Entity Reference

/ Amster 5.5.2

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Abstract

Reference of the ForgeRock® Access Management command-line interface entities.

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Preface

This reference contains:

- Entities supported in Amster commands
- Actions you can perform with Amster commands.

This guide is written for anyone using Amster to configure and manage ForgeRock Access Management deployments.

About ForgeRock Identity Platform™ Software

ForgeRock Identity Platform™ serves as the basis for our simple and comprehensive Identity and Access Management solution. We help our customers deepen their relationships with their customers, and improve the productivity and connectivity of their employees and partners. For more information about ForgeRock and about the platform, see https://www.forgerock.com.

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Chapter 1

Amster Entity Reference

This chapter contains details of the entities available to Amster in AM 5.5.

1.1. ActiveDirectory

1.1.1. Realm Operations

Resource path: `/realm-config/services/id-repositories/LDAPv3ForAD`

Resource version: `1.0`

1.1.1.1. create

Usage:

```
am> create ActiveDirectory --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "sunIdRepoAttributeMapping" : {
      "title" : "Attribute Name Mapping",
      "description" : "",
      "propertyOrder" : 1800,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
```


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```
    "sun-idrepo-ldapv3-config-auth-kba-index-attr" : {
      "title" : "Knowledge Based Authentication Active Index",
      "description" : "",
      "propertyOrder" : 5400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-auth-kba-attr" : {
      "title" : "Knowledge Based Authentication Attribute Name",
      "description" : "",
      "propertyOrder" : 5300,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-connection-mode" : {
      "title" : "LDAP Connection Mode",
      "description" : "Defines which protocol/operation is used to establish the connection to the
LDAP Directory Server.<br><br>If 'LDAP' is selected, the connection <b>won't be secured</b> and
passwords are transferred in <b>cleartext</b> over the network.<br/> If 'LDAPS' is selected, the
connection is secured via SSL or TLS. <br/> If 'StartTLS' is selected, the connection is secured by
using StartTLS extended operation.",
      "propertyOrder" : 1000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-connection_pool_min_size" : {
      "title" : "LDAP Connection Pool Minimum Size",
      "description" : "",
      "propertyOrder" : 1100,
      "required" : false,
      "type" : "integer",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-active" : {
      "title" : "User Status Active Value",
      "description" : "",
      "propertyOrder" : 2700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-dncache-size" : {
      "title" : "DN Cache Size",
      "description" : "In DN items, only used when DN Cache is enabled.",
      "propertyOrder" : 6000,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-people-container-value" : {
      "title" : "LDAP People Container Value",
      "description" : "",
      "propertyOrder" : 5100,
```


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```
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-organization_name" : {
      "title" : "LDAP Organization DN",
      "description" : "",
      "propertyOrder" : 900,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-group-container-value" : {
      "title" : "LDAP Groups Container Value",
      "description" : "",
      "propertyOrder" : 3200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-uniquemember" : {
      "title" : "Attribute Name of Unique Member",
      "description" : "",
      "propertyOrder" : 3600,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-people-container-name" : {
      "title" : "LDAP People Container Naming Attribute",
      "description" : "",
      "propertyOrder" : 5000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "openam-idrepo-ldapv3-heartbeat-timeunit" : {
      "title" : "LDAP Connection Heartbeat Time Unit",
      "description" : "Defines the time unit corresponding to the Heartbeat Interval
setting.<br><br>This setting controls how often OpenAM <b>should</b> send a heartbeat search request
to the configured directory. If a connection becomes unresponsive (e.g. due to a network error) then
it may take up to the interval period before the problem is detected. Use along with the Heartbeat
Interval parameter to define the exact interval.",
      "propertyOrder" : 1400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-groups-search-attribute" : {
      "title" : "LDAP Groups Search Attribute",
      "description" : "",
      "propertyOrder" : 2900,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-memberof" : {
      "title" : "Attribute Name for Group Membership",
      "description" : "",
```


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```
      "propertyOrder" : 3500,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-auth-naming-attr" : {
      "title" : "Authentication Naming Attribute",
      "description" : "",
      "propertyOrder" : 5200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-dncache-enabled" : {
      "title" : "DN Cache",
      "description" : "Used to enable/disable the DN Cache within the OpenAM repository
implementation.<br><br>The DN Cache is used to cache DN lookups which tend to happen in bursts during
authentication. The DN Cache can become out of date when a user is moved or renamed in the underlying
LDAP store and this is not reflected in a persistent search result. Enable when the underlying LDAP
store supports persistent search and move/rename (mod_dn) results are available.",
      "propertyOrder" : 5900,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "adRecursiveGroupMembership" : {
      "title" : "AD Recursive Group Membership Evaluation",
      "description" : "Used to enable/disable Active Directory Recursive Group Membership
evaluation.<br><br>Enables an Active Directory specific extensible filter called
LDAP_MATCHING_RULE_IN_CHAIN that according to MSDN \"walks the chain of ancestry in objects all
the way to the root until it finds a match\", meaning that it will resolve all group memberships,
including nested groups. This will add a performance overhead on the Active Directory server, indexes
may need to be created.",
      "propertyOrder" : 6100,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-max-result" : {
      "title" : "Maximum Results Returned from Search",
      "description" : "",
      "propertyOrder" : 1500,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-ldap-server" : {
      "title" : "LDAP Server",
      "description" : "Format: LDAP server host name:port | server_ID | site_ID",
      "propertyOrder" : 600,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-users-search-filter" : {
      "title" : "LDAP Users  Search Filter",
```


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```
      "description" : "",
      "propertyOrder" : 2200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-authpw" : {
      "title" : "LDAP Bind Password",
      "description" : "",
      "propertyOrder" : 800,
      "required" : true,
      "type" : "string",
      "format" : "password",
      "exampleValue" : ""
    },
    "sunIdRepoSupportedOperations" : {
      "title" : "LDAPv3 Plug-in Supported Types and Operations",
      "description" : "",
      "propertyOrder" : 1900,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-createuser-attr-mapping" : {
      "title" : "Create User Attribute Mapping",
      "description" : "Format: attribute name or TargetAttributeName=SourceAttributeName",
      "propertyOrder" : 2500,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "openam-idrepo-ldapv3-heartbeat-interval" : {
      "title" : "LDAP Connection Heartbeat Interval",
      "description" : "Specifies how often should OpenAM send a heartbeat request to the
directory.<br><br>This setting controls how often OpenAM <b>should</b> send a heartbeat search
request to the configured directory. If a connection becomes unresponsive (e.g. due to a network
error) then it may take up to the interval period before the problem is detected. Use along with the
Heartbeat Time Unit parameter to define the exact interval. Zero or negative value will result in
disabling heartbeat requests.",
      "propertyOrder" : 1300,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-psearchbase" : {
      "title" : "Persistent Search Base DN",
      "description" : "",
      "propertyOrder" : 5500,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-group-attributes" : {
```


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```
      "title" : "LDAP Groups Attributes",
      "description" : "",
      "propertyOrder" : 3400,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-authid" : {
      "title" : "LDAP Bind DN",
      "description" : "A user or admin with sufficient access rights to perform the supported
operations.",
      "propertyOrder" : 700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-groups-search-filter" : {
      "title" : "LDAP Groups Search Filter",
      "description" : "",
      "propertyOrder" : 3000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-user-attributes" : {
      "title" : "LDAP User Attributes",
      "description" : "",
      "propertyOrder" : 2400,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "openam-idrepo-ldapv3-affinity-enabled" : {
      "title" : "Affinity Enabled",
      "description" : "Enables affinity based request load balancing when accessing the user store
servers (based on DN). It is imperative that the connection string setting is set to the same value
for all OpenAM servers in the deployment when this feature is enabled.",
      "propertyOrder" : 6200,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "sunIdRepoClass" : {
      "title" : "LDAPv3 Repository Plug-in Class Name",
      "description" : "",
      "propertyOrder" : 1700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-isactive" : {
      "title" : "Attribute Name of User Status",
      "description" : "",
```


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```
      "propertyOrder" : 2600,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-group-container-name" : {
      "title" : "LDAP Groups Container Naming Attribute",
      "description" : "",
      "propertyOrder" : 3100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-group-objectclass" : {
      "title" : "LDAP Groups Object Class",
      "description" : "",
      "propertyOrder" : 3300,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-time-limit" : {
      "title" : "Search Timeout",
      "description" : "In seconds.",
      "propertyOrder" : 1600,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-user-objectclass" : {
      "title" : "LDAP User Object Class",
      "description" : "",
      "propertyOrder" : 2300,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-connection_pool_max_size" : {
      "title" : "LDAP Connection Pool Maximum Size",
      "description" : "",
      "propertyOrder" : 1200,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-search-scope" : {
      "title" : "LDAPv3 Plug-in Search Scope",
      "description" : "",
      "propertyOrder" : 2000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
```


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```
    "sun-idrepo-ldapv3-config-inactive" : {
      "title" : "User Status Inactive Value",
      "description" : "",
      "propertyOrder" : 2800,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-psearch-scope" : {
      "title" : "Persistent Search Scope",
      "description" : "",
      "propertyOrder" : 5700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-users-search-attribute" : {
      "title" : "LDAP Users  Search Attribute",
      "description" : "",
      "propertyOrder" : 2100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "com.iplanet.am.ldap.connection.delay.between.retries" : {
      "title" : "The Delay Time Between Retries",
      "description" : "In milliseconds.",
      "propertyOrder" : 5800,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    }
  }
}
```

1.1.1.2. delete

Usage:

```
am> delete ActiveDirectory --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.1.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action ActiveDirectory --realm Realm --actionName getAllTypes
```


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1.1.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action ActiveDirectory --realm Realm --actionName getCreatableTypes
```

1.1.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action ActiveDirectory --realm Realm --actionName nextdescendents
```

1.1.1.6. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

```
am> query ActiveDirectory --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.1.1.7. read

Usage:

```
am> read ActiveDirectory --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.1.1.8. update

Usage:

```
am> update ActiveDirectory --realm Realm --id id --body body
```

Parameters:

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--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "sunIdRepoAttributeMapping" : {
      "title" : "Attribute Name Mapping",
      "description" : "",
      "propertyOrder" : 1800,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-auth-kba-index-attr" : {
      "title" : "Knowledge Based Authentication Active Index",
      "description" : "",
      "propertyOrder" : 5400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-auth-kba-attr" : {
      "title" : "Knowledge Based Authentication Attribute Name",
      "description" : "",
      "propertyOrder" : 5300,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-connection-mode" : {
      "title" : "LDAP Connection Mode",
      "description" : "Defines which protocol/operation is used to establish the connection to the
LDAP Directory Server.<br><br>If 'LDAP' is selected, the connection <b>won't be secured</b> and
passwords are transferred in <b>cleartext</b> over the network.<br/> If 'LDAPS' is selected, the
connection is secured via SSL or TLS. <br/> If 'StartTLS' is selected, the connection is secured by
using StartTLS extended operation.",
      "propertyOrder" : 1000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-connection_pool_min_size" : {
      "title" : "LDAP Connection Pool Minimum Size",
      "description" : "",
      "propertyOrder" : 1100,
      "required" : false,
      "type" : "integer",
```


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```
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-active" : {
      "title" : "User Status Active Value",
      "description" : "",
      "propertyOrder" : 2700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-dncache-size" : {
      "title" : "DN Cache Size",
      "description" : "In DN items, only used when DN Cache is enabled.",
      "propertyOrder" : 6000,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-people-container-value" : {
      "title" : "LDAP People Container Value",
      "description" : "",
      "propertyOrder" : 5100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-organization_name" : {
      "title" : "LDAP Organization DN",
      "description" : "",
      "propertyOrder" : 900,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-group-container-value" : {
      "title" : "LDAP Groups Container Value",
      "description" : "",
      "propertyOrder" : 3200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-uniquemember" : {
      "title" : "Attribute Name of Unique Member",
      "description" : "",
      "propertyOrder" : 3600,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-people-container-name" : {
      "title" : "LDAP People Container Naming Attribute",
      "description" : "",
      "propertyOrder" : 5000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "openam-idrepo-ldapv3-heartbeat-timeunit" : {
```


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```
     "title" : "LDAP Connection Heartbeat Time Unit",
     "description" : "Defines the time unit corresponding to the Heartbeat Interval
setting.<br><br>This setting controls how often OpenAM <b>should</b> send a heartbeat search request
to the configured directory. If a connection becomes unresponsive (e.g. due to a network error) then
it may take up to the interval period before the problem is detected. Use along with the Heartbeat
Interval parameter to define the exact interval.",
     "propertyOrder" : 1400,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "sun-idrepo-ldapv3-config-groups-search-attribute" : {
     "title" : "LDAP Groups Search Attribute",
     "description" : "",
     "propertyOrder" : 2900,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "sun-idrepo-ldapv3-config-memberof" : {
     "title" : "Attribute Name for Group Membership",
     "description" : "",
     "propertyOrder" : 3500,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "sun-idrepo-ldapv3-config-auth-naming-attr" : {
     "title" : "Authentication Naming Attribute",
     "description" : "",
     "propertyOrder" : 5200,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "sun-idrepo-ldapv3-dncache-enabled" : {
     "title" : "DN Cache",
     "description" : "Used to enable/disable the DN Cache within the OpenAM repository
implementation.<br><br>The DN Cache is used to cache DN lookups which tend to happen in bursts during
authentication. The DN Cache can become out of date when a user is moved or renamed in the underlying
LDAP store and this is not reflected in a persistent search result. Enable when the underlying LDAP
store supports persistent search and move/rename (mod_dn) results are available.",
     "propertyOrder" : 5900,
     "required" : true,
     "type" : "boolean",
     "exampleValue" : ""
   },
   "adRecursiveGroupMembership" : {
     "title" : "AD Recursive Group Membership Evaluation",
     "description" : "Used to enable/disable Active Directory Recursive Group Membership
evaluation.<br><br>Enables an Active Directory specific extensible filter called
LDAP_MATCHING_RULE_IN_CHAIN that according to MSDN \"walks the chain of ancestry in objects all
the way to the root until it finds a match\", meaning that it will resolve all group memberships,
including nested groups. This will add a performance overhead on the Active Directory server, indexes
may need to be created.",
     "propertyOrder" : 6100,
     "required" : true,
     "type" : "boolean",
     "exampleValue" : ""
```


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```
    },
    "sun-idrepo-ldapv3-config-max-result" : {
      "title" : "Maximum Results Returned from Search",
      "description" : "",
      "propertyOrder" : 1500,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-ldap-server" : {
      "title" : "LDAP Server",
      "description" : "Format: LDAP server host name:port | server_ID | site_ID",
      "propertyOrder" : 600,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-users-search-filter" : {
      "title" : "LDAP Users  Search Filter",
      "description" : "",
      "propertyOrder" : 2200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-authpw" : {
      "title" : "LDAP Bind Password",
      "description" : "",
      "propertyOrder" : 800,
      "required" : true,
      "type" : "string",
      "format" : "password",
      "exampleValue" : ""
    },
    "sunIdRepoSupportedOperations" : {
      "title" : "LDAPv3 Plug-in Supported Types and Operations",
      "description" : "",
      "propertyOrder" : 1900,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-createuser-attr-mapping" : {
      "title" : "Create User Attribute Mapping",
      "description" : "Format: attribute name or TargetAttributeName=SourceAttributeName",
      "propertyOrder" : 2500,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
```


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```
   "openam-idrepo-ldapv3-heartbeat-interval" : {
     "title" : "LDAP Connection Heartbeat Interval",
     "description" : "Specifies how often should OpenAM send a heartbeat request to the
directory.<br><br>This setting controls how often OpenAM <b>should</b> send a heartbeat search
request to the configured directory. If a connection becomes unresponsive (e.g. due to a network
error) then it may take up to the interval period before the problem is detected. Use along with the
Heartbeat Time Unit parameter to define the exact interval. Zero or negative value will result in
disabling heartbeat requests.",
     "propertyOrder" : 1300,
     "required" : true,
     "type" : "integer",
     "exampleValue" : ""
   },
   "sun-idrepo-ldapv3-config-psearchbase" : {
     "title" : "Persistent Search Base DN",
     "description" : "",
     "propertyOrder" : 5500,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "sun-idrepo-ldapv3-config-group-attributes" : {
     "title" : "LDAP Groups Attributes",
     "description" : "",
     "propertyOrder" : 3400,
     "required" : true,
     "items" : {
       "type" : "string"
     },
     "type" : "array",
     "exampleValue" : ""
   },
   "sun-idrepo-ldapv3-config-authid" : {
     "title" : "LDAP Bind DN",
     "description" : "A user or admin with sufficient access rights to perform the supported
operations.",
     "propertyOrder" : 700,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "sun-idrepo-ldapv3-config-groups-search-filter" : {
     "title" : "LDAP Groups Search Filter",
     "description" : "",
     "propertyOrder" : 3000,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "sun-idrepo-ldapv3-config-user-attributes" : {
     "title" : "LDAP User Attributes",
     "description" : "",
     "propertyOrder" : 2400,
     "required" : true,
     "items" : {
       "type" : "string"
     },
     "type" : "array",
     "exampleValue" : ""
```


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```
    },
    "openam-idrepo-ldapv3-affinity-enabled" : {
      "title" : "Affinity Enabled",
      "description" : "Enables affinity based request load balancing when accessing the user store
servers (based on DN). It is imperative that the connection string setting is set to the same value
for all OpenAM servers in the deployment when this feature is enabled.",
      "propertyOrder" : 6200,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "sunIdRepoClass" : {
      "title" : "LDAPv3 Repository Plug-in Class Name",
      "description" : "",
      "propertyOrder" : 1700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-isactive" : {
      "title" : "Attribute Name of User Status",
      "description" : "",
      "propertyOrder" : 2600,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-group-container-name" : {
      "title" : "LDAP Groups Container Naming Attribute",
      "description" : "",
      "propertyOrder" : 3100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-group-objectclass" : {
      "title" : "LDAP Groups Object Class",
      "description" : "",
      "propertyOrder" : 3300,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-time-limit" : {
      "title" : "Search Timeout",
      "description" : "In seconds.",
      "propertyOrder" : 1600,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-user-objectclass" : {
      "title" : "LDAP User Object Class",
      "description" : "",
      "propertyOrder" : 2300,
      "required" : true,
```


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```
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-connection_pool_max_size" : {
      "title" : "LDAP Connection Pool Maximum Size",
      "description" : "",
      "propertyOrder" : 1200,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-search-scope" : {
      "title" : "LDAPv3 Plug-in Search Scope",
      "description" : "",
      "propertyOrder" : 2000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-inactive" : {
      "title" : "User Status Inactive Value",
      "description" : "",
      "propertyOrder" : 2800,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-psearch-scope" : {
      "title" : "Persistent Search Scope",
      "description" : "",
      "propertyOrder" : 5700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-users-search-attribute" : {
      "title" : "LDAP Users  Search Attribute",
      "description" : "",
      "propertyOrder" : 2100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "com.iplanet.am.ldap.connection.delay.between.retries" : {
      "title" : "The Delay Time Between Retries",
      "description" : "In milliseconds.",
      "propertyOrder" : 5800,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    }
  }
}
```


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1.2. ActiveDirectoryApplicationModeADAM

1.2.1. Realm Operations

Resource path: `/realm-config/services/id-repositories/LDAPv3ForADAM`

Resource version: `1.0`

1.2.1.1. create

Usage:

```
am> create ActiveDirectoryApplicationModeADAM --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "sun-idrepo-ldapv3-config-groups-search-filter" : {
      "title" : "LDAP Groups Search Filter",
      "description" : "",
      "propertyOrder" : 3000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "adRecursiveGroupMembership" : {
      "title" : "AD Recursive Group Membership Evaluation",
      "description" : "Used to enable/disable Active Directory Recursive Group Membership
 evaluation.<br><br>Enables an Active Directory specific extensible filter called
 LDAP_MATCHING_RULE_IN_CHAIN that according to MSDN \"walks the chain of ancestry in objects all
 the way to the root until it finds a match\", meaning that it will resolve all group memberships,
 including nested groups. This will add a performance overhead on the Active Directory server, indexes
 may need to be created.",
      "propertyOrder" : 6100,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-createuser-attr-mapping" : {
      "title" : "Create User Attribute Mapping",
      "description" : "Format: attribute name or TargetAttributeName=SourceAttributeName",
      "propertyOrder" : 2500,
      "required" : true,
```


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```
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-psearchbase" : {
      "title" : "Persistent Search Base DN",
      "description" : "",
      "propertyOrder" : 5500,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-group-objectclass" : {
      "title" : "LDAP Groups Object Class",
      "description" : "",
      "propertyOrder" : 3300,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-users-search-attribute" : {
      "title" : "LDAP Users  Search Attribute",
      "description" : "",
      "propertyOrder" : 2100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-inactive" : {
      "title" : "User Status Inactive Value",
      "description" : "",
      "propertyOrder" : 2800,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "openam-idrepo-ldapv3-affinity-enabled" : {
      "title" : "Affinity Enabled",
      "description" : "Enables affinity based request load balancing when accessing the user store
servers (based on DN). It is imperative that the connection string setting is set to the same value
for all OpenAM servers in the deployment when this feature is enabled.",
      "propertyOrder" : 6200,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-group-container-value" : {
      "title" : "LDAP Groups Container Value",
      "description" : "",
      "propertyOrder" : 3200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
```


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```
    "sun-idrepo-ldapv3-config-max-result" : {
      "title" : "Maximum Results Returned from Search",
      "description" : "",
      "propertyOrder" : 1500,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "com.iplanet.am.ldap.connection.delay.between.retries" : {
      "title" : "The Delay Time Between Retries",
      "description" : "In milliseconds.",
      "propertyOrder" : 5800,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-authpw" : {
      "title" : "LDAP Bind Password",
      "description" : "",
      "propertyOrder" : 800,
      "required" : true,
      "type" : "string",
      "format" : "password",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-connection_pool_min_size" : {
      "title" : "LDAP Connection Pool Minimum Size",
      "description" : "",
      "propertyOrder" : 1100,
      "required" : false,
      "type" : "integer",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-authid" : {
      "title" : "LDAP Bind DN",
      "description" : "A user or admin with sufficient access rights to perform the supported
operations.",
      "propertyOrder" : 700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-people-container-name" : {
      "title" : "LDAP People Container Naming Attribute",
      "description" : "",
      "propertyOrder" : 5000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-dncache-enabled" : {
      "title" : "DN Cache",
      "description" : "Used to enable/disable the DN Cache within the OpenAM repository
implementation.<br><br>The DN Cache is used to cache DN lookups which tend to happen in bursts during
authentication. The DN Cache can become out of date when a user is moved or renamed in the underlying
LDAP store and this is not reflected in a persistent search result. Enable when the underlying LDAP
store supports persistent search and move/rename (mod_dn) results are available.",
      "propertyOrder" : 5900,
      "required" : true,
```


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```
      "type" : "boolean",
      "exampleValue" : ""
    },
    "openam-idrepo-ldapv3-heartbeat-interval" : {
      "title" : "LDAP Connection Heartbeat Interval",
      "description" : "Specifies how often should OpenAM send a heartbeat request to the
directory.<br><br>This setting controls how often OpenAM <b>should</b> send a heartbeat search
request to the configured directory. If a connection becomes unresponsive (e.g. due to a network
error) then it may take up to the interval period before the problem is detected. Use along with the
Heartbeat Time Unit parameter to define the exact interval. Zero or negative value will result in
disabling heartbeat requests.",
      "propertyOrder" : 1300,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-connection-mode" : {
      "title" : "LDAP Connection Mode",
      "description" : "Defines which protocol/operation is used to establish the connection to the
LDAP Directory Server.<br><br>If 'LDAP' is selected, the connection <b>won't be secured</b> and
passwords are transferred in <b>cleartext</b> over the network.<br/> If 'LDAPS' is selected, the
connection is secured via SSL or TLS. <br/> If 'StartTLS' is selected, the connection is secured by
using StartTLS extended operation.",
      "propertyOrder" : 1000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sunIdRepoAttributeMapping" : {
      "title" : "Attribute Name Mapping",
      "description" : "",
      "propertyOrder" : 1800,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-group-attributes" : {
      "title" : "LDAP Groups Attributes",
      "description" : "",
      "propertyOrder" : 3400,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-groups-search-attribute" : {
      "title" : "LDAP Groups Search Attribute",
      "description" : "",
      "propertyOrder" : 2900,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-organization_name" : {
```


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```
      "title" : "LDAP Organization DN",
      "description" : "",
      "propertyOrder" : 900,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "openam-idrepo-ldapv3-heartbeat-timeunit" : {
      "title" : "LDAP Connection Heartbeat Time Unit",
      "description" : "Defines the time unit corresponding to the Heartbeat Interval
setting.<br><br>This setting controls how often OpenAM <b>should</b> send a heartbeat search request
to the configured directory. If a connection becomes unresponsive (e.g. due to a network error) then
it may take up to the interval period before the problem is detected. Use along with the Heartbeat
Interval parameter to define the exact interval.",
      "propertyOrder" : 1400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-users-search-filter" : {
      "title" : "LDAP Users  Search Filter",
      "description" : "",
      "propertyOrder" : 2200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-auth-kba-index-attr" : {
      "title" : "Knowledge Based Authentication Active Index",
      "description" : "",
      "propertyOrder" : 5400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-uniquemember" : {
      "title" : "Attribute Name of Unique Member",
      "description" : "",
      "propertyOrder" : 3600,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-active" : {
      "title" : "User Status Active Value",
      "description" : "",
      "propertyOrder" : 2700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sunIdRepoClass" : {
      "title" : "LDAPv3 Repository Plug-in Class Name",
      "description" : "",
      "propertyOrder" : 1700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
```


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```
    "sun-idrepo-ldapv3-dncache-size" : {
      "title" : "DN Cache Size",
      "description" : "In DN items, only used when DN Cache is enabled.",
      "propertyOrder" : 6000,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-search-scope" : {
      "title" : "LDAPv3 Plug-in Search Scope",
      "description" : "",
      "propertyOrder" : 2000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-connection_pool_max_size" : {
      "title" : "LDAP Connection Pool Maximum Size",
      "description" : "",
      "propertyOrder" : 1200,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-group-container-name" : {
      "title" : "LDAP Groups Container Naming Attribute",
      "description" : "",
      "propertyOrder" : 3100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-psearch-scope" : {
      "title" : "Persistent Search Scope",
      "description" : "",
      "propertyOrder" : 5700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-time-limit" : {
      "title" : "Search Timeout",
      "description" : "In seconds.",
      "propertyOrder" : 1600,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "sunIdRepoSupportedOperations" : {
      "title" : "LDAPv3 Plug-in Supported Types and Operations",
      "description" : "",
      "propertyOrder" : 1900,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
```


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```
    "sun-idrepo-ldapv3-config-auth-kba-attr" : {
      "title" : "Knowledge Based Authentication Attribute Name",
      "description" : "",
      "propertyOrder" : 5300,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-user-attributes" : {
      "title" : "LDAP User Attributes",
      "description" : "",
      "propertyOrder" : 2400,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-people-container-value" : {
      "title" : "LDAP People Container Value",
      "description" : "",
      "propertyOrder" : 5100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-auth-naming-attr" : {
      "title" : "Authentication Naming Attribute",
      "description" : "",
      "propertyOrder" : 5200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-ldap-server" : {
      "title" : "LDAP Server",
      "description" : "Format: LDAP server host name:port | server_ID | site_ID",
      "propertyOrder" : 600,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-user-objectclass" : {
      "title" : "LDAP User Object Class",
      "description" : "",
      "propertyOrder" : 2300,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
```


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```
    },
    "sun-idrepo-ldapv3-config-isactive" : {
      "title" : "Attribute Name of User Status",
      "description" : "",
      "propertyOrder" : 2600,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-memberof" : {
      "title" : "Attribute Name for Group Membership",
      "description" : "",
      "propertyOrder" : 3500,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```

1.2.1.2. delete

Usage:

```
am> delete ActiveDirectoryApplicationModeADAM --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.2.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action ActiveDirectoryApplicationModeADAM --realm Realm --actionName getAllTypes
```

1.2.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action ActiveDirectoryApplicationModeADAM --realm Realm --actionName getCreatableTypes
```

1.2.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

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Usage:

```
am> action ActiveDirectoryApplicationModeADAM --realm Realm --actionName nextdescendents
```

1.2.1.6. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

```
am> query ActiveDirectoryApplicationModeADAM --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.2.1.7. read

Usage:

```
am> read ActiveDirectoryApplicationModeADAM --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.2.1.8. update

Usage:

```
am> update ActiveDirectoryApplicationModeADAM --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "sun-idrepo-ldapv3-config-groups-search-filter" : {
      "title" : "LDAP Groups Search Filter",
      "description" : "",
      "propertyOrder" : 3000,
```


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```
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "adRecursiveGroupMembership" : {
      "title" : "AD Recursive Group Membership Evaluation",
      "description" : "Used to enable/disable Active Directory Recursive Group Membership
evaluation.<br><br>Enables an Active Directory specific extensible filter called
LDAP_MATCHING_RULE_IN_CHAIN that according to MSDN \"walks the chain of ancestry in objects all
the way to the root until it finds a match\", meaning that it will resolve all group memberships,
including nested groups. This will add a performance overhead on the Active Directory server, indexes
may need to be created.",
      "propertyOrder" : 6100,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-createuser-attr-mapping" : {
      "title" : "Create User Attribute Mapping",
      "description" : "Format: attribute name or TargetAttributeName=SourceAttributeName",
      "propertyOrder" : 2500,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-psearchbase" : {
      "title" : "Persistent Search Base DN",
      "description" : "",
      "propertyOrder" : 5500,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-group-objectclass" : {
      "title" : "LDAP Groups Object Class",
      "description" : "",
      "propertyOrder" : 3300,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-users-search-attribute" : {
      "title" : "LDAP Users  Search Attribute",
      "description" : "",
      "propertyOrder" : 2100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-inactive" : {
      "title" : "User Status Inactive Value",
      "description" : "",
      "propertyOrder" : 2800,
```


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```
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "openam-idrepo-ldapv3-affinity-enabled" : {
      "title" : "Affinity Enabled",
      "description" : "Enables affinity based request load balancing when accessing the user store
servers (based on DN). It is imperative that the connection string setting is set to the same value
for all OpenAM servers in the deployment when this feature is enabled.",
      "propertyOrder" : 6200,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-group-container-value" : {
      "title" : "LDAP Groups Container Value",
      "description" : "",
      "propertyOrder" : 3200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-max-result" : {
      "title" : "Maximum Results Returned from Search",
      "description" : "",
      "propertyOrder" : 1500,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "com.iplanet.am.ldap.connection.delay.between.retries" : {
      "title" : "The Delay Time Between Retries",
      "description" : "In milliseconds.",
      "propertyOrder" : 5800,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-authpw" : {
      "title" : "LDAP Bind Password",
      "description" : "",
      "propertyOrder" : 800,
      "required" : true,
      "type" : "string",
      "format" : "password",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-connection_pool_min_size" : {
      "title" : "LDAP Connection Pool Minimum Size",
      "description" : "",
      "propertyOrder" : 1100,
      "required" : false,
      "type" : "integer",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-authid" : {
      "title" : "LDAP Bind DN",
      "description" : "A user or admin with sufficient access rights to perform the supported
operations.",
```


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```
      "propertyOrder" : 700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-people-container-name" : {
      "title" : "LDAP People Container Naming Attribute",
      "description" : "",
      "propertyOrder" : 5000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-dncache-enabled" : {
      "title" : "DN Cache",
      "description" : "Used to enable/disable the DN Cache within the OpenAM repository
implementation.<br><br>The DN Cache is used to cache DN lookups which tend to happen in bursts during
authentication. The DN Cache can become out of date when a user is moved or renamed in the underlying
LDAP store and this is not reflected in a persistent search result. Enable when the underlying LDAP
store supports persistent search and move/rename (mod_dn) results are available.",
      "propertyOrder" : 5900,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "openam-idrepo-ldapv3-heartbeat-interval" : {
      "title" : "LDAP Connection Heartbeat Interval",
      "description" : "Specifies how often should OpenAM send a heartbeat request to the
directory.<br><br>This setting controls how often OpenAM <b>should</b> send a heartbeat search
request to the configured directory. If a connection becomes unresponsive (e.g. due to a network
error) then it may take up to the interval period before the problem is detected. Use along with the
Heartbeat Time Unit parameter to define the exact interval. Zero or negative value will result in
disabling heartbeat requests.",
      "propertyOrder" : 1300,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-connection-mode" : {
      "title" : "LDAP Connection Mode",
      "description" : "Defines which protocol/operation is used to establish the connection to the
LDAP Directory Server.<br><br>If 'LDAP' is selected, the connection <b>won't be secured</b> and
passwords are transferred in <b>cleartext</b> over the network.<br/> If 'LDAPS' is selected, the
connection is secured via SSL or TLS. <br/> If 'StartTLS' is selected, the connection is secured by
using StartTLS extended operation.",
      "propertyOrder" : 1000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sunIdRepoAttributeMapping" : {
      "title" : "Attribute Name Mapping",
      "description" : "",
      "propertyOrder" : 1800,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
```


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```
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-group-attributes" : {
      "title" : "LDAP Groups Attributes",
      "description" : "",
      "propertyOrder" : 3400,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-groups-search-attribute" : {
      "title" : "LDAP Groups Search Attribute",
      "description" : "",
      "propertyOrder" : 2900,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-organization_name" : {
      "title" : "LDAP Organization DN",
      "description" : "",
      "propertyOrder" : 900,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "openam-idrepo-ldapv3-heartbeat-timeunit" : {
      "title" : "LDAP Connection Heartbeat Time Unit",
      "description" : "Defines the time unit corresponding to the Heartbeat Interval
setting.<br><br>This setting controls how often OpenAM <b>should</b> send a heartbeat search request
to the configured directory. If a connection becomes unresponsive (e.g. due to a network error) then
it may take up to the interval period before the problem is detected. Use along with the Heartbeat
Interval parameter to define the exact interval.",
      "propertyOrder" : 1400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-users-search-filter" : {
      "title" : "LDAP Users  Search Filter",
      "description" : "",
      "propertyOrder" : 2200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-auth-kba-index-attr" : {
      "title" : "Knowledge Based Authentication Active Index",
      "description" : "",
      "propertyOrder" : 5400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-uniquemember" : {
      "title" : "Attribute Name of Unique Member",
```


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```
      "description" : "",
      "propertyOrder" : 3600,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-active" : {
      "title" : "User Status Active Value",
      "description" : "",
      "propertyOrder" : 2700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sunIdRepoClass" : {
      "title" : "LDAPv3 Repository Plug-in Class Name",
      "description" : "",
      "propertyOrder" : 1700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-dncache-size" : {
      "title" : "DN Cache Size",
      "description" : "In DN items, only used when DN Cache is enabled.",
      "propertyOrder" : 6000,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-search-scope" : {
      "title" : "LDAPv3 Plug-in Search Scope",
      "description" : "",
      "propertyOrder" : 2000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-connection_pool_max_size" : {
      "title" : "LDAP Connection Pool Maximum Size",
      "description" : "",
      "propertyOrder" : 1200,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-group-container-name" : {
      "title" : "LDAP Groups Container Naming Attribute",
      "description" : "",
      "propertyOrder" : 3100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-psearch-scope" : {
      "title" : "Persistent Search Scope",
      "description" : "",
      "propertyOrder" : 5700,
      "required" : true,
```


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```
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-time-limit" : {
      "title" : "Search Timeout",
      "description" : "In seconds.",
      "propertyOrder" : 1600,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "sunIdRepoSupportedOperations" : {
      "title" : "LDAPv3 Plug-in Supported Types and Operations",
      "description" : "",
      "propertyOrder" : 1900,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-auth-kba-attr" : {
      "title" : "Knowledge Based Authentication Attribute Name",
      "description" : "",
      "propertyOrder" : 5300,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-user-attributes" : {
      "title" : "LDAP User Attributes",
      "description" : "",
      "propertyOrder" : 2400,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-people-container-value" : {
      "title" : "LDAP People Container Value",
      "description" : "",
      "propertyOrder" : 5100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-auth-naming-attr" : {
      "title" : "Authentication Naming Attribute",
      "description" : "",
      "propertyOrder" : 5200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
```


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```
    },
    "sun-idrepo-ldapv3-config-ldap-server" : {
      "title" : "LDAP Server",
      "description" : "Format: LDAP server host name:port | server_ID | site_ID",
      "propertyOrder" : 600,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-user-objectclass" : {
      "title" : "LDAP User Object Class",
      "description" : "",
      "propertyOrder" : 2300,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-isactive" : {
      "title" : "Attribute Name of User Status",
      "description" : "",
      "propertyOrder" : 2600,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-memberof" : {
      "title" : "Attribute Name for Group Membership",
      "description" : "",
      "propertyOrder" : 3500,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```

1.3. ActiveDirectoryModule

1.3.1. Realm Operations

Resource path: `/realm-config/authentication/modules/activedirectory`

Resource version: `1.0`

1.3.1.1. create

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Usage:

```
am> create ActiveDirectoryModule --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "profileAttributeMappings" : {
      "title" : "User Creation Attributes",
      "description" : "Controls the mapping of local attribute to external attribute for dynamic
 profile creation.<br><br>If dynamic profile creation is enabled; this feature allows for a mapping
 between the attribute/values retrieved from the users authenticated profile and the attribute/values
 that will be provisioned into their matching account in the data store.<br/><br/>The format of this
 property is: <br/><br/><code> local attr1|external attr1</code>",
      "propertyOrder" : 1300,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "userSearchAttributes" : {
      "title" : "Attributes Used to Search for a User to be Authenticated",
      "description" : "The attributes specified in this list form the LDAP search filter.<br><br>The
 default value of uid will form the following search filter of <code>uid=<i>user</i></code>, if there
 are multiple values such as uid and cn, the module will create a search filter as follows <code>(|
(uid=<i>user</i>)(cn=<i>user</i>))</code>",
      "propertyOrder" : 700,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "userBindDN" : {
      "title" : "Bind User DN",
      "description" : "The DN of an admin user used by the module to authentication to the LDAP
 server<br><br>The LDAP module requires an administration account in order to perform functionality
 such as password reset.<br/><br/><i>NB </i><code>cn=Directory Manager</code> should not be used in
 production systems.",
      "propertyOrder" : 400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "userBindPassword" : {
      "title" : "Bind User Password",
```


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```
      "description" : "The password of the administration account.",
      "propertyOrder" : 500,
      "required" : true,
      "type" : "string",
      "format" : "password",
      "exampleValue" : ""
    },
    "openam-auth-ldap-connection-mode" : {
      "title" : "LDAP Connection Mode",
      "description" : "Defines which protocol/operation is used to establish the connection to the
 LDAP Directory Server.<br><br>If 'LDAP' is selected, the connection <b>won't be secured</b> and
 passwords are transferred in <b>cleartext</b> over the network.<br/> If 'LDAPS' is selected, the
 connection is secured via SSL or TLS. <br/> If 'StartTLS' is selected, the connection is secured by
 using StartTLS extended operation.",
      "propertyOrder" : 1000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "userSearchStartDN" : {
      "title" : "DN to Start User Search",
      "description" : "The search for accounts to be authenticated start from this base DN <br><br>For
 a single server just enter the Base DN to be searched. Multiple OpenAM servers can have different
 base DNs for the search The format is as follows:<br/><br/><code>local server name | search DN</
code><br/><br/><i>NB </i>The local server name is the full name of the server from the list of servers
 and sites.",
      "propertyOrder" : 300,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "secondaryLdapServer" : {
      "title" : "Secondary Active Directory Server",
      "description" : "Use this list to set the secondary (failover) Active Directory server used
 for authentication.<br><br>If the primary Active Directory server fails, the Active Directory
 authentication module will failover to the secondary server. A single entry must be in the
 format:<br/><br/><code>server:port</code><br/><br/>Multiple entries allow associations between
 OpenAM servers and an Active Directory server. The format is:<br/><br/><code>local server name |
 server:port</code><br/><br/><i>NB </i>The local server name is the full name of the server from the
 list of servers and sites.",
      "propertyOrder" : 200,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "operationTimeout" : {
      "title" : "LDAP operations timeout",
      "description" : "Defines the timeout in seconds OpenAM should wait for a response of the
 Directory Server - <code>0</code> means no timeout.<br><br>If the Directory Server's host is down
 completely or the TCP connection became stale OpenAM waits until operation timeouts from the OS or
 the JVM are applied. However this setting allows more granular control within OpenAM itself. A value
 of <code>0</code> means NO timeout is applied on OpenAM level and the timeouts from the JVM or OS
 will apply.",
```


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```
      "propertyOrder" : 1700,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "userProfileRetrievalAttribute" : {
      "title" : "Attribute Used to Retrieve User Profile",
      "description" : "The LDAP module will use this attribute to search of the profile of an
 authenticated user.<br><br>This is the attribute used to find the profile of the authenticated user.
 Normally this will be the same attribute used to find the user account. The value will be the name of
 the user used for authentication.",
      "propertyOrder" : 600,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "searchScope" : {
      "title" : "Search Scope",
      "description" : "The level in the Directory Server that will be searched for a matching
 user profile.<br><br>This attribute controls how the directory is searched.<br/><br/
><ul><li><code>OBJECT</code>: Only the Base DN is searched.</li><li><code>ONELEVEL</code>: Only the
 single level below (and not the Base DN) is searched</li><li><code>SUBTREE</code>: The Base DN and
 all levels below are searched</li></ul>",
      "propertyOrder" : 900,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "authenticationLevel" : {
      "title" : "Authentication Level",
      "description" : "The authentication level associated with this module.<br><br>Each
 authentication module has an authentication level that can be used to indicate the level of security
 associated with the module; 0 is the lowest (and the default). ",
      "propertyOrder" : 1800,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "returnUserDN" : {
      "title" : "Return User DN to DataStore",
      "description" : "Controls whether the DN or the username is returned as the authentication
 principal.",
      "propertyOrder" : 1200,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "connectionHeartbeatInterval" : {
      "title" : "LDAP Connection Heartbeat Interval",
      "description" : "Specifies how often should OpenAM send a heartbeat request to the
 directory.<br><br>Use this option in case a firewall/loadbalancer can close idle connections,
 since the heartbeat requests will ensure that the connections won't become idle. Use along with the
 Heartbeat Time Unit parameter to define the correct interval. Zero or negative value will result in
 disabling heartbeat requests.",
      "propertyOrder" : 1500,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
```


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```
    "trustAllServerCertificates" : {
      "title" : "Trust All Server Certificates",
      "description" : "Enables a <code>X509TrustManager</code> that trusts all
 certificates.<br><br>This feature will allow the LDAP authentication module to connect to LDAP
 servers protected by self signed or invalid certificates (such as invalid hostname).<br/><br/><i>NB
 </i>Use this feature with care as it bypasses the normal certificate verification process",
      "propertyOrder" : 1400,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "userSearchFilter" : {
      "title" : "User Search Filter",
      "description" : "This search filter will be appended to the standard user search
 filter.<br><br>This attribute can be used to append a custom search filter to the standard filter.
 For example: <code>(objectClass=person)</code>would result in the following user search filter:<br/
><br/><code>(&(uid=<i>user</i>)(objectClass=person))</code>",
      "propertyOrder" : 800,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "connectionHeartbeatTimeUnit" : {
      "title" : "LDAP Connection Heartbeat Time Unit",
      "description" : "Defines the time unit corresponding to the Heartbeat Interval
 setting.<br><br>Use this option in case a firewall/loadbalancer can close idle connections, since the
 heartbeat requests will ensure that the connections won't become idle.",
      "propertyOrder" : 1600,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "primaryLdapServer" : {
      "title" : "Primary Active Directory Server ",
      "description" : "Use this list to set the primary Active Directory server used for
 authentication. <br><br>The Active Directory authentication module will use this list as the primary
 server for authentication. A single entry must be in the format:<br/><br/><code>server:port</
code><br/><br/>Multiple entries allow associations between OpenAM servers and an Active Directory
 server. The format is:<br/><br/><code>local server name | server:port</code><br/><br/>The local
 server name is the full name of the server from the list of servers and sites.",
      "propertyOrder" : 100,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    }
  }
}
```

1.3.1.2. delete

Usage:

```
am> delete ActiveDirectoryModule --realm Realm --id id
```


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Parameters:

--id

The unique identifier for the resource.

1.3.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action ActiveDirectoryModule --realm Realm --actionName getAllTypes
```

1.3.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action ActiveDirectoryModule --realm Realm --actionName getCreatableTypes
```

1.3.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action ActiveDirectoryModule --realm Realm --actionName nextdescendents
```

1.3.1.6. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

```
am> query ActiveDirectoryModule --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.3.1.7. read

Usage:

```
am> read ActiveDirectoryModule --realm Realm --id id
```


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Parameters:

--id

The unique identifier for the resource.

1.3.1.8. update

Usage:

```
am> update ActiveDirectoryModule --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "profileAttributeMappings" : {
      "title" : "User Creation Attributes",
      "description" : "Controls the mapping of local attribute to external attribute for dynamic
 profile creation.<br><br>If dynamic profile creation is enabled; this feature allows for a mapping
 between the attribute/values retrieved from the users authenticated profile and the attribute/values
 that will be provisioned into their matching account in the data store.<br/><br/>The format of this
 property is: <br/><br/><code> local attr1|external attr1</code>",
      "propertyOrder" : 1300,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "userSearchAttributes" : {
      "title" : "Attributes Used to Search for a User to be Authenticated",
      "description" : "The attributes specified in this list form the LDAP search filter.<br><br>The
 default value of uid will form the following search filter of <code>uid=<i>user</i></code>, if there
 are multiple values such as uid and cn, the module will create a search filter as follows <code>(|
(uid=<i>user</i>)(cn=<i>user</i>))</code>",
      "propertyOrder" : 700,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "userBindDN" : {
      "title" : "Bind User DN",
```


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```
      "description" : "The DN of an admin user used by the module to authentication to the LDAP
 server<br><br>The LDAP module requires an administration account in order to perform functionality
 such as password reset.<br/><br/><i>NB </i><code>cn=Directory Manager</code> should not be used in
 production systems.",
      "propertyOrder" : 400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "userBindPassword" : {
      "title" : "Bind User Password",
      "description" : "The password of the administration account.",
      "propertyOrder" : 500,
      "required" : true,
      "type" : "string",
      "format" : "password",
      "exampleValue" : ""
    },
    "openam-auth-ldap-connection-mode" : {
      "title" : "LDAP Connection Mode",
      "description" : "Defines which protocol/operation is used to establish the connection to the
 LDAP Directory Server.<br><br>If 'LDAP' is selected, the connection <b>won't be secured</b> and
 passwords are transferred in <b>cleartext</b> over the network.<br/> If 'LDAPS' is selected, the
 connection is secured via SSL or TLS. <br/> If 'StartTLS' is selected, the connection is secured by
 using StartTLS extended operation.",
      "propertyOrder" : 1000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "userSearchStartDN" : {
      "title" : "DN to Start User Search",
      "description" : "The search for accounts to be authenticated start from this base DN <br><br>For
 a single server just enter the Base DN to be searched. Multiple OpenAM servers can have different
 base DNs for the search The format is as follows:<br/><br/><code>local server name | search DN</
code><br/><br/><i>NB </i>The local server name is the full name of the server from the list of servers
 and sites.",
      "propertyOrder" : 300,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "secondaryLdapServer" : {
      "title" : "Secondary Active Directory Server",
      "description" : "Use this list to set the secondary (failover) Active Directory server used
 for authentication.<br><br>If the primary Active Directory server fails, the Active Directory
 authentication module will failover to the secondary server. A single entry must be in the
 format:<br/><br/><code>server:port</code><br/><br/>Multiple entries allow associations between
 OpenAM servers and an Active Directory server. The format is:<br/><br/><code>local server name |
 server:port</code><br/><br/><i>NB </i>The local server name is the full name of the server from the
 list of servers and sites.",
      "propertyOrder" : 200,
      "required" : true,
      "items" : {
        "type" : "string"
      },
```


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```
      "type" : "array",
      "exampleValue" : ""
    },
    "operationTimeout" : {
      "title" : "LDAP operations timeout",
      "description" : "Defines the timeout in seconds OpenAM should wait for a response of the
 Directory Server - <code>0</code> means no timeout.<br><br>If the Directory Server's host is down
 completely or the TCP connection became stale OpenAM waits until operation timeouts from the OS or
 the JVM are applied. However this setting allows more granular control within OpenAM itself. A value
 of <code>0</code> means NO timeout is applied on OpenAM level and the timeouts from the JVM or OS
 will apply.",
      "propertyOrder" : 1700,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "userProfileRetrievalAttribute" : {
      "title" : "Attribute Used to Retrieve User Profile",
      "description" : "The LDAP module will use this attribute to search of the profile of an
 authenticated user.<br><br>This is the attribute used to find the profile of the authenticated user.
 Normally this will be the same attribute used to find the user account. The value will be the name of
 the user used for authentication.",
      "propertyOrder" : 600,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "searchScope" : {
      "title" : "Search Scope",
      "description" : "The level in the Directory Server that will be searched for a matching
 user profile.<br><br>This attribute controls how the directory is searched.<br/><br/
><ul><li><code>OBJECT</code>: Only the Base DN is searched.</li><li><code>ONELEVEL</code>: Only the
 single level below (and not the Base DN) is searched</li><li><code>SUBTREE</code>: The Base DN and
 all levels below are searched</li></ul>",
      "propertyOrder" : 900,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "authenticationLevel" : {
      "title" : "Authentication Level",
      "description" : "The authentication level associated with this module.<br><br>Each
 authentication module has an authentication level that can be used to indicate the level of security
 associated with the module; 0 is the lowest (and the default). ",
      "propertyOrder" : 1800,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "returnUserDN" : {
      "title" : "Return User DN to DataStore",
      "description" : "Controls whether the DN or the username is returned as the authentication
 principal.",
      "propertyOrder" : 1200,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "connectionHeartbeatInterval" : {
```


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```
      "title" : "LDAP Connection Heartbeat Interval",
      "description" : "Specifies how often should OpenAM send a heartbeat request to the
 directory.<br><br>Use this option in case a firewall/loadbalancer can close idle connections,
 since the heartbeat requests will ensure that the connections won't become idle. Use along with the
 Heartbeat Time Unit parameter to define the correct interval. Zero or negative value will result in
 disabling heartbeat requests.",
      "propertyOrder" : 1500,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "trustAllServerCertificates" : {
      "title" : "Trust All Server Certificates",
      "description" : "Enables a <code>X509TrustManager</code> that trusts all
 certificates.<br><br>This feature will allow the LDAP authentication module to connect to LDAP
 servers protected by self signed or invalid certificates (such as invalid hostname).<br/><br/><i>NB
 </i>Use this feature with care as it bypasses the normal certificate verification process",
      "propertyOrder" : 1400,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "userSearchFilter" : {
      "title" : "User Search Filter",
      "description" : "This search filter will be appended to the standard user search
 filter.<br><br>This attribute can be used to append a custom search filter to the standard filter.
 For example: <code>(objectClass=person)</code>would result in the following user search filter:<br/
><br/><code>(&(uid=<i>user</i>)(objectClass=person))</code>",
      "propertyOrder" : 800,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "connectionHeartbeatTimeUnit" : {
      "title" : "LDAP Connection Heartbeat Time Unit",
      "description" : "Defines the time unit corresponding to the Heartbeat Interval
 setting.<br><br>Use this option in case a firewall/loadbalancer can close idle connections, since the
 heartbeat requests will ensure that the connections won't become idle.",
      "propertyOrder" : 1600,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "primaryLdapServer" : {
      "title" : "Primary Active Directory Server ",
      "description" : "Use this list to set the primary Active Directory server used for
 authentication. <br><br>The Active Directory authentication module will use this list as the primary
 server for authentication. A single entry must be in the format:<br/><br/><code>server:port</
code><br/><br/>Multiple entries allow associations between OpenAM servers and an Active Directory
 server. The format is:<br/><br/><code>local server name | server:port</code><br/><br/>The local
 server name is the full name of the server from the list of servers and sites.",
      "propertyOrder" : 100,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    }
```


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```
  }
}
```

1.3.2. Global Operations

Resource path: `/global-config/authentication/modules/activedirectory`

Resource version: `1.0`

1.3.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action ActiveDirectoryModule --global --actionName getAllTypes
```

1.3.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action ActiveDirectoryModule --global --actionName getCreatableTypes
```

1.3.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action ActiveDirectoryModule --global --actionName nextdescendents
```

1.3.2.4. read

Usage:

```
am> read ActiveDirectoryModule --global
```

1.3.2.5. update

Usage:

```
am> update ActiveDirectoryModule --global --body body
```

Parameters:

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--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "defaults" : {
      "properties" : {
        "openam-auth-ldap-connection-mode" : {
          "title" : "LDAP Connection Mode",
          "description" : "Defines which protocol/operation is used to establish the connection to
 the LDAP Directory Server.<br><br>If 'LDAP' is selected, the connection <b>won't be secured</b> and
 passwords are transferred in <b>cleartext</b> over the network.<br/> If 'LDAPS' is selected, the
 connection is secured via SSL or TLS. <br/> If 'StartTLS' is selected, the connection is secured by
 using StartTLS extended operation.",
          "propertyOrder" : 1000,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "userSearchFilter" : {
          "title" : "User Search Filter",
          "description" : "This search filter will be appended to the standard user search
 filter.<br><br>This attribute can be used to append a custom search filter to the standard filter.
 For example: <code>(objectClass=person)</code>would result in the following user search filter:<br/
><br/><code>(&(uid=<i>user</i>)(objectClass=person))</code>",
          "propertyOrder" : 800,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "operationTimeout" : {
          "title" : "LDAP operations timeout",
          "description" : "Defines the timeout in seconds OpenAM should wait for a response of the
 Directory Server - <code>0</code> means no timeout.<br><br>If the Directory Server's host is down
 completely or the TCP connection became stale OpenAM waits until operation timeouts from the OS or
 the JVM are applied. However this setting allows more granular control within OpenAM itself. A value
 of <code>0</code> means NO timeout is applied on OpenAM level and the timeouts from the JVM or OS
 will apply.",
          "propertyOrder" : 1700,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "authenticationLevel" : {
          "title" : "Authentication Level",
          "description" : "The authentication level associated with this module.<br><br>Each
 authentication module has an authentication level that can be used to indicate the level of security
 associated with the module; 0 is the lowest (and the default). ",
          "propertyOrder" : 1800,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "userProfileRetrievalAttribute" : {
          "title" : "Attribute Used to Retrieve User Profile",
          "description" : "The LDAP module will use this attribute to search of the profile of an
 authenticated user.<br><br>This is the attribute used to find the profile of the authenticated user.
```


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```
 Normally this will be the same attribute used to find the user account. The value will be the name of
 the user used for authentication.",
          "propertyOrder" : 600,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "searchScope" : {
          "title" : "Search Scope",
          "description" : "The level in the Directory Server that will be searched for a
 matching user profile.<br><br>This attribute controls how the directory is searched.<br/><br/
><ul><li><code>OBJECT</code>: Only the Base DN is searched.</li><li><code>ONELEVEL</code>: Only the
 single level below (and not the Base DN) is searched</li><li><code>SUBTREE</code>: The Base DN and
 all levels below are searched</li></ul>",
          "propertyOrder" : 900,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "profileAttributeMappings" : {
          "title" : "User Creation Attributes",
          "description" : "Controls the mapping of local attribute to external attribute for dynamic
 profile creation.<br><br>If dynamic profile creation is enabled; this feature allows for a mapping
 between the attribute/values retrieved from the users authenticated profile and the attribute/values
 that will be provisioned into their matching account in the data store.<br/><br/>The format of this
 property is: <br/><br/><code> local attr1|external attr1</code>",
          "propertyOrder" : 1300,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "secondaryLdapServer" : {
          "title" : "Secondary Active Directory Server",
          "description" : "Use this list to set the secondary (failover) Active Directory server
 used for authentication.<br><br>If the primary Active Directory server fails, the Active Directory
 authentication module will failover to the secondary server. A single entry must be in the
 format:<br/><br/><code>server:port</code><br/><br/>Multiple entries allow associations between
 OpenAM servers and an Active Directory server. The format is:<br/><br/><code>local server name |
 server:port</code><br/><br/><i>NB </i>The local server name is the full name of the server from the
 list of servers and sites.",
          "propertyOrder" : 200,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "userSearchStartDN" : {
          "title" : "DN to Start User Search",
          "description" : "The search for accounts to be authenticated start from this base DN
 <br><br>For a single server just enter the Base DN to be searched. Multiple OpenAM servers can have
 different base DNs for the search The format is as follows:<br/><br/><code>local server name | search
 DN</code><br/><br/><i>NB </i>The local server name is the full name of the server from the list of
 servers and sites.",
          "propertyOrder" : 300,
```


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```
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "userBindPassword" : {
          "title" : "Bind User Password",
          "description" : "The password of the administration account.",
          "propertyOrder" : 500,
          "required" : true,
          "type" : "string",
          "format" : "password",
          "exampleValue" : ""
        },
        "userBindDN" : {
          "title" : "Bind User DN",
          "description" : "The DN of an admin user used by the module to authentication to the LDAP
 server<br><br>The LDAP module requires an administration account in order to perform functionality
 such as password reset.<br/><br/><i>NB </i><code>cn=Directory Manager</code> should not be used in
 production systems.",
          "propertyOrder" : 400,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "trustAllServerCertificates" : {
          "title" : "Trust All Server Certificates",
          "description" : "Enables a <code>X509TrustManager</code> that trusts all
 certificates.<br><br>This feature will allow the LDAP authentication module to connect to LDAP
 servers protected by self signed or invalid certificates (such as invalid hostname).<br/><br/><i>NB
 </i>Use this feature with care as it bypasses the normal certificate verification process",
          "propertyOrder" : 1400,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "primaryLdapServer" : {
          "title" : "Primary Active Directory Server ",
          "description" : "Use this list to set the primary Active Directory server used for
 authentication. <br><br>The Active Directory authentication module will use this list as the primary
 server for authentication. A single entry must be in the format:<br/><br/><code>server:port</
code><br/><br/>Multiple entries allow associations between OpenAM servers and an Active Directory
 server. The format is:<br/><br/><code>local server name | server:port</code><br/><br/>The local
 server name is the full name of the server from the list of servers and sites.",
          "propertyOrder" : 100,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "connectionHeartbeatTimeUnit" : {
          "title" : "LDAP Connection Heartbeat Time Unit",
          "description" : "Defines the time unit corresponding to the Heartbeat Interval
 setting.<br><br>Use this option in case a firewall/loadbalancer can close idle connections, since the
 heartbeat requests will ensure that the connections won't become idle.",
```


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```
          "propertyOrder" : 1600,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "userSearchAttributes" : {
          "title" : "Attributes Used to Search for a User to be Authenticated",
          "description" : "The attributes specified in this list form the LDAP search
 filter.<br><br>The default value of uid will form the following search filter of <code>uid=<i>user</
i></code>, if there are multiple values such as uid and cn, the module will create a search filter as
 follows <code>(|(uid=<i>user</i>)(cn=<i>user</i>))</code>",
          "propertyOrder" : 700,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "returnUserDN" : {
          "title" : "Return User DN to DataStore",
          "description" : "Controls whether the DN or the username is returned as the authentication
 principal.",
          "propertyOrder" : 1200,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "connectionHeartbeatInterval" : {
          "title" : "LDAP Connection Heartbeat Interval",
          "description" : "Specifies how often should OpenAM send a heartbeat request to the
 directory.<br><br>Use this option in case a firewall/loadbalancer can close idle connections,
 since the heartbeat requests will ensure that the connections won't become idle. Use along with the
 Heartbeat Time Unit parameter to define the correct interval. Zero or negative value will result in
 disabling heartbeat requests.",
          "propertyOrder" : 1500,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        }
      },
      "type" : "object",
      "title" : "Realm Defaults"
    }
  }
}
```


1.4. AdaptiveRiskModule

1.4.1. Realm Operations

Resource path: `/realm-config/authentication/modules/adaptiverisk`

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Resource version: `1.0`

1.4.1.1. create

Usage:

```
am> create AdaptiveRiskModule --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "knownCookieScore" : {
      "title" : "Score",
      "description" : "The amount to increment the score if this check fails.",
      "propertyOrder" : 2000,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "invertGeolocationScore" : {
      "title" : "Invert Result",
      "description" : "If the check succeeds the score will be included in the total, for failure the
 score will not be incremented.",
      "propertyOrder" : 4200,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "saveDeviceCookieValueOnSuccessfulLogin" : {
      "title" : "Save Device Registration on Successful Login",
      "description" : "Set the device cookie on the client response<br><br>The Adaptive Risk Post
 Authentication Plug-in will set the device cookie on the client response",
      "propertyOrder" : 3500,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "profileRiskAttributeName" : {
      "title" : "Attribute Name",
      "description" : "The name of the attribute to retrieve from the user profile in the data
 store.",
      "propertyOrder" : 2900,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
```


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```
   "failureScore" : {
     "title" : "Score",
     "description" : "The amount to increment the score if this check fails.",
     "propertyOrder" : 400,
     "required" : true,
     "type" : "integer",
     "exampleValue" : ""
   },
   "deviceCookieCheckEnabled" : {
     "title" : "Device Registration Cookie Check",
     "description" : "Enables the checking of the client request for a known cookie.<br><br>If this
check is enabled, the check will pass if the client request contains the named cookie.",
     "propertyOrder" : 3300,
     "required" : true,
     "type" : "boolean",
     "exampleValue" : ""
   },
   "ipHistoryCount" : {
     "title" : "History size",
     "description" : "The number of client IP addresses to save in the history list.",
     "propertyOrder" : 1100,
     "required" : true,
     "type" : "integer",
     "exampleValue" : ""
   },
   "knownCookieName" : {
     "title" : "Cookie Name",
     "description" : "The name of the cookie to set on the client.",
     "propertyOrder" : 1700,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "profileRiskAttributeValue" : {
     "title" : "Attribute Value",
     "description" : "The required value of the named attribute.",
     "propertyOrder" : 3000,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "createKnownCookieOnSuccessfulLogin" : {
     "title" : "Save Cookie Value on Successful Login",
     "description" : "The cookie will be created on the client after successful login<br><br>The
Adaptive Risk Post Authentication Plug-in will set the cookie on the client response",
     "propertyOrder" : 1900,
     "required" : true,
     "type" : "boolean",
     "exampleValue" : ""
   },
   "ipHistoryCheckEnabled" : {
     "title" : "IP History Check",
     "description" : "Enables the checking of client IP address against a list of past IP
addresses.<br><br>If this check is enabled; a set number of past IP addresses used by the client to
access OpenAM is recorded in the user profile. This check passes if the current client IP address
is present in the history list. If the IP address is not present, the check fails and the IP address
is added to list if the overall authentication is successful (causing the oldest IP address to be
removed).",
     "propertyOrder" : 1000,
```


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```
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "ipRange" : {
      "title" : "IP Range",
      "description" : "The list of IP address to compare against the client IP address.<br><br>The
 format of the IP address is as follows:<br/><br/><ul><li>Single IP address: <code>172.16.90.1</
code></li><li>CIDR notation: <code>172.16.90.0/24</code></li><li>IP net-block with netmask:
 <code>172.16.90.0:255.255.255.0</code></li></ul>",
      "propertyOrder" : 700,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "geolocationDatabaseLocation" : {
      "title" : "Geolocation Database location",
      "description" : "The path to the location of the GEO location database.<br><br>The Geolocation
 database is not distributed with OpenAM, you can get it in binary format from <a href=\"http://
www.maxmind.com/app/country\" target=\"_blank\">MaxMind</a>.",
      "propertyOrder" : 3900,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "profileRiskAttributeScore" : {
      "title" : "Score",
      "description" : "The amount to increment the score if this check fails.",
      "propertyOrder" : 3100,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "invertIPHistoryScore" : {
      "title" : "Invert Result",
      "description" : "If the check succeeds the score will be included in the total, for failure the
 score will not be incremented.",
      "propertyOrder" : 1500,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "geolocationValidCountryCodes" : {
      "title" : "Valid Country Codes",
      "description" : "The list of country codes that are considered as valid locations for client
 IPs.<br><br>The list is made up of country codes separated by a | character; for example:<br/><br/
><code>gb|us|no|fr</code>",
      "propertyOrder" : 4000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "failedAuthenticationCheckEnabled" : {
      "title" : "Failed Authentication Check",
```


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```
      "description" : "Checks if the user has past authentication failures.<br><br>Check if the OpenAM
 account lockout mechanism has recorded past authentication failures for the user.<br/><br/><i>NB </
i>For this check to function, Account Lockout must be enabled.",
      "propertyOrder" : 300,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "invertIPRangeScoreEnabled" : {
      "title" : "Invert Result",
      "description" : "If the check succeeds the score will be included in the total, for failure the
 score will not be incremented.",
      "propertyOrder" : 900,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "requestHeaderScore" : {
      "title" : "Score",
      "description" : "The amount to increment the score if this check fails.",
      "propertyOrder" : 4600,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "invertRequestHeaderScore" : {
      "title" : "Invert Result",
      "description" : "If the check succeeds the score will be included in the total, for failure the
 score will not be incremented.",
      "propertyOrder" : 4700,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "maxTimeSinceLastLogin" : {
      "title" : "Max Time since Last login",
      "description" : "The maximum number of days that can elapse before this test.",
      "propertyOrder" : 2400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "invertProfileRiskAttributeScore" : {
      "title" : "Invert Result",
      "description" : "If the check succeeds the score will be included in the total, for failure the
 score will not be incremented.",
      "propertyOrder" : 3200,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "timeSinceLastLoginScore" : {
      "title" : "Score",
      "description" : "The amount to increment the score if this check fails.",
      "propertyOrder" : 2600,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
```


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```
   "requestHeaderName" : {
     "title" : "Request Header Name",
     "description" : "The name of the required HTTP header ",
     "propertyOrder" : 4400,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "invertTimeSinceLastLoginScore" : {
     "title" : "Invert Result",
     "description" : "If the check succeeds the score will be included in the total, for failure the
score will not be incremented.",
     "propertyOrder" : 2700,
     "required" : true,
     "type" : "boolean",
     "exampleValue" : ""
   },
   "saveSuccessfulIP" : {
     "title" : "Save Successful IP Address",
     "description" : "The IP History list will be updated in the data store<br><br>The Adaptive
Risk Post Authentication Plug-in will update the IP history list if the overall authentication is
successful.",
     "propertyOrder" : 1300,
     "required" : true,
     "type" : "boolean",
     "exampleValue" : ""
   },
   "geolocationScore" : {
     "title" : "Score",
     "description" : "The amount to increment the score if this check fails.",
     "propertyOrder" : 4100,
     "required" : true,
     "type" : "integer",
     "exampleValue" : ""
   },
   "invertFailureScore" : {
     "title" : "Invert Result",
     "description" : "If the check succeeds the score will be included in the total, for failure the
score will not be incremented.",
     "propertyOrder" : 500,
     "required" : true,
     "type" : "boolean",
     "exampleValue" : ""
   },
   "profileRiskAttributeCheckEnabled" : {
     "title" : "Profile Risk Attribute check",
     "description" : "Enables the checking of the user profile for a matching attribute and
value.<br><br>If this check is enabled, the check will pass if the users profile contains the
required risk attribute and value.",
     "propertyOrder" : 2800,
     "required" : true,
     "type" : "boolean",
     "exampleValue" : ""
   },
   "saveLastLoginTimeOnSuccessfulLogin" : {
     "title" : "Save time of Successful Login",
     "description" : "The last login time will be saved in a client cookie<br><br>The Adaptive Risk
Post Authentication Plug-in will update the last login time",
     "propertyOrder" : 2500,
```


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```
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "invertKnownCookieScore" : {
      "title" : "Invert Result",
      "description" : "If the check succeeds the score will be included in the total, for failure the
score will not be incremented.",
      "propertyOrder" : 2100,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "timeSinceLastLoginCookieName" : {
      "title" : "Cookie Name",
      "description" : "The name of the cookie used to store the time of the last successful
authentication.",
      "propertyOrder" : 2300,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "riskThreshold" : {
      "title" : "Risk Threshold",
      "description" : "If the risk threshold value is not reached after executing the different tests,
the authentication is considered to be successful.<br><br>Associated with many of the adaptive risk
checks is a score; if a check does not passes then the score is added to the current running total.
The final score is then compared with the <i>Risk Threshold</i>, if the score is lesser than said
threshold the module will be successful. ",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "requestHeaderValue" : {
      "title" : "Request Header Value",
      "description" : "The required value of the named HTTP header.",
      "propertyOrder" : 4500,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "deviceCookieName" : {
      "title" : "Cookie Name",
      "description" : "The name of the cookie to be checked for (and optionally set) on the client
request",
      "propertyOrder" : 3400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "ipHistoryScore" : {
      "title" : "Score",
      "description" : "The amount to increment the score if this check fails.",
      "propertyOrder" : 1400,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
```


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```
    "authenticationLevel" : {
      "title" : "Authentication Level",
      "description" : "The authentication level associated with this module.<br><br>Each
 authentication module has an authentication level that can be used to indicate the level of security
 associated with the module; 0 is the lowest (and the default).",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "timeSinceLastLoginCheckEnabled" : {
      "title" : "Time since Last login Check",
      "description" : "Enables the checking of the last time the user successfully
 authenticated.<br><br>If this check is enabled, the check ensures the user has successfully
 authenticated within a given interval. If the interval has been exceeded the check will fail. The
 last authentication for the user is stored in a client cookie.",
      "propertyOrder" : 2200,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "ipHistoryProfileAttribute" : {
      "title" : "Profile Attribute Name",
      "description" : "The name of the attribute used to store the IP history list in the data
 store.<br><br>IP history list is stored in the Data Store meaning your Data Store should be able
 to store values under the configured attribute name. If you're using a directory server as backend,
 make sure your Data Store configuration contains the necessary objectclass and attribute related
 settings.",
      "propertyOrder" : 1200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "deviceCookieScore" : {
      "title" : "Score",
      "description" : "The amount to increment the score if this check fails.",
      "propertyOrder" : 3600,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "ipRangeCheckEnabled" : {
      "title" : "IP Range Check",
      "description" : "Enables the checking of the client IP address against a list of IP
 addresses.<br><br>The IP range check compares the IP of the client against a list of IP addresses, if
 the client IP is found within said list the check is successful.",
      "propertyOrder" : 600,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "geolocationCheckEnabled" : {
      "title" : "Geolocation Country Code Check",
      "description" : "Enables the checking of the client IP address against the geolocation
 database.<br><br>The geolocation database associates IP addresses against their known location. This
 check passes if the country associated with the client IP address is matched against the list of
 valid country codes.<br/><br/>The geolocation database is available in binary format at <a href=
\"http://www.maxmind.com/app/country\" target=\"_blank\">MaxMind</a>.",
      "propertyOrder" : 3800,
```


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```
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "ipRangeScore" : {
      "title" : "Score",
      "description" : "The amount to increment the score if this check fails.",
      "propertyOrder" : 800,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "knownCookieCheckEnabled" : {
      "title" : "Cookie Value Check",
      "description" : "Enables the checking of a known cookie value in the client request<br><br>If
 this check is enabled, the check looks for a known cookie in the client request. If the cookie exists
 and has the correct value then the check will pass. ",
      "propertyOrder" : 1600,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "knownCookieValue" : {
      "title" : "Cookie Value",
      "description" : "The value to be set on the cookie.",
      "propertyOrder" : 1800,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "requestHeaderCheckEnabled" : {
      "title" : "Request Header Check",
      "description" : "Enables the checking of the client request for a known header name and
 value.<br><br>The request header check will pass if the client request contains the required named
 header and value.",
      "propertyOrder" : 4300,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "invertDeviceCookieScore" : {
      "title" : "Invert Result",
      "description" : "If the check succeeds the score will be included in the total, for failure the
 score will not be incremented.",
      "propertyOrder" : 3700,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    }
  }
}
```

1.4.1.2. delete

Usage:

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```
am> delete AdaptiveRiskModule --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.4.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action AdaptiveRiskModule --realm Realm --actionName getAllTypes
```

1.4.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action AdaptiveRiskModule --realm Realm --actionName getCreatableTypes
```

1.4.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action AdaptiveRiskModule --realm Realm --actionName nextdescendents
```

1.4.1.6. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

```
am> query AdaptiveRiskModule --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.4.1.7. read

Usage:

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```
am> read AdaptiveRiskModule --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.4.1.8. update

Usage:

```
am> update AdaptiveRiskModule --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "knownCookieScore" : {
      "title" : "Score",
      "description" : "The amount to increment the score if this check fails.",
      "propertyOrder" : 2000,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "invertGeolocationScore" : {
      "title" : "Invert Result",
      "description" : "If the check succeeds the score will be included in the total, for failure the
 score will not be incremented.",
      "propertyOrder" : 4200,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "saveDeviceCookieValueOnSuccessfulLogin" : {
      "title" : "Save Device Registration on Successful Login",
      "description" : "Set the device cookie on the client response<br><br>The Adaptive Risk Post
 Authentication Plug-in will set the device cookie on the client response",
      "propertyOrder" : 3500,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "profileRiskAttributeName" : {
      "title" : "Attribute Name",
```


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```
      "description" : "The name of the attribute to retrieve from the user profile in the data
store.",
      "propertyOrder" : 2900,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "failureScore" : {
      "title" : "Score",
      "description" : "The amount to increment the score if this check fails.",
      "propertyOrder" : 400,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "deviceCookieCheckEnabled" : {
      "title" : "Device Registration Cookie Check",
      "description" : "Enables the checking of the client request for a known cookie.<br><br>If this
check is enabled, the check will pass if the client request contains the named cookie.",
      "propertyOrder" : 3300,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "ipHistoryCount" : {
      "title" : "History size",
      "description" : "The number of client IP addresses to save in the history list.",
      "propertyOrder" : 1100,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "knownCookieName" : {
      "title" : "Cookie Name",
      "description" : "The name of the cookie to set on the client.",
      "propertyOrder" : 1700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "profileRiskAttributeValue" : {
      "title" : "Attribute Value",
      "description" : "The required value of the named attribute.",
      "propertyOrder" : 3000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "createKnownCookieOnSuccessfulLogin" : {
      "title" : "Save Cookie Value on Successful Login",
      "description" : "The cookie will be created on the client after successful login<br><br>The
Adaptive Risk Post Authentication Plug-in will set the cookie on the client response",
      "propertyOrder" : 1900,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "ipHistoryCheckEnabled" : {
      "title" : "IP History Check",
```


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```
      "description" : "Enables the checking of client IP address against a list of past IP
 addresses.<br><br>If this check is enabled; a set number of past IP addresses used by the client to
 access OpenAM is recorded in the user profile. This check passes if the current client IP address
 is present in the history list. If the IP address is not present, the check fails and the IP address
 is added to list if the overall authentication is successful (causing the oldest IP address to be
 removed).",
      "propertyOrder" : 1000,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "ipRange" : {
      "title" : "IP Range",
      "description" : "The list of IP address to compare against the client IP address.<br><br>The
 format of the IP address is as follows:<br/><br/><ul><li>Single IP address: <code>172.16.90.1</
code></li><li>CIDR notation: <code>172.16.90.0/24</code></li><li>IP net-block with netmask:
 <code>172.16.90.0:255.255.255.0</code></li></ul>",
      "propertyOrder" : 700,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "geolocationDatabaseLocation" : {
      "title" : "Geolocation Database location",
      "description" : "The path to the location of the GEO location database.<br><br>The Geolocation
 database is not distributed with OpenAM, you can get it in binary format from <a href=\"http://
www.maxmind.com/app/country\" target=\"_blank\">MaxMind</a>.",
      "propertyOrder" : 3900,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "profileRiskAttributeScore" : {
      "title" : "Score",
      "description" : "The amount to increment the score if this check fails.",
      "propertyOrder" : 3100,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "invertIPHistoryScore" : {
      "title" : "Invert Result",
      "description" : "If the check succeeds the score will be included in the total, for failure the
 score will not be incremented.",
      "propertyOrder" : 1500,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "geolocationValidCountryCodes" : {
      "title" : "Valid Country Codes",
      "description" : "The list of country codes that are considered as valid locations for client
 IPs.<br><br>The list is made up of country codes separated by a | character; for example:<br/><br/
><code>gb|us|no|fr</code>",
      "propertyOrder" : 4000,
      "required" : true,
```


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```
      "type" : "string",
      "exampleValue" : ""
    },
    "failedAuthenticationCheckEnabled" : {
      "title" : "Failed Authentication Check",
      "description" : "Checks if the user has past authentication failures.<br><br>Check if the OpenAM
 account lockout mechanism has recorded past authentication failures for the user.<br/><br/><i>NB </
i>For this check to function, Account Lockout must be enabled.",
      "propertyOrder" : 300,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "invertIPRangeScoreEnabled" : {
      "title" : "Invert Result",
      "description" : "If the check succeeds the score will be included in the total, for failure the
 score will not be incremented.",
      "propertyOrder" : 900,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "requestHeaderScore" : {
      "title" : "Score",
      "description" : "The amount to increment the score if this check fails.",
      "propertyOrder" : 4600,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "invertRequestHeaderScore" : {
      "title" : "Invert Result",
      "description" : "If the check succeeds the score will be included in the total, for failure the
 score will not be incremented.",
      "propertyOrder" : 4700,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "maxTimeSinceLastLogin" : {
      "title" : "Max Time since Last login",
      "description" : "The maximum number of days that can elapse before this test.",
      "propertyOrder" : 2400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "invertProfileRiskAttributeScore" : {
      "title" : "Invert Result",
      "description" : "If the check succeeds the score will be included in the total, for failure the
 score will not be incremented.",
      "propertyOrder" : 3200,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "timeSinceLastLoginScore" : {
      "title" : "Score",
      "description" : "The amount to increment the score if this check fails.",
```


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```
      "propertyOrder" : 2600,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "requestHeaderName" : {
      "title" : "Request Header Name",
      "description" : "The name of the required HTTP header ",
      "propertyOrder" : 4400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "invertTimeSinceLastLoginScore" : {
      "title" : "Invert Result",
      "description" : "If the check succeeds the score will be included in the total, for failure the
score will not be incremented.",
      "propertyOrder" : 2700,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "saveSuccessfulIP" : {
      "title" : "Save Successful IP Address",
      "description" : "The IP History list will be updated in the data store<br><br>The Adaptive
Risk Post Authentication Plug-in will update the IP history list if the overall authentication is
successful.",
      "propertyOrder" : 1300,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "geolocationScore" : {
      "title" : "Score",
      "description" : "The amount to increment the score if this check fails.",
      "propertyOrder" : 4100,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "invertFailureScore" : {
      "title" : "Invert Result",
      "description" : "If the check succeeds the score will be included in the total, for failure the
score will not be incremented.",
      "propertyOrder" : 500,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "profileRiskAttributeCheckEnabled" : {
      "title" : "Profile Risk Attribute check",
      "description" : "Enables the checking of the user profile for a matching attribute and
value.<br><br>If this check is enabled, the check will pass if the users profile contains the
required risk attribute and value.",
      "propertyOrder" : 2800,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
```


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```
   "saveLastLoginTimeOnSuccessfulLogin" : {
     "title" : "Save time of Successful Login",
     "description" : "The last login time will be saved in a client cookie<br><br>The Adaptive Risk
Post Authentication Plug-in will update the last login time",
     "propertyOrder" : 2500,
     "required" : true,
     "type" : "boolean",
     "exampleValue" : ""
   },
   "invertKnownCookieScore" : {
     "title" : "Invert Result",
     "description" : "If the check succeeds the score will be included in the total, for failure the
score will not be incremented.",
     "propertyOrder" : 2100,
     "required" : true,
     "type" : "boolean",
     "exampleValue" : ""
   },
   "timeSinceLastLoginCookieName" : {
     "title" : "Cookie Name",
     "description" : "The name of the cookie used to store the time of the last successful
authentication.",
     "propertyOrder" : 2300,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "riskThreshold" : {
     "title" : "Risk Threshold",
     "description" : "If the risk threshold value is not reached after executing the different tests,
the authentication is considered to be successful.<br><br>Associated with many of the adaptive risk
checks is a score; if a check does not passes then the score is added to the current running total.
The final score is then compared with the <i>Risk Threshold</i>, if the score is lesser than said
threshold the module will be successful. ",
     "propertyOrder" : 200,
     "required" : true,
     "type" : "integer",
     "exampleValue" : ""
   },
   "requestHeaderValue" : {
     "title" : "Request Header Value",
     "description" : "The required value of the named HTTP header.",
     "propertyOrder" : 4500,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "deviceCookieName" : {
     "title" : "Cookie Name",
     "description" : "The name of the cookie to be checked for (and optionally set) on the client
request",
     "propertyOrder" : 3400,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "ipHistoryScore" : {
     "title" : "Score",
     "description" : "The amount to increment the score if this check fails.",
```


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```
      "propertyOrder" : 1400,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "authenticationLevel" : {
      "title" : "Authentication Level",
      "description" : "The authentication level associated with this module.<br><br>Each
authentication module has an authentication level that can be used to indicate the level of security
associated with the module; 0 is the lowest (and the default).",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "timeSinceLastLoginCheckEnabled" : {
      "title" : "Time since Last login Check",
      "description" : "Enables the checking of the last time the user successfully
authenticated.<br><br>If this check is enabled, the check ensures the user has successfully
authenticated within a given interval. If the interval has been exceeded the check will fail. The
last authentication for the user is stored in a client cookie.",
      "propertyOrder" : 2200,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "ipHistoryProfileAttribute" : {
      "title" : "Profile Attribute Name",
      "description" : "The name of the attribute used to store the IP history list in the data
store.<br><br>IP history list is stored in the Data Store meaning your Data Store should be able
to store values under the configured attribute name. If you're using a directory server as backend,
make sure your Data Store configuration contains the necessary objectclass and attribute related
settings.",
      "propertyOrder" : 1200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "deviceCookieScore" : {
      "title" : "Score",
      "description" : "The amount to increment the score if this check fails.",
      "propertyOrder" : 3600,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "ipRangeCheckEnabled" : {
      "title" : "IP Range Check",
      "description" : "Enables the checking of the client IP address against a list of IP
addresses.<br><br>The IP range check compares the IP of the client against a list of IP addresses, if
the client IP is found within said list the check is successful.",
      "propertyOrder" : 600,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "geolocationCheckEnabled" : {
      "title" : "Geolocation Country Code Check",
```


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```
      "description" : "Enables the checking of the client IP address against the geolocation
 database.<br><br>The geolocation database associates IP addresses against their known location. This
 check passes if the country associated with the client IP address is matched against the list of
 valid country codes.<br/><br/>The geolocation database is available in binary format at <a href=
\"http://www.maxmind.com/app/country\" target=\"_blank\">MaxMind</a>.",
      "propertyOrder" : 3800,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "ipRangeScore" : {
      "title" : "Score",
      "description" : "The amount to increment the score if this check fails.",
      "propertyOrder" : 800,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "knownCookieCheckEnabled" : {
      "title" : "Cookie Value Check",
      "description" : "Enables the checking of a known cookie value in the client request<br><br>If
 this check is enabled, the check looks for a known cookie in the client request. If the cookie exists
 and has the correct value then the check will pass. ",
      "propertyOrder" : 1600,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "knownCookieValue" : {
      "title" : "Cookie Value",
      "description" : "The value to be set on the cookie.",
      "propertyOrder" : 1800,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "requestHeaderCheckEnabled" : {
      "title" : "Request Header Check",
      "description" : "Enables the checking of the client request for a known header name and
 value.<br><br>The request header check will pass if the client request contains the required named
 header and value.",
      "propertyOrder" : 4300,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "invertDeviceCookieScore" : {
      "title" : "Invert Result",
      "description" : "If the check succeeds the score will be included in the total, for failure the
 score will not be incremented.",
      "propertyOrder" : 3700,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    }
  }
}
```


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1.4.2. Global Operations

Resource path: `/global-config/authentication/modules/adaptiverisk`

Resource version: `1.0`

1.4.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action AdaptiveRiskModule --global --actionName getAllTypes
```

1.4.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action AdaptiveRiskModule --global --actionName getCreatableTypes
```

1.4.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action AdaptiveRiskModule --global --actionName nextdescendents
```

1.4.2.4. read

Usage:

```
am> read AdaptiveRiskModule --global
```

1.4.2.5. update

Usage:

```
am> update AdaptiveRiskModule --global --body body
```

Parameters:

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--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "defaults" : {
      "properties" : {
        "general" : {
          "type" : "object",
          "title" : "General",
          "propertyOrder" : 0,
          "properties" : {
            "riskThreshold" : {
              "title" : "Risk Threshold",
              "description" : "If the risk threshold value is not reached after executing the
different tests, the authentication is considered to be successful.<br><br>Associated with many
of the adaptive risk checks is a score; if a check does not passes then the score is added to the
current running total. The final score is then compared with the <i>Risk Threshold</i>, if the score
is lesser than said threshold the module will be successful. ",
              "propertyOrder" : 200,
              "required" : true,
              "type" : "integer",
              "exampleValue" : ""
            },
            "authenticationLevel" : {
              "title" : "Authentication Level",
              "description" : "The authentication level associated with this module.<br><br>Each
authentication module has an authentication level that can be used to indicate the level of security
associated with the module; 0 is the lowest (and the default).",
              "propertyOrder" : 100,
              "required" : true,
              "type" : "integer",
              "exampleValue" : ""
            }
          }
        },
        "iphistory" : {
          "type" : "object",
          "title" : "IP Address History",
          "propertyOrder" : 3,
          "properties" : {
            "ipHistoryCheckEnabled" : {
              "title" : "IP History Check",
              "description" : "Enables the checking of client IP address against a list of past IP
addresses.<br><br>If this check is enabled; a set number of past IP addresses used by the client to
access OpenAM is recorded in the user profile. This check passes if the current client IP address
is present in the history list. If the IP address is not present, the check fails and the IP address
is added to list if the overall authentication is successful (causing the oldest IP address to be
removed).",
              "propertyOrder" : 1000,
              "required" : true,
              "type" : "boolean",
              "exampleValue" : ""
            },
            "ipHistoryScore" : {
              "title" : "Score",
              "description" : "The amount to increment the score if this check fails.",
```


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```
              "propertyOrder" : 1400,
              "required" : true,
              "type" : "integer",
              "exampleValue" : ""
            },
            "saveSuccessfulIP" : {
              "title" : "Save Successful IP Address",
              "description" : "The IP History list will be updated in the data store<br><br>The
Adaptive Risk Post Authentication Plug-in will update the IP history list if the overall
authentication is successful.",
              "propertyOrder" : 1300,
              "required" : true,
              "type" : "boolean",
              "exampleValue" : ""
            },
            "invertIPHistoryScore" : {
              "title" : "Invert Result",
              "description" : "If the check succeeds the score will be included in the total, for
failure the score will not be incremented.",
              "propertyOrder" : 1500,
              "required" : true,
              "type" : "boolean",
              "exampleValue" : ""
            },
            "ipHistoryCount" : {
              "title" : "History size",
              "description" : "The number of client IP addresses to save in the history list.",
              "propertyOrder" : 1100,
              "required" : true,
              "type" : "integer",
              "exampleValue" : ""
            },
            "ipHistoryProfileAttribute" : {
              "title" : "Profile Attribute Name",
              "description" : "The name of the attribute used to store the IP history list in the data
store.<br><br>IP history list is stored in the Data Store meaning your Data Store should be able
to store values under the configured attribute name. If you're using a directory server as backend,
make sure your Data Store configuration contains the necessary objectclass and attribute related
settings.",
              "propertyOrder" : 1200,
              "required" : true,
              "type" : "string",
              "exampleValue" : ""
            }
          }
        },
        "attributecheck" : {
          "type" : "object",
          "title" : "Profile Attribute",
          "propertyOrder" : 7,
          "properties" : {
            "profileRiskAttributeScore" : {
              "title" : "Score",
              "description" : "The amount to increment the score if this check fails.",
              "propertyOrder" : 3100,
              "required" : true,
              "type" : "integer",
              "exampleValue" : ""
            },
```


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```
            "invertProfileRiskAttributeScore" : {
              "title" : "Invert Result",
              "description" : "If the check succeeds the score will be included in the total, for
failure the score will not be incremented.",
              "propertyOrder" : 3200,
              "required" : true,
              "type" : "boolean",
              "exampleValue" : ""
            },
            "profileRiskAttributeValue" : {
              "title" : "Attribute Value",
              "description" : "The required value of the named attribute.",
              "propertyOrder" : 3000,
              "required" : true,
              "type" : "string",
              "exampleValue" : ""
            },
            "profileRiskAttributeName" : {
              "title" : "Attribute Name",
              "description" : "The name of the attribute to retrieve from the user profile in the data
store.",
              "propertyOrder" : 2900,
              "required" : true,
              "type" : "string",
              "exampleValue" : ""
            },
            "profileRiskAttributeCheckEnabled" : {
              "title" : "Profile Risk Attribute check",
              "description" : "Enables the checking of the user profile for a matching attribute
and value.<br><br>If this check is enabled, the check will pass if the users profile contains the
required risk attribute and value.",
              "propertyOrder" : 2800,
              "required" : true,
              "type" : "boolean",
              "exampleValue" : ""
            }
          }
        },
        "requestheader" : {
          "type" : "object",
          "title" : "Request Header",
          "propertyOrder" : 9,
          "properties" : {
            "requestHeaderScore" : {
              "title" : "Score",
              "description" : "The amount to increment the score if this check fails.",
              "propertyOrder" : 4600,
              "required" : true,
              "type" : "integer",
              "exampleValue" : ""
            },
            "requestHeaderValue" : {
              "title" : "Request Header Value",
              "description" : "The required value of the named HTTP header.",
              "propertyOrder" : 4500,
              "required" : true,
              "type" : "string",
              "exampleValue" : ""
            },
```


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```
            "requestHeaderCheckEnabled" : {
              "title" : "Request Header Check",
              "description" : "Enables the checking of the client request for a known header name and
value.<br><br>The request header check will pass if the client request contains the required named
header and value.",
              "propertyOrder" : 4300,
              "required" : true,
              "type" : "boolean",
              "exampleValue" : ""
            },
            "requestHeaderName" : {
              "title" : "Request Header Name",
              "description" : "The name of the required HTTP header ",
              "propertyOrder" : 4400,
              "required" : true,
              "type" : "string",
              "exampleValue" : ""
            },
            "invertRequestHeaderScore" : {
              "title" : "Invert Result",
              "description" : "If the check succeeds the score will be included in the total, for
failure the score will not be incremented.",
              "propertyOrder" : 4700,
              "required" : true,
              "type" : "boolean",
              "exampleValue" : ""
            }
          }
        },
        "iprange" : {
          "type" : "object",
          "title" : "IP Address Range",
          "propertyOrder" : 2,
          "properties" : {
            "ipRange" : {
              "title" : "IP Range",
              "description" : "The list of IP address to compare against the client IP
address.<br><br>The format of the IP address is as follows:<br/><br/><ul><li>Single IP address:
<code>172.16.90.1</code></li><li>CIDR notation: <code>172.16.90.0/24</code></li><li>IP net-block with
netmask: <code>172.16.90.0:255.255.255.0</code></li></ul>",
              "propertyOrder" : 700,
              "required" : true,
              "items" : {
                "type" : "string"
              },
              "type" : "array",
              "exampleValue" : ""
            },
            "ipRangeScore" : {
              "title" : "Score",
              "description" : "The amount to increment the score if this check fails.",
              "propertyOrder" : 800,
              "required" : true,
              "type" : "integer",
              "exampleValue" : ""
            },
            "ipRangeCheckEnabled" : {
              "title" : "IP Range Check",
```


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```
              "description" : "Enables the checking of the client IP address against a list of IP
addresses.<br><br>The IP range check compares the IP of the client against a list of IP addresses, if
the client IP is found within said list the check is successful.",
              "propertyOrder" : 600,
              "required" : true,
              "type" : "boolean",
              "exampleValue" : ""
            },
            "invertIPRangeScoreEnabled" : {
              "title" : "Invert Result",
              "description" : "If the check succeeds the score will be included in the total, for
failure the score will not be incremented.",
              "propertyOrder" : 900,
              "required" : true,
              "type" : "boolean",
              "exampleValue" : ""
            }
          }
        },
        "knowncookie" : {
          "type" : "object",
          "title" : "Known Cookie",
          "propertyOrder" : 4,
          "properties" : {
            "invertKnownCookieScore" : {
              "title" : "Invert Result",
              "description" : "If the check succeeds the score will be included in the total, for
failure the score will not be incremented.",
              "propertyOrder" : 2100,
              "required" : true,
              "type" : "boolean",
              "exampleValue" : ""
            },
            "createKnownCookieOnSuccessfulLogin" : {
              "title" : "Save Cookie Value on Successful Login",
              "description" : "The cookie will be created on the client after successful
login<br><br>The Adaptive Risk Post Authentication Plug-in will set the cookie on the client
response",
              "propertyOrder" : 1900,
              "required" : true,
              "type" : "boolean",
              "exampleValue" : ""
            },
            "knownCookieName" : {
              "title" : "Cookie Name",
              "description" : "The name of the cookie to set on the client.",
              "propertyOrder" : 1700,
              "required" : true,
              "type" : "string",
              "exampleValue" : ""
            },
            "knownCookieCheckEnabled" : {
              "title" : "Cookie Value Check",
              "description" : "Enables the checking of a known cookie value in the client
request<br><br>If this check is enabled, the check looks for a known cookie in the client request. If
the cookie exists and has the correct value then the check will pass. ",
              "propertyOrder" : 1600,
              "required" : true,
              "type" : "boolean",
```


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```
              "exampleValue" : ""
            },
            "knownCookieValue" : {
              "title" : "Cookie Value",
              "description" : "The value to be set on the cookie.",
              "propertyOrder" : 1800,
              "required" : true,
              "type" : "string",
              "exampleValue" : ""
            },
            "knownCookieScore" : {
              "title" : "Score",
              "description" : "The amount to increment the score if this check fails.",
              "propertyOrder" : 2000,
              "required" : true,
              "type" : "integer",
              "exampleValue" : ""
            }
          }
        },
        "lastlogin" : {
          "type" : "object",
          "title" : "Time Since Last Login",
          "propertyOrder" : 6,
          "properties" : {
            "maxTimeSinceLastLogin" : {
              "title" : "Max Time since Last login",
              "description" : "The maximum number of days that can elapse before this test.",
              "propertyOrder" : 2400,
              "required" : true,
              "type" : "string",
              "exampleValue" : ""
            },
            "timeSinceLastLoginCookieName" : {
              "title" : "Cookie Name",
              "description" : "The name of the cookie used to store the time of the last successful
authentication.",
              "propertyOrder" : 2300,
              "required" : true,
              "type" : "string",
              "exampleValue" : ""
            },
            "saveLastLoginTimeOnSuccessfulLogin" : {
              "title" : "Save time of Successful Login",
              "description" : "The last login time will be saved in a client cookie<br><br>The
Adaptive Risk Post Authentication Plug-in will update the last login time",
              "propertyOrder" : 2500,
              "required" : true,
              "type" : "boolean",
              "exampleValue" : ""
            },
            "timeSinceLastLoginScore" : {
              "title" : "Score",
              "description" : "The amount to increment the score if this check fails.",
              "propertyOrder" : 2600,
              "required" : true,
              "type" : "integer",
              "exampleValue" : ""
            },
```


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```
            "invertTimeSinceLastLoginScore" : {
              "title" : "Invert Result",
              "description" : "If the check succeeds the score will be included in the total, for
 failure the score will not be incremented.",
              "propertyOrder" : 2700,
              "required" : true,
              "type" : "boolean",
              "exampleValue" : ""
            },
            "timeSinceLastLoginCheckEnabled" : {
              "title" : "Time since Last login Check",
              "description" : "Enables the checking of the last time the user successfully
 authenticated.<br><br>If this check is enabled, the check ensures the user has successfully
 authenticated within a given interval. If the interval has been exceeded the check will fail. The
 last authentication for the user is stored in a client cookie.",
              "propertyOrder" : 2200,
              "required" : true,
              "type" : "boolean",
              "exampleValue" : ""
            }
          }
        },
        "geolocation" : {
          "type" : "object",
          "title" : "Geo Location",
          "propertyOrder" : 8,
          "properties" : {
            "geolocationDatabaseLocation" : {
              "title" : "Geolocation Database location",
              "description" : "The path to the location of the GEO location database.<br><br>The
 Geolocation database is not distributed with OpenAM, you can get it in binary format from <a href=
\"http://www.maxmind.com/app/country\" target=\"_blank\">MaxMind</a>.",
              "propertyOrder" : 3900,
              "required" : true,
              "type" : "string",
              "exampleValue" : ""
            },
            "geolocationValidCountryCodes" : {
              "title" : "Valid Country Codes",
              "description" : "The list of country codes that are considered as valid locations for
 client IPs.<br><br>The list is made up of country codes separated by a | character; for example:<br/
><br/><code>gb|us|no|fr</code>",
              "propertyOrder" : 4000,
              "required" : true,
              "type" : "string",
              "exampleValue" : ""
            },
            "geolocationScore" : {
              "title" : "Score",
              "description" : "The amount to increment the score if this check fails.",
              "propertyOrder" : 4100,
              "required" : true,
              "type" : "integer",
              "exampleValue" : ""
            },
            "invertGeolocationScore" : {
              "title" : "Invert Result",
              "description" : "If the check succeeds the score will be included in the total, for
 failure the score will not be incremented.",
```


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```
              "propertyOrder" : 4200,
              "required" : true,
              "type" : "boolean",
              "exampleValue" : ""
            },
            "geolocationCheckEnabled" : {
              "title" : "Geolocation Country Code Check",
              "description" : "Enables the checking of the client IP address against the geolocation
 database.<br><br>The geolocation database associates IP addresses against their known location. This
 check passes if the country associated with the client IP address is matched against the list of
 valid country codes.<br/><br/>The geolocation database is available in binary format at <a href=
\"http://www.maxmind.com/app/country\" target=\"_blank\">MaxMind</a>.",
              "propertyOrder" : 3800,
              "required" : true,
              "type" : "boolean",
              "exampleValue" : ""
            }
          }
        },
        "devicecookie" : {
          "type" : "object",
          "title" : "Device Cookie",
          "propertyOrder" : 5,
          "properties" : {
            "deviceCookieName" : {
              "title" : "Cookie Name",
              "description" : "The name of the cookie to be checked for (and optionally set) on the
 client request",
              "propertyOrder" : 3400,
              "required" : true,
              "type" : "string",
              "exampleValue" : ""
            },
            "invertDeviceCookieScore" : {
              "title" : "Invert Result",
              "description" : "If the check succeeds the score will be included in the total, for
 failure the score will not be incremented.",
              "propertyOrder" : 3700,
              "required" : true,
              "type" : "boolean",
              "exampleValue" : ""
            },
            "saveDeviceCookieValueOnSuccessfulLogin" : {
              "title" : "Save Device Registration on Successful Login",
              "description" : "Set the device cookie on the client response<br><br>The Adaptive Risk
 Post Authentication Plug-in will set the device cookie on the client response",
              "propertyOrder" : 3500,
              "required" : true,
              "type" : "boolean",
              "exampleValue" : ""
            },
            "deviceCookieCheckEnabled" : {
              "title" : "Device Registration Cookie Check",
              "description" : "Enables the checking of the client request for a known
 cookie.<br><br>If this check is enabled, the check will pass if the client request contains the named
 cookie.",
              "propertyOrder" : 3300,
              "required" : true,
              "type" : "boolean",
```


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```
              "exampleValue" : ""
            },
            "deviceCookieScore" : {
              "title" : "Score",
              "description" : "The amount to increment the score if this check fails.",
              "propertyOrder" : 3600,
              "required" : true,
              "type" : "integer",
              "exampleValue" : ""
            }
          }
        },
        "authfailed" : {
          "type" : "object",
          "title" : "Failed Authentications",
          "propertyOrder" : 1,
          "properties" : {
            "failedAuthenticationCheckEnabled" : {
              "title" : "Failed Authentication Check",
              "description" : "Checks if the user has past authentication failures.<br><br>Check if
 the OpenAM account lockout mechanism has recorded past authentication failures for the user.<br/><br/
><i>NB </i>For this check to function, Account Lockout must be enabled.",
              "propertyOrder" : 300,
              "required" : true,
              "type" : "boolean",
              "exampleValue" : ""
            },
            "failureScore" : {
              "title" : "Score",
              "description" : "The amount to increment the score if this check fails.",
              "propertyOrder" : 400,
              "required" : true,
              "type" : "integer",
              "exampleValue" : ""
            },
            "invertFailureScore" : {
              "title" : "Invert Result",
              "description" : "If the check succeeds the score will be included in the total, for
 failure the score will not be incremented.",
              "propertyOrder" : 500,
              "required" : true,
              "type" : "boolean",
              "exampleValue" : ""
            }
          }
        }
      },
      "type" : "object",
      "title" : "Realm Defaults"
    }
  }
}
```


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1.5. AdvancedProperties

1.5.1. Global Operations

An object of property key-value pairs

Resource path: `/global-config/servers/{serverName}/properties/advanced`

Resource version: `1.0`

1.5.1.1. read

Usage:

```
am> read AdvancedProperties --global --serverName serverName
```

Parameters:

`--serverName`

An object of property key-value pairs

1.5.1.2. update

Usage:

```
am> update AdvancedProperties --global --serverName serverName --body body
```

Parameters:

`--serverName`

An object of property key-value pairs

`--body`

The resource in JSON format, described by the following JSON schema:

```
{
  "patternProperties" : {
    ".+" : {
      "type" : "string",
      "title" : "Value",
      "description" : "Any string value"
    }
  },
  "$schema" : "http://json-schema.org/draft-04/schema#",
  "description" : "An object of property key-value pairs",
  "type" : "object",
  "title" : "Advanced Properties"
}
```


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1.6. AgentGroups

1.6.1. Realm Operations

Aggregating Agent Groups handler that is responsible for querying the aggregating agent groups

Resource path: `/realm-config/agents/groups`

Resource version: `1.0`

1.6.1.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action AgentGroups --realm Realm --actionName getAllTypes
```

1.6.1.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action AgentGroups --realm Realm --actionName getCreatableTypes
```

1.6.1.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action AgentGroups --realm Realm --actionName nextdescendents
```

1.6.1.4. query

Querying the aggregating agent groups

Usage:

```
am> query AgentGroups --realm Realm --filter filter
```

Parameters:

`--filter`

A CREST formatted query filter, where "true" will query all. Fields that can be queried: [*]

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1.7. AgentService

1.7.1. Global Operations

Resource path: `/global-config/agents/AgentService`

Resource version: `1.0`

1.7.1.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action AgentService --global --actionName getAllTypes
```

1.7.1.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action AgentService --global --actionName getCreatableTypes
```

1.7.1.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action AgentService --global --actionName nextdescendents
```

1.7.1.4. read

Usage:

```
am> read AgentService --global
```

1.7.1.5. update

Usage:

```
am> update AgentService --global --body body
```

Parameters:

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--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object"
}
```

1.8. Agents

1.8.1. Realm Operations

Aggregating Agents handler that is responsible for querying the aggregating agents

Resource path: `/realm-config/agents`

Resource version: `1.0`

1.8.1.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action Agents --realm Realm --actionName getAllTypes
```

1.8.1.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action Agents --realm Realm --actionName getCreatableTypes
```

1.8.1.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action Agents --realm Realm --actionName nextdescendents
```

1.8.1.4. query

Querying the aggregating agents

Usage:

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```
am> query Agents --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all. Fields that can be queried: [*]

1.8.2. Global Operations

Global and default configuration for agents

Resource path: `/global-config/agents`

Resource version: `1.0`

1.8.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action Agents --global --actionName getAllTypes
```

1.8.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action Agents --global --actionName getCreatableTypes
```

1.8.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action Agents --global --actionName nextdescendents
```

1.9. AmsterModule

1.9.1. Realm Operations

Resource path: `/realm-config/authentication/modules/amster`

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Resource version: `1.0`

1.9.1.1. create

Usage:

```
am> create AmsterModule --realm Realm --id id --body body
```

Parameters:

`--id`

The unique identifier for the resource.

`--body`

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "enabled" : {
      "title" : "Enabled",
      "description" : "If not enabled, prevents PKI login using the Amster module.",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "authorizedKeys" : {
      "title" : "Authorized Keys",
      "description" : "The location of the authorized_keys file (which has the same format as an
 OpenSSH authorized_keys file) to use to validate remote Amster connections.",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "authenticationLevel" : {
      "title" : "Authentication Level",
      "description" : "",
      "propertyOrder" : 300,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    }
  }
}
```

1.9.1.2. delete

Usage:

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```
am> delete AmsterModule --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.9.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action AmsterModule --realm Realm --actionName getAllTypes
```

1.9.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action AmsterModule --realm Realm --actionName getCreatableTypes
```

1.9.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action AmsterModule --realm Realm --actionName nextdescendents
```

1.9.1.6. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

```
am> query AmsterModule --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.9.1.7. read

Usage:

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```
am> read AmsterModule --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.9.1.8. update

Usage:

```
am> update AmsterModule --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "enabled" : {
      "title" : "Enabled",
      "description" : "If not enabled, prevents PKI login using the Amster module.",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "authorizedKeys" : {
      "title" : "Authorized Keys",
      "description" : "The location of the authorized_keys file (which has the same format as an
 OpenSSH authorized_keys file) to use to validate remote Amster connections.",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "authenticationLevel" : {
      "title" : "Authentication Level",
      "description" : "",
      "propertyOrder" : 300,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    }
  }
}
```


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1.9.2. Global Operations

Resource path: `/global-config/authentication/modules/amster`

Resource version: `1.0`

1.9.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action AmsterModule --global --actionName getAllTypes
```

1.9.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action AmsterModule --global --actionName getCreatableTypes
```

1.9.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action AmsterModule --global --actionName nextdescendents
```

1.9.2.4. read

Usage:

```
am> read AmsterModule --global
```

1.9.2.5. update

Usage:

```
am> update AmsterModule --global --body body
```

Parameters:

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--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "defaults" : {
      "properties" : {
        "authenticationLevel" : {
          "title" : "Authentication Level",
          "description" : "",
          "propertyOrder" : 300,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "enabled" : {
          "title" : "Enabled",
          "description" : "If not enabled, prevents PKI login using the Amster module.",
          "propertyOrder" : 200,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "authorizedKeys" : {
          "title" : "Authorized Keys",
          "description" : "The location of the authorized_keys file (which has the same format as an
 OpenSSH authorized_keys file) to use to validate remote Amster connections.",
          "propertyOrder" : 100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      },
      "type" : "object",
      "title" : "Realm Defaults"
    }
  }
}
```

1.10. AnonymousModule

1.10.1. Realm Operations

Resource path: `/realm-config/authentication/modules/anonymous`

Resource version: `1.0`

1.10.1.1. create

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Usage:

```
am> create AnonymousModule --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "validAnonymousUsers" : {
      "title" : "Valid Anonymous Users",
      "description" : "List of accounts that are allowed to login without providing
 credentials.<br><br>Any username on this list will be allows anonymous access to OpenAM. Usernames
 listed here must have matching profiles in the data store or the user profile requirement must be
 disabled. The username can be specified during anonymous authentication as follows:<br/><br/><code>/
openam/UI/Login?module=anonymous&IDToken1=<i>username</i></code>",
      "propertyOrder" : 100,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "authenticationLevel" : {
      "title" : "Authentication Level",
      "description" : "The authentication level associated with this module.<br><br>Each
 authentication module has an authentication level that can be used to indicate the level of security
 associated with the module; 0 is the lowest (and the default).",
      "propertyOrder" : 400,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "defaultAnonymousUsername" : {
      "title" : "Default Anonymous User Name",
      "description" : "The default username to use if no username is supplied during authentication.",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "caseSensitiveUsernameMatchingEnabled" : {
      "title" : "Case Sensitive User IDs",
      "description" : "If enabled, username matching will be case sensitive.",
      "propertyOrder" : 300,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
```


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```
    }
  }
}
```

1.10.1.2. delete

Usage:

```
am> delete AnonymousModule --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.10.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action AnonymousModule --realm Realm --actionName getAllTypes
```

1.10.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action AnonymousModule --realm Realm --actionName getCreatableTypes
```

1.10.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action AnonymousModule --realm Realm --actionName nextdescendents
```

1.10.1.6. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

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```
am> query AnonymousModule --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.10.1.7. read

Usage:

```
am> read AnonymousModule --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.10.1.8. update

Usage:

```
am> update AnonymousModule --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "validAnonymousUsers" : {
      "title" : "Valid Anonymous Users",
      "description" : "List of accounts that are allowed to login without providing
 credentials.<br><br>Any username on this list will be allows anonymous access to OpenAM. Usernames
 listed here must have matching profiles in the data store or the user profile requirement must be
 disabled. The username can be specified during anonymous authentication as follows:<br/><br/><code>/
openam/UI/Login?module=anonymous&IDToken1=<i>username</i></code>",
      "propertyOrder" : 100,
      "required" : true,
```


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```
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "authenticationLevel" : {
      "title" : "Authentication Level",
      "description" : "The authentication level associated with this module.<br><br>Each
 authentication module has an authentication level that can be used to indicate the level of security
 associated with the module; 0 is the lowest (and the default).",
      "propertyOrder" : 400,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "defaultAnonymousUsername" : {
      "title" : "Default Anonymous User Name",
      "description" : "The default username to use if no username is supplied during authentication.",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "caseSensitiveUsernameMatchingEnabled" : {
      "title" : "Case Sensitive User IDs",
      "description" : "If enabled, username matching will be case sensitive.",
      "propertyOrder" : 300,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    }
  }
}
```

1.10.2. Global Operations

Resource path: `/global-config/authentication/modules/anonymous`

Resource version: `1.0`

1.10.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action AnonymousModule --global --actionName getAllTypes
```

1.10.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

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Usage:

```
am> action AnonymousModule --global --actionName getCreatableTypes
```

1.10.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action AnonymousModule --global --actionName nextdescendents
```

1.10.2.4. read

Usage:

```
am> read AnonymousModule --global
```

1.10.2.5. update

Usage:

```
am> update AnonymousModule --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "defaults" : {
      "properties" : {
        "caseSensitiveUsernameMatchingEnabled" : {
          "title" : "Case Sensitive User IDs",
          "description" : "If enabled, username matching will be case sensitive.",
          "propertyOrder" : 300,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "validAnonymousUsers" : {
          "title" : "Valid Anonymous Users",
          "description" : "List of accounts that are allowed to login without providing
 credentials.<br><br>Any username on this list will be allows anonymous access to OpenAM. Usernames
 listed here must have matching profiles in the data store or the user profile requirement must be
 disabled. The username can be specified during anonymous authentication as follows:<br/><br/><code>/
openam/UI/Login?module=anonymous&IDToken1=<i>username</i></code>",
```


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```
          "propertyOrder" : 100,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "authenticationLevel" : {
          "title" : "Authentication Level",
          "description" : "The authentication level associated with this module.<br><br>Each
 authentication module has an authentication level that can be used to indicate the level of security
 associated with the module; 0 is the lowest (and the default).",
          "propertyOrder" : 400,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "defaultAnonymousUsername" : {
          "title" : "Default Anonymous User Name",
          "description" : "The default username to use if no username is supplied during
 authentication.",
          "propertyOrder" : 200,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      },
      "type" : "object",
      "title" : "Realm Defaults"
    }
  }
}
```

1.11. ApplicationTypes

1.11.1. Realm Operations

Service for reading and listing the available application types. Application types act as templates for policy sets, and define how to compare resources and index policies. OpenAM provides a default application type that represents web resources called iPlanetAMWebAgentService

Resource path: `/applicationtypes`

Resource version: `1.0`

1.11.1.1. query

Lists the application types using a query filter

Usage:

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```
am> query ApplicationTypes --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all. Fields that can be queried: [*]

1.11.1.2. read

Reads an individual application type by the provided application type name

Usage:

```
am> read ApplicationTypes --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.12. Applications

1.12.1. Realm Operations

Service for manipulating Applications. It supports the CRUDQ operations.

Resource path: `/applications`

Resource version: `2.1`

1.12.1.1. create

Creates a new Application in a realm

Usage:

```
am> create Applications --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

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--body

The resource in JSON format, described by the following JSON schema:

```
{
  "$schema" : "http://json-schema.org/draft-04/schema#",
  "description" : "Application schema",
  "type" : "object",
  "title" : "Application",
  "properties" : {
    "name" : {
      "type" : "string",
      "title" : "Name",
      "description" : "Unique application identifier."
    },
    "displayName" : {
      "type" : "string",
      "title" : "Display name",
      "description" : "When defined, it is displayed in the UI instead of application name."
    },
    "description" : {
      "type" : "string",
      "title" : "Description",
      "description" : "String describing the application."
    },
    "applicationType" : {
      "type" : "string",
      "title" : "Application type",
      "description" : "Name of the application type used as a template for the policy set."
    },
    "conditions" : {
      "type" : "array",
      "items" : {
        "type" : "string",
        "title" : "Conditions",
        "description" : "Condition types allowed in the context of the policy set."
      }
    },
    "subjects" : {
      "type" : "array",
      "items" : {
        "type" : "string",
        "title" : "Subjects",
        "description" : "Subject types allowed in the context of the policy set."
      }
    },
    "resourceTypeUuids" : {
      "type" : "array",
      "items" : {
        "type" : "string",
        "title" : "Resource type uuids",
        "description" : "A list of the UUIDs of the resource types associated with the policy set."
      }
    },
    "entitlementCombiner" : {
      "type" : "string",
      "title" : "Entitlement combiner",
      "description" : "Name of the decision combiner, such as \"DenyOverride\"."
    },
```


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```
    "searchIndex" : {
      "type" : "string",
      "title" : "Search index",
      "description" : "Class name of the implementation for searching indexes for resource names, such
 as \"com.sun.identity.entitlement.util.ResourceNameSplitter\" for URL resource names."
    },
    "saveIndex" : {
      "type" : "string",
      "title" : "Save index",
      "description" : "Class name of the implementation for creating indexes for resource names, such
 as \"com.sun.identity.entitlement.util.ResourceNameIndexGenerator\" for URL resource names."
    },
    "resourceComparator" : {
      "type" : "string",
      "title" : "Resource comparator",
      "description" : "Class name of the resource comparator implementation
 used in the context of the policy set. The following implementations
 are available: \"com.sun.identity.entitlement.ExactMatchResourceName\",
 \"com.sun.identity.entitlement.PrefixResourceName\", \"com.sun.identity.entitlement.RegExResourceName
\", \"com.sun.identity.entitlement.URLResourceName\"."
    },
    "attributeNames" : {
      "type" : "array",
      "items" : {
        "type" : "string",
        "title" : "Attribute names",
        "description" : "A list of attribute names such as cn. The list is used to aid policy indexing
 and lookup."
      }
    },
    "createdBy" : {
      "type" : "string",
      "title" : "Created by",
      "description" : "A string containing the universal identifier DN of the subject that created the
 application."
    },
    "lastModifiedBy" : {
      "type" : "string",
      "title" : "Last modified by",
      "description" : "A string containing the universal identifier DN of the subject that most
 recently updated the application. If the application has not been modified since it was created, this
 will be the same value as createdBy."
    },
    "creationDate" : {
      "type" : "integer",
      "title" : "Creation date",
      "description" : "An integer containing the creation date and time, in number of seconds since
 the Unix Epoch."
    },
    "lastModifiedDate" : {
      "type" : "integer",
      "title" : "Last modified date",
      "description" : "An integer containing the last modified date and time, in number of seconds
 since the Unix Epoch. If the application has not been modified since it was created, this will be the
 same value as creationDate."
    },
    "editable" : {
      "type" : "boolean",
      "title" : "Editable",
```


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```
      "description" : "It indicates if application is editable."
    }
  },
  "required" : [ "name", "applicationType" ]
}
```

1.12.1.2. delete

Deletes an individual Application in a realm specified by its name

Usage:

```
am> delete Applications --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.12.1.3. query

Lists all the Applications in a realm

Usage:

```
am> query Applications --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all. Fields that can be queried: [*]

1.12.1.4. read

Reads an individual Application in a realm specified by its name

Usage:

```
am> read Applications --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.12.1.5. update

Updates an individual Application in a realm specified by its name

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Usage:

```
am> update Applications --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "$schema" : "http://json-schema.org/draft-04/schema#",
  "description" : "Application schema",
  "type" : "object",
  "title" : "Application",
  "properties" : {
    "name" : {
      "type" : "string",
      "title" : "Name",
      "description" : "Unique application identifier."
    },
    "displayName" : {
      "type" : "string",
      "title" : "Display name",
      "description" : "When defined, it is displayed in the UI instead of application name."
    },
    "description" : {
      "type" : "string",
      "title" : "Description",
      "description" : "String describing the application."
    },
    "applicationType" : {
      "type" : "string",
      "title" : "Application type",
      "description" : "Name of the application type used as a template for the policy set."
    },
    "conditions" : {
      "type" : "array",
      "items" : {
        "type" : "string",
        "title" : "Conditions",
        "description" : "Condition types allowed in the context of the policy set."
      }
    },
    "subjects" : {
      "type" : "array",
      "items" : {
        "type" : "string",
        "title" : "Subjects",
        "description" : "Subject types allowed in the context of the policy set."
      }
    },
    "resourceTypeUuids" : {
      "type" : "array",
      "items" : {
```


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```
        "type" : "string",
        "title" : "Resource type uuids",
        "description" : "A list of the UUIDs of the resource types associated with the policy set."
      }
    },
    "entitlementCombiner" : {
      "type" : "string",
      "title" : "Entitlement combiner",
      "description" : "Name of the decision combiner, such as \"DenyOverride\"."
    },
    "searchIndex" : {
      "type" : "string",
      "title" : "Search index",
      "description" : "Class name of the implementation for searching indexes for resource names, such
 as \"com.sun.identity.entitlement.util.ResourceNameSplitter\" for URL resource names."
    },
    "saveIndex" : {
      "type" : "string",
      "title" : "Save index",
      "description" : "Class name of the implementation for creating indexes for resource names, such
 as \"com.sun.identity.entitlement.util.ResourceNameIndexGenerator\" for URL resource names."
    },
    "resourceComparator" : {
      "type" : "string",
      "title" : "Resource comparator",
      "description" : "Class name of the resource comparator implementation
 used in the context of the policy set. The following implementations
 are available: \"com.sun.identity.entitlement.ExactMatchResourceName\",
 \"com.sun.identity.entitlement.PrefixResourceName\", \"com.sun.identity.entitlement.RegExResourceName
\", \"com.sun.identity.entitlement.URLResourceName\"."
    },
    "attributeNames" : {
      "type" : "array",
      "items" : {
        "type" : "string",
        "title" : "Attribute names",
        "description" : "A list of attribute names such as cn. The list is used to aid policy indexing
 and lookup."
      }
    },
    "createdBy" : {
      "type" : "string",
      "title" : "Created by",
      "description" : "A string containing the universal identifier DN of the subject that created the
 application."
    },
    "lastModifiedBy" : {
      "type" : "string",
      "title" : "Last modified by",
      "description" : "A string containing the universal identifier DN of the subject that most
 recently updated the application. If the application has not been modified since it was created, this
 will be the same value as createdBy."
    },
    "creationDate" : {
      "type" : "integer",
      "title" : "Creation date",
      "description" : "An integer containing the creation date and time, in number of seconds since
 the Unix Epoch."
    },
```


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```
    "lastModifiedDate" : {
      "type" : "integer",
      "title" : "Last modified date",
      "description" : "An integer containing the last modified date and time, in number of seconds
 since the Unix Epoch. If the application has not been modified since it was created, this will be the
 same value as creationDate."
    },
    "editable" : {
      "type" : "boolean",
      "title" : "Editable",
      "description" : "It indicates if application is editable."
    }
  },
  "required" : [ "name", "applicationType" ]
}
```

1.13. AuditEvent

1.13.1. Realm Operations

Audit events are logged through a realm audit service.

Resource path: `/realm-audit/{topic}`

Resource version: `1.0`

1.13.1.1. create

Create a new audit event, which will be handled and logged by the configured audit service.

Usage:

```
am> create AuditEvent --realm Realm --topic topic --body body
```

Parameters:

`--topic`

Audit events are logged through a realm audit service.

`--body`

The resource in JSON format, described by the following JSON schema:

```
{
  "$schema" : "http://json-schema.org/draft-04/schema#",
  "description" : "The schema contains properties that are common to all topics and some that are
 unique to a specific topic. The description of each property indicates which topic the property
 applies to.",
  "title" : "Audit event schema",
  "type" : "object",
  "properties" : {
    "_id" : {
```


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```
      "title" : "ID",
      "description" : "The ID of the event, used by all topics",
      "type" : "string"
    },
    "timestamp" : {
      "title" : "Timestamp",
      "description" : "The time at which the event occurred, used by all topics",
      "type" : "string"
    },
    "eventName" : {
      "title" : "Event name",
      "description" : "The name of the event, used by all topics",
      "type" : "string"
    },
    "transactionId" : {
      "title" : "Transaction ID",
      "description" : "The transaction ID of the event, used by all topics",
      "type" : "string"
    },
    "userId" : {
      "title" : "User ID",
      "description" : "The ID of the user responsible for the event, used by all topics",
      "type" : "string"
    },
    "trackingIds" : {
      "title" : "Tracking IDs",
      "description" : "The tracking IDs of the event, used by all topics",
      "type" : "array",
      "items" : {
        "id" : "0",
        "type" : "string"
      }
    },
    "component" : {
      "title" : "Component",
      "description" : "The component responsible for the event, used by all topics",
      "type" : "string"
    },
    "realm" : {
      "title" : "Realm",
      "description" : "The realm in which the event occurred, used by all topics",
      "type" : "string"
    },
    "server" : {
      "title" : "Server",
      "description" : "The server details for an access event",
      "type" : "object",
      "properties" : {
        "ip" : {
          "title" : "Server IP address",
          "description" : "The server ip address for an access event",
          "type" : "string"
        },
        "port" : {
          "title" : "Server port",
          "description" : "The server port for an access event",
          "type" : "integer"
        }
      }
```


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```
    },
    "client" : {
      "title" : "Client",
      "description" : "The client details for an access event",
      "type" : "object",
      "properties" : {
        "ip" : {
          "title" : "Client IP address",
          "description" : "The client IP address for an access event",
          "type" : "string"
        },
        "port" : {
          "title" : "Client port",
          "description" : "The client port for an access event",
          "type" : "integer"
        }
      }
    },
    "request" : {
      "title" : "Request",
      "description" : "The request details for an access event",
      "type" : "object",
      "properties" : {
        "protocol" : {
          "title" : "Request protocol",
          "description" : "The request protocol for an access event",
          "type" : "string"
        },
        "operation" : {
          "title" : "Request operation",
          "description" : "The request operation for an access event",
          "type" : "string"
        },
        "detail" : {
          "title" : "Request detail",
          "description" : "The request detail for an access event",
          "type" : "object"
        }
      }
    },
    "http" : {
      "title" : "Http details",
      "description" : "The Http details for an access event",
      "type" : "object",
      "properties" : {
        "request" : {
          "title" : "Http request",
          "description" : "The http request for an access event",
          "type" : "object",
          "properties" : {
            "secure" : {
              "title" : "Http secure",
              "description" : "The http secure property for an access event",
              "type" : "boolean"
            },
            "method" : {
              "title" : "Http method",
              "description" : "The http method for an access event",
              "type" : "string"
```


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```
            },
            "path" : {
              "title" : "Http path",
              "description" : "The http path for an access event",
              "type" : "string"
            },
            "queryParameters" : {
              "title" : "Http query parameters",
              "description" : "The http query parameters for an access event",
              "type" : "object",
              "additionalProperties" : {
                "type" : "array",
                "items" : {
                  "type" : "string"
                }
              }
            },
            "headers" : {
              "title" : "Http headers",
              "description" : "The http headers for an access event",
              "type" : "object",
              "additionalProperties" : {
                "type" : "array",
                "items" : {
                  "type" : "string"
                }
              }
            },
            "cookies" : {
              "title" : "Http cookies",
              "description" : "The http cookies for an access event",
              "type" : "object",
              "additionalProperties" : {
                "type" : "string"
              }
            }
          }
        },
        "response" : {
          "title" : "Http response",
          "description" : "The http response for an access event",
          "type" : "object",
          "properties" : {
            "headers" : {
              "title" : "Http request headers",
              "description" : "The http request headers for an access event",
              "type" : "object",
              "additionalProperties" : {
                "type" : "array",
                "items" : {
                  "type" : "string"
                }
              }
            }
          }
        }
      }
    },
    "response" : {
```


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```
      "title" : "Response",
      "description" : "The response details for an access event",
      "type" : "object",
      "properties" : {
        "status" : {
          "title" : "Response status",
          "description" : "The response status for an access event",
          "type" : "string"
        },
        "statusCode" : {
          "title" : "Response status code",
          "description" : "The response status code for an access event",
          "type" : "string"
        },
        "detail" : {
          "title" : "Response detail",
          "description" : "The response detail for an access event",
          "type" : "object"
        },
        "elapsedTime" : {
          "title" : "Response elapsed time",
          "description" : "The response elapsedTime for an access event",
          "type" : "integer"
        },
        "elapsedTimeUnits" : {
          "title" : "Response elapsed time units",
          "description" : "The response elapsed time units for an access event",
          "type" : "string"
        }
      }
    },
    "runAs" : {
      "title" : "Run as",
      "description" : "What the change that triggered an activity or config event was run as",
      "type" : "string"
    },
    "objectId" : {
      "title" : "Object ID",
      "description" : "The object ID of the change that triggered an activity or config event",
      "type" : "string"
    },
    "operation" : {
      "title" : "Operation",
      "description" : "The operation that triggered an activity or config event",
      "type" : "string"
    },
    "before" : {
      "title" : "Before state",
      "description" : "The state before an activity or config event occurred",
      "type" : "object"
    },
    "after" : {
      "title" : "After state",
      "description" : "The state after an activity or config event occurred",
      "type" : "object"
    },
    "changedFields" : {
      "title" : "Changed fields",
      "description" : "The changed fields after an activity or config event occurred",
```


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```
      "type" : "array",
      "items" : {
        "id" : "1",
        "type" : "string"
      }
    },
    "revision" : {
      "title" : "Revision",
      "description" : "The revision for an activity or config event",
      "type" : "string"
    },
    "result" : {
      "title" : "Result",
      "description" : "The result of the authentication event",
      "type" : "string"
    },
    "principal" : {
      "title" : "Principal",
      "description" : "The principal responsible for the authentication event",
      "type" : "array",
      "items" : {
        "type" : "string"
      }
    },
    "context" : {
      "title" : "Context",
      "description" : "The context of an authentication event",
      "type" : "object",
      "properties" : { }
    },
    "entries" : {
      "title" : "Entries",
      "description" : "The entries for an authentication event",
      "type" : "array",
      "items" : {
        "type" : "object",
        "properties" : {
          "moduleId" : {
            "title" : "Module ID",
            "description" : "The module ID for the authentication event",
            "type" : "string"
          },
          "result" : {
            "title" : "Module result",
            "description" : "The result of the module authentication event",
            "type" : "string"
          },
          "info" : {
            "title" : "Entries information",
            "description" : "The entries information for an authentication event",
            "type" : "object",
            "properties" : { }
          }
        }
      }
    }
  },
  "required" : [ "transactionId", "timestamp" ]
```


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```
}
```

1.13.2. Global Operations

Audit events are logged through the global audit service.

Resource path: `/global-audit/{topic}`

Resource version: `1.0`

1.13.2.1. create

Create a new audit event, which will be handled and logged by the configured audit service.

Usage:

```
am> create AuditEvent --global --topic topic --body body
```

Parameters:

`--topic`

Audit events are logged through the global audit service.

`--body`

The resource in JSON format, described by the following JSON schema:

```
{
  "$schema" : "http://json-schema.org/draft-04/schema#",
  "description" : "The schema contains properties that are common to all topics and some that are
 unique to a specific topic. The description of each property indicates which topic the property
 applies to.",
  "title" : "Audit event schema",
  "type" : "object",
  "properties" : {
    "_id" : {
      "title" : "ID",
      "description" : "The ID of the event, used by all topics",
      "type" : "string"
    },
    "timestamp" : {
      "title" : "Timestamp",
      "description" : "The time at which the event occurred, used by all topics",
      "type" : "string"
    },
    "eventName" : {
      "title" : "Event name",
      "description" : "The name of the event, used by all topics",
      "type" : "string"
    },
    "transactionId" : {
      "title" : "Transaction ID",
      "description" : "The transaction ID of the event, used by all topics",
      "type" : "string"
```


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```
    },
    "userId" : {
      "title" : "User ID",
      "description" : "The ID of the user responsible for the event, used by all topics",
      "type" : "string"
    },
    "trackingIds" : {
      "title" : "Tracking IDs",
      "description" : "The tracking IDs of the event, used by all topics",
      "type" : "array",
      "items" : {
        "id" : "0",
        "type" : "string"
      }
    },
    "component" : {
      "title" : "Component",
      "description" : "The component responsible for the event, used by all topics",
      "type" : "string"
    },
    "realm" : {
      "title" : "Realm",
      "description" : "The realm in which the event occurred, used by all topics",
      "type" : "string"
    },
    "server" : {
      "title" : "Server",
      "description" : "The server details for an access event",
      "type" : "object",
      "properties" : {
        "ip" : {
          "title" : "Server IP address",
          "description" : "The server ip address for an access event",
          "type" : "string"
        },
        "port" : {
          "title" : "Server port",
          "description" : "The server port for an access event",
          "type" : "integer"
        }
      }
    },
    "client" : {
      "title" : "Client",
      "description" : "The client details for an access event",
      "type" : "object",
      "properties" : {
        "ip" : {
          "title" : "Client IP address",
          "description" : "The client IP address for an access event",
          "type" : "string"
        },
        "port" : {
          "title" : "Client port",
          "description" : "The client port for an access event",
          "type" : "integer"
        }
      }
    },
```


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```
    "request" : {
      "title" : "Request",
      "description" : "The request details for an access event",
      "type" : "object",
      "properties" : {
        "protocol" : {
          "title" : "Request protocol",
          "description" : "The request protocol for an access event",
          "type" : "string"
        },
        "operation" : {
          "title" : "Request operation",
          "description" : "The request operation for an access event",
          "type" : "string"
        },
        "detail" : {
          "title" : "Request detail",
          "description" : "The request detail for an access event",
          "type" : "object"
        }
      }
    },
    "http" : {
      "title" : "Http details",
      "description" : "The Http details for an access event",
      "type" : "object",
      "properties" : {
        "request" : {
          "title" : "Http request",
          "description" : "The http request for an access event",
          "type" : "object",
          "properties" : {
            "secure" : {
              "title" : "Http secure",
              "description" : "The http secure property for an access event",
              "type" : "boolean"
            },
            "method" : {
              "title" : "Http method",
              "description" : "The http method for an access event",
              "type" : "string"
            },
            "path" : {
              "title" : "Http path",
              "description" : "The http path for an access event",
              "type" : "string"
            },
            "queryParameters" : {
              "title" : "Http query parameters",
              "description" : "The http query parameters for an access event",
              "type" : "object",
              "additionalProperties" : {
                "type" : "array",
                "items" : {
                  "type" : "string"
                }
              }
            },
            "headers" : {
```


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```
            "title" : "Http headers",
            "description" : "The http headers for an access event",
            "type" : "object",
            "additionalProperties" : {
              "type" : "array",
              "items" : {
                "type" : "string"
              }
            }
          },
          "cookies" : {
            "title" : "Http cookies",
            "description" : "The http cookies for an access event",
            "type" : "object",
            "additionalProperties" : {
              "type" : "string"
            }
          }
        }
      },
      "response" : {
        "title" : "Http response",
        "description" : "The http response for an access event",
        "type" : "object",
        "properties" : {
          "headers" : {
            "title" : "Http request headers",
            "description" : "The http request headers for an access event",
            "type" : "object",
            "additionalProperties" : {
              "type" : "array",
              "items" : {
                "type" : "string"
              }
            }
          }
        }
      }
    }
  },
  "response" : {
    "title" : "Response",
    "description" : "The response details for an access event",
    "type" : "object",
    "properties" : {
      "status" : {
        "title" : "Response status",
        "description" : "The response status for an access event",
        "type" : "string"
      },
      "statusCode" : {
        "title" : "Response status code",
        "description" : "The response status code for an access event",
        "type" : "string"
      },
      "detail" : {
        "title" : "Response detail",
        "description" : "The response detail for an access event",
        "type" : "object"
```


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```
        },
        "elapsedTime" : {
          "title" : "Response elapsed time",
          "description" : "The response elapsedTime for an access event",
          "type" : "integer"
        },
        "elapsedTimeUnits" : {
          "title" : "Response elapsed time units",
          "description" : "The response elapsed time units for an access event",
          "type" : "string"
        }
      }
    },
    "runAs" : {
      "title" : "Run as",
      "description" : "What the change that triggered an activity or config event was run as",
      "type" : "string"
    },
    "objectId" : {
      "title" : "Object ID",
      "description" : "The object ID of the change that triggered an activity or config event",
      "type" : "string"
    },
    "operation" : {
      "title" : "Operation",
      "description" : "The operation that triggered an activity or config event",
      "type" : "string"
    },
    "before" : {
      "title" : "Before state",
      "description" : "The state before an activity or config event occurred",
      "type" : "object"
    },
    "after" : {
      "title" : "After state",
      "description" : "The state after an activity or config event occurred",
      "type" : "object"
    },
    "changedFields" : {
      "title" : "Changed fields",
      "description" : "The changed fields after an activity or config event occurred",
      "type" : "array",
      "items" : {
        "id" : "1",
        "type" : "string"
      }
    },
    "revision" : {
      "title" : "Revision",
      "description" : "The revision for an activity or config event",
      "type" : "string"
    },
    "result" : {
      "title" : "Result",
      "description" : "The result of the authentication event",
      "type" : "string"
    },
    "principal" : {
      "title" : "Principal",
```


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```
      "description" : "The principal responsible for the authentication event",
      "type" : "array",
      "items" : {
        "type" : "string"
      }
    },
    "context" : {
      "title" : "Context",
      "description" : "The context of an authentication event",
      "type" : "object",
      "properties" : { }
    },
    "entries" : {
      "title" : "Entries",
      "description" : "The entries for an authentication event",
      "type" : "array",
      "items" : {
        "type" : "object",
        "properties" : {
          "moduleId" : {
            "title" : "Module ID",
            "description" : "The module ID for the authentication event",
            "type" : "string"
          },
          "result" : {
            "title" : "Module result",
            "description" : "The result of the module authentication event",
            "type" : "string"
          },
          "info" : {
            "title" : "Entries information",
            "description" : "The entries information for an authentication event",
            "type" : "object",
            "properties" : { }
          }
        }
      }
    }
  },
  "required" : [ "transactionId", "timestamp" ]
}
```

1.14. AuditLogging

1.14.1. Realm Operations

Resource path: `/realm-config/services/audit`

Resource version: `1.0`

1.14.1.1. create

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Usage:

```
am> create AuditLogging --realm Realm --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "fieldFilterPolicy" : {
      "title" : "Field exclusion policies",
      "description" : "A list of fields or values (JSON pointers) to exclude from the audit
 event.<br><br>To specify a field or value within a field to be filtered out of the event, start
 the pointer with the event topic, for example access, activity, authentication, or config, followed
 by the field name or the path to the value in the field.<p><p>For example, to filter out the
 <code>userId</code> field in an access event the pointer will be <code>/access/userId</code>.<p>To
 filter out the <code>content-type</code> value in the <code>http.request.headers</code> field the
 pointer will be <code>/access/http/request/headers/content-type</code>.<p>Only values that are made
 up of JSON strings can be manipulated in this way.",
      "propertyOrder" : 200,
      "required" : false,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "auditEnabled" : {
      "title" : "Audit logging",
      "description" : "Enable audit logging in OpenAM.",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    }
  }
}
```

1.14.1.2. delete

Usage:

```
am> delete AuditLogging --realm Realm
```

1.14.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

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```
am> action AuditLogging --realm Realm --actionName getAllTypes
```

1.14.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action AuditLogging --realm Realm --actionName getCreatableTypes
```

1.14.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action AuditLogging --realm Realm --actionName nextdescendents
```

1.14.1.6. read

Usage:

```
am> read AuditLogging --realm Realm
```

1.14.1.7. update

Usage:

```
am> update AuditLogging --realm Realm --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

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```
{
  "type" : "object",
  "properties" : {
    "fieldFilterPolicy" : {
      "title" : "Field exclusion policies",
      "description" : "A list of fields or values (JSON pointers) to exclude from the audit
 event.<br><br>To specify a field or value within a field to be filtered out of the event, start
 the pointer with the event topic, for example access, activity, authentication, or config, followed
 by the field name or the path to the value in the field.<p><p>For example, to filter out the
 <code>userId</code> field in an access event the pointer will be <code>/access/userId</code>.<p>To
 filter out the <code>content-type</code> value in the <code>http.request.headers</code> field the
 pointer will be <code>/access/http/request/headers/content-type</code>.<p>Only values that are made
 up of JSON strings can be manipulated in this way.",
      "propertyOrder" : 200,
      "required" : false,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "auditEnabled" : {
      "title" : "Audit logging",
      "description" : "Enable audit logging in OpenAM.",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    }
  }
}
```


1.14.2. Global Operations

Resource path: `/global-config/services/audit`

Resource version: `1.0`

1.14.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action AuditLogging --global --actionName getAllTypes
```

1.14.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

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```
am> action AuditLogging --global --actionName getCreatableTypes
```

1.14.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action AuditLogging --global --actionName nextdescendents
```

1.14.2.4. read

Usage:

```
am> read AuditLogging --global
```

1.14.2.5. update

Usage:

```
am> update AuditLogging --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "auditEnabled" : {
      "title" : "Audit logging",
      "description" : "Enable audit logging in OpenAM.",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "fieldFilterPolicy" : {
      "title" : "Field exclusion policies",
      "description" : "A list of fields or values (JSON pointers) to exclude from the audit
 event.<br><br>To specify a field or value within a field to be filtered out of the event, start
 the pointer with the event topic, for example access, activity, authentication, or config, followed
 by the field name or the path to the value in the field.<p><p>For example, to filter out the
 <code>userId</code> field in an access event the pointer will be <code>/access/userId</code>.<p>To
 filter out the <code>content-type</code> value in the <code>http.request.headers</code> field the
 pointer will be <code>/access/http/request/headers/content-type</code>.<p>Only values that are made
 up of JSON strings can be manipulated in this way.",
      "propertyOrder" : 200,
      "required" : false,
```


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```
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "defaults" : {
      "properties" : {
        "auditEnabled" : {
          "title" : "Audit logging",
          "description" : "Enable audit logging in OpenAM.",
          "propertyOrder" : 100,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "fieldFilterPolicy" : {
          "title" : "Field exclusion policies",
          "description" : "A list of fields or values (JSON pointers) to exclude from the audit
 event.<br><br>To specify a field or value within a field to be filtered out of the event, start
 the pointer with the event topic, for example access, activity, authentication, or config, followed
 by the field name or the path to the value in the field.<p><p>For example, to filter out the
 <code>userId</code> field in an access event the pointer will be <code>/access/userId</code>.<p>To
 filter out the <code>content-type</code> value in the <code>http.request.headers</code> field the
 pointer will be <code>/access/http/request/headers/content-type</code>.<p>Only values that are made
 up of JSON strings can be manipulated in this way.",
          "propertyOrder" : 200,
          "required" : false,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        }
      },
      "type" : "object",
      "title" : "Realm Defaults"
    }
  }
}
```


1.15. AuthLevelDecision

1.15.1. Realm Operations

Resource path: `/realm-config/authentication/authenticationtrees/nodes/AuthLevelDecisionNode`

Resource version: `1.0`

1.15.1.1. create

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Usage:

```
am> create AuthLevelDecision --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "authLevelRequirement" : {
      "title" : "Sufficient Authentication Level",
      "description" : "The current authentication level must be greater than or equal to this value
 for the decision to return true.",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    }
  }
}
```

1.15.1.2. delete

Usage:

```
am> delete AuthLevelDecision --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.15.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action AuthLevelDecision --realm Realm --actionName getAllTypes
```

1.15.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

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Usage:

```
am> action AuthLevelDecision --realm Realm --actionName getCreatableTypes
```

1.15.1.5. listOutcomes

List the available outcomes for the node type.

Usage:

```
am> action AuthLevelDecision --realm Realm --body body --actionName listOutcomes
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "title" : "Some configuration of the node. This does not need to be complete against the
 configuration schema."
}
```

1.15.1.6. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action AuthLevelDecision --realm Realm --actionName nextdescendents
```

1.15.1.7. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

```
am> query AuthLevelDecision --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.15.1.8. read

Usage:

```
am> read AuthLevelDecision --realm Realm --id id
```


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Parameters:

--id

The unique identifier for the resource.

1.15.1.9. update

Usage:

```
am> update AuthLevelDecision --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "authLevelRequirement" : {
      "title" : "Sufficient Authentication Level",
      "description" : "The current authentication level must be greater than or equal to this value
 for the decision to return true.",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    }
  }
}
```

1.15.2. Global Operations

Resource path: `/global-config/authentication/authenticationtrees/nodes/AuthLevelDecisionNode`

Resource version: `1.0`

1.15.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action AuthLevelDecision --global --actionName getAllTypes
```


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1.15.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action AuthLevelDecision --global --actionName getCreatableTypes
```

1.15.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action AuthLevelDecision --global --actionName nextdescendents
```

1.15.2.4. read

Usage:

```
am> read AuthLevelDecision --global
```

1.15.2.5. update

Usage:

```
am> update AuthLevelDecision --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object"
}
```

1.16. AuthTree

1.16.1. Realm Operations

Authentication trees.

Resource path: `/realm-config/authentication/authenticationtrees/trees`

Resource version: `1.0`

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1.16.1.1. create

Usage:

```
am> create AuthTree --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "description" : "A tree contains a set of nodes and their connections.",
  "type" : "object",
  "title" : "Authentication Tree",
  "properties" : {
    "nodes" : {
      "type" : "object",
      "title" : "Nodes",
      "description" : "A map of node ID to node association details.",
      "patternProperties" : {
        ".*" : {
          "type" : "object",
          "title" : "Node",
          "description" : "A association of a node with a tree.",
          "properties" : {
            "connections" : {
              "type" : "object",
              "title" : "Connections",
              "description" : "The node's connected outcomes.",
              "patternProperties" : {
                ".*" : {
                  "type" : "string",
                  "title" : "Node ID",
                  "description" : "The ID of the node that this outcome connects to."
                }
              }
            },
            "_outcomes" : {
              "type" : "array",
              "title" : "Outcomes",
              "description" : "The node's complete set of outcomes.",
              "readOnly" : true,
              "items" : {
                "type" : "object",
                "title" : "Outcome",
                "description" : "A possible outcome of the node.",
                "readOnly" : true,
                "properties" : {
                  "id" : {
                    "type" : "string",
                    "title" : "ID",
```


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```
                    "description" : "The identifier of the outcome.",
                    "readOnly" : true
                  },
                  "displayName" : {
                    "type" : "string",
                    "title" : "Display Name",
                    "description" : "The display name of the outcome, in the requester's preferred
 locale.",
                    "readOnly" : true
                  }
                }
              }
            },
            "displayName" : {
              "title" : "Display Name",
              "description" : "The name of the node to show in the tree UI.",
              "propertyOrder" : 200,
              "required" : true,
              "type" : "string",
              "exampleValue" : ""
            },
            "nodeType" : {
              "title" : "Type",
              "description" : "The name of the SMS service for this node.",
              "propertyOrder" : 100,
              "required" : true,
              "type" : "string",
              "exampleValue" : ""
            }
          }
        }
      }
    },
    "entryNodeId" : {
      "title" : "Entry Node",
      "description" : "The ID of the node that the tree starts processing from.",
      "propertyOrder" : null,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```

1.16.1.2. delete

Usage:

```
am> delete AuthTree --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

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1.16.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action AuthTree --realm Realm --actionName getAllTypes
```

1.16.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action AuthTree --realm Realm --actionName getCreatableTypes
```

1.16.1.5. getIds

Get the names of each tree configured in this realm.

Usage:

```
am> action AuthTree --realm Realm --actionName getIds
```

1.16.1.6. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action AuthTree --realm Realm --actionName nextdescendents
```

1.16.1.7. query

Query for all authentication trees. Only a query filter of 'true' is supported.

Usage:

```
am> query AuthTree --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.16.1.8. read

Usage:

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```
am> read AuthTree --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.16.1.9. update

Usage:

```
am> update AuthTree --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "description" : "A tree contains a set of nodes and their connections.",
  "type" : "object",
  "title" : "Authentication Tree",
  "properties" : {
    "nodes" : {
      "type" : "object",
      "title" : "Nodes",
      "description" : "A map of node ID to node association details.",
      "patternProperties" : {
        ".*" : {
          "type" : "object",
          "title" : "Node",
          "description" : "A association of a node with a tree.",
          "properties" : {
            "connections" : {
              "type" : "object",
              "title" : "Connections",
              "description" : "The node's connected outcomes.",
              "patternProperties" : {
                ".*" : {
                  "type" : "string",
                  "title" : "Node ID",
                  "description" : "The ID of the node that this outcome connects to."
                }
              }
            },
            "_outcomes" : {
              "type" : "array",
              "title" : "Outcomes",
              "description" : "The node's complete set of outcomes.",
```


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```
              "readOnly" : true,
              "items" : {
                "type" : "object",
                "title" : "Outcome",
                "description" : "A possible outcome of the node.",
                "readOnly" : true,
                "properties" : {
                  "id" : {
                    "type" : "string",
                    "title" : "ID",
                    "description" : "The identifier of the outcome.",
                    "readOnly" : true
                  },
                  "displayName" : {
                    "type" : "string",
                    "title" : "Display Name",
                    "description" : "The display name of the outcome, in the requester's preferred
 locale.",
                    "readOnly" : true
                  }
                }
              }
            },
            "displayName" : {
              "title" : "Display Name",
              "description" : "The name of the node to show in the tree UI.",
              "propertyOrder" : 200,
              "required" : true,
              "type" : "string",
              "exampleValue" : ""
            },
            "nodeType" : {
              "title" : "Type",
              "description" : "The name of the SMS service for this node.",
              "propertyOrder" : 100,
              "required" : true,
              "type" : "string",
              "exampleValue" : ""
            }
          }
        }
      }
    },
    "entryNodeId" : {
      "title" : "Entry Node",
      "description" : "The ID of the node that the tree starts processing from.",
      "propertyOrder" : null,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```

1.16.1.10. validate

Validates a tree giving errors and warnings.

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Usage:

```
am> action AuthTree --realm Realm --body body --actionName validate
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "description" : "A tree contains a set of nodes and their connections.",
  "type" : "object",
  "title" : "Authentication Tree",
  "properties" : {
    "nodes" : {
      "type" : "object",
      "title" : "Nodes",
      "description" : "A map of node ID to node association details.",
      "patternProperties" : {
        ".*" : {
          "type" : "object",
          "title" : "Node",
          "description" : "A association of a node with a tree.",
          "properties" : {
            "connections" : {
              "type" : "object",
              "title" : "Connections",
              "description" : "The node's connected outcomes.",
              "patternProperties" : {
                ".*" : {
                  "type" : "string",
                  "title" : "Node ID",
                  "description" : "The ID of the node that this outcome connects to."
                }
              }
            },
            "_outcomes" : {
              "type" : "array",
              "title" : "Outcomes",
              "description" : "The node's complete set of outcomes.",
              "readOnly" : true,
              "items" : {
                "type" : "object",
                "title" : "Outcome",
                "description" : "A possible outcome of the node.",
                "readOnly" : true,
                "properties" : {
                  "id" : {
                    "type" : "string",
                    "title" : "ID",
                    "description" : "The identifier of the outcome.",
                    "readOnly" : true
                  },
                  "displayName" : {
                    "type" : "string",
                    "title" : "Display Name",
                    "description" : "The display name of the outcome, in the requester's preferred
 locale.",
```


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```
                    "readOnly" : true
                  }
                }
              }
            },
            "displayName" : {
              "title" : "Display Name",
              "description" : "The name of the node to show in the tree UI.",
              "propertyOrder" : 200,
              "required" : true,
              "type" : "string",
              "exampleValue" : ""
            },
            "nodeType" : {
              "title" : "Type",
              "description" : "The name of the SMS service for this node.",
              "propertyOrder" : 100,
              "required" : true,
              "type" : "string",
              "exampleValue" : ""
            }
          }
        }
      }
    },
    "entryNodeId" : {
      "title" : "Entry Node",
      "description" : "The ID of the node that the tree starts processing from.",
      "propertyOrder" : null,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```

1.17. Authentication

1.17.1. Realm Operations

Resource path: `/realm-config/authentication`

Resource version: `1.0`

1.17.1.1. create

Usage:

```
am> create Authentication --realm Realm --body body
```

Parameters:

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--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "accountlockout" : {
      "type" : "object",
      "title" : "Account Lockout",
      "propertyOrder" : 2,
      "properties" : {
        "lockoutDurationMultiplier" : {
          "title" : "Lockout Duration Multiplier",
          "description" : "Value multiplied to the Login Failure Lockout Duration for each successive
 lockout.<br><br>This property is used to enable OpenAM to increase the account lockout duration for
 each successive account lockout. For example: If the lockout duration is set to 10 and the duration
 multiplier is set to 2; the duration of the first lockout will be 10 minutes and the duration of the
 second lockout will be 20 minutes.<br/><br/>The default value of 1 disables this function.  ",
          "propertyOrder" : 1400,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "invalidAttemptsDataAttributeName" : {
          "title" : "Invalid Attempts Data Attribute Name",
          "description" : "The name of the attribute used to store information about failed
 authentications.<br><br>OpenAM can be configured to store information about invalid authentications
 in the users profile. This allows multiple instances of OpenAM in the same site to share
 information about a users invalid authentication attempts. By default the custom attribute;
 <code>sunAMAuthInvalidAttemptsData</code> defined in the <code>sunAMAuthAccountLockout</code>
 objectclass is used to store this data. Use this property to change the attribute used by OpenAM to
 store this information.<br/><br/><i>NB </i>Any attribute specified must be a valid attribute in the
 data store.",
          "propertyOrder" : 1700,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "lockoutAttributeName" : {
          "title" : "Lockout Attribute Name",
          "description" : "Name of custom lockout attribute <br><br>When OpenAM locks an account, the
 <code>inetuserstatus</code> attribute in the locked account is set to Inactive. In addition, OpenAM
 can set the value of another attribute in the users profile. ",
          "propertyOrder" : 1500,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "lockoutEmailAddress" : {
          "title" : "Email Address to Send Lockout Notification",
          "description" : "An email address or set of email addresses that receive notifications
 about account lockout events.<br><br>OpenAM can be configured to send a localisable email
 message to a set of email addresses when account lockout events occur. The contents of the
 email message is configured using the following properties in the <code>amAuth.properties</code>
 file.<br/><ul><li><code>lockOutEmailFrom</code> : The \"From\" address of the email message</
li><li><code>lockOutEmailSub</code> : The subject of the email message</li><li><code>lockOutEmailMsg</
code> : The contents of the email message</li></ul><br/>The identity for whom the account has
 been locked is included in the email message.<br/><br/>The format of this property is:<br/
```


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```
><code>emailaddress|locale|charset</code>. Multiple email addresses are space-separated.<br/>Email
 addresses must include the domain name, such as <code>admin@example.com</code>.",
          "propertyOrder" : 1100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "loginFailureDuration" : {
          "title" : "Login Failure Lockout Interval",
          "description" : "The lockout interval time is in minutes.<br><br>OpenAM tracks the failed
 authentication count for a user over the lockout interval.<br/><br/>For example: If the lockout
 interval is 5 minutes and the lockout count is 5; the user will have to have failed to authenticate
 5 times over the previous 5 minutes for the account to be locked. Failed authentications the occurred
 outside of the 5 minute interval are ignored.",
          "propertyOrder" : 1000,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "loginFailureLockoutMode" : {
          "title" : "Login Failure Lockout Mode",
          "description" : "Enables account lockout functionality for users authenticating to this
 realm.<br><br>OpenAM can track the number of failed authentications by a user over time and if a pre-
defined limit is breached, OpenAM can lockout the users account and perform additional functions.<br/
><br/><i>NB </i>This functionality is in addition to any account lockout behaviour implemented by the
 LDAP Directory Server.",
          "propertyOrder" : 800,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "loginFailureCount" : {
          "title" : "Login Failure Lockout Count",
          "description" : "The maximum number of failed authentications for a user before their
 account is locked.<br><br>This setting controls the maximum number of failed authentications a user
 can have during the lockout interval before OpenAM locks the users account.",
          "propertyOrder" : 900,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "storeInvalidAttemptsInDataStore" : {
          "title" : "Store Invalid Attempts in Data Store",
          "description" : "Enables sharing of login failure attempts across AM Instances<br><br>When
 this setting is enabled OpenAM will store the users invalid authentication information in the data
 store under the attribute configured in the <i>Invalid Attempts Data Attribute Name</i> property.",
          "propertyOrder" : 2700,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "lockoutDuration" : {
          "title" : "Login Failure Lockout Duration",
          "description" : "The duration of the users account lockout, in minutes.<br><br>OpenAM can
 either lockout the users account indefinitely (until administration action) by setting the duration
 to 0, (the default) or OpenAM can lock the users account for a given number of minutes. After the
 lockout interval, the user will be able to successfully authenticate to OpenAM.",
          "propertyOrder" : 1300,
          "required" : true,
```


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```
          "type" : "integer",
          "exampleValue" : ""
        },
        "lockoutAttributeValue" : {
          "title" : "Lockout Attribute Value",
          "description" : "Value to set in custom lockout attribute<br><br>This is the value that will
be set on the custom attribute in the users profile when they account is locked.",
          "propertyOrder" : 1600,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "lockoutWarnUserCount" : {
          "title" : "Warn User After N Failures",
          "description" : "Warn the user when they reach this level of failed
authentications.<br><br>The user will be given a warning when they reach this level of failed
authentications during the lockout interval.<br/>The text of the lockout warning is configured using
the <code>lockOutWarning</code> property in the <code>amAuth.properties</code> file.",
          "propertyOrder" : 1200,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        }
      }
    },
    "userprofile" : {
      "type" : "object",
      "title" : "User Profile",
      "propertyOrder" : 0,
      "properties" : {
        "defaultRole" : {
          "title" : "User Profile Dynamic Creation Default Roles",
          "description" : "List of roles of which dynamically created users will be a
member.<br><br>Enter the DN for each role that will be assigned to a new user when their profile has
been dynamically created by OpenAM.<br/><br/><i>NB </i> Deprecated functionality in OpenAM.",
          "propertyOrder" : 300,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "aliasAttributeName" : {
          "title" : "Alias Search Attribute Name",
          "description" : "The secondary LDAP attribute retrieves the user profile if the primary
LDAP attribute specified in 'User Naming Attribute' fails.<br><br>This list of LDAP attributes
is used to extend the set of attributes searched by OpenAM to find the users profile.<br>For
example: <ul><li>cn</li><li>mail</li><li>givenname</li></ul><br/>A user authenticates to OpenAM
under the id of steve, OpenAM will first search using the naming attribute (uid by default) so
uid=steve, if no match is found then cn=steve will be searched until a match is found or the list is
exhausted.<br><br/><br/><i>NB </i> Only used when User Profile searching is enabled.",
          "propertyOrder" : 400,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
```


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```
        },
        "dynamicProfileCreation" : {
          "title" : "User Profile",
          "description" : "Controls the result of the user profile success post successful
 authentication.<br><br>Controls whether a user profile is required for authentication to be
 successful or if the profile will be dynamically created if none already exists. Choose ignore if you
 do not have a data store configured in the realm.",
          "propertyOrder" : 100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    },
    "general" : {
      "type" : "object",
      "title" : "General",
      "propertyOrder" : 3,
      "properties" : {
        "twoFactorRequired" : {
          "title" : "Two Factor Authentication Mandatory",
          "description" : "",
          "propertyOrder" : 3900,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "identityType" : {
          "title" : "Identity Types",
          "description" : "",
          "propertyOrder" : 2500,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "statelessSessionsEnabled" : {
          "title" : "Use Stateless Sessions",
          "description" : "Enables stateless sessions.<br><br>Stateless sessions provide elastic
 scalability by storing all session state on the client in the SSO cookie. See Session service
 configuration to enable signing and encryption (HIGHLY RECOMMENDED).",
          "propertyOrder" : 3800,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "userStatusCallbackPlugins" : {
          "title" : "Pluggable User Status Event Classes",
          "description" : "List of classes to be called when status of the user account
 changes.<br><br>When the status of a users account changes, OpenAM can be configured to call into
 a custom class. The custom class can then be used to perform some action as required. The built in
 status change events are:<br/><br/><ul><li>Account locked</li><li>Password changed</li></ul><br/
>Custom code can also extend this mechanism.",
          "propertyOrder" : 2600,
          "required" : true,
          "items" : {
            "type" : "string"
```


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```
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "locale" : {
          "title" : "Default Authentication Locale",
          "description" : "",
          "propertyOrder" : 600,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "defaultAuthLevel" : {
          "title" : "Default Authentication Level",
          "description" : "The default authentication level for modules in this realm.<br><br>If
the authentication module does not set it's own auth level then the module will have the default
authentication level for the realm.",
          "propertyOrder" : 4100,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        }
      }
    },
    "postauthprocess" : {
      "type" : "object",
      "title" : "Post Authentication Processing",
      "propertyOrder" : 5,
      "properties" : {
        "loginFailureUrl" : {
          "title" : "Default Failure Login URL ",
          "description" : "Failed logins will be forwarded to this URL<br><br>This is the URL to
which clients will be forwarded upon failed authentication. Enter a URL or URI relative to the
local OpenAM. URL or URI can be prefixed with ClientType|URL if client specific. URL without http(s)
protocol will be appended to the current URI of OpenAM.",
          "propertyOrder" : 1900,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "loginPostProcessClass" : {
          "title" : "Authentication Post Processing Classes",
          "description" : "A list of post authentication processing classes for all users
in this realm.<br><br>This is a list of Post Processing Classes that will be called by
OpenAM for all users that authenticate to this realm. Refer to the documentation for the
places where the list of post authentication classes can be set and their precedence.
<br/><br/>For example: org.forgerock.auth.PostProcessClass<br/><i>NB </i>OpenAM must be
able to find these classes on the <code>CLASSPATH</code> and must implement the interface
<code>com.sun.identity.authentication.spi.AMPostAuthProcessInterface</code>.",
          "propertyOrder" : 2000,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
```


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```
        },
        "userAttributeSessionMapping" : {
          "title" : "User Attribute Mapping to Session Attribute",
          "description" : "Mapping of user profile attribute name to session attribute
 name.<br><br>The setting causes OpenAM to read the named attributes from the users profile in the
 data store and store their values in the users session.<br/></br>Format: User Profile Attribute|
Session Attribute name. ",
          "propertyOrder" : 3000,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "loginSuccessUrl" : {
          "title" : "Default Success Login URL",
          "description" : "Successful logins will be forwarded to this URL<br><br>This is the URL to
 which clients will be forwarded upon successful authentication. Enter a URL or URI relative to the
 local OpenAM. URL or URI can be prefixed with the ClientType|URL if client specific. URL without
 http(s) protocol will be appended to the current URI of OpenAM.",
          "propertyOrder" : 1800,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "usernameGeneratorClass" : {
          "title" : "Pluggable User Name Generator Class",
          "description" : "The name of the default implementation of the user name
 generator class.<br><br>The name of the class used to return a list of usernames to
 the Membership auth module.<br/><br/><i>NB </i>This class must implement the interface
 <code>com.sun.identity.authentication.spi.UserIDGenerator</code>",
          "propertyOrder" : 2200,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "usernameGeneratorEnabled" : {
          "title" : "Generate UserID Mode",
          "description" : "Enables this mode in the Membership auth module.<br><br>When this mode is
 enabled, if the Membership auth module detects that the supplied username already exists in the data
 store then a list of valid usernames can be shown to the user, if requested by said user.",
          "propertyOrder" : 2100,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        }
      }
    },
    "security" : {
      "type" : "object",
      "title" : "Security",
      "propertyOrder" : 4,
      "properties" : {
        "sharedSecret" : {
          "title" : "Organization Authentication Signing Secret",
```


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```
          "description" : "HMAC shared secret for signing RESTful Authentication requests.<br><br>This
is the shared secret for signing state used in RESTful authentication requests. Should be at Base-64
encoded and at least 128-bits in length. By default a cryptographically secure random value is
generated.",
          "propertyOrder" : 4000,
          "required" : true,
          "type" : "string",
          "format" : "password",
          "exampleValue" : ""
        },
        "keyAlias" : {
          "title" : "Persistent Cookie Encryption Certificate Alias",
          "description" : "Keystore Alias for encrypting Persistent Cookies.<br><br>This is the alias
for the private/public keys in the Keystore used in Persistent Cookie authentication requests.",
          "propertyOrder" : 3300,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "moduleBasedAuthEnabled" : {
          "title" : "Module Based Authentication",
          "description" : "Allows a user to authenticate via module based authentication.<br><br>The
feature allow users to override the realm configuration and use a named authentication module to
authenticate.<br/><br/><i>NB </i>Recommended to turn this feature off in production environments.",
          "propertyOrder" : 2800,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "zeroPageLoginEnabled" : {
          "title" : "Zero Page Login",
          "description" : "Allows a user to authenticate using GET request parameters without
showing the login screen.<br><br>Enable this feature if the authentication mechanism uses a single
authentication screen or the first authentication screen should always be invisible to users (since
it is auto-submitted). Use caution when enabling this feature as it can be used to authenticate using
regular GET parameters, which could be cached by browsers and logged in server and proxy access logs
exposing the values of the GET parameters.",
          "propertyOrder" : 3400,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "zeroPageLoginReferrerWhiteList" : {
          "title" : "Zero Page Login Referer Whitelist",
          "description" : "List of allowed HTTP Referer (sic) URLs from which Zero Page Login requests
are allowed.<br><br>Enter here all URLs from which you want to allow Zero Page Login. This provides
some mitigation against Login CSRF attacks. Leave empty to allow from any Referer. Applies to both
GET and POST login requests.",
          "propertyOrder" : 3600,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "zeroPageLoginAllowedWithoutReferrer" : {
          "title" : "Zero Page Login Allowed without Referer?",
```


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```
          "description" : "Whether to allow Zero Page Login if the HTTP Referer header is
 missing.<br><br>The HTTP Referer header is sometimes missing from requests (e.g., if making a request
 to HTTP from HTTPS). This setting controls whether such requests should be allowed or not. Setting
 to 'true' will reduce the risk of Login CSRF attacks with Zero Page Login, but may potentially deny
 legitimate requests.",
          "propertyOrder" : 3700,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        }
      }
    },
    "core" : {
      "type" : "object",
      "title" : "Core",
      "propertyOrder" : -1,
      "properties" : {
        "orgConfig" : {
          "title" : "Organization Authentication Configuration",
          "description" : "Default Authentication Chain for users<br><br>This is the authentication
 chain that will be used to authenticate users to this realm.",
          "propertyOrder" : 700,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "adminAuthModule" : {
          "title" : "Administrator Authentication Configuration",
          "description" : "Default Authentication Chain for administrators<br><br>This is the
 authentication chain that will be used to authentication administrative users to this realm.",
          "propertyOrder" : 200,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    }
  }
}
```

1.17.1.2. delete

Usage:

```
am> delete Authentication --realm Realm
```

1.17.1.3. read

Usage:

```
am> read Authentication --realm Realm
```


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1.17.1.4. update

Usage:

```
am> update Authentication --realm Realm --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "accountlockout" : {
      "type" : "object",
      "title" : "Account Lockout",
      "propertyOrder" : 2,
      "properties" : {
        "lockoutDurationMultiplier" : {
          "title" : "Lockout Duration Multiplier",
          "description" : "Value multiplied to the Login Failure Lockout Duration for each successive
 lockout.<br><br>This property is used to enable OpenAM to increase the account lockout duration for
 each successive account lockout. For example: If the lockout duration is set to 10 and the duration
 multiplier is set to 2; the duration of the first lockout will be 10 minutes and the duration of the
 second lockout will be 20 minutes.<br/><br/>The default value of 1 disables this function.  ",
          "propertyOrder" : 1400,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "invalidAttemptsDataAttributeName" : {
          "title" : "Invalid Attempts Data Attribute Name",
          "description" : "The name of the attribute used to store information about failed
 authentications.<br><br>OpenAM can be configured to store information about invalid authentications
 in the users profile. This allows multiple instances of OpenAM in the same site to share
 information about a users invalid authentication attempts. By default the custom attribute;
 <code>sunAMAuthInvalidAttemptsData</code> defined in the <code>sunAMAuthAccountLockout</code>
 objectclass is used to store this data. Use this property to change the attribute used by OpenAM to
 store this information.<br/><br/><i>NB </i>Any attribute specified must be a valid attribute in the
 data store.",
          "propertyOrder" : 1700,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "lockoutAttributeName" : {
          "title" : "Lockout Attribute Name",
          "description" : "Name of custom lockout attribute <br><br>When OpenAM locks an account, the
 <code>inetuserstatus</code> attribute in the locked account is set to Inactive. In addition, OpenAM
 can set the value of another attribute in the users profile. ",
          "propertyOrder" : 1500,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "lockoutEmailAddress" : {
```


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```
          "title" : "Email Address to Send Lockout Notification",
          "description" : "An email address or set of email addresses that receive notifications
 about account lockout events.<br><br>OpenAM can be configured to send a localisable email
 message to a set of email addresses when account lockout events occur. The contents of the
 email message is configured using the following properties in the <code>amAuth.properties</code>
 file.<br/><ul><li><code>lockOutEmailFrom</code> : The \"From\" address of the email message</
li><li><code>lockOutEmailSub</code> : The subject of the email message</li><li><code>lockOutEmailMsg</
code> : The contents of the email message</li></ul><br/>The identity for whom the account has
 been locked is included in the email message.<br/><br/>The format of this property is:<br/
><code>emailaddress|locale|charset</code>. Multiple email addresses are space-separated.<br/>Email
 addresses must include the domain name, such as <code>admin@example.com</code>.",
          "propertyOrder" : 1100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "loginFailureDuration" : {
          "title" : "Login Failure Lockout Interval",
          "description" : "The lockout interval time is in minutes.<br><br>OpenAM tracks the failed
 authentication count for a user over the lockout interval.<br/><br/>For example: If the lockout
 interval is 5 minutes and the lockout count is 5; the user will have to have failed to authenticate
 5 times over the previous 5 minutes for the account to be locked. Failed authentications the occurred
 outside of the 5 minute interval are ignored.",
          "propertyOrder" : 1000,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "loginFailureLockoutMode" : {
          "title" : "Login Failure Lockout Mode",
          "description" : "Enables account lockout functionality for users authenticating to this
 realm.<br><br>OpenAM can track the number of failed authentications by a user over time and if a pre-
defined limit is breached, OpenAM can lockout the users account and perform additional functions.<br/
><br/><i>NB </i>This functionality is in addition to any account lockout behaviour implemented by the
 LDAP Directory Server.",
          "propertyOrder" : 800,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "loginFailureCount" : {
          "title" : "Login Failure Lockout Count",
          "description" : "The maximum number of failed authentications for a user before their
 account is locked.<br><br>This setting controls the maximum number of failed authentications a user
 can have during the lockout interval before OpenAM locks the users account.",
          "propertyOrder" : 900,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "storeInvalidAttemptsInDataStore" : {
          "title" : "Store Invalid Attempts in Data Store",
          "description" : "Enables sharing of login failure attempts across AM Instances<br><br>When
 this setting is enabled OpenAM will store the users invalid authentication information in the data
 store under the attribute configured in the <i>Invalid Attempts Data Attribute Name</i> property.",
          "propertyOrder" : 2700,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
```


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```
       },
       "lockoutDuration" : {
         "title" : "Login Failure Lockout Duration",
         "description" : "The duration of the users account lockout, in minutes.<br><br>OpenAM can
either lockout the users account indefinitely (until administration action) by setting the duration
to 0, (the default) or OpenAM can lock the users account for a given number of minutes. After the
lockout interval, the user will be able to successfully authenticate to OpenAM.",
         "propertyOrder" : 1300,
         "required" : true,
         "type" : "integer",
         "exampleValue" : ""
       },
       "lockoutAttributeValue" : {
         "title" : "Lockout Attribute Value",
         "description" : "Value to set in custom lockout attribute<br><br>This is the value that will
be set on the custom attribute in the users profile when they account is locked.",
         "propertyOrder" : 1600,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       },
       "lockoutWarnUserCount" : {
         "title" : "Warn User After N Failures",
         "description" : "Warn the user when they reach this level of failed
authentications.<br><br>The user will be given a warning when they reach this level of failed
authentications during the lockout interval.<br/>The text of the lockout warning is configured using
the <code>lockOutWarning</code> property in the <code>amAuth.properties</code> file.",
         "propertyOrder" : 1200,
         "required" : true,
         "type" : "integer",
         "exampleValue" : ""
       }
     }
   },
   "userprofile" : {
     "type" : "object",
     "title" : "User Profile",
     "propertyOrder" : 0,
     "properties" : {
       "defaultRole" : {
         "title" : "User Profile Dynamic Creation Default Roles",
         "description" : "List of roles of which dynamically created users will be a
member.<br><br>Enter the DN for each role that will be assigned to a new user when their profile has
been dynamically created by OpenAM.<br/><br/><i>NB </i> Deprecated functionality in OpenAM.",
         "propertyOrder" : 300,
         "required" : true,
         "items" : {
           "type" : "string"
         },
         "type" : "array",
         "exampleValue" : ""
       },
       "aliasAttributeName" : {
         "title" : "Alias Search Attribute Name",
         "description" : "The secondary LDAP attribute retrieves the user profile if the primary
LDAP attribute specified in 'User Naming Attribute' fails.<br><br>This list of LDAP attributes
is used to extend the set of attributes searched by OpenAM to find the users profile.<br>For
example: <ul><li>cn</li><li>mail</li><li>givenname</li></ul><br/>A user authenticates to OpenAM
under the id of steve, OpenAM will first search using the naming attribute (uid by default) so
```


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```
uid=steve, if no match is found then cn=steve will be searched until a match is found or the list is
exhausted.<br><br/><br/><i>NB </i> Only used when User Profile searching is enabled.",
         "propertyOrder" : 400,
         "required" : true,
         "items" : {
           "type" : "string"
         },
         "type" : "array",
         "exampleValue" : ""
       },
       "dynamicProfileCreation" : {
         "title" : "User Profile",
         "description" : "Controls the result of the user profile success post successful
authentication.<br><br>Controls whether a user profile is required for authentication to be
successful or if the profile will be dynamically created if none already exists. Choose ignore if you
do not have a data store configured in the realm.",
         "propertyOrder" : 100,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       }
     }
   },
   "general" : {
     "type" : "object",
     "title" : "General",
     "propertyOrder" : 3,
     "properties" : {
       "twoFactorRequired" : {
         "title" : "Two Factor Authentication Mandatory",
         "description" : "",
         "propertyOrder" : 3900,
         "required" : true,
         "type" : "boolean",
         "exampleValue" : ""
       },
       "identityType" : {
         "title" : "Identity Types",
         "description" : "",
         "propertyOrder" : 2500,
         "required" : true,
         "items" : {
           "type" : "string"
         },
         "type" : "array",
         "exampleValue" : ""
       },
       "statelessSessionsEnabled" : {
         "title" : "Use Stateless Sessions",
         "description" : "Enables stateless sessions.<br><br>Stateless sessions provide elastic
scalability by storing all session state on the client in the SSO cookie. See Session service
configuration to enable signing and encryption (HIGHLY RECOMMENDED).",
         "propertyOrder" : 3800,
         "required" : true,
         "type" : "boolean",
         "exampleValue" : ""
       },
       "userStatusCallbackPlugins" : {
         "title" : "Pluggable User Status Event Classes",
```


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```
          "description" : "List of classes to be called when status of the user account
 changes.<br><br>When the status of a users account changes, OpenAM can be configured to call into
 a custom class. The custom class can then be used to perform some action as required. The built in
 status change events are:<br/><br/><ul><li>Account locked</li><li>Password changed</li></ul><br/
>Custom code can also extend this mechanism.",
          "propertyOrder" : 2600,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "locale" : {
          "title" : "Default Authentication Locale",
          "description" : "",
          "propertyOrder" : 600,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "defaultAuthLevel" : {
          "title" : "Default Authentication Level",
          "description" : "The default authentication level for modules in this realm.<br><br>If
 the authentication module does not set it's own auth level then the module will have the default
 authentication level for the realm.",
          "propertyOrder" : 4100,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        }
      }
    },
    "postauthprocess" : {
      "type" : "object",
      "title" : "Post Authentication Processing",
      "propertyOrder" : 5,
      "properties" : {
        "loginFailureUrl" : {
          "title" : "Default Failure Login URL ",
          "description" : "Failed logins will be forwarded to this URL<br><br>This is the URL to
 which clients will be forwarded upon failed authentication. Enter a URL or URI relative to the
 local OpenAM. URL or URI can be prefixed with ClientType|URL if client specific. URL without http(s)
 protocol will be appended to the current URI of OpenAM.",
          "propertyOrder" : 1900,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "loginPostProcessClass" : {
          "title" : "Authentication Post Processing Classes",
          "description" : "A list of post authentication processing classes for all users
 in this realm.<br><br>This is a list of Post Processing Classes that will be called by
 OpenAM for all users that authenticate to this realm. Refer to the documentation for the
 places where the list of post authentication classes can be set and their precedence.
 <br/><br/>For example: org.forgerock.auth.PostProcessClass<br/><i>NB </i>OpenAM must be
```


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```
 able to find these classes on the <code>CLASSPATH</code> and must implement the interface
 <code>com.sun.identity.authentication.spi.AMPostAuthProcessInterface</code>.",
          "propertyOrder" : 2000,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "userAttributeSessionMapping" : {
          "title" : "User Attribute Mapping to Session Attribute",
          "description" : "Mapping of user profile attribute name to session attribute
 name.<br><br>The setting causes OpenAM to read the named attributes from the users profile in the
 data store and store their values in the users session.<br/></br>Format: User Profile Attribute|
Session Attribute name. ",
          "propertyOrder" : 3000,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "loginSuccessUrl" : {
          "title" : "Default Success Login URL",
          "description" : "Successful logins will be forwarded to this URL<br><br>This is the URL to
 which clients will be forwarded upon successful authentication. Enter a URL or URI relative to the
 local OpenAM. URL or URI can be prefixed with the ClientType|URL if client specific. URL without
 http(s) protocol will be appended to the current URI of OpenAM.",
          "propertyOrder" : 1800,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "usernameGeneratorClass" : {
          "title" : "Pluggable User Name Generator Class",
          "description" : "The name of the default implementation of the user name
 generator class.<br><br>The name of the class used to return a list of usernames to
 the Membership auth module.<br/><br/><i>NB </i>This class must implement the interface
 <code>com.sun.identity.authentication.spi.UserIDGenerator</code>",
          "propertyOrder" : 2200,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "usernameGeneratorEnabled" : {
          "title" : "Generate UserID Mode",
          "description" : "Enables this mode in the Membership auth module.<br><br>When this mode is
 enabled, if the Membership auth module detects that the supplied username already exists in the data
 store then a list of valid usernames can be shown to the user, if requested by said user.",
          "propertyOrder" : 2100,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        }
```


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```
      }
    },
    "security" : {
      "type" : "object",
      "title" : "Security",
      "propertyOrder" : 4,
      "properties" : {
        "sharedSecret" : {
          "title" : "Organization Authentication Signing Secret",
          "description" : "HMAC shared secret for signing RESTful Authentication requests.<br><br>This
is the shared secret for signing state used in RESTful authentication requests. Should be at Base-64
encoded and at least 128-bits in length. By default a cryptographically secure random value is
generated.",
          "propertyOrder" : 4000,
          "required" : true,
          "type" : "string",
          "format" : "password",
          "exampleValue" : ""
        },
        "keyAlias" : {
          "title" : "Persistent Cookie Encryption Certificate Alias",
          "description" : "Keystore Alias for encrypting Persistent Cookies.<br><br>This is the alias
for the private/public keys in the Keystore used in Persistent Cookie authentication requests.",
          "propertyOrder" : 3300,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "moduleBasedAuthEnabled" : {
          "title" : "Module Based Authentication",
          "description" : "Allows a user to authenticate via module based authentication.<br><br>The
feature allow users to override the realm configuration and use a named authentication module to
authenticate.<br/><br/><i>NB </i>Recommended to turn this feature off in production environments.",
          "propertyOrder" : 2800,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "zeroPageLoginEnabled" : {
          "title" : "Zero Page Login",
          "description" : "Allows a user to authenticate using GET request parameters without
showing the login screen.<br><br>Enable this feature if the authentication mechanism uses a single
authentication screen or the first authentication screen should always be invisible to users (since
it is auto-submitted). Use caution when enabling this feature as it can be used to authenticate using
regular GET parameters, which could be cached by browsers and logged in server and proxy access logs
exposing the values of the GET parameters.",
          "propertyOrder" : 3400,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "zeroPageLoginReferrerWhiteList" : {
          "title" : "Zero Page Login Referer Whitelist",
          "description" : "List of allowed HTTP Referer (sic) URLs from which Zero Page Login requests
are allowed.<br><br>Enter here all URLs from which you want to allow Zero Page Login. This provides
some mitigation against Login CSRF attacks. Leave empty to allow from any Referer. Applies to both
GET and POST login requests.",
          "propertyOrder" : 3600,
          "required" : true,
```


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```
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "zeroPageLoginAllowedWithoutReferrer" : {
          "title" : "Zero Page Login Allowed without Referer?",
          "description" : "Whether to allow Zero Page Login if the HTTP Referer header is
 missing.<br><br>The HTTP Referer header is sometimes missing from requests (e.g., if making a request
 to HTTP from HTTPS). This setting controls whether such requests should be allowed or not. Setting
 to 'true' will reduce the risk of Login CSRF attacks with Zero Page Login, but may potentially deny
 legitimate requests.",
          "propertyOrder" : 3700,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        }
      }
    },
    "core" : {
      "type" : "object",
      "title" : "Core",
      "propertyOrder" : -1,
      "properties" : {
        "orgConfig" : {
          "title" : "Organization Authentication Configuration",
          "description" : "Default Authentication Chain for users<br><br>This is the authentication
 chain that will be used to authenticate users to this realm.",
          "propertyOrder" : 700,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "adminAuthModule" : {
          "title" : "Administrator Authentication Configuration",
          "description" : "Default Authentication Chain for administrators<br><br>This is the
 authentication chain that will be used to authentication administrative users to this realm.",
          "propertyOrder" : 200,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    }
  }
}
```

1.17.2. Global Operations

Resource path: `/global-config/authentication`

Resource version: `1.0`

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1.17.2.1. read

Usage:

```
am> read Authentication --global
```

1.17.2.2. update

Usage:

```
am> update Authentication --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "authenticators" : {
      "title" : "Pluggable Authentication Module Classes",
      "description" : "List of configured authentication modules<br><br>The list of
 configured authentication modules available to OpenAM. All modules must extend from the
 <code>com.sun.identity.authentication.spi.AMLoginModule</code> class.",
      "propertyOrder" : 500,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "remoteAuthSecurityEnabled" : {
      "title" : "Remote Auth Security",
      "description" : "OpenAM requires authentication client to authenticate itself before
 authenticating users.<br><br>When this setting is enabled, OpenAM will require the authentication
 client (such as a policy agent) to authentication itself to OpenAM before the client will be allow to
 use the remote authentication API to authenticate users. ",
      "propertyOrder" : 2900,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "keepPostProcessInstances" : {
      "title" : "Keep Post Process Objects for Logout Processing",
      "description" : "Store Post Processing Classes for the duration of the session.<br><br>Enabling
 this setting will cause OpenAM to store instances of post processing classes into the users session.
 When the user logs out the original instances of the post processing classes will be called instead
 of new instances. This may be needed for special logout processing.<br/><br/><i>NB </i>Enabling this
 setting will increase the memory usage of OpenAM.",
      "propertyOrder" : 3100,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
```


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```
    },
    "ldapConnectionPoolSize" : {
      "title" : "LDAP Connection Pool Size",
      "description" : "Controls the size of the LDAP connection pool used for
authentication<br><br>Control the size of the connection pool to the LDAP directory server used by
any of the authentication modules that use LDAP directly such as LDAP or Active Directory.Different
OpenAM servers can be configured with different connection pool settings.<br/><br/>Format:
host:port:minimum:maximum",
      "propertyOrder" : 2300,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "ldapConnectionPoolDefaultSize" : {
      "title" : "Default LDAP Connection Pool Size",
      "description" : "The default connection pool size; format is: mininum:maximum",
      "propertyOrder" : 2400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "defaults" : {
      "properties" : {
        "security" : {
          "type" : "object",
          "title" : "Security",
          "propertyOrder" : 4,
          "properties" : {
            "sharedSecret" : {
              "title" : "Organization Authentication Signing Secret",
              "description" : "HMAC shared secret for signing RESTful Authentication
requests.<br><br>This is the shared secret for signing state used in RESTful authentication requests.
Should be at Base-64 encoded and at least 128-bits in length. By default a cryptographically secure
random value is generated.",
              "propertyOrder" : 4000,
              "required" : true,
              "type" : "string",
              "format" : "password",
              "exampleValue" : ""
            },
            "zeroPageLoginEnabled" : {
              "title" : "Zero Page Login",
              "description" : "Allows a user to authenticate using GET request parameters without
showing the login screen.<br><br>Enable this feature if the authentication mechanism uses a single
authentication screen or the first authentication screen should always be invisible to users (since
it is auto-submitted). Use caution when enabling this feature as it can be used to authenticate using
regular GET parameters, which could be cached by browsers and logged in server and proxy access logs
exposing the values of the GET parameters.",
              "propertyOrder" : 3400,
              "required" : true,
              "type" : "boolean",
              "exampleValue" : ""
            },
            "zeroPageLoginReferrerWhiteList" : {
              "title" : "Zero Page Login Referer Whitelist",
```


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```
            "description" : "List of allowed HTTP Referer (sic) URLs from which Zero Page Login
requests are allowed.<br><br>Enter here all URLs from which you want to allow Zero Page Login. This
provides some mitigation against Login CSRF attacks. Leave empty to allow from any Referer. Applies
to both GET and POST login requests.",
            "propertyOrder" : 3600,
            "required" : true,
            "items" : {
              "type" : "string"
            },
            "type" : "array",
            "exampleValue" : ""
          },
          "keyAlias" : {
            "title" : "Persistent Cookie Encryption Certificate Alias",
            "description" : "Keystore Alias for encrypting Persistent Cookies.<br><br>This is
the alias for the private/public keys in the Keystore used in Persistent Cookie authentication
requests.",
            "propertyOrder" : 3300,
            "required" : true,
            "type" : "string",
            "exampleValue" : ""
          },
          "moduleBasedAuthEnabled" : {
            "title" : "Module Based Authentication",
            "description" : "Allows a user to authenticate via module based
authentication.<br><br>The feature allow users to override the realm configuration and use a named
authentication module to authenticate.<br/><br/><i>NB </i>Recommended to turn this feature off in
production environments.",
            "propertyOrder" : 2800,
            "required" : true,
            "type" : "boolean",
            "exampleValue" : ""
          },
          "zeroPageLoginAllowedWithoutReferrer" : {
            "title" : "Zero Page Login Allowed without Referer?",
            "description" : "Whether to allow Zero Page Login if the HTTP Referer header is
missing.<br><br>The HTTP Referer header is sometimes missing from requests (e.g., if making a request
to HTTP from HTTPS). This setting controls whether such requests should be allowed or not. Setting
to 'true' will reduce the risk of Login CSRF attacks with Zero Page Login, but may potentially deny
legitimate requests.",
            "propertyOrder" : 3700,
            "required" : true,
            "type" : "boolean",
            "exampleValue" : ""
          }
        }
      },
      "postauthprocess" : {
        "type" : "object",
        "title" : "Post Authentication Processing",
        "propertyOrder" : 5,
        "properties" : {
          "loginFailureUrl" : {
            "title" : "Default Failure Login URL ",
            "description" : "Failed logins will be forwarded to this URL<br><br>This is the URL
to which clients will be forwarded upon failed authentication. Enter a URL or URI relative to the
local OpenAM. URL or URI can be prefixed with ClientType|URL if client specific. URL without http(s)
protocol will be appended to the current URI of OpenAM.",
            "propertyOrder" : 1900,
```


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```
              "required" : true,
              "items" : {
                "type" : "string"
              },
              "type" : "array",
              "exampleValue" : ""
            },
            "usernameGeneratorEnabled" : {
              "title" : "Generate UserID Mode",
              "description" : "Enables this mode in the Membership auth module.<br><br>When this mode
 is enabled, if the Membership auth module detects that the supplied username already exists in the
 data store then a list of valid usernames can be shown to the user, if requested by said user.",
              "propertyOrder" : 2100,
              "required" : true,
              "type" : "boolean",
              "exampleValue" : ""
            },
            "userAttributeSessionMapping" : {
              "title" : "User Attribute Mapping to Session Attribute",
              "description" : "Mapping of user profile attribute name to session attribute
 name.<br><br>The setting causes OpenAM to read the named attributes from the users profile in the
 data store and store their values in the users session.<br/></br>Format: User Profile Attribute|
Session Attribute name. ",
              "propertyOrder" : 3000,
              "required" : true,
              "items" : {
                "type" : "string"
              },
              "type" : "array",
              "exampleValue" : ""
            },
            "usernameGeneratorClass" : {
              "title" : "Pluggable User Name Generator Class",
              "description" : "The name of the default implementation of the user name
 generator class.<br><br>The name of the class used to return a list of usernames to
 the Membership auth module.<br/><br/><i>NB </i>This class must implement the interface
 <code>com.sun.identity.authentication.spi.UserIDGenerator</code>",
              "propertyOrder" : 2200,
              "required" : true,
              "type" : "string",
              "exampleValue" : ""
            },
            "loginSuccessUrl" : {
              "title" : "Default Success Login URL",
              "description" : "Successful logins will be forwarded to this URL<br><br>This is the URL
 to which clients will be forwarded upon successful authentication. Enter a URL or URI relative to
 the local OpenAM. URL or URI can be prefixed with the ClientType|URL if client specific. URL without
 http(s) protocol will be appended to the current URI of OpenAM.",
              "propertyOrder" : 1800,
              "required" : true,
              "items" : {
                "type" : "string"
              },
              "type" : "array",
              "exampleValue" : ""
            },
            "loginPostProcessClass" : {
              "title" : "Authentication Post Processing Classes",
```


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```
              "description" : "A list of post authentication processing classes for all
 users in this realm.<br><br>This is a list of Post Processing Classes that will be called
 by OpenAM for all users that authenticate to this realm. Refer to the documentation for
 the places where the list of post authentication classes can be set and their precedence.
 <br/><br/>For example: org.forgerock.auth.PostProcessClass<br/><i>NB </i>OpenAM must be
 able to find these classes on the <code>CLASSPATH</code> and must implement the interface
 <code>com.sun.identity.authentication.spi.AMPostAuthProcessInterface</code>.",
              "propertyOrder" : 2000,
              "required" : true,
              "items" : {
                "type" : "string"
              },
              "type" : "array",
              "exampleValue" : ""
            }
          }
        },
        "general" : {
          "type" : "object",
          "title" : "General",
          "propertyOrder" : 3,
          "properties" : {
            "identityType" : {
              "title" : "Identity Types",
              "description" : "",
              "propertyOrder" : 2500,
              "required" : true,
              "items" : {
                "type" : "string"
              },
              "type" : "array",
              "exampleValue" : ""
            },
            "twoFactorRequired" : {
              "title" : "Two Factor Authentication Mandatory",
              "description" : "",
              "propertyOrder" : 3900,
              "required" : true,
              "type" : "boolean",
              "exampleValue" : ""
            },
            "statelessSessionsEnabled" : {
              "title" : "Use Stateless Sessions",
              "description" : "Enables stateless sessions.<br><br>Stateless sessions provide elastic
 scalability by storing all session state on the client in the SSO cookie. See Session service
 configuration to enable signing and encryption (HIGHLY RECOMMENDED).",
              "propertyOrder" : 3800,
              "required" : true,
              "type" : "boolean",
              "exampleValue" : ""
            },
            "userStatusCallbackPlugins" : {
              "title" : "Pluggable User Status Event Classes",
              "description" : "List of classes to be called when status of the user account
 changes.<br><br>When the status of a users account changes, OpenAM can be configured to call into
 a custom class. The custom class can then be used to perform some action as required. The built in
 status change events are:<br/><br/><ul><li>Account locked</li><li>Password changed</li></ul><br/
>Custom code can also extend this mechanism.",
              "propertyOrder" : 2600,
```


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```
              "required" : true,
              "items" : {
                "type" : "string"
              },
              "type" : "array",
              "exampleValue" : ""
            },
            "defaultAuthLevel" : {
              "title" : "Default Authentication Level",
              "description" : "The default authentication level for modules in this realm.<br><br>If
 the authentication module does not set it's own auth level then the module will have the default
 authentication level for the realm.",
              "propertyOrder" : 4100,
              "required" : true,
              "type" : "integer",
              "exampleValue" : ""
            },
            "locale" : {
              "title" : "Default Authentication Locale",
              "description" : "",
              "propertyOrder" : 600,
              "required" : true,
              "type" : "string",
              "exampleValue" : ""
            }
          }
        },
        "accountlockout" : {
          "type" : "object",
          "title" : "Account Lockout",
          "propertyOrder" : 2,
          "properties" : {
            "lockoutEmailAddress" : {
              "title" : "Email Address to Send Lockout Notification",
              "description" : "An email address or set of email addresses that receive notifications
 about account lockout events.<br><br>OpenAM can be configured to send a localisable email
 message to a set of email addresses when account lockout events occur. The contents of the
 email message is configured using the following properties in the <code>amAuth.properties</code>
 file.<br/><ul><li><code>lockOutEmailFrom</code> : The \"From\" address of the email message</
li><li><code>lockOutEmailSub</code> : The subject of the email message</li><li><code>lockOutEmailMsg</
code> : The contents of the email message</li></ul><br/>The identity for whom the account has
 been locked is included in the email message.<br/><br/>The format of this property is:<br/
><code>emailaddress|locale|charset</code>. Multiple email addresses are space-separated.<br/>Email
 addresses must include the domain name, such as <code>admin@example.com</code>.",
              "propertyOrder" : 1100,
              "required" : true,
              "type" : "string",
              "exampleValue" : ""
            },
            "loginFailureDuration" : {
              "title" : "Login Failure Lockout Interval",
              "description" : "The lockout interval time is in minutes.<br><br>OpenAM tracks the
 failed authentication count for a user over the lockout interval.<br/><br/>For example: If the
 lockout interval is 5 minutes and the lockout count is 5; the user will have to have failed to
 authenticate 5 times over the previous 5 minutes for the account to be locked. Failed authentications
 the occurred outside of the 5 minute interval are ignored.",
              "propertyOrder" : 1000,
              "required" : true,
              "type" : "integer",
```


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```
              "exampleValue" : ""
            },
            "loginFailureLockoutMode" : {
              "title" : "Login Failure Lockout Mode",
              "description" : "Enables account lockout functionality for users authenticating to this
 realm.<br><br>OpenAM can track the number of failed authentications by a user over time and if a pre-
defined limit is breached, OpenAM can lockout the users account and perform additional functions.<br/
><br/><i>NB </i>This functionality is in addition to any account lockout behaviour implemented by the
 LDAP Directory Server.",
              "propertyOrder" : 800,
              "required" : true,
              "type" : "boolean",
              "exampleValue" : ""
            },
            "invalidAttemptsDataAttributeName" : {
              "title" : "Invalid Attempts Data Attribute Name",
              "description" : "The name of the attribute used to store information about failed
 authentications.<br><br>OpenAM can be configured to store information about invalid authentications
 in the users profile. This allows multiple instances of OpenAM in the same site to share
 information about a users invalid authentication attempts. By default the custom attribute;
 <code>sunAMAuthInvalidAttemptsData</code> defined in the <code>sunAMAuthAccountLockout</code>
 objectclass is used to store this data. Use this property to change the attribute used by OpenAM to
 store this information.<br/><br/><i>NB </i>Any attribute specified must be a valid attribute in the
 data store.",
              "propertyOrder" : 1700,
              "required" : true,
              "type" : "string",
              "exampleValue" : ""
            },
            "lockoutAttributeValue" : {
              "title" : "Lockout Attribute Value",
              "description" : "Value to set in custom lockout attribute<br><br>This is the value that
 will be set on the custom attribute in the users profile when they account is locked.",
              "propertyOrder" : 1600,
              "required" : true,
              "type" : "string",
              "exampleValue" : ""
            },
            "lockoutAttributeName" : {
              "title" : "Lockout Attribute Name",
              "description" : "Name of custom lockout attribute <br><br>When OpenAM locks an account,
 the <code>inetuserstatus</code> attribute in the locked account is set to Inactive. In addition,
 OpenAM can set the value of another attribute in the users profile. ",
              "propertyOrder" : 1500,
              "required" : true,
              "type" : "string",
              "exampleValue" : ""
            },
            "lockoutDurationMultiplier" : {
              "title" : "Lockout Duration Multiplier",
              "description" : "Value multiplied to the Login Failure Lockout Duration for each
 successive lockout.<br><br>This property is used to enable OpenAM to increase the account lockout
 duration for each successive account lockout. For example: If the lockout duration is set to 10 and
 the duration multiplier is set to 2; the duration of the first lockout will be 10 minutes and the
 duration of the second lockout will be 20 minutes.<br/><br/>The default value of 1 disables this
 function.  ",
              "propertyOrder" : 1400,
              "required" : true,
              "type" : "integer",
```


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```
              "exampleValue" : ""
            },
            "lockoutWarnUserCount" : {
              "title" : "Warn User After N Failures",
              "description" : "Warn the user when they reach this level of failed
authentications.<br><br>The user will be given a warning when they reach this level of failed
authentications during the lockout interval.<br/>The text of the lockout warning is configured using
the <code>lockOutWarning</code> property in the <code>amAuth.properties</code> file.",
              "propertyOrder" : 1200,
              "required" : true,
              "type" : "integer",
              "exampleValue" : ""
            },
            "loginFailureCount" : {
              "title" : "Login Failure Lockout Count",
              "description" : "The maximum number of failed authentications for a user before their
account is locked.<br><br>This setting controls the maximum number of failed authentications a user
can have during the lockout interval before OpenAM locks the users account.",
              "propertyOrder" : 900,
              "required" : true,
              "type" : "integer",
              "exampleValue" : ""
            },
            "storeInvalidAttemptsInDataStore" : {
              "title" : "Store Invalid Attempts in Data Store",
              "description" : "Enables sharing of login failure attempts across AM
Instances<br><br>When this setting is enabled OpenAM will store the users invalid authentication
information in the data store under the attribute configured in the <i>Invalid Attempts Data
Attribute Name</i> property.",
              "propertyOrder" : 2700,
              "required" : true,
              "type" : "boolean",
              "exampleValue" : ""
            },
            "lockoutDuration" : {
              "title" : "Login Failure Lockout Duration",
              "description" : "The duration of the users account lockout, in minutes.<br><br>OpenAM
can either lockout the users account indefinitely (until administration action) by setting the
duration to 0, (the default) or OpenAM can lock the users account for a given number of minutes.
After the lockout interval, the user will be able to successfully authenticate to OpenAM.",
              "propertyOrder" : 1300,
              "required" : true,
              "type" : "integer",
              "exampleValue" : ""
            }
          }
        },
        "userprofile" : {
          "type" : "object",
          "title" : "User Profile",
          "propertyOrder" : 0,
          "properties" : {
            "aliasAttributeName" : {
              "title" : "Alias Search Attribute Name",
              "description" : "The secondary LDAP attribute retrieves the user profile if the primary
LDAP attribute specified in 'User Naming Attribute' fails.<br><br>This list of LDAP attributes
is used to extend the set of attributes searched by OpenAM to find the users profile.<br>For
example: <ul><li>cn</li><li>mail</li><li>givenname</li></ul><br/>A user authenticates to OpenAM
under the id of steve, OpenAM will first search using the naming attribute (uid by default) so
```


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```
uid=steve, if no match is found then cn=steve will be searched until a match is found or the list is
exhausted.<br><br/><br/><i>NB </i> Only used when User Profile searching is enabled.",
              "propertyOrder" : 400,
              "required" : true,
              "items" : {
                "type" : "string"
              },
              "type" : "array",
              "exampleValue" : ""
            },
            "defaultRole" : {
              "title" : "User Profile Dynamic Creation Default Roles",
              "description" : "List of roles of which dynamically created users will be a
member.<br><br>Enter the DN for each role that will be assigned to a new user when their profile has
been dynamically created by OpenAM.<br/><br/><i>NB </i> Deprecated functionality in OpenAM.",
              "propertyOrder" : 300,
              "required" : true,
              "items" : {
                "type" : "string"
              },
              "type" : "array",
              "exampleValue" : ""
            },
            "dynamicProfileCreation" : {
              "title" : "User Profile",
              "description" : "Controls the result of the user profile success post successful
authentication.<br><br>Controls whether a user profile is required for authentication to be
successful or if the profile will be dynamically created if none already exists. Choose ignore if you
do not have a data store configured in the realm.",
              "propertyOrder" : 100,
              "required" : true,
              "type" : "string",
              "exampleValue" : ""
            }
          }
        },
        "core" : {
          "type" : "object",
          "title" : "Core",
          "propertyOrder" : -1,
          "properties" : {
            "orgConfig" : {
              "title" : "Organization Authentication Configuration",
              "description" : "Default Authentication Chain for users<br><br>This is the
authentication chain that will be used to authenticate users to this realm.",
              "propertyOrder" : 700,
              "required" : true,
              "type" : "string",
              "exampleValue" : ""
            },
            "adminAuthModule" : {
              "title" : "Administrator Authentication Configuration",
              "description" : "Default Authentication Chain for administrators<br><br>This is the
authentication chain that will be used to authentication administrative users to this realm.",
              "propertyOrder" : 200,
              "required" : true,
              "type" : "string",
              "exampleValue" : ""
            }
```


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```
          }
        }
      },
      "type" : "object",
      "title" : "Realm Defaults"
    }
  }
}
```

1.18. AuthenticationChains

1.18.1. Realm Operations

Resource path: `/realm-config/authentication/chains`

Resource version: `1.0`

1.18.1.1. create

Usage:

```
am> create AuthenticationChains --realm Realm --id id --body body
```

Parameters:

`--id`

The unique identifier for the resource.

`--body`

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "authChainConfiguration" : {
      "title" : "Authentication Configuration",
      "description" : "",
      "propertyOrder" : 100,
      "required" : true,
      "exampleValue" : "",
      "type" : "array",
      "items" : {
        "type" : "object",
        "properties" : {
          "module" : {
            "type" : "string"
          },
          "criteria" : {
```


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```
            "type" : "string"
          },
          "options" : {
            "type" : "object",
            "patternProperties" : {
              ".*" : {
                "type" : "string"
              }
            }
          }
        }
      }
    },
    "loginSuccessUrl" : {
      "title" : "Login Success URL",
      "description" : "URL or ClientType|URL if client specific. URL without http(s) protocol will be
 appended to the current URI.",
      "propertyOrder" : 200,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "loginFailureUrl" : {
      "title" : "Login Failed URL",
      "description" : "URL or ClientType|URL if client specific. URL without http(s) protocol will be
 appended to the current URI.",
      "propertyOrder" : 300,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "loginPostProcessClass" : {
      "title" : "Authentication Post Processing Classes",
      "description" : "Example: com.abc.authentication.PostProcessClass",
      "propertyOrder" : 400,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    }
  }
}
```

1.18.1.2. delete

Usage:

```
am> delete AuthenticationChains --realm Realm --id id
```


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Parameters:

--id

The unique identifier for the resource.

1.18.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action AuthenticationChains --realm Realm --actionName getAllTypes
```

1.18.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action AuthenticationChains --realm Realm --actionName getCreatableTypes
```

1.18.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action AuthenticationChains --realm Realm --actionName nextdescendents
```

1.18.1.6. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

```
am> query AuthenticationChains --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.18.1.7. read

Usage:

```
am> read AuthenticationChains --realm Realm --id id
```


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Parameters:

--id

The unique identifier for the resource.

1.18.1.8. update

Usage:

```
am> update AuthenticationChains --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "authChainConfiguration" : {
      "title" : "Authentication Configuration",
      "description" : "",
      "propertyOrder" : 100,
      "required" : true,
      "exampleValue" : "",
      "type" : "array",
      "items" : {
        "type" : "object",
        "properties" : {
          "module" : {
            "type" : "string"
          },
          "criteria" : {
            "type" : "string"
          },
          "options" : {
            "type" : "object",
            "patternProperties" : {
              ".*" : {
                "type" : "string"
              }
            }
          }
        }
      }
    },
    "loginSuccessUrl" : {
      "title" : "Login Success URL",
      "description" : "URL or ClientType|URL if client specific. URL without http(s) protocol will be
 appended to the current URI.",
```


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```
      "propertyOrder" : 200,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "loginFailureUrl" : {
      "title" : "Login Failed URL",
      "description" : "URL or ClientType|URL if client specific. URL without http(s) protocol will be
 appended to the current URI.",
      "propertyOrder" : 300,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "loginPostProcessClass" : {
      "title" : "Authentication Post Processing Classes",
      "description" : "Example: com.abc.authentication.PostProcessClass",
      "propertyOrder" : 400,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    }
  }
}
```

1.18.2. Global Operations

Resource path: `/global-config/authentication/chains`

Resource version: `1.0`

1.18.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action AuthenticationChains --global --actionName getAllTypes
```

1.18.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

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Usage:

```
am> action AuthenticationChains --global --actionName getCreatableTypes
```

1.18.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action AuthenticationChains --global --actionName nextdescendents
```

1.18.2.4. read

Usage:

```
am> read AuthenticationChains --global
```

1.18.2.5. update

Usage:

```
am> update AuthenticationChains --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "dynamic" : {
      "properties" : {
        "authChainConfiguration" : {
          "title" : "Authentication Configuration",
          "description" : "",
          "propertyOrder" : 100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      },
      "type" : "object",
      "title" : "Dynamic Attributes"
    }
  }
}
```


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1.19. AuthenticationModules

1.19.1. Realm Operations

The collection of all authentication modules in a realm allows querying for all module instances.

Resource path: `/realm-config/authentication/modules`

Resource version: `1.0`

1.19.1.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action AuthenticationModules --realm Realm --actionName getAllTypes
```

1.19.1.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action AuthenticationModules --realm Realm --actionName getCreatableTypes
```

1.19.1.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action AuthenticationModules --realm Realm --actionName nextdescendents
```

1.19.1.4. query

Query for authentication module instances

Usage:

```
am> query AuthenticationModules --realm Realm --filter filter
```

Parameters:

`--filter`

A CREST formatted query filter, where "true" will query all. Fields that can be queried: [_id]

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1.19.2. Global Operations

Global and default configuration for authentication modules

Resource path: `/global-config/authentication/modules`

Resource version: `1.0`

1.19.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action AuthenticationModules --global --actionName getAllTypes
```

1.19.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action AuthenticationModules --global --actionName getCreatableTypes
```

1.19.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action AuthenticationModules --global --actionName nextdescendents
```

1.20. AuthenticationNodes

1.20.1. Realm Operations

Auth Tree Nodes

Resource path: `/realm-config/authentication/authenticationtrees/nodes`

Resource version: `1.0`

1.20.1.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

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```
am> action AuthenticationNodes --realm Realm --actionName getAllTypes
```

1.20.1.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action AuthenticationNodes --realm Realm --actionName getCreatableTypes
```

1.20.1.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action AuthenticationNodes --realm Realm --actionName nextdescendents
```

1.20.2. Global Operations

Auth Tree Nodes

Resource path: `/global-config/authentication/authenticationtrees/nodes`

Resource version: `1.0`

1.20.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action AuthenticationNodes --global --actionName getAllTypes
```

1.20.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action AuthenticationNodes --global --actionName getCreatableTypes
```

1.20.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action AuthenticationNodes --global --actionName nextdescendents
```


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1.21. AuthenticationTreesConfiguration

1.21.1. Realm Operations

Sub-path parent for all authentication tree configuration.

Resource path: `/realm-config/authentication/authenticationtrees`

Resource version: `1.0`

1.21.1.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action AuthenticationTreesConfiguration --realm Realm --actionName getAllTypes
```

1.21.1.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action AuthenticationTreesConfiguration --realm Realm --actionName getCreatableTypes
```

1.21.1.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action AuthenticationTreesConfiguration --realm Realm --actionName nextdescendents
```

1.21.2. Global Operations

Resource path: `/global-config/authentication/authenticationtrees`

Resource version: `1.0`

1.21.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action AuthenticationTreesConfiguration --global --actionName getAllTypes
```


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1.21.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action AuthenticationTreesConfiguration --global --actionName getCreatableTypes
```

1.21.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action AuthenticationTreesConfiguration --global --actionName nextdescendents
```

1.21.2.4. read

Usage:

```
am> read AuthenticationTreesConfiguration --global
```

1.21.2.5. update

Usage:

```
am> update AuthenticationTreesConfiguration --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object"
}
```

1.22. AuthenticatorOath

1.22.1. Realm Operations

Resource path: `/realm-config/services/authenticatorOathService`

Resource version: `1.0`

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1.22.1.1. create

Usage:

```
am> create AuthenticatorOath --realm Realm --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "oathAttrName" : {
      "title" : "Profile Storage Attribute",
      "description" : "Attribute for storing ForgeRock Authenticator OATH profiles.<br><br>The default
 attribute is added to the user store during OpenAM installation. If you want to use a different
 attribute, you must make sure to add it to your user store schema prior to deploying two-step
 verification with a ForgeRock OATH authenticator app in OpenAM. OpenAM must be able to write to the
 attribute.",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "authenticatorOATHDeviceSettingsEncryptionKeystoreKeyPairAlias" : {
      "title" : "Key-Pair Alias",
      "description" : "Alias of the certificate and private key in the key store. The private key is
 used to encrypt and decrypt device profiles.",
      "propertyOrder" : 600,
      "required" : false,
      "type" : "string",
      "exampleValue" : ""
    },
    "authenticatorOATHSkippableName" : {
      "title" : "ForgeRock Authenticator (OATH) Device Skippable Attribute Name",
      "description" : "The data store attribute that holds the user's decision to enable or disable
 obtaining and providing a password obtained from the ForgeRock Authenticator app. This attribute must
 be writeable.",
      "propertyOrder" : 800,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "authenticatorOATHDeviceSettingsEncryptionKeystoreType" : {
      "title" : "Key Store Type",
      "description" : "Type of encryption key store.<br><br><i>Note:</i> PKCS#11 keys tores require
 hardware support such as a security device or smart card and is not available by default in most
 JVM installations.<p><p>See the <a href=\"https://docs.oracle.com/javase/8/docs/technotes/guides/
security/p11guide.html\" target=\"_blank\">JDK 8 PKCS#11 Reference Guide</a> for more details.",
      "propertyOrder" : 400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
```


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```
    "authenticatorOATHDeviceSettingsEncryptionKeystorePassword" : {
      "title" : "Key Store Password",
      "description" : "Password to unlock the key store. This password will be encrypted.",
      "propertyOrder" : 500,
      "required" : false,
      "type" : "string",
      "format" : "password",
      "exampleValue" : ""
    },
    "authenticatorOATHDeviceSettingsEncryptionScheme" : {
      "title" : "Device Profile Encryption Scheme",
      "description" : "Encryption scheme for securing device profiles stored on the server.<br><br>If
 enabled, each device profile is encrypted using a unique random secret key using the given strength
 of AES encryption in CBC mode with PKCS#5 padding. An HMAC-SHA of the given strength (truncated to
 half-size) is used to ensure integrity protection and authenticated encryption. The unique random
 key is encrypted with the given RSA key pair and stored with the device profile.<p><p><i>Note:</i>
 AES-256 may require installation of the JCE Unlimited Strength policy files.",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "authenticatorOATHDeviceSettingsEncryptionKeystorePrivateKeyPassword" : {
      "title" : "Private Key Password",
      "description" : "Password to unlock the private key.",
      "propertyOrder" : 700,
      "required" : false,
      "type" : "string",
      "format" : "password",
      "exampleValue" : ""
    },
    "authenticatorOATHDeviceSettingsEncryptionKeystore" : {
      "title" : "Encryption Key Store",
      "description" : "Path to the key store from which to load encryption keys.",
      "propertyOrder" : 300,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```

1.22.1.2. delete

Usage:

```
am> delete AuthenticatorOath --realm Realm
```

1.22.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action AuthenticatorOath --realm Realm --actionName getAllTypes
```


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1.22.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action AuthenticatorOath --realm Realm --actionName getCreatableTypes
```

1.22.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action AuthenticatorOath --realm Realm --actionName nextdescendents
```

1.22.1.6. read

Usage:

```
am> read AuthenticatorOath --realm Realm
```

1.22.1.7. update

Usage:

```
am> update AuthenticatorOath --realm Realm --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "oathAttrName" : {
      "title" : "Profile Storage Attribute",
      "description" : "Attribute for storing ForgeRock Authenticator OATH profiles.<br><br>The default
 attribute is added to the user store during OpenAM installation. If you want to use a different
 attribute, you must make sure to add it to your user store schema prior to deploying two-step
 verification with a ForgeRock OATH authenticator app in OpenAM. OpenAM must be able to write to the
 attribute.",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "authenticatorOATHDeviceSettingsEncryptionKeystoreKeyPairAlias" : {
      "title" : "Key-Pair Alias",
      "description" : "Alias of the certificate and private key in the key store. The private key is
 used to encrypt and decrypt device profiles.",
```


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```
      "propertyOrder" : 600,
      "required" : false,
      "type" : "string",
      "exampleValue" : ""
    },
    "authenticatorOATHSkippableName" : {
      "title" : "ForgeRock Authenticator (OATH) Device Skippable Attribute Name",
      "description" : "The data store attribute that holds the user's decision to enable or disable
 obtaining and providing a password obtained from the ForgeRock Authenticator app. This attribute must
 be writeable.",
      "propertyOrder" : 800,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "authenticatorOATHDeviceSettingsEncryptionKeystoreType" : {
      "title" : "Key Store Type",
      "description" : "Type of encryption key store.<br><br><i>Note:</i> PKCS#11 keys tores require
 hardware support such as a security device or smart card and is not available by default in most
 JVM installations.<p><p>See the <a href=\"https://docs.oracle.com/javase/8/docs/technotes/guides/
security/p11guide.html\" target=\"_blank\">JDK 8 PKCS#11 Reference Guide</a> for more details.",
      "propertyOrder" : 400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "authenticatorOATHDeviceSettingsEncryptionKeystorePassword" : {
      "title" : "Key Store Password",
      "description" : "Password to unlock the key store. This password will be encrypted.",
      "propertyOrder" : 500,
      "required" : false,
      "type" : "string",
      "format" : "password",
      "exampleValue" : ""
    },
    "authenticatorOATHDeviceSettingsEncryptionScheme" : {
      "title" : "Device Profile Encryption Scheme",
      "description" : "Encryption scheme for securing device profiles stored on the server.<br><br>If
 enabled, each device profile is encrypted using a unique random secret key using the given strength
 of AES encryption in CBC mode with PKCS#5 padding. An HMAC-SHA of the given strength (truncated to
 half-size) is used to ensure integrity protection and authenticated encryption. The unique random
 key is encrypted with the given RSA key pair and stored with the device profile.<p><p><i>Note:</i>
 AES-256 may require installation of the JCE Unlimited Strength policy files.",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "authenticatorOATHDeviceSettingsEncryptionKeystorePrivateKeyPassword" : {
      "title" : "Private Key Password",
      "description" : "Password to unlock the private key.",
      "propertyOrder" : 700,
      "required" : false,
      "type" : "string",
      "format" : "password",
      "exampleValue" : ""
    },
    "authenticatorOATHDeviceSettingsEncryptionKeystore" : {
      "title" : "Encryption Key Store",
```


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```
      "description" : "Path to the key store from which to load encryption keys.",
      "propertyOrder" : 300,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```

1.22.2. Global Operations

Resource path: `/global-config/services/authenticatorOathService`

Resource version: `1.0`

1.22.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action AuthenticatorOath --global --actionName getAllTypes
```

1.22.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action AuthenticatorOath --global --actionName getCreatableTypes
```

1.22.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action AuthenticatorOath --global --actionName nextdescendents
```

1.22.2.4. read

Usage:

```
am> read AuthenticatorOath --global
```

1.22.2.5. update

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Usage:

```
am> update AuthenticatorOath --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "defaults" : {
      "properties" : {
        "authenticatorOATHDeviceSettingsEncryptionKeystoreKeyPairAlias" : {
          "title" : "Key-Pair Alias",
          "description" : "Alias of the certificate and private key in the key store. The private key
 is used to encrypt and decrypt device profiles.",
          "propertyOrder" : 600,
          "required" : false,
          "type" : "string",
          "exampleValue" : ""
        },
        "authenticatorOATHSkippableName" : {
          "title" : "ForgeRock Authenticator (OATH) Device Skippable Attribute Name",
          "description" : "The data store attribute that holds the user's decision to enable or
 disable obtaining and providing a password obtained from the ForgeRock Authenticator app. This
 attribute must be writeable.",
          "propertyOrder" : 800,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "oathAttrName" : {
          "title" : "Profile Storage Attribute",
          "description" : "Attribute for storing ForgeRock Authenticator OATH profiles.<br><br>The
 default attribute is added to the user store during OpenAM installation. If you want to use a
 different attribute, you must make sure to add it to your user store schema prior to deploying two-
step verification with a ForgeRock OATH authenticator app in OpenAM. OpenAM must be able to write to
 the attribute.",
          "propertyOrder" : 100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "authenticatorOATHDeviceSettingsEncryptionKeystore" : {
          "title" : "Encryption Key Store",
          "description" : "Path to the key store from which to load encryption keys.",
          "propertyOrder" : 300,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "authenticatorOATHDeviceSettingsEncryptionKeystorePrivateKeyPassword" : {
          "title" : "Private Key Password",
          "description" : "Password to unlock the private key.",
          "propertyOrder" : 700,
          "required" : false,
```


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```
          "type" : "string",
          "format" : "password",
          "exampleValue" : ""
        },
        "authenticatorOATHDeviceSettingsEncryptionScheme" : {
          "title" : "Device Profile Encryption Scheme",
          "description" : "Encryption scheme for securing device profiles stored on the
 server.<br><br>If enabled, each device profile is encrypted using a unique random secret key
 using the given strength of AES encryption in CBC mode with PKCS#5 padding. An HMAC-SHA of the
 given strength (truncated to half-size) is used to ensure integrity protection and authenticated
 encryption. The unique random key is encrypted with the given RSA key pair and stored with the device
 profile.<p><p><i>Note:</i> AES-256 may require installation of the JCE Unlimited Strength policy
 files.",
          "propertyOrder" : 200,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "authenticatorOATHDeviceSettingsEncryptionKeystoreType" : {
          "title" : "Key Store Type",
          "description" : "Type of encryption key store.<br><br><i>Note:</i> PKCS#11 keys tores
 require hardware support such as a security device or smart card and is not available by default
 in most JVM installations.<p><p>See the <a href=\"https://docs.oracle.com/javase/8/docs/technotes/
guides/security/p11guide.html\" target=\"_blank\">JDK 8 PKCS#11 Reference Guide</a> for more
 details.",
          "propertyOrder" : 400,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "authenticatorOATHDeviceSettingsEncryptionKeystorePassword" : {
          "title" : "Key Store Password",
          "description" : "Password to unlock the key store. This password will be encrypted.",
          "propertyOrder" : 500,
          "required" : false,
          "type" : "string",
          "format" : "password",
          "exampleValue" : ""
        }
      },
      "type" : "object",
      "title" : "Realm Defaults"
    }
  }
}
```


1.23. AuthenticatorOathModule

1.23.1. Realm Operations

Resource path: `/realm-config/authentication/modules/authenticatoroath`

Resource version: `1.0`

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1.23.1.1. create

Usage:

```
am> create AuthenticatorOathModule --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "totpTimeStepInterval" : {
      "title" : "TOTP Time Step Interval",
      "description" : "The TOTP time step in seconds that the OTP device uses to generate the
 OTP.<br><br>This is the time interval that one OTP is valid for. For example, if the time step is 30
 seconds, then a new OTP will be generated every 30 seconds. This makes a single OTP valid for only 30
 seconds.",
      "propertyOrder" : 800,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "authenticationLevel" : {
      "title" : "Authentication Level",
      "description" : "The authentication level associated with this module.<br><br>Each
 authentication module has an authentication level that can be used to indicate the level of security
 associated with the module; 0 is the lowest (and the default).",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "frOathOtpMaxRetry" : {
      "title" : "One Time Password Max Retry",
      "description" : "The number of times entry of the OTP may be attempted. Minimum is 1 maximum is
 10 and default is 3.",
      "propertyOrder" : null,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "oathAlgorithm" : {
      "title" : "OATH Algorithm to Use",
      "description" : "Choose the algorithm your device uses to generate the OTP.<br><br>HOTP uses a
 counter value that is incremented every time a new OTP is generated. TOTP generates a new OTP every
 few seconds as specified by the time step interval.",
      "propertyOrder" : 400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
```


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```
   },
   "totpTimeStepsInWindow" : {
     "title" : "TOTP Time Steps",
     "description" : "The number of time steps to check before and after receiving a OTP.<br><br>This
is the number of time step intervals to check the received OTP against both forward in time and back
in time. For example, with 1 time steps and a time step interval of 30 seconds the server will allow
a code between the previous code, the current code and the next code.",
     "propertyOrder" : 900,
     "required" : true,
     "type" : "integer",
     "exampleValue" : ""
   },
   "passwordLength" : {
     "title" : "One Time Password Length ",
     "description" : "The length of the generated OTP in digits, must be at least 6 and compatible
with the hardware/software OTP generators you expect your end-users to use. For example, Google and
ForgeRock authenticators support values of 6 and 8.",
     "propertyOrder" : 200,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "totpMaximumClockDrift" : {
     "title" : "Maximum Allowed Clock Drift",
     "description" : "Number of time steps a client is allowed to get out of sync with the server
before manual resynchronisation is required. For example, with 3 allowed drifts and a time step
interval of 30 seconds the server will allow codes from up to 90 seconds from the current time to be
treated as the current time step. The drift for a user's device is calculated each time they enter a
new code. If the drift exceeds this value, the user's authentication code will be rejected.",
     "propertyOrder" : 1000,
     "required" : true,
     "type" : "integer",
     "exampleValue" : ""
   },
   "oathIssuerName" : {
     "title" : "Name of the Issuer",
     "description" : "Name to identify the OTP issuer.",
     "propertyOrder" : 1100,
     "required" : true,
     "type" : "string",
     "exampleValue" : "ForgeRock"
   },
   "hotpWindowSize" : {
     "title" : "HOTP Window Size",
     "description" : "The size of the window to resynchronize with the client.<br><br>This sets the
window that the OTP device and the server counter can be out of sync. For example, if the window size
is 100 and the servers last successful login was at counter value 2, then the server will accept a
OTP from the OTP device that is from device counter 3 to 102.",
     "propertyOrder" : 500,
     "required" : true,
     "type" : "integer",
     "exampleValue" : ""
   },
   "addChecksumToOtpEnabled" : {
     "title" : "Add Checksum Digit",
     "description" : "This adds a checksum digit to the OTP.<br><br>This adds a digit to the end
of the OTP generated to be used as a checksum to verify the OTP was generated correctly. This is in
addition to the actual password length. You should only set this if your device supports it.",
     "propertyOrder" : 600,
```


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```
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "truncationOffset" : {
      "title" : "Truncation Offset",
      "description" : "This adds an offset to the generation of the OTP.<br><br>This is an option used
 by the HOTP algorithm that not all devices support. This should be left default unless you know your
 device uses a offset.",
      "propertyOrder" : 700,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "minimumSecretKeyLength" : {
      "title" : "Minimum Secret Key Length",
      "description" : "Number of hexadecimal characters allowed for the Secret Key.",
      "propertyOrder" : 300,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    }
  }
}
```

1.23.1.2. delete

Usage:

```
am> delete AuthenticatorOathModule --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.23.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action AuthenticatorOathModule --realm Realm --actionName getAllTypes
```

1.23.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

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```
am> action AuthenticatorOathModule --realm Realm --actionName getCreatableTypes
```

1.23.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action AuthenticatorOathModule --realm Realm --actionName nextdescendents
```

1.23.1.6. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

```
am> query AuthenticatorOathModule --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.23.1.7. read

Usage:

```
am> read AuthenticatorOathModule --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.23.1.8. update

Usage:

```
am> update AuthenticatorOathModule --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

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--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "totpTimeStepInterval" : {
      "title" : "TOTP Time Step Interval",
      "description" : "The TOTP time step in seconds that the OTP device uses to generate the
OTP.<br><br>This is the time interval that one OTP is valid for. For example, if the time step is 30
seconds, then a new OTP will be generated every 30 seconds. This makes a single OTP valid for only 30
seconds.",
      "propertyOrder" : 800,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "authenticationLevel" : {
      "title" : "Authentication Level",
      "description" : "The authentication level associated with this module.<br><br>Each
authentication module has an authentication level that can be used to indicate the level of security
associated with the module; 0 is the lowest (and the default).",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "frOathOtpMaxRetry" : {
      "title" : "One Time Password Max Retry",
      "description" : "The number of times entry of the OTP may be attempted. Minimum is 1 maximum is
10 and default is 3.",
      "propertyOrder" : null,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "oathAlgorithm" : {
      "title" : "OATH Algorithm to Use",
      "description" : "Choose the algorithm your device uses to generate the OTP.<br><br>HOTP uses a
counter value that is incremented every time a new OTP is generated. TOTP generates a new OTP every
few seconds as specified by the time step interval.",
      "propertyOrder" : 400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "totpTimeStepsInWindow" : {
      "title" : "TOTP Time Steps",
      "description" : "The number of time steps to check before and after receiving a OTP.<br><br>This
is the number of time step intervals to check the received OTP against both forward in time and back
in time. For example, with 1 time steps and a time step interval of 30 seconds the server will allow
a code between the previous code, the current code and the next code.",
      "propertyOrder" : 900,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "passwordLength" : {
```


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```
     "title" : "One Time Password Length ",
     "description" : "The length of the generated OTP in digits, must be at least 6 and compatible
with the hardware/software OTP generators you expect your end-users to use. For example, Google and
ForgeRock authenticators support values of 6 and 8.",
     "propertyOrder" : 200,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "totpMaximumClockDrift" : {
     "title" : "Maximum Allowed Clock Drift",
     "description" : "Number of time steps a client is allowed to get out of sync with the server
before manual resynchronisation is required. For example, with 3 allowed drifts and a time step
interval of 30 seconds the server will allow codes from up to 90 seconds from the current time to be
treated as the current time step. The drift for a user's device is calculated each time they enter a
new code. If the drift exceeds this value, the user's authentication code will be rejected.",
     "propertyOrder" : 1000,
     "required" : true,
     "type" : "integer",
     "exampleValue" : ""
   },
   "oathIssuerName" : {
     "title" : "Name of the Issuer",
     "description" : "Name to identify the OTP issuer.",
     "propertyOrder" : 1100,
     "required" : true,
     "type" : "string",
     "exampleValue" : "ForgeRock"
   },
   "hotpWindowSize" : {
     "title" : "HOTP Window Size",
     "description" : "The size of the window to resynchronize with the client.<br><br>This sets the
window that the OTP device and the server counter can be out of sync. For example, if the window size
is 100 and the servers last successful login was at counter value 2, then the server will accept a
OTP from the OTP device that is from device counter 3 to 102.",
     "propertyOrder" : 500,
     "required" : true,
     "type" : "integer",
     "exampleValue" : ""
   },
   "addChecksumToOtpEnabled" : {
     "title" : "Add Checksum Digit",
     "description" : "This adds a checksum digit to the OTP.<br><br>This adds a digit to the end
of the OTP generated to be used as a checksum to verify the OTP was generated correctly. This is in
addition to the actual password length. You should only set this if your device supports it.",
     "propertyOrder" : 600,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "truncationOffset" : {
     "title" : "Truncation Offset",
     "description" : "This adds an offset to the generation of the OTP.<br><br>This is an option used
by the HOTP algorithm that not all devices support. This should be left default unless you know your
device uses a offset.",
     "propertyOrder" : 700,
     "required" : true,
     "type" : "integer",
     "exampleValue" : ""
```


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```
    },
    "minimumSecretKeyLength" : {
      "title" : "Minimum Secret Key Length",
      "description" : "Number of hexadecimal characters allowed for the Secret Key.",
      "propertyOrder" : 300,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    }
  }
}
```

1.23.2. Global Operations

Resource path: `/global-config/authentication/modules/authenticatoroath`

Resource version: `1.0`

1.23.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action AuthenticatorOathModule --global --actionName getAllTypes
```

1.23.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action AuthenticatorOathModule --global --actionName getCreatableTypes
```

1.23.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action AuthenticatorOathModule --global --actionName nextdescendents
```

1.23.2.4. read

Usage:

```
am> read AuthenticatorOathModule --global
```


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1.23.2.5. update

Usage:

```
am> update AuthenticatorOathModule --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "defaults" : {
      "properties" : {
        "authenticationLevel" : {
          "title" : "Authentication Level",
          "description" : "The authentication level associated with this module.<br><br>Each
 authentication module has an authentication level that can be used to indicate the level of security
 associated with the module; 0 is the lowest (and the default).",
          "propertyOrder" : 100,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "totpTimeStepInterval" : {
          "title" : "TOTP Time Step Interval",
          "description" : "The TOTP time step in seconds that the OTP device uses to generate the
 OTP.<br><br>This is the time interval that one OTP is valid for. For example, if the time step is 30
 seconds, then a new OTP will be generated every 30 seconds. This makes a single OTP valid for only 30
 seconds.",
          "propertyOrder" : 800,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "totpTimeStepsInWindow" : {
          "title" : "TOTP Time Steps",
          "description" : "The number of time steps to check before and after receiving a
 OTP.<br><br>This is the number of time step intervals to check the received OTP against both forward
 in time and back in time. For example, with 1 time steps and a time step interval of 30 seconds the
 server will allow a code between the previous code, the current code and the next code.",
          "propertyOrder" : 900,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "frOathOtpMaxRetry" : {
          "title" : "One Time Password Max Retry",
          "description" : "The number of times entry of the OTP may be attempted. Minimum is 1 maximum
 is 10 and default is 3.",
          "propertyOrder" : null,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
```


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```
       "truncationOffset" : {
         "title" : "Truncation Offset",
         "description" : "This adds an offset to the generation of the OTP.<br><br>This is an option
used by the HOTP algorithm that not all devices support. This should be left default unless you know
your device uses a offset.",
         "propertyOrder" : 700,
         "required" : true,
         "type" : "integer",
         "exampleValue" : ""
       },
       "oathIssuerName" : {
         "title" : "Name of the Issuer",
         "description" : "Name to identify the OTP issuer.",
         "propertyOrder" : 1100,
         "required" : true,
         "type" : "string",
         "exampleValue" : "ForgeRock"
       },
       "minimumSecretKeyLength" : {
         "title" : "Minimum Secret Key Length",
         "description" : "Number of hexadecimal characters allowed for the Secret Key.",
         "propertyOrder" : 300,
         "required" : true,
         "type" : "integer",
         "exampleValue" : ""
       },
       "oathAlgorithm" : {
         "title" : "OATH Algorithm to Use",
         "description" : "Choose the algorithm your device uses to generate the OTP.<br><br>HOTP uses
a counter value that is incremented every time a new OTP is generated. TOTP generates a new OTP every
few seconds as specified by the time step interval.",
         "propertyOrder" : 400,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       },
       "addChecksumToOtpEnabled" : {
         "title" : "Add Checksum Digit",
         "description" : "This adds a checksum digit to the OTP.<br><br>This adds a digit to the end
of the OTP generated to be used as a checksum to verify the OTP was generated correctly. This is in
addition to the actual password length. You should only set this if your device supports it.",
         "propertyOrder" : 600,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       },
       "passwordLength" : {
         "title" : "One Time Password Length ",
         "description" : "The length of the generated OTP in digits, must be at least 6 and
compatible with the hardware/software OTP generators you expect your end-users to use. For example,
Google and ForgeRock authenticators support values of 6 and 8.",
         "propertyOrder" : 200,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       },
       "totpMaximumClockDrift" : {
         "title" : "Maximum Allowed Clock Drift",
```


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```
          "description" : "Number of time steps a client is allowed to get out of sync with the server
 before manual resynchronisation is required. For example, with 3 allowed drifts and a time step
 interval of 30 seconds the server will allow codes from up to 90 seconds from the current time to be
 treated as the current time step. The drift for a user's device is calculated each time they enter a
 new code. If the drift exceeds this value, the user's authentication code will be rejected.",
          "propertyOrder" : 1000,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "hotpWindowSize" : {
          "title" : "HOTP Window Size",
          "description" : "The size of the window to resynchronize with the client.<br><br>This sets
 the window that the OTP device and the server counter can be out of sync. For example, if the window
 size is 100 and the servers last successful login was at counter value 2, then the server will accept
 a OTP from the OTP device that is from device counter 3 to 102.",
          "propertyOrder" : 500,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        }
      },
      "type" : "object",
      "title" : "Realm Defaults"
    }
  }
}
```

1.24. AuthenticatorPush

1.24.1. Realm Operations

Resource path: `/realm-config/services/authenticatorPushService`

Resource version: `1.0`

1.24.1.1. create

Usage:

```
am> create AuthenticatorPush --realm Realm --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
```


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```
   "pushAttrName" : {
     "title" : "Profile Storage Attribute",
     "description" : "The user's attribute in which to store Push Notification profiles.<br><br>The
default attribute is added to the schema when you prepare a user store for use with OpenAM. If you
want to use a different attribute, you must make sure to add it to your user store schema prior to
deploying push notifications with the ForgeRock Authenticator app in OpenAM. OpenAM must be able to
write to the attribute.",
     "propertyOrder" : 100,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "authenticatorPushDeviceSettingsEncryptionKeystorePrivateKeyPassword" : {
     "title" : "Private Key Password",
     "description" : "Password to unlock the private key.",
     "propertyOrder" : 700,
     "required" : true,
     "type" : "string",
     "format" : "password",
     "exampleValue" : ""
   },
   "authenticatorPushDeviceSettingsEncryptionScheme" : {
     "title" : "Device Profile Encryption Scheme",
     "description" : "Encryption scheme to use to secure device profiles stored on the
server.<br><br>If enabled, each device profile is encrypted using a unique random secret key
using the given strength of AES encryption in CBC mode with PKCS#5 padding. An HMAC-SHA of the
given strength (truncated to half-size) is used to ensure integrity protection and authenticated
encryption. The unique random key is encrypted with the given RSA key pair and stored with the device
profile.<p><p><i>Note:</i> AES-256 may require installation of the JCE Unlimited Strength policy
files.",
     "propertyOrder" : 200,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "authenticatorPushDeviceSettingsEncryptionKeystore" : {
     "title" : "Encryption Key Store",
     "description" : "Path to the key store from which to load encryption keys.",
     "propertyOrder" : 300,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "authenticatorPushDeviceSettingsEncryptionKeystoreKeyPairAlias" : {
     "title" : "Key-Pair Alias",
     "description" : "Alias of the certificate and private key in the key store. The private key is
used to encrypt and decrypt device profiles.",
     "propertyOrder" : 600,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "authenticatorPushDeviceSettingsEncryptionKeystorePassword" : {
     "title" : "Key Store Password",
     "description" : "Password to unlock the key store. This password is encrypted when it is saved
in the OpenAM configuration. You should modify the default value.",
     "propertyOrder" : 500,
     "required" : true,
     "type" : "string",
```


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```
      "format" : "password",
      "exampleValue" : ""
    },
    "authenticatorPushDeviceSettingsEncryptionKeystoreType" : {
      "title" : "Key Store Type",
      "description" : "Type of key store to load.<br><br><i>Note:</i> PKCS#11 key stores require
 hardware support such as a security device or smart card and is not available by default in most
 JVM installations.<p><p>See the <a href=\"https://docs.oracle.com/javase/8/docs/technotes/guides/
security/p11guide.html\" target=\"_blank\">JDK 8 PKCS#11 Reference Guide</a> for more details.",
      "propertyOrder" : 400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```

1.24.1.2. delete

Usage:

```
am> delete AuthenticatorPush --realm Realm
```

1.24.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action AuthenticatorPush --realm Realm --actionName getAllTypes
```

1.24.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action AuthenticatorPush --realm Realm --actionName getCreatableTypes
```

1.24.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action AuthenticatorPush --realm Realm --actionName nextdescendents
```

1.24.1.6. read

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Usage:

```
am> read AuthenticatorPush --realm Realm
```

1.24.1.7. update

Usage:

```
am> update AuthenticatorPush --realm Realm --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "pushAttrName" : {
      "title" : "Profile Storage Attribute",
      "description" : "The user's attribute in which to store Push Notification profiles.<br><br>The
 default attribute is added to the schema when you prepare a user store for use with OpenAM. If you
 want to use a different attribute, you must make sure to add it to your user store schema prior to
 deploying push notifications with the ForgeRock Authenticator app in OpenAM. OpenAM must be able to
 write to the attribute.",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "authenticatorPushDeviceSettingsEncryptionKeystorePrivateKeyPassword" : {
      "title" : "Private Key Password",
      "description" : "Password to unlock the private key.",
      "propertyOrder" : 700,
      "required" : true,
      "type" : "string",
      "format" : "password",
      "exampleValue" : ""
    },
    "authenticatorPushDeviceSettingsEncryptionScheme" : {
      "title" : "Device Profile Encryption Scheme",
      "description" : "Encryption scheme to use to secure device profiles stored on the
 server.<br><br>If enabled, each device profile is encrypted using a unique random secret key
 using the given strength of AES encryption in CBC mode with PKCS#5 padding. An HMAC-SHA of the
 given strength (truncated to half-size) is used to ensure integrity protection and authenticated
 encryption. The unique random key is encrypted with the given RSA key pair and stored with the device
 profile.<p><p><i>Note:</i> AES-256 may require installation of the JCE Unlimited Strength policy
 files.",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "authenticatorPushDeviceSettingsEncryptionKeystore" : {
```


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```
      "title" : "Encryption Key Store",
      "description" : "Path to the key store from which to load encryption keys.",
      "propertyOrder" : 300,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "authenticatorPushDeviceSettingsEncryptionKeystoreKeyPairAlias" : {
      "title" : "Key-Pair Alias",
      "description" : "Alias of the certificate and private key in the key store. The private key is
 used to encrypt and decrypt device profiles.",
      "propertyOrder" : 600,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "authenticatorPushDeviceSettingsEncryptionKeystorePassword" : {
      "title" : "Key Store Password",
      "description" : "Password to unlock the key store. This password is encrypted when it is saved
 in the OpenAM configuration. You should modify the default value.",
      "propertyOrder" : 500,
      "required" : true,
      "type" : "string",
      "format" : "password",
      "exampleValue" : ""
    },
    "authenticatorPushDeviceSettingsEncryptionKeystoreType" : {
      "title" : "Key Store Type",
      "description" : "Type of key store to load.<br><br><i>Note:</i> PKCS#11 key stores require
 hardware support such as a security device or smart card and is not available by default in most
 JVM installations.<p><p>See the <a href=\"https://docs.oracle.com/javase/8/docs/technotes/guides/
security/p11guide.html\" target=\"_blank\">JDK 8 PKCS#11 Reference Guide</a> for more details.",
      "propertyOrder" : 400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```


1.24.2. Global Operations

Resource path: `/global-config/services/authenticatorPushService`

Resource version: `1.0`

1.24.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action AuthenticatorPush --global --actionName getAllTypes
```


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1.24.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action AuthenticatorPush --global --actionName getCreatableTypes
```

1.24.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action AuthenticatorPush --global --actionName nextdescendents
```

1.24.2.4. read

Usage:

```
am> read AuthenticatorPush --global
```

1.24.2.5. update

Usage:

```
am> update AuthenticatorPush --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "defaults" : {
      "properties" : {
        "pushAttrName" : {
          "title" : "Profile Storage Attribute",
          "description" : "The user's attribute in which to store Push Notification
 profiles.<br><br>The default attribute is added to the schema when you prepare a user store for use
 with OpenAM. If you want to use a different attribute, you must make sure to add it to your user
 store schema prior to deploying push notifications with the ForgeRock Authenticator app in OpenAM.
 OpenAM must be able to write to the attribute.",
          "propertyOrder" : 100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "authenticatorPushDeviceSettingsEncryptionKeystoreKeyPairAlias" : {
          "title" : "Key-Pair Alias",
```


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```
          "description" : "Alias of the certificate and private key in the key store. The private key
 is used to encrypt and decrypt device profiles.",
          "propertyOrder" : 600,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "authenticatorPushDeviceSettingsEncryptionScheme" : {
          "title" : "Device Profile Encryption Scheme",
          "description" : "Encryption scheme to use to secure device profiles stored on the
 server.<br><br>If enabled, each device profile is encrypted using a unique random secret key
 using the given strength of AES encryption in CBC mode with PKCS#5 padding. An HMAC-SHA of the
 given strength (truncated to half-size) is used to ensure integrity protection and authenticated
 encryption. The unique random key is encrypted with the given RSA key pair and stored with the device
 profile.<p><p><i>Note:</i> AES-256 may require installation of the JCE Unlimited Strength policy
 files.",
          "propertyOrder" : 200,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "authenticatorPushDeviceSettingsEncryptionKeystore" : {
          "title" : "Encryption Key Store",
          "description" : "Path to the key store from which to load encryption keys.",
          "propertyOrder" : 300,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "authenticatorPushDeviceSettingsEncryptionKeystorePrivateKeyPassword" : {
          "title" : "Private Key Password",
          "description" : "Password to unlock the private key.",
          "propertyOrder" : 700,
          "required" : true,
          "type" : "string",
          "format" : "password",
          "exampleValue" : ""
        },
        "authenticatorPushDeviceSettingsEncryptionKeystoreType" : {
          "title" : "Key Store Type",
          "description" : "Type of key store to load.<br><br><i>Note:</i> PKCS#11 key stores require
 hardware support such as a security device or smart card and is not available by default in most
 JVM installations.<p><p>See the <a href=\"https://docs.oracle.com/javase/8/docs/technotes/guides/
security/p11guide.html\" target=\"_blank\">JDK 8 PKCS#11 Reference Guide</a> for more details.",
          "propertyOrder" : 400,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "authenticatorPushDeviceSettingsEncryptionKeystorePassword" : {
          "title" : "Key Store Password",
          "description" : "Password to unlock the key store. This password is encrypted when it is
 saved in the OpenAM configuration. You should modify the default value.",
          "propertyOrder" : 500,
          "required" : true,
          "type" : "string",
          "format" : "password",
          "exampleValue" : ""
        }
```


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```
      },
      "type" : "object",
      "title" : "Realm Defaults"
    }
  }
}
```

1.25. AuthenticatorPushModule

1.25.1. Realm Operations

Resource path: `/realm-config/authentication/modules/authPush`

Resource version: `1.0`

1.25.1.1. create

Usage:

```
am> create AuthenticatorPushModule --realm Realm --id id --body body
```

Parameters:

`--id`

The unique identifier for the resource.

`--body`

The resource in JSON format, described by the following JSON schema:

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```
{
  "type" : "object",
  "properties" : {
    "timeoutInMilliSecconds" : {
      "title" : "Return Message Timeout (ms)",
      "description" : "The period of time (in milliseconds) within which a push notification should be
 replied to.",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "authenticationLevel" : {
      "title" : "Authentication Level",
      "description" : "The authentication level associated with this module.<br><br>Each
 authentication module has an authentication level that can be used to indicate the level of security
 associated with the module; 0 is the lowest (and the default).",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "pushMessage" : {
      "title" : "Login Message",
      "description" : "Message transmitted over Push. Use the label {{user}} to replace with the
 registered login's username, and {{issuer}} to replace with the name of the issuer stored at
 registration.",
      "propertyOrder" : 300,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```

1.25.1.2. delete

Usage:

```
am> delete AuthenticatorPushModule --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.25.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

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```
am> action AuthenticatorPushModule --realm Realm --actionName getAllTypes
```

1.25.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action AuthenticatorPushModule --realm Realm --actionName getCreatableTypes
```

1.25.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action AuthenticatorPushModule --realm Realm --actionName nextdescendents
```

1.25.1.6. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

```
am> query AuthenticatorPushModule --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.25.1.7. read

Usage:

```
am> read AuthenticatorPushModule --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.25.1.8. update

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Usage:

```
am> update AuthenticatorPushModule --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "timeoutInMilliSecconds" : {
      "title" : "Return Message Timeout (ms)",
      "description" : "The period of time (in milliseconds) within which a push notification should be
 replied to.",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "authenticationLevel" : {
      "title" : "Authentication Level",
      "description" : "The authentication level associated with this module.<br><br>Each
 authentication module has an authentication level that can be used to indicate the level of security
 associated with the module; 0 is the lowest (and the default).",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "pushMessage" : {
      "title" : "Login Message",
      "description" : "Message transmitted over Push. Use the label {{user}} to replace with the
 registered login's username, and {{issuer}} to replace with the name of the issuer stored at
 registration.",
      "propertyOrder" : 300,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```

1.25.2. Global Operations

Resource path: `/global-config/authentication/modules/authPush`

Resource version: `1.0`

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1.25.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action AuthenticatorPushModule --global --actionName getAllTypes
```

1.25.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action AuthenticatorPushModule --global --actionName getCreatableTypes
```

1.25.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action AuthenticatorPushModule --global --actionName nextdescendents
```

1.25.2.4. read

Usage:

```
am> read AuthenticatorPushModule --global
```

1.25.2.5. update

Usage:

```
am> update AuthenticatorPushModule --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "defaults" : {
      "properties" : {
        "pushMessage" : {
```


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```
          "title" : "Login Message",
          "description" : "Message transmitted over Push. Use the label {{user}} to replace with
 the registered login's username, and {{issuer}} to replace with the name of the issuer stored at
 registration.",
          "propertyOrder" : 300,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "timeoutInMilliSecconds" : {
          "title" : "Return Message Timeout (ms)",
          "description" : "The period of time (in milliseconds) within which a push notification
 should be replied to.",
          "propertyOrder" : 200,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "authenticationLevel" : {
          "title" : "Authentication Level",
          "description" : "The authentication level associated with this module.<br><br>Each
 authentication module has an authentication level that can be used to indicate the level of security
 associated with the module; 0 is the lowest (and the default).",
          "propertyOrder" : 100,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        }
      },
      "type" : "object",
      "title" : "Realm Defaults"
    }
  }
}
```

1.26. AuthenticatorPushRegistrationModule

1.26.1. Realm Operations

Resource path: `/realm-config/authentication/modules/authPushReg`

Resource version: `1.0`

1.26.1.1. create

Usage:

```
am> create AuthenticatorPushRegistrationModule --realm Realm --id id --body body
```

Parameters:

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--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "imgUrl" : {
      "title" : "Image URL",
      "description" : "The location of the image to download and display as your identity issuer's
 logo within the mobile app.",
      "propertyOrder" : 500,
      "required" : true,
      "type" : "string",
      "exampleValue" : "http://example.com/image.png"
    },
    "appleLink" : {
      "title" : "App Store App URL",
      "description" : "URL of the app to download on the App Store.",
      "propertyOrder" : 600,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "googleLink" : {
      "title" : "Google Play URL",
      "description" : "URL of the app to download on Google Play.",
      "propertyOrder" : 700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "authenticationLevel" : {
      "title" : "Authentication Level",
      "description" : "The authentication level associated with this module.<br><br>Each
 authentication module has an authentication level that can be used to indicate the level of security
 associated with the module; 0 is the lowest (and the default).",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "bgcolour" : {
      "title" : "Background Colour",
      "description" : "The background colour of the image to display behind your identity issuer's
 logo within the mobile app.",
      "propertyOrder" : 400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "timeoutInMilliSecconds" : {
      "title" : "Registration Response Timeout (ms)",
      "description" : "The period of time (in milliseconds) within which the registration QR code
 should be replied to.",
```


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```
      "propertyOrder" : 300,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "issuer" : {
      "title" : "Issuer Name",
      "description" : "The Name of the service as it will appear on the registered device.",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```

1.26.1.2. delete

Usage:

```
am> delete AuthenticatorPushRegistrationModule --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.26.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action AuthenticatorPushRegistrationModule --realm Realm --actionName getAllTypes
```

1.26.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action AuthenticatorPushRegistrationModule --realm Realm --actionName getCreatableTypes
```

1.26.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action AuthenticatorPushRegistrationModule --realm Realm --actionName nextdescendents
```


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1.26.1.6. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

```
am> query AuthenticatorPushRegistrationModule --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.26.1.7. read

Usage:

```
am> read AuthenticatorPushRegistrationModule --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.26.1.8. update

Usage:

```
am> update AuthenticatorPushRegistrationModule --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "imgUrl" : {
      "title" : "Image URL",
      "description" : "The location of the image to download and display as your identity issuer's
 logo within the mobile app.",
      "propertyOrder" : 500,
      "required" : true,
      "type" : "string",
      "exampleValue" : "http://example.com/image.png"
    },
```


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```
    "appleLink" : {
      "title" : "App Store App URL",
      "description" : "URL of the app to download on the App Store.",
      "propertyOrder" : 600,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "googleLink" : {
      "title" : "Google Play URL",
      "description" : "URL of the app to download on Google Play.",
      "propertyOrder" : 700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "authenticationLevel" : {
      "title" : "Authentication Level",
      "description" : "The authentication level associated with this module.<br><br>Each
 authentication module has an authentication level that can be used to indicate the level of security
 associated with the module; 0 is the lowest (and the default).",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "bgcolour" : {
      "title" : "Background Colour",
      "description" : "The background colour of the image to display behind your identity issuer's
 logo within the mobile app.",
      "propertyOrder" : 400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "timeoutInMilliSecconds" : {
      "title" : "Registration Response Timeout (ms)",
      "description" : "The period of time (in milliseconds) within which the registration QR code
 should be replied to.",
      "propertyOrder" : 300,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "issuer" : {
      "title" : "Issuer Name",
      "description" : "The Name of the service as it will appear on the registered device.",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```

1.26.2. Global Operations

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Resource path: `/global-config/authentication/modules/authPushReg`

Resource version: `1.0`

1.26.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action AuthenticatorPushRegistrationModule --global --actionName getAllTypes
```

1.26.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action AuthenticatorPushRegistrationModule --global --actionName getCreatableTypes
```

1.26.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action AuthenticatorPushRegistrationModule --global --actionName nextdescendents
```

1.26.2.4. read

Usage:

```
am> read AuthenticatorPushRegistrationModule --global
```

1.26.2.5. update

Usage:

```
am> update AuthenticatorPushRegistrationModule --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "defaults" : {
```


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```
     "properties" : {
       "authenticationLevel" : {
         "title" : "Authentication Level",
         "description" : "The authentication level associated with this module.<br><br>Each
authentication module has an authentication level that can be used to indicate the level of security
associated with the module; 0 is the lowest (and the default).",
         "propertyOrder" : 100,
         "required" : true,
         "type" : "integer",
         "exampleValue" : ""
       },
       "googleLink" : {
         "title" : "Google Play URL",
         "description" : "URL of the app to download on Google Play.",
         "propertyOrder" : 700,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       },
       "timeoutInMilliSecconds" : {
         "title" : "Registration Response Timeout (ms)",
         "description" : "The period of time (in milliseconds) within which the registration QR code
should be replied to.",
         "propertyOrder" : 300,
         "required" : true,
         "type" : "integer",
         "exampleValue" : ""
       },
       "imgUrl" : {
         "title" : "Image URL",
         "description" : "The location of the image to download and display as your identity issuer's
logo within the mobile app.",
         "propertyOrder" : 500,
         "required" : true,
         "type" : "string",
         "exampleValue" : "http://example.com/image.png"
       },
       "issuer" : {
         "title" : "Issuer Name",
         "description" : "The Name of the service as it will appear on the registered device.",
         "propertyOrder" : 200,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       },
       "bgcolour" : {
         "title" : "Background Colour",
         "description" : "The background colour of the image to display behind your identity issuer's
logo within the mobile app.",
         "propertyOrder" : 400,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       },
       "appleLink" : {
         "title" : "App Store App URL",
         "description" : "URL of the app to download on the App Store.",
         "propertyOrder" : 600,
         "required" : true,
```


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```
          "type" : "string",
          "exampleValue" : ""
        }
      },
      "type" : "object",
      "title" : "Realm Defaults"
    }
  }
}
```

1.27. BaseUrlSource

1.27.1. Realm Operations

Resource path: `/realm-config/services/baseurl`

Resource version: `1.0`

1.27.1.1. create

Usage:

```
am> create BaseUrlSource --realm Realm --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "fixedValue" : {
      "title" : "Fixed value base URL",
      "description" : "If Fixed value is selected as the Base URL source, enter the base URL in the
 Fixed value base URL field.",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "contextPath" : {
      "title" : "Context path",
      "description" : "Specifies the context path for the base URL.<p><p>If provided, the base URL
 includes the deployment context path appended to the calculated URL.<p>For example, <code>/openam</
code>.",
      "propertyOrder" : 400,
      "required" : true,
      "type" : "string",
```


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```
      "exampleValue" : ""
    },
    "extensionClassName" : {
      "title" : "Extension class name",
      "description" : "If Extension class is selected as the Base URL source, enter
 <code>org.forgerock.openam.services.baseurl.BaseURLProvider</code> in the Extension class name
 field.",
      "propertyOrder" : 300,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "source" : {
      "title" : "Base URL Source",
      "description" : "Specifies the source of the base URL. Choose from the
 following:<ul> <li>Extension class. Specifies that the extension class returns a
 base URL from a provided HttpServletRequest. In the Extension class name field, enter
 <code>org.forgerock.openam.services.baseurl.BaseURLProvider</code>.</li><li>Fixed value. Specifies
 that the base URL is retrieved from a specific base URL value. In the Fixed value base URL field,
 enter the base URL value.</li><li>Forwarded header. Specifies that the base URL is retrieved from
 a forwarded header field in the HTTP request. The Forwarded HTTP header field is standardized and
 specified in <a href=\"https://tools.ietf.org/html/rfc7239\">RFC7239</a>.</li><li>Host/protocol
 from incoming request. Specifies that the hostname, server name, and port are retrieved from the
 incoming HTTP request.</li><li>X-Forwarded-* headers. Specifies that the base URL is retrieved from
 non-standard header fields, such as <code>X-Forwarded-For</code>, <code>X-Forwarded-By</code>, and
 <code>X-Forwarded-Proto</code>.</li></ul>",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```

1.27.1.2. delete

Usage:

```
am> delete BaseUrlSource --realm Realm
```

1.27.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action BaseUrlSource --realm Realm --actionName getAllTypes
```

1.27.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

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```
am> action BaseUrlSource --realm Realm --actionName getCreatableTypes
```

1.27.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action BaseUrlSource --realm Realm --actionName nextdescendents
```

1.27.1.6. read

Usage:

```
am> read BaseUrlSource --realm Realm
```

1.27.1.7. update

Usage:

```
am> update BaseUrlSource --realm Realm --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "fixedValue" : {
      "title" : "Fixed value base URL",
      "description" : "If Fixed value is selected as the Base URL source, enter the base URL in the
 Fixed value base URL field.",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "contextPath" : {
      "title" : "Context path",
      "description" : "Specifies the context path for the base URL.<p><p>If provided, the base URL
 includes the deployment context path appended to the calculated URL.<p>For example, <code>/openam</
code>.",
      "propertyOrder" : 400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "extensionClassName" : {
```


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```
      "title" : "Extension class name",
      "description" : "If Extension class is selected as the Base URL source, enter
 <code>org.forgerock.openam.services.baseurl.BaseURLProvider</code> in the Extension class name
 field.",
      "propertyOrder" : 300,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "source" : {
      "title" : "Base URL Source",
      "description" : "Specifies the source of the base URL. Choose from the
 following:<ul> <li>Extension class. Specifies that the extension class returns a
 base URL from a provided HttpServletRequest. In the Extension class name field, enter
 <code>org.forgerock.openam.services.baseurl.BaseURLProvider</code>.</li><li>Fixed value. Specifies
 that the base URL is retrieved from a specific base URL value. In the Fixed value base URL field,
 enter the base URL value.</li><li>Forwarded header. Specifies that the base URL is retrieved from
 a forwarded header field in the HTTP request. The Forwarded HTTP header field is standardized and
 specified in <a href=\"https://tools.ietf.org/html/rfc7239\">RFC7239</a>.</li><li>Host/protocol
 from incoming request. Specifies that the hostname, server name, and port are retrieved from the
 incoming HTTP request.</li><li>X-Forwarded-* headers. Specifies that the base URL is retrieved from
 non-standard header fields, such as <code>X-Forwarded-For</code>, <code>X-Forwarded-By</code>, and
 <code>X-Forwarded-Proto</code>.</li></ul>",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```

1.27.2. Global Operations

Resource path: `/global-config/services/baseurl`

Resource version: `1.0`

1.27.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action BaseUrlSource --global --actionName getAllTypes
```

1.27.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action BaseUrlSource --global --actionName getCreatableTypes
```


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1.27.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action BaseUrlSource --global --actionName nextdescendents
```

1.27.2.4. read

Usage:

```
am> read BaseUrlSource --global
```

1.27.2.5. update

Usage:

```
am> update BaseUrlSource --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "defaults" : {
      "properties" : {
        "contextPath" : {
          "title" : "Context path",
          "description" : "Specifies the context path for the base URL.<p><p>If provided, the base URL
 includes the deployment context path appended to the calculated URL.<p>For example, <code>/openam</
code>.",
          "propertyOrder" : 400,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "fixedValue" : {
          "title" : "Fixed value base URL",
          "description" : "If Fixed value is selected as the Base URL source, enter the base URL in
 the Fixed value base URL field.",
          "propertyOrder" : 200,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "extensionClassName" : {
```


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```
          "title" : "Extension class name",
          "description" : "If Extension class is selected as the Base URL source, enter
 <code>org.forgerock.openam.services.baseurl.BaseURLProvider</code> in the Extension class name
 field.",
          "propertyOrder" : 300,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "source" : {
          "title" : "Base URL Source",
          "description" : "Specifies the source of the base URL. Choose from the
 following:<ul> <li>Extension class. Specifies that the extension class returns a
 base URL from a provided HttpServletRequest. In the Extension class name field, enter
 <code>org.forgerock.openam.services.baseurl.BaseURLProvider</code>.</li><li>Fixed value. Specifies
 that the base URL is retrieved from a specific base URL value. In the Fixed value base URL field,
 enter the base URL value.</li><li>Forwarded header. Specifies that the base URL is retrieved from
 a forwarded header field in the HTTP request. The Forwarded HTTP header field is standardized and
 specified in <a href=\"https://tools.ietf.org/html/rfc7239\">RFC7239</a>.</li><li>Host/protocol
 from incoming request. Specifies that the hostname, server name, and port are retrieved from the
 incoming HTTP request.</li><li>X-Forwarded-* headers. Specifies that the base URL is retrieved from
 non-standard header fields, such as <code>X-Forwarded-For</code>, <code>X-Forwarded-By</code>, and
 <code>X-Forwarded-Proto</code>.</li></ul>",
          "propertyOrder" : 100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      },
      "type" : "object",
      "title" : "Realm Defaults"
    }
  }
}
```

1.28. CertificateModule

1.28.1. Realm Operations

Resource path: `/realm-config/authentication/modules/certificate`

Resource version: `1.0`

1.28.1.1. create

Usage:

```
am> create CertificateModule --realm Realm --id id --body body
```

Parameters:

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--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "clientCertificateHttpHeaderName" : {
      "title" : "HTTP Header Name for Client Certificate",
      "description" : "The name of the HTTP request header containing the certificate, only used when
 <i>Trusted Remote Hosts</i> mode is enabled.",
      "propertyOrder" : 1900,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "crlMatchingCertificateAttribute" : {
      "title" : "Issuer DN Attribute(s) Used to Search LDAP for CRLs",
      "description" : "This is the name of the attribute taken from the CA certificate that will
 be used to search the CRL.<br><br>If only one attribute name is specified, the ldap searchfilter
 will be (attrName=Value_of_the_corresponding_Attribute_from_SubjectDN)<br/>e.g. SubjectDN of issuer
 cert 'C=US, CN=Some CA, serialNumber=123456',attribute name specified is 'CN', searchfilter used
 will be <code>(CN=Some CA)</code><br/><br/>If serveral attribute names are specified, they have
 to separated by <code>,</code>. The resulting ldap searchfilter value will be a comma separated
 list of name attribute values, the search attribute will be <code>cn</code><br/>e.g. SubjectDN of
 issuer cert 'C=US, CN=Some CA, serialNumber=123456',attribute names specified are 'CN,serialNumber',
 searchfilter used will be <code>cn=CN=Some CA,serialNumber=123456</code><br/>The order of the values
 of the attribute names matter as they must match the value of the <code>cn</code> attribute of a
 crlDistributionPoint entry in the directory server.",
      "propertyOrder" : 400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "certificateLdapServers" : {
      "title" : "LDAP Server Where Certificates are Stored",
      "description" : "Use this list to set the LDAP server used to search for certificates.
 <br><br>The Certificate authentication module will use this list for the LDAP server used to search
 for certificates. A single entry must be in the format:<br/><br/><code>ldap_server:port</code><br/
><br/>Multiple entries allow associations between OpenAM servers and a LDAP server. The format is:<br/
><br/><code>local server name | server:port</code><br/><br/>The local server name is the full name of
 the server from the list of servers and sites.",
      "propertyOrder" : 1000,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "otherCertificateAttributeToProfileMapping" : {
      "title" : "Other Certificate Field Used to Access User Profile",
      "description" : "This field is only used if the <i>Certificate Field Used to Access User
 Profile</i> attribute is set to <i>other</i>. This field allows a custom certificate field to be used
 as the basis of the user search.",
```


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```
      "propertyOrder" : 1600,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "iplanet-am-auth-cert-gw-cert-preferred" : {
      "title" : "Use only Certificate from HTTP request header",
      "description" : "Strictly use client cert from HTTP header over cert from HTTPS connection/
servlet attribute",
      "propertyOrder" : 2000,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "certificateAttributeToProfileMapping" : {
      "title" : "Certificate Field Used to Access User Profile",
      "description" : "The certificate module needs to read a value from the client certificate that
 can be used to search the LDAP server for a matching certificate.  ",
      "propertyOrder" : 1500,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "crlHttpParameters" : {
      "title" : "HTTP Parameters for CRL Update",
      "description" : "These parameters will be included in any HTTP CRL call to the Certificate
 Authority<br><br>If the Client or CA certificate contains the Issuing Distribution Point Extension
 then OpenAM will use this information to retrieve the CRL from the distribution point. This property
 allow custom HTTP parameters to be included in the CRL request.<br/><br/>The format of the parameter
 is as follows:<br/><br/><code>param1=value1,param2=value</code>",
      "propertyOrder" : 500,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sslEnabled" : {
      "title" : "Use SSL/TLS for LDAP Access",
      "description" : "The certificate module will use SSL/TLS to access the LDAP server",
      "propertyOrder" : 1400,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "userBindPassword" : {
      "title" : "LDAP Server Authentication Password",
      "description" : "The password for the authentication user",
      "propertyOrder" : 1300,
      "required" : true,
      "type" : "string",
      "format" : "password",
      "exampleValue" : ""
    },
    "cacheCRLsInMemory" : {
      "title" : "Cache CRLs in memory",
      "description" : "The CRLs will be cached in memory",
      "propertyOrder" : 700,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
```


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```
    },
    "userBindDN" : {
      "title" : "LDAP Server Authentication User",
      "description" : "DN of the user used by the module to authenticate to the LDAP server<br><br>The
 Certificate module authenticates to the LDAP server in order to search for a matching certificate.
 The DN entered here represents the account used for said authentication and must have read/search
 access to the LDAP server.",
      "propertyOrder" : 1200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "ldapSearchStartDN" : {
      "title" : "LDAP Search Start or Base DN",
      "description" : "The start point in the LDAP server for the certificate search<br><br>When
 entering multiple entries, each entry must be prefixed with a local server name. Multiple entries
 allow different search Base DNs depending on the OpenAM server in use. The format is:<br/><br/
><code>local server name | base dn</code><br/><br/>The local server name is the full name of the
 server from the list of servers and sites.",
      "propertyOrder" : 1100,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "ldapCertificateAttribute" : {
      "title" : "Subject DN Attribute Used to Search LDAP for Certificates",
      "description" : "This is the attribute used to search the directory for the
 certificate<br><br>The Certificate module will search the directory for the certificate using the
 search filter based on this attribute and the value of the Subject DN taken from the certificate.",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "updateCRLsFromDistributionPoint" : {
      "title" : "Update CA CRLs from CRLDistributionPoint",
      "description" : "Fetch new CA CRLs from CRLDistributionPoint and update it in
 Directory Server<br><br>If the CA certificate includes an IssuingDistributionPoint or has an
 CRLDistributionPoint extension set OpenAM tries to update the CRLs if neeed (i.e. CRL is out-of-
date). <br/>This property controls if the update should be performed.<br/>This property is only used
 if CA CRL checking is enabled.",
      "propertyOrder" : 800,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "trustedRemoteHosts" : {
      "title" : "Trusted Remote Hosts",
      "description" : "A list of IP addresses trusted to supply client certificates.<br><br>If SSL/TLS
 is being terminated at a load balancer or at the Distributed Authentication server then this option
 can be used to ensure that only specified <i>trusted</i> hosts (identified by IP address) are allowed
 to supply client certificates to the certificate module,<br/><br/>Valid values for this list are as
 follows:<ul><li>none</li><li>any</li><li>multiple IP addresses</li></ul><br/><br/>The default value
 of <i>none</i> disables this functionality",
      "propertyOrder" : 1800,
      "required" : true,
```


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```
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "certificateAttributeProfileMappingExtension" : {
      "title" : "SubjectAltNameExt Value Type to Access User Profile",
      "description" : "Use the Subject Alternative Name Field in preference to one of the standard
certificate fields.<br><br>Selecting RFC822Name or UPN will cause this field to have have precedence
over the <i>Certificate Field Used to Access User Profile</i> or <i>Other Certificate Field Used
to Access User Profile</i> attribute.<br/><br/><i>NB </i>The client certificate must contain the
<i>Subject Alternate Name Extension</i> for this function to operate.",
      "propertyOrder" : 1700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "matchCertificateInLdap" : {
      "title" : "Match Certificate in LDAP",
      "description" : "The client certificate must exist in the directory for the authentication to be
successful.",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "authenticationLevel" : {
      "title" : "Authentication Level",
      "description" : "The authentication level associated with this module.<br><br>Each
authentication module has an authentication level that can be used to indicate the level of security
associated with the module; 0 is the lowest (and the default).",
      "propertyOrder" : 2100,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "matchCACertificateToCRL" : {
      "title" : "Match CA Certificate to CRL",
      "description" : "The CA certificate that issued the client certificate will also be checked
against the CRL.",
      "propertyOrder" : 600,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "matchCertificateToCRL" : {
      "title" : "Match Certificate to CRL",
      "description" : "The Client Certificate will be checked against the Certificate Revocation list
held in the directory<br><br>A Certificate Revocation List can be provisioned into the directory.
Having this option enabled will cause all client certificates to be checked against this list.",
      "propertyOrder" : 300,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "ocspValidationEnabled" : {
      "title" : "OCSP Validation",
```


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```
      "description" : "Enable Online Certificate Status Protocol validation for OCSP aware
 certificates<br><br>If the certificate contains OCSP validation information then OpenAM will use this
 information to check the validity of the certificate as part of the authentication process.<br/><br/
><i>NB </i>The OpenAM server must have Internet connectivity for OCSP to work",
      "propertyOrder" : 900,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    }
  }
}
```

1.28.1.2. delete

Usage:

```
am> delete CertificateModule --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.28.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action CertificateModule --realm Realm --actionName getAllTypes
```

1.28.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action CertificateModule --realm Realm --actionName getCreatableTypes
```

1.28.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action CertificateModule --realm Realm --actionName nextdescendents
```


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1.28.1.6. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

```
am> query CertificateModule --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.28.1.7. read

Usage:

```
am> read CertificateModule --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.28.1.8. update

Usage:

```
am> update CertificateModule --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "clientCertificateHttpHeaderName" : {
      "title" : "HTTP Header Name for Client Certificate",
      "description" : "The name of the HTTP request header containing the certificate, only used when
 <i>Trusted Remote Hosts</i> mode is enabled.",
      "propertyOrder" : 1900,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
```


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```
    "crlMatchingCertificateAttribute" : {
      "title" : "Issuer DN Attribute(s) Used to Search LDAP for CRLs",
      "description" : "This is the name of the attribute taken from the CA certificate that will
 be used to search the CRL.<br><br>If only one attribute name is specified, the ldap searchfilter
 will be (attrName=Value_of_the_corresponding_Attribute_from_SubjectDN)<br/>e.g. SubjectDN of issuer
 cert 'C=US, CN=Some CA, serialNumber=123456',attribute name specified is 'CN', searchfilter used
 will be <code>(CN=Some CA)</code><br/><br/>If serveral attribute names are specified, they have
 to separated by <code>,</code>. The resulting ldap searchfilter value will be a comma separated
 list of name attribute values, the search attribute will be <code>cn</code><br/>e.g. SubjectDN of
 issuer cert 'C=US, CN=Some CA, serialNumber=123456',attribute names specified are 'CN,serialNumber',
 searchfilter used will be <code>cn=CN=Some CA,serialNumber=123456</code><br/>The order of the values
 of the attribute names matter as they must match the value of the <code>cn</code> attribute of a
 crlDistributionPoint entry in the directory server.",
      "propertyOrder" : 400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "certificateLdapServers" : {
      "title" : "LDAP Server Where Certificates are Stored",
      "description" : "Use this list to set the LDAP server used to search for certificates.
 <br><br>The Certificate authentication module will use this list for the LDAP server used to search
 for certificates. A single entry must be in the format:<br/><br/><code>ldap_server:port</code><br/
><br/>Multiple entries allow associations between OpenAM servers and a LDAP server. The format is:<br/
><br/><code>local server name | server:port</code><br/><br/>The local server name is the full name of
 the server from the list of servers and sites.",
      "propertyOrder" : 1000,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "otherCertificateAttributeToProfileMapping" : {
      "title" : "Other Certificate Field Used to Access User Profile",
      "description" : "This field is only used if the <i>Certificate Field Used to Access User
 Profile</i> attribute is set to <i>other</i>. This field allows a custom certificate field to be used
 as the basis of the user search.",
      "propertyOrder" : 1600,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "iplanet-am-auth-cert-gw-cert-preferred" : {
      "title" : "Use only Certificate from HTTP request header",
      "description" : "Strictly use client cert from HTTP header over cert from HTTPS connection/
servlet attribute",
      "propertyOrder" : 2000,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "certificateAttributeToProfileMapping" : {
      "title" : "Certificate Field Used to Access User Profile",
      "description" : "The certificate module needs to read a value from the client certificate that
 can be used to search the LDAP server for a matching certificate.  ",
      "propertyOrder" : 1500,
      "required" : true,
```


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```
      "type" : "string",
      "exampleValue" : ""
    },
    "crlHttpParameters" : {
      "title" : "HTTP Parameters for CRL Update",
      "description" : "These parameters will be included in any HTTP CRL call to the Certificate
 Authority<br><br>If the Client or CA certificate contains the Issuing Distribution Point Extension
 then OpenAM will use this information to retrieve the CRL from the distribution point. This property
 allow custom HTTP parameters to be included in the CRL request.<br/><br/>The format of the parameter
 is as follows:<br/><br/><code>param1=value1,param2=value</code>",
      "propertyOrder" : 500,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sslEnabled" : {
      "title" : "Use SSL/TLS for LDAP Access",
      "description" : "The certificate module will use SSL/TLS to access the LDAP server",
      "propertyOrder" : 1400,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "userBindPassword" : {
      "title" : "LDAP Server Authentication Password",
      "description" : "The password for the authentication user",
      "propertyOrder" : 1300,
      "required" : true,
      "type" : "string",
      "format" : "password",
      "exampleValue" : ""
    },
    "cacheCRLsInMemory" : {
      "title" : "Cache CRLs in memory",
      "description" : "The CRLs will be cached in memory",
      "propertyOrder" : 700,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "userBindDN" : {
      "title" : "LDAP Server Authentication User",
      "description" : "DN of the user used by the module to authenticate to the LDAP server<br><br>The
 Certificate module authenticates to the LDAP server in order to search for a matching certificate.
 The DN entered here represents the account used for said authentication and must have read/search
 access to the LDAP server.",
      "propertyOrder" : 1200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "ldapSearchStartDN" : {
      "title" : "LDAP Search Start or Base DN",
      "description" : "The start point in the LDAP server for the certificate search<br><br>When
 entering multiple entries, each entry must be prefixed with a local server name. Multiple entries
 allow different search Base DNs depending on the OpenAM server in use. The format is:<br/><br/
><code>local server name | base dn</code><br/><br/>The local server name is the full name of the
 server from the list of servers and sites.",
      "propertyOrder" : 1100,
```


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```
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "ldapCertificateAttribute" : {
      "title" : "Subject DN Attribute Used to Search LDAP for Certificates",
      "description" : "This is the attribute used to search the directory for the
 certificate<br><br>The Certificate module will search the directory for the certificate using the
 search filter based on this attribute and the value of the Subject DN taken from the certificate.",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "updateCRLsFromDistributionPoint" : {
      "title" : "Update CA CRLs from CRLDistributionPoint",
      "description" : "Fetch new CA CRLs from CRLDistributionPoint and update it in
 Directory Server<br><br>If the CA certificate includes an IssuingDistributionPoint or has an
 CRLDistributionPoint extension set OpenAM tries to update the CRLs if neeed (i.e. CRL is out-of-
date). <br/>This property controls if the update should be performed.<br/>This property is only used
 if CA CRL checking is enabled.",
      "propertyOrder" : 800,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "trustedRemoteHosts" : {
      "title" : "Trusted Remote Hosts",
      "description" : "A list of IP addresses trusted to supply client certificates.<br><br>If SSL/TLS
 is being terminated at a load balancer or at the Distributed Authentication server then this option
 can be used to ensure that only specified <i>trusted</i> hosts (identified by IP address) are allowed
 to supply client certificates to the certificate module,<br/><br/>Valid values for this list are as
 follows:<ul><li>none</li><li>any</li><li>multiple IP addresses</li></ul><br/><br/>The default value
 of <i>none</i> disables this functionality",
      "propertyOrder" : 1800,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "certificateAttributeProfileMappingExtension" : {
      "title" : "SubjectAltNameExt Value Type to Access User Profile",
      "description" : "Use the Subject Alternative Name Field in preference to one of the standard
 certificate fields.<br><br>Selecting RFC822Name or UPN will cause this field to have have precedence
 over the <i>Certificate Field Used to Access User Profile</i> or <i>Other Certificate Field Used
 to Access User Profile</i> attribute.<br/><br/><i>NB </i>The client certificate must contain the
 <i>Subject Alternate Name Extension</i> for this function to operate.",
      "propertyOrder" : 1700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "matchCertificateInLdap" : {
      "title" : "Match Certificate in LDAP",
```


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```
      "description" : "The client certificate must exist in the directory for the authentication to be
 successful.",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "authenticationLevel" : {
      "title" : "Authentication Level",
      "description" : "The authentication level associated with this module.<br><br>Each
 authentication module has an authentication level that can be used to indicate the level of security
 associated with the module; 0 is the lowest (and the default).",
      "propertyOrder" : 2100,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "matchCACertificateToCRL" : {
      "title" : "Match CA Certificate to CRL",
      "description" : "The CA certificate that issued the client certificate will also be checked
 against the CRL.",
      "propertyOrder" : 600,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "matchCertificateToCRL" : {
      "title" : "Match Certificate to CRL",
      "description" : "The Client Certificate will be checked against the Certificate Revocation list
 held in the directory<br><br>A Certificate Revocation List can be provisioned into the directory.
 Having this option enabled will cause all client certificates to be checked against this list.",
      "propertyOrder" : 300,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "ocspValidationEnabled" : {
      "title" : "OCSP Validation",
      "description" : "Enable Online Certificate Status Protocol validation for OCSP aware
 certificates<br><br>If the certificate contains OCSP validation information then OpenAM will use this
 information to check the validity of the certificate as part of the authentication process.<br/><br/
><i>NB </i>The OpenAM server must have Internet connectivity for OCSP to work",
      "propertyOrder" : 900,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    }
  }
}
```


1.28.2. Global Operations

Resource path: `/global-config/authentication/modules/certificate`

Resource version: `1.0`

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1.28.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action CertificateModule --global --actionName getAllTypes
```

1.28.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action CertificateModule --global --actionName getCreatableTypes
```

1.28.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action CertificateModule --global --actionName nextdescendents
```

1.28.2.4. read

Usage:

```
am> read CertificateModule --global
```

1.28.2.5. update

Usage:

```
am> update CertificateModule --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "defaults" : {
      "properties" : {
        "clientCertificateHttpHeaderName" : {
          "title" : "HTTP Header Name for Client Certificate",
          "description" : "The name of the HTTP request header containing the certificate, only used
 when <i>Trusted Remote Hosts</i> mode is enabled.",
          "propertyOrder" : 1900,
```


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```
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "ocspValidationEnabled" : {
          "title" : "OCSP Validation",
          "description" : "Enable Online Certificate Status Protocol validation for OCSP aware
 certificates<br><br>If the certificate contains OCSP validation information then OpenAM will use this
 information to check the validity of the certificate as part of the authentication process.<br/><br/
><i>NB </i>The OpenAM server must have Internet connectivity for OCSP to work",
          "propertyOrder" : 900,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "matchCertificateToCRL" : {
          "title" : "Match Certificate to CRL",
          "description" : "The Client Certificate will be checked against the Certificate Revocation
 list held in the directory<br><br>A Certificate Revocation List can be provisioned into the
 directory. Having this option enabled will cause all client certificates to be checked against this
 list.",
          "propertyOrder" : 300,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "iplanet-am-auth-cert-gw-cert-preferred" : {
          "title" : "Use only Certificate from HTTP request header",
          "description" : "Strictly use client cert from HTTP header over cert from HTTPS connection/
servlet attribute",
          "propertyOrder" : 2000,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "userBindDN" : {
          "title" : "LDAP Server Authentication User",
          "description" : "DN of the user used by the module to authenticate to the LDAP
 server<br><br>The Certificate module authenticates to the LDAP server in order to search for a
 matching certificate. The DN entered here represents the account used for said authentication and
 must have read/search access to the LDAP server.",
          "propertyOrder" : 1200,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "matchCACertificateToCRL" : {
          "title" : "Match CA Certificate to CRL",
          "description" : "The CA certificate that issued the client certificate will also be checked
 against the CRL.",
          "propertyOrder" : 600,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "authenticationLevel" : {
          "title" : "Authentication Level",
```


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```
          "description" : "The authentication level associated with this module.<br><br>Each
authentication module has an authentication level that can be used to indicate the level of security
associated with the module; 0 is the lowest (and the default).",
          "propertyOrder" : 2100,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "certificateAttributeToProfileMapping" : {
          "title" : "Certificate Field Used to Access User Profile",
          "description" : "The certificate module needs to read a value from the client certificate
that can be used to search the LDAP server for a matching certificate.  ",
          "propertyOrder" : 1500,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "matchCertificateInLdap" : {
          "title" : "Match Certificate in LDAP",
          "description" : "The client certificate must exist in the directory for the authentication
to be successful.",
          "propertyOrder" : 100,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "crlMatchingCertificateAttribute" : {
          "title" : "Issuer DN Attribute(s) Used to Search LDAP for CRLs",
          "description" : "This is the name of the attribute taken from the CA certificate that will
be used to search the CRL.<br><br>If only one attribute name is specified, the ldap searchfilter
will be (attrName=Value_of_the_corresponding_Attribute_from_SubjectDN)<br/>e.g. SubjectDN of issuer
cert 'C=US, CN=Some CA, serialNumber=123456',attribute name specified is 'CN', searchfilter used
will be <code>(CN=Some CA)</code><br/><br/>If serveral attribute names are specified, they have
to separated by <code>,</code>. The resulting ldap searchfilter value will be a comma separated
list of name attribute values, the search attribute will be <code>cn</code><br/>e.g. SubjectDN of
issuer cert 'C=US, CN=Some CA, serialNumber=123456',attribute names specified are 'CN,serialNumber',
searchfilter used will be <code>cn=CN=Some CA,serialNumber=123456</code><br/>The order of the values
of the attribute names matter as they must match the value of the <code>cn</code> attribute of a
crlDistributionPoint entry in the directory server.",
          "propertyOrder" : 400,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "certificateAttributeProfileMappingExtension" : {
          "title" : "SubjectAltNameExt Value Type to Access User Profile",
          "description" : "Use the Subject Alternative Name Field in preference to one of the standard
certificate fields.<br><br>Selecting RFC822Name or UPN will cause this field to have have precedence
over the <i>Certificate Field Used to Access User Profile</i> or <i>Other Certificate Field Used
to Access User Profile</i> attribute.<br/><br/><i>NB </i>The client certificate must contain the
<i>Subject Alternate Name Extension</i> for this function to operate.",
          "propertyOrder" : 1700,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "ldapSearchStartDN" : {
          "title" : "LDAP Search Start or Base DN",
```


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```
          "description" : "The start point in the LDAP server for the certificate search<br><br>When
 entering multiple entries, each entry must be prefixed with a local server name. Multiple entries
 allow different search Base DNs depending on the OpenAM server in use. The format is:<br/><br/
><code>local server name | base dn</code><br/><br/>The local server name is the full name of the
 server from the list of servers and sites.",
          "propertyOrder" : 1100,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "ldapCertificateAttribute" : {
          "title" : "Subject DN Attribute Used to Search LDAP for Certificates",
          "description" : "This is the attribute used to search the directory for the
 certificate<br><br>The Certificate module will search the directory for the certificate using the
 search filter based on this attribute and the value of the Subject DN taken from the certificate.",
          "propertyOrder" : 200,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "otherCertificateAttributeToProfileMapping" : {
          "title" : "Other Certificate Field Used to Access User Profile",
          "description" : "This field is only used if the <i>Certificate Field Used to Access User
 Profile</i> attribute is set to <i>other</i>. This field allows a custom certificate field to be used
 as the basis of the user search.",
          "propertyOrder" : 1600,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "userBindPassword" : {
          "title" : "LDAP Server Authentication Password",
          "description" : "The password for the authentication user",
          "propertyOrder" : 1300,
          "required" : true,
          "type" : "string",
          "format" : "password",
          "exampleValue" : ""
        },
        "crlHttpParameters" : {
          "title" : "HTTP Parameters for CRL Update",
          "description" : "These parameters will be included in any HTTP CRL call to the Certificate
 Authority<br><br>If the Client or CA certificate contains the Issuing Distribution Point Extension
 then OpenAM will use this information to retrieve the CRL from the distribution point. This property
 allow custom HTTP parameters to be included in the CRL request.<br/><br/>The format of the parameter
 is as follows:<br/><br/><code>param1=value1,param2=value</code>",
          "propertyOrder" : 500,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "trustedRemoteHosts" : {
          "title" : "Trusted Remote Hosts",
          "description" : "A list of IP addresses trusted to supply client certificates.<br><br>If
 SSL/TLS is being terminated at a load balancer or at the Distributed Authentication server then this
 option can be used to ensure that only specified <i>trusted</i> hosts (identified by IP address) are
```


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```
 allowed to supply client certificates to the certificate module,<br/><br/>Valid values for this list
 are as follows:<ul><li>none</li><li>any</li><li>multiple IP addresses</li></ul><br/><br/>The default
 value of <i>none</i> disables this functionality",
          "propertyOrder" : 1800,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "cacheCRLsInMemory" : {
          "title" : "Cache CRLs in memory",
          "description" : "The CRLs will be cached in memory",
          "propertyOrder" : 700,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "certificateLdapServers" : {
          "title" : "LDAP Server Where Certificates are Stored",
          "description" : "Use this list to set the LDAP server used to search for certificates.
 <br><br>The Certificate authentication module will use this list for the LDAP server used to search
 for certificates. A single entry must be in the format:<br/><br/><code>ldap_server:port</code><br/
><br/>Multiple entries allow associations between OpenAM servers and a LDAP server. The format is:<br/
><br/><code>local server name | server:port</code><br/><br/>The local server name is the full name of
 the server from the list of servers and sites.",
          "propertyOrder" : 1000,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "updateCRLsFromDistributionPoint" : {
          "title" : "Update CA CRLs from CRLDistributionPoint",
          "description" : "Fetch new CA CRLs from CRLDistributionPoint and update it in
 Directory Server<br><br>If the CA certificate includes an IssuingDistributionPoint or has an
 CRLDistributionPoint extension set OpenAM tries to update the CRLs if neeed (i.e. CRL is out-of-
date). <br/>This property controls if the update should be performed.<br/>This property is only used
 if CA CRL checking is enabled.",
          "propertyOrder" : 800,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "sslEnabled" : {
          "title" : "Use SSL/TLS for LDAP Access",
          "description" : "The certificate module will use SSL/TLS to access the LDAP server",
          "propertyOrder" : 1400,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        }
      },
      "type" : "object",
      "title" : "Realm Defaults"
    }
```


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```
  }
}
```

1.29. ChoiceCollector

1.29.1. Realm Operations

Resource path: `/realm-config/authentication/authenticationtrees/nodes/ChoiceCollectorNode`

Resource version: `1.0`

1.29.1.1. create

Usage:

```
am> create ChoiceCollector --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "choices" : {
      "title" : "Choices",
      "description" : "List of values that represents the choices for the user",
      "propertyOrder" : 100,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "prompt" : {
      "title" : "Prompt",
      "description" : "Prompt displayed on the choice page",
      "propertyOrder" : 300,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "defaultChoice" : {
```


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```
      "title" : "Default choice",
      "description" : "The default selected choice value",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```

1.29.1.2. delete

Usage:

```
am> delete ChoiceCollector --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.29.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action ChoiceCollector --realm Realm --actionName getAllTypes
```

1.29.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action ChoiceCollector --realm Realm --actionName getCreatableTypes
```

1.29.1.5. listOutcomes

List the available outcomes for the node type.

Usage:

```
am> action ChoiceCollector --realm Realm --body body --actionName listOutcomes
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

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```
{
  "type" : "object",
  "title" : "Some configuration of the node. This does not need to be complete against the
 configuration schema."
}
```

1.29.1.6. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action ChoiceCollector --realm Realm --actionName nextdescendents
```

1.29.1.7. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

```
am> query ChoiceCollector --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.29.1.8. read

Usage:

```
am> read ChoiceCollector --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.29.1.9. update

Usage:

```
am> update ChoiceCollector --realm Realm --id id --body body
```

Parameters:

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--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "choices" : {
      "title" : "Choices",
      "description" : "List of values that represents the choices for the user",
      "propertyOrder" : 100,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "prompt" : {
      "title" : "Prompt",
      "description" : "Prompt displayed on the choice page",
      "propertyOrder" : 300,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "defaultChoice" : {
      "title" : "Default choice",
      "description" : "The default selected choice value",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```

1.29.2. Global Operations

Resource path: `/global-config/authentication/authenticationtrees/nodes/ChoiceCollectorNode`

Resource version: `1.0`

1.29.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action ChoiceCollector --global --actionName getAllTypes
```


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1.29.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action ChoiceCollector --global --actionName getCreatableTypes
```

1.29.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action ChoiceCollector --global --actionName nextdescendents
```

1.29.2.4. read

Usage:

```
am> read ChoiceCollector --global
```

1.29.2.5. update

Usage:

```
am> update ChoiceCollector --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object"
}
```

1.30. CircleOfTrust

1.30.1. Realm Operations

Resource path: `/realm-config/federation/circlesoftrust`

Resource version: `1.0`

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1.30.1.1. create

Usage:

```
am> create CircleOfTrust --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "idffWriterServiceUrl" : {
      "title" : "a213",
      "description" : "",
      "propertyOrder" : 600,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "saml2WriterServiceUrl" : {
      "title" : "a211",
      "description" : "",
      "propertyOrder" : 400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "status" : {
      "title" : "Status of the Circle of Trust",
      "description" : "",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "idffReaderServiceUrl" : {
      "title" : "a214",
      "description" : "",
      "propertyOrder" : 700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "saml2ReaderServiceUrl" : {
      "title" : "a212",
      "description" : "",
      "propertyOrder" : 500,
      "required" : true,
      "type" : "string",
```


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```
      "exampleValue" : ""
    },
    "description" : {
      "title" : "Description of the Circle of Trust ",
      "description" : "",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "trustedProviders" : {
      "title" : "Trusted Providers",
      "description" : "",
      "propertyOrder" : 300,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    }
  }
}
```

1.30.1.2. delete

Usage:

```
am> delete CircleOfTrust --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.30.1.3. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

```
am> query CircleOfTrust --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.30.1.4. read

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Usage:

```
am> read CircleOfTrust --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.30.1.5. update

Usage:

```
am> update CircleOfTrust --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "idffWriterServiceUrl" : {
      "title" : "a213",
      "description" : "",
      "propertyOrder" : 600,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "saml2WriterServiceUrl" : {
      "title" : "a211",
      "description" : "",
      "propertyOrder" : 400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "status" : {
      "title" : "Status of the Circle of Trust",
      "description" : "",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "idffReaderServiceUrl" : {
      "title" : "a214",
```


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```
      "description" : "",
      "propertyOrder" : 700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "saml2ReaderServiceUrl" : {
      "title" : "a212",
      "description" : "",
      "propertyOrder" : 500,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "description" : {
      "title" : "Description of the Circle of Trust ",
      "description" : "",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "trustedProviders" : {
      "title" : "Trusted Providers",
      "description" : "",
      "propertyOrder" : 300,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    }
  }
}
```


1.31. CommonFederationConfiguration

1.31.1. Global Operations

Resource path: `/global-config/services/federation/common`

Resource version: `1.0`

1.31.1.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action CommonFederationConfiguration --global --actionName getAllTypes
```


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1.31.1.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action CommonFederationConfiguration --global --actionName getCreatableTypes
```

1.31.1.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action CommonFederationConfiguration --global --actionName nextdescendents
```

1.31.1.4. read

Usage:

```
am> read CommonFederationConfiguration --global
```

1.31.1.5. update

Usage:

```
am> update CommonFederationConfiguration --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "implementationClasses" : {
      "type" : "object",
      "title" : "Implementation Classes",
      "propertyOrder" : 1,
      "properties" : {
        "signatureProviderClass" : {
          "title" : "SignatureProvider SPI implementation class",
          "description" : "The Federation system uses this class to digitally sign SAML
 documents.<br><br>The default implementation uses the XERCES APIs to sign the documents. A custom
 implementation must implement the <code>com.sun.identity.saml.xmlsig.SignatureProvider</code>
 interface.",
          "propertyOrder" : 700,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
```


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```
       "keyProviderClass" : {
         "title" : "KeyProvider SPI implementation class",
         "description" : "The Federation system uses this class to provide access to the
underlying Java keystore.<br><br>The default implementation uses the Java Cryptographic
Engine to provide access to the Java keystore. A custom implementation must implement the
<code>com.sun.identity.saml.xmlsig.KeyProvider</code> interface.",
         "propertyOrder" : 800,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       },
       "sessionProviderClass" : {
         "title" : "SessionProvider SPI implementation class",
         "description" : "The Federation system uses this class to interface with the
session service.<br><br>The default implementation uses the standard authentication
and SSO APIs to access the session service. A custom implementation must implement the
<code>com.sun.identity.plugin.session.SessionProvider</code> interface.",
         "propertyOrder" : 400,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       },
       "passwordDecoderClass" : {
         "title" : "PasswordDecoder SPI implementation class",
         "description" : "The Federation system uses this class to decode password
encoded by OpenAM.<br><br>The default implementation uses the internal OpenAM
decryption API to decode passwords. A custom implementation must implement the
<code>com.sun.identity.saml.xmlsig.PasswordDecoder</code> interface.",
         "propertyOrder" : 600,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       },
       "loggerClass" : {
         "title" : "Logger SPI implementation class",
         "description" : "The Federation system uses this class to record log entries.<br><br>The
default implementation uses the Logging APIs to record log entries. A custom implementation must
implement the <code>com.sun.identity.plugin.log.Logger</code> interface.",
         "propertyOrder" : 300,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       },
       "datastoreClass" : {
         "title" : "Datastore SPI implementation class",
         "description" : "The Federation system uses this class to get/set user
profile attributes.<br><br>The default implementation uses the Identity repository
APIs to access user profile attributes. A custom implementation must implement the
<code>com.sun.identity.plugin.datastore.DataStoreProvider</code> interface. ",
         "propertyOrder" : 100,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       },
       "configurationClass" : {
         "title" : "ConfigurationInstance SPI implementation class",
         "description" : "The Federation system uses this class to fetch
service configuration.<br><br>The default implementation uses the SMS APIs
```


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```
to access service configuration. A custom implementation must implement the
<code>com.sun.identity.plugin.configuration.ConfigurationInstance</code> interface.",
         "propertyOrder" : 200,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       }
     }
   },
   "generalConfig" : {
     "type" : "object",
     "title" : "General Configuration",
     "propertyOrder" : 0,
     "properties" : {
       "certificateChecking" : {
         "title" : "Check presence of certificates",
         "description" : "Enable checking of certificates against local copy<br><br>Whether to verify
that the partner's signing certificate included in the Federation XML document is the same as the one
stored in the said partner's meta data.",
         "propertyOrder" : 900,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       },
       "samlErrorPageUrl" : {
         "title" : "SAML Error Page URL",
         "description" : "OpenAM redirects users here when an error occurs in the SAML2
engine.<br><br>Both relative and absolute URLs are supported. Users are redirected to an absolute URL
using the configured HTTP Binding whereas relative URLs are displayed within the request.",
         "propertyOrder" : 1700,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       },
       "samlErrorPageHttpBinding" : {
         "title" : "SAML Error Page HTTP Binding",
         "description" : "The possible values are HTTP-Redirect or HTTP-POST.",
         "propertyOrder" : 1800,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       },
       "maxContentLength" : {
         "title" : "Maximum allowed content length",
         "description" : "The maximum content length allowed in federation communications, in
bytes.",
         "propertyOrder" : 500,
         "required" : true,
         "type" : "integer",
         "exampleValue" : ""
       }
     }
   },
   "algorithms" : {
     "type" : "object",
     "title" : "Algorithms",
     "propertyOrder" : 2,
     "properties" : {
       "signatureAlgorithm" : {
```


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```
          "title" : "XML signature algorithm",
          "description" : "The algorithm used to sign XML documents.",
          "propertyOrder" : 1100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "DigestAlgorithm" : {
          "title" : "XML digest algorithm",
          "description" : "The default digest algorithm to use in signing XML.",
          "propertyOrder" : 1200,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "canonicalizationAlgorithm" : {
          "title" : "XML canonicalization algorithm",
          "description" : "The algorithm used to canonicalize XML documents.",
          "propertyOrder" : 1000,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "QuerySignatureAlgorithmRSA" : {
          "title" : "Query String signature algorithm (RSA)",
          "description" : "The default signature algorithm to use in case of RSA keys.",
          "propertyOrder" : 1300,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "transformationAlgorithm" : {
          "title" : "XML transformation algorithm",
          "description" : "The algorithm used to transform XML documents.",
          "propertyOrder" : 1600,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "QuerySignatureAlgorithmEC" : {
          "title" : "Query String signature algorithm (EC)",
          "description" : "The default signature algorithm to use in case of EC keys.",
          "propertyOrder" : 1500,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "QuerySignatureAlgorithmDSA" : {
          "title" : "Query String signature algorithm (DSA)",
          "description" : "The default signature algorithm to use in case of DSA keys.",
          "propertyOrder" : 1400,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    },
    "montoring" : {
      "type" : "object",
```


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```
      "title" : "Monitoring",
      "propertyOrder" : 3,
      "properties" : {
        "monitoringIdffClass" : {
          "title" : "Monitoring Provider Class for ID-FF",
          "description" : "The ID-FF engine uses this class to gain access to the monitoring
 system.<br><br>The default implementation uses the built-in OpenAM monitoring system. A custom
 implementation must implement the <code>com.sun.identity.plugin.monitoring.FedMonIDFFSvc</code>
 interface.",
          "propertyOrder" : 2200,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "monitoringSaml2Class" : {
          "title" : "Monitoring Provider Class for SAML2",
          "description" : "The SAML2 engine uses this class to gain access to the monitoring
 system.<br><br>The default implementation uses the built-in OpenAM monitoring system. A custom
 implementation must implement the <code>com.sun.identity.plugin.monitoring.FedMonSAML2Svc</code>
 interface.",
          "propertyOrder" : 2100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "monitoringAgentClass" : {
          "title" : "Monitoring Agent Provider Class",
          "description" : "The Federation system uses this class to gain access to the monitoring
 system.<br><br>The default implementation uses the built-in OpenAM monitoring system. A custom
 implementation must implement the <code>com.sun.identity.plugin.monitoring.FedMonAgent</code>
 interface.",
          "propertyOrder" : 1900,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "monitoringSaml1Class" : {
          "title" : "Monitoring Provider Class for SAML1",
          "description" : "The SAMLv1 engine uses this class to gain access to the monitoring
 system<br><br>The default implementation uses the built-in OpenAM monitoring system. A custom
 implementation must implement the <code>com.sun.identity.plugin.monitoring.FedMonSAML1Svc</code>
 interface.",
          "propertyOrder" : 2000,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    }
  }
}
```


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1.32. ConditionTypes

1.32.1. Realm Operations

Service for querying and reading the environment condition types stored in OpenAM. Environment condition types describe the JSON representation of environment conditions that you can use in policy definitions

Resource path: `/conditiontypes`

Resource version: `1.0`

1.32.1.1. query

Query the list of environment condition types

Usage:

```
am> query ConditionTypes --realm Realm --filter filter
```

Parameters:

`--filter`

A CREST formatted query filter, where "true" will query all. Fields that can be queried: [*]

1.32.1.2. read

Read an individual environment condition type by providing the unique identifier title

Usage:

```
am> read ConditionTypes --realm Realm --id id
```

Parameters:

`--id`

The unique identifier for the resource.

1.33. Csv

1.33.1. Realm Operations

Resource path: `/realm-config/services/audit/CSV`

Resource version: `1.0`

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1.33.1.1. create

Usage:

```
am> create Csv --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "csvFileRetention" : {
      "type" : "object",
      "title" : "File Retention",
      "propertyOrder" : 4,
      "properties" : {
        "retentionMinFreeSpaceRequired" : {
          "title" : "Minimum Free Space Required",
          "description" : "Minimum amount of disk space required, in bytes, on the system where audit
 files are stored. A negative or zero value indicates this policy is disabled.",
          "propertyOrder" : 1400,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "retentionMaxDiskSpaceToUse" : {
          "title" : "Maximum Disk Space",
          "description" : "The maximum amount of disk space the audit files can occupy, in bytes. A
 negative or zero value indicates this policy is disabled.",
          "propertyOrder" : 1300,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "retentionMaxNumberOfHistoryFiles" : {
          "title" : "Maximum Number of Historical Files",
          "description" : "Maximum number of backup audit files allowed. A value of <code>-1</code>
 disables pruning of old history files.",
          "propertyOrder" : 1200,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    },
    "commonHandlerPlugin" : {
      "type" : "object",
      "title" : "Audit Event Handler Factory",
      "propertyOrder" : 1,
      "properties" : {
```


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```
       "handlerFactory" : {
         "title" : "Factory Class Name",
         "description" : "The fully qualified class name of the factory
responsible for creating the Audit Event Handler. The class must implement
<code>org.forgerock.openam.audit.AuditEventHandlerFactory</code>.",
         "propertyOrder" : 2100,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       }
     }
   },
   "csvFileRotation" : {
     "type" : "object",
     "title" : "File Rotation",
     "propertyOrder" : 3,
     "properties" : {
       "rotationFilePrefix" : {
         "title" : "File Rotation Prefix",
         "description" : "Prefix to prepend to audit files when rotating audit files.",
         "propertyOrder" : 800,
         "required" : false,
         "type" : "string",
         "exampleValue" : ""
       },
       "rotationTimes" : {
         "title" : "Rotation Times",
         "description" : "Durations after midnight to trigger file rotation, in seconds.",
         "propertyOrder" : 1100,
         "required" : true,
         "items" : {
           "type" : "string"
         },
         "type" : "array",
         "exampleValue" : ""
       },
       "rotationInterval" : {
         "title" : "Rotation Interval",
         "description" : "Interval to trigger audit file rotations, in seconds. A negative or zero
value disables this feature.",
         "propertyOrder" : 1000,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       },
       "rotationMaxFileSize" : {
         "title" : "Maximum File Size",
         "description" : "Maximum size, in bytes, which an audit file can grow to before rotation is
triggered. A negative or zero value indicates this policy is disabled.",
         "propertyOrder" : 700,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       },
       "rotationEnabled" : {
         "title" : "Rotation Enabled",
         "description" : "Enables and disables audit file rotation.",
         "propertyOrder" : 600,
         "required" : true,
```


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```
          "type" : "boolean",
          "exampleValue" : ""
        },
        "rotationFileSuffix" : {
          "title" : "File Rotation Suffix",
          "description" : "Suffix to append to audit files when they are rotated. Suffix should be a
timestamp.",
          "propertyOrder" : 900,
          "required" : false,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    },
    "commonHandler" : {
      "type" : "object",
      "title" : "General Handler Configuration",
      "propertyOrder" : 0,
      "properties" : {
        "enabled" : {
          "title" : "Enabled",
          "description" : "Enables or disables an audit event handler.",
          "propertyOrder" : 300,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "topics" : {
          "title" : "Topics",
          "description" : "List of topics handled by an audit event handler.",
          "propertyOrder" : 400,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        }
      }
    },
    "csvBuffering" : {
      "type" : "object",
      "title" : "Buffering",
      "propertyOrder" : 5,
      "properties" : {
        "bufferingAutoFlush" : {
          "title" : "Flush Each Event Immediately",
          "description" : "Performance may be improved by writing all buffered events before
flushing.",
          "propertyOrder" : 1600,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "bufferingEnabled" : {
          "title" : "Buffering Enabled",
          "description" : "Enables or disables buffering.",
          "propertyOrder" : 1500,
          "required" : true,
```


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```
          "type" : "boolean",
          "exampleValue" : ""
        }
      }
    },
    "csvSecurity" : {
      "type" : "object",
      "title" : "Tamper Evident Configuration",
      "propertyOrder" : 6,
      "properties" : {
        "securityEnabled" : {
          "title" : "Is Enabled",
          "description" : "Enables the CSV tamper evident feature.",
          "propertyOrder" : 1700,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "securityPassword" : {
          "title" : "Certificate Store Password",
          "description" : "Password for Java keystore.",
          "propertyOrder" : 1900,
          "required" : false,
          "type" : "string",
          "format" : "password",
          "exampleValue" : ""
        },
        "securitySignatureInterval" : {
          "title" : "Signature Interval",
          "description" : "Signature generation interval, in seconds.",
          "propertyOrder" : 2000,
          "required" : false,
          "type" : "string",
          "exampleValue" : ""
        },
        "securityFilename" : {
          "title" : "Certificate Store Location",
          "description" : "Path to Java keystore.",
          "propertyOrder" : 1800,
          "required" : false,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    },
    "csvConfig" : {
      "type" : "object",
      "title" : "CSV Configuration",
      "propertyOrder" : 2,
      "properties" : {
        "location" : {
          "title" : "Log Directory",
          "description" : "Directory in which to store audit log CSV files.",
          "propertyOrder" : 500,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
```


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```
    }
  }
}
```

1.33.1.2. delete

Usage:

```
am> delete Csv --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.33.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action Csv --realm Realm --actionName getAllTypes
```

1.33.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action Csv --realm Realm --actionName getCreatableTypes
```

1.33.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action Csv --realm Realm --actionName nextdescendents
```

1.33.1.6. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

```
am> query Csv --realm Realm --filter filter
```

Parameters:

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--filter

A CREST formatted query filter, where "true" will query all.

1.33.1.7. read

Usage:

```
am> read Csv --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.33.1.8. update

Usage:

```
am> update Csv --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "csvFileRetention" : {
      "type" : "object",
      "title" : "File Retention",
      "propertyOrder" : 4,
      "properties" : {
        "retentionMinFreeSpaceRequired" : {
          "title" : "Minimum Free Space Required",
          "description" : "Minimum amount of disk space required, in bytes, on the system where audit
 files are stored. A negative or zero value indicates this policy is disabled.",
          "propertyOrder" : 1400,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "retentionMaxDiskSpaceToUse" : {
          "title" : "Maximum Disk Space",
          "description" : "The maximum amount of disk space the audit files can occupy, in bytes. A
 negative or zero value indicates this policy is disabled.",
          "propertyOrder" : 1300,
```


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```
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "retentionMaxNumberOfHistoryFiles" : {
          "title" : "Maximum Number of Historical Files",
          "description" : "Maximum number of backup audit files allowed. A value of <code>-1</code>
disables pruning of old history files.",
          "propertyOrder" : 1200,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    },
    "commonHandlerPlugin" : {
      "type" : "object",
      "title" : "Audit Event Handler Factory",
      "propertyOrder" : 1,
      "properties" : {
        "handlerFactory" : {
          "title" : "Factory Class Name",
          "description" : "The fully qualified class name of the factory
responsible for creating the Audit Event Handler. The class must implement
<code>org.forgerock.openam.audit.AuditEventHandlerFactory</code>.",
          "propertyOrder" : 2100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    },
    "csvFileRotation" : {
      "type" : "object",
      "title" : "File Rotation",
      "propertyOrder" : 3,
      "properties" : {
        "rotationFilePrefix" : {
          "title" : "File Rotation Prefix",
          "description" : "Prefix to prepend to audit files when rotating audit files.",
          "propertyOrder" : 800,
          "required" : false,
          "type" : "string",
          "exampleValue" : ""
        },
        "rotationTimes" : {
          "title" : "Rotation Times",
          "description" : "Durations after midnight to trigger file rotation, in seconds.",
          "propertyOrder" : 1100,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "rotationInterval" : {
          "title" : "Rotation Interval",
```


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```
          "description" : "Interval to trigger audit file rotations, in seconds. A negative or zero
value disables this feature.",
          "propertyOrder" : 1000,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "rotationMaxFileSize" : {
          "title" : "Maximum File Size",
          "description" : "Maximum size, in bytes, which an audit file can grow to before rotation is
triggered. A negative or zero value indicates this policy is disabled.",
          "propertyOrder" : 700,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "rotationEnabled" : {
          "title" : "Rotation Enabled",
          "description" : "Enables and disables audit file rotation.",
          "propertyOrder" : 600,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "rotationFileSuffix" : {
          "title" : "File Rotation Suffix",
          "description" : "Suffix to append to audit files when they are rotated. Suffix should be a
timestamp.",
          "propertyOrder" : 900,
          "required" : false,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    },
    "commonHandler" : {
      "type" : "object",
      "title" : "General Handler Configuration",
      "propertyOrder" : 0,
      "properties" : {
        "enabled" : {
          "title" : "Enabled",
          "description" : "Enables or disables an audit event handler.",
          "propertyOrder" : 300,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "topics" : {
          "title" : "Topics",
          "description" : "List of topics handled by an audit event handler.",
          "propertyOrder" : 400,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        }
```


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```
      }
    },
    "csvBuffering" : {
      "type" : "object",
      "title" : "Buffering",
      "propertyOrder" : 5,
      "properties" : {
        "bufferingAutoFlush" : {
          "title" : "Flush Each Event Immediately",
          "description" : "Performance may be improved by writing all buffered events before
flushing.",
          "propertyOrder" : 1600,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "bufferingEnabled" : {
          "title" : "Buffering Enabled",
          "description" : "Enables or disables buffering.",
          "propertyOrder" : 1500,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        }
      }
    },
    "csvSecurity" : {
      "type" : "object",
      "title" : "Tamper Evident Configuration",
      "propertyOrder" : 6,
      "properties" : {
        "securityEnabled" : {
          "title" : "Is Enabled",
          "description" : "Enables the CSV tamper evident feature.",
          "propertyOrder" : 1700,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "securityPassword" : {
          "title" : "Certificate Store Password",
          "description" : "Password for Java keystore.",
          "propertyOrder" : 1900,
          "required" : false,
          "type" : "string",
          "format" : "password",
          "exampleValue" : ""
        },
        "securitySignatureInterval" : {
          "title" : "Signature Interval",
          "description" : "Signature generation interval, in seconds.",
          "propertyOrder" : 2000,
          "required" : false,
          "type" : "string",
          "exampleValue" : ""
        },
        "securityFilename" : {
          "title" : "Certificate Store Location",
          "description" : "Path to Java keystore.",
```


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```
          "propertyOrder" : 1800,
          "required" : false,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    },
    "csvConfig" : {
      "type" : "object",
      "title" : "CSV Configuration",
      "propertyOrder" : 2,
      "properties" : {
        "location" : {
          "title" : "Log Directory",
          "description" : "Directory in which to store audit log CSV files.",
          "propertyOrder" : 500,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    }
  }
}
```

1.33.2. Global Operations

Resource path: `/global-config/services/audit/CSV`

Resource version: `1.0`

1.33.2.1. create

Usage:

```
am> create Csv --global --id id --body body
```

Parameters:

`--id`

The unique identifier for the resource.

`--body`

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "csvFileRetention" : {
      "type" : "object",
      "title" : "File Retention",
      "propertyOrder" : 4,
```


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```
     "properties" : {
       "retentionMinFreeSpaceRequired" : {
         "title" : "Minimum Free Space Required",
         "description" : "Minimum amount of disk space required, in bytes, on the system where audit
files are stored. A negative or zero value indicates this policy is disabled.",
         "propertyOrder" : 1400,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       },
       "retentionMaxDiskSpaceToUse" : {
         "title" : "Maximum Disk Space",
         "description" : "The maximum amount of disk space the audit files can occupy, in bytes. A
negative or zero value indicates this policy is disabled.",
         "propertyOrder" : 1300,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       },
       "retentionMaxNumberOfHistoryFiles" : {
         "title" : "Maximum Number of Historical Files",
         "description" : "Maximum number of backup audit files allowed. A value of <code>-1</code>
disables pruning of old history files.",
         "propertyOrder" : 1200,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       }
     }
   },
   "csvBuffering" : {
     "type" : "object",
     "title" : "Buffering",
     "propertyOrder" : 5,
     "properties" : {
       "bufferingEnabled" : {
         "title" : "Buffering Enabled",
         "description" : "Enables or disables buffering.",
         "propertyOrder" : 1500,
         "required" : true,
         "type" : "boolean",
         "exampleValue" : ""
       },
       "bufferingAutoFlush" : {
         "title" : "Flush Each Event Immediately",
         "description" : "Performance may be improved by writing all buffered events before
flushing.",
         "propertyOrder" : 1600,
         "required" : true,
         "type" : "boolean",
         "exampleValue" : ""
       }
     }
   },
   "csvFileRotation" : {
     "type" : "object",
     "title" : "File Rotation",
     "propertyOrder" : 3,
     "properties" : {
```


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```
       "rotationFilePrefix" : {
         "title" : "File Rotation Prefix",
         "description" : "Prefix to prepend to audit files when rotating audit files.",
         "propertyOrder" : 800,
         "required" : false,
         "type" : "string",
         "exampleValue" : ""
       },
       "rotationEnabled" : {
         "title" : "Rotation Enabled",
         "description" : "Enables and disables audit file rotation.",
         "propertyOrder" : 600,
         "required" : true,
         "type" : "boolean",
         "exampleValue" : ""
       },
       "rotationInterval" : {
         "title" : "Rotation Interval",
         "description" : "Interval to trigger audit file rotations, in seconds. A negative or zero
value disables this feature.",
         "propertyOrder" : 1000,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       },
       "rotationFileSuffix" : {
         "title" : "File Rotation Suffix",
         "description" : "Suffix to append to audit files when they are rotated. Suffix should be a
timestamp.",
         "propertyOrder" : 900,
         "required" : false,
         "type" : "string",
         "exampleValue" : ""
       },
       "rotationMaxFileSize" : {
         "title" : "Maximum File Size",
         "description" : "Maximum size, in bytes, which an audit file can grow to before rotation is
triggered. A negative or zero value indicates this policy is disabled.",
         "propertyOrder" : 700,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       },
       "rotationTimes" : {
         "title" : "Rotation Times",
         "description" : "Durations after midnight to trigger file rotation, in seconds.",
         "propertyOrder" : 1100,
         "required" : true,
         "items" : {
           "type" : "string"
         },
         "type" : "array",
         "exampleValue" : ""
       }
     }
   },
   "csvSecurity" : {
     "type" : "object",
     "title" : "Tamper Evident Configuration",
```


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```
      "propertyOrder" : 6,
      "properties" : {
        "securityPassword" : {
          "title" : "Certificate Store Password",
          "description" : "Password for Java keystore.",
          "propertyOrder" : 1900,
          "required" : false,
          "type" : "string",
          "format" : "password",
          "exampleValue" : ""
        },
        "securitySignatureInterval" : {
          "title" : "Signature Interval",
          "description" : "Signature generation interval, in seconds.",
          "propertyOrder" : 2000,
          "required" : false,
          "type" : "string",
          "exampleValue" : ""
        },
        "securityEnabled" : {
          "title" : "Is Enabled",
          "description" : "Enables the CSV tamper evident feature.",
          "propertyOrder" : 1700,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "securityFilename" : {
          "title" : "Certificate Store Location",
          "description" : "Path to Java keystore.",
          "propertyOrder" : 1800,
          "required" : false,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    },
    "commonHandlerPlugin" : {
      "type" : "object",
      "title" : "Audit Event Handler Factory",
      "propertyOrder" : 1,
      "properties" : {
        "handlerFactory" : {
          "title" : "Factory Class Name",
          "description" : "The fully qualified class name of the factory
responsible for creating the Audit Event Handler. The class must implement
<code>org.forgerock.openam.audit.AuditEventHandlerFactory</code>.",
          "propertyOrder" : 2100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    },
    "commonHandler" : {
      "type" : "object",
      "title" : "General Handler Configuration",
      "propertyOrder" : 0,
      "properties" : {
```


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```
        "enabled" : {
          "title" : "Enabled",
          "description" : "Enables or disables an audit event handler.",
          "propertyOrder" : 300,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "topics" : {
          "title" : "Topics",
          "description" : "List of topics handled by an audit event handler.",
          "propertyOrder" : 400,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        }
      }
    },
    "csvConfig" : {
      "type" : "object",
      "title" : "CSV Configuration",
      "propertyOrder" : 2,
      "properties" : {
        "location" : {
          "title" : "Log Directory",
          "description" : "Directory in which to store audit log CSV files.",
          "propertyOrder" : 500,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    }
  }
}
```

1.33.2.2. delete

Usage:

```
am> delete Csv --global --id id
```

Parameters:

--id

The unique identifier for the resource.

1.33.2.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

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Usage:

```
am> action Csv --global --actionName getAllTypes
```

1.33.2.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action Csv --global --actionName getCreatableTypes
```

1.33.2.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action Csv --global --actionName nextdescendents
```

1.33.2.6. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

```
am> query Csv --global --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.33.2.7. read

Usage:

```
am> read Csv --global --id id
```

Parameters:

--id

The unique identifier for the resource.

1.33.2.8. update

Usage:

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```
am> update Csv --global --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "csvFileRetention" : {
      "type" : "object",
      "title" : "File Retention",
      "propertyOrder" : 4,
      "properties" : {
        "retentionMinFreeSpaceRequired" : {
          "title" : "Minimum Free Space Required",
          "description" : "Minimum amount of disk space required, in bytes, on the system where audit
 files are stored. A negative or zero value indicates this policy is disabled.",
          "propertyOrder" : 1400,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "retentionMaxDiskSpaceToUse" : {
          "title" : "Maximum Disk Space",
          "description" : "The maximum amount of disk space the audit files can occupy, in bytes. A
 negative or zero value indicates this policy is disabled.",
          "propertyOrder" : 1300,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "retentionMaxNumberOfHistoryFiles" : {
          "title" : "Maximum Number of Historical Files",
          "description" : "Maximum number of backup audit files allowed. A value of <code>-1</code>
 disables pruning of old history files.",
          "propertyOrder" : 1200,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    },
    "csvBuffering" : {
      "type" : "object",
      "title" : "Buffering",
      "propertyOrder" : 5,
      "properties" : {
        "bufferingEnabled" : {
          "title" : "Buffering Enabled",
          "description" : "Enables or disables buffering.",
          "propertyOrder" : 1500,
```


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```
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "bufferingAutoFlush" : {
          "title" : "Flush Each Event Immediately",
          "description" : "Performance may be improved by writing all buffered events before
flushing.",
          "propertyOrder" : 1600,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        }
      }
    },
    "csvFileRotation" : {
      "type" : "object",
      "title" : "File Rotation",
      "propertyOrder" : 3,
      "properties" : {
        "rotationFilePrefix" : {
          "title" : "File Rotation Prefix",
          "description" : "Prefix to prepend to audit files when rotating audit files.",
          "propertyOrder" : 800,
          "required" : false,
          "type" : "string",
          "exampleValue" : ""
        },
        "rotationEnabled" : {
          "title" : "Rotation Enabled",
          "description" : "Enables and disables audit file rotation.",
          "propertyOrder" : 600,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "rotationInterval" : {
          "title" : "Rotation Interval",
          "description" : "Interval to trigger audit file rotations, in seconds. A negative or zero
value disables this feature.",
          "propertyOrder" : 1000,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "rotationFileSuffix" : {
          "title" : "File Rotation Suffix",
          "description" : "Suffix to append to audit files when they are rotated. Suffix should be a
timestamp.",
          "propertyOrder" : 900,
          "required" : false,
          "type" : "string",
          "exampleValue" : ""
        },
        "rotationMaxFileSize" : {
          "title" : "Maximum File Size",
          "description" : "Maximum size, in bytes, which an audit file can grow to before rotation is
triggered. A negative or zero value indicates this policy is disabled.",
          "propertyOrder" : 700,
```


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```
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "rotationTimes" : {
          "title" : "Rotation Times",
          "description" : "Durations after midnight to trigger file rotation, in seconds.",
          "propertyOrder" : 1100,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        }
      }
    },
    "csvSecurity" : {
      "type" : "object",
      "title" : "Tamper Evident Configuration",
      "propertyOrder" : 6,
      "properties" : {
        "securityPassword" : {
          "title" : "Certificate Store Password",
          "description" : "Password for Java keystore.",
          "propertyOrder" : 1900,
          "required" : false,
          "type" : "string",
          "format" : "password",
          "exampleValue" : ""
        },
        "securitySignatureInterval" : {
          "title" : "Signature Interval",
          "description" : "Signature generation interval, in seconds.",
          "propertyOrder" : 2000,
          "required" : false,
          "type" : "string",
          "exampleValue" : ""
        },
        "securityEnabled" : {
          "title" : "Is Enabled",
          "description" : "Enables the CSV tamper evident feature.",
          "propertyOrder" : 1700,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "securityFilename" : {
          "title" : "Certificate Store Location",
          "description" : "Path to Java keystore.",
          "propertyOrder" : 1800,
          "required" : false,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    },
    "commonHandlerPlugin" : {
      "type" : "object",
```


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```
      "title" : "Audit Event Handler Factory",
      "propertyOrder" : 1,
      "properties" : {
        "handlerFactory" : {
          "title" : "Factory Class Name",
          "description" : "The fully qualified class name of the factory
 responsible for creating the Audit Event Handler. The class must implement
 <code>org.forgerock.openam.audit.AuditEventHandlerFactory</code>.",
          "propertyOrder" : 2100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    },
    "commonHandler" : {
      "type" : "object",
      "title" : "General Handler Configuration",
      "propertyOrder" : 0,
      "properties" : {
        "enabled" : {
          "title" : "Enabled",
          "description" : "Enables or disables an audit event handler.",
          "propertyOrder" : 300,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "topics" : {
          "title" : "Topics",
          "description" : "List of topics handled by an audit event handler.",
          "propertyOrder" : 400,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        }
      }
    },
    "csvConfig" : {
      "type" : "object",
      "title" : "CSV Configuration",
      "propertyOrder" : 2,
      "properties" : {
        "location" : {
          "title" : "Log Directory",
          "description" : "Directory in which to store audit log CSV files.",
          "propertyOrder" : 500,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    }
  }
}
```


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1.34. CtsDataStoreProperties

1.34.1. Global Operations

An object of property key-value pairs

Resource path: `/global-config/servers/{serverName}/properties/cts`

Resource version: `1.0`

1.34.1.1. read

Usage:

```
am> read CtsDataStoreProperties --global --serverName serverName
```

Parameters:

`--serverName`

An object of property key-value pairs

1.34.1.2. update

Usage:

```
am> update CtsDataStoreProperties --global --serverName serverName --body body
```

Parameters:

`--serverName`

An object of property key-value pairs

`--body`

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "amconfig.org.forgerock.services.cts.store.common.section" : {
      "title" : "CTS Token Store",
      "type" : "object",
      "propertyOrder" : 0,
      "properties" : {
        "org.forgerock.services.cts.store.location" : {
          "title" : "Store Mode",
          "type" : "object",
          "propertyOrder" : 0,
          "description" : "",
```


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```
        "properties" : {
          "value" : {
            "enum" : [ "default", "external" ],
            "options" : {
              "enum_titles" : [ "Default Token Store", "External Token Store" ]
            },
            "type" : "string",
            "required" : false
          },
          "inherited" : {
            "type" : "boolean",
            "required" : true
          }
        }
      },
      "org.forgerock.services.cts.store.root.suffix" : {
        "title" : "Root Suffix",
        "type" : "object",
        "propertyOrder" : 1,
        "description" : "",
        "properties" : {
          "value" : {
            "type" : "string",
            "required" : false
          },
          "inherited" : {
            "type" : "boolean",
            "required" : true
          }
        }
      },
      "org.forgerock.services.cts.store.max.connections" : {
        "title" : "Max Connections",
        "type" : "object",
        "propertyOrder" : 2,
        "description" : "",
        "properties" : {
          "value" : {
            "type" : "string",
            "required" : false
          },
          "inherited" : {
            "type" : "boolean",
            "required" : true
          }
        }
      }
    }
  },
  "amconfig.org.forgerock.services.cts.store.external.section" : {
    "title" : "External Store Configuration",
    "type" : "object",
    "propertyOrder" : 1,
    "properties" : {
      "org.forgerock.services.cts.store.ssl.enabled" : {
        "title" : "SSL/TLS Enabled",
        "type" : "object",
        "propertyOrder" : 0,
        "description" : "",
```


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```
          "properties" : {
            "value" : {
              "type" : "boolean",
              "required" : false
            },
            "inherited" : {
              "type" : "boolean",
              "required" : true
            }
          }
        },
        "org.forgerock.services.cts.store.directory.name" : {
          "title" : "Connection String(s)",
          "type" : "object",
          "propertyOrder" : 1,
          "description" : "An ordered list of connection strings for LDAP directories. Each connection
 string is composed as follows: <code>HOST:PORT[|SERVERID[|SITEID]]</code>, where server and site
 IDs are optional parameters that will prioritize that connection to use from the specified nodes.
 Multiple connection strings should be comma-separated, e.g. <code>host1:389,host2:50389|server1|
site1,host3:50389</code>.",
          "properties" : {
            "value" : {
              "type" : "string",
              "required" : false
            },
            "inherited" : {
              "type" : "boolean",
              "required" : true
            }
          }
        },
        "org.forgerock.services.cts.store.loginid" : {
          "title" : "Login Id",
          "type" : "object",
          "propertyOrder" : 2,
          "description" : "",
          "properties" : {
            "value" : {
              "type" : "string",
              "required" : false
            },
            "inherited" : {
              "type" : "boolean",
              "required" : true
            }
          }
        },
        "org.forgerock.services.cts.store.password" : {
          "title" : "Password",
          "type" : "object",
          "propertyOrder" : 3,
          "description" : "",
          "properties" : {
            "value" : {
              "type" : "string",
              "required" : false,
              "format" : "password"
            },
            "inherited" : {
```


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```
              "type" : "boolean",
              "required" : true
            }
          }
        },
        "org.forgerock.services.cts.store.heartbeat" : {
          "title" : "Heartbeat",
          "type" : "object",
          "propertyOrder" : 4,
          "description" : "",
          "properties" : {
            "value" : {
              "type" : "integer",
              "required" : false
            },
            "inherited" : {
              "type" : "boolean",
              "required" : true
            }
          }
        },
        "org.forgerock.services.cts.store.affinity.enabled" : {
          "title" : "Affinity Enabled",
          "type" : "object",
          "propertyOrder" : 5,
          "description" : "Enables affinity based request load balancing when accessing the CTS
 servers. It is imperative that the connection string setting is set to the same value for all OpenAM
 servers in the deployment when this feature is enabled.",
          "properties" : {
            "value" : {
              "type" : "boolean",
              "required" : false
            },
            "inherited" : {
              "type" : "boolean",
              "required" : true
            }
          }
        }
      }
    }
  }
}
```

1.35. Dashboard

1.35.1. Realm Operations

Resource path: `/realm-config/services/dashboard`

Resource version: `1.0`

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1.35.1.1. create

Usage:

```
am> create Dashboard --realm Realm --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "assignedDashboard" : {
      "title" : "Available Dashboard Apps",
      "description" : "List of application dashboard names available by default for realms with the
 Dashboard service configured.",
      "propertyOrder" : 700,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    }
  }
}
```

1.35.1.2. delete

Usage:

```
am> delete Dashboard --realm Realm
```

1.35.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action Dashboard --realm Realm --actionName getAllTypes
```

1.35.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

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```
am> action Dashboard --realm Realm --actionName getCreatableTypes
```

1.35.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action Dashboard --realm Realm --actionName nextdescendents
```

1.35.1.6. read

Usage:

```
am> read Dashboard --realm Realm
```

1.35.1.7. update

Usage:

```
am> update Dashboard --realm Realm --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "assignedDashboard" : {
      "title" : "Available Dashboard Apps",
      "description" : "List of application dashboard names available by default for realms with the
 Dashboard service configured.",
      "propertyOrder" : 700,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    }
  }
}
```

1.35.2. Global Operations

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Resource path: `/global-config/services/dashboard`

Resource version: `1.0`

1.35.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action Dashboard --global --actionName getAllTypes
```

1.35.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action Dashboard --global --actionName getCreatableTypes
```

1.35.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action Dashboard --global --actionName nextdescendents
```

1.35.2.4. read

Usage:

```
am> read Dashboard --global
```

1.35.2.5. update

Usage:

```
am> update Dashboard --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

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```
{
  "type" : "object",
  "properties" : {
    "defaults" : {
      "properties" : {
        "assignedDashboard" : {
          "title" : "Available Dashboard Apps",
          "description" : "List of application dashboard names available by default for realms with
 the Dashboard service configured.",
          "propertyOrder" : 700,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        }
      },
      "type" : "object",
      "title" : "Realm Defaults"
    }
  }
}
```

1.36. DashboardInstance

1.36.1. Global Operations

Resource path: `/global-config/services/dashboard/instances`

Resource version: `1.0`

1.36.1.1. create

Usage:

```
am> create DashboardInstance --global --id id --body body
```

Parameters:

`--id`

The unique identifier for the resource.

`--body`

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
```


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```
  "properties" : {
    "displayName" : {
      "title" : "Dashboard Display Name",
      "description" : "The application name that displays on the dashboard client.",
      "propertyOrder" : 300,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "icon" : {
      "title" : "Dashboard Icon",
      "description" : "The icon name that will be displayed on the dashboard client identifying the
 application.",
      "propertyOrder" : 400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "icfIdentifier" : {
      "title" : "ICF Identifier",
      "description" : "",
      "propertyOrder" : 600,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "name" : {
      "title" : "Dashboard Name",
      "description" : "The application name as it will appear to the administrator for configuring the
 dashboard.",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "className" : {
      "title" : "Dashboard Class Name",
      "description" : "Identifies how to access the application, for example
 <code>SAML2ApplicationClass</code> for a SAML v2.0 application.",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "login" : {
      "title" : "Dashboard Login",
      "description" : "The URL that takes the user to the application.",
      "propertyOrder" : 500,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```

1.36.1.2. delete

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Usage:

```
am> delete DashboardInstance --global --id id
```

Parameters:

--id

The unique identifier for the resource.

1.36.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action DashboardInstance --global --actionName getAllTypes
```

1.36.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action DashboardInstance --global --actionName getCreatableTypes
```

1.36.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action DashboardInstance --global --actionName nextdescendents
```

1.36.1.6. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

```
am> query DashboardInstance --global --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.36.1.7. read

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Usage:

```
am> read DashboardInstance --global --id id
```

Parameters:

--id

The unique identifier for the resource.

1.36.1.8. update

Usage:

```
am> update DashboardInstance --global --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "displayName" : {
      "title" : "Dashboard Display Name",
      "description" : "The application name that displays on the dashboard client.",
      "propertyOrder" : 300,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "icon" : {
      "title" : "Dashboard Icon",
      "description" : "The icon name that will be displayed on the dashboard client identifying the
 application.",
      "propertyOrder" : 400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "icfIdentifier" : {
      "title" : "ICF Identifier",
      "description" : "",
      "propertyOrder" : 600,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "name" : {
      "title" : "Dashboard Name",
```


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```
      "description" : "The application name as it will appear to the administrator for configuring the
 dashboard.",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "className" : {
      "title" : "Dashboard Class Name",
      "description" : "Identifies how to access the application, for example
 <code>SAML2ApplicationClass</code> for a SAML v2.0 application.",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "login" : {
      "title" : "Dashboard Login",
      "description" : "The URL that takes the user to the application.",
      "propertyOrder" : 500,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```

1.37. Dashboards

1.37.1. Realm Operations

The dashboard service is responsible for returning information from the Dashboard. The only supported operation is read.

Resource path: `/dashboard`

Resource version: `1.0`

1.37.1.1. read

Read dashboard information

Usage:

```
am> read Dashboards --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

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1.38. DataStoreDecision

1.38.1. Realm Operations

Resource path: `/realm-config/authentication/authenticationtrees/nodes/DataStoreDecisionNode`

Resource version: `1.0`

1.38.1.1. create

Usage:

```
am> create DataStoreDecision --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object"
}
```

1.38.1.2. delete

Usage:

```
am> delete DataStoreDecision --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.38.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action DataStoreDecision --realm Realm --actionName getAllTypes
```


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1.38.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action DataStoreDecision --realm Realm --actionName getCreatableTypes
```

1.38.1.5. listOutcomes

List the available outcomes for the node type.

Usage:

```
am> action DataStoreDecision --realm Realm --body body --actionName listOutcomes
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "title" : "Some configuration of the node. This does not need to be complete against the
 configuration schema."
}
```

1.38.1.6. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action DataStoreDecision --realm Realm --actionName nextdescendents
```

1.38.1.7. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

```
am> query DataStoreDecision --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.38.1.8. read

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Usage:

```
am> read DataStoreDecision --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.38.1.9. update

Usage:

```
am> update DataStoreDecision --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object"
}
```

1.38.2. Global Operations

Resource path: `/global-config/authentication/authenticationtrees/nodes/DataStoreDecisionNode`

Resource version: `1.0`

1.38.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action DataStoreDecision --global --actionName getAllTypes
```

1.38.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action DataStoreDecision --global --actionName getCreatableTypes
```


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1.38.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action DataStoreDecision --global --actionName nextdescendents
```

1.38.2.4. read

Usage:

```
am> read DataStoreDecision --global
```

1.38.2.5. update

Usage:

```
am> update DataStoreDecision --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object"
}
```

1.39. DataStoreModule

1.39.1. Realm Operations

Resource path: `/realm-config/authentication/modules/datastore`

Resource version: `1.0`

1.39.1.1. create

Usage:

```
am> create DataStoreModule --realm Realm --id id --body body
```

Parameters:

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--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "authenticationLevel" : {
      "title" : "Authentication Level",
      "description" : "The authentication level associated with this module.<br><br>Each
 authentication module has an authentication level that can be used to indicate the level of security
 associated with the module; 0 is the lowest (and the default).",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    }
  }
}
```

1.39.1.2. delete

Usage:

```
am> delete DataStoreModule --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.39.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action DataStoreModule --realm Realm --actionName getAllTypes
```

1.39.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action DataStoreModule --realm Realm --actionName getCreatableTypes
```


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1.39.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action DataStoreModule --realm Realm --actionName nextdescendents
```

1.39.1.6. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

```
am> query DataStoreModule --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.39.1.7. read

Usage:

```
am> read DataStoreModule --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.39.1.8. update

Usage:

```
am> update DataStoreModule --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

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```
{
  "type" : "object",
  "properties" : {
    "authenticationLevel" : {
      "title" : "Authentication Level",
      "description" : "The authentication level associated with this module.<br><br>Each
 authentication module has an authentication level that can be used to indicate the level of security
 associated with the module; 0 is the lowest (and the default).",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    }
  }
}
```

1.39.2. Global Operations

Resource path: `/global-config/authentication/modules/datastore`

Resource version: `1.0`

1.39.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action DataStoreModule --global --actionName getAllTypes
```

1.39.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action DataStoreModule --global --actionName getCreatableTypes
```

1.39.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action DataStoreModule --global --actionName nextdescendents
```

1.39.2.4. read

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Usage:

```
am> read DataStoreModule --global
```

1.39.2.5. update

Usage:

```
am> update DataStoreModule --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "defaults" : {
      "properties" : {
        "authenticationLevel" : {
          "title" : "Authentication Level",
          "description" : "The authentication level associated with this module.<br><br>Each
 authentication module has an authentication level that can be used to indicate the level of security
 associated with the module; 0 is the lowest (and the default).",
          "propertyOrder" : 100,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        }
      },
      "type" : "object",
      "title" : "Realm Defaults"
    }
  }
}
```

1.40. DatabaseRepositoryEarlyAccess

1.40.1. Realm Operations

Resource path: `/realm-config/services/id-repositories/Database`

Resource version: `1.0`

1.40.1.1. create

Usage:

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```
am> create DatabaseRepositoryEarlyAccess --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "sun-opensso-database-UserAttrs" : {
      "title" : "List of User Attributes Names in Database",
      "description" : "",
      "propertyOrder" : 8000,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-opensso-database-config-max-result" : {
      "title" : "Maximum Results Returned from Search",
      "description" : "Value to determine the maximum number of search results to fetch",
      "propertyOrder" : 8600,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "sun-opensso-database-DataSourceJndiName" : {
      "title" : "Database DataSource Name",
      "description" : "Name specified when configuring a DataSource in the application server for
 connections",
      "propertyOrder" : 7400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-opensso-database-JDBCDbpassword" : {
      "title" : "Password for Connecting to Database",
      "description" : "Password used as parameter by JDBC driver",
      "propertyOrder" : 7600,
      "required" : true,
      "type" : "string",
      "format" : "password",
      "exampleValue" : ""
    },
    "sun-opensso-database-UserIDAttr" : {
      "title" : "User ID Attribute Name",
      "description" : "Name of attribute column name in DB table for user id",
      "propertyOrder" : 8200,
      "required" : true,
      "type" : "string",
```


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```
      "exampleValue" : ""
    },
    "sun-opensso-database-UserTableName" : {
      "title" : "Database User Table Name",
      "description" : "",
      "propertyOrder" : 7900,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-opensso-database-JDBCDriver" : {
      "title" : "JDBC Driver Class Name",
      "description" : "Class name of JDBC driver to use to get connections. URL, JDBC username and
password paramters also needed",
      "propertyOrder" : 7500,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-opensso-database-sunIdRepoSupportedOperations" : {
      "title" : "Database Plug-in Supported Types and Operations",
      "description" : "",
      "propertyOrder" : 7100,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sunIdRepoClass" : {
      "title" : "Database Repository Plugin Class Name",
      "description" : "",
      "propertyOrder" : 7000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-opensso-database-JDBCDbuser" : {
      "title" : "Connect This User to Database",
      "description" : "Connection user name used as parameter by JDBC driver",
      "propertyOrder" : 7800,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-opensso-database-JDBCUrl" : {
      "title" : "JDBC Driver URL",
      "description" : "URL used as parameter by JDBC driver",
      "propertyOrder" : 7700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-opensso-database-UserPasswordAttr" : {
      "title" : "User Password Attribute Name",
      "description" : "Name of attribute column name in DB table for user password",
      "propertyOrder" : 8100,
      "required" : true,
```


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```
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-opensso-database-MembershipIDAttr" : {
      "title" : "Membership ID Attribute Name",
      "description" : "Name of attribute column name in DB membership table to uniquely identify a
group",
      "propertyOrder" : 8900,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-opensso-database-config-users-search-attribute" : {
      "title" : "Users Search Attribute in Database",
      "description" : "Name of attribute column name in DB table for users LIKE search queries",
      "propertyOrder" : 8700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-opensso-database-dao-class-name" : {
      "title" : "Database Data Access Object Plugin Class Name",
      "description" : "",
      "propertyOrder" : 7200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-opensso-database-MembershipTableName" : {
      "title" : "Database Membership table name",
      "description" : "",
      "propertyOrder" : 8800,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-opensso-database-UserStatusAttr" : {
      "title" : "Attribute Name of User Status",
      "description" : "Name of attribute column name in DB table to determine if user is active or
inactive",
      "propertyOrder" : 8300,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-opensso-database-inactiveValue" : {
      "title" : "User Status Inactive Value",
      "description" : "Value stored in the db table's user status column to represent an Inactive
user",
      "propertyOrder" : 8500,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-opensso-database-dao-JDBCConnectionType" : {
      "title" : "Connection Type",
      "description" : "",
      "propertyOrder" : 7300,
      "required" : true,
```


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```
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-opensso-database-membership-search-attribute" : {
      "title" : "Membership Search Attribute in Database",
      "description" : "Name of attribute column name in DB table for membership LIKE search queries",
      "propertyOrder" : 9000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sunIdRepoAttributeMapping" : {
      "title" : "Attribute Name Mapping",
      "description" : "",
      "propertyOrder" : 1800,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-opensso-database-activeValue" : {
      "title" : "User Status Active Value",
      "description" : "Value stored in the db table's user status column to represent an Active user",
      "propertyOrder" : 8400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```

1.40.1.2. delete

Usage:

```
am> delete DatabaseRepositoryEarlyAccess --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.40.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action DatabaseRepositoryEarlyAccess --realm Realm --actionName getAllTypes
```


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1.40.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action DatabaseRepositoryEarlyAccess --realm Realm --actionName getCreatableTypes
```

1.40.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action DatabaseRepositoryEarlyAccess --realm Realm --actionName nextdescendents
```

1.40.1.6. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

```
am> query DatabaseRepositoryEarlyAccess --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.40.1.7. read

Usage:

```
am> read DatabaseRepositoryEarlyAccess --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.40.1.8. update

Usage:

```
am> update DatabaseRepositoryEarlyAccess --realm Realm --id id --body body
```

Parameters:

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--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "sun-opensso-database-UserAttrs" : {
      "title" : "List of User Attributes Names in Database",
      "description" : "",
      "propertyOrder" : 8000,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-opensso-database-config-max-result" : {
      "title" : "Maximum Results Returned from Search",
      "description" : "Value to determine the maximum number of search results to fetch",
      "propertyOrder" : 8600,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "sun-opensso-database-DataSourceJndiName" : {
      "title" : "Database DataSource Name",
      "description" : "Name specified when configuring a DataSource in the application server for
 connections",
      "propertyOrder" : 7400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-opensso-database-JDBCDbpassword" : {
      "title" : "Password for Connecting to Database",
      "description" : "Password used as parameter by JDBC driver",
      "propertyOrder" : 7600,
      "required" : true,
      "type" : "string",
      "format" : "password",
      "exampleValue" : ""
    },
    "sun-opensso-database-UserIDAttr" : {
      "title" : "User ID Attribute Name",
      "description" : "Name of attribute column name in DB table for user id",
      "propertyOrder" : 8200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-opensso-database-UserTableName" : {
      "title" : "Database User Table Name",
      "description" : "",
```


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```
      "propertyOrder" : 7900,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-opensso-database-JDBCDriver" : {
      "title" : "JDBC Driver Class Name",
      "description" : "Class name of JDBC driver to use to get connections. URL, JDBC username and
password paramters also needed",
      "propertyOrder" : 7500,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-opensso-database-sunIdRepoSupportedOperations" : {
      "title" : "Database Plug-in Supported Types and Operations",
      "description" : "",
      "propertyOrder" : 7100,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sunIdRepoClass" : {
      "title" : "Database Repository Plugin Class Name",
      "description" : "",
      "propertyOrder" : 7000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-opensso-database-JDBCDbuser" : {
      "title" : "Connect This User to Database",
      "description" : "Connection user name used as parameter by JDBC driver",
      "propertyOrder" : 7800,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-opensso-database-JDBCUrl" : {
      "title" : "JDBC Driver URL",
      "description" : "URL used as parameter by JDBC driver",
      "propertyOrder" : 7700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-opensso-database-UserPasswordAttr" : {
      "title" : "User Password Attribute Name",
      "description" : "Name of attribute column name in DB table for user password",
      "propertyOrder" : 8100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-opensso-database-MembershipIDAttr" : {
      "title" : "Membership ID Attribute Name",
```


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```
      "description" : "Name of attribute column name in DB membership table to uniquely identify a
group",
      "propertyOrder" : 8900,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-opensso-database-config-users-search-attribute" : {
      "title" : "Users Search Attribute in Database",
      "description" : "Name of attribute column name in DB table for users LIKE search queries",
      "propertyOrder" : 8700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-opensso-database-dao-class-name" : {
      "title" : "Database Data Access Object Plugin Class Name",
      "description" : "",
      "propertyOrder" : 7200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-opensso-database-MembershipTableName" : {
      "title" : "Database Membership table name",
      "description" : "",
      "propertyOrder" : 8800,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-opensso-database-UserStatusAttr" : {
      "title" : "Attribute Name of User Status",
      "description" : "Name of attribute column name in DB table to determine if user is active or
inactive",
      "propertyOrder" : 8300,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-opensso-database-inactiveValue" : {
      "title" : "User Status Inactive Value",
      "description" : "Value stored in the db table's user status column to represent an Inactive
user",
      "propertyOrder" : 8500,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-opensso-database-dao-JDBCConnectionType" : {
      "title" : "Connection Type",
      "description" : "",
      "propertyOrder" : 7300,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-opensso-database-membership-search-attribute" : {
      "title" : "Membership Search Attribute in Database",
```


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```
      "description" : "Name of attribute column name in DB table for membership LIKE search queries",
      "propertyOrder" : 9000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sunIdRepoAttributeMapping" : {
      "title" : "Attribute Name Mapping",
      "description" : "",
      "propertyOrder" : 1800,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-opensso-database-activeValue" : {
      "title" : "User Status Active Value",
      "description" : "Value stored in the db table's user status column to represent an Active user",
      "propertyOrder" : 8400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```


1.41. DecisionCombiners

1.41.1. Realm Operations

Service for querying and reading decision combiners information. Decision combiners describe how to resolve policy decisions when multiple policies apply

Resource path: `/decisioncombiners`

Resource version: `1.0`

1.41.1.1. query

Lists all decision combiners

Usage:

```
am> query DecisionCombiners --realm Realm --filter filter
```

Parameters:

`--filter`

A CREST formatted query filter, where "true" will query all. Fields that can be queried: [title]

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1.41.1.2. read

Reads an individual decision combiner specified by its name

Usage:

```
am> read DecisionCombiners --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.42. DefaultAdvancedProperties

1.42.1. Global Operations

An object of property key-value pairs

Resource path: `/global-config/servers/server-default/properties/advanced`

Resource version: `1.0`

1.42.1.1. read

Usage:

```
am> read DefaultAdvancedProperties --global
```

1.42.1.2. update

Usage:

```
am> update DefaultAdvancedProperties --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

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```
{
  "patternProperties" : {
    ".+" : {
      "type" : "string",
      "title" : "Value",
      "description" : "Any string value"
    }
  },
  "$schema" : "http://json-schema.org/draft-04/schema#",
  "description" : "An object of property key-value pairs",
  "type" : "object",
  "title" : "Advanced Properties"
}
```

1.43. DefaultCtsDataStoreProperties

1.43.1. Global Operations

An object of property key-value pairs

Resource path: `/global-config/servers/server-default/properties/cts`

Resource version: `1.0`

1.43.1.1. read

Usage:

```
am> read DefaultCtsDataStoreProperties --global
```

1.43.1.2. update

Usage:

```
am> update DefaultCtsDataStoreProperties --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "amconfig.org.forgerock.services.cts.store.common.section" : {
      "title" : "CTS Token Store",
      "type" : "object",
      "propertyOrder" : 0,
```


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```
      "properties" : {
        "org.forgerock.services.cts.store.location" : {
          "enum" : [ "default", "external" ],
          "options" : {
            "enum_titles" : [ "Default Token Store", "External Token Store" ]
          },
          "type" : "string",
          "title" : "Store Mode",
          "propertyOrder" : 0,
          "required" : true,
          "description" : ""
        },
        "org.forgerock.services.cts.store.root.suffix" : {
          "type" : "string",
          "title" : "Root Suffix",
          "propertyOrder" : 1,
          "required" : true,
          "description" : ""
        },
        "org.forgerock.services.cts.store.max.connections" : {
          "type" : "string",
          "title" : "Max Connections",
          "propertyOrder" : 2,
          "required" : true,
          "description" : ""
        }
      }
    },
    "amconfig.org.forgerock.services.cts.store.external.section" : {
      "title" : "External Store Configuration",
      "type" : "object",
      "propertyOrder" : 1,
      "properties" : {
        "org.forgerock.services.cts.store.ssl.enabled" : {
          "type" : "boolean",
          "title" : "SSL/TLS Enabled",
          "propertyOrder" : 0,
          "required" : true,
          "description" : ""
        },
        "org.forgerock.services.cts.store.directory.name" : {
          "type" : "string",
          "title" : "Connection String(s)",
          "propertyOrder" : 1,
          "required" : true,
          "description" : "An ordered list of connection strings for LDAP directories. Each connection
 string is composed as follows: <code>HOST:PORT[|SERVERID[|SITEID]]</code>, where server and site
 IDs are optional parameters that will prioritize that connection to use from the specified nodes.
 Multiple connection strings should be comma-separated, e.g. <code>host1:389,host2:50389|server1|
site1,host3:50389</code>."
        },
        "org.forgerock.services.cts.store.loginid" : {
          "type" : "string",
          "title" : "Login Id",
          "propertyOrder" : 2,
          "required" : true,
          "description" : ""
        },
        "org.forgerock.services.cts.store.password" : {
```


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```
          "type" : "string",
          "title" : "Password",
          "propertyOrder" : 3,
          "required" : true,
          "description" : "",
          "format" : "password"
        },
        "org.forgerock.services.cts.store.heartbeat" : {
          "type" : "integer",
          "title" : "Heartbeat",
          "propertyOrder" : 4,
          "required" : true,
          "description" : ""
        },
        "org.forgerock.services.cts.store.affinity.enabled" : {
          "type" : "boolean",
          "title" : "Affinity Enabled",
          "propertyOrder" : 5,
          "required" : true,
          "description" : "Enables affinity based request load balancing when accessing the CTS
 servers. It is imperative that the connection string setting is set to the same value for all OpenAM
 servers in the deployment when this feature is enabled."
        }
      }
    }
  }
}
```

1.44. DefaultDirectoryConfiguration

1.44.1. Global Operations

Connection details for directory server(s).

Resource path: `/global-config/servers/server-default/properties/directoryConfiguration`

Resource version: `1.0`

1.44.1.1. read

Usage:

```
am> read DefaultDirectoryConfiguration --global
```

1.44.1.2. update

Usage:

```
am> update DefaultDirectoryConfiguration --global --body body
```


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Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "directoryConfiguration" : {
      "type" : "object",
      "title" : "Directory Configuration",
      "propertyOrder" : 0,
      "properties" : {
        "minConnectionPool" : {
          "title" : "Minimum Connection Pool",
          "propertyOrder" : 0,
          "type" : "number"
        },
        "maxConnectionPool" : {
          "title" : "Maximum Connection Pool",
          "propertyOrder" : 1,
          "type" : "number"
        },
        "bindDn" : {
          "title" : "Bind DN",
          "propertyOrder" : 2,
          "type" : "string"
        },
        "bindPassword" : {
          "title" : "Bind Password",
          "propertyOrder" : 3,
          "type" : "string",
          "format" : "password"
        }
      }
    },
    "directoryServers" : {
      "type" : "array",
      "title" : "Server",
      "propertyOrder" : 1,
      "items" : {
        "type" : "object",
        "required" : [ "serverName", "hostName", "portNumber", "connectionType" ],
        "properties" : {
          "serverName" : {
            "title" : "Name",
            "type" : "string",
            "propertyOrder" : 0
          },
          "hostName" : {
            "title" : "Host Name",
            "type" : "string",
            "propertyOrder" : 1
          },
          "portNumber" : {
            "title" : "Port Number",
            "type" : "string",
            "propertyOrder" : 2
```


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```
          },
          "connectionType" : {
            "type" : "string",
            "enum" : [ "SIMPLE", "SSL" ],
            "options" : {
              "enum_titles" : [ "SIMPLE", "SSL" ]
            },
            "title" : "Connection Type",
            "propertyOrder" : 3
          }
        }
      }
    }
  }
}
```

1.45. DefaultGeneralProperties

1.45.1. Global Operations

An object of property key-value pairs

Resource path: `/global-config/servers/server-default/properties/general`

Resource version: `1.0`

1.45.1.1. read

Usage:

```
am> read DefaultGeneralProperties --global
```

1.45.1.2. update

Usage:

```
am> update DefaultGeneralProperties --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "amconfig.header.installdir" : {
      "title" : "System",
      "type" : "object",
```


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```
     "propertyOrder" : 0,
     "properties" : {
       "com.iplanet.services.configpath" : {
         "type" : "string",
         "title" : "Base installation directory",
         "propertyOrder" : 0,
         "required" : true,
         "description" : "Base directory where product's data resides. (property name:
com.iplanet.services.configpath)"
       },
       "com.iplanet.am.locale" : {
         "type" : "string",
         "title" : "Default Locale",
         "propertyOrder" : 1,
         "required" : true,
         "description" : "Default locale for the product. (property name: com.iplanet.am.locale)"
       },
       "com.sun.identity.client.notification.url" : {
         "type" : "string",
         "title" : "Notification URL",
         "propertyOrder" : 2,
         "required" : true,
         "description" : "The location of notification service end point. It is usually the product's
deployment URI/notificationservice. (property name: com.sun.identity.client.notification.url)"
       },
       "com.iplanet.am.util.xml.validating" : {
         "enum" : [ "on", "off" ],
         "options" : {
           "enum_titles" : [ "On", "Off" ]
         },
         "type" : "string",
         "title" : "XML Validation",
         "propertyOrder" : 3,
         "required" : true,
         "description" : "Specifies if validation is required when parsing XML documents. (property
name: com.iplanet.am.util.xml.validating)"
       }
     }
   },
   "amconfig.header.debug" : {
     "title" : "Debugging",
     "type" : "object",
     "propertyOrder" : 1,
     "properties" : {
       "com.iplanet.services.debug.level" : {
         "enum" : [ "off", "error", "warning", "message" ],
         "options" : {
           "enum_titles" : [ "Off", "Error", "Warning", "Message" ]
         },
         "type" : "string",
         "title" : "Debug Level",
         "propertyOrder" : 0,
         "required" : true,
         "description" : "Debug level for all components in the product. (property name:
com.iplanet.services.debug.level)"
       },
       "com.sun.services.debug.mergeall" : {
         "enum" : [ "on", "off" ],
         "options" : {
```


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```
            "enum_titles" : [ "On", "Off" ]
          },
          "type" : "string",
          "title" : "Merge Debug Files",
          "propertyOrder" : 1,
          "required" : true,
          "description" : "On : Directs all debug data to a single file (debug.out); Off : creates
 separate per-component debug files (property name : com.sun.services.debug.mergeall)"
        },
        "com.iplanet.services.debug.directory" : {
          "type" : "string",
          "title" : "Debug Directory",
          "propertyOrder" : 2,
          "required" : true,
          "description" : "Directory where debug files reside. (property name:
 com.iplanet.services.debug.directory)"
        }
      }
    },
    "amconfig.header.mailserver" : {
      "title" : "Mail Server",
      "type" : "object",
      "propertyOrder" : 2,
      "properties" : {
        "com.iplanet.am.smtphost" : {
          "type" : "string",
          "title" : "Mail Server Host Name",
          "propertyOrder" : 0,
          "required" : true,
          "description" : "(property name: com.iplanet.am.smtphost)"
        },
        "com.iplanet.am.smtpport" : {
          "type" : "integer",
          "title" : "Mail Server Port Number",
          "propertyOrder" : 1,
          "required" : true,
          "description" : "(property name: com.iplanet.am.smtpport)"
        }
      }
    }
  }
}
```

1.46. DefaultSdkProperties

1.46.1. Global Operations

An object of property key-value pairs

Resource path: `/global-config/servers/server-default/properties/sdk`

Resource version: `1.0`

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1.46.1.1. read

Usage:

```
am> read DefaultSdkProperties --global
```

1.46.1.2. update

Usage:

```
am> update DefaultSdkProperties --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "amconfig.header.datastore" : {
      "title" : "Data Store",
      "type" : "object",
      "propertyOrder" : 0,
      "properties" : {
        "com.sun.identity.sm.enableDataStoreNotification" : {
          "type" : "boolean",
          "title" : "Enable Datastore Notification",
          "propertyOrder" : 0,
          "required" : true,
          "description" : "Specifies if backend datastore notification is enabled. If
 this value is set to 'false', then in-memory notification is enabled. (property name:
 com.sun.identity.sm.enableDataStoreNotification)"
        },
        "com.sun.identity.sm.ldap.enableProxy" : {
          "type" : "boolean",
          "title" : "Enable Directory Proxy",
          "propertyOrder" : 1,
          "required" : true,
          "description" : "This indicates to Service Management that the Directory Proxy must be used
 for read, write, and/or modify operations to the Directory Server. This flag also determines if ACIs
 or delegation privileges are to be used. (property name: com.sun.identity.sm.ldap.enableProxy)"
        },
        "com.sun.identity.sm.notification.threadpool.size" : {
          "type" : "integer",
          "title" : "Notification Pool Size",
          "propertyOrder" : 2,
          "required" : true,
          "description" : "Specifies the size of the sm notification thread pool (total number of
 threads). (property name: com.sun.identity.sm.notification.threadpool.size)"
        }
      }
    },
    "amconfig.header.eventservice" : {
      "title" : "Event Service",
```


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```
     "type" : "object",
     "propertyOrder" : 1,
     "properties" : {
       "com.iplanet.am.event.connection.num.retries" : {
         "type" : "integer",
         "title" : "Number of retries for Event Service connections",
         "propertyOrder" : 0,
         "required" : true,
         "description" : "Specifies the number of attempts made to successfully re-establish the
Event Service connections. (property name: com.iplanet.am.event.connection.num.retries)"
       },
       "com.iplanet.am.event.connection.delay.between.retries" : {
         "type" : "integer",
         "title" : "Delay between Event Service connection retries",
         "propertyOrder" : 1,
         "required" : true,
         "description" : "Specifies the delay in milliseconds between retries to re-establish the
Event Service connections. (property name: com.iplanet.am.event.connection.delay.between.retries)"
       },
       "com.iplanet.am.event.connection.ldap.error.codes.retries" : {
         "type" : "string",
         "title" : "Error codes for Event Service connection retries",
         "propertyOrder" : 2,
         "required" : true,
         "description" : "This secifies the LDAP exception error codes for which
retries to re-establish Event Service connections will trigger. (property name:
com.iplanet.am.event.connection.ldap.error.codes.retries)"
       },
       "com.sun.am.event.connection.disable.list" : {
         "type" : "string",
         "title" : "Disabled Event Service Connection",
         "propertyOrder" : 3,
         "required" : true,
         "description" : "Specifies which event connection (persistent search) to be disabled. There
are three valid values - aci, sm and um (case insensitive). Multiple values should be separated with
\",\". (property name: com.sun.am.event.connection.disable.list)"
       }
     }
   },
   "amconfig.header.ldapconnection" : {
     "title" : "LDAP Connection",
     "type" : "object",
     "propertyOrder" : 2,
     "properties" : {
       "com.iplanet.am.ldap.connection.num.retries" : {
         "type" : "integer",
         "title" : "Number of retries for LDAP Connection",
         "propertyOrder" : 0,
         "required" : true,
         "description" : "Specifies the number of attempts made to successfully re-establish LDAP
Connection. (property name: com.iplanet.am.ldap.connection.num.retries)"
       },
       "com.iplanet.am.ldap.connection.delay.between.retries" : {
         "type" : "integer",
         "title" : "Delay between LDAP connection retries",
         "propertyOrder" : 1,
         "required" : true,
         "description" : "Specifies the delay in milliseconds between retries to re-establish the
LDAP connections. (property name: com.iplanet.am.ldap.connection.delay.between.retries)"
```


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```
       },
       "com.iplanet.am.ldap.connection.ldap.error.codes.retries" : {
         "type" : "string",
         "title" : "Error codes for LDAP connection retries",
         "propertyOrder" : 2,
         "required" : true,
         "description" : "This secifies the LDAP exception error codes for
which retries to re-establish LDAP connections will trigger. (property name:
com.iplanet.am.ldap.connection.ldap.error.codes.retries)"
       }
     }
   },
   "amconfig.header.cachingreplica" : {
     "title" : "Caching and Replica",
     "type" : "object",
     "propertyOrder" : 3,
     "properties" : {
       "com.iplanet.am.sdk.cache.maxSize" : {
         "type" : "integer",
         "title" : "SDK Caching Max. Size",
         "propertyOrder" : 0,
         "required" : true,
         "description" : "Specifies the size of the cache when SDK caching is enabled. The size
should be an integer greater than 0, or default size (10000) will be used. Changing this value will
reset (clear) the contents of the cache. (property name: com.iplanet.am.sdk.cache.maxSize)"
       },
       "com.iplanet.am.replica.num.retries" : {
         "type" : "integer",
         "title" : "SDK Replica Retries",
         "propertyOrder" : 1,
         "required" : true,
         "description" : "Specifies the number of times to retry when an Entry Not Found error is
returned to the SDK. (property name: com.iplanet.am.replica.num.retries)"
       },
       "com.iplanet.am.replica.delay.between.retries" : {
         "type" : "integer",
         "title" : "Delay between SDK Replica Retries",
         "propertyOrder" : 2,
         "required" : true,
         "description" : "Specifies the delay time in milliseconds between the retries. (property
name: com.iplanet.am.replica.delay.between.retries)"
       }
     }
   },
   "amconfig.header.sdktimetoliveconfig" : {
     "title" : "Time To Live Configuration",
     "type" : "object",
     "propertyOrder" : 4,
     "properties" : {
       "com.iplanet.am.sdk.cache.entry.expire.enabled" : {
         "type" : "boolean",
         "title" : "Cache Entry Expiration Enabled",
         "propertyOrder" : 0,
         "required" : true,
         "description" : "If this property is set, the cache entries will expire
based on the time specified in User Entry Expiration Time property. (property name:
com.iplanet.am.sdk.cache.entry.expire.enabled)"
       },
       "com.iplanet.am.sdk.cache.entry.user.expire.time" : {
```


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```
          "type" : "integer",
          "title" : "User Entry Expiration Time",
          "propertyOrder" : 1,
          "required" : true,
          "description" : "This property specifies time in minutes for which the user entries remain
 valid in cache after their last modification. After this specified period of time elapses (after the
 last modification/read from the directory), the data for the entry that is cached will expire. At
 that instant new requests for data for these user entries will result in reading from the Directory.
 (property name: com.iplanet.am.sdk.cache.entry.user.expire.time)"
        },
        "com.iplanet.am.sdk.cache.entry.default.expire.time" : {
          "type" : "integer",
          "title" : "Default Entry Expiration Time",
          "propertyOrder" : 2,
          "required" : true,
          "description" : "This property specifies time in minutes for which the non-user entries
 remain valid in cache after their last modification. After this specified period of time elapses
 (after the last modification/read from the directory), the data for the entry that is cached will
 expire. At that instant new requests for data for these non-user entries will result in reading from
 the Directory. (property name: com.iplanet.am.sdk.cache.entry.default.expire.time)"
        }
      }
    }
  }
}
```

1.47. DefaultSecurityProperties

1.47.1. Global Operations

An object of property key-value pairs

Resource path: `/global-config/servers/server-default/properties/security`

Resource version: `1.0`

1.47.1.1. read

Usage:

```
am> read DefaultSecurityProperties --global
```

1.47.1.2. update

Usage:

```
am> update DefaultSecurityProperties --global --body body
```

Parameters:

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--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "amconfig.header.encryption" : {
      "title" : "Encryption",
      "type" : "object",
      "propertyOrder" : 0,
      "properties" : {
        "am.encryption.pwd" : {
          "type" : "string",
          "title" : "Password Encryption Key",
          "propertyOrder" : 0,
          "required" : true,
          "description" : "The encryption key value for decrypting passwords stored in the Service
 Management System configuration. (property name: am.encryption.pwd)"
        },
        "com.iplanet.security.encryptor" : {
          "type" : "string",
          "title" : "Encryption class",
          "propertyOrder" : 1,
          "required" : true,
          "description" : "The default encryption class. (property name:
 com.iplanet.security.encryptor)"
        },
        "com.iplanet.security.SecureRandomFactoryImpl" : {
          "type" : "string",
          "title" : "Secure Random Factory Class",
          "propertyOrder" : 2,
          "required" : true,
          "description" : "This property is used for specifying SecureRandomFactory class. Available
 values for this property are com.iplanet.am.util.JSSSecureRandomFactoryImpl that is using JSS
 and com.iplanet.am.util.SecureRandomFactoryImpl that is using pure Java only. (property name:
 com.iplanet.security.SecureRandomFactoryImpl)"
        }
      }
    },
    "amconfig.header.validation" : {
      "title" : "Validation",
      "type" : "object",
      "propertyOrder" : 1,
      "properties" : {
        "com.iplanet.services.comm.server.pllrequest.maxContentLength" : {
          "type" : "integer",
          "title" : "Platform Low Level Comm. Max. Content Length",
          "propertyOrder" : 0,
          "required" : true,
          "description" : "Maximum content-length for an HttpRequest. (property name:
 com.iplanet.services.comm.server.pllrequest.maxContentLength)"
        },
        "com.iplanet.am.clientIPCheckEnabled" : {
          "type" : "boolean",
          "title" : "Client IP Address Check",
          "propertyOrder" : 1,
          "required" : true,
```


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```
          "description" : "Specifies whether or not the IP address of the client is checked in all
single sign on token creations or validations. (property name: com.iplanet.am.clientIPCheckEnabled)"
        }
      }
    },
    "amconfig.header.cookie" : {
      "title" : "Cookie",
      "type" : "object",
      "propertyOrder" : 2,
      "properties" : {
        "com.iplanet.am.cookie.name" : {
          "type" : "string",
          "title" : "Cookie Name",
          "propertyOrder" : 0,
          "required" : true,
          "description" : "The cookie name used by Authentication Service to set the valid
session handler ID. This name is used to retrieve the valid session information. (property name:
com.iplanet.am.cookie.name)"
        },
        "com.iplanet.am.cookie.secure" : {
          "type" : "boolean",
          "title" : "Secure Cookie",
          "propertyOrder" : 1,
          "required" : true,
          "description" : "Specifies whether to set cookie in a secure mode in which the browser
will only return the cookie when a secure protocol such as HTTP(s) is used. (property name:
com.iplanet.am.cookie.secure)"
        },
        "com.iplanet.am.cookie.encode" : {
          "type" : "boolean",
          "title" : "Encode Cookie Value",
          "propertyOrder" : 2,
          "required" : true,
          "description" : "Specifies whether to URL encode the cookie value. (property name:
com.iplanet.am.cookie.encode)"
        }
      }
    },
    "amconfig.header.securitykey" : {
      "title" : "Key Store",
      "type" : "object",
      "propertyOrder" : 3,
      "properties" : {
        "com.sun.identity.saml.xmlsig.keystore" : {
          "type" : "string",
          "title" : "Keystore File",
          "propertyOrder" : 0,
          "required" : true,
          "description" : "Specifies the location of the keystore file. (property name:
com.sun.identity.saml.xmlsig.keystore)"
        },
        "com.sun.identity.saml.xmlsig.storetype" : {
          "type" : "string",
          "title" : "Keystore Type",
          "propertyOrder" : 1,
          "required" : true,
          "description" : "Specifies the keystore type. (property name:
com.sun.identity.saml.xmlsig.storetype)"
        },
```


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```
       "com.sun.identity.saml.xmlsig.storepass" : {
         "type" : "string",
         "title" : "Keystore Password File",
         "propertyOrder" : 2,
         "required" : true,
         "description" : "Specifies the location of the file that contains the password used to
access the keystore file. (property name: com.sun.identity.saml.xmlsig.storepass)"
       },
       "com.sun.identity.saml.xmlsig.keypass" : {
         "type" : "string",
         "title" : "Private Key Password File",
         "propertyOrder" : 3,
         "required" : true,
         "description" : "Specifies the location of the file that contains the
password used to protect the private key of a generated key pair. (property name:
com.sun.identity.saml.xmlsig.keypass)"
       },
       "com.sun.identity.saml.xmlsig.certalias" : {
         "type" : "string",
         "title" : "Certificate Alias",
         "propertyOrder" : 4,
         "required" : true,
         "description" : "(property name: com.sun.identity.saml.xmlsig.certalias)"
       }
     }
   },
   "amconfig.header.crlcache" : {
     "title" : "Certificate Revocation List Caching",
     "type" : "object",
     "propertyOrder" : 4,
     "properties" : {
       "com.sun.identity.crl.cache.directory.host" : {
         "type" : "string",
         "title" : "LDAP server host name",
         "propertyOrder" : 0,
         "required" : true,
         "description" : ""
       },
       "com.sun.identity.crl.cache.directory.port" : {
         "type" : "integer",
         "title" : "LDAP server port number",
         "propertyOrder" : 1,
         "required" : true,
         "description" : ""
       },
       "com.sun.identity.crl.cache.directory.ssl" : {
         "type" : "boolean",
         "title" : "SSL/TLS Enabled",
         "propertyOrder" : 2,
         "required" : true,
         "description" : ""
       },
       "com.sun.identity.crl.cache.directory.user" : {
         "type" : "string",
         "title" : "LDAP server bind user name",
         "propertyOrder" : 3,
         "required" : true,
         "description" : ""
       },
```


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```
        "com.sun.identity.crl.cache.directory.password" : {
          "type" : "string",
          "title" : "LDAP server bind password",
          "propertyOrder" : 4,
          "required" : true,
          "description" : "",
          "format" : "password"
        },
        "com.sun.identity.crl.cache.directory.searchlocs" : {
          "type" : "string",
          "title" : "LDAP search base DN",
          "propertyOrder" : 5,
          "required" : true,
          "description" : ""
        },
        "com.sun.identity.crl.cache.directory.searchattr" : {
          "type" : "string",
          "title" : "Search Attributes",
          "propertyOrder" : 6,
          "required" : true,
          "description" : "Any DN component of issuer's subjectDN can be used to retrieve CRL from
local LDAP server. It is single value string, like, \"cn\". All Root CA need to use the same search
attribute."
        }
      }
    },
    "amconfig.header.ocsp.check" : {
      "title" : "Online Certificate Status Protocol Check",
      "type" : "object",
      "propertyOrder" : 5,
      "properties" : {
        "com.sun.identity.authentication.ocspCheck" : {
          "type" : "boolean",
          "title" : "Check Enabled",
          "propertyOrder" : 0,
          "required" : true,
          "description" : ""
        },
        "com.sun.identity.authentication.ocsp.responder.url" : {
          "type" : "string",
          "title" : "Responder URL",
          "propertyOrder" : 1,
          "required" : true,
          "description" : ""
        },
        "com.sun.identity.authentication.ocsp.responder.nickname" : {
          "type" : "string",
          "title" : "Certificate Nickname",
          "propertyOrder" : 2,
          "required" : true,
          "description" : ""
        }
      }
    },
    "amconfig.header.deserialisationwhitelist" : {
      "title" : "Object Deserialisation Class Whitelist",
      "type" : "object",
      "propertyOrder" : 6,
      "properties" : {
```


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```
        "openam.deserialisation.classes.whitelist" : {
          "type" : "string",
          "title" : "Whitelist",
          "propertyOrder" : 0,
          "required" : true,
          "description" : "The list of classes that are considered valid when OpenAM performs
 Object deserialisation operations. The defaults should work for most installations. (property name:
 openam.deserialisation.classes.whitelist)"
        }
      }
    }
  }
}
```

1.48. DefaultSessionProperties

1.48.1. Global Operations

An object of property key-value pairs

Resource path: `/global-config/servers/server-default/properties/session`

Resource version: `1.0`

1.48.1.1. read

Usage:

```
am> read DefaultSessionProperties --global
```

1.48.1.2. update

Usage:

```
am> update DefaultSessionProperties --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "amconfig.header.sessionthresholds" : {
      "title" : "Session Limits",
      "type" : "object",
      "propertyOrder" : 0,
      "properties" : {
```


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```
       "org.forgerock.openam.session.service.access.persistence.caching.maxsize" : {
         "type" : "integer",
         "title" : "Maximum Session Cache Size",
         "propertyOrder" : 0,
         "required" : true,
         "description" : "The maximum number of sessions to cache in the per-server internal session
cache. (property name: org.forgerock.openam.session.service.access.persistence.caching.maxsize)"
       },
       "com.iplanet.am.session.invalidsessionmaxtime" : {
         "type" : "integer",
         "title" : "Invalidate Session Max Time",
         "propertyOrder" : 1,
         "required" : true,
         "description" : "Duration in minutes after which the invalid session will be removed
from the session table if it is created and the user does not login. This value should always
be greater than the timeout value in the Authentication module properties file. (property name:
com.iplanet.am.session.invalidsessionmaxtime)"
       }
     }
   },
   "amconfig.header.sessionlogging" : {
     "title" : "Statistics",
     "type" : "object",
     "propertyOrder" : 1,
     "properties" : {
       "com.iplanet.am.stats.interval" : {
         "type" : "integer",
         "title" : "Logging Interval (in seconds)",
         "propertyOrder" : 0,
         "required" : true,
         "description" : "Number of seconds to elapse between statistics logging. The interval
should be at least 5 seconds to avoid CPU saturation. An interval value less than 5 seconds will be
interpreted as 5 seconds. (property name: com.iplanet.am.stats.interval)"
       },
       "com.iplanet.services.stats.state" : {
         "enum" : [ "off", "file", "console" ],
         "options" : {
           "enum_titles" : [ "Off", "File", "Console" ]
         },
         "type" : "string",
         "title" : "State",
         "propertyOrder" : 1,
         "required" : true,
         "description" : "Statistics state 'file' will write to a file under the specified directory,
and 'console' will write into webserver log files. (property name: com.iplanet.services.stats.state)"
       },
       "com.iplanet.services.stats.directory" : {
         "type" : "string",
         "title" : "Directory",
         "propertyOrder" : 2,
         "required" : true,
         "description" : "Directory where the statistic files will be created. Use forward slashes
\"/\" to separate directories, not backslash \"\\\". Spaces in the file name are allowed for Windows.
(property name: com.iplanet.services.stats.directory)"
       },
       "com.sun.am.session.enableHostLookUp" : {
         "type" : "boolean",
         "title" : "Enable Host Lookup",
         "propertyOrder" : 3,
```


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```
          "required" : true,
          "description" : "Enables or disables host lookup during session logging. (property name:
 com.sun.am.session.enableHostLookUp)"
        }
      }
    },
    "amconfig.header.sessionnotification" : {
      "title" : "Notification",
      "type" : "object",
      "propertyOrder" : 2,
      "properties" : {
        "com.iplanet.am.notification.threadpool.size" : {
          "type" : "integer",
          "title" : "Notification Pool Size",
          "propertyOrder" : 0,
          "required" : true,
          "description" : "Specifies the size of the notification thread pool (total number of
 threads). (property name: com.iplanet.am.notification.threadpool.size)"
        },
        "com.iplanet.am.notification.threadpool.threshold" : {
          "type" : "integer",
          "title" : "Notification Thread Pool Threshold",
          "propertyOrder" : 1,
          "required" : true,
          "description" : "Specifies the maximum task queue length for serving notification threads.
 (property name: com.iplanet.am.notification.threadpool.threshold)"
        }
      }
    },
    "amconfig.header.sessionvalidation" : {
      "title" : "Validation",
      "type" : "object",
      "propertyOrder" : 3,
      "properties" : {
        "com.sun.am.session.caseInsensitiveDN" : {
          "type" : "boolean",
          "title" : "Case Insensitive client DN comparison",
          "propertyOrder" : 0,
          "required" : true,
          "description" : "Specifies if client distinguished name comparison is case insensitive/
sensitive. (property name: com.sun.am.session.caseInsensitiveDN)"
        }
      }
    }
  }
}
```

1.49. DefaultUmaDataStoreProperties

1.49.1. Global Operations

An object of property key-value pairs

Resource path: `/global-config/servers/server-default/properties/uma`

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Resource version: `1.0`

1.49.1.1. read

Usage:

```
am> read DefaultUmaDataStoreProperties --global
```

1.49.1.2. update

Usage:

```
am> update DefaultUmaDataStoreProperties --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "amconfig.org.forgerock.services.resourcesets.store.common.section" : {
      "title" : "Resource Sets Store",
      "type" : "object",
      "propertyOrder" : 0,
      "properties" : {
        "org.forgerock.services.resourcesets.store.location" : {
          "enum" : [ "default", "external" ],
          "options" : {
            "enum_titles" : [ "Default Token Store", "External Token Store" ]
          },
          "type" : "string",
          "title" : "Store Mode",
          "propertyOrder" : 0,
          "required" : true,
          "description" : ""
        },
        "org.forgerock.services.resourcesets.store.root.suffix" : {
          "type" : "string",
          "title" : "Root Suffix",
          "propertyOrder" : 1,
          "required" : true,
          "description" : ""
        },
        "org.forgerock.services.resourcesets.store.max.connections" : {
          "type" : "string",
          "title" : "Max Connections",
          "propertyOrder" : 2,
          "required" : true,
          "description" : ""
        }
      }
    },
```


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```
    "amconfig.org.forgerock.services.resourcesets.store.external.section" : {
      "title" : "External Resource Sets Store Configuration",
      "type" : "object",
      "propertyOrder" : 1,
      "properties" : {
        "org.forgerock.services.resourcesets.store.ssl.enabled" : {
          "type" : "boolean",
          "title" : "SSL/TLS Enabled",
          "propertyOrder" : 0,
          "required" : true,
          "description" : ""
        },
        "org.forgerock.services.resourcesets.store.directory.name" : {
          "type" : "string",
          "title" : "Connection String(s)",
          "propertyOrder" : 1,
          "required" : true,
          "description" : "An ordered list of connection strings for LDAP directories. Each connection
 string is composed as follows: <code>HOST:PORT[|SERVERID[|SITEID]]</code>, where server and site
 IDs are optional parameters that will prioritize that connection to use from the specified nodes.
 Multiple connection strings should be comma-separated, e.g. <code>host1:389,host2:50389|server1|
site1,host3:50389</code>."
        },
        "org.forgerock.services.resourcesets.store.loginid" : {
          "type" : "string",
          "title" : "Login Id",
          "propertyOrder" : 2,
          "required" : true,
          "description" : ""
        },
        "org.forgerock.services.resourcesets.store.password" : {
          "type" : "string",
          "title" : "Password",
          "propertyOrder" : 3,
          "required" : true,
          "description" : "",
          "format" : "password"
        },
        "org.forgerock.services.resourcesets.store.heartbeat" : {
          "type" : "integer",
          "title" : "Heartbeat",
          "propertyOrder" : 4,
          "required" : true,
          "description" : ""
        }
      }
    },
    "amconfig.org.forgerock.services.umaaudit.store.common.section" : {
      "title" : "UMA Audit Store",
      "type" : "object",
      "propertyOrder" : 2,
      "properties" : {
        "org.forgerock.services.umaaudit.store.location" : {
          "enum" : [ "default", "external" ],
          "options" : {
            "enum_titles" : [ "Default Token Store", "External Token Store" ]
          },
          "type" : "string",
          "title" : "Store Mode",
```


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```
          "propertyOrder" : 0,
          "required" : true,
          "description" : ""
        },
        "org.forgerock.services.umaaudit.store.root.suffix" : {
          "type" : "string",
          "title" : "Root Suffix",
          "propertyOrder" : 1,
          "required" : true,
          "description" : ""
        },
        "org.forgerock.services.umaaudit.store.max.connections" : {
          "type" : "string",
          "title" : "Max Connections",
          "propertyOrder" : 2,
          "required" : true,
          "description" : ""
        }
      }
    },
    "amconfig.org.forgerock.services.umaaudit.store.external.section" : {
      "title" : "External UMA Audit Store Configuration",
      "type" : "object",
      "propertyOrder" : 3,
      "properties" : {
        "org.forgerock.services.umaaudit.store.ssl.enabled" : {
          "type" : "boolean",
          "title" : "SSL/TLS Enabled",
          "propertyOrder" : 0,
          "required" : true,
          "description" : ""
        },
        "org.forgerock.services.umaaudit.store.directory.name" : {
          "type" : "string",
          "title" : "Connection String(s)",
          "propertyOrder" : 1,
          "required" : true,
          "description" : "An ordered list of connection strings for LDAP directories. Each connection
 string is composed as follows: <code>HOST:PORT[|SERVERID[|SITEID]]</code>, where server and site
 IDs are optional parameters that will prioritize that connection to use from the specified nodes.
 Multiple connection strings should be comma-separated, e.g. <code>host1:389,host2:50389|server1|
site1,host3:50389</code>."
        },
        "org.forgerock.services.umaaudit.store.loginid" : {
          "type" : "string",
          "title" : "Login Id",
          "propertyOrder" : 2,
          "required" : true,
          "description" : ""
        },
        "org.forgerock.services.umaaudit.store.password" : {
          "type" : "string",
          "title" : "Password",
          "propertyOrder" : 3,
          "required" : true,
          "description" : "",
          "format" : "password"
        },
        "org.forgerock.services.umaaudit.store.heartbeat" : {
```


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```
          "type" : "integer",
          "title" : "Heartbeat",
          "propertyOrder" : 4,
          "required" : true,
          "description" : ""
        }
      }
    },
    "amconfig.org.forgerock.services.uma.pendingrequests.store.common.section" : {
      "title" : "Pending Requests Store",
      "type" : "object",
      "propertyOrder" : 4,
      "properties" : {
        "org.forgerock.services.uma.pendingrequests.store.location" : {
          "enum" : [ "default", "external" ],
          "options" : {
            "enum_titles" : [ "Default Token Store", "External Token Store" ]
          },
          "type" : "string",
          "title" : "Store Mode",
          "propertyOrder" : 0,
          "required" : true,
          "description" : ""
        },
        "org.forgerock.services.uma.pendingrequests.store.root.suffix" : {
          "type" : "string",
          "title" : "Root Suffix",
          "propertyOrder" : 1,
          "required" : true,
          "description" : ""
        },
        "org.forgerock.services.uma.pendingrequests.store.max.connections" : {
          "type" : "string",
          "title" : "Max Connections",
          "propertyOrder" : 2,
          "required" : true,
          "description" : ""
        }
      }
    },
    "amconfig.org.forgerock.services.uma.pendingrequests.store.external.section" : {
      "title" : "External Pending Requests Store Configuration",
      "type" : "object",
      "propertyOrder" : 5,
      "properties" : {
        "org.forgerock.services.uma.pendingrequests.store.ssl.enabled" : {
          "type" : "boolean",
          "title" : "SSL/TLS Enabled",
          "propertyOrder" : 0,
          "required" : true,
          "description" : ""
        },
        "org.forgerock.services.uma.pendingrequests.store.directory.name" : {
          "type" : "string",
          "title" : "Connection String(s)",
          "propertyOrder" : 1,
          "required" : true,
          "description" : "An ordered list of connection strings for LDAP directories. Each connection
string is composed as follows: <code>HOST:PORT[|SERVERID[|SITEID]]</code>, where server and site
```


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```
 IDs are optional parameters that will prioritize that connection to use from the specified nodes.
 Multiple connection strings should be comma-separated, e.g. <code>host1:389,host2:50389|server1|
site1,host3:50389</code>."
        },
        "org.forgerock.services.uma.pendingrequests.store.loginid" : {
          "type" : "string",
          "title" : "Login Id",
          "propertyOrder" : 2,
          "required" : true,
          "description" : ""
        },
        "org.forgerock.services.uma.pendingrequests.store.password" : {
          "type" : "string",
          "title" : "Password",
          "propertyOrder" : 3,
          "required" : true,
          "description" : "",
          "format" : "password"
        },
        "org.forgerock.services.uma.pendingrequests.store.heartbeat" : {
          "type" : "integer",
          "title" : "Heartbeat",
          "propertyOrder" : 4,
          "required" : true,
          "description" : ""
        }
      }
    },
    "amconfig.org.forgerock.services.uma.labels.store.common.section" : {
      "title" : "UMA Resource Set Labels Store",
      "type" : "object",
      "propertyOrder" : 6,
      "properties" : {
        "org.forgerock.services.uma.labels.store.location" : {
          "enum" : [ "default", "external" ],
          "options" : {
            "enum_titles" : [ "Default Token Store", "External Token Store" ]
          },
          "type" : "string",
          "title" : "Store Mode",
          "propertyOrder" : 0,
          "required" : true,
          "description" : ""
        },
        "org.forgerock.services.uma.labels.store.root.suffix" : {
          "type" : "string",
          "title" : "Root Suffix",
          "propertyOrder" : 1,
          "required" : true,
          "description" : ""
        },
        "org.forgerock.services.uma.labels.store.max.connections" : {
          "type" : "string",
          "title" : "Max Connections",
          "propertyOrder" : 2,
          "required" : true,
          "description" : ""
        }
      }
```


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```
    },
    "amconfig.org.forgerock.services.uma.labels.store.external.section" : {
      "title" : "External Resource Set Labels Store Configuration",
      "type" : "object",
      "propertyOrder" : 7,
      "properties" : {
        "org.forgerock.services.uma.labels.store.ssl.enabled" : {
          "type" : "boolean",
          "title" : "SSL/TLS Enabled",
          "propertyOrder" : 0,
          "required" : true,
          "description" : ""
        },
        "org.forgerock.services.uma.labels.store.directory.name" : {
          "type" : "string",
          "title" : "Connection String(s)",
          "propertyOrder" : 1,
          "required" : true,
          "description" : "An ordered list of connection strings for LDAP directories. Each connection
 string is composed as follows: <code>HOST:PORT[|SERVERID[|SITEID]]</code>, where server and site
 IDs are optional parameters that will prioritize that connection to use from the specified nodes.
 Multiple connection strings should be comma-separated, e.g. <code>host1:389,host2:50389|server1|
site1,host3:50389</code>."
        },
        "org.forgerock.services.uma.labels.store.loginid" : {
          "type" : "string",
          "title" : "Login Id",
          "propertyOrder" : 2,
          "required" : true,
          "description" : ""
        },
        "org.forgerock.services.uma.labels.store.password" : {
          "type" : "string",
          "title" : "Password",
          "propertyOrder" : 3,
          "required" : true,
          "description" : "",
          "format" : "password"
        },
        "org.forgerock.services.uma.labels.store.heartbeat" : {
          "type" : "integer",
          "title" : "Heartbeat",
          "propertyOrder" : 4,
          "required" : true,
          "description" : ""
        }
      }
    }
  }
}
```


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1.50. DeviceIDService

1.50.1. Realm Operations

Resource path: `/realm-config/services/deviceIdService`

Resource version: `1.0`

1.50.1.1. create

Usage:

```
am> create DeviceIDService --realm Realm --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "deviceIdSettingsEncryptionKeystoreKeyPairAlias" : {
      "title" : "Key-Pair Alias",
      "description" : "Alias of the certificate and private key in the key store. The private key is
 used to encrypt and decrypt device profiles.",
      "propertyOrder" : 600,
      "required" : false,
      "type" : "string",
      "exampleValue" : ""
    },
    "deviceIdSettingsEncryptionKeystorePassword" : {
      "title" : "Key Store Password",
      "description" : "Password to unlock the key store. This password is encrypted when it is saved
 in the OpenAM configuration. You should modify the default value.",
      "propertyOrder" : 500,
      "required" : false,
      "type" : "string",
      "format" : "password",
      "exampleValue" : ""
    },
    "deviceIdSettingsEncryptionScheme" : {
      "title" : "Device Profile Encryption Scheme",
      "description" : "Encryption scheme to use to secure device profiles stored on the
 server.<br><br>If enabled, each device profile is encrypted using a unique random secret key
 using the given strength of AES encryption in CBC mode with PKCS#5 padding. An HMAC-SHA of the
 given strength (truncated to half-size) is used to ensure integrity protection and authenticated
 encryption. The unique random key is encrypted with the given RSA key pair and stored with the device
 profile.<p><p><i>Note:</i> AES-256 may require installation of the JCE Unlimited Strength policy
 files.",
      "propertyOrder" : 200,
      "required" : true,
```


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```
      "type" : "string",
      "exampleValue" : ""
    },
    "deviceIdSettingsEncryptionKeystore" : {
      "title" : "Encryption Key Store",
      "description" : "Path to the key store from which to load encryption keys.",
      "propertyOrder" : 300,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "deviceIdAttrName" : {
      "title" : "Profile Storage Attribute",
      "description" : "The user's attribute in which to store Device ID profiles.<br><br>The default
 attribute is added to the schema when you prepare a user store for use with OpenAM. If you want to
 use a different attribute, you must make sure to add it to your user store schema prior to enabling
 the Device ID authentication module. OpenAM must be able to write to the attribute.",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "deviceIdSettingsEncryptionKeystoreType" : {
      "title" : "Key Store Type",
      "description" : "Type of key store to load.<br><br><i>Note:</i> PKCS#11 key stores require
 hardware support such as a security device or smart card and is not available by default in most
 JVM installations.<p><p>See the <a href=\"https://docs.oracle.com/javase/8/docs/technotes/guides/
security/p11guide.html\" target=\"_blank\">JDK 8 PKCS#11 Reference Guide</a> for more details.",
      "propertyOrder" : 400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "deviceIdSettingsEncryptionKeystorePrivateKeyPassword" : {
      "title" : "Private Key Password",
      "description" : "Password to unlock the private key.",
      "propertyOrder" : 700,
      "required" : false,
      "type" : "string",
      "format" : "password",
      "exampleValue" : ""
    }
  }
}
```


1.50.1.2. delete

Usage:

```
am> delete DeviceIDService --realm Realm
```

1.50.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

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Usage:

```
am> action DeviceIDService --realm Realm --actionName getAllTypes
```

1.50.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action DeviceIDService --realm Realm --actionName getCreatableTypes
```

1.50.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action DeviceIDService --realm Realm --actionName nextdescendents
```

1.50.1.6. read

Usage:

```
am> read DeviceIDService --realm Realm
```

1.50.1.7. update

Usage:

```
am> update DeviceIDService --realm Realm --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "deviceIdSettingsEncryptionKeystoreKeyPairAlias" : {
      "title" : "Key-Pair Alias",
      "description" : "Alias of the certificate and private key in the key store. The private key is
 used to encrypt and decrypt device profiles.",
      "propertyOrder" : 600,
      "required" : false,
      "type" : "string",
      "exampleValue" : ""
    },
    "deviceIdSettingsEncryptionKeystorePassword" : {
      "title" : "Key Store Password",
```


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```
      "description" : "Password to unlock the key store. This password is encrypted when it is saved
 in the OpenAM configuration. You should modify the default value.",
      "propertyOrder" : 500,
      "required" : false,
      "type" : "string",
      "format" : "password",
      "exampleValue" : ""
    },
    "deviceIdSettingsEncryptionScheme" : {
      "title" : "Device Profile Encryption Scheme",
      "description" : "Encryption scheme to use to secure device profiles stored on the
 server.<br><br>If enabled, each device profile is encrypted using a unique random secret key
 using the given strength of AES encryption in CBC mode with PKCS#5 padding. An HMAC-SHA of the
 given strength (truncated to half-size) is used to ensure integrity protection and authenticated
 encryption. The unique random key is encrypted with the given RSA key pair and stored with the device
 profile.<p><p><i>Note:</i> AES-256 may require installation of the JCE Unlimited Strength policy
 files.",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "deviceIdSettingsEncryptionKeystore" : {
      "title" : "Encryption Key Store",
      "description" : "Path to the key store from which to load encryption keys.",
      "propertyOrder" : 300,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "deviceIdAttrName" : {
      "title" : "Profile Storage Attribute",
      "description" : "The user's attribute in which to store Device ID profiles.<br><br>The default
 attribute is added to the schema when you prepare a user store for use with OpenAM. If you want to
 use a different attribute, you must make sure to add it to your user store schema prior to enabling
 the Device ID authentication module. OpenAM must be able to write to the attribute.",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "deviceIdSettingsEncryptionKeystoreType" : {
      "title" : "Key Store Type",
      "description" : "Type of key store to load.<br><br><i>Note:</i> PKCS#11 key stores require
 hardware support such as a security device or smart card and is not available by default in most
 JVM installations.<p><p>See the <a href=\"https://docs.oracle.com/javase/8/docs/technotes/guides/
security/p11guide.html\" target=\"_blank\">JDK 8 PKCS#11 Reference Guide</a> for more details.",
      "propertyOrder" : 400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "deviceIdSettingsEncryptionKeystorePrivateKeyPassword" : {
      "title" : "Private Key Password",
      "description" : "Password to unlock the private key.",
      "propertyOrder" : 700,
      "required" : false,
      "type" : "string",
      "format" : "password",
```


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```
      "exampleValue" : ""
    }
  }
}
```

1.50.2. Global Operations

Resource path: `/global-config/services/deviceIdService`

Resource version: `1.0`

1.50.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action DeviceIDService --global --actionName getAllTypes
```

1.50.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action DeviceIDService --global --actionName getCreatableTypes
```

1.50.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action DeviceIDService --global --actionName nextdescendents
```

1.50.2.4. read

Usage:

```
am> read DeviceIDService --global
```

1.50.2.5. update

Usage:

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```
am> update DeviceIDService --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "defaults" : {
      "properties" : {
        "deviceIdSettingsEncryptionKeystorePassword" : {
          "title" : "Key Store Password",
          "description" : "Password to unlock the key store. This password is encrypted when it is
 saved in the OpenAM configuration. You should modify the default value.",
          "propertyOrder" : 500,
          "required" : false,
          "type" : "string",
          "format" : "password",
          "exampleValue" : ""
        },
        "deviceIdSettingsEncryptionKeystoreKeyPairAlias" : {
          "title" : "Key-Pair Alias",
          "description" : "Alias of the certificate and private key in the key store. The private key
 is used to encrypt and decrypt device profiles.",
          "propertyOrder" : 600,
          "required" : false,
          "type" : "string",
          "exampleValue" : ""
        },
        "deviceIdSettingsEncryptionScheme" : {
          "title" : "Device Profile Encryption Scheme",
          "description" : "Encryption scheme to use to secure device profiles stored on the
 server.<br><br>If enabled, each device profile is encrypted using a unique random secret key
 using the given strength of AES encryption in CBC mode with PKCS#5 padding. An HMAC-SHA of the
 given strength (truncated to half-size) is used to ensure integrity protection and authenticated
 encryption. The unique random key is encrypted with the given RSA key pair and stored with the device
 profile.<p><p><i>Note:</i> AES-256 may require installation of the JCE Unlimited Strength policy
 files.",
          "propertyOrder" : 200,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "deviceIdSettingsEncryptionKeystoreType" : {
          "title" : "Key Store Type",
          "description" : "Type of key store to load.<br><br><i>Note:</i> PKCS#11 key stores require
 hardware support such as a security device or smart card and is not available by default in most
 JVM installations.<p><p>See the <a href=\"https://docs.oracle.com/javase/8/docs/technotes/guides/
security/p11guide.html\" target=\"_blank\">JDK 8 PKCS#11 Reference Guide</a> for more details.",
          "propertyOrder" : 400,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "deviceIdAttrName" : {
```


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```
          "title" : "Profile Storage Attribute",
          "description" : "The user's attribute in which to store Device ID profiles.<br><br>The
 default attribute is added to the schema when you prepare a user store for use with OpenAM. If you
 want to use a different attribute, you must make sure to add it to your user store schema prior to
 enabling the Device ID authentication module. OpenAM must be able to write to the attribute.",
          "propertyOrder" : 100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "deviceIdSettingsEncryptionKeystorePrivateKeyPassword" : {
          "title" : "Private Key Password",
          "description" : "Password to unlock the private key.",
          "propertyOrder" : 700,
          "required" : false,
          "type" : "string",
          "format" : "password",
          "exampleValue" : ""
        },
        "deviceIdSettingsEncryptionKeystore" : {
          "title" : "Encryption Key Store",
          "description" : "Path to the key store from which to load encryption keys.",
          "propertyOrder" : 300,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      },
      "type" : "object",
      "title" : "Realm Defaults"
    }
  }
}
```

1.51. DeviceIdMatchModule

1.51.1. Realm Operations

Resource path: `/realm-config/authentication/modules/deviceidmatch`

Resource version: `1.0`

1.51.1.1. create

Usage:

```
am> create DeviceIdMatchModule --realm Realm --id id --body body
```

Parameters:

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--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "clientScriptEnabled" : {
      "title" : "Client-side Script Enabled",
      "description" : "Enable this setting if the client-side script should be executed.",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "authenticationLevel" : {
      "title" : "Authentication Level",
      "description" : "The authentication level associated with the authentication module.<br><br>Each
 authentication module has an authentication level that can be used to indicate the level of security
 associated with the module; 0 is the lowest (and the default).",
      "propertyOrder" : 400,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "clientScript" : {
      "title" : "Client-side Script",
      "description" : "The client-side script.",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "serverScript" : {
      "title" : "Server-side Script",
      "description" : "The server-side script to execute.<br><br>This script will be run on
 the server, subsequent to any client script having returned. It can be written in the selected
 language.",
      "propertyOrder" : 300,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```

1.51.1.2. delete

Usage:

```
am> delete DeviceIdMatchModule --realm Realm --id id
```


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Parameters:

--id

The unique identifier for the resource.

1.51.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action DeviceIdMatchModule --realm Realm --actionName getAllTypes
```

1.51.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action DeviceIdMatchModule --realm Realm --actionName getCreatableTypes
```

1.51.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action DeviceIdMatchModule --realm Realm --actionName nextdescendents
```

1.51.1.6. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

```
am> query DeviceIdMatchModule --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.51.1.7. read

Usage:

```
am> read DeviceIdMatchModule --realm Realm --id id
```


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Parameters:

--id

The unique identifier for the resource.

1.51.1.8. update

Usage:

```
am> update DeviceIdMatchModule --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "clientScriptEnabled" : {
      "title" : "Client-side Script Enabled",
      "description" : "Enable this setting if the client-side script should be executed.",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "authenticationLevel" : {
      "title" : "Authentication Level",
      "description" : "The authentication level associated with the authentication module.<br><br>Each
 authentication module has an authentication level that can be used to indicate the level of security
 associated with the module; 0 is the lowest (and the default).",
      "propertyOrder" : 400,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "clientScript" : {
      "title" : "Client-side Script",
      "description" : "The client-side script.",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "serverScript" : {
      "title" : "Server-side Script",
      "description" : "The server-side script to execute.<br><br>This script will be run on
 the server, subsequent to any client script having returned. It can be written in the selected
 language.",
```


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```
      "propertyOrder" : 300,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```

1.51.2. Global Operations

Resource path: `/global-config/authentication/modules/deviceidmatch`

Resource version: `1.0`

1.51.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action DeviceIdMatchModule --global --actionName getAllTypes
```

1.51.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action DeviceIdMatchModule --global --actionName getCreatableTypes
```

1.51.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action DeviceIdMatchModule --global --actionName nextdescendents
```

1.51.2.4. read

Usage:

```
am> read DeviceIdMatchModule --global
```

1.51.2.5. update

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Usage:

```
am> update DeviceIdMatchModule --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "defaults" : {
      "properties" : {
        "authenticationLevel" : {
          "title" : "Authentication Level",
          "description" : "The authentication level associated with the authentication
 module.<br><br>Each authentication module has an authentication level that can be used to indicate
 the level of security associated with the module; 0 is the lowest (and the default).",
          "propertyOrder" : 400,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "serverScript" : {
          "title" : "Server-side Script",
          "description" : "The server-side script to execute.<br><br>This script will be run on
 the server, subsequent to any client script having returned. It can be written in the selected
 language.",
          "propertyOrder" : 300,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "clientScriptEnabled" : {
          "title" : "Client-side Script Enabled",
          "description" : "Enable this setting if the client-side script should be executed.",
          "propertyOrder" : 100,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "clientScript" : {
          "title" : "Client-side Script",
          "description" : "The client-side script.",
          "propertyOrder" : 200,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      },
      "type" : "object",
      "title" : "Realm Defaults"
    }
  }
}
```


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1.52. DeviceIdSaveModule

1.52.1. Realm Operations

Resource path: `/realm-config/authentication/modules/deviceidsave`

Resource version: `1.0`

1.52.1.1. create

Usage:

```
am> create DeviceIdSaveModule --realm Realm --id id --body body
```

Parameters:

`--id`

The unique identifier for the resource.

`--body`

The resource in JSON format, described by the following JSON schema:

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```
{
  "type" : "object",
  "properties" : {
    "authenticationLevel" : {
      "title" : "Authentication Level",
      "description" : "The authentication level associated with the authentication module.<br><br>Each
 authentication module has an authentication level that can be used to indicate the level of security
 associated with the module; 0 is the lowest (and the default).",
      "propertyOrder" : 300,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "maxProfilesAllowed" : {
      "title" : "Maximum stored profile quantity",
      "description" : "No more than specified profiles quantity will be stored in user record",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "autoStoreProfiles" : {
      "title" : "Automatically store new profiles",
      "description" : "Select this checkbox to assume user consent to store every new
 profile<br><br>If this checkbox is selected user won't be prompted for storing new profiles. After
 successful OTP confirmation profile will be stored automatically.",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    }
  }
}
```


1.52.1.2. delete

Usage:

```
am> delete DeviceIdSaveModule --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.52.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action DeviceIdSaveModule --realm Realm --actionName getAllTypes
```


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1.52.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action DeviceIdSaveModule --realm Realm --actionName getCreatableTypes
```

1.52.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action DeviceIdSaveModule --realm Realm --actionName nextdescendents
```

1.52.1.6. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

```
am> query DeviceIdSaveModule --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.52.1.7. read

Usage:

```
am> read DeviceIdSaveModule --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.52.1.8. update

Usage:

```
am> update DeviceIdSaveModule --realm Realm --id id --body body
```


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Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "authenticationLevel" : {
      "title" : "Authentication Level",
      "description" : "The authentication level associated with the authentication module.<br><br>Each
 authentication module has an authentication level that can be used to indicate the level of security
 associated with the module; 0 is the lowest (and the default).",
      "propertyOrder" : 300,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "maxProfilesAllowed" : {
      "title" : "Maximum stored profile quantity",
      "description" : "No more than specified profiles quantity will be stored in user record",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "autoStoreProfiles" : {
      "title" : "Automatically store new profiles",
      "description" : "Select this checkbox to assume user consent to store every new
 profile<br><br>If this checkbox is selected user won't be prompted for storing new profiles. After
 successful OTP confirmation profile will be stored automatically.",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    }
  }
}
```

1.52.2. Global Operations

Resource path: `/global-config/authentication/modules/deviceidsave`

Resource version: `1.0`

1.52.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

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Usage:

```
am> action DeviceIdSaveModule --global --actionName getAllTypes
```

1.52.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action DeviceIdSaveModule --global --actionName getCreatableTypes
```

1.52.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action DeviceIdSaveModule --global --actionName nextdescendents
```

1.52.2.4. read

Usage:

```
am> read DeviceIdSaveModule --global
```

1.52.2.5. update

Usage:

```
am> update DeviceIdSaveModule --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "defaults" : {
      "properties" : {
        "authenticationLevel" : {
          "title" : "Authentication Level",
          "description" : "The authentication level associated with the authentication
 module.<br><br>Each authentication module has an authentication level that can be used to indicate
 the level of security associated with the module; 0 is the lowest (and the default).",
          "propertyOrder" : 300,
```


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```
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "maxProfilesAllowed" : {
          "title" : "Maximum stored profile quantity",
          "description" : "No more than specified profiles quantity will be stored in user record",
          "propertyOrder" : 200,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "autoStoreProfiles" : {
          "title" : "Automatically store new profiles",
          "description" : "Select this checkbox to assume user consent to store every new
 profile<br><br>If this checkbox is selected user won't be prompted for storing new profiles. After
 successful OTP confirmation profile will be stored automatically.",
          "propertyOrder" : 100,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        }
      },
      "type" : "object",
      "title" : "Realm Defaults"
    }
  }
}
```

1.53. DirectoryConfiguration

1.53.1. Global Operations

Connection details for directory server(s).

Resource path: `/global-config/servers/{serverName}/properties/directoryConfiguration`

Resource version: `1.0`

1.53.1.1. read

Usage:

```
am> read DirectoryConfiguration --global --serverName serverName
```

Parameters:

`--serverName`

Connection details for directory server(s).

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1.53.1.2. update

Usage:

```
am> update DirectoryConfiguration --global --serverName serverName --body body
```

Parameters:

--serverName

Connection details for directory server(s).

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "directoryConfiguration" : {
      "type" : "object",
      "title" : "Directory Configuration",
      "propertyOrder" : 0,
      "properties" : {
        "minConnectionPool" : {
          "title" : "Minimum Connection Pool",
          "propertyOrder" : 0,
          "type" : "number"
        },
        "maxConnectionPool" : {
          "title" : "Maximum Connection Pool",
          "propertyOrder" : 1,
          "type" : "number"
        },
        "bindDn" : {
          "title" : "Bind DN",
          "propertyOrder" : 2,
          "type" : "string"
        },
        "bindPassword" : {
          "title" : "Bind Password",
          "propertyOrder" : 3,
          "type" : "string",
          "format" : "password"
        }
      }
    },
    "directoryServers" : {
      "type" : "array",
      "title" : "Server",
      "propertyOrder" : 1,
      "items" : {
        "type" : "object",
        "required" : [ "serverName", "hostName", "portNumber", "connectionType" ],
        "properties" : {
```


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```
          "serverName" : {
            "title" : "Name",
            "type" : "string",
            "propertyOrder" : 0
          },
          "hostName" : {
            "title" : "Host Name",
            "type" : "string",
            "propertyOrder" : 1
          },
          "portNumber" : {
            "title" : "Port Number",
            "type" : "string",
            "propertyOrder" : 2
          },
          "connectionType" : {
            "type" : "string",
            "enum" : [ "SIMPLE", "SSL" ],
            "options" : {
              "enum_titles" : [ "SIMPLE", "SSL" ]
            },
            "title" : "Connection Type",
            "propertyOrder" : 3
          }
        }
      }
    }
  }
}
```

1.54. EdgeAuthenticationModule

1.54.1. Realm Operations

Resource path: `/realm-config/authentication/modules/authEdgeAuthentication`

Resource version: `1.0`

1.54.1.1. create

Usage:

```
am> create EdgeAuthenticationModule --realm Realm --id id --body body
```

Parameters:

`--id`

The unique identifier for the resource.

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--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "authenticationLevel" : {
      "title" : "Authentication Level",
      "description" : "The authentication level associated with this module.",
      "propertyOrder" : 10000,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "subjectJwkSetAttr" : {
      "title" : "Subject JWK Set Attribute",
      "description" : "Subject profile attribute that contains a JWK Set of confirmation and
 encryption keys.",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "challengeSigningKey" : {
      "title" : "Challenge Signing Key",
      "description" : "Name of the key (in the AM keystore) to use to sign challenges.",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```

1.54.1.2. delete

Usage:

```
am> delete EdgeAuthenticationModule --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.54.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action EdgeAuthenticationModule --realm Realm --actionName getAllTypes
```


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1.54.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action EdgeAuthenticationModule --realm Realm --actionName getCreatableTypes
```

1.54.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action EdgeAuthenticationModule --realm Realm --actionName nextdescendents
```

1.54.1.6. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

```
am> query EdgeAuthenticationModule --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.54.1.7. read

Usage:

```
am> read EdgeAuthenticationModule --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.54.1.8. update

Usage:

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```
am> update EdgeAuthenticationModule --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "authenticationLevel" : {
      "title" : "Authentication Level",
      "description" : "The authentication level associated with this module.",
      "propertyOrder" : 10000,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "subjectJwkSetAttr" : {
      "title" : "Subject JWK Set Attribute",
      "description" : "Subject profile attribute that contains a JWK Set of confirmation and
 encryption keys.",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "challengeSigningKey" : {
      "title" : "Challenge Signing Key",
      "description" : "Name of the key (in the AM keystore) to use to sign challenges.",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```

1.54.2. Global Operations

Resource path: `/global-config/authentication/modules/authEdgeAuthentication`

Resource version: `1.0`

1.54.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

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Usage:

```
am> action EdgeAuthenticationModule --global --actionName getAllTypes
```

1.54.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action EdgeAuthenticationModule --global --actionName getCreatableTypes
```

1.54.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action EdgeAuthenticationModule --global --actionName nextdescendents
```

1.54.2.4. read

Usage:

```
am> read EdgeAuthenticationModule --global
```

1.54.2.5. update

Usage:

```
am> update EdgeAuthenticationModule --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "defaults" : {
      "properties" : {
        "challengeSigningKey" : {
          "title" : "Challenge Signing Key",
          "description" : "Name of the key (in the AM keystore) to use to sign challenges.",
```


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```
          "propertyOrder" : 200,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "authenticationLevel" : {
          "title" : "Authentication Level",
          "description" : "The authentication level associated with this module.",
          "propertyOrder" : 10000,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "subjectJwkSetAttr" : {
          "title" : "Subject JWK Set Attribute",
          "description" : "Subject profile attribute that contains a JWK Set of confirmation and
 encryption keys.",
          "propertyOrder" : 100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      },
      "type" : "object",
      "title" : "Realm Defaults"
    }
  }
}
```

1.55. EdgeRegistrationModule

1.55.1. Realm Operations

Resource path: `/realm-config/authentication/modules/authEdgeRegistration`

Resource version: `1.0`

1.55.1.1. create

Usage:

```
am> create EdgeRegistrationModule --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

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--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "subjectJwkSetAttr" : {
      "title" : "Subject JWK Set Attribute",
      "description" : "Subject profile attribute that contains a JWK Set of confirmation and
 encryption keys.",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "authenticationLevel" : {
      "title" : "Authentication Level",
      "description" : "The authentication level associated with this module.",
      "propertyOrder" : 10000,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "challengeSigningKey" : {
      "title" : "Challenge Signing Key",
      "description" : "Name of the key (in the AM keystore) to use to sign challenges.",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```

1.55.1.2. delete

Usage:

```
am> delete EdgeRegistrationModule --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.55.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action EdgeRegistrationModule --realm Realm --actionName getAllTypes
```


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1.55.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action EdgeRegistrationModule --realm Realm --actionName getCreatableTypes
```

1.55.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action EdgeRegistrationModule --realm Realm --actionName nextdescendents
```

1.55.1.6. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

```
am> query EdgeRegistrationModule --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.55.1.7. read

Usage:

```
am> read EdgeRegistrationModule --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.55.1.8. update

Usage:

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```
am> update EdgeRegistrationModule --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "subjectJwkSetAttr" : {
      "title" : "Subject JWK Set Attribute",
      "description" : "Subject profile attribute that contains a JWK Set of confirmation and
 encryption keys.",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "authenticationLevel" : {
      "title" : "Authentication Level",
      "description" : "The authentication level associated with this module.",
      "propertyOrder" : 10000,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "challengeSigningKey" : {
      "title" : "Challenge Signing Key",
      "description" : "Name of the key (in the AM keystore) to use to sign challenges.",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```

1.55.2. Global Operations

Resource path: `/global-config/authentication/modules/authEdgeRegistration`

Resource version: `1.0`

1.55.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

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Usage:

```
am> action EdgeRegistrationModule --global --actionName getAllTypes
```

1.55.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action EdgeRegistrationModule --global --actionName getCreatableTypes
```

1.55.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action EdgeRegistrationModule --global --actionName nextdescendents
```

1.55.2.4. read

Usage:

```
am> read EdgeRegistrationModule --global
```

1.55.2.5. update

Usage:

```
am> update EdgeRegistrationModule --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "defaults" : {
      "properties" : {
        "authenticationLevel" : {
          "title" : "Authentication Level",
          "description" : "The authentication level associated with this module.",
```


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```
          "propertyOrder" : 10000,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "subjectJwkSetAttr" : {
          "title" : "Subject JWK Set Attribute",
          "description" : "Subject profile attribute that contains a JWK Set of confirmation and
 encryption keys.",
          "propertyOrder" : 100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "challengeSigningKey" : {
          "title" : "Challenge Signing Key",
          "description" : "Name of the key (in the AM keystore) to use to sign challenges.",
          "propertyOrder" : 200,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      },
      "type" : "object",
      "title" : "Realm Defaults"
    }
  }
}
```

1.56. ElasticSearch

1.56.1. Realm Operations

Resource path: `/realm-config/services/audit/Elasticsearch`

Resource version: `1.0`

1.56.1.1. create

Usage:

```
am> create ElasticSearch --realm Realm --id id --body body
```

Parameters:

`--id`

The unique identifier for the resource.

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--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "elasticsearchBuffering" : {
      "type" : "object",
      "title" : "Buffering",
      "propertyOrder" : 4,
      "properties" : {
        "writeInterval" : {
          "title" : "Write interval (in milliseconds)",
          "description" : "Specifies the interval in milliseconds at which buffered events are written
 to Elasticsearch.",
          "propertyOrder" : 6000,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "maxEvents" : {
          "title" : "Queue Capacity",
          "description" : "Maximum number of audit logs in the batch queue. Additional audit events
 are dropped.",
          "propertyOrder" : 5900,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "bufferingEnabled" : {
          "title" : "Buffering Enabled",
          "description" : "",
          "propertyOrder" : 5700,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "batchSize" : {
          "title" : "Batch Size",
          "description" : "Maximum number of events that can be buffered (default: 10000)",
          "propertyOrder" : 5800,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        }
      }
    },
    "elasticsearchConfig" : {
      "type" : "object",
      "title" : "Elasticsearch Configuration",
      "propertyOrder" : 2,
      "properties" : {
        "sslEnabled" : {
          "title" : "SSL Enabled",
          "description" : "Specifies whether SSL is configured on the Elasticsearch server.<p><p>If
 SSL is enabled, be sure to import the CA certificate used to sign Elasticsearch node certificates
 into the Java keystore on the host that runs OpenAM before attempting to log audit events to
 Elasticsearch.",
```


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```
          "propertyOrder" : 5300,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "port" : {
          "title" : "Server Port",
          "description" : "Specifies the port number used to access Elasticsearch's REST API.",
          "propertyOrder" : 5200,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "index" : {
          "title" : "Elasticsearch Index",
          "description" : "Specifies the name of the Elasticsearch index to be used for OpenAM audit
logging.",
          "propertyOrder" : 5400,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "host" : {
          "title" : "Server Hostname",
          "description" : "Host name or IP address of the Elasticsearch server.",
          "propertyOrder" : 5100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    },
    "commonHandler" : {
      "type" : "object",
      "title" : "General Handler Configuration",
      "propertyOrder" : 0,
      "properties" : {
        "topics" : {
          "title" : "Topics",
          "description" : "List of topics handled by an audit event handler.",
          "propertyOrder" : 5000,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "enabled" : {
          "title" : "Enabled",
          "description" : "Enables or disables an audit event handler.",
          "propertyOrder" : 4900,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        }
      }
    },
    "commonHandlerPlugin" : {
```


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```
      "type" : "object",
      "title" : "Audit Event Handler Factory",
      "propertyOrder" : 1,
      "properties" : {
        "handlerFactory" : {
          "title" : "Factory Class Name",
          "description" : "The fully qualified class name of the factory
 responsible for creating the Audit Event Handler. The class must implement
 <code>org.forgerock.openam.audit.AuditEventHandlerFactory</code>.",
          "propertyOrder" : 6100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    },
    "elasticsearchAuthentication" : {
      "type" : "object",
      "title" : "Authentication",
      "propertyOrder" : 3,
      "properties" : {
        "password" : {
          "title" : "Password",
          "description" : "Specifies the password to access the Elasticsearch server.<p><p>Required if
 Elasticsearch Shield authentication is configured.",
          "propertyOrder" : 5600,
          "required" : true,
          "type" : "string",
          "format" : "password",
          "exampleValue" : ""
        },
        "username" : {
          "title" : "Username",
          "description" : "Specifies the username to access the Elasticsearch server.<p><p>Required if
 Elasticsearch Shield authentication is configured.",
          "propertyOrder" : 5500,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    }
  }
}
```

1.56.1.2. delete

Usage:

```
am> delete ElasticSearch --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

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1.56.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action ElasticSearch --realm Realm --actionName getAllTypes
```

1.56.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action ElasticSearch --realm Realm --actionName getCreatableTypes
```

1.56.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action ElasticSearch --realm Realm --actionName nextdescendents
```

1.56.1.6. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

```
am> query ElasticSearch --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.56.1.7. read

Usage:

```
am> read ElasticSearch --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

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1.56.1.8. update

Usage:

```
am> update ElasticSearch --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "elasticsearchBuffering" : {
      "type" : "object",
      "title" : "Buffering",
      "propertyOrder" : 4,
      "properties" : {
        "writeInterval" : {
          "title" : "Write interval (in milliseconds)",
          "description" : "Specifies the interval in milliseconds at which buffered events are written
 to Elasticsearch.",
          "propertyOrder" : 6000,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "maxEvents" : {
          "title" : "Queue Capacity",
          "description" : "Maximum number of audit logs in the batch queue. Additional audit events
 are dropped.",
          "propertyOrder" : 5900,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "bufferingEnabled" : {
          "title" : "Buffering Enabled",
          "description" : "",
          "propertyOrder" : 5700,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "batchSize" : {
          "title" : "Batch Size",
          "description" : "Maximum number of events that can be buffered (default: 10000)",
          "propertyOrder" : 5800,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        }
```


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```
      }
    },
    "elasticsearchConfig" : {
      "type" : "object",
      "title" : "Elasticsearch Configuration",
      "propertyOrder" : 2,
      "properties" : {
        "sslEnabled" : {
          "title" : "SSL Enabled",
          "description" : "Specifies whether SSL is configured on the Elasticsearch server.<p><p>If
SSL is enabled, be sure to import the CA certificate used to sign Elasticsearch node certificates
into the Java keystore on the host that runs OpenAM before attempting to log audit events to
Elasticsearch.",
          "propertyOrder" : 5300,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "port" : {
          "title" : "Server Port",
          "description" : "Specifies the port number used to access Elasticsearch's REST API.",
          "propertyOrder" : 5200,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "index" : {
          "title" : "Elasticsearch Index",
          "description" : "Specifies the name of the Elasticsearch index to be used for OpenAM audit
logging.",
          "propertyOrder" : 5400,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "host" : {
          "title" : "Server Hostname",
          "description" : "Host name or IP address of the Elasticsearch server.",
          "propertyOrder" : 5100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    },
    "commonHandler" : {
      "type" : "object",
      "title" : "General Handler Configuration",
      "propertyOrder" : 0,
      "properties" : {
        "topics" : {
          "title" : "Topics",
          "description" : "List of topics handled by an audit event handler.",
          "propertyOrder" : 5000,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
```


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```
          "exampleValue" : ""
        },
        "enabled" : {
          "title" : "Enabled",
          "description" : "Enables or disables an audit event handler.",
          "propertyOrder" : 4900,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        }
      }
    },
    "commonHandlerPlugin" : {
      "type" : "object",
      "title" : "Audit Event Handler Factory",
      "propertyOrder" : 1,
      "properties" : {
        "handlerFactory" : {
          "title" : "Factory Class Name",
          "description" : "The fully qualified class name of the factory
 responsible for creating the Audit Event Handler. The class must implement
 <code>org.forgerock.openam.audit.AuditEventHandlerFactory</code>.",
          "propertyOrder" : 6100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    },
    "elasticsearchAuthentication" : {
      "type" : "object",
      "title" : "Authentication",
      "propertyOrder" : 3,
      "properties" : {
        "password" : {
          "title" : "Password",
          "description" : "Specifies the password to access the Elasticsearch server.<p><p>Required if
 Elasticsearch Shield authentication is configured.",
          "propertyOrder" : 5600,
          "required" : true,
          "type" : "string",
          "format" : "password",
          "exampleValue" : ""
        },
        "username" : {
          "title" : "Username",
          "description" : "Specifies the username to access the Elasticsearch server.<p><p>Required if
 Elasticsearch Shield authentication is configured.",
          "propertyOrder" : 5500,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    }
  }
}
```


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1.56.2. Global Operations

Resource path: `/global-config/services/audit/Elasticsearch`

Resource version: `1.0`

1.56.2.1. create

Usage:

```
am> create ElasticSearch --global --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "elasticsearchBuffering" : {
      "type" : "object",
      "title" : "Buffering",
      "propertyOrder" : 4,
      "properties" : {
        "maxEvents" : {
          "title" : "Queue Capacity",
          "description" : "Maximum number of audit logs in the batch queue. Additional audit events
 are dropped.",
          "propertyOrder" : 5900,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "writeInterval" : {
          "title" : "Write interval (in milliseconds)",
          "description" : "Specifies the interval in milliseconds at which buffered events are written
 to Elasticsearch.",
          "propertyOrder" : 6000,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "bufferingEnabled" : {
          "title" : "Buffering Enabled",
          "description" : "",
          "propertyOrder" : 5700,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
```


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```
       },
       "batchSize" : {
         "title" : "Batch Size",
         "description" : "Maximum number of events that can be buffered (default: 10000)",
         "propertyOrder" : 5800,
         "required" : true,
         "type" : "integer",
         "exampleValue" : ""
       }
     }
   },
   "commonHandlerPlugin" : {
     "type" : "object",
     "title" : "Audit Event Handler Factory",
     "propertyOrder" : 1,
     "properties" : {
       "handlerFactory" : {
         "title" : "Factory Class Name",
         "description" : "The fully qualified class name of the factory
responsible for creating the Audit Event Handler. The class must implement
<code>org.forgerock.openam.audit.AuditEventHandlerFactory</code>.",
         "propertyOrder" : 6100,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       }
     }
   },
   "elasticsearchConfig" : {
     "type" : "object",
     "title" : "Elasticsearch Configuration",
     "propertyOrder" : 2,
     "properties" : {
       "host" : {
         "title" : "Server Hostname",
         "description" : "Host name or IP address of the Elasticsearch server.",
         "propertyOrder" : 5100,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       },
       "index" : {
         "title" : "Elasticsearch Index",
         "description" : "Specifies the name of the Elasticsearch index to be used for OpenAM audit
logging.",
         "propertyOrder" : 5400,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       },
       "sslEnabled" : {
         "title" : "SSL Enabled",
         "description" : "Specifies whether SSL is configured on the Elasticsearch server.<p><p>If
SSL is enabled, be sure to import the CA certificate used to sign Elasticsearch node certificates
into the Java keystore on the host that runs OpenAM before attempting to log audit events to
Elasticsearch.",
         "propertyOrder" : 5300,
         "required" : true,
         "type" : "boolean",
```


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```
          "exampleValue" : ""
        },
        "port" : {
          "title" : "Server Port",
          "description" : "Specifies the port number used to access Elasticsearch's REST API.",
          "propertyOrder" : 5200,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        }
      }
    },
    "elasticsearchAuthentication" : {
      "type" : "object",
      "title" : "Authentication",
      "propertyOrder" : 3,
      "properties" : {
        "username" : {
          "title" : "Username",
          "description" : "Specifies the username to access the Elasticsearch server.<p><p>Required if
Elasticsearch Shield authentication is configured.",
          "propertyOrder" : 5500,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "password" : {
          "title" : "Password",
          "description" : "Specifies the password to access the Elasticsearch server.<p><p>Required if
Elasticsearch Shield authentication is configured.",
          "propertyOrder" : 5600,
          "required" : true,
          "type" : "string",
          "format" : "password",
          "exampleValue" : ""
        }
      }
    },
    "commonHandler" : {
      "type" : "object",
      "title" : "General Handler Configuration",
      "propertyOrder" : 0,
      "properties" : {
        "enabled" : {
          "title" : "Enabled",
          "description" : "Enables or disables an audit event handler.",
          "propertyOrder" : 4900,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "topics" : {
          "title" : "Topics",
          "description" : "List of topics handled by an audit event handler.",
          "propertyOrder" : 5000,
          "required" : true,
          "items" : {
            "type" : "string"
          },
```


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```
          "type" : "array",
          "exampleValue" : ""
        }
      }
    }
  }
}
```

1.56.2.2. delete

Usage:

```
am> delete ElasticSearch --global --id id
```

Parameters:

--id

The unique identifier for the resource.

1.56.2.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action ElasticSearch --global --actionName getAllTypes
```

1.56.2.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action ElasticSearch --global --actionName getCreatableTypes
```

1.56.2.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action ElasticSearch --global --actionName nextdescendents
```

1.56.2.6. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

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```
am> query ElasticSearch --global --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.56.2.7. read

Usage:

```
am> read ElasticSearch --global --id id
```

Parameters:

--id

The unique identifier for the resource.

1.56.2.8. update

Usage:

```
am> update ElasticSearch --global --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "elasticsearchBuffering" : {
      "type" : "object",
      "title" : "Buffering",
      "propertyOrder" : 4,
      "properties" : {
        "maxEvents" : {
          "title" : "Queue Capacity",
          "description" : "Maximum number of audit logs in the batch queue. Additional audit events
 are dropped.",
          "propertyOrder" : 5900,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
```


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```
       "writeInterval" : {
         "title" : "Write interval (in milliseconds)",
         "description" : "Specifies the interval in milliseconds at which buffered events are written
to Elasticsearch.",
         "propertyOrder" : 6000,
         "required" : true,
         "type" : "integer",
         "exampleValue" : ""
       },
       "bufferingEnabled" : {
         "title" : "Buffering Enabled",
         "description" : "",
         "propertyOrder" : 5700,
         "required" : true,
         "type" : "boolean",
         "exampleValue" : ""
       },
       "batchSize" : {
         "title" : "Batch Size",
         "description" : "Maximum number of events that can be buffered (default: 10000)",
         "propertyOrder" : 5800,
         "required" : true,
         "type" : "integer",
         "exampleValue" : ""
       }
     }
   },
   "commonHandlerPlugin" : {
     "type" : "object",
     "title" : "Audit Event Handler Factory",
     "propertyOrder" : 1,
     "properties" : {
       "handlerFactory" : {
         "title" : "Factory Class Name",
         "description" : "The fully qualified class name of the factory
responsible for creating the Audit Event Handler. The class must implement
<code>org.forgerock.openam.audit.AuditEventHandlerFactory</code>.",
         "propertyOrder" : 6100,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       }
     }
   },
   "elasticsearchConfig" : {
     "type" : "object",
     "title" : "Elasticsearch Configuration",
     "propertyOrder" : 2,
     "properties" : {
       "host" : {
         "title" : "Server Hostname",
         "description" : "Host name or IP address of the Elasticsearch server.",
         "propertyOrder" : 5100,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       },
       "index" : {
         "title" : "Elasticsearch Index",
```


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```
          "description" : "Specifies the name of the Elasticsearch index to be used for OpenAM audit
logging.",
          "propertyOrder" : 5400,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "sslEnabled" : {
          "title" : "SSL Enabled",
          "description" : "Specifies whether SSL is configured on the Elasticsearch server.<p><p>If
SSL is enabled, be sure to import the CA certificate used to sign Elasticsearch node certificates
into the Java keystore on the host that runs OpenAM before attempting to log audit events to
Elasticsearch.",
          "propertyOrder" : 5300,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "port" : {
          "title" : "Server Port",
          "description" : "Specifies the port number used to access Elasticsearch's REST API.",
          "propertyOrder" : 5200,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        }
      }
    },
    "elasticsearchAuthentication" : {
      "type" : "object",
      "title" : "Authentication",
      "propertyOrder" : 3,
      "properties" : {
        "username" : {
          "title" : "Username",
          "description" : "Specifies the username to access the Elasticsearch server.<p><p>Required if
Elasticsearch Shield authentication is configured.",
          "propertyOrder" : 5500,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "password" : {
          "title" : "Password",
          "description" : "Specifies the password to access the Elasticsearch server.<p><p>Required if
Elasticsearch Shield authentication is configured.",
          "propertyOrder" : 5600,
          "required" : true,
          "type" : "string",
          "format" : "password",
          "exampleValue" : ""
        }
      }
    },
    "commonHandler" : {
      "type" : "object",
      "title" : "General Handler Configuration",
      "propertyOrder" : 0,
      "properties" : {
```


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```
        "enabled" : {
          "title" : "Enabled",
          "description" : "Enables or disables an audit event handler.",
          "propertyOrder" : 4900,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "topics" : {
          "title" : "Topics",
          "description" : "List of topics handled by an audit event handler.",
          "propertyOrder" : 5000,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        }
      }
    }
  }
}
```

1.57. EmailService

1.57.1. Realm Operations

Resource path: `/realm-config/services/email`

Resource version: `1.0`

1.57.1.1. create

Usage:

```
am> create EmailService --realm Realm --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "emailAddressAttribute" : {
      "title" : "Email Attribute Name",
      "description" : "Specifies the profile attribute from which to retrieve the end user's email
 address.",
```


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```
      "propertyOrder" : 800,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "message" : {
      "title" : "Email Content",
      "description" : "Specifies content for notification messages. If you do not set this, OpenAM
includes only the confirmation URL in the mail body.",
      "propertyOrder" : 1000,
      "required" : false,
      "type" : "string",
      "exampleValue" : ""
    },
    "username" : {
      "title" : "Mail Server Authentication Username",
      "description" : "Specifies the user name for the SMTP mail server.",
      "propertyOrder" : 400,
      "required" : true,
      "type" : "string",
      "exampleValue" : "username"
    },
    "emailImplClassName" : {
      "title" : "Email Message Implementation Class",
      "description" : "Specifies the class that sends email notifications, such as those sent for user
registration and forgotten passwords.",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "subject" : {
      "title" : "Email Subject",
      "description" : "Specifies a subject for notification messages. If you do not set this, OpenAM
does not set the subject for notification messages.",
      "propertyOrder" : 900,
      "required" : false,
      "type" : "string",
      "exampleValue" : ""
    },
    "password" : {
      "title" : "Mail Server Authentication Password",
      "description" : "Specifies the password for the SMTP user name.",
      "propertyOrder" : 500,
      "required" : true,
      "type" : "string",
      "format" : "password",
      "exampleValue" : ""
    },
    "from" : {
      "title" : "Email From Address",
      "description" : "Specifies the address from which to send email notifications.",
      "propertyOrder" : 700,
      "required" : true,
      "type" : "string",
      "exampleValue" : "no-reply@example.com"
    },
    "hostname" : {
      "title" : "Mail Server Host Name",
```


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```
      "description" : "Specifies the fully qualified domain name of the SMTP mail server through which
 to send email notifications.",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "string",
      "exampleValue" : "smtp.example.com"
    },
    "sslState" : {
      "title" : "Mail Server Secure Connection",
      "description" : "Specifies whether to connect to the SMTP mail server using SSL.",
      "propertyOrder" : 600,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "port" : {
      "title" : "Mail Server Host Port",
      "description" : "Specifies the port number for the SMTP mail server.",
      "propertyOrder" : 300,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    }
  }
}
```

1.57.1.2. delete

Usage:

```
am> delete EmailService --realm Realm
```

1.57.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action EmailService --realm Realm --actionName getAllTypes
```

1.57.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action EmailService --realm Realm --actionName getCreatableTypes
```

1.57.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

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Usage:

```
am> action EmailService --realm Realm --actionName nextdescendents
```

1.57.1.6. read

Usage:

```
am> read EmailService --realm Realm
```

1.57.1.7. update

Usage:

```
am> update EmailService --realm Realm --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "emailAddressAttribute" : {
      "title" : "Email Attribute Name",
      "description" : "Specifies the profile attribute from which to retrieve the end user's email
 address.",
      "propertyOrder" : 800,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "message" : {
      "title" : "Email Content",
      "description" : "Specifies content for notification messages. If you do not set this, OpenAM
 includes only the confirmation URL in the mail body.",
      "propertyOrder" : 1000,
      "required" : false,
      "type" : "string",
      "exampleValue" : ""
    },
    "username" : {
      "title" : "Mail Server Authentication Username",
      "description" : "Specifies the user name for the SMTP mail server.",
      "propertyOrder" : 400,
      "required" : true,
      "type" : "string",
      "exampleValue" : "username"
    },
    "emailImplClassName" : {
      "title" : "Email Message Implementation Class",
      "description" : "Specifies the class that sends email notifications, such as those sent for user
 registration and forgotten passwords.",
```


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```
      "propertyOrder" : 100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "subject" : {
      "title" : "Email Subject",
      "description" : "Specifies a subject for notification messages. If you do not set this, OpenAM
 does not set the subject for notification messages.",
      "propertyOrder" : 900,
      "required" : false,
      "type" : "string",
      "exampleValue" : ""
    },
    "password" : {
      "title" : "Mail Server Authentication Password",
      "description" : "Specifies the password for the SMTP user name.",
      "propertyOrder" : 500,
      "required" : true,
      "type" : "string",
      "format" : "password",
      "exampleValue" : ""
    },
    "from" : {
      "title" : "Email From Address",
      "description" : "Specifies the address from which to send email notifications.",
      "propertyOrder" : 700,
      "required" : true,
      "type" : "string",
      "exampleValue" : "no-reply@example.com"
    },
    "hostname" : {
      "title" : "Mail Server Host Name",
      "description" : "Specifies the fully qualified domain name of the SMTP mail server through which
 to send email notifications.",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "string",
      "exampleValue" : "smtp.example.com"
    },
    "sslState" : {
      "title" : "Mail Server Secure Connection",
      "description" : "Specifies whether to connect to the SMTP mail server using SSL.",
      "propertyOrder" : 600,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "port" : {
      "title" : "Mail Server Host Port",
      "description" : "Specifies the port number for the SMTP mail server.",
      "propertyOrder" : 300,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    }
  }
}
```


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1.57.2. Global Operations

Resource path: `/global-config/services/email`

Resource version: `1.0`

1.57.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action EmailService --global --actionName getAllTypes
```

1.57.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action EmailService --global --actionName getCreatableTypes
```

1.57.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action EmailService --global --actionName nextdescendents
```

1.57.2.4. read

Usage:

```
am> read EmailService --global
```

1.57.2.5. update

Usage:

```
am> update EmailService --global --body body
```

Parameters:

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--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "defaults" : {
      "properties" : {
        "message" : {
          "title" : "Email Content",
          "description" : "Specifies content for notification messages. If you do not set this, OpenAM
 includes only the confirmation URL in the mail body.",
          "propertyOrder" : 1000,
          "required" : false,
          "type" : "string",
          "exampleValue" : ""
        },
        "from" : {
          "title" : "Email From Address",
          "description" : "Specifies the address from which to send email notifications.",
          "propertyOrder" : 700,
          "required" : true,
          "type" : "string",
          "exampleValue" : "no-reply@example.com"
        },
        "emailImplClassName" : {
          "title" : "Email Message Implementation Class",
          "description" : "Specifies the class that sends email notifications, such as those sent for
 user registration and forgotten passwords.",
          "propertyOrder" : 100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "password" : {
          "title" : "Mail Server Authentication Password",
          "description" : "Specifies the password for the SMTP user name.",
          "propertyOrder" : 500,
          "required" : true,
          "type" : "string",
          "format" : "password",
          "exampleValue" : ""
        },
        "subject" : {
          "title" : "Email Subject",
          "description" : "Specifies a subject for notification messages. If you do not set this,
 OpenAM does not set the subject for notification messages.",
          "propertyOrder" : 900,
          "required" : false,
          "type" : "string",
          "exampleValue" : ""
        },
        "emailAddressAttribute" : {
          "title" : "Email Attribute Name",
          "description" : "Specifies the profile attribute from which to retrieve the end user's email
 address.",
          "propertyOrder" : 800,
          "required" : true,
```


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```
          "type" : "string",
          "exampleValue" : ""
        },
        "hostname" : {
          "title" : "Mail Server Host Name",
          "description" : "Specifies the fully qualified domain name of the SMTP mail server through
 which to send email notifications.",
          "propertyOrder" : 200,
          "required" : true,
          "type" : "string",
          "exampleValue" : "smtp.example.com"
        },
        "sslState" : {
          "title" : "Mail Server Secure Connection",
          "description" : "Specifies whether to connect to the SMTP mail server using SSL.",
          "propertyOrder" : 600,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "username" : {
          "title" : "Mail Server Authentication Username",
          "description" : "Specifies the user name for the SMTP mail server.",
          "propertyOrder" : 400,
          "required" : true,
          "type" : "string",
          "exampleValue" : "username"
        },
        "port" : {
          "title" : "Mail Server Host Port",
          "description" : "Specifies the port number for the SMTP mail server.",
          "propertyOrder" : 300,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        }
      },
      "type" : "object",
      "title" : "Realm Defaults"
    }
  }
}
```

1.58. FederationModule

1.58.1. Realm Operations

Resource path: `/realm-config/authentication/modules/federation`

Resource version: `1.0`

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1.58.1.1. create

Usage:

```
am> create FederationModule --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "authenticationLevel" : {
      "title" : "Authentication Level",
      "description" : "The authentication level associated with this module.<br><br>Each
 authentication module has an authentication level that can be used to indicate the level of security
 associated with the module; 0 is the lowest (and the default).",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    }
  }
}
```

1.58.1.2. delete

Usage:

```
am> delete FederationModule --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.58.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action FederationModule --realm Realm --actionName getAllTypes
```


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1.58.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action FederationModule --realm Realm --actionName getCreatableTypes
```

1.58.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action FederationModule --realm Realm --actionName nextdescendents
```

1.58.1.6. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

```
am> query FederationModule --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.58.1.7. read

Usage:

```
am> read FederationModule --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.58.1.8. update

Usage:

```
am> update FederationModule --realm Realm --id id --body body
```

Parameters:

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--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "authenticationLevel" : {
      "title" : "Authentication Level",
      "description" : "The authentication level associated with this module.<br><br>Each
 authentication module has an authentication level that can be used to indicate the level of security
 associated with the module; 0 is the lowest (and the default).",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    }
  }
}
```

1.58.2. Global Operations

Resource path: `/global-config/authentication/modules/federation`

Resource version: `1.0`

1.58.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action FederationModule --global --actionName getAllTypes
```

1.58.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action FederationModule --global --actionName getCreatableTypes
```

1.58.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

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```
am> action FederationModule --global --actionName nextdescendents
```

1.58.2.4. read

Usage:

```
am> read FederationModule --global
```

1.58.2.5. update

Usage:

```
am> update FederationModule --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "defaults" : {
      "properties" : {
        "authenticationLevel" : {
          "title" : "Authentication Level",
          "description" : "The authentication level associated with this module.<br><br>Each
 authentication module has an authentication level that can be used to indicate the level of security
 associated with the module; 0 is the lowest (and the default).",
          "propertyOrder" : 100,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        }
      },
      "type" : "object",
      "title" : "Realm Defaults"
    }
  }
}
```

1.59. Files

1.59.1. Realm Operations

Resource path: `/realm-config/services/id-repositories/files`

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Resource version: `1.0`

1.59.1.1. create

Usage:

```
am> create Files --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "sunFilesEncryptAttrs" : {
      "title" : "Encrypted Attributes",
      "description" : "",
      "propertyOrder" : 6900,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sunFilesMonitorForChanges" : {
      "title" : "Caching",
      "description" : "",
      "propertyOrder" : 6300,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "sunFilesObjectClasses" : {
      "title" : "User Object Classes",
      "description" : "",
      "propertyOrder" : 6500,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sunFilesHashAttrs" : {
      "title" : "Hashed Attributes",
      "description" : "",
      "propertyOrder" : 6800,
      "required" : true,
```


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```
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sunFilesIdRepoDirectory" : {
      "title" : "Files Repository Directory",
      "description" : "",
      "propertyOrder" : 6200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sunFilesPasswordAttr" : {
      "title" : "Password Attribute",
      "description" : "",
      "propertyOrder" : 6600,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sunFilesStatusAttr" : {
      "title" : "Status Attribute",
      "description" : "",
      "propertyOrder" : 6700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sunFilesMonitoringTime" : {
      "title" : "Cache Update Interval",
      "description" : "In minutes.",
      "propertyOrder" : 6400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sunIdRepoClass" : {
      "title" : "Files Repository Plugin Class Name",
      "description" : "",
      "propertyOrder" : 6100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```


1.59.1.2. delete

Usage:

```
am> delete Files --realm Realm --id id
```

Parameters:

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--id

The unique identifier for the resource.

1.59.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action Files --realm Realm --actionName getAllTypes
```

1.59.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action Files --realm Realm --actionName getCreatableTypes
```

1.59.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action Files --realm Realm --actionName nextdescendents
```

1.59.1.6. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

```
am> query Files --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.59.1.7. read

Usage:

```
am> read Files --realm Realm --id id
```

Parameters:

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--id

The unique identifier for the resource.

1.59.1.8. update

Usage:

```
am> update Files --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "sunFilesEncryptAttrs" : {
      "title" : "Encrypted Attributes",
      "description" : "",
      "propertyOrder" : 6900,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sunFilesMonitorForChanges" : {
      "title" : "Caching",
      "description" : "",
      "propertyOrder" : 6300,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "sunFilesObjectClasses" : {
      "title" : "User Object Classes",
      "description" : "",
      "propertyOrder" : 6500,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sunFilesHashAttrs" : {
      "title" : "Hashed Attributes",
      "description" : "",
```


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```
      "propertyOrder" : 6800,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sunFilesIdRepoDirectory" : {
      "title" : "Files Repository Directory",
      "description" : "",
      "propertyOrder" : 6200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sunFilesPasswordAttr" : {
      "title" : "Password Attribute",
      "description" : "",
      "propertyOrder" : 6600,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sunFilesStatusAttr" : {
      "title" : "Status Attribute",
      "description" : "",
      "propertyOrder" : 6700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sunFilesMonitoringTime" : {
      "title" : "Cache Update Interval",
      "description" : "In minutes.",
      "propertyOrder" : 6400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sunIdRepoClass" : {
      "title" : "Files Repository Plugin Class Name",
      "description" : "",
      "propertyOrder" : 6100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```


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1.60. ForgottenPassword

1.60.1. Realm Operations

Self Service endpoint for retrieving a forgotten password

Resource path: `/selfservice/forgottenPassword`

Resource version: `1.0`

1.60.1.1. read

Initialise the forgotten password reclamation process.A set of requirements will be returned that will need to be fulfilled and sent to the submitRequirements action.

Usage:

```
am> read ForgottenPassword --realm Realm
```

1.60.1.2. submitRequirements

Submit some fulfilled requirements. Returns either a completion status, or a token along with some more requirements. If requirements are returned, they should be submitted with the token as a fresh request to this action.

Usage:

```
am> action ForgottenPassword --realm Realm --body body --actionName submitRequirements
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

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```
{
  "$schema" : "http://json-schema.org/draft-04/schema#",
  "description" : "The structure of a request to the submitRequirements action.",
  "type" : "object",
  "title" : "Submit requirements structure",
  "properties" : {
    "token" : {
      "type" : "string",
      "title" : "Token",
      "description" : "The token returned from the previous submitRequirements request."
    },
    "input" : {
      "type" : "object",
      "title" : "Input",
      "description" : "The input as collected from the user that has forgotten their password. This
 object must conform to the JSON Schema of the requirements property from the last response.",
      "patternProperties" : {
        ".*" : {
          "type" : "any",
          "title" : "Input Property",
          "description" : "Valid content according to the received JSON Schema."
        }
      }
    }
  },
  "required" : [ "input" ]
}
```

1.61. ForgottenUsername

1.61.1. Realm Operations

Self Service endpoint for retrieving a forgotten username

Resource path: `/selfservice/forgottenUsername`

Resource version: `1.0`

1.61.1.1. read

Initialise the forgotten username reclamation process.A set of requirements will be returned that will need to be fulfilled and sent to the submitRequirements action.

Usage:

```
am> read ForgottenUsername --realm Realm
```


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1.61.1.2. submitRequirements

Submit some fulfilled requirements. Returns either a completion status, or a token along with some more requirements. If requirements are returned, they should be submitted with the token as a fresh request to this action.

Usage:

```
am> action ForgottenUsername --realm Realm --body body --actionName submitRequirements
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "$schema" : "http://json-schema.org/draft-04/schema#",
  "description" : "The structure of a request to the submitRequirements action.",
  "type" : "object",
  "title" : "Submit requirements structure",
  "properties" : {
    "token" : {
      "type" : "string",
      "title" : "Token",
      "description" : "The token returned from the previous submitRequirements request."
    },
    "input" : {
      "type" : "object",
      "title" : "Input",
      "description" : "The input as collected from the user that has forgotten their username. This
 object must conform to the JSON Schema of the requirements property from the last response.",
      "patternProperties" : {
        ".*" : {
          "type" : "any",
          "title" : "Input Property",
          "description" : "Valid content according to the received JSON Schema."
        }
      }
    }
  },
  "required" : [ "input" ]
}
```

1.62. GeneralProperties

1.62.1. Global Operations

An object of property key-value pairs

Resource path: `/global-config/servers/{serverName}/properties/general`

Resource version: `1.0`

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1.62.1.1. read

Usage:

```
am> read GeneralProperties --global --serverName serverName
```

Parameters:

--serverName

An object of property key-value pairs

1.62.1.2. update

Usage:

```
am> update GeneralProperties --global --serverName serverName --body body
```

Parameters:

--serverName

An object of property key-value pairs

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "amconfig.header.site" : {
      "title" : "Site",
      "type" : "object",
      "propertyOrder" : 0,
      "properties" : {
        "singleChoiceSite" : {
          "enum" : null,
          "options" : {
            "enum_titles" : null
          },
          "type" : "string",
          "title" : "Parent Site",
          "propertyOrder" : 0,
          "required" : false,
          "description" : "Parent Site"
        }
      }
    },
    "amconfig.header.installdir" : {
      "title" : "System",
      "type" : "object",
      "propertyOrder" : 1,
      "properties" : {
        "com.iplanet.services.configpath" : {
```


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```
          "title" : "Base installation directory",
          "type" : "object",
          "propertyOrder" : 0,
          "description" : "Base directory where product's data resides. (property name:
com.iplanet.services.configpath)",
          "properties" : {
            "value" : {
              "type" : "string",
              "required" : false
            },
            "inherited" : {
              "type" : "boolean",
              "required" : true
            }
          }
        },
        "com.iplanet.am.locale" : {
          "title" : "Default Locale",
          "type" : "object",
          "propertyOrder" : 1,
          "description" : "Default locale for the product. (property name: com.iplanet.am.locale)",
          "properties" : {
            "value" : {
              "type" : "string",
              "required" : false
            },
            "inherited" : {
              "type" : "boolean",
              "required" : true
            }
          }
        },
        "com.sun.identity.client.notification.url" : {
          "title" : "Notification URL",
          "type" : "object",
          "propertyOrder" : 2,
          "description" : "The location of notification service end point. It is usually the product's
deployment URI/notificationservice. (property name: com.sun.identity.client.notification.url)",
          "properties" : {
            "value" : {
              "type" : "string",
              "required" : false
            },
            "inherited" : {
              "type" : "boolean",
              "required" : true
            }
          }
        },
        "com.iplanet.am.util.xml.validating" : {
          "title" : "XML Validation",
          "type" : "object",
          "propertyOrder" : 3,
          "description" : "Specifies if validation is required when parsing XML documents. (property
name: com.iplanet.am.util.xml.validating)",
          "properties" : {
            "value" : {
              "enum" : [ "on", "off" ],
              "options" : {
```


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```
              "enum_titles" : [ "On", "Off" ]
            },
            "type" : "string",
            "required" : false
          },
          "inherited" : {
            "type" : "boolean",
            "required" : true
          }
        }
      }
    }
  },
  "amconfig.header.debug" : {
    "title" : "Debugging",
    "type" : "object",
    "propertyOrder" : 2,
    "properties" : {
      "com.iplanet.services.debug.level" : {
        "title" : "Debug Level",
        "type" : "object",
        "propertyOrder" : 0,
        "description" : "Debug level for all components in the product. (property name:
com.iplanet.services.debug.level)",
        "properties" : {
          "value" : {
            "enum" : [ "off", "error", "warning", "message" ],
            "options" : {
              "enum_titles" : [ "Off", "Error", "Warning", "Message" ]
            },
            "type" : "string",
            "required" : false
          },
          "inherited" : {
            "type" : "boolean",
            "required" : true
          }
        }
      },
      "com.sun.services.debug.mergeall" : {
        "title" : "Merge Debug Files",
        "type" : "object",
        "propertyOrder" : 1,
        "description" : "On : Directs all debug data to a single file (debug.out); Off : creates
separate per-component debug files (property name : com.sun.services.debug.mergeall)",
        "properties" : {
          "value" : {
            "enum" : [ "on", "off" ],
            "options" : {
              "enum_titles" : [ "On", "Off" ]
            },
            "type" : "string",
            "required" : false
          },
          "inherited" : {
            "type" : "boolean",
            "required" : true
          }
        }
```


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```
      },
      "com.iplanet.services.debug.directory" : {
        "title" : "Debug Directory",
        "type" : "object",
        "propertyOrder" : 2,
        "description" : "Directory where debug files reside. (property name:
com.iplanet.services.debug.directory)",
        "properties" : {
          "value" : {
            "type" : "string",
            "required" : false
          },
          "inherited" : {
            "type" : "boolean",
            "required" : true
          }
        }
      }
    }
  },
  "amconfig.header.mailserver" : {
    "title" : "Mail Server",
    "type" : "object",
    "propertyOrder" : 3,
    "properties" : {
      "com.iplanet.am.smtphost" : {
        "title" : "Mail Server Host Name",
        "type" : "object",
        "propertyOrder" : 0,
        "description" : "(property name: com.iplanet.am.smtphost)",
        "properties" : {
          "value" : {
            "type" : "string",
            "required" : false
          },
          "inherited" : {
            "type" : "boolean",
            "required" : true
          }
        }
      },
      "com.iplanet.am.smtpport" : {
        "title" : "Mail Server Port Number",
        "type" : "object",
        "propertyOrder" : 1,
        "description" : "(property name: com.iplanet.am.smtpport)",
        "properties" : {
          "value" : {
            "type" : "integer",
            "required" : false
          },
          "inherited" : {
            "type" : "boolean",
            "required" : true
          }
        }
      }
    }
  }
```


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```
  }
}
```

1.63. GenericLDAPv3

1.63.1. Realm Operations

Resource path: `/realm-config/services/id-repositories/LDAPv3`

Resource version: `1.0`

1.63.1.1. create

Usage:

```
am> create GenericLDAPv3 --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "sun-idrepo-ldapv3-config-psearch-scope" : {
      "title" : "Persistent Search Scope",
      "description" : "",
      "propertyOrder" : 5700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-createuser-attr-mapping" : {
      "title" : "Create User Attribute Mapping",
      "description" : "Format: attribute name or TargetAttributeName=SourceAttributeName",
      "propertyOrder" : 2500,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-group-attributes" : {
      "title" : "LDAP Groups Attributes",
```


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```
      "description" : "",
      "propertyOrder" : 3400,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-ldap-server" : {
      "title" : "LDAP Server",
      "description" : "Format: LDAP server host name:port | server_ID | site_ID",
      "propertyOrder" : 600,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-people-container-name" : {
      "title" : "LDAP People Container Naming Attribute",
      "description" : "",
      "propertyOrder" : 5000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-time-limit" : {
      "title" : "Search Timeout",
      "description" : "In seconds.",
      "propertyOrder" : 1600,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-groups-search-attribute" : {
      "title" : "LDAP Groups Search Attribute",
      "description" : "",
      "propertyOrder" : 2900,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-psearchbase" : {
      "title" : "Persistent Search Base DN",
      "description" : "",
      "propertyOrder" : 5500,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-dftgroupmember" : {
      "title" : "Default Group Member's User DN",
      "description" : "User automatically added when group is created.",
      "propertyOrder" : 3800,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
```


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```
    },
    "sun-idrepo-ldapv3-config-users-search-attribute" : {
      "title" : "LDAP Users  Search Attribute",
      "description" : "",
      "propertyOrder" : 2100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-inactive" : {
      "title" : "User Status Inactive Value",
      "description" : "",
      "propertyOrder" : 2800,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "openam-idrepo-ldapv3-affinity-enabled" : {
      "title" : "Affinity Enabled",
      "description" : "Enables affinity based request load balancing when accessing the user store
servers (based on DN). It is imperative that the connection string setting is set to the same value
for all OpenAM servers in the deployment when this feature is enabled.",
      "propertyOrder" : 6200,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "sunIdRepoSupportedOperations" : {
      "title" : "LDAPv3 Plug-in Supported Types and Operations",
      "description" : "",
      "propertyOrder" : 1900,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sunIdRepoClass" : {
      "title" : "LDAPv3 Repository Plug-in Class Name",
      "description" : "",
      "propertyOrder" : 1700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-uniquemember" : {
      "title" : "Attribute Name of Unique Member",
      "description" : "",
      "propertyOrder" : 3600,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-isactive" : {
      "title" : "Attribute Name of User Status",
      "description" : "",
      "propertyOrder" : 2600,
      "required" : true,
```


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```
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-active" : {
      "title" : "User Status Active Value",
      "description" : "",
      "propertyOrder" : 2700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-search-scope" : {
      "title" : "LDAPv3 Plug-in Search Scope",
      "description" : "",
      "propertyOrder" : 2000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "openam-idrepo-ldapv3-heartbeat-interval" : {
      "title" : "LDAP Connection Heartbeat Interval",
      "description" : "Specifies how often should OpenAM send a heartbeat request to the
directory.<br><br>This setting controls how often OpenAM <b>should</b> send a heartbeat search
request to the configured directory. If a connection becomes unresponsive (e.g. due to a network
error) then it may take up to the interval period before the problem is detected. Use along with the
Heartbeat Time Unit parameter to define the exact interval. Zero or negative value will result in
disabling heartbeat requests.",
      "propertyOrder" : 1300,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-group-container-value" : {
      "title" : "LDAP Groups Container Value",
      "description" : "",
      "propertyOrder" : 3200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-connection-mode" : {
      "title" : "LDAP Connection Mode",
      "description" : "Defines which protocol/operation is used to establish the connection to the
LDAP Directory Server.<br><br>If 'LDAP' is selected, the connection <b>won't be secured</b> and
passwords are transferred in <b>cleartext</b> over the network.<br/> If 'LDAPS' is selected, the
connection is secured via SSL or TLS. <br/> If 'StartTLS' is selected, the connection is secured by
using StartTLS extended operation.",
      "propertyOrder" : 1000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sunIdRepoAttributeMapping" : {
      "title" : "Attribute Name Mapping",
      "description" : "",
      "propertyOrder" : 1800,
      "required" : true,
      "items" : {
        "type" : "string"
```


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```
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-users-search-filter" : {
      "title" : "LDAP Users  Search Filter",
      "description" : "",
      "propertyOrder" : 2200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-memberof" : {
      "title" : "Attribute Name for Group Membership",
      "description" : "",
      "propertyOrder" : 3500,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-dncache-size" : {
      "title" : "DN Cache Size",
      "description" : "In DN items, only used when DN Cache is enabled.",
      "propertyOrder" : 6000,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-connection_pool_min_size" : {
      "title" : "LDAP Connection Pool Minimum Size",
      "description" : "",
      "propertyOrder" : 1100,
      "required" : false,
      "type" : "integer",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-groups-search-filter" : {
      "title" : "LDAP Groups Search Filter",
      "description" : "",
      "propertyOrder" : 3000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-authid" : {
      "title" : "LDAP Bind DN",
      "description" : "A user or admin with sufficient access rights to perform the supported
operations.",
      "propertyOrder" : 700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-group-container-name" : {
      "title" : "LDAP Groups Container Naming Attribute",
      "description" : "",
      "propertyOrder" : 3100,
      "required" : true,
      "type" : "string",
```


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```
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-psearch-filter" : {
      "title" : "Persistent Search Filter",
      "description" : "",
      "propertyOrder" : 5600,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "openam-idrepo-ldapv3-heartbeat-timeunit" : {
      "title" : "LDAP Connection Heartbeat Time Unit",
      "description" : "Defines the time unit corresponding to the Heartbeat Interval
setting.<br><br>This setting controls how often OpenAM <b>should</b> send a heartbeat search request
to the configured directory. If a connection becomes unresponsive (e.g. due to a network error) then
it may take up to the interval period before the problem is detected. Use along with the Heartbeat
Interval parameter to define the exact interval.",
      "propertyOrder" : 1400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "openam-idrepo-ldapv3-behera-support-enabled" : {
      "title" : "Behera Support Enabled",
      "description" : "When enabled, Behera draft control will be used in the outgoing requests for
operations that may modify password value. This will allow OpenAM to display password policy related
error messages when password policies are not met.",
      "propertyOrder" : 6100,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-auth-naming-attr" : {
      "title" : "Authentication Naming Attribute",
      "description" : "",
      "propertyOrder" : 5200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "com.iplanet.am.ldap.connection.delay.between.retries" : {
      "title" : "The Delay Time Between Retries",
      "description" : "In milliseconds.",
      "propertyOrder" : 5800,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-user-attributes" : {
      "title" : "LDAP User Attributes",
      "description" : "",
      "propertyOrder" : 2400,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
```


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```
   "sun-idrepo-ldapv3-config-connection_pool_max_size" : {
     "title" : "LDAP Connection Pool Maximum Size",
     "description" : "",
     "propertyOrder" : 1200,
     "required" : true,
     "type" : "integer",
     "exampleValue" : ""
   },
   "sun-idrepo-ldapv3-config-max-result" : {
     "title" : "Maximum Results Returned from Search",
     "description" : "",
     "propertyOrder" : 1500,
     "required" : true,
     "type" : "integer",
     "exampleValue" : ""
   },
   "sun-idrepo-ldapv3-config-organization_name" : {
     "title" : "LDAP Organization DN",
     "description" : "",
     "propertyOrder" : 900,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "sun-idrepo-ldapv3-dncache-enabled" : {
     "title" : "DN Cache",
     "description" : "Used to enable/disable the DN Cache within the OpenAM repository
implementation.<br><br>The DN Cache is used to cache DN lookups which tend to happen in bursts during
authentication. The DN Cache can become out of date when a user is moved or renamed in the underlying
LDAP store and this is not reflected in a persistent search result. Enable when the underlying LDAP
store supports persistent search and move/rename (mod_dn) results are available.",
     "propertyOrder" : 5900,
     "required" : true,
     "type" : "boolean",
     "exampleValue" : ""
   },
   "sun-idrepo-ldapv3-config-authpw" : {
     "title" : "LDAP Bind Password",
     "description" : "",
     "propertyOrder" : 800,
     "required" : true,
     "type" : "string",
     "format" : "password",
     "exampleValue" : ""
   },
   "sun-idrepo-ldapv3-config-group-objectclass" : {
     "title" : "LDAP Groups Object Class",
     "description" : "",
     "propertyOrder" : 3300,
     "required" : true,
     "items" : {
       "type" : "string"
     },
     "type" : "array",
     "exampleValue" : ""
   },
   "sun-idrepo-ldapv3-config-user-objectclass" : {
     "title" : "LDAP User Object Class",
     "description" : "",
```


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```
      "propertyOrder" : 2300,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-memberurl" : {
      "title" : "Attribute Name of Group Member URL",
      "description" : "",
      "propertyOrder" : 3700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-people-container-value" : {
      "title" : "LDAP People Container Value",
      "description" : "",
      "propertyOrder" : 5100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```

1.63.1.2. delete

Usage:

```
am> delete GenericLDAPv3 --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.63.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action GenericLDAPv3 --realm Realm --actionName getAllTypes
```

1.63.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

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```
am> action GenericLDAPv3 --realm Realm --actionName getCreatableTypes
```

1.63.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action GenericLDAPv3 --realm Realm --actionName nextdescendents
```

1.63.1.6. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

```
am> query GenericLDAPv3 --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.63.1.7. read

Usage:

```
am> read GenericLDAPv3 --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.63.1.8. update

Usage:

```
am> update GenericLDAPv3 --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

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--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "sun-idrepo-ldapv3-config-psearch-scope" : {
      "title" : "Persistent Search Scope",
      "description" : "",
      "propertyOrder" : 5700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-createuser-attr-mapping" : {
      "title" : "Create User Attribute Mapping",
      "description" : "Format: attribute name or TargetAttributeName=SourceAttributeName",
      "propertyOrder" : 2500,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-group-attributes" : {
      "title" : "LDAP Groups Attributes",
      "description" : "",
      "propertyOrder" : 3400,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-ldap-server" : {
      "title" : "LDAP Server",
      "description" : "Format: LDAP server host name:port | server_ID | site_ID",
      "propertyOrder" : 600,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-people-container-name" : {
      "title" : "LDAP People Container Naming Attribute",
      "description" : "",
      "propertyOrder" : 5000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-time-limit" : {
      "title" : "Search Timeout",
      "description" : "In seconds.",
```


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```
      "propertyOrder" : 1600,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-groups-search-attribute" : {
      "title" : "LDAP Groups Search Attribute",
      "description" : "",
      "propertyOrder" : 2900,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-psearchbase" : {
      "title" : "Persistent Search Base DN",
      "description" : "",
      "propertyOrder" : 5500,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-dftgroupmember" : {
      "title" : "Default Group Member's User DN",
      "description" : "User automatically added when group is created.",
      "propertyOrder" : 3800,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-users-search-attribute" : {
      "title" : "LDAP Users  Search Attribute",
      "description" : "",
      "propertyOrder" : 2100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-inactive" : {
      "title" : "User Status Inactive Value",
      "description" : "",
      "propertyOrder" : 2800,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "openam-idrepo-ldapv3-affinity-enabled" : {
      "title" : "Affinity Enabled",
      "description" : "Enables affinity based request load balancing when accessing the user store
servers (based on DN). It is imperative that the connection string setting is set to the same value
for all OpenAM servers in the deployment when this feature is enabled.",
      "propertyOrder" : 6200,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "sunIdRepoSupportedOperations" : {
      "title" : "LDAPv3 Plug-in Supported Types and Operations",
      "description" : "",
      "propertyOrder" : 1900,
```


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```
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sunIdRepoClass" : {
      "title" : "LDAPv3 Repository Plug-in Class Name",
      "description" : "",
      "propertyOrder" : 1700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-uniquemember" : {
      "title" : "Attribute Name of Unique Member",
      "description" : "",
      "propertyOrder" : 3600,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-isactive" : {
      "title" : "Attribute Name of User Status",
      "description" : "",
      "propertyOrder" : 2600,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-active" : {
      "title" : "User Status Active Value",
      "description" : "",
      "propertyOrder" : 2700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-search-scope" : {
      "title" : "LDAPv3 Plug-in Search Scope",
      "description" : "",
      "propertyOrder" : 2000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "openam-idrepo-ldapv3-heartbeat-interval" : {
      "title" : "LDAP Connection Heartbeat Interval",
      "description" : "Specifies how often should OpenAM send a heartbeat request to the
directory.<br><br>This setting controls how often OpenAM <b>should</b> send a heartbeat search
request to the configured directory. If a connection becomes unresponsive (e.g. due to a network
error) then it may take up to the interval period before the problem is detected. Use along with the
Heartbeat Time Unit parameter to define the exact interval. Zero or negative value will result in
disabling heartbeat requests.",
      "propertyOrder" : 1300,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
```


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```
    },
    "sun-idrepo-ldapv3-config-group-container-value" : {
      "title" : "LDAP Groups Container Value",
      "description" : "",
      "propertyOrder" : 3200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-connection-mode" : {
      "title" : "LDAP Connection Mode",
      "description" : "Defines which protocol/operation is used to establish the connection to the
LDAP Directory Server.<br><br>If 'LDAP' is selected, the connection <b>won't be secured</b> and
passwords are transferred in <b>cleartext</b> over the network.<br/> If 'LDAPS' is selected, the
connection is secured via SSL or TLS. <br/> If 'StartTLS' is selected, the connection is secured by
using StartTLS extended operation.",
      "propertyOrder" : 1000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sunIdRepoAttributeMapping" : {
      "title" : "Attribute Name Mapping",
      "description" : "",
      "propertyOrder" : 1800,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-users-search-filter" : {
      "title" : "LDAP Users  Search Filter",
      "description" : "",
      "propertyOrder" : 2200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-memberof" : {
      "title" : "Attribute Name for Group Membership",
      "description" : "",
      "propertyOrder" : 3500,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-dncache-size" : {
      "title" : "DN Cache Size",
      "description" : "In DN items, only used when DN Cache is enabled.",
      "propertyOrder" : 6000,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-connection_pool_min_size" : {
      "title" : "LDAP Connection Pool Minimum Size",
      "description" : "",
```


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```
      "propertyOrder" : 1100,
      "required" : false,
      "type" : "integer",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-groups-search-filter" : {
      "title" : "LDAP Groups Search Filter",
      "description" : "",
      "propertyOrder" : 3000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-authid" : {
      "title" : "LDAP Bind DN",
      "description" : "A user or admin with sufficient access rights to perform the supported
operations.",
      "propertyOrder" : 700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-group-container-name" : {
      "title" : "LDAP Groups Container Naming Attribute",
      "description" : "",
      "propertyOrder" : 3100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-psearch-filter" : {
      "title" : "Persistent Search Filter",
      "description" : "",
      "propertyOrder" : 5600,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "openam-idrepo-ldapv3-heartbeat-timeunit" : {
      "title" : "LDAP Connection Heartbeat Time Unit",
      "description" : "Defines the time unit corresponding to the Heartbeat Interval
setting.<br><br>This setting controls how often OpenAM <b>should</b> send a heartbeat search request
to the configured directory. If a connection becomes unresponsive (e.g. due to a network error) then
it may take up to the interval period before the problem is detected. Use along with the Heartbeat
Interval parameter to define the exact interval.",
      "propertyOrder" : 1400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "openam-idrepo-ldapv3-behera-support-enabled" : {
      "title" : "Behera Support Enabled",
      "description" : "When enabled, Behera draft control will be used in the outgoing requests for
operations that may modify password value. This will allow OpenAM to display password policy related
error messages when password policies are not met.",
      "propertyOrder" : 6100,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
```


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```
    },
    "sun-idrepo-ldapv3-config-auth-naming-attr" : {
      "title" : "Authentication Naming Attribute",
      "description" : "",
      "propertyOrder" : 5200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "com.iplanet.am.ldap.connection.delay.between.retries" : {
      "title" : "The Delay Time Between Retries",
      "description" : "In milliseconds.",
      "propertyOrder" : 5800,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-user-attributes" : {
      "title" : "LDAP User Attributes",
      "description" : "",
      "propertyOrder" : 2400,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-connection_pool_max_size" : {
      "title" : "LDAP Connection Pool Maximum Size",
      "description" : "",
      "propertyOrder" : 1200,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-max-result" : {
      "title" : "Maximum Results Returned from Search",
      "description" : "",
      "propertyOrder" : 1500,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-organization_name" : {
      "title" : "LDAP Organization DN",
      "description" : "",
      "propertyOrder" : 900,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-dncache-enabled" : {
      "title" : "DN Cache",
      "description" : "Used to enable/disable the DN Cache within the OpenAM repository
implementation.<br><br>The DN Cache is used to cache DN lookups which tend to happen in bursts during
authentication. The DN Cache can become out of date when a user is moved or renamed in the underlying
LDAP store and this is not reflected in a persistent search result. Enable when the underlying LDAP
store supports persistent search and move/rename (mod_dn) results are available.",
```


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```
      "propertyOrder" : 5900,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-authpw" : {
      "title" : "LDAP Bind Password",
      "description" : "",
      "propertyOrder" : 800,
      "required" : true,
      "type" : "string",
      "format" : "password",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-group-objectclass" : {
      "title" : "LDAP Groups Object Class",
      "description" : "",
      "propertyOrder" : 3300,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-user-objectclass" : {
      "title" : "LDAP User Object Class",
      "description" : "",
      "propertyOrder" : 2300,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-memberurl" : {
      "title" : "Attribute Name of Group Member URL",
      "description" : "",
      "propertyOrder" : 3700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-people-container-value" : {
      "title" : "LDAP People Container Value",
      "description" : "",
      "propertyOrder" : 5100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```


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1.64. GlobalScripts

1.64.1. Global Operations

Resource path: `/global-config/services/scripting/globalScript`

Resource version: `1.0`

1.64.1.1. create

Usage:

```
am> create GlobalScripts --global --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "lastModifiedDate" : {
      "title" : "Last modification date",
      "description" : "A string containing the last modified date and time, in ISO 8601 format. If
 the script has not been modified since it was created, this property will have the same value as
 creationDate",
      "propertyOrder" : null,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "context" : {
      "title" : "Script type",
      "description" : "The script type. Supported values are: POLICY_CONDITION : Policy Condition
 AUTHENTICATION_SERVER_SIDE : Server-side Authentication  AUTHENTICATION_CLIENT_SIDE : Client-side
 Authentication - Note Client-side scripts must be written in JavaScript OIDC_CLAIMS : OIDC Claims",
      "propertyOrder" : null,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "name" : {
      "title" : "Script name",
      "description" : "The name provided for the script",
      "propertyOrder" : null,
      "required" : true,
      "type" : "string",
```


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```
      "exampleValue" : ""
    },
    "script" : {
      "title" : "Script",
      "description" : "The source code of the script. The source code is in UTF-8 format and encoded
 into Base64",
      "propertyOrder" : null,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "description" : {
      "title" : "Script description",
      "description" : "An optional text string to help identify the script",
      "propertyOrder" : null,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "language" : {
      "title" : "Script language",
      "description" : "The language the script is written in - JAVASCRIPT or GROOVY",
      "propertyOrder" : null,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "creationDate" : {
      "title" : "Creation date",
      "description" : "An integer containing the creation date and time, in ISO 8601 format",
      "propertyOrder" : null,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "createdBy" : {
      "title" : "Created by",
      "description" : "A string containing the universal identifier DN of the subject that created the
 script",
      "propertyOrder" : null,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "lastModifiedBy" : {
      "title" : "Last modifier",
      "description" : "A string containing the universal identifier DN of the subject that most
 recently updated the script. If the script has not been modified since it was created, this property
 will have the same value as createdBy",
      "propertyOrder" : null,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```


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1.64.1.2. delete

Usage:

```
am> delete GlobalScripts --global --id id
```

Parameters:

--id

The unique identifier for the resource.

1.64.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action GlobalScripts --global --actionName getAllTypes
```

1.64.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action GlobalScripts --global --actionName getCreatableTypes
```

1.64.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action GlobalScripts --global --actionName nextdescendents
```

1.64.1.6. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

```
am> query GlobalScripts --global --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

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1.64.1.7. read

Usage:

```
am> read GlobalScripts --global --id id
```

Parameters:

--id

The unique identifier for the resource.

1.64.1.8. update

Usage:

```
am> update GlobalScripts --global --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "lastModifiedDate" : {
      "title" : "Last modification date",
      "description" : "A string containing the last modified date and time, in ISO 8601 format. If
 the script has not been modified since it was created, this property will have the same value as
 creationDate",
      "propertyOrder" : null,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "context" : {
      "title" : "Script type",
      "description" : "The script type. Supported values are: POLICY_CONDITION : Policy Condition
 AUTHENTICATION_SERVER_SIDE : Server-side Authentication  AUTHENTICATION_CLIENT_SIDE : Client-side
 Authentication - Note Client-side scripts must be written in JavaScript OIDC_CLAIMS : OIDC Claims",
      "propertyOrder" : null,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "name" : {
      "title" : "Script name",
      "description" : "The name provided for the script",
      "propertyOrder" : null,
```


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```
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "script" : {
      "title" : "Script",
      "description" : "The source code of the script. The source code is in UTF-8 format and encoded
 into Base64",
      "propertyOrder" : null,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "description" : {
      "title" : "Script description",
      "description" : "An optional text string to help identify the script",
      "propertyOrder" : null,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "language" : {
      "title" : "Script language",
      "description" : "The language the script is written in - JAVASCRIPT or GROOVY",
      "propertyOrder" : null,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "creationDate" : {
      "title" : "Creation date",
      "description" : "An integer containing the creation date and time, in ISO 8601 format",
      "propertyOrder" : null,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "createdBy" : {
      "title" : "Created by",
      "description" : "A string containing the universal identifier DN of the subject that created the
 script",
      "propertyOrder" : null,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "lastModifiedBy" : {
      "title" : "Last modifier",
      "description" : "A string containing the universal identifier DN of the subject that most
 recently updated the script. If the script has not been modified since it was created, this property
 will have the same value as createdBy",
      "propertyOrder" : null,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```


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1.65. Globalization

1.65.1. Realm Operations

Resource path: `/realm-config/services/globalization`

Resource version: `1.0`

1.65.1.1. create

Usage:

```
am> create Globalization --realm Realm --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "commonNameFormats" : {
      "title" : "Auto Generated Common Name Format",
      "description" : "Use this list to configure how OpenAM formats names shown in the console
 banner.<br><br>This setting allows the name of the authenticated user shown in the OpenAM console
 banner to be customised based on the locale of the user.",
      "propertyOrder" : 300,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    }
  }
}
```

1.65.1.2. delete

Usage:

```
am> delete Globalization --realm Realm
```

1.65.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

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Usage:

```
am> action Globalization --realm Realm --actionName getAllTypes
```

1.65.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action Globalization --realm Realm --actionName getCreatableTypes
```

1.65.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action Globalization --realm Realm --actionName nextdescendents
```

1.65.1.6. read

Usage:

```
am> read Globalization --realm Realm
```

1.65.1.7. update

Usage:

```
am> update Globalization --realm Realm --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

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```
{
  "type" : "object",
  "properties" : {
    "commonNameFormats" : {
      "title" : "Auto Generated Common Name Format",
      "description" : "Use this list to configure how OpenAM formats names shown in the console
 banner.<br><br>This setting allows the name of the authenticated user shown in the OpenAM console
 banner to be customised based on the locale of the user.",
      "propertyOrder" : 300,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    }
  }
}
```

1.65.2. Global Operations

Resource path: `/global-config/services/globalization`

Resource version: `1.0`

1.65.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action Globalization --global --actionName getAllTypes
```

1.65.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action Globalization --global --actionName getCreatableTypes
```

1.65.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action Globalization --global --actionName nextdescendents
```


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1.65.2.4. read

Usage:

```
am> read Globalization --global
```

1.65.2.5. update

Usage:

```
am> update Globalization --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "charsetMappings" : {
      "title" : "Charsets Supported by Each Locale",
      "description" : "This table lets you configure the order of supported character sets used for
 each supported locale. Change the settings only if the defaults are not appropriate.",
      "propertyOrder" : 100,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-identity-g11n-settings-charset-alias-mapping" : {
      "title" : "Charset Aliases",
      "description" : "Use this list to map between different character set names used in Java and in
 MIME.",
      "propertyOrder" : 200,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "defaults" : {
      "properties" : {
        "commonNameFormats" : {
          "title" : "Auto Generated Common Name Format",
          "description" : "Use this list to configure how OpenAM formats names shown in the console
 banner.<br><br>This setting allows the name of the authenticated user shown in the OpenAM console
 banner to be customised based on the locale of the user.",
```


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```
          "propertyOrder" : 300,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        }
      },
      "type" : "object",
      "title" : "Realm Defaults"
    }
  }
}
```

1.66. GraphiteReporter

1.66.1. Global Operations

Resource path: `/global-config/services/monitoring/graphite`

Resource version: `1.0`

1.66.1.1. create

Usage:

```
am> create GraphiteReporter --global --id id --body body
```

Parameters:

`--id`

The unique identifier for the resource.

`--body`

The resource in JSON format, described by the following JSON schema:

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```
{
  "type" : "object",
  "properties" : {
    "host" : {
      "title" : "Hostname",
      "description" : "The hostname of the Graphite server to which metrics should be published.",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "port" : {
      "title" : "Port",
      "description" : "The port of the Graphite server to which metrics should be published.",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "frequency" : {
      "title" : "Frequency",
      "description" : "The frequency (in seconds) at which metrics should be published.",
      "propertyOrder" : 300,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    }
  }
}
```

1.66.1.2. delete

Usage:

```
am> delete GraphiteReporter --global --id id
```

Parameters:

--id

The unique identifier for the resource.

1.66.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action GraphiteReporter --global --actionName getAllTypes
```

1.66.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

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Usage:

```
am> action GraphiteReporter --global --actionName getCreatableTypes
```

1.66.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action GraphiteReporter --global --actionName nextdescendents
```

1.66.1.6. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

```
am> query GraphiteReporter --global --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.66.1.7. read

Usage:

```
am> read GraphiteReporter --global --id id
```

Parameters:

--id

The unique identifier for the resource.

1.66.1.8. update

Usage:

```
am> update GraphiteReporter --global --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

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--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "host" : {
      "title" : "Hostname",
      "description" : "The hostname of the Graphite server to which metrics should be published.",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "port" : {
      "title" : "Port",
      "description" : "The port of the Graphite server to which metrics should be published.",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "frequency" : {
      "title" : "Frequency",
      "description" : "The frequency (in seconds) at which metrics should be published.",
      "propertyOrder" : 300,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    }
  }
}
```

1.67. HotpModule

1.67.1. Realm Operations

Resource path: `/realm-config/authentication/modules/hotp`

Resource version: `1.0`

1.67.1.1. create

Usage:

```
am> create HotpModule --realm Realm --id id --body body
```

Parameters:

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--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "smsGatewayClass" : {
      "title" : "SMS Gateway Implementation Class",
      "description" : "The HOTP authentication module uses this class to send SMS
 messages.<br><br>The SMS gateway class must implement the following interface<br/><br/
><code>com.sun.identity.authentication.modules.hotp.SMSGateway</code>",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "smtpHostname" : {
      "title" : "Mail Server Host Name",
      "description" : "The name of the mail server; OpenAM will use SMTP to send the messages.",
      "propertyOrder" : 300,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "authenticationLevel" : {
      "title" : "Authentication Level",
      "description" : "The authentication level associated with this module.<br><br>Each
 authentication module has an authentication level that can be used to indicate the level of security
 associated with the module; 0 is the lowest (and the default).",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "smtpUserPassword" : {
      "title" : "Mail Server Authentication Password",
      "description" : "The password to use if the mail server is using SMTP authentication",
      "propertyOrder" : 600,
      "required" : true,
      "type" : "string",
      "format" : "password",
      "exampleValue" : ""
    },
    "autoSendOTP" : {
      "title" : "Auto Send OTP Code",
      "description" : "Select this checkbox if the OTP should be sent automatically",
      "propertyOrder" : 1500,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "smtpSslEnabled" : {
      "title" : "Mail Server Secure Connection ",
```


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```
      "description" : "This setting controls whether the authentication module communicates with the
mail server using SSL/TLS",
      "propertyOrder" : 700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "otpMaxRetry" : {
      "title" : "One Time Password Max Retry",
      "description" : "The number of times entry of the OTP may be attempted. Minimum is 1 maximum is
10 and default is 3.",
      "propertyOrder" : null,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "smtpFromAddress" : {
      "title" : "Email From Address",
      "description" : "Emails from the HOTP Authentication module will come from this address.",
      "propertyOrder" : 800,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "userProfileTelephoneAttribute" : {
      "title" : "Mobile Phone Number Attribute Name",
      "description" : "This is the attribute name used for a requested text message",
      "propertyOrder" : 1200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "otpDeliveryMethod" : {
      "title" : "One Time Password Delivery",
      "description" : "The mechanism used to deliver the One Time Password",
      "propertyOrder" : 1100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "mobileCarrierAttribute" : {
      "title" : "Mobile Carrier Attribute Name",
      "description" : "This is the attribute name used for a mobile carrier domain for sending SMS
messages",
      "propertyOrder" : 1300,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "otpValidityDuration" : {
      "title" : "One Time Password Validity Length",
      "description" : "This One Time Password will remain valid for this period (in minutes)",
      "propertyOrder" : 900,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "userProfileEmailAttribute" : {
      "title" : "Email Attribute Name",
```


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```
      "description" : "This is the attribute name used by the OTP to email the user",
      "propertyOrder" : 1400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "smtpUsername" : {
      "title" : "Mail Server Authentication Username",
      "description" : "The username to use if the mail server is using SMTP authentication",
      "propertyOrder" : 500,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "smtpHostPort" : {
      "title" : "Mail Server Host Port",
      "description" : "The port of the mail server.<br><br>The default port for SMTP is 25, if using
 SSL the default port is 465.",
      "propertyOrder" : 400,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "otpLength" : {
      "title" : "One Time Password Length ",
      "description" : "The length of the generated One Time Password (in digits)",
      "propertyOrder" : 1000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```

1.67.1.2. delete

Usage:

```
am> delete HotpModule --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.67.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action HotpModule --realm Realm --actionName getAllTypes
```


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1.67.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action HotpModule --realm Realm --actionName getCreatableTypes
```

1.67.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action HotpModule --realm Realm --actionName nextdescendents
```

1.67.1.6. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

```
am> query HotpModule --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.67.1.7. read

Usage:

```
am> read HotpModule --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.67.1.8. update

Usage:

```
am> update HotpModule --realm Realm --id id --body body
```

Parameters:

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--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "smsGatewayClass" : {
      "title" : "SMS Gateway Implementation Class",
      "description" : "The HOTP authentication module uses this class to send SMS
 messages.<br><br>The SMS gateway class must implement the following interface<br/><br/
><code>com.sun.identity.authentication.modules.hotp.SMSGateway</code>",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "smtpHostname" : {
      "title" : "Mail Server Host Name",
      "description" : "The name of the mail server; OpenAM will use SMTP to send the messages.",
      "propertyOrder" : 300,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "authenticationLevel" : {
      "title" : "Authentication Level",
      "description" : "The authentication level associated with this module.<br><br>Each
 authentication module has an authentication level that can be used to indicate the level of security
 associated with the module; 0 is the lowest (and the default).",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "smtpUserPassword" : {
      "title" : "Mail Server Authentication Password",
      "description" : "The password to use if the mail server is using SMTP authentication",
      "propertyOrder" : 600,
      "required" : true,
      "type" : "string",
      "format" : "password",
      "exampleValue" : ""
    },
    "autoSendOTP" : {
      "title" : "Auto Send OTP Code",
      "description" : "Select this checkbox if the OTP should be sent automatically",
      "propertyOrder" : 1500,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "smtpSslEnabled" : {
      "title" : "Mail Server Secure Connection ",
```


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```
      "description" : "This setting controls whether the authentication module communicates with the
mail server using SSL/TLS",
      "propertyOrder" : 700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "otpMaxRetry" : {
      "title" : "One Time Password Max Retry",
      "description" : "The number of times entry of the OTP may be attempted. Minimum is 1 maximum is
10 and default is 3.",
      "propertyOrder" : null,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "smtpFromAddress" : {
      "title" : "Email From Address",
      "description" : "Emails from the HOTP Authentication module will come from this address.",
      "propertyOrder" : 800,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "userProfileTelephoneAttribute" : {
      "title" : "Mobile Phone Number Attribute Name",
      "description" : "This is the attribute name used for a requested text message",
      "propertyOrder" : 1200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "otpDeliveryMethod" : {
      "title" : "One Time Password Delivery",
      "description" : "The mechanism used to deliver the One Time Password",
      "propertyOrder" : 1100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "mobileCarrierAttribute" : {
      "title" : "Mobile Carrier Attribute Name",
      "description" : "This is the attribute name used for a mobile carrier domain for sending SMS
messages",
      "propertyOrder" : 1300,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "otpValidityDuration" : {
      "title" : "One Time Password Validity Length",
      "description" : "This One Time Password will remain valid for this period (in minutes)",
      "propertyOrder" : 900,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "userProfileEmailAttribute" : {
      "title" : "Email Attribute Name",
```


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```
      "description" : "This is the attribute name used by the OTP to email the user",
      "propertyOrder" : 1400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "smtpUsername" : {
      "title" : "Mail Server Authentication Username",
      "description" : "The username to use if the mail server is using SMTP authentication",
      "propertyOrder" : 500,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "smtpHostPort" : {
      "title" : "Mail Server Host Port",
      "description" : "The port of the mail server.<br><br>The default port for SMTP is 25, if using
 SSL the default port is 465.",
      "propertyOrder" : 400,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "otpLength" : {
      "title" : "One Time Password Length ",
      "description" : "The length of the generated One Time Password (in digits)",
      "propertyOrder" : 1000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```

1.67.2. Global Operations

Resource path: `/global-config/authentication/modules/hotp`

Resource version: `1.0`

1.67.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action HotpModule --global --actionName getAllTypes
```

1.67.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

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```
am> action HotpModule --global --actionName getCreatableTypes
```

1.67.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action HotpModule --global --actionName nextdescendents
```

1.67.2.4. read

Usage:

```
am> read HotpModule --global
```

1.67.2.5. update

Usage:

```
am> update HotpModule --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "defaults" : {
      "properties" : {
        "smtpHostPort" : {
          "title" : "Mail Server Host Port",
          "description" : "The port of the mail server.<br><br>The default port for SMTP is 25, if
 using SSL the default port is 465.",
          "propertyOrder" : 400,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "smsGatewayClass" : {
          "title" : "SMS Gateway Implementation Class",
          "description" : "The HOTP authentication module uses this class to send SMS
 messages.<br><br>The SMS gateway class must implement the following interface<br/><br/
><code>com.sun.identity.authentication.modules.hotp.SMSGateway</code>",
          "propertyOrder" : 200,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "mobileCarrierAttribute" : {
```


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```
          "title" : "Mobile Carrier Attribute Name",
          "description" : "This is the attribute name used for a mobile carrier domain for sending SMS
messages",
          "propertyOrder" : 1300,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "smtpHostname" : {
          "title" : "Mail Server Host Name",
          "description" : "The name of the mail server; OpenAM will use SMTP to send the messages.",
          "propertyOrder" : 300,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "smtpUserPassword" : {
          "title" : "Mail Server Authentication Password",
          "description" : "The password to use if the mail server is using SMTP authentication",
          "propertyOrder" : 600,
          "required" : true,
          "type" : "string",
          "format" : "password",
          "exampleValue" : ""
        },
        "otpLength" : {
          "title" : "One Time Password Length ",
          "description" : "The length of the generated One Time Password (in digits)",
          "propertyOrder" : 1000,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "authenticationLevel" : {
          "title" : "Authentication Level",
          "description" : "The authentication level associated with this module.<br><br>Each
authentication module has an authentication level that can be used to indicate the level of security
associated with the module; 0 is the lowest (and the default).",
          "propertyOrder" : 100,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "otpDeliveryMethod" : {
          "title" : "One Time Password Delivery",
          "description" : "The mechanism used to deliver the One Time Password",
          "propertyOrder" : 1100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "smtpUsername" : {
          "title" : "Mail Server Authentication Username",
          "description" : "The username to use if the mail server is using SMTP authentication",
          "propertyOrder" : 500,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
```


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```
       "smtpSslEnabled" : {
         "title" : "Mail Server Secure Connection ",
         "description" : "This setting controls whether the authentication module communicates with
the mail server using SSL/TLS",
         "propertyOrder" : 700,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       },
       "otpMaxRetry" : {
         "title" : "One Time Password Max Retry",
         "description" : "The number of times entry of the OTP may be attempted. Minimum is 1 maximum
is 10 and default is 3.",
         "propertyOrder" : null,
         "required" : true,
         "type" : "integer",
         "exampleValue" : ""
       },
       "autoSendOTP" : {
         "title" : "Auto Send OTP Code",
         "description" : "Select this checkbox if the OTP should be sent automatically",
         "propertyOrder" : 1500,
         "required" : true,
         "type" : "boolean",
         "exampleValue" : ""
       },
       "otpValidityDuration" : {
         "title" : "One Time Password Validity Length",
         "description" : "This One Time Password will remain valid for this period (in minutes)",
         "propertyOrder" : 900,
         "required" : true,
         "type" : "integer",
         "exampleValue" : ""
       },
       "smtpFromAddress" : {
         "title" : "Email From Address",
         "description" : "Emails from the HOTP Authentication module will come from this address.",
         "propertyOrder" : 800,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       },
       "userProfileTelephoneAttribute" : {
         "title" : "Mobile Phone Number Attribute Name",
         "description" : "This is the attribute name used for a requested text message",
         "propertyOrder" : 1200,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       },
       "userProfileEmailAttribute" : {
         "title" : "Email Attribute Name",
         "description" : "This is the attribute name used by the OTP to email the user",
         "propertyOrder" : 1400,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       }
     },
```


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```
      "type" : "object",
      "title" : "Realm Defaults"
    }
  }
}
```

1.68. HttpBasicModule

1.68.1. Realm Operations

Resource path: `/realm-config/authentication/modules/httpbasic`

Resource version: `1.0`

1.68.1.1. create

Usage:

```
am> create HttpBasicModule --realm Realm --id id --body body
```

Parameters:

`--id`

The unique identifier for the resource.

`--body`

The resource in JSON format, described by the following JSON schema:

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```
{
  "type" : "object",
  "properties" : {
    "backendModuleName" : {
      "title" : "Backend Module Name",
      "description" : "The name of the module that will be used to perform the
 authentication<br><br>The HTTP Basic authentication module collect the credentials from the user and
 will then supply said credentials to the backend authentication module using the shared state. ",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "authenticationLevel" : {
      "title" : "Authentication Level",
      "description" : "The authentication level associated with this module.<br><br>Each
 authentication module has an authentication level that can be used to indicate the level of security
 associated with the module; 0 is the lowest (and the default). ",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    }
  }
}
```

1.68.1.2. delete

Usage:

```
am> delete HttpBasicModule --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.68.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action HttpBasicModule --realm Realm --actionName getAllTypes
```

1.68.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action HttpBasicModule --realm Realm --actionName getCreatableTypes
```


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1.68.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action HttpBasicModule --realm Realm --actionName nextdescendents
```

1.68.1.6. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

```
am> query HttpBasicModule --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.68.1.7. read

Usage:

```
am> read HttpBasicModule --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.68.1.8. update

Usage:

```
am> update HttpBasicModule --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

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```
{
  "type" : "object",
  "properties" : {
    "backendModuleName" : {
      "title" : "Backend Module Name",
      "description" : "The name of the module that will be used to perform the
 authentication<br><br>The HTTP Basic authentication module collect the credentials from the user and
 will then supply said credentials to the backend authentication module using the shared state. ",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "authenticationLevel" : {
      "title" : "Authentication Level",
      "description" : "The authentication level associated with this module.<br><br>Each
 authentication module has an authentication level that can be used to indicate the level of security
 associated with the module; 0 is the lowest (and the default). ",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    }
  }
}
```


1.68.2. Global Operations

Resource path: `/global-config/authentication/modules/httpbasic`

Resource version: `1.0`

1.68.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action HttpBasicModule --global --actionName getAllTypes
```

1.68.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action HttpBasicModule --global --actionName getCreatableTypes
```

1.68.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

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Usage:

```
am> action HttpBasicModule --global --actionName nextdescendents
```

1.68.2.4. read

Usage:

```
am> read HttpBasicModule --global
```

1.68.2.5. update

Usage:

```
am> update HttpBasicModule --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "defaults" : {
      "properties" : {
        "authenticationLevel" : {
          "title" : "Authentication Level",
          "description" : "The authentication level associated with this module.<br><br>Each
 authentication module has an authentication level that can be used to indicate the level of security
 associated with the module; 0 is the lowest (and the default). ",
          "propertyOrder" : 200,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "backendModuleName" : {
          "title" : "Backend Module Name",
          "description" : "The name of the module that will be used to perform the
 authentication<br><br>The HTTP Basic authentication module collect the credentials from the user and
 will then supply said credentials to the backend authentication module using the shared state. ",
          "propertyOrder" : 100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      },
      "type" : "object",
      "title" : "Realm Defaults"
    }
  }
}
```


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1.69. IDMProvisioning

1.69.1. Realm Operations

Resource path: `/realm-config/services/idm-integration`

Resource version: `1.0`

1.69.1.1. create

Usage:

```
am> create IDMProvisioning --realm Realm --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "provisioningEncryptionKeyAlias" : {
      "title" : "Encryption Key Alias",
      "description" : "Alias of the encryption asymmetric key in AM's default keystore. Must be a
 duplicate of the asymmetric key used by IDM.",
      "propertyOrder" : 2250,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "enabled" : {
      "title" : "Enabled",
      "description" : "",
      "propertyOrder" : 2100,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "idmDeploymentUrl" : {
      "title" : "Deployment URL",
      "description" : "URL of the IDM deployment.",
      "propertyOrder" : 2200,
      "required" : true,
      "type" : "string",
      "exampleValue" : "https://openidm.example.com"
    },
    "provisioningSigningAlgorithm" : {
      "title" : "Signing Algorithm",
      "description" : "JWT signing algorithm.",
      "propertyOrder" : 2260,
```


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```
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "provisioningEncryptionMethod" : {
      "title" : "Encryption Method",
      "description" : "JWT encryption method.",
      "propertyOrder" : 2280,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "provisioningEncryptionAlgorithm" : {
      "title" : "Encryption Algorithm",
      "description" : "JWT encryption algorithm.",
      "propertyOrder" : 2270,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "provisioningSigningKeyAlias" : {
      "title" : "Signing Key Alias",
      "description" : "Alias of the signing symmetric key in AM's default keystore. Must be a
 duplicate of the symmetric key used by IDM.",
      "propertyOrder" : 2240,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```

1.69.1.2. delete

Usage:

```
am> delete IDMProvisioning --realm Realm
```

1.69.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action IDMProvisioning --realm Realm --actionName getAllTypes
```

1.69.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action IDMProvisioning --realm Realm --actionName getCreatableTypes
```


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1.69.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action IDMProvisioning --realm Realm --actionName nextdescendents
```

1.69.1.6. read

Usage:

```
am> read IDMProvisioning --realm Realm
```

1.69.1.7. update

Usage:

```
am> update IDMProvisioning --realm Realm --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "provisioningEncryptionKeyAlias" : {
      "title" : "Encryption Key Alias",
      "description" : "Alias of the encryption asymmetric key in AM's default keystore. Must be a
 duplicate of the asymmetric key used by IDM.",
      "propertyOrder" : 2250,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "enabled" : {
      "title" : "Enabled",
      "description" : "",
      "propertyOrder" : 2100,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "idmDeploymentUrl" : {
      "title" : "Deployment URL",
      "description" : "URL of the IDM deployment.",
      "propertyOrder" : 2200,
      "required" : true,
      "type" : "string",
      "exampleValue" : "https://openidm.example.com"
    },
```


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```
    "provisioningSigningAlgorithm" : {
      "title" : "Signing Algorithm",
      "description" : "JWT signing algorithm.",
      "propertyOrder" : 2260,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "provisioningEncryptionMethod" : {
      "title" : "Encryption Method",
      "description" : "JWT encryption method.",
      "propertyOrder" : 2280,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "provisioningEncryptionAlgorithm" : {
      "title" : "Encryption Algorithm",
      "description" : "JWT encryption algorithm.",
      "propertyOrder" : 2270,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "provisioningSigningKeyAlias" : {
      "title" : "Signing Key Alias",
      "description" : "Alias of the signing symmetric key in AM's default keystore. Must be a
 duplicate of the symmetric key used by IDM.",
      "propertyOrder" : 2240,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```

1.69.2. Global Operations

Resource path: `/global-config/services/idm-integration`

Resource version: `1.0`

1.69.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action IDMProvisioning --global --actionName getAllTypes
```

1.69.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

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Usage:

```
am> action IDMProvisioning --global --actionName getCreatableTypes
```

1.69.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action IDMProvisioning --global --actionName nextdescendents
```

1.69.2.4. read

Usage:

```
am> read IDMProvisioning --global
```

1.69.2.5. update

Usage:

```
am> update IDMProvisioning --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "defaults" : {
      "properties" : {
        "provisioningEncryptionAlgorithm" : {
          "title" : "Encryption Algorithm",
          "description" : "JWT encryption algorithm.",
          "propertyOrder" : 2270,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "provisioningEncryptionMethod" : {
          "title" : "Encryption Method",
          "description" : "JWT encryption method.",
          "propertyOrder" : 2280,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "provisioningSigningKeyAlias" : {
```


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```
          "title" : "Signing Key Alias",
          "description" : "Alias of the signing symmetric key in AM's default keystore. Must be a
 duplicate of the symmetric key used by IDM.",
          "propertyOrder" : 2240,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "provisioningSigningAlgorithm" : {
          "title" : "Signing Algorithm",
          "description" : "JWT signing algorithm.",
          "propertyOrder" : 2260,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "enabled" : {
          "title" : "Enabled",
          "description" : "",
          "propertyOrder" : 2100,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "provisioningEncryptionKeyAlias" : {
          "title" : "Encryption Key Alias",
          "description" : "Alias of the encryption asymmetric key in AM's default keystore. Must be a
 duplicate of the asymmetric key used by IDM.",
          "propertyOrder" : 2250,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "idmDeploymentUrl" : {
          "title" : "Deployment URL",
          "description" : "URL of the IDM deployment.",
          "propertyOrder" : 2200,
          "required" : true,
          "type" : "string",
          "exampleValue" : "https://openidm.example.com"
        }
      },
      "type" : "object",
      "title" : "Realm Defaults"
    }
  }
}
```

1.70. IdRepository

1.70.1. Realm Operations

Resource path: `/realm-config/services/id-repositories`

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Resource version: `1.0`

1.70.1.1. create

Usage:

```
am> create IdRepository --realm Realm --body body
```

Parameters:

`--body`

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "sunIdRepoAttributeCombiner" : {
      "title" : "Attribute Combiner plug-in",
      "description" : "",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sunIdRepoAttributeValidator" : {
      "title" : "Attribute Validator Plug-in",
      "description" : "",
      "propertyOrder" : 300,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    }
  }
}
```

1.70.1.2. delete

Usage:

```
am> delete IdRepository --realm Realm
```

1.70.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

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```
am> action IdRepository --realm Realm --actionName getAllTypes
```

1.70.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action IdRepository --realm Realm --actionName getCreatableTypes
```

1.70.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action IdRepository --realm Realm --actionName nextdescendents
```

1.70.1.6. read

Usage:

```
am> read IdRepository --realm Realm
```

1.70.1.7. update

Usage:

```
am> update IdRepository --realm Realm --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

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```
{
  "type" : "object",
  "properties" : {
    "sunIdRepoAttributeCombiner" : {
      "title" : "Attribute Combiner plug-in",
      "description" : "",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sunIdRepoAttributeValidator" : {
      "title" : "Attribute Validator Plug-in",
      "description" : "",
      "propertyOrder" : 300,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    }
  }
}
```

1.70.2. Global Operations

Resource path: `/global-config/services/id-repositories`

Resource version: `1.0`

1.70.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action IdRepository --global --actionName getAllTypes
```

1.70.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action IdRepository --global --actionName getCreatableTypes
```

1.70.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

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Usage:

```
am> action IdRepository --global --actionName nextdescendents
```

1.70.2.4. read

Usage:

```
am> read IdRepository --global
```

1.70.2.5. update

Usage:

```
am> update IdRepository --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "defaults" : {
      "properties" : {
        "sunIdRepoAttributeCombiner" : {
          "title" : "Attribute Combiner plug-in",
          "description" : "",
          "propertyOrder" : 100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "sunIdRepoAttributeValidator" : {
          "title" : "Attribute Validator Plug-in",
          "description" : "",
          "propertyOrder" : 300,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        }
      },
      "type" : "object",
      "title" : "Realm Defaults"
    }
  }
}
```


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1.71. IdRepositoryUser

1.71.1. Global Operations

Resource path: `/global-config/services/id-repositories/user`

Resource version: `1.0`

1.71.1.1. create

Usage:

```
am> create IdRepositoryUser --global --id id --body body
```

Parameters:

`--id`

The unique identifier for the resource.

`--body`

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "roles" : {
      "title" : "Roles",
      "description" : "",
      "propertyOrder" : 10100,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "iplanet-am-user-alias-list" : {
      "title" : "iplanet-am-user-alias-list",
      "description" : "",
      "propertyOrder" : 9500,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "givenName" : {
      "title" : "givenName",
      "description" : "",
      "propertyOrder" : 9400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
```


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```
    },
    "employeeNumber" : {
      "title" : "employeeNumber",
      "description" : "",
      "propertyOrder" : 9300,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "telephoneNumber" : {
      "title" : "telephoneNumber",
      "description" : "",
      "propertyOrder" : 10500,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "dn" : {
      "title" : "dn",
      "description" : "",
      "propertyOrder" : 9200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "postalAddress" : {
      "title" : "postalAddress",
      "description" : "",
      "propertyOrder" : 10000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "iplanet-am-user-failure-url" : {
      "title" : "iplanet-am-user-failure-url",
      "description" : "",
      "propertyOrder" : 9600,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sn" : {
      "title" : "sn",
      "description" : "",
      "propertyOrder" : 10200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sunIdentityMSISDNNumber" : {
      "title" : "sunIdentityMSISDNNumber",
      "description" : "",
      "propertyOrder" : 10400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "userPassword" : {
      "title" : "Password",
```


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```
      "description" : "",
      "propertyOrder" : 9900,
      "required" : true,
      "type" : "string",
      "format" : "password",
      "exampleValue" : ""
    },
    "cn" : {
      "title" : "Name",
      "description" : "",
      "propertyOrder" : 9100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "iplanet-am-user-success-url" : {
      "title" : "iplanet-am-user-success-url",
      "description" : "",
      "propertyOrder" : 9700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "mail" : {
      "title" : "mail",
      "description" : "",
      "propertyOrder" : 9800,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "inetUserStatus" : {
      "title" : "staturs",
      "description" : "",
      "propertyOrder" : 10300,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```

1.71.1.2. delete

Usage:

```
am> delete IdRepositoryUser --global --id id
```

Parameters:

--id

The unique identifier for the resource.

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1.71.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action IdRepositoryUser --global --actionName getAllTypes
```

1.71.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action IdRepositoryUser --global --actionName getCreatableTypes
```

1.71.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action IdRepositoryUser --global --actionName nextdescendents
```

1.71.1.6. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

```
am> query IdRepositoryUser --global --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.71.1.7. read

Usage:

```
am> read IdRepositoryUser --global --id id
```

Parameters:

--id

The unique identifier for the resource.

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1.71.1.8. update

Usage:

```
am> update IdRepositoryUser --global --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "roles" : {
      "title" : "Roles",
      "description" : "",
      "propertyOrder" : 10100,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "iplanet-am-user-alias-list" : {
      "title" : "iplanet-am-user-alias-list",
      "description" : "",
      "propertyOrder" : 9500,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "givenName" : {
      "title" : "givenName",
      "description" : "",
      "propertyOrder" : 9400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "employeeNumber" : {
      "title" : "employeeNumber",
      "description" : "",
      "propertyOrder" : 9300,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "telephoneNumber" : {
      "title" : "telephoneNumber",
      "description" : "",
      "propertyOrder" : 10500,
```


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```
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "dn" : {
      "title" : "dn",
      "description" : "",
      "propertyOrder" : 9200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "postalAddress" : {
      "title" : "postalAddress",
      "description" : "",
      "propertyOrder" : 10000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "iplanet-am-user-failure-url" : {
      "title" : "iplanet-am-user-failure-url",
      "description" : "",
      "propertyOrder" : 9600,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sn" : {
      "title" : "sn",
      "description" : "",
      "propertyOrder" : 10200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sunIdentityMSISDNNumber" : {
      "title" : "sunIdentityMSISDNNumber",
      "description" : "",
      "propertyOrder" : 10400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "userPassword" : {
      "title" : "Password",
      "description" : "",
      "propertyOrder" : 9900,
      "required" : true,
      "type" : "string",
      "format" : "password",
      "exampleValue" : ""
    },
    "cn" : {
      "title" : "Name",
      "description" : "",
      "propertyOrder" : 9100,
      "required" : true,
      "type" : "string",
```


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```
      "exampleValue" : ""
    },
    "iplanet-am-user-success-url" : {
      "title" : "iplanet-am-user-success-url",
      "description" : "",
      "propertyOrder" : 9700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "mail" : {
      "title" : "mail",
      "description" : "",
      "propertyOrder" : 9800,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "inetUserStatus" : {
      "title" : "staturs",
      "description" : "",
      "propertyOrder" : 10300,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```

1.72. IdffEntity

1.72.1. Realm Operations

Resource path: `/realm-config/federation/entityproviders/idff`

Resource version: `1.0`

1.72.1.1. create

Usage:

```
am> create IdffEntity --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

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--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "metadata" : {
      "title" : "Metadata",
      "description" : "",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "entityConfig" : {
      "title" : "Entity Configuration",
      "description" : "",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```

1.72.1.2. delete

Usage:

```
am> delete IdffEntity --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.72.1.3. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

```
am> query IdffEntity --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

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1.72.1.4. read

Usage:

```
am> read IdffEntity --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.72.1.5. update

Usage:

```
am> update IdffEntity --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "metadata" : {
      "title" : "Metadata",
      "description" : "",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "entityConfig" : {
      "title" : "Entity Configuration",
      "description" : "",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```


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1.73. InnerTreeEvaluator

1.73.1. Realm Operations

Resource path: `/realm-config/authentication/authenticationtrees/nodes/InnerTreeEvaluatorNode`

Resource version: `1.0`

1.73.1.1. create

Usage:

```
am> create InnerTreeEvaluator --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "tree" : {
      "title" : "Tree name",
      "description" : "The name of the tree that will be evaluated.",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```

1.73.1.2. delete

Usage:

```
am> delete InnerTreeEvaluator --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

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1.73.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action InnerTreeEvaluator --realm Realm --actionName getAllTypes
```

1.73.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action InnerTreeEvaluator --realm Realm --actionName getCreatableTypes
```

1.73.1.5. listOutcomes

List the available outcomes for the node type.

Usage:

```
am> action InnerTreeEvaluator --realm Realm --body body --actionName listOutcomes
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "title" : "Some configuration of the node. This does not need to be complete against the
 configuration schema."
}
```

1.73.1.6. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action InnerTreeEvaluator --realm Realm --actionName nextdescendents
```

1.73.1.7. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

```
am> query InnerTreeEvaluator --realm Realm --filter filter
```


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Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.73.1.8. read

Usage:

```
am> read InnerTreeEvaluator --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.73.1.9. update

Usage:

```
am> update InnerTreeEvaluator --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "tree" : {
      "title" : "Tree name",
      "description" : "The name of the tree that will be evaluated.",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```

1.73.2. Global Operations

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Resource path: `/global-config/authentication/authenticationtrees/nodes/InnerTreeEvaluatorNode`

Resource version: `1.0`

1.73.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action InnerTreeEvaluator --global --actionName getAllTypes
```

1.73.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action InnerTreeEvaluator --global --actionName getCreatableTypes
```

1.73.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action InnerTreeEvaluator --global --actionName nextdescendents
```

1.73.2.4. read

Usage:

```
am> read InnerTreeEvaluator --global
```

1.73.2.5. update

Usage:

```
am> update InnerTreeEvaluator --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object"
}
```


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1.74. J2EEAgentGroups

1.74.1. Realm Operations

Agent Groups handler that is responsible for managing agent groups

Resource path: `/realm-config/agents/groups/J2EEAgent`

Resource version: `1.0`

1.74.1.1. create

Usage:

```
am> create J2EEAgentGroups --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "possibleXssCodeElements" : {
      "title" : "Possible XSS code elements",
      "description" : "If one of these strings occurs in the request, the client is redirected to an
 error page. (property name: com.sun.identity.agents.config.xss.code.elements) <br>Hot-swap: Yes",
      "propertyOrder" : 12800,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "policyClientClockSkew" : {
      "title" : "Policy Client Clock Skew",
      "description" : "Time in seconds which is allowed to accommodate the time difference
 between the OpenAM server machine and the remote policy client machine. (property name:
 com.sun.identity.policy.client.clockSkew) <br>Hot-swap: No",
      "propertyOrder" : 11700,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "logoutProbeTimeout" : {
      "title" : "Logout URL Probe Timeout",
```


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```
      "description" : "The connect timeout value in milliseconds, if also Logout URL Probe is set to
 true. (property name: com.sun.identity.agents.config.logout.url.probe.timeout) <br>Hot-swap: Yes",
      "propertyOrder" : 12700,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "userMappingMode" : {
      "title" : "User Mapping Mode",
      "description" : "Specifies mechanism agent uses to determine user-ID. (property name:
 com.sun.identity.agents.config.user.mapping.mode) <br>Hot-swap: Yes",
      "propertyOrder" : 600,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "privilegedAttributesToLowerCase" : {
      "title" : "Privileged Attributes To Lower Case",
      "description" : "(Not used in Agent 5 onwards) <br>Maps the privileged
 attribute types to whether they should be converted to lowercase. (property name:
 com.sun.identity.agents.config.privileged.attribute.tolowercase) <br> Valid Keys: the privileged
 attribute types, such as Group, Role. <br>Valid value: true, false. <br>Hot-swap: Yes  <br> Example:
 <br> Enter Group in Map Key field, and enter false in Corresponding Map Value field.",
      "propertyOrder" : 9600,
      "required" : true,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : ""
    },
    "customResponseHeader" : {
      "title" : "Custom Response Header",
      "description" : "Map specifies the custom headers that are set by the Agent on the client
 browser. The key is the header name and the value represents the header value. (property name:
 com.sun.identity.agents.config.response.header) <br>Hot-swap: Yes <br> Example: <br>  To set the
 custom header Cache-Control to value no-cache: enter Cache-Control in Map Key field, and enter no-
cache in Corresponding Map Value field.",
      "propertyOrder" : 7000,
      "required" : true,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : ""
    },
    "clientHostnameHeader" : {
      "title" : "Client Hostname Header",
      "description" : "HTTP header name that holds the Hostname of the client. (property name:
 com.sun.identity.agents.config.client.hostname.header) <br>Hot-swap: Yes",
      "propertyOrder" : 1100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
```


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```
   "portCheckFile" : {
     "title" : "Port Check File",
     "description" : "Name or complete path of a file that has the necessary content needed to handle
requests that need port correction. (property name: com.sun.identity.agents.config.port.check.file)
<br>Hot-swap: Yes",
     "propertyOrder" : 7300,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "policyActionBooleanValues" : {
     "title" : "Policy Client Boolean Action Values",
     "description" : "Boolean action values for policy action names. (property name:
com.sun.identity.policy.client.booleanActionValues) <br>Hot-swap: No",
     "propertyOrder" : 11500,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "resourceAccessDeniedUri" : {
     "title" : "Resource Access Denied URI",
     "description" : "An application-specific Map that identifies a URI of the customized access
denied page. (property name: com.sun.identity.agents.config.access.denied.uri) <br>Valid key: the
web application name. <br>Valid value: the customized application access denied page URI. <br>For
this property, a global value can be set to apply to all the applications that don't have their own
specific access denied page. <br>Hot-swap: Yes <br> Examples: <br>To set a global access denied page:
leave Map Key field empty, and enter the global access denied page URI /sample/accessdenied.html in
Corresponding Map Value field. <br> To set the access denied page URI for application BankApp: enter
BankApp in Map Key field, and enter the application access denied page URI /BankApp/accessdenied.html
in Corresponding Map Value field.",
     "propertyOrder" : 2700,
     "required" : true,
     "patternProperties" : {
       ".*" : {
         "type" : "string"
       }
     },
     "type" : "object",
     "exampleValue" : ""
   },
   "customVerificationHandlers" : {
     "title" : "Custom Verification Handler",
     "description" : "Application specific verification handler to validate the user credentials with
the local repository. (property name: com.sun.identity.agents.config.verification.handler) <br>Valid
key: the web application name. <br>Valid value: the verification handler class name. <br>Hot-swap:
Yes <br> Example: <br> To set verification handler for application BankApp: enter BankApp in Map Key
field, and enter verification handler class name BankVerificationHandler in Corresponding Map Value
field.",
     "propertyOrder" : 3400,
     "required" : true,
     "patternProperties" : {
       ".*" : {
         "type" : "string"
       }
     },
     "type" : "object",
     "exampleValue" : ""
   },
   "localeLanguage" : {
```


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```
     "title" : "Locale Language",
     "description" : "(property name: com.sun.identity.agents.config.locale.language) <br>Hot-swap:
No",
     "propertyOrder" : 1300,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "webServiceAuthenticator" : {
     "title" : "Web Service Authenticator",
     "description" : "An implementation class of interface
com.sun.identity.agents.filter.IWebServiceAuthenticator that can be used to authenticate web-service
requests. (property name: com.sun.identity.agents.config.webservice.authenticator) <br>Hot-swap:
Yes",
     "propertyOrder" : 2300,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "encryptionProvider" : {
     "title" : "Encryption Provider",
     "description" : "Specifies the encryption provider implementation to be used by the Agent.
(property name: com.iplanet.security.encryptor) <br>Hot-swap: No",
     "propertyOrder" : 10400,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "alternativeAgentProtocol" : {
     "title" : "Alternative Agent Protocol",
     "description" : "Protocol being used (http/https) by the client browsers to communicate with
the Agent protected server if different from the actual protocol used by the server. (property name:
com.sun.identity.agents.config.agent.protocol) <br>Hot-swap: Yes",
     "propertyOrder" : 4300,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "userPrincipalFlag" : {
     "title" : "User Principal Flag",
     "description" : "Use principal instead of just the user-ID for authenticating the user.
(property name: com.sun.identity.agents.config.user.principal) <br>Hot-swap: Yes",
     "propertyOrder" : 800,
     "required" : true,
     "type" : "boolean",
     "exampleValue" : ""
   },
   "urlPolicyEnvPostParameters" : {
     "title" : "URL Policy Env POST Parameters",
     "description" : "List of HTTP POST request parameters whose names and values will
be set in the environment map for URL policy evaluation at OpenAM server. (property name:
com.sun.identity.agents.config.policy.env.post.param) <br>Hot-swap: Yes <br> Examples: <br> name <br>
phonenumber",
     "propertyOrder" : 11900,
     "required" : true,
     "items" : {
       "type" : "string"
     },
     "type" : "array",
```


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```
      "exampleValue" : ""
    },
    "notEnforcedUrisCacheSize" : {
      "title" : "Not Enforced URIs Cache Size",
      "description" : "Size of the cache to be used if caching of not enforced URI list evaluation
results is enabled. (property name: com.sun.identity.agents.config.notenforced.uri.cache.size)
<br>Hot-swap: Yes",
      "propertyOrder" : 7800,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "useInternalLogin" : {
      "title" : "Use Internal Login",
      "description" : "Set to false if want to customize Login Content File instead of default
internal content provided. (property name: com.sun.identity.agents.config.login.use.internal)
<br>Hot-swap: Yes",
      "propertyOrder" : 3000,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "userDataCachePollingTime" : {
      "title" : "User Data Cache Polling Time",
      "description" : "Cache update time in minutes for user management data. If set to '0' no updates
happen. (property name: com.iplanet.am.sdk.remote.pollingTime) <br>Hot-swap: No",
      "propertyOrder" : 10600,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "continuousSecurityHeaders" : {
      "title" : "Continuous Security Headers",
      "description" : "The name of the headers in the user's original request, that will be sent
as part of the payload during policy evaluation, which can then be accessed via the 'environment'
variable in a policy script. The 'key' is the name of the header to be sent, and the 'value' is the
name which it will appear as in the policy evaluation script.It is possible to map multiple headers
to the same name (they will simply appear as an array in the evaluation script). If the header
doesn't exist, then the empty string will be sent.",
      "propertyOrder" : 3211,
      "required" : true,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : ""
    },
    "probeLoginUrl" : {
      "title" : "Login URL Probe",
      "description" : "Specifies if agent will check the availability of these urls before redirecting
to them. (property name: com.sun.identity.agents.config.login.url.probe.enabled) <br>Hot-swap: Yes",
      "propertyOrder" : 3900,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "headerAttributeDateFormat" : {
```


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```
      "title" : "Fetch Attribute Date Format",
      "description" : "Format of date attribute values to be used when the attribute is
 being set as HTTP header. Format is based on java.text.SimpleDateFormat. (property name:
 com.sun.identity.agents.config.attribute.date.format) <br>Hot-swap: Yes",
      "propertyOrder" : 8400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "cdsso" : {
      "title" : "Cross Domain SSO",
      "description" : "Enables Cross Domain Single SignOn. (property name:
 com.sun.identity.agents.config.cdsso.enable) <br>Hot-swap: Yes",
      "propertyOrder" : 5000,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "profileAttributeFetchMode" : {
      "title" : "Profile Attribute Fetch Mode",
      "description" : "The mode of fetching profile attributes. (property name:
 com.sun.identity.agents.config.profile.attribute.fetch.mode) <br>Hot-swap: Yes",
      "propertyOrder" : 8700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "clientIpHeader" : {
      "title" : "Client IP Address Header",
      "description" : "HTTP header name that holds the IP address of the client. (property name:
 com.sun.identity.agents.config.client.ip.header) <br>Hot-swap: Yes",
      "propertyOrder" : 1000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "amLogoutUrl" : {
      "title" : "OpenAM Logout URL",
      "description" : "OpenAM logout page URL. (property name:
 com.sun.identity.agents.config.logout.url) <br>Hot-swap: Yes <br> Example: <br> http://host:port/
opensso/UI/Logout",
      "propertyOrder" : 12400,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "webServiceAuthorizationErrorContentFile" : {
      "title" : "Web Service Authorization Error Content File",
      "description" : "The name of file that contains content used by the
 Agent to generate an authorization error fault for clients. (property name:
 com.sun.identity.agents.config.webservice.autherror.content) <br>Hot-swap: Yes",
      "propertyOrder" : 2600,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
```


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```
   "httpSessionBinding" : {
     "title" : "HTTP Session Binding",
     "description" : "If true will invalidate the http session when login has failed, user
has no SSO session, or principal user name does not match SSO user name. (property name:
com.sun.identity.agents.config.httpsession.binding) <br>Hot-swap: Yes",
     "propertyOrder" : 3500,
     "required" : true,
     "type" : "boolean",
     "exampleValue" : ""
   },
   "cdssoDomainList" : {
     "title" : "CDSSO Domain List",
     "description" : "Domains for which cookies have to be set in a CDSSO scenario. (property name:
com.sun.identity.agents.config.cdsso.domain) <br>Hot-swap: Yes <br> Example: <br> .sun.com",
     "propertyOrder" : 5800,
     "required" : true,
     "items" : {
       "type" : "string"
     },
     "type" : "array",
     "exampleValue" : ""
   },
   "urlPolicyEnvJsessionParameters" : {
     "title" : "URL Policy Env jsession Parameters",
     "description" : "List of HTTP SESSION attributes whose names and values will be
set in the environment map for URL policy evaluation at OpenAM server. (property name:
com.sun.identity.agents.config.policy.env.jsession.param) <br>Hot-swap: Yes <br> Examples: <br> name
<br> phonenumber",
     "propertyOrder" : 12000,
     "required" : true,
     "items" : {
       "type" : "string"
     },
     "type" : "array",
     "exampleValue" : ""
   },
   "debugLevel" : {
     "title" : "Agent Debug Level",
     "description" : "Specifies type of agent debug messages to log. (property name:
com.iplanet.services.debug.level) <br>Hot-swap: Yes",
     "propertyOrder" : 10000,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "invertNotEnforcedIps" : {
     "title" : "Not Enforced IP Invert List",
     "description" : "Client IP Addresses to invert protection of IP addresses listed in the related
Not Enforced Client IP List. (property name: com.sun.identity.agents.config.notenforced.ip.invert)
<br>Hot-swap: Yes",
     "propertyOrder" : 8000,
     "required" : true,
     "type" : "boolean",
     "exampleValue" : ""
   },
   "notEnforcedIpsCacheEnabled" : {
     "title" : "Not Enforced IP Cache Flag",
     "description" : "Enable caching of not-enforced IP list evaluation results. (property name:
com.sun.identity.agents.config.notenforced.ip.cache.enable) <br>Hot-swap: Yes",
```


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```
      "propertyOrder" : 8100,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "status" : {
      "title" : "Status",
      "description" : "Status of the agent configuration.",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "portCheckEnabled" : {
      "title" : "Port Check Enable",
      "description" : "Indicates if port check functionality is enabled or disabled. (property name:
 com.sun.identity.agents.config.port.check.enable) <br>Hot-swap: Yes",
      "propertyOrder" : 7200,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "authServiceProtocol" : {
      "title" : "OpenAM Authentication Service Protocol",
      "description" : "Protocol to be used by the OpenAM authentication service. (property name:
 com.iplanet.am.server.protocol) <br>Hot-swap: No",
      "propertyOrder" : 10900,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "gotoParameterName" : {
      "title" : "Goto Parameter Name",
      "description" : "Property used only when CDSSO is enabled. Default value should
 be changed only when the login URL has a landing page specified <br> Example :
 com.sun.identity.agents.config.cdsso.cdcservlet.url = http://host:port/opensso/cdcservlet?
goto=http://agent:port/landing.jsp <br> The parameter is used by the Agent to append the original
 request URL to this cdcserlet URL. This parameter is consumed by the landing page to redirect to
 the original URL. (property name: com.sun.identity.agents.config.redirect.param) <br>Hot-swap: Yes
 <br> Example: com.sun.identity.agents.config.redirect.param = goto2<br> The complete URL sent for
 authentication will be <br> http://host:port/opensso/cdcservlet?goto=http://agent:port/landing.jsp?
goto2=http://agent.port/original.jsp",
      "propertyOrder" : 3600,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "loginProbeTimeout" : {
      "title" : "Login URL Probe Timeout",
      "description" : "The connect timeout value in milliseconds, if also Login URL Probe is set to
 true. (property name: com.sun.identity.agents.config.login.url.probe.timeout) <br>Hot-swap: Yes",
      "propertyOrder" : 4000,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "ignorePathInfo" : {
      "title" : "Ignore Path Info in Request URL",
```


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```
      "description" : "The path info will be stripped from the request URL while doing Not
 Enforced List check and url policy evaluation if the value is set to true. (property name:
 com.sun.identity.agents.config.ignore.path.info) <br>Hot-swap: Yes",
      "propertyOrder" : 18600,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "logoutRequestParameters" : {
      "title" : "Logout Request Parameter",
      "description" : "An application-specific Map that identifies a parameter
 which when present in the HTTP request indicates a logout event. (property name:
 com.sun.identity.agents.config.logout.request.param)  <br>Valid key: the web application name.
 <br>Valid value: the logout request parameter. <br>For this property, a global value can be set to
 apply to all the applications that don't have their own specific logout request parameter. <br>Hot-
swap: Yes  <br> Examples: <br>To set a global application logout request parameter: leave Map Key
 field empty, and enter the global application logout request parameter logoutparam in Corresponding
 Map Value field. <br> To set the logout request parameter for application BankApp: enter BankApp in
 Map Key field, and enter the logout request parameter logoutparam in Corresponding Map Value field.",
      "propertyOrder" : 6100,
      "required" : true,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : ""
    },
    "alternativeAgentHostname" : {
      "title" : "Alternative Agent Host Name",
      "description" : "Host name identifying the Agent protected server to the client browsers if
 different from the actual host name. (property name: com.sun.identity.agents.config.agent.host)
 <br>Hot-swap: Yes",
      "propertyOrder" : 4100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "fqdnCheck" : {
      "title" : "FQDN Check",
      "description" : "Enables checking of fqdn default value and fqdn map values. (property name:
 com.sun.identity.agents.config.fqdn.check.enable) <br>Hot-swap: Yes",
      "propertyOrder" : 6400,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "webServiceProcessGetEnabled" : {
      "title" : "Web Service Process GET Enable",
      "description" : "Flag to indicates if the processing of HTTP GET requests for Web Service
 endpoints is enabled. (property name: com.sun.identity.agents.config.webservice.process.get.enable)
 <br>Hot-swap: Yes",
      "propertyOrder" : 2200,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "logoutUrlPrioritized" : {
```


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```
     "title" : "Logout URL Prioritized",
     "description" : "Specifies if failover sequence for Logout URLs should be prioritized as defined
in the OpenAM Login URL list. (property name: com.sun.identity.agents.config.logout.url.prioritized)
<br>Hot-swap: Yes",
     "propertyOrder" : 12500,
     "required" : true,
     "type" : "boolean",
     "exampleValue" : ""
   },
   "userDataCacheNotifications" : {
     "title" : "Enable Notification of User Data Caches",
     "description" : "Enable notifications for amsdk and IdRepo Caches. (property name:
com.sun.identity.idm.remote.notification.enabled) <br>Hot-swap: No",
     "propertyOrder" : 10500,
     "required" : true,
     "type" : "boolean",
     "exampleValue" : ""
   },
   "responseAttributeMap" : {
     "title" : "Response Attribute Mapping",
     "description" : "Maps the policy response attributes to be populated
under specific names for the currently authenticated user. (property name:
com.sun.identity.agents.config.response.attribute.mapping) <br>Hot-swap: Yes <br> Example: <br> To
populate the value of response attribute uid under name CUSTOM-USER-NAME: enter uid in Map Key field,
and enter CUSTOM-USER-NAME in Corresponding Map Value field.",
     "propertyOrder" : 9200,
     "required" : true,
     "patternProperties" : {
       ".*" : {
         "type" : "string"
       }
     },
     "type" : "object",
     "exampleValue" : ""
   },
   "responseAttributeFetchMode" : {
     "title" : "Response Attribute Fetch Mode",
     "description" : "The mode of fetching policy response attributes. (property name:
com.sun.identity.agents.config.response.attribute.fetch.mode) <br>Hot-swap: Yes",
     "propertyOrder" : 9100,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "sessionAttributeFetchMode" : {
     "title" : "Session Attribute Fetch Mode",
     "description" : "The mode of fetching session attributes. (property name:
com.sun.identity.agents.config.session.attribute.fetch.mode) <br>Hot-swap: Yes",
     "propertyOrder" : 8900,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "authServicePort" : {
     "title" : "OpenAM Authentication Service Port",
     "description" : "Port to be used by the OpenAM authentication service. (property name:
com.iplanet.am.server.port) <br>Hot-swap: No",
     "propertyOrder" : 11100,
     "required" : true,
```


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```
      "type" : "integer",
      "exampleValue" : ""
    },
    "logoutIntrospection" : {
      "title" : "Logout Introspect Enabled",
      "description" : "Allows the Agent to search HTTP request body to locate logout parameter.
(property name: com.sun.identity.agents.config.logout.introspect.enabled) <br>Hot-swap: Yes",
      "propertyOrder" : 6200,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "useRedirectForCompositeAdvice" : {
      "title" : "Use HTTP-Redirect for composite advice",
      "description" : "Configure remote policy client to use HTTP-redirect instead of HTTP-POST
for composite advices. (property name: com.sun.identity.agents.config.policy.advice.use.redirect)
<br>Hot-swap: Yes",
      "propertyOrder" : 13000,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "clientPollingPeriod" : {
      "title" : "Client Polling Period",
      "description" : "(Not used in Agent 5 onwards) <br>Time in seconds after which the session
client will request update of cached session information from the server. (property name:
com.iplanet.am.session.client.polling.period) <br>Hot-swap: No",
      "propertyOrder" : 10300,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "shortenedPrivilegeAttributeValues" : {
      "title" : "Shortened privilege attribute values",
      "description" : "When using privileged attribute type, this setting will ensure that the
membership details will be stored in a shortened format and not in the default universal ID
format.<br><br>By default the agent maps identity memberships using their universal IDs (e.g.
id=admin,ou=group,dc=openam,dc=forgerock,dc=org), however this may not be always acceptable. Using
this setting the identity membership details will be mapped in a shortened format, only including the
group's/role's name (e.g. admin). Be aware that in case there are both roles and groups in the data
store, this setting will make them indistinguishable from each other, i.e. if there is a group and a
role with the same name it will not be possible to differentiate them.",
      "propertyOrder" : 13600,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "postDataStickySessionMode" : {
      "title" : "PDP Stickysession mode",
      "description" : "The PDP mechanism needs sticky loadbalancing, the URL mode will
append a querystring, while the Cookie mode will create a cookie. (property name:
com.sun.identity.agents.config.postdata.preserve.stickysession.mode)",
      "propertyOrder" : 13400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "postDataPreserveCacheEntryMaxTotalSizeMb" : {
      "title" : "PDP Maximum Cache Size",
```


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```
      "description" : "Maximum size of the PDP cache, in megabytes (Property name:
 org.forgerock.openam.agents.config.postdata.preserve.cache.entry.max.total.size.mb). (Agent 5 only)",
      "propertyOrder" : 13600,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "serviceDataCacheNotifications" : {
      "title" : "Enable Notification of Service Data Caches",
      "description" : "Enable the notifications for service management caches. (property name:
 com.sun.identity.sm.notification.enabled) <br>Hot-swap: No",
      "propertyOrder" : 10700,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "webServiceResponseProcessor" : {
      "title" : "Web Service Response Processor",
      "description" : "An implementation class of interface
 com.sun.identity.agents.filter.IWebServiceResponseProcessor that can be used to process the web-
service responses. (property name: com.sun.identity.agents.config.webservice.responseprocessor)
 <br>Hot-swap: Yes",
      "propertyOrder" : 2400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "loginUrlPrioritized" : {
      "title" : "Login URL Prioritized",
      "description" : "Specifies if failover sequence for Login URLs or CDSSO URLs
 should be prioritized as defined in the OpenAM Login URL list. (property name:
 com.sun.identity.agents.config.login.url.prioritized) <br>Hot-swap: Yes",
      "propertyOrder" : 3800,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "cdssoRootUrl" : {
      "title" : "Agent Root URL for CDSSO",
      "description" : "The agent root URL for CDSSO. The valid value is in the following format:
 <br>protocol://hostname:port/<br> The protocol represents the protocol used, such as http or https.
 The hostname represents the host name of the machine on which the agent resides. The port represents
 the port number on which the agent is installed. The slash following the port number is required.",
      "propertyOrder" : 22700,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "customProperties" : {
      "title" : "Custom Properties",
      "description" : "Additional properties that allow users to augment the set of properties
 supported by agent. (property name: com.sun.identity.agents.config.freeformproperties) <br>Hot-
swap: Yes <br> Examples: <br> customproperty=custom-value1 <br> customlist[0]=customlist-
value-0 <br> customlist[1]=customlist-value-1 <br> custommap[key1]=custommap-value-1 <br>
 custommap[key2]=custommap-value-2",
      "propertyOrder" : 12200,
```


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```
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "bypassPrincipalList" : {
      "title" : "Bypass Principal List",
      "description" : "List of principals that are bypassed by the Agent for authentication and search
 purposes. (property name: com.sun.identity.agents.config.bypass.principal) <br>Hot-swap: Yes <br>
 Examples: <br> guest <br> testuser",
      "propertyOrder" : 9300,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "fqdnDefault" : {
      "title" : "FQDN Default",
      "description" : "Fully qualified hostname that the users should use in order to access
 resources. (property name: com.sun.identity.agents.config.fqdn.default) <br>Hot-swap: Yes",
      "propertyOrder" : 6500,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "privilegedAttributeMappingEnabled" : {
      "title" : "Enable Privileged Attribute Mapping",
      "description" : "(Not used in Agent 5 onwards) <br>Enable a mapping from the
 original value of an attribute to another value. To satisfy container-specific
 restrictions on character set being used in certain configuration files. (property name:
 com.sun.identity.agents.config.privileged.attribute.mapping.enable) <br>Hot-swap: Yes",
      "propertyOrder" : 9800,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "applicationLogoutUris" : {
      "title" : "Application Logout URI",
      "description" : "An application-specific Map that identifies a request URI which indicates
 a logout event. (property name: com.sun.identity.agents.config.logout.uri) <br>Valid key: the web
 application name. <br>Valid value: the application logout URI. <br>For this property, a global value
 can be set to apply to all the applications that don't have their own specific logout URI. <br>Hot-
swap: Yes <br> Examples: <br>To set a global application logout URI: leave Map Key field empty, and
 enter the global application logout URI /logout.jsp in Corresponding Map Value field. <br> To set the
 logout URI for application BankApp: enter BankApp in Map Key field, and enter the application logout
 URI /BankApp/logout.jsp in Corresponding Map Value field.",
      "propertyOrder" : 6000,
      "required" : true,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : ""
```


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```
   },
   "cookieAttributeUrlEncoded" : {
     "title" : "Attribute Cookie Encode",
     "description" : "Indicates if the value of the attribute should be URL encoded before being set
as a cookie. (property name: com.sun.identity.agents.config.attribute.cookie.encode) <br>Hot-swap:
Yes",
     "propertyOrder" : 8500,
     "required" : true,
     "type" : "boolean",
     "exampleValue" : ""
   },
   "userAttributeName" : {
     "title" : "User Attribute Name",
     "description" : "Name of the attribute which contains the user-ID. (property name:
com.sun.identity.agents.config.user.attribute.name) <br>Hot-swap: Yes",
     "propertyOrder" : 700,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "configurationReloadInterval" : {
     "title" : "Configuration Reload Interval",
     "description" : "Interval in seconds between configuration reloads. (property name:
com.sun.identity.agents.config.load.interval) <br>Hot-swap: Yes",
     "propertyOrder" : 1200,
     "required" : true,
     "type" : "integer",
     "exampleValue" : ""
   },
   "webServiceInternalErrorContentFile" : {
     "title" : "Web Service Internal Error Content File",
     "description" : "The name of file that contains content used by the
Agent to generate an internal error fault for clients. (property name:
com.sun.identity.agents.config.webservice.internalerror.content) <br>Hot-swap: Yes",
     "propertyOrder" : 2500,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "conditionalLoginUrl" : {
     "title" : "OpenAM Conditional Login URL",
     "description" : "(Only used in Agent 5 onwards) (property name:
org.forgerock.openam.agents.config.conditional.login.url) <br>Hot-swap: Yes <br> Examples: <br>
match|url?param1=value1&param2=value2 <br> match/path|?param1=value1&param2=value2&param3=value3",
     "propertyOrder" : 4010,
     "required" : true,
     "items" : {
       "type" : "string"
     },
     "type" : "array",
     "exampleValue" : ""
   },
   "redirectAttemptLimit" : {
     "title" : "Redirect Attempt Limit",
     "description" : "Number of successive single point redirects that a user can make using a
single browser session which will trigger the blocking of the user request. Set to 0 to disable this
feature. (property name: com.sun.identity.agents.config.redirect.attempt.limit) <br>Hot-swap: Yes",
     "propertyOrder" : 7100,
     "required" : true,
```


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```
      "type" : "integer",
      "exampleValue" : ""
    },
    "localAuditRotationSize" : {
      "title" : "Local Audit Log Rotation Size",
      "description" : "Size limit when a local audit log file is rotated to a new file. (property
name: com.sun.identity.agents.config.local.log.size) <br>Hot-swap: Yes",
      "propertyOrder" : 1900,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "cookieAttributeMultiValueSeparator" : {
      "title" : "Cookie Separator Character",
      "description" : "Character that will be used to separate multiple values
of the same attribute when it is being set as a cookie. (property name:
com.sun.identity.agents.config.attribute.cookie.separator) <br>Hot-swap: Yes",
      "propertyOrder" : 8300,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "enableClientPolling" : {
      "title" : "Enable Client Polling",
      "description" : "Specifies if the session client must use polling for updating
session information and not depend upon server notifications. (property name:
com.iplanet.am.session.client.polling.enable) <br>Hot-swap: No",
      "propertyOrder" : 10200,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "postDataStickySessionKeyValue" : {
      "title" : "PDP Stickysession key-value",
      "description" : "The provided key-value pair will be used for adding to
the URL or creating the cookie. <br>Example: <br>Set 'lb=server1' to append to
the querystring or to have 'lb' cookie with 'server1' value. (property name:
com.sun.identity.agents.config.postdata.preserve.stickysession.value)",
      "propertyOrder" : 13500,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "policyNotifications" : {
      "title" : "Enable Policy Notifications",
      "description" : "Enable Notifications for remote policy client. (property name:
com.sun.identity.agents.notification.enabled) <br>Hot-swap: No",
      "propertyOrder" : 11200,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "policyEvaluationRealm" : {
      "title" : "Realm",
      "description" : "Which realm to start evaluating from. (property name:
org.forgerock.openam.agents.config.policy.evaluation.realm) <br>Hot-swap: Yes",
      "propertyOrder" : 5400,
      "required" : true,
      "type" : "string",
```


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```
      "exampleValue" : ""
    },
    "cdssoSecureCookies" : {
      "title" : "CDSSO Secure Enable",
      "description" : "The SSO Token cookie set by the agent in the different domains in CDSSO mode
 will be marked secure. Only transmitted if the communications channel with host is a secure one.
 (property name: com.sun.identity.agents.config.cdsso.secure.enable) <br>Hot-swap: Yes",
      "propertyOrder" : 5700,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "customLogoutHandlers" : {
      "title" : "Custom Logout Handler",
      "description" : "Application specific logout handler to log out a user with the application
 server. (property name: com.sun.identity.agents.config.logout.handler)  <br>Valid key: the web
 application name. <br>Valid value: the logout handler class name. <br>Hot-swap: Yes <br> Example:
 <br>To set logout handler for application BankApp: enter BankApp in Map Key field, and enter logout
 handler class name BankLogoutHandler in Corresponding Map Value field.",
      "propertyOrder" : 3300,
      "required" : true,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : ""
    },
    "loginErrorUri" : {
      "title" : "Login Error URI",
      "description" : "List of absolute URIs corresponding to an application's web.xml form-error-
page element. (property name: com.sun.identity.agents.config.login.error.uri) <br>Hot-swap: Yes <br>
 Example: <br> /BankApp/jsp/error.jsp",
      "propertyOrder" : 2900,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "serviceDataCacheTime" : {
      "title" : "Service Data Cache Time",
      "description" : "Cache update time in minutes for service configuration data. If set to '0' no
 updates happen. (property name: com.sun.identity.sm.cacheTime) <br>Hot-swap: No",
      "propertyOrder" : 10800,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "localeCountry" : {
      "title" : "Locale Country",
      "description" : "(property name: com.sun.identity.agents.config.locale.country) <br>Hot-swap:
 No",
      "propertyOrder" : 1400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
```


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```
    },
    "defaultPrivilegedAttributes" : {
      "title" : "Default Privileged Attribute",
      "description" : "(Not used in Agent 5 onwards) <br>List of privileged attributes
 that will be granted to all users who have a valid OpenAM session. (property name:
 com.sun.identity.agents.config.default.privileged.attribute) <br>Hot-swap: Yes <br> Example: <br>
 AUTHENTICATED_USERS",
      "propertyOrder" : 9400,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "invertNotEnforcedUris" : {
      "title" : "Invert Not Enforced URIs",
      "description" : "Inverts protection of  URIs specified in Not Enforced URIs list. When set
 to true, it indicates that the URIs specified should be enforced and all other URIs should be
 not enforced by the Agent. (property name: com.sun.identity.agents.config.notenforced.uri.invert)
 <br>Hot-swap: Yes",
      "propertyOrder" : 7600,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "cdssoRedirectUri" : {
      "title" : "CDSSO Redirect URI",
      "description" : "An intermediate URI that is used by the Agent for processing CDSSO requests.
 (property name: com.sun.identity.agents.config.cdsso.redirect.uri) <br>Hot-swap: Yes",
      "propertyOrder" : 5100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "webServiceEnabled" : {
      "title" : "Web Service Enable",
      "description" : "Flag specifies if Web Service processing is enabled. (property name:
 com.sun.identity.agents.config.webservice.enable) <br>Hot-swap: Yes",
      "propertyOrder" : 2000,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "xssDetectionRedirectUri" : {
      "title" : "XSS detection redirect URI",
      "description" : "An application-specific Map that identifies a URI of the customized page if
 XSS code has been deteced. (property name: com.sun.identity.agents.config.xss.redirect.uri) <br>Hot-
swap: Yes <br>Examples: <br>To set a redirect target for application BankApp: enter BankApp in Map Key
 field, and enter a redirect URI in Corresponding Map Value field.",
      "propertyOrder" : 12900,
      "required" : true,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : ""
```


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```
    },
    "policyClientResourceComparators" : {
      "title" : "Policy Client Resource Comparators",
      "description" : "Resource Comparators to be used for different service names. (property name:
 com.sun.identity.policy.client.resourceComparators) <br>Hot-swap: No",
      "propertyOrder" : 11600,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "loginAttemptLimit" : {
      "title" : "Login Attempt Limit",
      "description" : "Limit of failed login attempts for a user's single browser session until
 triggering the blocking of the user request. Value of 0 disables this feature. (property name:
 com.sun.identity.agents.config.login.attempt.limit) <br>Hot-swap: Yes",
      "propertyOrder" : 4400,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "cookieResetEnabled" : {
      "title" : "Cookie Reset",
      "description" : "Agent resets cookies in the response before redirecting to authentication.
 (property name: com.sun.identity.agents.config.cookie.reset.enable) <br>Hot-swap: Yes",
      "propertyOrder" : 4600,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "jbossWebAuthenticationAvailable" : {
      "title" : "WebAuthentication Available",
      "description" : "(Not used in Agent 5 onwards) <br>Enable agent to make programmatic
 authentication with the JBoss web container using WebAuthentication feature. (property name:
 com.sun.identity.agents.config.jboss.webauth.available) <br>Hot-swap: Yes",
      "propertyOrder" : 12300,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "postDataCacheTtl" : {
      "title" : "PDP entry TTL",
      "description" : "This value tells how long a given POST entry should be stored
 in the local cache (in milliseconds), default value is 300000. (property name:
 com.sun.identity.agents.config.postdata.preserve.cache.entry.ttl)",
      "propertyOrder" : 13300,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "portCheckSetting" : {
      "title" : "Port Check Setting",
      "description" : "Map of port versus protocol entries with the key being the listening port
 number and value being the listening protocol to be used by the Agent to identify requests with
 invalid port numbers. (property name: com.sun.identity.agents.config.port.check.setting) <br>Hot-
swap: Yes <br> Example: <br> To map port 80 to protocol http: enter 80 in Map Key field, and enter
 http in Corresponding Map Value field.",
      "propertyOrder" : 7400,
      "required" : true,
      "patternProperties" : {
```


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```
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : ""
    },
    "filterMode" : {
      "title" : "Agent Filter Mode",
      "description" : "Specifies the mode of operation of the Filter. (property name:
com.sun.identity.agents.config.filter.mode) <br>Valid key: the web application name. <br>Valid
values: ALL, J2EE_POLICY (Not used in Agent 5 onwards), URL_POLICY, SSO_ONLY, NONE <br>For this
property, a global value can be set to apply to all the applications that don't have their own
specific filter mode. <br>Hot-swap: No <br>Examples: <br>To set ALL as the global filter mode:
leave Map Key field empty, and enter ALL in Corresponding Map Value field. <br>To set URL_POLICY
as the filter mode for application BankApp: enter BankApp in Map Key field, and enter URL_POLICY in
Corresponding Map Value field.",
      "propertyOrder" : 500,
      "required" : true,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : ""
    },
    "sessionAttributeMap" : {
      "title" : "Session Attribute Mapping",
      "description" : "Maps the session attributes to be populated under
specific names for the currently authenticated user. (property name:
com.sun.identity.agents.config.session.attribute.mapping) <br>Hot-swap: Yes  <br> Example: <br>  To
populate the value of session attribute UserToken under name CUSTOM-userid: enter UserToken in Map
Key field, and enter CUSTOM-userid in Corresponding Map Value field.",
      "propertyOrder" : 9000,
      "required" : true,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : ""
    },
    "cdssoTrustedIdProvider" : {
      "title" : "CDSSO Trusted ID Provider",
      "description" : "List of OpenAM Server/ID providers that should be trusted
by the agent, when evaluating the CDC Liberty Responses. (property name:
com.sun.identity.agents.config.cdsso.trusted.id.provider) <br>Hot-swap: Yes <br> Example: <br>
http://host:port/opensso/cdcservlet",
      "propertyOrder" : 5600,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "policyEvaluationApplication" : {
```


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```
     "title" : "Application",
     "description" : "Which application contains the policies to evaluate with. (property name:
org.forgerock.openam.agents.config.policy.evaluation.application) <br>Hot-swap: Yes",
     "propertyOrder" : 5500,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "policyClientCacheMode" : {
     "title" : "Policy Client Cache Mode",
     "description" : "Mode of caching to be used by remote policy client. (property name:
com.sun.identity.policy.client.cacheMode) <br>Hot-swap: No",
     "propertyOrder" : 11400,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "continuousSecurityCookies" : {
     "title" : "Continuous Security Cookies",
     "description" : "The name of the cookies to be sent as part of the payload during policy
evaluation, which can be accessed via the 'environment' variable in a policy script. The 'key' is
the name of the cookie to be sent, and the 'value' is the name which it will appear as in the policy
evaluation script. It is possible to map multiple cookies to the same name (they will simply appear
as an array in the evaluation script). If the cookie doesn't exist, then the empty string will be
sent.",
     "propertyOrder" : 3210,
     "required" : true,
     "patternProperties" : {
       ".*" : {
         "type" : "string"
       }
     },
     "type" : "object",
     "exampleValue" : ""
   },
   "missingPostDataPreservationEntryUri" : {
     "title" : "Missing PDP entry URI",
     "description" : "An application-specific URI Map that is used in case the referenced
PDP entry cannot be found in the local cache (due to ttl). In such cases it will redirect
to the specified URI, otherwise it will show a HTTP 403 Forbidden error. (property name:
com.sun.identity.agents.config.postdata.preservce.cache.noentry.url)<br>Examples: <br>To set a
redirect target for application BankApp: enter Bankapp in Map Key field and enter a redirect URI in
corresponding Map Value field.",
     "propertyOrder" : 13200,
     "required" : true,
     "items" : {
       "type" : "string"
     },
     "type" : "array",
     "exampleValue" : ""
   },
   "localAuditLogRotation" : {
     "title" : "Rotate Local Audit Log",
     "description" : "Flag to indicate that audit log files should be rotated when reaching a certain
size. (property name: com.sun.identity.agents.config.local.log.rotate) <br>Hot-swap: Yes",
     "propertyOrder" : 1800,
     "required" : true,
     "type" : "boolean",
     "exampleValue" : ""
```


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```
    },
    "cookieResetPaths" : {
      "title" : "Cookies Reset Path Map",
      "description" : "Maps cookie names specified in Cookie Reset Name List to value
 being the path of this cookie to be used when a reset event occurs. (property name:
 com.sun.identity.agents.config.cookie.reset.path) <br>Hot-swap: Yes",
      "propertyOrder" : 4900,
      "required" : true,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : ""
    },
    "agentConfigChangeNotificationsEnabled" : {
      "title" : "Agent Configuration Change Notification",
      "description" : "Enable agent to receive notification messages from OpenAM server for
 configuration changes. (property name: com.sun.identity.agents.config.change.notification.enable)
 <br>Hot-swap: Yes",
      "propertyOrder" : 12100,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "urlPolicyEnvGetParameters" : {
      "title" : "URL Policy Env GET Parameters",
      "description" : "List of HTTP GET request parameters whose names and values will be
 set in the environment map for URL policy evaluation at OpenAM server. (property name:
 com.sun.identity.agents.config.policy.env.get.param) <br>Hot-swap: Yes <br> Examples: <br> name <br>
 phonenumber",
      "propertyOrder" : 11800,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "authServiceHost" : {
      "title" : "OpenAM Authentication Service Host Name",
      "description" : "Host name to be used by the OpenAM authentication service. (property name:
 com.iplanet.am.server.host) <br>Hot-swap: No",
      "propertyOrder" : 11000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "notEnforcedUris" : {
      "title" : "Not Enforced URIs",
      "description" : "List of URIs for which protection is not enforced by the Agent. (property
 name: com.sun.identity.agents.config.notenforced.uri) <br>Hot-swap: Yes <br> Examples: <br> /BankApp/
public/* <br> /BankApp/images/*",
      "propertyOrder" : 7500,
      "required" : true,
      "items" : {
        "type" : "string"
      },
```


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```
      "type" : "array",
      "exampleValue" : ""
    },
    "cookieResetNames" : {
      "title" : "Cookies Reset Name List",
      "description" : "Cookie names that will be reset by the Agent if Cookie Reset is enabled.
 (property name: com.sun.identity.agents.config.cdsso.cookie.reset.name) <br>Hot-swap: Yes",
      "propertyOrder" : 4700,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "notEnforcedUrisRefreshSessionIdleTime" : {
      "title" : "Refresh Session Idle Time",
      "description" : "Indicates if opensso session idle time should be refreshed or reset for not
 enforced URIs. (property name: com.sun.identity.agents.config.notenforced.refresh.session.idletime)
 <br>Hot-swap: Yes",
      "propertyOrder" : 8600,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "cdssoClockSkew" : {
      "title" : "CDSSO Clock Skew",
      "description" : "Time in seconds to be used by the Agent to determine the validity of the CDSSO
 AuthnResponse assertion. (property name: com.sun.identity.agents.config.cdsso.clock.skew) <br>Hot-
swap: Yes",
      "propertyOrder" : 5300,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "notEnforcedRuleCompoundSeparator" : {
      "title" : "Not Enforced Compound Rule Separator",
      "description" : "Specifies a separator for not enforced compound rules (Agent 5 only). The
 format for compound rules requires a list of IP rules, a separator (by default the | character),
 and a list of URI rules. For example, GET 192.168.1.1-192.168.4.3 | /images/* Configure a
 different separator (for example, &&) when working with the REGEX keyword to avoid invalid regular
 expressions.",
      "propertyOrder" : 7450,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "notEnforcedUrisCacheEnabled" : {
      "title" : "Not Enforced URIs Cache Enabled",
      "description" : "Enables the caching of the Not Enforced URIs list evaluation results. (property
 name: com.sun.identity.agents.config.notenforced.uri.cache.enable) <br>Hot-swap: Yes",
      "propertyOrder" : 7700,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "postDataPreservation" : {
      "title" : "Post Data Preservation enabled",
```


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      "description" : "Post Data Preservation functionality basically stores any POST
data before redirecting the user to the login screen and after successful login the agent
will generate a page that autosubmits the same POST to the original URL. (property name:
com.sun.identity.agents.config.postdata.preserve.enable)",
      "propertyOrder" : 13100,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "loginContentFile" : {
      "title" : "Login Content File Name",
      "description" : "Complete path and name of custom login content file. (property name:
com.sun.identity.agents.config.login.content.file) <br>Hot-swap: Yes",
      "propertyOrder" : 3100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "auditAccessType" : {
      "title" : "Audit Access Types",
      "description" : "Types of messages to log based on user URL access attempts. (property name:
com.sun.identity.agents.config.audit.accesstype) <br>Hot-swap: Yes",
      "propertyOrder" : 1500,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "userpassword" : {
      "title" : "Password",
      "description" : "",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "string",
      "format" : "password",
      "exampleValue" : ""
    },
    "ssoCacheEnabled" : {
      "title" : "SSO Cache Enable",
      "description" : "Specifies if the SSO Cache is active for the agent.
Cache is used through public APIs exposed by the agent SDK. (property name:
com.sun.identity.agents.config.amsso.cache.enable) <br>Hot-swap: Yes",
      "propertyOrder" : 4500,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "privilegedSessionAttribute" : {
      "title" : "Privileged Session Attribute",
      "description" : "(Not used in Agent 5 onwards) <br>List of session property
names which hold privileged attributes for the authenticated user. (property name:
com.sun.identity.agents.config.privileged.session.attribute) <br>Hot-swap: Yes <br> Example: <br>
UserToken",
      "propertyOrder" : 9700,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
```


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```
   },
   "customAuthenticationHandlers" : {
     "title" : "Custom Authentication Handler",
     "description" : "Application specific authentication handler to authenticate the logged on user
with the application server. (property name: com.sun.identity.agents.config.auth.handler)  <br>Valid
key: the web application name. <br>Valid value: the authentication handler class name. <br>Hot-swap:
Yes  <br>Example: <br>To set authentication handler for application BankApp: enter BankApp in Map
Key field, and enter authentication handler class name BankAuthHandler in Corresponding Map Value
field.",
     "propertyOrder" : 3200,
     "required" : true,
     "patternProperties" : {
       ".*" : {
         "type" : "string"
       }
     },
     "type" : "object",
     "exampleValue" : ""
   },
   "webServiceEndpoints" : {
     "title" : "Web Service End Points",
     "description" : "A list of Web Application end points that represent Web Services. (property
name: com.sun.identity.agents.config.webservice.endpoint) <br>Hot-swap: Yes",
     "propertyOrder" : 2100,
     "required" : true,
     "items" : {
       "type" : "string"
     },
     "type" : "array",
     "exampleValue" : ""
   },
   "notEnforcedIps" : {
     "title" : "Not Enforced Client IP List",
     "description" : "No authentication and authorization protection from agent are
required for the requests coming from these client IP addresses. (property name:
com.sun.identity.agents.config.notenforced.ip) <br>Hot-swap: Yes <br> Examples: <br> 192.18.145.*
<br> 192.18.146.123",
     "propertyOrder" : 7900,
     "required" : true,
     "items" : {
       "type" : "string"
     },
     "type" : "array",
     "exampleValue" : ""
   },
   "loginFormUri" : {
     "title" : "Login Form URI",
     "description" : "List of absolute URIs corresponding to an application's web.xml form-login-page
element. (property name: com.sun.identity.agents.config.login.form) <br>Hot-swap: Yes <br> Example:
<br> /BankApp/jsp/login.jsp",
     "propertyOrder" : 2800,
     "required" : true,
     "items" : {
       "type" : "string"
     },
     "type" : "array",
     "exampleValue" : ""
   },
   "applicationLogoutHandlers" : {
```


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```
      "title" : "Application Logout Handler",
      "description" : "An application-specific Map that identifies a handler to be used for logout
processing. (property name: com.sun.identity.agents.config.logout.application.handler) <br>Valid
key: the web application name. <br>Valid value: the application logout handler class name. <br>For
this property, a global value can be set to apply to all the applications that don't have their own
specific logout handler. <br>Hot-swap: Yes <br> Examples:  <br>To set a global application logout
handler: leave Map Key field empty, and enter the global application logout handler class name
GlobalApplicationLogoutHandler in Corresponding Map Value field. <br>To set the logout handler for
application BankApp: enter BankApp in Map Key field, and enter the application logout handler class
name BankAppLogoutHandler in Corresponding Map Value field.",
      "propertyOrder" : 5900,
      "required" : true,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : ""
    },
    "agentNotificationUrl" : {
      "title" : "Agent Notification URL",
      "description" : "URL used by agent to register notification listeners. (property name:
com.sun.identity.client.notification.url) <br>Hot-swap: No",
      "propertyOrder" : 300,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "legacyRedirectUri" : {
      "title" : "Legacy User Agent Redirect URI",
      "description" : "An intermediate URI used by the Agent to redirect legacy user agent requests.
(property name: com.sun.identity.agents.config.legacy.redirect.uri) <br>Hot-swap: Yes",
      "propertyOrder" : 6900,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "profileAttributeMap" : {
      "title" : "Profile Attribute Mapping",
      "description" : "Maps the profile attributes to be populated under
specific names for the currently authenticated user. (property name:
com.sun.identity.agents.config.profile.attribute.mapping) <br>Hot-swap: Yes <br> Example: <br> To
populate the value of profile attribute cn under name CUSTOM-Common-Name: enter cn in Map Key field,
and enter CUSTOM-Common-Name in Corresponding Map Value field. <br> To populate the value of profile
attribute mail under name CUSTOM-Email: enter mail in Map Key field, and enter CUSTOM-Email in
Corresponding Map Value field.",
      "propertyOrder" : 8800,
      "required" : true,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : ""
    },
    "fqdnMapping" : {
      "title" : "FQDN Virtual Host Map",
```


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```
      "description" : "Maps virtual, invalid, or partial hostnames, and IP addresses to the FQDN to
 access protected resources. (property name: com.sun.identity.agents.config.fqdn.mapping) <br>Hot-
swap: Yes <br> Examples: <br>  To map the partial hostname myserver to myserver.mydomain.com: enter
 myserver in the Map Key field and myserver.mydomain.com in the Corresponding Map Value field. To map
 a virtual server rst.hostname.com that points to the actual server abc.hostname.com: enter valid1 in
 the Map Key field and rst.hostname.com in the Corresponding Map Value field.",
      "propertyOrder" : 6600,
      "required" : true,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : ""
    },
    "conditionalLogoutUrl" : {
      "title" : "OpenAM Conditional Logout URL",
      "description" : "(Only used in Agent 5 onwards) (property name:
 org.forgerock.openam.agents.config.conditional.logout.url) <br>Hot-swap: Yes <br> Examples: <br>
 match|url?param1=value1&param2=value2 <br> match/path|?param1=value1&param2=value2&param3=value3",
      "propertyOrder" : 12550,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "legacyUserAgentList" : {
      "title" : "Legacy User Agent List",
      "description" : "List of user agent header values that identify legacy
 browsers. Entries in this list can have wild card character '*'. (property name:
 com.sun.identity.agents.config.legacy.user.agent) <br>Hot-swap: Yes",
      "propertyOrder" : 6800,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "repositoryLocation" : {
      "title" : "Location of Agent Configuration Repository",
      "description" : "Indicates agent's configuration located either on agent's host or centrally on
 OpenAM server.",
      "propertyOrder" : 400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "postDataPreserveCacheEntryMaxEntries" : {
      "title" : "PDP Maximum Number of Cache Entries",
      "description" : "Maximum number of entries to hold in the PDP cache (Property name:
 org.forgerock.openam.agents.config.postdata.preserve.cache.entry.max.entries) (Agent 5 only).",
      "propertyOrder" : 13550,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
```


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```
    },
    "jwtName" : {
      "title" : "JWT Cookie Name",
      "description" : "The name used by the agent to set the OIDC JWT on the user's browser. (Agent 5
 only).",
      "propertyOrder" : 11201,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "policyClientPollingInterval" : {
      "title" : "Policy Client Polling Interval",
      "description" : "Duration in minutes after which the cached entries are refreshed by remote
 policy client. (property name: com.sun.identity.agents.polling.interval) <br>Hot-swap: No",
      "propertyOrder" : 11300,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "alternativeAgentPort" : {
      "title" : "Alternative Agent Port Name",
      "description" : "Port number identifying the Agent protected server listening port
 to the client browsers if different from the actual listening port. (property name:
 com.sun.identity.agents.config.agent.port) <br>Hot-swap: Yes",
      "propertyOrder" : 4200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "remoteLogFilename" : {
      "title" : "Remote Log File Name",
      "description" : "Name of file stored on OpenAM server that contains agent audit messages.
 (property name: com.sun.identity.agents.config.remote.logfile) <br>Hot-swap: Yes",
      "propertyOrder" : 1700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "amLoginUrl" : {
      "title" : "OpenAM Login URL",
      "description" : "OpenAM login page URL. (property name:
 com.sun.identity.agents.config.login.url) <br>Hot-swap: Yes <br> Example: <br> http://host:port/
opensso/UI/Login",
      "propertyOrder" : 3700,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "cdssoUrls" : {
      "title" : "CDSSO Servlet URL",
      "description" : "List of URLs of the available CDSSO controllers that may be used by the Agent
 for CDSSO processing. (property name: com.sun.identity.agents.config.cdsso.cdcservlet.url) <br>Hot-
swap: Yes <br> Example: <br> http://host:port/opensso/cdcservlet",
      "propertyOrder" : 5200,
      "required" : true,
      "items" : {
```


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```
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "notEnforcedIpsCacheSize" : {
      "title" : "Not Enforced IP Cache Size",
      "description" : "Size of the cache to be used if Not Enforced IP Cache Flag is enabled.
(property name: com.sun.identity.agents.config.notenforced.ip.cache.size) <br>Hot-swap: Yes",
      "propertyOrder" : 8200,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "probeLogoutUrl" : {
      "title" : "Logout URL Probe",
      "description" : "Specifies if agent will check the availability of these urls before redirecting
to them. (property name: com.sun.identity.agents.config.logout.url.probe.enabled) <br>Hot-swap: Yes",
      "propertyOrder" : 12600,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "cookieResetDomains" : {
      "title" : "Cookies Reset Domain Map",
      "description" : "Maps cookie names specified in Cookie Reset Name List to value
being the domain of this cookie to be used when a reset event occurs. (property name:
com.sun.identity.agents.config.cookie.reset.domain) <br>Hot-swap: Yes",
      "propertyOrder" : 4800,
      "required" : true,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : ""
    },
    "legacyUserAgentSupport" : {
      "title" : "Legacy User Agent Support Enable",
      "description" : "Enables support for legacy user agents (browser). (property name:
com.sun.identity.agents.config.legacy.support.enable) <br>Hot-swap: Yes",
      "propertyOrder" : 6700,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "amCookieName" : {
      "title" : "Cookie Name",
      "description" : "Name of the SSO Token cookie used between the OpenAM server and the Agent.
(property name: com.iplanet.am.cookie.name) <br>Hot-swap: No",
      "propertyOrder" : 10100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "privilegedAttributeType" : {
      "title" : "Privileged Attribute Type",
```


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```
      "description" : "(Not used in Agent 5 onwards) <br>List of privileged attribute types that will
 be fetched for each user. (property name: com.sun.identity.agents.config.privileged.attribute.type)
 <br>Hot-swap: Yes <br> Example: <br> Group",
      "propertyOrder" : 9500,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "userTokenName" : {
      "title" : "User Token Name",
      "description" : "Session property name for user-ID of the authenticated user in session.
 (property name: com.sun.identity.agents.config.user.token) <br>Hot-swap: Yes",
      "propertyOrder" : 900,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "logoutEntryUri" : {
      "title" : "Logout Entry URI",
      "description" : "An application-specific Map that identifies a URI to be used as an entry point
 after successful logout and subsequent successful authentication if applicable. (property name:
 com.sun.identity.agents.config.logout.entry.uri) <br>Valid key: the web application name. <br>Valid
 value: the logout entry URI. <br>For this property, a global value can be set to apply to all the
 applications that don't have their own specific logout entry URI.  <br>Hot-swap: Yes <br> Examples:
 <br>To set a global application logout entry URI: leave Map Key field empty, and enter the global
 application logout entry URI /welcome.html in Corresponding Map Value field. <br> To set the logout
 entry URI for application BankApp: enter BankApp in Map Key field, and enter the logout entry URI /
BankApp/welcome.html in Corresponding Map Value field.",
      "propertyOrder" : 6300,
      "required" : true,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : ""
    },
    "webSocketConnectionIntervalInMinutes" : {
      "title" : "Web Socket Connection Interval",
      "description" : "Interval in minutes by which agents reopen their web socket connection to
 ensure a fair distribution of connections across OpenAM servers. (Agent 5 only).",
      "propertyOrder" : 12105,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "privilegedAttributeMap" : {
      "title" : "Privileged Attribute Mapping",
      "description" : "(Not used in Agent 5 onwards) <br>Map if using Enable Privileged Attribute
 Mapping. (property name: com.sun.identity.agents.config.privileged.attribute.mapping) <br>Hot-
swap: Yes <br> Examples: <br> To map UUID id=manager,ou=group,dc=openam,dc=forgerock,dc=org
 to the principal name am_manager_role specified in webapp's deployment descriptor: enter
 id=manager,ou=group,dc=openam,dc=forgerock,dc=org in Map Key field, and enter am_manager_role in
 Corresponding Map Value field. <br> To  map UUID id=employee,ou=group,dc=openam,dc=forgerock,dc=org
 to the principal name am_employee_role  specified in webapp's deployment descriptor: enter
```


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```
 id=employee,ou=group,dc=openam,dc=forgerock,dc=org in Map Key field, and enter am_employee_role in
 Corresponding Map Value field.",
      "propertyOrder" : 9900,
      "required" : true,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : ""
    },
    "auditLogLocation" : {
      "title" : "Audit Log Location",
      "description" : "Specifies where audit messages should be logged. (property name:
 com.sun.identity.agents.config.log.disposition) <br>Hot-swap: Yes",
      "propertyOrder" : 1600,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```

1.74.1.2. delete

Usage:

```
am> delete J2EEAgentGroups --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.74.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action J2EEAgentGroups --realm Realm --actionName getAllTypes
```

1.74.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action J2EEAgentGroups --realm Realm --actionName getCreatableTypes
```


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1.74.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action J2EEAgentGroups --realm Realm --actionName nextdescendents
```

1.74.1.6. query

Querying the agent groups of a specific type

Usage:

```
am> query J2EEAgentGroups --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.74.1.7. read

Usage:

```
am> read J2EEAgentGroups --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.74.1.8. update

Usage:

```
am> update J2EEAgentGroups --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

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--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "possibleXssCodeElements" : {
      "title" : "Possible XSS code elements",
      "description" : "If one of these strings occurs in the request, the client is redirected to an
 error page. (property name: com.sun.identity.agents.config.xss.code.elements) <br>Hot-swap: Yes",
      "propertyOrder" : 12800,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "policyClientClockSkew" : {
      "title" : "Policy Client Clock Skew",
      "description" : "Time in seconds which is allowed to accommodate the time difference
 between the OpenAM server machine and the remote policy client machine. (property name:
 com.sun.identity.policy.client.clockSkew) <br>Hot-swap: No",
      "propertyOrder" : 11700,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "logoutProbeTimeout" : {
      "title" : "Logout URL Probe Timeout",
      "description" : "The connect timeout value in milliseconds, if also Logout URL Probe is set to
 true. (property name: com.sun.identity.agents.config.logout.url.probe.timeout) <br>Hot-swap: Yes",
      "propertyOrder" : 12700,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "userMappingMode" : {
      "title" : "User Mapping Mode",
      "description" : "Specifies mechanism agent uses to determine user-ID. (property name:
 com.sun.identity.agents.config.user.mapping.mode) <br>Hot-swap: Yes",
      "propertyOrder" : 600,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "privilegedAttributesToLowerCase" : {
      "title" : "Privileged Attributes To Lower Case",
      "description" : "(Not used in Agent 5 onwards) <br>Maps the privileged
 attribute types to whether they should be converted to lowercase. (property name:
 com.sun.identity.agents.config.privileged.attribute.tolowercase) <br> Valid Keys: the privileged
 attribute types, such as Group, Role. <br>Valid value: true, false. <br>Hot-swap: Yes  <br> Example:
 <br> Enter Group in Map Key field, and enter false in Corresponding Map Value field.",
      "propertyOrder" : 9600,
      "required" : true,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
```


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```
        }
      },
      "type" : "object",
      "exampleValue" : ""
    },
    "customResponseHeader" : {
      "title" : "Custom Response Header",
      "description" : "Map specifies the custom headers that are set by the Agent on the client
 browser. The key is the header name and the value represents the header value. (property name:
 com.sun.identity.agents.config.response.header) <br>Hot-swap: Yes <br> Example: <br>  To set the
 custom header Cache-Control to value no-cache: enter Cache-Control in Map Key field, and enter no-
cache in Corresponding Map Value field.",
      "propertyOrder" : 7000,
      "required" : true,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : ""
    },
    "clientHostnameHeader" : {
      "title" : "Client Hostname Header",
      "description" : "HTTP header name that holds the Hostname of the client. (property name:
 com.sun.identity.agents.config.client.hostname.header) <br>Hot-swap: Yes",
      "propertyOrder" : 1100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "portCheckFile" : {
      "title" : "Port Check File",
      "description" : "Name or complete path of a file that has the necessary content needed to handle
 requests that need port correction. (property name: com.sun.identity.agents.config.port.check.file)
 <br>Hot-swap: Yes",
      "propertyOrder" : 7300,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "policyActionBooleanValues" : {
      "title" : "Policy Client Boolean Action Values",
      "description" : "Boolean action values for policy action names. (property name:
 com.sun.identity.policy.client.booleanActionValues) <br>Hot-swap: No",
      "propertyOrder" : 11500,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "resourceAccessDeniedUri" : {
      "title" : "Resource Access Denied URI",
      "description" : "An application-specific Map that identifies a URI of the customized access
 denied page. (property name: com.sun.identity.agents.config.access.denied.uri) <br>Valid key: the
 web application name. <br>Valid value: the customized application access denied page URI. <br>For
 this property, a global value can be set to apply to all the applications that don't have their own
 specific access denied page. <br>Hot-swap: Yes <br> Examples: <br>To set a global access denied page:
 leave Map Key field empty, and enter the global access denied page URI /sample/accessdenied.html in
 Corresponding Map Value field. <br> To set the access denied page URI for application BankApp: enter
```


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```
BankApp in Map Key field, and enter the application access denied page URI /BankApp/accessdenied.html
in Corresponding Map Value field.",
     "propertyOrder" : 2700,
     "required" : true,
     "patternProperties" : {
       ".*" : {
         "type" : "string"
       }
     },
     "type" : "object",
     "exampleValue" : ""
   },
   "customVerificationHandlers" : {
     "title" : "Custom Verification Handler",
     "description" : "Application specific verification handler to validate the user credentials with
the local repository. (property name: com.sun.identity.agents.config.verification.handler) <br>Valid
key: the web application name. <br>Valid value: the verification handler class name. <br>Hot-swap:
Yes <br> Example: <br> To set verification handler for application BankApp: enter BankApp in Map Key
field, and enter verification handler class name BankVerificationHandler in Corresponding Map Value
field.",
     "propertyOrder" : 3400,
     "required" : true,
     "patternProperties" : {
       ".*" : {
         "type" : "string"
       }
     },
     "type" : "object",
     "exampleValue" : ""
   },
   "localeLanguage" : {
     "title" : "Locale Language",
     "description" : "(property name: com.sun.identity.agents.config.locale.language) <br>Hot-swap:
No",
     "propertyOrder" : 1300,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "webServiceAuthenticator" : {
     "title" : "Web Service Authenticator",
     "description" : "An implementation class of interface
com.sun.identity.agents.filter.IWebServiceAuthenticator that can be used to authenticate web-service
requests. (property name: com.sun.identity.agents.config.webservice.authenticator) <br>Hot-swap:
Yes",
     "propertyOrder" : 2300,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "encryptionProvider" : {
     "title" : "Encryption Provider",
     "description" : "Specifies the encryption provider implementation to be used by the Agent.
(property name: com.iplanet.security.encryptor) <br>Hot-swap: No",
     "propertyOrder" : 10400,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
```


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```
   "alternativeAgentProtocol" : {
     "title" : "Alternative Agent Protocol",
     "description" : "Protocol being used (http/https) by the client browsers to communicate with
the Agent protected server if different from the actual protocol used by the server. (property name:
com.sun.identity.agents.config.agent.protocol) <br>Hot-swap: Yes",
     "propertyOrder" : 4300,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "userPrincipalFlag" : {
     "title" : "User Principal Flag",
     "description" : "Use principal instead of just the user-ID for authenticating the user.
(property name: com.sun.identity.agents.config.user.principal) <br>Hot-swap: Yes",
     "propertyOrder" : 800,
     "required" : true,
     "type" : "boolean",
     "exampleValue" : ""
   },
   "urlPolicyEnvPostParameters" : {
     "title" : "URL Policy Env POST Parameters",
     "description" : "List of HTTP POST request parameters whose names and values will
be set in the environment map for URL policy evaluation at OpenAM server. (property name:
com.sun.identity.agents.config.policy.env.post.param) <br>Hot-swap: Yes <br> Examples: <br> name <br>
phonenumber",
     "propertyOrder" : 11900,
     "required" : true,
     "items" : {
       "type" : "string"
     },
     "type" : "array",
     "exampleValue" : ""
   },
   "notEnforcedUrisCacheSize" : {
     "title" : "Not Enforced URIs Cache Size",
     "description" : "Size of the cache to be used if caching of not enforced URI list evaluation
results is enabled. (property name: com.sun.identity.agents.config.notenforced.uri.cache.size)
<br>Hot-swap: Yes",
     "propertyOrder" : 7800,
     "required" : true,
     "type" : "integer",
     "exampleValue" : ""
   },
   "useInternalLogin" : {
     "title" : "Use Internal Login",
     "description" : "Set to false if want to customize Login Content File instead of default
internal content provided. (property name: com.sun.identity.agents.config.login.use.internal)
<br>Hot-swap: Yes",
     "propertyOrder" : 3000,
     "required" : true,
     "type" : "boolean",
     "exampleValue" : ""
   },
   "userDataCachePollingTime" : {
     "title" : "User Data Cache Polling Time",
     "description" : "Cache update time in minutes for user management data. If set to '0' no updates
happen. (property name: com.iplanet.am.sdk.remote.pollingTime) <br>Hot-swap: No",
     "propertyOrder" : 10600,
     "required" : true,
```


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```
      "type" : "integer",
      "exampleValue" : ""
    },
    "continuousSecurityHeaders" : {
      "title" : "Continuous Security Headers",
      "description" : "The name of the headers in the user's original request, that will be sent
as part of the payload during policy evaluation, which can then be accessed via the 'environment'
variable in a policy script. The 'key' is the name of the header to be sent, and the 'value' is the
name which it will appear as in the policy evaluation script.It is possible to map multiple headers
to the same name (they will simply appear as an array in the evaluation script). If the header
doesn't exist, then the empty string will be sent.",
      "propertyOrder" : 3211,
      "required" : true,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : ""
    },
    "probeLoginUrl" : {
      "title" : "Login URL Probe",
      "description" : "Specifies if agent will check the availability of these urls before redirecting
to them. (property name: com.sun.identity.agents.config.login.url.probe.enabled) <br>Hot-swap: Yes",
      "propertyOrder" : 3900,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "headerAttributeDateFormat" : {
      "title" : "Fetch Attribute Date Format",
      "description" : "Format of date attribute values to be used when the attribute is
being set as HTTP header. Format is based on java.text.SimpleDateFormat. (property name:
com.sun.identity.agents.config.attribute.date.format) <br>Hot-swap: Yes",
      "propertyOrder" : 8400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "cdsso" : {
      "title" : "Cross Domain SSO",
      "description" : "Enables Cross Domain Single SignOn. (property name:
com.sun.identity.agents.config.cdsso.enable) <br>Hot-swap: Yes",
      "propertyOrder" : 5000,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "profileAttributeFetchMode" : {
      "title" : "Profile Attribute Fetch Mode",
      "description" : "The mode of fetching profile attributes. (property name:
com.sun.identity.agents.config.profile.attribute.fetch.mode) <br>Hot-swap: Yes",
      "propertyOrder" : 8700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "clientIpHeader" : {
```


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```
      "title" : "Client IP Address Header",
      "description" : "HTTP header name that holds the IP address of the client. (property name:
 com.sun.identity.agents.config.client.ip.header) <br>Hot-swap: Yes",
      "propertyOrder" : 1000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "amLogoutUrl" : {
      "title" : "OpenAM Logout URL",
      "description" : "OpenAM logout page URL. (property name:
 com.sun.identity.agents.config.logout.url) <br>Hot-swap: Yes <br> Example: <br> http://host:port/
opensso/UI/Logout",
      "propertyOrder" : 12400,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "webServiceAuthorizationErrorContentFile" : {
      "title" : "Web Service Authorization Error Content File",
      "description" : "The name of file that contains content used by the
 Agent to generate an authorization error fault for clients. (property name:
 com.sun.identity.agents.config.webservice.autherror.content) <br>Hot-swap: Yes",
      "propertyOrder" : 2600,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "httpSessionBinding" : {
      "title" : "HTTP Session Binding",
      "description" : "If true will invalidate the http session when login has failed, user
 has no SSO session, or principal user name does not match SSO user name. (property name:
 com.sun.identity.agents.config.httpsession.binding) <br>Hot-swap: Yes",
      "propertyOrder" : 3500,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "cdssoDomainList" : {
      "title" : "CDSSO Domain List",
      "description" : "Domains for which cookies have to be set in a CDSSO scenario. (property name:
 com.sun.identity.agents.config.cdsso.domain) <br>Hot-swap: Yes <br> Example: <br> .sun.com",
      "propertyOrder" : 5800,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "urlPolicyEnvJsessionParameters" : {
      "title" : "URL Policy Env jsession Parameters",
      "description" : "List of HTTP SESSION attributes whose names and values will be
 set in the environment map for URL policy evaluation at OpenAM server. (property name:
 com.sun.identity.agents.config.policy.env.jsession.param) <br>Hot-swap: Yes <br> Examples: <br> name
 <br> phonenumber",
```


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```
     "propertyOrder" : 12000,
     "required" : true,
     "items" : {
       "type" : "string"
     },
     "type" : "array",
     "exampleValue" : ""
   },
   "debugLevel" : {
     "title" : "Agent Debug Level",
     "description" : "Specifies type of agent debug messages to log. (property name:
com.iplanet.services.debug.level) <br>Hot-swap: Yes",
     "propertyOrder" : 10000,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "invertNotEnforcedIps" : {
     "title" : "Not Enforced IP Invert List",
     "description" : "Client IP Addresses to invert protection of IP addresses listed in the related
Not Enforced Client IP List. (property name: com.sun.identity.agents.config.notenforced.ip.invert)
<br>Hot-swap: Yes",
     "propertyOrder" : 8000,
     "required" : true,
     "type" : "boolean",
     "exampleValue" : ""
   },
   "notEnforcedIpsCacheEnabled" : {
     "title" : "Not Enforced IP Cache Flag",
     "description" : "Enable caching of not-enforced IP list evaluation results. (property name:
com.sun.identity.agents.config.notenforced.ip.cache.enable) <br>Hot-swap: Yes",
     "propertyOrder" : 8100,
     "required" : true,
     "type" : "boolean",
     "exampleValue" : ""
   },
   "status" : {
     "title" : "Status",
     "description" : "Status of the agent configuration.",
     "propertyOrder" : 200,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "portCheckEnabled" : {
     "title" : "Port Check Enable",
     "description" : "Indicates if port check functionality is enabled or disabled. (property name:
com.sun.identity.agents.config.port.check.enable) <br>Hot-swap: Yes",
     "propertyOrder" : 7200,
     "required" : true,
     "type" : "boolean",
     "exampleValue" : ""
   },
   "authServiceProtocol" : {
     "title" : "OpenAM Authentication Service Protocol",
     "description" : "Protocol to be used by the OpenAM authentication service. (property name:
com.iplanet.am.server.protocol) <br>Hot-swap: No",
     "propertyOrder" : 10900,
     "required" : true,
```


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```
      "type" : "string",
      "exampleValue" : ""
    },
    "gotoParameterName" : {
      "title" : "Goto Parameter Name",
      "description" : "Property used only when CDSSO is enabled. Default value should
 be changed only when the login URL has a landing page specified <br> Example :
 com.sun.identity.agents.config.cdsso.cdcservlet.url = http://host:port/opensso/cdcservlet?
goto=http://agent:port/landing.jsp <br> The parameter is used by the Agent to append the original
 request URL to this cdcserlet URL. This parameter is consumed by the landing page to redirect to
 the original URL. (property name: com.sun.identity.agents.config.redirect.param) <br>Hot-swap: Yes
 <br> Example: com.sun.identity.agents.config.redirect.param = goto2<br> The complete URL sent for
 authentication will be <br> http://host:port/opensso/cdcservlet?goto=http://agent:port/landing.jsp?
goto2=http://agent.port/original.jsp",
      "propertyOrder" : 3600,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "loginProbeTimeout" : {
      "title" : "Login URL Probe Timeout",
      "description" : "The connect timeout value in milliseconds, if also Login URL Probe is set to
 true. (property name: com.sun.identity.agents.config.login.url.probe.timeout) <br>Hot-swap: Yes",
      "propertyOrder" : 4000,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "ignorePathInfo" : {
      "title" : "Ignore Path Info in Request URL",
      "description" : "The path info will be stripped from the request URL while doing Not
 Enforced List check and url policy evaluation if the value is set to true. (property name:
 com.sun.identity.agents.config.ignore.path.info) <br>Hot-swap: Yes",
      "propertyOrder" : 18600,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "logoutRequestParameters" : {
      "title" : "Logout Request Parameter",
      "description" : "An application-specific Map that identifies a parameter
 which when present in the HTTP request indicates a logout event. (property name:
 com.sun.identity.agents.config.logout.request.param)  <br>Valid key: the web application name.
 <br>Valid value: the logout request parameter. <br>For this property, a global value can be set to
 apply to all the applications that don't have their own specific logout request parameter. <br>Hot-
swap: Yes  <br> Examples: <br>To set a global application logout request parameter: leave Map Key
 field empty, and enter the global application logout request parameter logoutparam in Corresponding
 Map Value field. <br> To set the logout request parameter for application BankApp: enter BankApp in
 Map Key field, and enter the logout request parameter logoutparam in Corresponding Map Value field.",
      "propertyOrder" : 6100,
      "required" : true,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : ""
    },
```


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```
   "alternativeAgentHostname" : {
     "title" : "Alternative Agent Host Name",
     "description" : "Host name identifying the Agent protected server to the client browsers if
different from the actual host name. (property name: com.sun.identity.agents.config.agent.host)
<br>Hot-swap: Yes",
     "propertyOrder" : 4100,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "fqdnCheck" : {
     "title" : "FQDN Check",
     "description" : "Enables checking of fqdn default value and fqdn map values. (property name:
com.sun.identity.agents.config.fqdn.check.enable) <br>Hot-swap: Yes",
     "propertyOrder" : 6400,
     "required" : true,
     "type" : "boolean",
     "exampleValue" : ""
   },
   "webServiceProcessGetEnabled" : {
     "title" : "Web Service Process GET Enable",
     "description" : "Flag to indicates if the processing of HTTP GET requests for Web Service
endpoints is enabled. (property name: com.sun.identity.agents.config.webservice.process.get.enable)
<br>Hot-swap: Yes",
     "propertyOrder" : 2200,
     "required" : true,
     "type" : "boolean",
     "exampleValue" : ""
   },
   "logoutUrlPrioritized" : {
     "title" : "Logout URL Prioritized",
     "description" : "Specifies if failover sequence for Logout URLs should be prioritized as defined
in the OpenAM Login URL list. (property name: com.sun.identity.agents.config.logout.url.prioritized)
<br>Hot-swap: Yes",
     "propertyOrder" : 12500,
     "required" : true,
     "type" : "boolean",
     "exampleValue" : ""
   },
   "userDataCacheNotifications" : {
     "title" : "Enable Notification of User Data Caches",
     "description" : "Enable notifications for amsdk and IdRepo Caches. (property name:
com.sun.identity.idm.remote.notification.enabled) <br>Hot-swap: No",
     "propertyOrder" : 10500,
     "required" : true,
     "type" : "boolean",
     "exampleValue" : ""
   },
   "responseAttributeMap" : {
     "title" : "Response Attribute Mapping",
     "description" : "Maps the policy response attributes to be populated
under specific names for the currently authenticated user. (property name:
com.sun.identity.agents.config.response.attribute.mapping) <br>Hot-swap: Yes <br> Example: <br> To
populate the value of response attribute uid under name CUSTOM-USER-NAME: enter uid in Map Key field,
and enter CUSTOM-USER-NAME in Corresponding Map Value field.",
     "propertyOrder" : 9200,
     "required" : true,
     "patternProperties" : {
       ".*" : {
```


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```
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : ""
    },
    "responseAttributeFetchMode" : {
      "title" : "Response Attribute Fetch Mode",
      "description" : "The mode of fetching policy response attributes. (property name:
com.sun.identity.agents.config.response.attribute.fetch.mode) <br>Hot-swap: Yes",
      "propertyOrder" : 9100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sessionAttributeFetchMode" : {
      "title" : "Session Attribute Fetch Mode",
      "description" : "The mode of fetching session attributes. (property name:
com.sun.identity.agents.config.session.attribute.fetch.mode) <br>Hot-swap: Yes",
      "propertyOrder" : 8900,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "authServicePort" : {
      "title" : "OpenAM Authentication Service Port",
      "description" : "Port to be used by the OpenAM authentication service. (property name:
com.iplanet.am.server.port) <br>Hot-swap: No",
      "propertyOrder" : 11100,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "logoutIntrospection" : {
      "title" : "Logout Introspect Enabled",
      "description" : "Allows the Agent to search HTTP request body to locate logout parameter.
(property name: com.sun.identity.agents.config.logout.introspect.enabled) <br>Hot-swap: Yes",
      "propertyOrder" : 6200,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "useRedirectForCompositeAdvice" : {
      "title" : "Use HTTP-Redirect for composite advice",
      "description" : "Configure remote policy client to use HTTP-redirect instead of HTTP-POST
for composite advices. (property name: com.sun.identity.agents.config.policy.advice.use.redirect)
<br>Hot-swap: Yes",
      "propertyOrder" : 13000,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "clientPollingPeriod" : {
      "title" : "Client Polling Period",
      "description" : "(Not used in Agent 5 onwards) <br>Time in seconds after which the session
client will request update of cached session information from the server. (property name:
com.iplanet.am.session.client.polling.period) <br>Hot-swap: No",
      "propertyOrder" : 10300,
      "required" : true,
```


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```
      "type" : "integer",
      "exampleValue" : ""
    },
    "shortenedPrivilegeAttributeValues" : {
      "title" : "Shortened privilege attribute values",
      "description" : "When using privileged attribute type, this setting will ensure that the
 membership details will be stored in a shortened format and not in the default universal ID
 format.<br><br>By default the agent maps identity memberships using their universal IDs (e.g.
 id=admin,ou=group,dc=openam,dc=forgerock,dc=org), however this may not be always acceptable. Using
 this setting the identity membership details will be mapped in a shortened format, only including the
 group's/role's name (e.g. admin). Be aware that in case there are both roles and groups in the data
 store, this setting will make them indistinguishable from each other, i.e. if there is a group and a
 role with the same name it will not be possible to differentiate them.",
      "propertyOrder" : 13600,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "postDataStickySessionMode" : {
      "title" : "PDP Stickysession mode",
      "description" : "The PDP mechanism needs sticky loadbalancing, the URL mode will
 append a querystring, while the Cookie mode will create a cookie. (property name:
 com.sun.identity.agents.config.postdata.preserve.stickysession.mode)",
      "propertyOrder" : 13400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "postDataPreserveCacheEntryMaxTotalSizeMb" : {
      "title" : "PDP Maximum Cache Size",
      "description" : "Maximum size of the PDP cache, in megabytes (Property name:
 org.forgerock.openam.agents.config.postdata.preserve.cache.entry.max.total.size.mb). (Agent 5 only)",
      "propertyOrder" : 13600,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "serviceDataCacheNotifications" : {
      "title" : "Enable Notification of Service Data Caches",
      "description" : "Enable the notifications for service management caches. (property name:
 com.sun.identity.sm.notification.enabled) <br>Hot-swap: No",
      "propertyOrder" : 10700,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "webServiceResponseProcessor" : {
      "title" : "Web Service Response Processor",
      "description" : "An implementation class of interface
 com.sun.identity.agents.filter.IWebServiceResponseProcessor that can be used to process the web-
service responses. (property name: com.sun.identity.agents.config.webservice.responseprocessor)
 <br>Hot-swap: Yes",
      "propertyOrder" : 2400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "loginUrlPrioritized" : {
      "title" : "Login URL Prioritized",
```


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      "description" : "Specifies if failover sequence for Login URLs or CDSSO URLs
 should be prioritized as defined in the OpenAM Login URL list. (property name:
 com.sun.identity.agents.config.login.url.prioritized) <br>Hot-swap: Yes",
      "propertyOrder" : 3800,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "cdssoRootUrl" : {
      "title" : "Agent Root URL for CDSSO",
      "description" : "The agent root URL for CDSSO. The valid value is in the following format:
 <br>protocol://hostname:port/<br> The protocol represents the protocol used, such as http or https.
 The hostname represents the host name of the machine on which the agent resides. The port represents
 the port number on which the agent is installed. The slash following the port number is required.",
      "propertyOrder" : 22700,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "customProperties" : {
      "title" : "Custom Properties",
      "description" : "Additional properties that allow users to augment the set of properties
 supported by agent. (property name: com.sun.identity.agents.config.freeformproperties) <br>Hot-
swap: Yes <br> Examples: <br> customproperty=custom-value1 <br> customlist[0]=customlist-
value-0 <br> customlist[1]=customlist-value-1 <br> custommap[key1]=custommap-value-1 <br>
 custommap[key2]=custommap-value-2",
      "propertyOrder" : 12200,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "bypassPrincipalList" : {
      "title" : "Bypass Principal List",
      "description" : "List of principals that are bypassed by the Agent for authentication and search
 purposes. (property name: com.sun.identity.agents.config.bypass.principal) <br>Hot-swap: Yes <br>
 Examples: <br> guest <br> testuser",
      "propertyOrder" : 9300,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "fqdnDefault" : {
      "title" : "FQDN Default",
      "description" : "Fully qualified hostname that the users should use in order to access
 resources. (property name: com.sun.identity.agents.config.fqdn.default) <br>Hot-swap: Yes",
      "propertyOrder" : 6500,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
```


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```
    "privilegedAttributeMappingEnabled" : {
      "title" : "Enable Privileged Attribute Mapping",
      "description" : "(Not used in Agent 5 onwards) <br>Enable a mapping from the
 original value of an attribute to another value. To satisfy container-specific
 restrictions on character set being used in certain configuration files. (property name:
 com.sun.identity.agents.config.privileged.attribute.mapping.enable) <br>Hot-swap: Yes",
      "propertyOrder" : 9800,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "applicationLogoutUris" : {
      "title" : "Application Logout URI",
      "description" : "An application-specific Map that identifies a request URI which indicates
 a logout event. (property name: com.sun.identity.agents.config.logout.uri) <br>Valid key: the web
 application name. <br>Valid value: the application logout URI. <br>For this property, a global value
 can be set to apply to all the applications that don't have their own specific logout URI. <br>Hot-
swap: Yes <br> Examples: <br>To set a global application logout URI: leave Map Key field empty, and
 enter the global application logout URI /logout.jsp in Corresponding Map Value field. <br> To set the
 logout URI for application BankApp: enter BankApp in Map Key field, and enter the application logout
 URI /BankApp/logout.jsp in Corresponding Map Value field.",
      "propertyOrder" : 6000,
      "required" : true,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : ""
    },
    "cookieAttributeUrlEncoded" : {
      "title" : "Attribute Cookie Encode",
      "description" : "Indicates if the value of the attribute should be URL encoded before being set
 as a cookie. (property name: com.sun.identity.agents.config.attribute.cookie.encode) <br>Hot-swap:
 Yes",
      "propertyOrder" : 8500,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "userAttributeName" : {
      "title" : "User Attribute Name",
      "description" : "Name of the attribute which contains the user-ID. (property name:
 com.sun.identity.agents.config.user.attribute.name) <br>Hot-swap: Yes",
      "propertyOrder" : 700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "configurationReloadInterval" : {
      "title" : "Configuration Reload Interval",
      "description" : "Interval in seconds between configuration reloads. (property name:
 com.sun.identity.agents.config.load.interval) <br>Hot-swap: Yes",
      "propertyOrder" : 1200,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
```


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```
   "webServiceInternalErrorContentFile" : {
     "title" : "Web Service Internal Error Content File",
     "description" : "The name of file that contains content used by the
Agent to generate an internal error fault for clients. (property name:
com.sun.identity.agents.config.webservice.internalerror.content) <br>Hot-swap: Yes",
     "propertyOrder" : 2500,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "conditionalLoginUrl" : {
     "title" : "OpenAM Conditional Login URL",
     "description" : "(Only used in Agent 5 onwards) (property name:
org.forgerock.openam.agents.config.conditional.login.url) <br>Hot-swap: Yes <br> Examples: <br>
match|url?param1=value1&param2=value2 <br> match/path|?param1=value1&param2=value2&param3=value3",
     "propertyOrder" : 4010,
     "required" : true,
     "items" : {
       "type" : "string"
     },
     "type" : "array",
     "exampleValue" : ""
   },
   "redirectAttemptLimit" : {
     "title" : "Redirect Attempt Limit",
     "description" : "Number of successive single point redirects that a user can make using a
single browser session which will trigger the blocking of the user request. Set to 0 to disable this
feature. (property name: com.sun.identity.agents.config.redirect.attempt.limit) <br>Hot-swap: Yes",
     "propertyOrder" : 7100,
     "required" : true,
     "type" : "integer",
     "exampleValue" : ""
   },
   "localAuditRotationSize" : {
     "title" : "Local Audit Log Rotation Size",
     "description" : "Size limit when a local audit log file is rotated to a new file. (property
name: com.sun.identity.agents.config.local.log.size) <br>Hot-swap: Yes",
     "propertyOrder" : 1900,
     "required" : true,
     "type" : "integer",
     "exampleValue" : ""
   },
   "cookieAttributeMultiValueSeparator" : {
     "title" : "Cookie Separator Character",
     "description" : "Character that will be used to separate multiple values
of the same attribute when it is being set as a cookie. (property name:
com.sun.identity.agents.config.attribute.cookie.separator) <br>Hot-swap: Yes",
     "propertyOrder" : 8300,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "enableClientPolling" : {
     "title" : "Enable Client Polling",
     "description" : "Specifies if the session client must use polling for updating
session information and not depend upon server notifications. (property name:
com.iplanet.am.session.client.polling.enable) <br>Hot-swap: No",
     "propertyOrder" : 10200,
     "required" : true,
```


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```
      "type" : "boolean",
      "exampleValue" : ""
    },
    "postDataStickySessionKeyValue" : {
      "title" : "PDP Stickysession key-value",
      "description" : "The provided key-value pair will be used for adding to
the URL or creating the cookie. <br>Example: <br>Set 'lb=server1' to append to
the querystring or to have 'lb' cookie with 'server1' value. (property name:
com.sun.identity.agents.config.postdata.preserve.stickysession.value)",
      "propertyOrder" : 13500,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "policyNotifications" : {
      "title" : "Enable Policy Notifications",
      "description" : "Enable Notifications for remote policy client. (property name:
com.sun.identity.agents.notification.enabled) <br>Hot-swap: No",
      "propertyOrder" : 11200,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "policyEvaluationRealm" : {
      "title" : "Realm",
      "description" : "Which realm to start evaluating from. (property name:
org.forgerock.openam.agents.config.policy.evaluation.realm) <br>Hot-swap: Yes",
      "propertyOrder" : 5400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "cdssoSecureCookies" : {
      "title" : "CDSSO Secure Enable",
      "description" : "The SSO Token cookie set by the agent in the different domains in CDSSO mode
will be marked secure. Only transmitted if the communications channel with host is a secure one.
(property name: com.sun.identity.agents.config.cdsso.secure.enable) <br>Hot-swap: Yes",
      "propertyOrder" : 5700,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "customLogoutHandlers" : {
      "title" : "Custom Logout Handler",
      "description" : "Application specific logout handler to log out a user with the application
server. (property name: com.sun.identity.agents.config.logout.handler)  <br>Valid key: the web
application name. <br>Valid value: the logout handler class name. <br>Hot-swap: Yes <br> Example:
<br>To set logout handler for application BankApp: enter BankApp in Map Key field, and enter logout
handler class name BankLogoutHandler in Corresponding Map Value field.",
      "propertyOrder" : 3300,
      "required" : true,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : ""
    },
```


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```
    "loginErrorUri" : {
      "title" : "Login Error URI",
      "description" : "List of absolute URIs corresponding to an application's web.xml form-error-
page element. (property name: com.sun.identity.agents.config.login.error.uri) <br>Hot-swap: Yes <br>
 Example: <br> /BankApp/jsp/error.jsp",
      "propertyOrder" : 2900,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "serviceDataCacheTime" : {
      "title" : "Service Data Cache Time",
      "description" : "Cache update time in minutes for service configuration data. If set to '0' no
 updates happen. (property name: com.sun.identity.sm.cacheTime) <br>Hot-swap: No",
      "propertyOrder" : 10800,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "localeCountry" : {
      "title" : "Locale Country",
      "description" : "(property name: com.sun.identity.agents.config.locale.country) <br>Hot-swap:
 No",
      "propertyOrder" : 1400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "defaultPrivilegedAttributes" : {
      "title" : "Default Privileged Attribute",
      "description" : "(Not used in Agent 5 onwards) <br>List of privileged attributes
 that will be granted to all users who have a valid OpenAM session. (property name:
 com.sun.identity.agents.config.default.privileged.attribute) <br>Hot-swap: Yes <br> Example: <br>
 AUTHENTICATED_USERS",
      "propertyOrder" : 9400,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "invertNotEnforcedUris" : {
      "title" : "Invert Not Enforced URIs",
      "description" : "Inverts protection of  URIs specified in Not Enforced URIs list. When set
 to true, it indicates that the URIs specified should be enforced and all other URIs should be
 not enforced by the Agent. (property name: com.sun.identity.agents.config.notenforced.uri.invert)
 <br>Hot-swap: Yes",
      "propertyOrder" : 7600,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "cdssoRedirectUri" : {
      "title" : "CDSSO Redirect URI",
```


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```
      "description" : "An intermediate URI that is used by the Agent for processing CDSSO requests.
 (property name: com.sun.identity.agents.config.cdsso.redirect.uri) <br>Hot-swap: Yes",
      "propertyOrder" : 5100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "webServiceEnabled" : {
      "title" : "Web Service Enable",
      "description" : "Flag specifies if Web Service processing is enabled. (property name:
 com.sun.identity.agents.config.webservice.enable) <br>Hot-swap: Yes",
      "propertyOrder" : 2000,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "xssDetectionRedirectUri" : {
      "title" : "XSS detection redirect URI",
      "description" : "An application-specific Map that identifies a URI of the customized page if
 XSS code has been deteced. (property name: com.sun.identity.agents.config.xss.redirect.uri) <br>Hot-
swap: Yes <br>Examples: <br>To set a redirect target for application BankApp: enter BankApp in Map Key
 field, and enter a redirect URI in Corresponding Map Value field.",
      "propertyOrder" : 12900,
      "required" : true,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : ""
    },
    "policyClientResourceComparators" : {
      "title" : "Policy Client Resource Comparators",
      "description" : "Resource Comparators to be used for different service names. (property name:
 com.sun.identity.policy.client.resourceComparators) <br>Hot-swap: No",
      "propertyOrder" : 11600,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "loginAttemptLimit" : {
      "title" : "Login Attempt Limit",
      "description" : "Limit of failed login attempts for a user's single browser session until
 triggering the blocking of the user request. Value of 0 disables this feature. (property name:
 com.sun.identity.agents.config.login.attempt.limit) <br>Hot-swap: Yes",
      "propertyOrder" : 4400,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "cookieResetEnabled" : {
      "title" : "Cookie Reset",
      "description" : "Agent resets cookies in the response before redirecting to authentication.
 (property name: com.sun.identity.agents.config.cookie.reset.enable) <br>Hot-swap: Yes",
      "propertyOrder" : 4600,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
```


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```
    },
    "jbossWebAuthenticationAvailable" : {
      "title" : "WebAuthentication Available",
      "description" : "(Not used in Agent 5 onwards) <br>Enable agent to make programmatic
 authentication with the JBoss web container using WebAuthentication feature. (property name:
 com.sun.identity.agents.config.jboss.webauth.available) <br>Hot-swap: Yes",
      "propertyOrder" : 12300,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "postDataCacheTtl" : {
      "title" : "PDP entry TTL",
      "description" : "This value tells how long a given POST entry should be stored
 in the local cache (in milliseconds), default value is 300000. (property name:
 com.sun.identity.agents.config.postdata.preserve.cache.entry.ttl)",
      "propertyOrder" : 13300,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "portCheckSetting" : {
      "title" : "Port Check Setting",
      "description" : "Map of port versus protocol entries with the key being the listening port
 number and value being the listening protocol to be used by the Agent to identify requests with
 invalid port numbers. (property name: com.sun.identity.agents.config.port.check.setting) <br>Hot-
swap: Yes <br> Example: <br> To map port 80 to protocol http: enter 80 in Map Key field, and enter
 http in Corresponding Map Value field.",
      "propertyOrder" : 7400,
      "required" : true,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : ""
    },
    "filterMode" : {
      "title" : "Agent Filter Mode",
      "description" : "Specifies the mode of operation of the Filter. (property name:
 com.sun.identity.agents.config.filter.mode) <br>Valid key: the web application name. <br>Valid
 values: ALL, J2EE_POLICY (Not used in Agent 5 onwards), URL_POLICY, SSO_ONLY, NONE <br>For this
 property, a global value can be set to apply to all the applications that don't have their own
 specific filter mode. <br>Hot-swap: No <br>Examples: <br>To set ALL as the global filter mode:
 leave Map Key field empty, and enter ALL in Corresponding Map Value field. <br>To set URL_POLICY
 as the filter mode for application BankApp: enter BankApp in Map Key field, and enter URL_POLICY in
 Corresponding Map Value field.",
      "propertyOrder" : 500,
      "required" : true,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : ""
    },
    "sessionAttributeMap" : {
```


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```
      "title" : "Session Attribute Mapping",
      "description" : "Maps the session attributes to be populated under
specific names for the currently authenticated user. (property name:
com.sun.identity.agents.config.session.attribute.mapping) <br>Hot-swap: Yes  <br> Example: <br>  To
populate the value of session attribute UserToken under name CUSTOM-userid: enter UserToken in Map
Key field, and enter CUSTOM-userid in Corresponding Map Value field.",
      "propertyOrder" : 9000,
      "required" : true,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : ""
    },
    "cdssoTrustedIdProvider" : {
      "title" : "CDSSO Trusted ID Provider",
      "description" : "List of OpenAM Server/ID providers that should be trusted
by the agent, when evaluating the CDC Liberty Responses. (property name:
com.sun.identity.agents.config.cdsso.trusted.id.provider) <br>Hot-swap: Yes <br> Example: <br>
http://host:port/opensso/cdcservlet",
      "propertyOrder" : 5600,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "policyEvaluationApplication" : {
      "title" : "Application",
      "description" : "Which application contains the policies to evaluate with. (property name:
org.forgerock.openam.agents.config.policy.evaluation.application) <br>Hot-swap: Yes",
      "propertyOrder" : 5500,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "policyClientCacheMode" : {
      "title" : "Policy Client Cache Mode",
      "description" : "Mode of caching to be used by remote policy client. (property name:
com.sun.identity.policy.client.cacheMode) <br>Hot-swap: No",
      "propertyOrder" : 11400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "continuousSecurityCookies" : {
      "title" : "Continuous Security Cookies",
      "description" : "The name of the cookies to be sent as part of the payload during policy
evaluation, which can be accessed via the 'environment' variable in a policy script. The 'key' is
the name of the cookie to be sent, and the 'value' is the name which it will appear as in the policy
evaluation script. It is possible to map multiple cookies to the same name (they will simply appear
as an array in the evaluation script). If the cookie doesn't exist, then the empty string will be
sent.",
      "propertyOrder" : 3210,
      "required" : true,
      "patternProperties" : {
```


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```
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : ""
    },
    "missingPostDataPreservationEntryUri" : {
      "title" : "Missing PDP entry URI",
      "description" : "An application-specific URI Map that is used in case the referenced
PDP entry cannot be found in the local cache (due to ttl). In such cases it will redirect
to the specified URI, otherwise it will show a HTTP 403 Forbidden error. (property name:
com.sun.identity.agents.config.postdata.preservce.cache.noentry.url)<br>Examples: <br>To set a
redirect target for application BankApp: enter Bankapp in Map Key field and enter a redirect URI in
corresponding Map Value field.",
      "propertyOrder" : 13200,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "localAuditLogRotation" : {
      "title" : "Rotate Local Audit Log",
      "description" : "Flag to indicate that audit log files should be rotated when reaching a certain
size. (property name: com.sun.identity.agents.config.local.log.rotate) <br>Hot-swap: Yes",
      "propertyOrder" : 1800,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "cookieResetPaths" : {
      "title" : "Cookies Reset Path Map",
      "description" : "Maps cookie names specified in Cookie Reset Name List to value
being the path of this cookie to be used when a reset event occurs. (property name:
com.sun.identity.agents.config.cookie.reset.path) <br>Hot-swap: Yes",
      "propertyOrder" : 4900,
      "required" : true,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : ""
    },
    "agentConfigChangeNotificationsEnabled" : {
      "title" : "Agent Configuration Change Notification",
      "description" : "Enable agent to receive notification messages from OpenAM server for
configuration changes. (property name: com.sun.identity.agents.config.change.notification.enable)
<br>Hot-swap: Yes",
      "propertyOrder" : 12100,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "urlPolicyEnvGetParameters" : {
      "title" : "URL Policy Env GET Parameters",
```


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      "description" : "List of HTTP GET request parameters whose names and values will be
 set in the environment map for URL policy evaluation at OpenAM server. (property name:
 com.sun.identity.agents.config.policy.env.get.param) <br>Hot-swap: Yes <br> Examples: <br> name <br>
 phonenumber",
      "propertyOrder" : 11800,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "authServiceHost" : {
      "title" : "OpenAM Authentication Service Host Name",
      "description" : "Host name to be used by the OpenAM authentication service. (property name:
 com.iplanet.am.server.host) <br>Hot-swap: No",
      "propertyOrder" : 11000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "notEnforcedUris" : {
      "title" : "Not Enforced URIs",
      "description" : "List of URIs for which protection is not enforced by the Agent. (property
 name: com.sun.identity.agents.config.notenforced.uri) <br>Hot-swap: Yes <br> Examples: <br> /BankApp/
public/* <br> /BankApp/images/*",
      "propertyOrder" : 7500,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "cookieResetNames" : {
      "title" : "Cookies Reset Name List",
      "description" : "Cookie names that will be reset by the Agent if Cookie Reset is enabled.
 (property name: com.sun.identity.agents.config.cdsso.cookie.reset.name) <br>Hot-swap: Yes",
      "propertyOrder" : 4700,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "notEnforcedUrisRefreshSessionIdleTime" : {
      "title" : "Refresh Session Idle Time",
      "description" : "Indicates if opensso session idle time should be refreshed or reset for not
 enforced URIs. (property name: com.sun.identity.agents.config.notenforced.refresh.session.idletime)
 <br>Hot-swap: Yes",
      "propertyOrder" : 8600,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "cdssoClockSkew" : {
      "title" : "CDSSO Clock Skew",
```


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      "description" : "Time in seconds to be used by the Agent to determine the validity of the CDSSO
 AuthnResponse assertion. (property name: com.sun.identity.agents.config.cdsso.clock.skew) <br>Hot-
swap: Yes",
      "propertyOrder" : 5300,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "notEnforcedRuleCompoundSeparator" : {
      "title" : "Not Enforced Compound Rule Separator",
      "description" : "Specifies a separator for not enforced compound rules (Agent 5 only). The
 format for compound rules requires a list of IP rules, a separator (by default the | character),
 and a list of URI rules. For example, GET 192.168.1.1-192.168.4.3 | /images/* Configure a
 different separator (for example, &&) when working with the REGEX keyword to avoid invalid regular
 expressions.",
      "propertyOrder" : 7450,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "notEnforcedUrisCacheEnabled" : {
      "title" : "Not Enforced URIs Cache Enabled",
      "description" : "Enables the caching of the Not Enforced URIs list evaluation results. (property
 name: com.sun.identity.agents.config.notenforced.uri.cache.enable) <br>Hot-swap: Yes",
      "propertyOrder" : 7700,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "postDataPreservation" : {
      "title" : "Post Data Preservation enabled",
      "description" : "Post Data Preservation functionality basically stores any POST
 data before redirecting the user to the login screen and after successful login the agent
 will generate a page that autosubmits the same POST to the original URL. (property name:
 com.sun.identity.agents.config.postdata.preserve.enable)",
      "propertyOrder" : 13100,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "loginContentFile" : {
      "title" : "Login Content File Name",
      "description" : "Complete path and name of custom login content file. (property name:
 com.sun.identity.agents.config.login.content.file) <br>Hot-swap: Yes",
      "propertyOrder" : 3100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "auditAccessType" : {
      "title" : "Audit Access Types",
      "description" : "Types of messages to log based on user URL access attempts. (property name:
 com.sun.identity.agents.config.audit.accesstype) <br>Hot-swap: Yes",
      "propertyOrder" : 1500,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "userpassword" : {
```


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```
     "title" : "Password",
     "description" : "",
     "propertyOrder" : 100,
     "required" : true,
     "type" : "string",
     "format" : "password",
     "exampleValue" : ""
   },
   "ssoCacheEnabled" : {
     "title" : "SSO Cache Enable",
     "description" : "Specifies if the SSO Cache is active for the agent.
Cache is used through public APIs exposed by the agent SDK. (property name:
com.sun.identity.agents.config.amsso.cache.enable) <br>Hot-swap: Yes",
     "propertyOrder" : 4500,
     "required" : true,
     "type" : "boolean",
     "exampleValue" : ""
   },
   "privilegedSessionAttribute" : {
     "title" : "Privileged Session Attribute",
     "description" : "(Not used in Agent 5 onwards) <br>List of session property
names which hold privileged attributes for the authenticated user. (property name:
com.sun.identity.agents.config.privileged.session.attribute) <br>Hot-swap: Yes <br> Example: <br>
UserToken",
     "propertyOrder" : 9700,
     "required" : true,
     "items" : {
       "type" : "string"
     },
     "type" : "array",
     "exampleValue" : ""
   },
   "customAuthenticationHandlers" : {
     "title" : "Custom Authentication Handler",
     "description" : "Application specific authentication handler to authenticate the logged on user
with the application server. (property name: com.sun.identity.agents.config.auth.handler)  <br>Valid
key: the web application name. <br>Valid value: the authentication handler class name. <br>Hot-swap:
Yes  <br>Example: <br>To set authentication handler for application BankApp: enter BankApp in Map
Key field, and enter authentication handler class name BankAuthHandler in Corresponding Map Value
field.",
     "propertyOrder" : 3200,
     "required" : true,
     "patternProperties" : {
       ".*" : {
         "type" : "string"
       }
     },
     "type" : "object",
     "exampleValue" : ""
   },
   "webServiceEndpoints" : {
     "title" : "Web Service End Points",
     "description" : "A list of Web Application end points that represent Web Services. (property
name: com.sun.identity.agents.config.webservice.endpoint) <br>Hot-swap: Yes",
     "propertyOrder" : 2100,
     "required" : true,
     "items" : {
       "type" : "string"
     },
```


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```
      "type" : "array",
      "exampleValue" : ""
    },
    "notEnforcedIps" : {
      "title" : "Not Enforced Client IP List",
      "description" : "No authentication and authorization protection from agent are
required for the requests coming from these client IP addresses. (property name:
com.sun.identity.agents.config.notenforced.ip) <br>Hot-swap: Yes <br> Examples: <br> 192.18.145.*
<br> 192.18.146.123",
      "propertyOrder" : 7900,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "loginFormUri" : {
      "title" : "Login Form URI",
      "description" : "List of absolute URIs corresponding to an application's web.xml form-login-page
element. (property name: com.sun.identity.agents.config.login.form) <br>Hot-swap: Yes <br> Example:
<br> /BankApp/jsp/login.jsp",
      "propertyOrder" : 2800,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "applicationLogoutHandlers" : {
      "title" : "Application Logout Handler",
      "description" : "An application-specific Map that identifies a handler to be used for logout
processing. (property name: com.sun.identity.agents.config.logout.application.handler) <br>Valid
key: the web application name. <br>Valid value: the application logout handler class name. <br>For
this property, a global value can be set to apply to all the applications that don't have their own
specific logout handler. <br>Hot-swap: Yes <br> Examples:  <br>To set a global application logout
handler: leave Map Key field empty, and enter the global application logout handler class name
GlobalApplicationLogoutHandler in Corresponding Map Value field. <br>To set the logout handler for
application BankApp: enter BankApp in Map Key field, and enter the application logout handler class
name BankAppLogoutHandler in Corresponding Map Value field.",
      "propertyOrder" : 5900,
      "required" : true,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : ""
    },
    "agentNotificationUrl" : {
      "title" : "Agent Notification URL",
      "description" : "URL used by agent to register notification listeners. (property name:
com.sun.identity.client.notification.url) <br>Hot-swap: No",
      "propertyOrder" : 300,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
```


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```
    },
    "legacyRedirectUri" : {
      "title" : "Legacy User Agent Redirect URI",
      "description" : "An intermediate URI used by the Agent to redirect legacy user agent requests.
 (property name: com.sun.identity.agents.config.legacy.redirect.uri) <br>Hot-swap: Yes",
      "propertyOrder" : 6900,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "profileAttributeMap" : {
      "title" : "Profile Attribute Mapping",
      "description" : "Maps the profile attributes to be populated under
 specific names for the currently authenticated user. (property name:
 com.sun.identity.agents.config.profile.attribute.mapping) <br>Hot-swap: Yes <br> Example: <br> To
 populate the value of profile attribute cn under name CUSTOM-Common-Name: enter cn in Map Key field,
 and enter CUSTOM-Common-Name in Corresponding Map Value field. <br> To populate the value of profile
 attribute mail under name CUSTOM-Email: enter mail in Map Key field, and enter CUSTOM-Email in
 Corresponding Map Value field.",
      "propertyOrder" : 8800,
      "required" : true,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : ""
    },
    "fqdnMapping" : {
      "title" : "FQDN Virtual Host Map",
      "description" : "Maps virtual, invalid, or partial hostnames, and IP addresses to the FQDN to
 access protected resources. (property name: com.sun.identity.agents.config.fqdn.mapping) <br>Hot-
swap: Yes <br> Examples: <br>  To map the partial hostname myserver to myserver.mydomain.com: enter
 myserver in the Map Key field and myserver.mydomain.com in the Corresponding Map Value field. To map
 a virtual server rst.hostname.com that points to the actual server abc.hostname.com: enter valid1 in
 the Map Key field and rst.hostname.com in the Corresponding Map Value field.",
      "propertyOrder" : 6600,
      "required" : true,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : ""
    },
    "conditionalLogoutUrl" : {
      "title" : "OpenAM Conditional Logout URL",
      "description" : "(Only used in Agent 5 onwards) (property name:
 org.forgerock.openam.agents.config.conditional.logout.url) <br>Hot-swap: Yes <br> Examples: <br>
 match|url?param1=value1&param2=value2 <br> match/path|?param1=value1&param2=value2&param3=value3",
      "propertyOrder" : 12550,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
```


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```
   },
   "legacyUserAgentList" : {
     "title" : "Legacy User Agent List",
     "description" : "List of user agent header values that identify legacy
browsers. Entries in this list can have wild card character '*'. (property name:
com.sun.identity.agents.config.legacy.user.agent) <br>Hot-swap: Yes",
     "propertyOrder" : 6800,
     "required" : true,
     "items" : {
       "type" : "string"
     },
     "type" : "array",
     "exampleValue" : ""
   },
   "repositoryLocation" : {
     "title" : "Location of Agent Configuration Repository",
     "description" : "Indicates agent's configuration located either on agent's host or centrally on
OpenAM server.",
     "propertyOrder" : 400,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "postDataPreserveCacheEntryMaxEntries" : {
     "title" : "PDP Maximum Number of Cache Entries",
     "description" : "Maximum number of entries to hold in the PDP cache (Property name:
org.forgerock.openam.agents.config.postdata.preserve.cache.entry.max.entries) (Agent 5 only).",
     "propertyOrder" : 13550,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "jwtName" : {
     "title" : "JWT Cookie Name",
     "description" : "The name used by the agent to set the OIDC JWT on the user's browser. (Agent 5
only).",
     "propertyOrder" : 11201,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "policyClientPollingInterval" : {
     "title" : "Policy Client Polling Interval",
     "description" : "Duration in minutes after which the cached entries are refreshed by remote
policy client. (property name: com.sun.identity.agents.polling.interval) <br>Hot-swap: No",
     "propertyOrder" : 11300,
     "required" : true,
     "type" : "integer",
     "exampleValue" : ""
   },
   "alternativeAgentPort" : {
     "title" : "Alternative Agent Port Name",
     "description" : "Port number identifying the Agent protected server listening port
to the client browsers if different from the actual listening port. (property name:
com.sun.identity.agents.config.agent.port) <br>Hot-swap: Yes",
     "propertyOrder" : 4200,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
```


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```
    },
    "remoteLogFilename" : {
      "title" : "Remote Log File Name",
      "description" : "Name of file stored on OpenAM server that contains agent audit messages.
 (property name: com.sun.identity.agents.config.remote.logfile) <br>Hot-swap: Yes",
      "propertyOrder" : 1700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "amLoginUrl" : {
      "title" : "OpenAM Login URL",
      "description" : "OpenAM login page URL. (property name:
 com.sun.identity.agents.config.login.url) <br>Hot-swap: Yes <br> Example: <br> http://host:port/
opensso/UI/Login",
      "propertyOrder" : 3700,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "cdssoUrls" : {
      "title" : "CDSSO Servlet URL",
      "description" : "List of URLs of the available CDSSO controllers that may be used by the Agent
 for CDSSO processing. (property name: com.sun.identity.agents.config.cdsso.cdcservlet.url) <br>Hot-
swap: Yes <br> Example: <br> http://host:port/opensso/cdcservlet",
      "propertyOrder" : 5200,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "notEnforcedIpsCacheSize" : {
      "title" : "Not Enforced IP Cache Size",
      "description" : "Size of the cache to be used if Not Enforced IP Cache Flag is enabled.
 (property name: com.sun.identity.agents.config.notenforced.ip.cache.size) <br>Hot-swap: Yes",
      "propertyOrder" : 8200,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "probeLogoutUrl" : {
      "title" : "Logout URL Probe",
      "description" : "Specifies if agent will check the availability of these urls before redirecting
 to them. (property name: com.sun.identity.agents.config.logout.url.probe.enabled) <br>Hot-swap: Yes",
      "propertyOrder" : 12600,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "cookieResetDomains" : {
      "title" : "Cookies Reset Domain Map",
      "description" : "Maps cookie names specified in Cookie Reset Name List to value
 being the domain of this cookie to be used when a reset event occurs. (property name:
 com.sun.identity.agents.config.cookie.reset.domain) <br>Hot-swap: Yes",
```


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```
      "propertyOrder" : 4800,
      "required" : true,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : ""
    },
    "legacyUserAgentSupport" : {
      "title" : "Legacy User Agent Support Enable",
      "description" : "Enables support for legacy user agents (browser). (property name:
com.sun.identity.agents.config.legacy.support.enable) <br>Hot-swap: Yes",
      "propertyOrder" : 6700,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "amCookieName" : {
      "title" : "Cookie Name",
      "description" : "Name of the SSO Token cookie used between the OpenAM server and the Agent.
(property name: com.iplanet.am.cookie.name) <br>Hot-swap: No",
      "propertyOrder" : 10100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "privilegedAttributeType" : {
      "title" : "Privileged Attribute Type",
      "description" : "(Not used in Agent 5 onwards) <br>List of privileged attribute types that will
be fetched for each user. (property name: com.sun.identity.agents.config.privileged.attribute.type)
<br>Hot-swap: Yes <br> Example: <br> Group",
      "propertyOrder" : 9500,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "userTokenName" : {
      "title" : "User Token Name",
      "description" : "Session property name for user-ID of the authenticated user in session.
(property name: com.sun.identity.agents.config.user.token) <br>Hot-swap: Yes",
      "propertyOrder" : 900,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "logoutEntryUri" : {
      "title" : "Logout Entry URI",
      "description" : "An application-specific Map that identifies a URI to be used as an entry point
after successful logout and subsequent successful authentication if applicable. (property name:
com.sun.identity.agents.config.logout.entry.uri) <br>Valid key: the web application name. <br>Valid
value: the logout entry URI. <br>For this property, a global value can be set to apply to all the
applications that don't have their own specific logout entry URI.  <br>Hot-swap: Yes <br> Examples:
<br>To set a global application logout entry URI: leave Map Key field empty, and enter the global
application logout entry URI /welcome.html in Corresponding Map Value field. <br> To set the logout
```


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```
 entry URI for application BankApp: enter BankApp in Map Key field, and enter the logout entry URI /
BankApp/welcome.html in Corresponding Map Value field.",
      "propertyOrder" : 6300,
      "required" : true,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : ""
    },
    "webSocketConnectionIntervalInMinutes" : {
      "title" : "Web Socket Connection Interval",
      "description" : "Interval in minutes by which agents reopen their web socket connection to
 ensure a fair distribution of connections across OpenAM servers. (Agent 5 only).",
      "propertyOrder" : 12105,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "privilegedAttributeMap" : {
      "title" : "Privileged Attribute Mapping",
      "description" : "(Not used in Agent 5 onwards) <br>Map if using Enable Privileged Attribute
 Mapping. (property name: com.sun.identity.agents.config.privileged.attribute.mapping) <br>Hot-
swap: Yes <br> Examples: <br> To map UUID id=manager,ou=group,dc=openam,dc=forgerock,dc=org
 to the principal name am_manager_role specified in webapp's deployment descriptor: enter
 id=manager,ou=group,dc=openam,dc=forgerock,dc=org in Map Key field, and enter am_manager_role in
 Corresponding Map Value field. <br> To  map UUID id=employee,ou=group,dc=openam,dc=forgerock,dc=org
 to the principal name am_employee_role  specified in webapp's deployment descriptor: enter
 id=employee,ou=group,dc=openam,dc=forgerock,dc=org in Map Key field, and enter am_employee_role in
 Corresponding Map Value field.",
      "propertyOrder" : 9900,
      "required" : true,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : ""
    },
    "auditLogLocation" : {
      "title" : "Audit Log Location",
      "description" : "Specifies where audit messages should be logged. (property name:
 com.sun.identity.agents.config.log.disposition) <br>Hot-swap: Yes",
      "propertyOrder" : 1600,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```


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1.75. J2eeAgents

1.75.1. Realm Operations

Agents handler that is responsible for managing agents

Resource path: `/realm-config/agents/J2EEAgent`

Resource version: `1.0`

1.75.1.1. create

Usage:

```
am> create J2eeAgents --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "postDataPreserveCacheEntryMaxTotalSizeMb" : {
      "title" : "PDP Maximum Cache Size",
      "description" : "Maximum size of the PDP cache, in megabytes (Property name:
 org.forgerock.openam.agents.config.postdata.preserve.cache.entry.max.total.size.mb). (Agent 5 only)",
      "propertyOrder" : 13600,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "logoutProbeTimeout" : {
      "title" : "Logout URL Probe Timeout",
      "description" : "The connect timeout value in milliseconds, if also Logout URL Probe is set to
 true. (property name: com.sun.identity.agents.config.logout.url.probe.timeout) <br>Hot-swap: Yes",
      "propertyOrder" : 12700,
      "type" : "object",
      "exampleValue" : "",
```


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```
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "integer",
          "required" : true
        }
      }
    },
    "alternativeAgentProtocol" : {
      "title" : "Alternative Agent Protocol",
      "description" : "Protocol being used (http/https) by the client browsers to communicate with
the Agent protected server if different from the actual protocol used by the server. (property name:
com.sun.identity.agents.config.agent.protocol) <br>Hot-swap: Yes",
      "propertyOrder" : 4300,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "serviceDataCacheNotifications" : {
      "title" : "Enable Notification of Service Data Caches",
      "description" : "Enable the notifications for service management caches. (property name:
com.sun.identity.sm.notification.enabled) <br>Hot-swap: No",
      "propertyOrder" : 10700,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "repositoryLocation" : {
      "title" : "Location of Agent Configuration Repository",
      "description" : "Indicates agent's configuration located either on agent's host or centrally on
OpenAM server.",
      "propertyOrder" : 400,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
```


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```
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "legacyUserAgentList" : {
      "title" : "Legacy User Agent List",
      "description" : "List of user agent header values that identify legacy
 browsers. Entries in this list can have wild card character '*'. (property name:
 com.sun.identity.agents.config.legacy.user.agent) <br>Hot-swap: Yes",
      "propertyOrder" : 6800,
      "items" : {
        "type" : "string"
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "array",
          "required" : true
        }
      }
    },
    "cdssoUrls" : {
      "title" : "CDSSO Servlet URL",
      "description" : "List of URLs of the available CDSSO controllers that may be used by the Agent
 for CDSSO processing. (property name: com.sun.identity.agents.config.cdsso.cdcservlet.url) <br>Hot-
swap: Yes <br> Example: <br> http://host:port/opensso/cdcservlet",
      "propertyOrder" : 5200,
      "items" : {
        "type" : "string"
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "array",
          "required" : true
        }
      }
    },
    "webServiceEnabled" : {
      "title" : "Web Service Enable",
      "description" : "Flag specifies if Web Service processing is enabled. (property name:
 com.sun.identity.agents.config.webservice.enable) <br>Hot-swap: Yes",
      "propertyOrder" : 2000,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
```


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```
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "logoutEntryUri" : {
      "title" : "Logout Entry URI",
      "description" : "An application-specific Map that identifies a URI to be used as an entry point
 after successful logout and subsequent successful authentication if applicable. (property name:
 com.sun.identity.agents.config.logout.entry.uri) <br>Valid key: the web application name. <br>Valid
 value: the logout entry URI. <br>For this property, a global value can be set to apply to all the
 applications that don't have their own specific logout entry URI.  <br>Hot-swap: Yes <br> Examples:
 <br>To set a global application logout entry URI: leave Map Key field empty, and enter the global
 application logout entry URI /welcome.html in Corresponding Map Value field. <br> To set the logout
 entry URI for application BankApp: enter BankApp in Map Key field, and enter the logout entry URI /
BankApp/welcome.html in Corresponding Map Value field.",
      "propertyOrder" : 6300,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "object",
          "required" : true
        }
      }
    },
    "useRedirectForCompositeAdvice" : {
      "title" : "Use HTTP-Redirect for composite advice",
      "description" : "Configure remote policy client to use HTTP-redirect instead of HTTP-POST
 for composite advices. (property name: com.sun.identity.agents.config.policy.advice.use.redirect)
 <br>Hot-swap: Yes",
      "propertyOrder" : 13000,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
```


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```
   "defaultPrivilegedAttributes" : {
     "title" : "Default Privileged Attribute",
     "description" : "(Not used in Agent 5 onwards) <br>List of privileged attributes
that will be granted to all users who have a valid OpenAM session. (property name:
com.sun.identity.agents.config.default.privileged.attribute) <br>Hot-swap: Yes <br> Example: <br>
AUTHENTICATED_USERS",
     "propertyOrder" : 9400,
     "items" : {
       "type" : "string"
     },
     "type" : "object",
     "exampleValue" : "",
     "properties" : {
       "inherited" : {
         "type" : "boolean",
         "required" : true
       },
       "value" : {
         "type" : "array",
         "required" : true
       }
     }
   },
   "cookieAttributeUrlEncoded" : {
     "title" : "Attribute Cookie Encode",
     "description" : "Indicates if the value of the attribute should be URL encoded before being set
as a cookie. (property name: com.sun.identity.agents.config.attribute.cookie.encode) <br>Hot-swap:
Yes",
     "propertyOrder" : 8500,
     "type" : "object",
     "exampleValue" : "",
     "properties" : {
       "inherited" : {
         "type" : "boolean",
         "required" : true
       },
       "value" : {
         "type" : "boolean",
         "required" : true
       }
     }
   },
   "localeLanguage" : {
     "title" : "Locale Language",
     "description" : "(property name: com.sun.identity.agents.config.locale.language) <br>Hot-swap:
No",
     "propertyOrder" : 1300,
     "type" : "object",
     "exampleValue" : "",
     "properties" : {
       "inherited" : {
         "type" : "boolean",
         "required" : true
       },
       "value" : {
         "type" : "string",
         "required" : true
       }
     }
```


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```
    },
    "webServiceAuthenticator" : {
      "title" : "Web Service Authenticator",
      "description" : "An implementation class of interface
 com.sun.identity.agents.filter.IWebServiceAuthenticator that can be used to authenticate web-service
 requests. (property name: com.sun.identity.agents.config.webservice.authenticator) <br>Hot-swap:
 Yes",
      "propertyOrder" : 2300,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "agentConfigChangeNotificationsEnabled" : {
      "title" : "Agent Configuration Change Notification",
      "description" : "Enable agent to receive notification messages from OpenAM server for
 configuration changes. (property name: com.sun.identity.agents.config.change.notification.enable)
 <br>Hot-swap: Yes",
      "propertyOrder" : 12100,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "cdssoClockSkew" : {
      "title" : "CDSSO Clock Skew",
      "description" : "Time in seconds to be used by the Agent to determine the validity of the CDSSO
 AuthnResponse assertion. (property name: com.sun.identity.agents.config.cdsso.clock.skew) <br>Hot-
swap: Yes",
      "propertyOrder" : 5300,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "integer",
          "required" : true
        }
      }
    },
```


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```
    "amLogoutUrl" : {
      "title" : "OpenAM Logout URL",
      "description" : "OpenAM logout page URL. (property name:
 com.sun.identity.agents.config.logout.url) <br>Hot-swap: Yes <br> Example: <br> http://host:port/
opensso/UI/Logout",
      "propertyOrder" : 12400,
      "items" : {
        "type" : "string"
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "array",
          "required" : true
        }
      }
    },
    "cookieResetNames" : {
      "title" : "Cookies Reset Name List",
      "description" : "Cookie names that will be reset by the Agent if Cookie Reset is enabled.
 (property name: com.sun.identity.agents.config.cdsso.cookie.reset.name) <br>Hot-swap: Yes",
      "propertyOrder" : 4700,
      "items" : {
        "type" : "string"
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "array",
          "required" : true
        }
      }
    },
    "amCookieName" : {
      "title" : "Cookie Name",
      "description" : "Name of the SSO Token cookie used between the OpenAM server and the Agent.
 (property name: com.iplanet.am.cookie.name) <br>Hot-swap: No",
      "propertyOrder" : 10100,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
```


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```
      }
    },
    "notEnforcedUrisRefreshSessionIdleTime" : {
      "title" : "Refresh Session Idle Time",
      "description" : "Indicates if opensso session idle time should be refreshed or reset for not
enforced URIs. (property name: com.sun.identity.agents.config.notenforced.refresh.session.idletime)
<br>Hot-swap: Yes",
      "propertyOrder" : 8600,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "legacyUserAgentSupport" : {
      "title" : "Legacy User Agent Support Enable",
      "description" : "Enables support for legacy user agents (browser). (property name:
com.sun.identity.agents.config.legacy.support.enable) <br>Hot-swap: Yes",
      "propertyOrder" : 6700,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "policyClientPollingInterval" : {
      "title" : "Policy Client Polling Interval",
      "description" : "Duration in minutes after which the cached entries are refreshed by remote
policy client. (property name: com.sun.identity.agents.polling.interval) <br>Hot-swap: No",
      "propertyOrder" : 11300,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "integer",
          "required" : true
        }
      }
    },
    "shortenedPrivilegeAttributeValues" : {
      "title" : "Shortened privilege attribute values",
```


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```
     "description" : "When using privileged attribute type, this setting will ensure that the
membership details will be stored in a shortened format and not in the default universal ID
format.<br><br>By default the agent maps identity memberships using their universal IDs (e.g.
id=admin,ou=group,dc=openam,dc=forgerock,dc=org), however this may not be always acceptable. Using
this setting the identity membership details will be mapped in a shortened format, only including the
group's/role's name (e.g. admin). Be aware that in case there are both roles and groups in the data
store, this setting will make them indistinguishable from each other, i.e. if there is a group and a
role with the same name it will not be possible to differentiate them.",
     "propertyOrder" : 13600,
     "type" : "object",
     "exampleValue" : "",
     "properties" : {
       "inherited" : {
         "type" : "boolean",
         "required" : true
       },
       "value" : {
         "type" : "boolean",
         "required" : true
       }
     }
   },
   "cdssoDomainList" : {
     "title" : "CDSSO Domain List",
     "description" : "Domains for which cookies have to be set in a CDSSO scenario. (property name:
com.sun.identity.agents.config.cdsso.domain) <br>Hot-swap: Yes <br> Example: <br> .sun.com",
     "propertyOrder" : 5800,
     "items" : {
       "type" : "string"
     },
     "type" : "object",
     "exampleValue" : "",
     "properties" : {
       "inherited" : {
         "type" : "boolean",
         "required" : true
       },
       "value" : {
         "type" : "array",
         "required" : true
       }
     }
   },
   "clientPollingPeriod" : {
     "title" : "Client Polling Period",
     "description" : "(Not used in Agent 5 onwards) <br>Time in seconds after which the session
client will request update of cached session information from the server. (property name:
com.iplanet.am.session.client.polling.period) <br>Hot-swap: No",
     "propertyOrder" : 10300,
     "type" : "object",
     "exampleValue" : "",
     "properties" : {
       "inherited" : {
         "type" : "boolean",
         "required" : true
       },
       "value" : {
         "type" : "integer",
         "required" : true
```


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```
        }
      }
    },
    "loginProbeTimeout" : {
      "title" : "Login URL Probe Timeout",
      "description" : "The connect timeout value in milliseconds, if also Login URL Probe is set to
true. (property name: com.sun.identity.agents.config.login.url.probe.timeout) <br>Hot-swap: Yes",
      "propertyOrder" : 4000,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "integer",
          "required" : true
        }
      }
    },
    "policyClientCacheMode" : {
      "title" : "Policy Client Cache Mode",
      "description" : "Mode of caching to be used by remote policy client. (property name:
com.sun.identity.policy.client.cacheMode) <br>Hot-swap: No",
      "propertyOrder" : 11400,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "redirectAttemptLimit" : {
      "title" : "Redirect Attempt Limit",
      "description" : "Number of successive single point redirects that a user can make using a
single browser session which will trigger the blocking of the user request. Set to 0 to disable this
feature. (property name: com.sun.identity.agents.config.redirect.attempt.limit) <br>Hot-swap: Yes",
      "propertyOrder" : 7100,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "integer",
          "required" : true
        }
      }
    },
    "alternativeAgentHostname" : {
```


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```
     "title" : "Alternative Agent Host Name",
     "description" : "Host name identifying the Agent protected server to the client browsers if
different from the actual host name. (property name: com.sun.identity.agents.config.agent.host)
<br>Hot-swap: Yes",
     "propertyOrder" : 4100,
     "type" : "object",
     "exampleValue" : "",
     "properties" : {
       "inherited" : {
         "type" : "boolean",
         "required" : true
       },
       "value" : {
         "type" : "string",
         "required" : true
       }
     }
   },
   "loginAttemptLimit" : {
     "title" : "Login Attempt Limit",
     "description" : "Limit of failed login attempts for a user's single browser session until
triggering the blocking of the user request. Value of 0 disables this feature. (property name:
com.sun.identity.agents.config.login.attempt.limit) <br>Hot-swap: Yes",
     "propertyOrder" : 4400,
     "type" : "object",
     "exampleValue" : "",
     "properties" : {
       "inherited" : {
         "type" : "boolean",
         "required" : true
       },
       "value" : {
         "type" : "integer",
         "required" : true
       }
     }
   },
   "status" : {
     "title" : "Status",
     "description" : "Status of the agent configuration.",
     "propertyOrder" : 200,
     "type" : "object",
     "exampleValue" : "",
     "properties" : {
       "inherited" : {
         "type" : "boolean",
         "required" : true
       },
       "value" : {
         "type" : "string",
         "required" : true
       }
     }
   },
   "notEnforcedIpsCacheEnabled" : {
     "title" : "Not Enforced IP Cache Flag",
     "description" : "Enable caching of not-enforced IP list evaluation results. (property name:
com.sun.identity.agents.config.notenforced.ip.cache.enable) <br>Hot-swap: Yes",
     "propertyOrder" : 8100,
```


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```
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "auditLogLocation" : {
      "title" : "Audit Log Location",
      "description" : "Specifies where audit messages should be logged. (property name:
com.sun.identity.agents.config.log.disposition) <br>Hot-swap: Yes",
      "propertyOrder" : 1600,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "notEnforcedIpsCacheSize" : {
      "title" : "Not Enforced IP Cache Size",
      "description" : "Size of the cache to be used if Not Enforced IP Cache Flag is enabled.
(property name: com.sun.identity.agents.config.notenforced.ip.cache.size) <br>Hot-swap: Yes",
      "propertyOrder" : 8200,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "integer",
          "required" : true
        }
      }
    },
    "webServiceAuthorizationErrorContentFile" : {
      "title" : "Web Service Authorization Error Content File",
      "description" : "The name of file that contains content used by the
Agent to generate an authorization error fault for clients. (property name:
com.sun.identity.agents.config.webservice.autherror.content) <br>Hot-swap: Yes",
      "propertyOrder" : 2600,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
```


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```
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "ignorePathInfo" : {
      "title" : "Ignore Path Info in Request URL",
      "description" : "The path info will be stripped from the request URL while doing Not
Enforced List check and url policy evaluation if the value is set to true. (property name:
com.sun.identity.agents.config.ignore.path.info) <br>Hot-swap: Yes",
      "propertyOrder" : 18600,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "userPrincipalFlag" : {
      "title" : "User Principal Flag",
      "description" : "Use principal instead of just the user-ID for authenticating the user.
(property name: com.sun.identity.agents.config.user.principal) <br>Hot-swap: Yes",
      "propertyOrder" : 800,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "authServiceProtocol" : {
      "title" : "OpenAM Authentication Service Protocol",
      "description" : "Protocol to be used by the OpenAM authentication service. (property name:
com.iplanet.am.server.protocol) <br>Hot-swap: No",
      "propertyOrder" : 10900,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
```


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```
          "type" : "string",
          "required" : true
        }
      }
    },
    "postDataPreserveCacheEntryMaxEntries" : {
      "title" : "PDP Maximum Number of Cache Entries",
      "description" : "Maximum number of entries to hold in the PDP cache (Property name:
org.forgerock.openam.agents.config.postdata.preserve.cache.entry.max.entries) (Agent 5 only).",
      "propertyOrder" : 13550,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "notEnforcedRuleCompoundSeparator" : {
      "title" : "Not Enforced Compound Rule Separator",
      "description" : "Specifies a separator for not enforced compound rules (Agent 5 only). The
format for compound rules requires a list of IP rules, a separator (by default the | character),
and a list of URI rules. For example, GET 192.168.1.1-192.168.4.3 | /images/* Configure a
different separator (for example, &&) when working with the REGEX keyword to avoid invalid regular
expressions.",
      "propertyOrder" : 7450,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "logoutUrlPrioritized" : {
      "title" : "Logout URL Prioritized",
      "description" : "Specifies if failover sequence for Logout URLs should be prioritized as defined
in the OpenAM Login URL list. (property name: com.sun.identity.agents.config.logout.url.prioritized)
<br>Hot-swap: Yes",
      "propertyOrder" : 12500,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
```


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```
          "required" : true
        }
      }
    },
    "notEnforcedUrisCacheSize" : {
      "title" : "Not Enforced URIs Cache Size",
      "description" : "Size of the cache to be used if caching of not enforced URI list evaluation
results is enabled. (property name: com.sun.identity.agents.config.notenforced.uri.cache.size)
<br>Hot-swap: Yes",
      "propertyOrder" : 7800,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "integer",
          "required" : true
        }
      }
    },
    "notEnforcedIps" : {
      "title" : "Not Enforced Client IP List",
      "description" : "No authentication and authorization protection from agent are
required for the requests coming from these client IP addresses. (property name:
com.sun.identity.agents.config.notenforced.ip) <br>Hot-swap: Yes <br> Examples: <br> 192.18.145.*
<br> 192.18.146.123",
      "propertyOrder" : 7900,
      "items" : {
        "type" : "string"
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "array",
          "required" : true
        }
      }
    },
    "continuousSecurityCookies" : {
      "title" : "Continuous Security Cookies",
      "description" : "The name of the cookies to be sent as part of the payload during policy
evaluation, which can be accessed via the 'environment' variable in a policy script. The 'key' is
the name of the cookie to be sent, and the 'value' is the name which it will appear as in the policy
evaluation script. It is possible to map multiple cookies to the same name (they will simply appear
as an array in the evaluation script). If the cookie doesn't exist, then the empty string will be
sent.",
      "propertyOrder" : 3210,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
```


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```
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "object",
          "required" : true
        }
      }
    },
    "privilegedAttributesToLowerCase" : {
      "title" : "Privileged Attributes To Lower Case",
      "description" : "(Not used in Agent 5 onwards) <br>Maps the privileged
 attribute types to whether they should be converted to lowercase. (property name:
 com.sun.identity.agents.config.privileged.attribute.tolowercase) <br> Valid Keys: the privileged
 attribute types, such as Group, Role. <br>Valid value: true, false. <br>Hot-swap: Yes  <br> Example:
 <br> Enter Group in Map Key field, and enter false in Corresponding Map Value field.",
      "propertyOrder" : 9600,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "object",
          "required" : true
        }
      }
    },
    "portCheckSetting" : {
      "title" : "Port Check Setting",
      "description" : "Map of port versus protocol entries with the key being the listening port
 number and value being the listening protocol to be used by the Agent to identify requests with
 invalid port numbers. (property name: com.sun.identity.agents.config.port.check.setting) <br>Hot-
swap: Yes <br> Example: <br> To map port 80 to protocol http: enter 80 in Map Key field, and enter
 http in Corresponding Map Value field.",
      "propertyOrder" : 7400,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
```


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```
        },
        "value" : {
          "type" : "object",
          "required" : true
        }
      }
    },
    "clientIpHeader" : {
      "title" : "Client IP Address Header",
      "description" : "HTTP header name that holds the IP address of the client. (property name:
com.sun.identity.agents.config.client.ip.header) <br>Hot-swap: Yes",
      "propertyOrder" : 1000,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "customAuthenticationHandlers" : {
      "title" : "Custom Authentication Handler",
      "description" : "Application specific authentication handler to authenticate the logged on user
with the application server. (property name: com.sun.identity.agents.config.auth.handler)  <br>Valid
key: the web application name. <br>Valid value: the authentication handler class name. <br>Hot-swap:
Yes  <br>Example: <br>To set authentication handler for application BankApp: enter BankApp in Map
Key field, and enter authentication handler class name BankAuthHandler in Corresponding Map Value
field.",
      "propertyOrder" : 3200,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "object",
          "required" : true
        }
      }
    },
    "possibleXssCodeElements" : {
      "title" : "Possible XSS code elements",
      "description" : "If one of these strings occurs in the request, the client is redirected to an
error page. (property name: com.sun.identity.agents.config.xss.code.elements) <br>Hot-swap: Yes",
      "propertyOrder" : 12800,
      "items" : {
        "type" : "string"
```


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```
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "array",
          "required" : true
        }
      }
    },
    "profileAttributeMap" : {
      "title" : "Profile Attribute Mapping",
      "description" : "Maps the profile attributes to be populated under
 specific names for the currently authenticated user. (property name:
 com.sun.identity.agents.config.profile.attribute.mapping) <br>Hot-swap: Yes <br> Example: <br> To
 populate the value of profile attribute cn under name CUSTOM-Common-Name: enter cn in Map Key field,
 and enter CUSTOM-Common-Name in Corresponding Map Value field. <br> To populate the value of profile
 attribute mail under name CUSTOM-Email: enter mail in Map Key field, and enter CUSTOM-Email in
 Corresponding Map Value field.",
      "propertyOrder" : 8800,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "object",
          "required" : true
        }
      }
    },
    "fqdnMapping" : {
      "title" : "FQDN Virtual Host Map",
      "description" : "Maps virtual, invalid, or partial hostnames, and IP addresses to the FQDN to
 access protected resources. (property name: com.sun.identity.agents.config.fqdn.mapping) <br>Hot-
swap: Yes <br> Examples: <br>  To map the partial hostname myserver to myserver.mydomain.com: enter
 myserver in the Map Key field and myserver.mydomain.com in the Corresponding Map Value field. To map
 a virtual server rst.hostname.com that points to the actual server abc.hostname.com: enter valid1 in
 the Map Key field and rst.hostname.com in the Corresponding Map Value field.",
      "propertyOrder" : 6600,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
```


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```
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "object",
          "required" : true
        }
      }
    },
    "customLogoutHandlers" : {
      "title" : "Custom Logout Handler",
      "description" : "Application specific logout handler to log out a user with the application
server. (property name: com.sun.identity.agents.config.logout.handler)  <br>Valid key: the web
application name. <br>Valid value: the logout handler class name. <br>Hot-swap: Yes <br> Example:
<br>To set logout handler for application BankApp: enter BankApp in Map Key field, and enter logout
handler class name BankLogoutHandler in Corresponding Map Value field.",
      "propertyOrder" : 3300,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "object",
          "required" : true
        }
      }
    },
    "applicationLogoutHandlers" : {
      "title" : "Application Logout Handler",
      "description" : "An application-specific Map that identifies a handler to be used for logout
processing. (property name: com.sun.identity.agents.config.logout.application.handler) <br>Valid
key: the web application name. <br>Valid value: the application logout handler class name. <br>For
this property, a global value can be set to apply to all the applications that don't have their own
specific logout handler. <br>Hot-swap: Yes <br> Examples:  <br>To set a global application logout
handler: leave Map Key field empty, and enter the global application logout handler class name
GlobalApplicationLogoutHandler in Corresponding Map Value field. <br>To set the logout handler for
application BankApp: enter BankApp in Map Key field, and enter the application logout handler class
name BankAppLogoutHandler in Corresponding Map Value field.",
      "propertyOrder" : 5900,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
```


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```
       },
       "value" : {
         "type" : "object",
         "required" : true
       }
     }
   },
   "postDataStickySessionMode" : {
     "title" : "PDP Stickysession mode",
     "description" : "The PDP mechanism needs sticky loadbalancing, the URL mode will
append a querystring, while the Cookie mode will create a cookie. (property name:
com.sun.identity.agents.config.postdata.preserve.stickysession.mode)",
     "propertyOrder" : 13400,
     "type" : "object",
     "exampleValue" : "",
     "properties" : {
       "inherited" : {
         "type" : "boolean",
         "required" : true
       },
       "value" : {
         "type" : "string",
         "required" : true
       }
     }
   },
   "userTokenName" : {
     "title" : "User Token Name",
     "description" : "Session property name for user-ID of the authenticated user in session.
(property name: com.sun.identity.agents.config.user.token) <br>Hot-swap: Yes",
     "propertyOrder" : 900,
     "type" : "object",
     "exampleValue" : "",
     "properties" : {
       "inherited" : {
         "type" : "boolean",
         "required" : true
       },
       "value" : {
         "type" : "string",
         "required" : true
       }
     }
   },
   "cdssoRootUrl" : {
     "title" : "Agent Root URL for CDSSO",
     "description" : "The agent root URL for CDSSO. The valid value is in the following format:
<br>protocol://hostname:port/<br> The protocol represents the protocol used, such as http or https.
The hostname represents the host name of the machine on which the agent resides. The port represents
the port number on which the agent is installed. The slash following the port number is required.",
     "propertyOrder" : 22700,
     "items" : {
       "type" : "string"
     },
     "type" : "object",
     "exampleValue" : "",
     "properties" : {
       "inherited" : {
         "type" : "boolean",
```


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```
          "required" : true
        },
        "value" : {
          "type" : "array",
          "required" : true
        }
      }
    },
    "jbossWebAuthenticationAvailable" : {
      "title" : "WebAuthentication Available",
      "description" : "(Not used in Agent 5 onwards) <br>Enable agent to make programmatic
authentication with the JBoss web container using WebAuthentication feature. (property name:
com.sun.identity.agents.config.jboss.webauth.available) <br>Hot-swap: Yes",
      "propertyOrder" : 12300,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "resourceAccessDeniedUri" : {
      "title" : "Resource Access Denied URI",
      "description" : "An application-specific Map that identifies a URI of the customized access
denied page. (property name: com.sun.identity.agents.config.access.denied.uri) <br>Valid key: the
web application name. <br>Valid value: the customized application access denied page URI. <br>For
this property, a global value can be set to apply to all the applications that don't have their own
specific access denied page. <br>Hot-swap: Yes <br> Examples: <br>To set a global access denied page:
leave Map Key field empty, and enter the global access denied page URI /sample/accessdenied.html in
Corresponding Map Value field. <br> To set the access denied page URI for application BankApp: enter
BankApp in Map Key field, and enter the application access denied page URI /BankApp/accessdenied.html
in Corresponding Map Value field.",
      "propertyOrder" : 2700,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "object",
          "required" : true
        }
      }
    },
    "invertNotEnforcedUris" : {
      "title" : "Invert Not Enforced URIs",
```


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```
      "description" : "Inverts protection of  URIs specified in Not Enforced URIs list. When set
 to true, it indicates that the URIs specified should be enforced and all other URIs should be
 not enforced by the Agent. (property name: com.sun.identity.agents.config.notenforced.uri.invert)
 <br>Hot-swap: Yes",
      "propertyOrder" : 7600,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "notEnforcedUrisCacheEnabled" : {
      "title" : "Not Enforced URIs Cache Enabled",
      "description" : "Enables the caching of the Not Enforced URIs list evaluation results. (property
 name: com.sun.identity.agents.config.notenforced.uri.cache.enable) <br>Hot-swap: Yes",
      "propertyOrder" : 7700,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "notEnforcedUris" : {
      "title" : "Not Enforced URIs",
      "description" : "List of URIs for which protection is not enforced by the Agent. (property
 name: com.sun.identity.agents.config.notenforced.uri) <br>Hot-swap: Yes <br> Examples: <br> /BankApp/
public/* <br> /BankApp/images/*",
      "propertyOrder" : 7500,
      "items" : {
        "type" : "string"
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "array",
          "required" : true
        }
      }
    },
    "loginFormUri" : {
```


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```
      "title" : "Login Form URI",
      "description" : "List of absolute URIs corresponding to an application's web.xml form-login-page
element. (property name: com.sun.identity.agents.config.login.form) <br>Hot-swap: Yes <br> Example:
<br> /BankApp/jsp/login.jsp",
      "propertyOrder" : 2800,
      "items" : {
        "type" : "string"
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "array",
          "required" : true
        }
      }
    },
    "logoutIntrospection" : {
      "title" : "Logout Introspect Enabled",
      "description" : "Allows the Agent to search HTTP request body to locate logout parameter.
(property name: com.sun.identity.agents.config.logout.introspect.enabled) <br>Hot-swap: Yes",
      "propertyOrder" : 6200,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "postDataStickySessionKeyValue" : {
      "title" : "PDP Stickysession key-value",
      "description" : "The provided key-value pair will be used for adding to
the URL or creating the cookie. <br>Example: <br>Set 'lb=server1' to append to
the querystring or to have 'lb' cookie with 'server1' value. (property name:
com.sun.identity.agents.config.postdata.preserve.stickysession.value)",
      "propertyOrder" : 13500,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
```


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```
    "loginErrorUri" : {
      "title" : "Login Error URI",
      "description" : "List of absolute URIs corresponding to an application's web.xml form-error-
page element. (property name: com.sun.identity.agents.config.login.error.uri) <br>Hot-swap: Yes <br>
 Example: <br> /BankApp/jsp/error.jsp",
      "propertyOrder" : 2900,
      "items" : {
        "type" : "string"
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "array",
          "required" : true
        }
      }
    },
    "userDataCacheNotifications" : {
      "title" : "Enable Notification of User Data Caches",
      "description" : "Enable notifications for amsdk and IdRepo Caches. (property name:
 com.sun.identity.idm.remote.notification.enabled) <br>Hot-swap: No",
      "propertyOrder" : 10500,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "agentNotificationUrl" : {
      "title" : "Agent Notification URL",
      "description" : "URL used by agent to register notification listeners. (property name:
 com.sun.identity.client.notification.url) <br>Hot-swap: No",
      "propertyOrder" : 300,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "policyClientResourceComparators" : {
```


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```
      "title" : "Policy Client Resource Comparators",
      "description" : "Resource Comparators to be used for different service names. (property name:
com.sun.identity.policy.client.resourceComparators) <br>Hot-swap: No",
      "propertyOrder" : 11600,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "authServiceHost" : {
      "title" : "OpenAM Authentication Service Host Name",
      "description" : "Host name to be used by the OpenAM authentication service. (property name:
com.iplanet.am.server.host) <br>Hot-swap: No",
      "propertyOrder" : 11000,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "webServiceInternalErrorContentFile" : {
      "title" : "Web Service Internal Error Content File",
      "description" : "The name of file that contains content used by the
Agent to generate an internal error fault for clients. (property name:
com.sun.identity.agents.config.webservice.internalerror.content) <br>Hot-swap: Yes",
      "propertyOrder" : 2500,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "authServicePort" : {
      "title" : "OpenAM Authentication Service Port",
      "description" : "Port to be used by the OpenAM authentication service. (property name:
com.iplanet.am.server.port) <br>Hot-swap: No",
      "propertyOrder" : 11100,
```


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```
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "integer",
          "required" : true
        }
      }
    },
    "cdsso" : {
      "title" : "Cross Domain SSO",
      "description" : "Enables Cross Domain Single SignOn. (property name:
com.sun.identity.agents.config.cdsso.enable) <br>Hot-swap: Yes",
      "propertyOrder" : 5000,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "remoteLogFilename" : {
      "title" : "Remote Log File Name",
      "description" : "Name of file stored on OpenAM server that contains agent audit messages.
(property name: com.sun.identity.agents.config.remote.logfile) <br>Hot-swap: Yes",
      "propertyOrder" : 1700,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "privilegedSessionAttribute" : {
      "title" : "Privileged Session Attribute",
      "description" : "(Not used in Agent 5 onwards) <br>List of session property
names which hold privileged attributes for the authenticated user. (property name:
com.sun.identity.agents.config.privileged.session.attribute) <br>Hot-swap: Yes <br> Example: <br>
UserToken",
      "propertyOrder" : 9700,
      "items" : {
        "type" : "string"
      },
```


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```
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "array",
          "required" : true
        }
      }
    },
    "applicationLogoutUris" : {
      "title" : "Application Logout URI",
      "description" : "An application-specific Map that identifies a request URI which indicates
 a logout event. (property name: com.sun.identity.agents.config.logout.uri) <br>Valid key: the web
 application name. <br>Valid value: the application logout URI. <br>For this property, a global value
 can be set to apply to all the applications that don't have their own specific logout URI. <br>Hot-
swap: Yes <br> Examples: <br>To set a global application logout URI: leave Map Key field empty, and
 enter the global application logout URI /logout.jsp in Corresponding Map Value field. <br> To set the
 logout URI for application BankApp: enter BankApp in Map Key field, and enter the application logout
 URI /BankApp/logout.jsp in Corresponding Map Value field.",
      "propertyOrder" : 6000,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "object",
          "required" : true
        }
      }
    },
    "customResponseHeader" : {
      "title" : "Custom Response Header",
      "description" : "Map specifies the custom headers that are set by the Agent on the client
 browser. The key is the header name and the value represents the header value. (property name:
 com.sun.identity.agents.config.response.header) <br>Hot-swap: Yes <br> Example: <br>  To set the
 custom header Cache-Control to value no-cache: enter Cache-Control in Map Key field, and enter no-
cache in Corresponding Map Value field.",
      "propertyOrder" : 7000,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
```


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```
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "object",
          "required" : true
        }
      }
    },
    "policyEvaluationApplication" : {
      "title" : "Application",
      "description" : "Which application contains the policies to evaluate with. (property name:
org.forgerock.openam.agents.config.policy.evaluation.application) <br>Hot-swap: Yes",
      "propertyOrder" : 5500,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "ssoCacheEnabled" : {
      "title" : "SSO Cache Enable",
      "description" : "Specifies if the SSO Cache is active for the agent.
Cache is used through public APIs exposed by the agent SDK. (property name:
com.sun.identity.agents.config.amsso.cache.enable) <br>Hot-swap: Yes",
      "propertyOrder" : 4500,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "sessionAttributeMap" : {
      "title" : "Session Attribute Mapping",
      "description" : "Maps the session attributes to be populated under
specific names for the currently authenticated user. (property name:
com.sun.identity.agents.config.session.attribute.mapping) <br>Hot-swap: Yes  <br> Example: <br>  To
populate the value of session attribute UserToken under name CUSTOM-userid: enter UserToken in Map
Key field, and enter CUSTOM-userid in Corresponding Map Value field.",
      "propertyOrder" : 9000,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
```


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```
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "object",
          "required" : true
        }
      }
    },
    "userDataCachePollingTime" : {
      "title" : "User Data Cache Polling Time",
      "description" : "Cache update time in minutes for user management data. If set to '0' no updates
happen. (property name: com.iplanet.am.sdk.remote.pollingTime) <br>Hot-swap: No",
      "propertyOrder" : 10600,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "integer",
          "required" : true
        }
      }
    },
    "encryptionProvider" : {
      "title" : "Encryption Provider",
      "description" : "Specifies the encryption provider implementation to be used by the Agent.
(property name: com.iplanet.security.encryptor) <br>Hot-swap: No",
      "propertyOrder" : 10400,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "filterMode" : {
      "title" : "Agent Filter Mode",
      "description" : "Specifies the mode of operation of the Filter. (property name:
com.sun.identity.agents.config.filter.mode) <br>Valid key: the web application name. <br>Valid
values: ALL, J2EE_POLICY (Not used in Agent 5 onwards), URL_POLICY, SSO_ONLY, NONE <br>For this
property, a global value can be set to apply to all the applications that don't have their own
specific filter mode. <br>Hot-swap: No <br>Examples: <br>To set ALL as the global filter mode:
leave Map Key field empty, and enter ALL in Corresponding Map Value field. <br>To set URL_POLICY
as the filter mode for application BankApp: enter BankApp in Map Key field, and enter URL_POLICY in
Corresponding Map Value field.",
```


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```
      "propertyOrder" : 500,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "object",
          "required" : true
        }
      }
    },
    "policyActionBooleanValues" : {
      "title" : "Policy Client Boolean Action Values",
      "description" : "Boolean action values for policy action names. (property name:
 com.sun.identity.policy.client.booleanActionValues) <br>Hot-swap: No",
      "propertyOrder" : 11500,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "amLoginUrl" : {
      "title" : "OpenAM Login URL",
      "description" : "OpenAM login page URL. (property name:
 com.sun.identity.agents.config.login.url) <br>Hot-swap: Yes <br> Example: <br> http://host:port/
opensso/UI/Login",
      "propertyOrder" : 3700,
      "items" : {
        "type" : "string"
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "array",
          "required" : true
        }
      }
    },
```


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```
    "urlPolicyEnvGetParameters" : {
      "title" : "URL Policy Env GET Parameters",
      "description" : "List of HTTP GET request parameters whose names and values will be
 set in the environment map for URL policy evaluation at OpenAM server. (property name:
 com.sun.identity.agents.config.policy.env.get.param) <br>Hot-swap: Yes <br> Examples: <br> name <br>
 phonenumber",
      "propertyOrder" : 11800,
      "items" : {
        "type" : "string"
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "array",
          "required" : true
        }
      }
    },
    "customProperties" : {
      "title" : "Custom Properties",
      "description" : "Additional properties that allow users to augment the set of properties
 supported by agent. (property name: com.sun.identity.agents.config.freeformproperties) <br>Hot-
swap: Yes <br> Examples: <br> customproperty=custom-value1 <br> customlist[0]=customlist-
value-0 <br> customlist[1]=customlist-value-1 <br> custommap[key1]=custommap-value-1 <br>
 custommap[key2]=custommap-value-2",
      "propertyOrder" : 12200,
      "items" : {
        "type" : "string"
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "array",
          "required" : true
        }
      }
    },
    "responseAttributeMap" : {
      "title" : "Response Attribute Mapping",
      "description" : "Maps the policy response attributes to be populated
 under specific names for the currently authenticated user. (property name:
 com.sun.identity.agents.config.response.attribute.mapping) <br>Hot-swap: Yes <br> Example: <br> To
 populate the value of response attribute uid under name CUSTOM-USER-NAME: enter uid in Map Key field,
 and enter CUSTOM-USER-NAME in Corresponding Map Value field.",
      "propertyOrder" : 9200,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
```


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```
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "object",
          "required" : true
        }
      }
    },
    "urlPolicyEnvPostParameters" : {
      "title" : "URL Policy Env POST Parameters",
      "description" : "List of HTTP POST request parameters whose names and values will
be set in the environment map for URL policy evaluation at OpenAM server. (property name:
com.sun.identity.agents.config.policy.env.post.param) <br>Hot-swap: Yes <br> Examples: <br> name <br>
phonenumber",
      "propertyOrder" : 11900,
      "items" : {
        "type" : "string"
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "array",
          "required" : true
        }
      }
    },
    "invertNotEnforcedIps" : {
      "title" : "Not Enforced IP Invert List",
      "description" : "Client IP Addresses to invert protection of IP addresses listed in the related
Not Enforced Client IP List. (property name: com.sun.identity.agents.config.notenforced.ip.invert)
<br>Hot-swap: Yes",
      "propertyOrder" : 8000,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "cdssoTrustedIdProvider" : {
      "title" : "CDSSO Trusted ID Provider",
```


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```
      "description" : "List of OpenAM Server/ID providers that should be trusted
 by the agent, when evaluating the CDC Liberty Responses. (property name:
 com.sun.identity.agents.config.cdsso.trusted.id.provider) <br>Hot-swap: Yes <br> Example: <br>
 http://host:port/opensso/cdcservlet",
      "propertyOrder" : 5600,
      "items" : {
        "type" : "string"
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "array",
          "required" : true
        }
      }
    },
    "webServiceResponseProcessor" : {
      "title" : "Web Service Response Processor",
      "description" : "An implementation class of interface
 com.sun.identity.agents.filter.IWebServiceResponseProcessor that can be used to process the web-
service responses. (property name: com.sun.identity.agents.config.webservice.responseprocessor)
 <br>Hot-swap: Yes",
      "propertyOrder" : 2400,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "webServiceEndpoints" : {
      "title" : "Web Service End Points",
      "description" : "A list of Web Application end points that represent Web Services. (property
 name: com.sun.identity.agents.config.webservice.endpoint) <br>Hot-swap: Yes",
      "propertyOrder" : 2100,
      "items" : {
        "type" : "string"
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "array",
          "required" : true
```


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```
        }
      }
    },
    "logoutRequestParameters" : {
      "title" : "Logout Request Parameter",
      "description" : "An application-specific Map that identifies a parameter
 which when present in the HTTP request indicates a logout event. (property name:
 com.sun.identity.agents.config.logout.request.param)  <br>Valid key: the web application name.
 <br>Valid value: the logout request parameter. <br>For this property, a global value can be set to
 apply to all the applications that don't have their own specific logout request parameter. <br>Hot-
swap: Yes  <br> Examples: <br>To set a global application logout request parameter: leave Map Key
 field empty, and enter the global application logout request parameter logoutparam in Corresponding
 Map Value field. <br> To set the logout request parameter for application BankApp: enter BankApp in
 Map Key field, and enter the logout request parameter logoutparam in Corresponding Map Value field.",
      "propertyOrder" : 6100,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "object",
          "required" : true
        }
      }
    },
    "localAuditRotationSize" : {
      "title" : "Local Audit Log Rotation Size",
      "description" : "Size limit when a local audit log file is rotated to a new file. (property
 name: com.sun.identity.agents.config.local.log.size) <br>Hot-swap: Yes",
      "propertyOrder" : 1900,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "integer",
          "required" : true
        }
      }
    },
    "probeLogoutUrl" : {
      "title" : "Logout URL Probe",
      "description" : "Specifies if agent will check the availability of these urls before redirecting
 to them. (property name: com.sun.identity.agents.config.logout.url.probe.enabled) <br>Hot-swap: Yes",
      "propertyOrder" : 12600,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
```


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```
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "jwtName" : {
      "title" : "JWT Cookie Name",
      "description" : "The name used by the agent to set the OIDC JWT on the user's browser. (Agent 5
 only).",
      "propertyOrder" : 11201,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "privilegedAttributeMap" : {
      "title" : "Privileged Attribute Mapping",
      "description" : "(Not used in Agent 5 onwards) <br>Map if using Enable Privileged Attribute
 Mapping. (property name: com.sun.identity.agents.config.privileged.attribute.mapping) <br>Hot-
swap: Yes <br> Examples: <br> To map UUID id=manager,ou=group,dc=openam,dc=forgerock,dc=org
 to the principal name am_manager_role specified in webapp's deployment descriptor: enter
 id=manager,ou=group,dc=openam,dc=forgerock,dc=org in Map Key field, and enter am_manager_role in
 Corresponding Map Value field. <br> To  map UUID id=employee,ou=group,dc=openam,dc=forgerock,dc=org
 to the principal name am_employee_role  specified in webapp's deployment descriptor: enter
 id=employee,ou=group,dc=openam,dc=forgerock,dc=org in Map Key field, and enter am_employee_role in
 Corresponding Map Value field.",
      "propertyOrder" : 9900,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "object",
          "required" : true
        }
      }
    },
    "conditionalLoginUrl" : {
```


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```
      "title" : "OpenAM Conditional Login URL",
      "description" : "(Only used in Agent 5 onwards) (property name:
org.forgerock.openam.agents.config.conditional.login.url) <br>Hot-swap: Yes <br> Examples: <br>
match|url?param1=value1&param2=value2 <br> match/path|?param1=value1&param2=value2&param3=value3",
      "propertyOrder" : 4010,
      "items" : {
        "type" : "string"
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "array",
          "required" : true
        }
      }
    },
    "responseAttributeFetchMode" : {
      "title" : "Response Attribute Fetch Mode",
      "description" : "The mode of fetching policy response attributes. (property name:
com.sun.identity.agents.config.response.attribute.fetch.mode) <br>Hot-swap: Yes",
      "propertyOrder" : 9100,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "legacyRedirectUri" : {
      "title" : "Legacy User Agent Redirect URI",
      "description" : "An intermediate URI used by the Agent to redirect legacy user agent requests.
(property name: com.sun.identity.agents.config.legacy.redirect.uri) <br>Hot-swap: Yes",
      "propertyOrder" : 6900,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "enableClientPolling" : {
      "title" : "Enable Client Polling",
```


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```
      "description" : "Specifies if the session client must use polling for updating
session information and not depend upon server notifications. (property name:
com.iplanet.am.session.client.polling.enable) <br>Hot-swap: No",
      "propertyOrder" : 10200,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "continuousSecurityHeaders" : {
      "title" : "Continuous Security Headers",
      "description" : "The name of the headers in the user's original request, that will be sent
as part of the payload during policy evaluation, which can then be accessed via the 'environment'
variable in a policy script. The 'key' is the name of the header to be sent, and the 'value' is the
name which it will appear as in the policy evaluation script.It is possible to map multiple headers
to the same name (they will simply appear as an array in the evaluation script). If the header
doesn't exist, then the empty string will be sent.",
      "propertyOrder" : 3211,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "object",
          "required" : true
        }
      }
    },
    "portCheckEnabled" : {
      "title" : "Port Check Enable",
      "description" : "Indicates if port check functionality is enabled or disabled. (property name:
com.sun.identity.agents.config.port.check.enable) <br>Hot-swap: Yes",
      "propertyOrder" : 7200,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
```


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```
        }
      }
    },
    "userAttributeName" : {
      "title" : "User Attribute Name",
      "description" : "Name of the attribute which contains the user-ID. (property name:
 com.sun.identity.agents.config.user.attribute.name) <br>Hot-swap: Yes",
      "propertyOrder" : 700,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "xssDetectionRedirectUri" : {
      "title" : "XSS detection redirect URI",
      "description" : "An application-specific Map that identifies a URI of the customized page if
 XSS code has been deteced. (property name: com.sun.identity.agents.config.xss.redirect.uri) <br>Hot-
swap: Yes <br>Examples: <br>To set a redirect target for application BankApp: enter BankApp in Map Key
 field, and enter a redirect URI in Corresponding Map Value field.",
      "propertyOrder" : 12900,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "object",
          "required" : true
        }
      }
    },
    "alternativeAgentPort" : {
      "title" : "Alternative Agent Port Name",
      "description" : "Port number identifying the Agent protected server listening port
 to the client browsers if different from the actual listening port. (property name:
 com.sun.identity.agents.config.agent.port) <br>Hot-swap: Yes",
      "propertyOrder" : 4200,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
```


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```
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "privilegedAttributeType" : {
      "title" : "Privileged Attribute Type",
      "description" : "(Not used in Agent 5 onwards) <br>List of privileged attribute types that will
be fetched for each user. (property name: com.sun.identity.agents.config.privileged.attribute.type)
<br>Hot-swap: Yes <br> Example: <br> Group",
      "propertyOrder" : 9500,
      "items" : {
        "type" : "string"
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "array",
          "required" : true
        }
      }
    },
    "missingPostDataPreservationEntryUri" : {
      "title" : "Missing PDP entry URI",
      "description" : "An application-specific URI Map that is used in case the referenced
PDP entry cannot be found in the local cache (due to ttl). In such cases it will redirect
to the specified URI, otherwise it will show a HTTP 403 Forbidden error. (property name:
com.sun.identity.agents.config.postdata.preservce.cache.noentry.url)<br>Examples: <br>To set a
redirect target for application BankApp: enter Bankapp in Map Key field and enter a redirect URI in
corresponding Map Value field.",
      "propertyOrder" : 13200,
      "items" : {
        "type" : "string"
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "array",
          "required" : true
        }
      }
    },
    "cdssoSecureCookies" : {
      "title" : "CDSSO Secure Enable",
      "description" : "The SSO Token cookie set by the agent in the different domains in CDSSO mode
will be marked secure. Only transmitted if the communications channel with host is a secure one.
(property name: com.sun.identity.agents.config.cdsso.secure.enable) <br>Hot-swap: Yes",
      "propertyOrder" : 5700,
```


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```
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "conditionalLogoutUrl" : {
      "title" : "OpenAM Conditional Logout URL",
      "description" : "(Only used in Agent 5 onwards) (property name:
org.forgerock.openam.agents.config.conditional.logout.url) <br>Hot-swap: Yes <br> Examples: <br>
match|url?param1=value1&param2=value2 <br> match/path|?param1=value1&param2=value2&param3=value3",
      "propertyOrder" : 12550,
      "items" : {
        "type" : "string"
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "array",
          "required" : true
        }
      }
    },
    "userMappingMode" : {
      "title" : "User Mapping Mode",
      "description" : "Specifies mechanism agent uses to determine user-ID. (property name:
com.sun.identity.agents.config.user.mapping.mode) <br>Hot-swap: Yes",
      "propertyOrder" : 600,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "cookieResetDomains" : {
      "title" : "Cookies Reset Domain Map",
      "description" : "Maps cookie names specified in Cookie Reset Name List to value
being the domain of this cookie to be used when a reset event occurs. (property name:
com.sun.identity.agents.config.cookie.reset.domain) <br>Hot-swap: Yes",
      "propertyOrder" : 4800,
```


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```
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "object",
          "required" : true
        }
      }
    },
    "loginContentFile" : {
      "title" : "Login Content File Name",
      "description" : "Complete path and name of custom login content file. (property name:
com.sun.identity.agents.config.login.content.file) <br>Hot-swap: Yes",
      "propertyOrder" : 3100,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "privilegedAttributeMappingEnabled" : {
      "title" : "Enable Privileged Attribute Mapping",
      "description" : "(Not used in Agent 5 onwards) <br>Enable a mapping from the
original value of an attribute to another value. To satisfy container-specific
restrictions on character set being used in certain configuration files. (property name:
com.sun.identity.agents.config.privileged.attribute.mapping.enable) <br>Hot-swap: Yes",
      "propertyOrder" : 9800,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "clientHostnameHeader" : {
      "title" : "Client Hostname Header",
```


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```
      "description" : "HTTP header name that holds the Hostname of the client. (property name:
com.sun.identity.agents.config.client.hostname.header) <br>Hot-swap: Yes",
      "propertyOrder" : 1100,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "fqdnCheck" : {
      "title" : "FQDN Check",
      "description" : "Enables checking of fqdn default value and fqdn map values. (property name:
com.sun.identity.agents.config.fqdn.check.enable) <br>Hot-swap: Yes",
      "propertyOrder" : 6400,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "useInternalLogin" : {
      "title" : "Use Internal Login",
      "description" : "Set to false if want to customize Login Content File instead of default
internal content provided. (property name: com.sun.identity.agents.config.login.use.internal)
<br>Hot-swap: Yes",
      "propertyOrder" : 3000,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "localeCountry" : {
      "title" : "Locale Country",
      "description" : "(property name: com.sun.identity.agents.config.locale.country) <br>Hot-swap:
No",
      "propertyOrder" : 1400,
      "type" : "object",
```


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```
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "cookieResetPaths" : {
      "title" : "Cookies Reset Path Map",
      "description" : "Maps cookie names specified in Cookie Reset Name List to value
being the path of this cookie to be used when a reset event occurs. (property name:
com.sun.identity.agents.config.cookie.reset.path) <br>Hot-swap: Yes",
      "propertyOrder" : 4900,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "object",
          "required" : true
        }
      }
    },
    "policyNotifications" : {
      "title" : "Enable Policy Notifications",
      "description" : "Enable Notifications for remote policy client. (property name:
com.sun.identity.agents.notification.enabled) <br>Hot-swap: No",
      "propertyOrder" : 11200,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "probeLoginUrl" : {
      "title" : "Login URL Probe",
      "description" : "Specifies if agent will check the availability of these urls before redirecting
to them. (property name: com.sun.identity.agents.config.login.url.probe.enabled) <br>Hot-swap: Yes",
      "propertyOrder" : 3900,
```


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```
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "serviceDataCacheTime" : {
      "title" : "Service Data Cache Time",
      "description" : "Cache update time in minutes for service configuration data. If set to '0' no
updates happen. (property name: com.sun.identity.sm.cacheTime) <br>Hot-swap: No",
      "propertyOrder" : 10800,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "integer",
          "required" : true
        }
      }
    },
    "userpassword" : {
      "title" : "Password",
      "description" : "",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "string",
      "format" : "password",
      "exampleValue" : ""
    },
    "fqdnDefault" : {
      "title" : "FQDN Default",
      "description" : "Fully qualified hostname that the users should use in order to access
resources. (property name: com.sun.identity.agents.config.fqdn.default) <br>Hot-swap: Yes",
      "propertyOrder" : 6500,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "headerAttributeDateFormat" : {
```


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```
      "title" : "Fetch Attribute Date Format",
      "description" : "Format of date attribute values to be used when the attribute is
being set as HTTP header. Format is based on java.text.SimpleDateFormat. (property name:
com.sun.identity.agents.config.attribute.date.format) <br>Hot-swap: Yes",
      "propertyOrder" : 8400,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "cdssoRedirectUri" : {
      "title" : "CDSSO Redirect URI",
      "description" : "An intermediate URI that is used by the Agent for processing CDSSO requests.
(property name: com.sun.identity.agents.config.cdsso.redirect.uri) <br>Hot-swap: Yes",
      "propertyOrder" : 5100,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "customVerificationHandlers" : {
      "title" : "Custom Verification Handler",
      "description" : "Application specific verification handler to validate the user credentials with
the local repository. (property name: com.sun.identity.agents.config.verification.handler) <br>Valid
key: the web application name. <br>Valid value: the verification handler class name. <br>Hot-swap:
Yes <br> Example: <br> To set verification handler for application BankApp: enter BankApp in Map Key
field, and enter verification handler class name BankVerificationHandler in Corresponding Map Value
field.",
      "propertyOrder" : 3400,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "object",
```


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```
          "required" : true
        }
      }
    },
    "localAuditLogRotation" : {
      "title" : "Rotate Local Audit Log",
      "description" : "Flag to indicate that audit log files should be rotated when reaching a certain
size. (property name: com.sun.identity.agents.config.local.log.rotate) <br>Hot-swap: Yes",
      "propertyOrder" : 1800,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "postDataCacheTtl" : {
      "title" : "PDP entry TTL",
      "description" : "This value tells how long a given POST entry should be stored
in the local cache (in milliseconds), default value is 300000. (property name:
com.sun.identity.agents.config.postdata.preserve.cache.entry.ttl)",
      "propertyOrder" : 13300,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "integer",
          "required" : true
        }
      }
    },
    "debugLevel" : {
      "title" : "Agent Debug Level",
      "description" : "Specifies type of agent debug messages to log. (property name:
com.iplanet.services.debug.level) <br>Hot-swap: Yes",
      "propertyOrder" : 10000,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
```


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```
   "profileAttributeFetchMode" : {
     "title" : "Profile Attribute Fetch Mode",
     "description" : "The mode of fetching profile attributes. (property name:
com.sun.identity.agents.config.profile.attribute.fetch.mode) <br>Hot-swap: Yes",
     "propertyOrder" : 8700,
     "type" : "object",
     "exampleValue" : "",
     "properties" : {
       "inherited" : {
         "type" : "boolean",
         "required" : true
       },
       "value" : {
         "type" : "string",
         "required" : true
       }
     }
   },
   "urlPolicyEnvJsessionParameters" : {
     "title" : "URL Policy Env jsession Parameters",
     "description" : "List of HTTP SESSION attributes whose names and values will be
set in the environment map for URL policy evaluation at OpenAM server. (property name:
com.sun.identity.agents.config.policy.env.jsession.param) <br>Hot-swap: Yes <br> Examples: <br> name
<br> phonenumber",
     "propertyOrder" : 12000,
     "items" : {
       "type" : "string"
     },
     "type" : "object",
     "exampleValue" : "",
     "properties" : {
       "inherited" : {
         "type" : "boolean",
         "required" : true
       },
       "value" : {
         "type" : "array",
         "required" : true
       }
     }
   },
   "webServiceProcessGetEnabled" : {
     "title" : "Web Service Process GET Enable",
     "description" : "Flag to indicates if the processing of HTTP GET requests for Web Service
endpoints is enabled. (property name: com.sun.identity.agents.config.webservice.process.get.enable)
<br>Hot-swap: Yes",
     "propertyOrder" : 2200,
     "type" : "object",
     "exampleValue" : "",
     "properties" : {
       "inherited" : {
         "type" : "boolean",
         "required" : true
       },
       "value" : {
         "type" : "boolean",
         "required" : true
       }
     }
```


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```
    },
    "loginUrlPrioritized" : {
      "title" : "Login URL Prioritized",
      "description" : "Specifies if failover sequence for Login URLs or CDSSO URLs
should be prioritized as defined in the OpenAM Login URL list. (property name:
com.sun.identity.agents.config.login.url.prioritized) <br>Hot-swap: Yes",
      "propertyOrder" : 3800,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "httpSessionBinding" : {
      "title" : "HTTP Session Binding",
      "description" : "If true will invalidate the http session when login has failed, user
has no SSO session, or principal user name does not match SSO user name. (property name:
com.sun.identity.agents.config.httpsession.binding) <br>Hot-swap: Yes",
      "propertyOrder" : 3500,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "policyEvaluationRealm" : {
      "title" : "Realm",
      "description" : "Which realm to start evaluating from. (property name:
org.forgerock.openam.agents.config.policy.evaluation.realm) <br>Hot-swap: Yes",
      "propertyOrder" : 5400,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "cookieAttributeMultiValueSeparator" : {
      "title" : "Cookie Separator Character",
```


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```
      "description" : "Character that will be used to separate multiple values
 of the same attribute when it is being set as a cookie. (property name:
 com.sun.identity.agents.config.attribute.cookie.separator) <br>Hot-swap: Yes",
      "propertyOrder" : 8300,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "gotoParameterName" : {
      "title" : "Goto Parameter Name",
      "description" : "Property used only when CDSSO is enabled. Default value should
 be changed only when the login URL has a landing page specified <br> Example :
 com.sun.identity.agents.config.cdsso.cdcservlet.url = http://host:port/opensso/cdcservlet?
goto=http://agent:port/landing.jsp <br> The parameter is used by the Agent to append the original
 request URL to this cdcserlet URL. This parameter is consumed by the landing page to redirect to
 the original URL. (property name: com.sun.identity.agents.config.redirect.param) <br>Hot-swap: Yes
 <br> Example: com.sun.identity.agents.config.redirect.param = goto2<br> The complete URL sent for
 authentication will be <br> http://host:port/opensso/cdcservlet?goto=http://agent:port/landing.jsp?
goto2=http://agent.port/original.jsp",
      "propertyOrder" : 3600,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "sessionAttributeFetchMode" : {
      "title" : "Session Attribute Fetch Mode",
      "description" : "The mode of fetching session attributes. (property name:
 com.sun.identity.agents.config.session.attribute.fetch.mode) <br>Hot-swap: Yes",
      "propertyOrder" : 8900,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
```


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```
   },
   "bypassPrincipalList" : {
     "title" : "Bypass Principal List",
     "description" : "List of principals that are bypassed by the Agent for authentication and search
purposes. (property name: com.sun.identity.agents.config.bypass.principal) <br>Hot-swap: Yes <br>
Examples: <br> guest <br> testuser",
     "propertyOrder" : 9300,
     "items" : {
       "type" : "string"
     },
     "type" : "object",
     "exampleValue" : "",
     "properties" : {
       "inherited" : {
         "type" : "boolean",
         "required" : true
       },
       "value" : {
         "type" : "array",
         "required" : true
       }
     }
   },
   "portCheckFile" : {
     "title" : "Port Check File",
     "description" : "Name or complete path of a file that has the necessary content needed to handle
requests that need port correction. (property name: com.sun.identity.agents.config.port.check.file)
<br>Hot-swap: Yes",
     "propertyOrder" : 7300,
     "type" : "object",
     "exampleValue" : "",
     "properties" : {
       "inherited" : {
         "type" : "boolean",
         "required" : true
       },
       "value" : {
         "type" : "string",
         "required" : true
       }
     }
   },
   "postDataPreservation" : {
     "title" : "Post Data Preservation enabled",
     "description" : "Post Data Preservation functionality basically stores any POST
data before redirecting the user to the login screen and after successful login the agent
will generate a page that autosubmits the same POST to the original URL. (property name:
com.sun.identity.agents.config.postdata.preserve.enable)",
     "propertyOrder" : 13100,
     "type" : "object",
     "exampleValue" : "",
     "properties" : {
       "inherited" : {
         "type" : "boolean",
         "required" : true
       },
       "value" : {
         "type" : "boolean",
         "required" : true
```


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```
        }
      }
    },
    "cookieResetEnabled" : {
      "title" : "Cookie Reset",
      "description" : "Agent resets cookies in the response before redirecting to authentication.
(property name: com.sun.identity.agents.config.cookie.reset.enable) <br>Hot-swap: Yes",
      "propertyOrder" : 4600,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "webSocketConnectionIntervalInMinutes" : {
      "title" : "Web Socket Connection Interval",
      "description" : "Interval in minutes by which agents reopen their web socket connection to
ensure a fair distribution of connections across OpenAM servers. (Agent 5 only).",
      "propertyOrder" : 12105,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "policyClientClockSkew" : {
      "title" : "Policy Client Clock Skew",
      "description" : "Time in seconds which is allowed to accommodate the time difference
between the OpenAM server machine and the remote policy client machine. (property name:
com.sun.identity.policy.client.clockSkew) <br>Hot-swap: No",
      "propertyOrder" : 11700,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "integer",
          "required" : true
        }
      }
    },
    "configurationReloadInterval" : {
```


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```
      "title" : "Configuration Reload Interval",
      "description" : "Interval in seconds between configuration reloads. (property name:
 com.sun.identity.agents.config.load.interval) <br>Hot-swap: Yes",
      "propertyOrder" : 1200,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "integer",
          "required" : true
        }
      }
    },
    "auditAccessType" : {
      "title" : "Audit Access Types",
      "description" : "Types of messages to log based on user URL access attempts. (property name:
 com.sun.identity.agents.config.audit.accesstype) <br>Hot-swap: Yes",
      "propertyOrder" : 1500,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    }
  }
}
```

1.75.1.2. delete

Usage:

```
am> delete J2eeAgents --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.75.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

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Usage:

```
am> action J2eeAgents --realm Realm --actionName getAllTypes
```

1.75.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action J2eeAgents --realm Realm --actionName getCreatableTypes
```

1.75.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action J2eeAgents --realm Realm --actionName nextdescendents
```

1.75.1.6. query

Querying the agents of a specific type

Usage:

```
am> query J2eeAgents --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.75.1.7. read

Usage:

```
am> read J2eeAgents --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.75.1.8. update

Usage:

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```
am> update J2eeAgents --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "postDataPreserveCacheEntryMaxTotalSizeMb" : {
      "title" : "PDP Maximum Cache Size",
      "description" : "Maximum size of the PDP cache, in megabytes (Property name:
 org.forgerock.openam.agents.config.postdata.preserve.cache.entry.max.total.size.mb). (Agent 5 only)",
      "propertyOrder" : 13600,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "logoutProbeTimeout" : {
      "title" : "Logout URL Probe Timeout",
      "description" : "The connect timeout value in milliseconds, if also Logout URL Probe is set to
 true. (property name: com.sun.identity.agents.config.logout.url.probe.timeout) <br>Hot-swap: Yes",
      "propertyOrder" : 12700,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "integer",
          "required" : true
        }
      }
    },
    "alternativeAgentProtocol" : {
      "title" : "Alternative Agent Protocol",
      "description" : "Protocol being used (http/https) by the client browsers to communicate with
 the Agent protected server if different from the actual protocol used by the server. (property name:
 com.sun.identity.agents.config.agent.protocol) <br>Hot-swap: Yes",
      "propertyOrder" : 4300,
      "type" : "object",
```


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```
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "serviceDataCacheNotifications" : {
      "title" : "Enable Notification of Service Data Caches",
      "description" : "Enable the notifications for service management caches. (property name:
com.sun.identity.sm.notification.enabled) <br>Hot-swap: No",
      "propertyOrder" : 10700,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "repositoryLocation" : {
      "title" : "Location of Agent Configuration Repository",
      "description" : "Indicates agent's configuration located either on agent's host or centrally on
OpenAM server.",
      "propertyOrder" : 400,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "legacyUserAgentList" : {
      "title" : "Legacy User Agent List",
      "description" : "List of user agent header values that identify legacy
browsers. Entries in this list can have wild card character '*'. (property name:
com.sun.identity.agents.config.legacy.user.agent) <br>Hot-swap: Yes",
      "propertyOrder" : 6800,
      "items" : {
        "type" : "string"
      },
      "type" : "object",
      "exampleValue" : "",
```


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```
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "array",
          "required" : true
        }
      }
    },
    "cdssoUrls" : {
      "title" : "CDSSO Servlet URL",
      "description" : "List of URLs of the available CDSSO controllers that may be used by the Agent
 for CDSSO processing. (property name: com.sun.identity.agents.config.cdsso.cdcservlet.url) <br>Hot-
swap: Yes <br> Example: <br> http://host:port/opensso/cdcservlet",
      "propertyOrder" : 5200,
      "items" : {
        "type" : "string"
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "array",
          "required" : true
        }
      }
    },
    "webServiceEnabled" : {
      "title" : "Web Service Enable",
      "description" : "Flag specifies if Web Service processing is enabled. (property name:
 com.sun.identity.agents.config.webservice.enable) <br>Hot-swap: Yes",
      "propertyOrder" : 2000,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "logoutEntryUri" : {
      "title" : "Logout Entry URI",
      "description" : "An application-specific Map that identifies a URI to be used as an entry point
 after successful logout and subsequent successful authentication if applicable. (property name:
 com.sun.identity.agents.config.logout.entry.uri) <br>Valid key: the web application name. <br>Valid
 value: the logout entry URI. <br>For this property, a global value can be set to apply to all the
 applications that don't have their own specific logout entry URI.  <br>Hot-swap: Yes <br> Examples:
 <br>To set a global application logout entry URI: leave Map Key field empty, and enter the global
```


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```
 application logout entry URI /welcome.html in Corresponding Map Value field. <br> To set the logout
 entry URI for application BankApp: enter BankApp in Map Key field, and enter the logout entry URI /
BankApp/welcome.html in Corresponding Map Value field.",
      "propertyOrder" : 6300,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "object",
          "required" : true
        }
      }
    },
    "useRedirectForCompositeAdvice" : {
      "title" : "Use HTTP-Redirect for composite advice",
      "description" : "Configure remote policy client to use HTTP-redirect instead of HTTP-POST
 for composite advices. (property name: com.sun.identity.agents.config.policy.advice.use.redirect)
 <br>Hot-swap: Yes",
      "propertyOrder" : 13000,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "defaultPrivilegedAttributes" : {
      "title" : "Default Privileged Attribute",
      "description" : "(Not used in Agent 5 onwards) <br>List of privileged attributes
 that will be granted to all users who have a valid OpenAM session. (property name:
 com.sun.identity.agents.config.default.privileged.attribute) <br>Hot-swap: Yes <br> Example: <br>
 AUTHENTICATED_USERS",
      "propertyOrder" : 9400,
      "items" : {
        "type" : "string"
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
```


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```
          "type" : "array",
          "required" : true
        }
      }
    },
    "cookieAttributeUrlEncoded" : {
      "title" : "Attribute Cookie Encode",
      "description" : "Indicates if the value of the attribute should be URL encoded before being set
as a cookie. (property name: com.sun.identity.agents.config.attribute.cookie.encode) <br>Hot-swap:
Yes",
      "propertyOrder" : 8500,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "localeLanguage" : {
      "title" : "Locale Language",
      "description" : "(property name: com.sun.identity.agents.config.locale.language) <br>Hot-swap:
No",
      "propertyOrder" : 1300,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "webServiceAuthenticator" : {
      "title" : "Web Service Authenticator",
      "description" : "An implementation class of interface
com.sun.identity.agents.filter.IWebServiceAuthenticator that can be used to authenticate web-service
requests. (property name: com.sun.identity.agents.config.webservice.authenticator) <br>Hot-swap:
Yes",
      "propertyOrder" : 2300,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
```


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```
        }
      }
    },
    "agentConfigChangeNotificationsEnabled" : {
      "title" : "Agent Configuration Change Notification",
      "description" : "Enable agent to receive notification messages from OpenAM server for
 configuration changes. (property name: com.sun.identity.agents.config.change.notification.enable)
 <br>Hot-swap: Yes",
      "propertyOrder" : 12100,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "cdssoClockSkew" : {
      "title" : "CDSSO Clock Skew",
      "description" : "Time in seconds to be used by the Agent to determine the validity of the CDSSO
 AuthnResponse assertion. (property name: com.sun.identity.agents.config.cdsso.clock.skew) <br>Hot-
swap: Yes",
      "propertyOrder" : 5300,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "integer",
          "required" : true
        }
      }
    },
    "amLogoutUrl" : {
      "title" : "OpenAM Logout URL",
      "description" : "OpenAM logout page URL. (property name:
 com.sun.identity.agents.config.logout.url) <br>Hot-swap: Yes <br> Example: <br> http://host:port/
opensso/UI/Logout",
      "propertyOrder" : 12400,
      "items" : {
        "type" : "string"
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "array",
```


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```
          "required" : true
        }
      }
    },
    "cookieResetNames" : {
      "title" : "Cookies Reset Name List",
      "description" : "Cookie names that will be reset by the Agent if Cookie Reset is enabled.
(property name: com.sun.identity.agents.config.cdsso.cookie.reset.name) <br>Hot-swap: Yes",
      "propertyOrder" : 4700,
      "items" : {
        "type" : "string"
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "array",
          "required" : true
        }
      }
    },
    "amCookieName" : {
      "title" : "Cookie Name",
      "description" : "Name of the SSO Token cookie used between the OpenAM server and the Agent.
(property name: com.iplanet.am.cookie.name) <br>Hot-swap: No",
      "propertyOrder" : 10100,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "notEnforcedUrisRefreshSessionIdleTime" : {
      "title" : "Refresh Session Idle Time",
      "description" : "Indicates if opensso session idle time should be refreshed or reset for not
enforced URIs. (property name: com.sun.identity.agents.config.notenforced.refresh.session.idletime)
<br>Hot-swap: Yes",
      "propertyOrder" : 8600,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
```


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```
        }
      }
    },
    "legacyUserAgentSupport" : {
      "title" : "Legacy User Agent Support Enable",
      "description" : "Enables support for legacy user agents (browser). (property name:
com.sun.identity.agents.config.legacy.support.enable) <br>Hot-swap: Yes",
      "propertyOrder" : 6700,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "policyClientPollingInterval" : {
      "title" : "Policy Client Polling Interval",
      "description" : "Duration in minutes after which the cached entries are refreshed by remote
policy client. (property name: com.sun.identity.agents.polling.interval) <br>Hot-swap: No",
      "propertyOrder" : 11300,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "integer",
          "required" : true
        }
      }
    },
    "shortenedPrivilegeAttributeValues" : {
      "title" : "Shortened privilege attribute values",
      "description" : "When using privileged attribute type, this setting will ensure that the
membership details will be stored in a shortened format and not in the default universal ID
format.<br><br>By default the agent maps identity memberships using their universal IDs (e.g.
id=admin,ou=group,dc=openam,dc=forgerock,dc=org), however this may not be always acceptable. Using
this setting the identity membership details will be mapped in a shortened format, only including the
group's/role's name (e.g. admin). Be aware that in case there are both roles and groups in the data
store, this setting will make them indistinguishable from each other, i.e. if there is a group and a
role with the same name it will not be possible to differentiate them.",
      "propertyOrder" : 13600,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
```


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```
          "required" : true
        }
      }
    },
    "cdssoDomainList" : {
      "title" : "CDSSO Domain List",
      "description" : "Domains for which cookies have to be set in a CDSSO scenario. (property name:
com.sun.identity.agents.config.cdsso.domain) <br>Hot-swap: Yes <br> Example: <br> .sun.com",
      "propertyOrder" : 5800,
      "items" : {
        "type" : "string"
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "array",
          "required" : true
        }
      }
    },
    "clientPollingPeriod" : {
      "title" : "Client Polling Period",
      "description" : "(Not used in Agent 5 onwards) <br>Time in seconds after which the session
client will request update of cached session information from the server. (property name:
com.iplanet.am.session.client.polling.period) <br>Hot-swap: No",
      "propertyOrder" : 10300,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "integer",
          "required" : true
        }
      }
    },
    "loginProbeTimeout" : {
      "title" : "Login URL Probe Timeout",
      "description" : "The connect timeout value in milliseconds, if also Login URL Probe is set to
true. (property name: com.sun.identity.agents.config.login.url.probe.timeout) <br>Hot-swap: Yes",
      "propertyOrder" : 4000,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "integer",
          "required" : true
```


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```
        }
      }
    },
    "policyClientCacheMode" : {
      "title" : "Policy Client Cache Mode",
      "description" : "Mode of caching to be used by remote policy client. (property name:
com.sun.identity.policy.client.cacheMode) <br>Hot-swap: No",
      "propertyOrder" : 11400,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "redirectAttemptLimit" : {
      "title" : "Redirect Attempt Limit",
      "description" : "Number of successive single point redirects that a user can make using a
single browser session which will trigger the blocking of the user request. Set to 0 to disable this
feature. (property name: com.sun.identity.agents.config.redirect.attempt.limit) <br>Hot-swap: Yes",
      "propertyOrder" : 7100,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "integer",
          "required" : true
        }
      }
    },
    "alternativeAgentHostname" : {
      "title" : "Alternative Agent Host Name",
      "description" : "Host name identifying the Agent protected server to the client browsers if
different from the actual host name. (property name: com.sun.identity.agents.config.agent.host)
<br>Hot-swap: Yes",
      "propertyOrder" : 4100,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
```


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```
   "loginAttemptLimit" : {
     "title" : "Login Attempt Limit",
     "description" : "Limit of failed login attempts for a user's single browser session until
triggering the blocking of the user request. Value of 0 disables this feature. (property name:
com.sun.identity.agents.config.login.attempt.limit) <br>Hot-swap: Yes",
     "propertyOrder" : 4400,
     "type" : "object",
     "exampleValue" : "",
     "properties" : {
       "inherited" : {
         "type" : "boolean",
         "required" : true
       },
       "value" : {
         "type" : "integer",
         "required" : true
       }
     }
   },
   "status" : {
     "title" : "Status",
     "description" : "Status of the agent configuration.",
     "propertyOrder" : 200,
     "type" : "object",
     "exampleValue" : "",
     "properties" : {
       "inherited" : {
         "type" : "boolean",
         "required" : true
       },
       "value" : {
         "type" : "string",
         "required" : true
       }
     }
   },
   "notEnforcedIpsCacheEnabled" : {
     "title" : "Not Enforced IP Cache Flag",
     "description" : "Enable caching of not-enforced IP list evaluation results. (property name:
com.sun.identity.agents.config.notenforced.ip.cache.enable) <br>Hot-swap: Yes",
     "propertyOrder" : 8100,
     "type" : "object",
     "exampleValue" : "",
     "properties" : {
       "inherited" : {
         "type" : "boolean",
         "required" : true
       },
       "value" : {
         "type" : "boolean",
         "required" : true
       }
     }
   },
   "auditLogLocation" : {
     "title" : "Audit Log Location",
     "description" : "Specifies where audit messages should be logged. (property name:
com.sun.identity.agents.config.log.disposition) <br>Hot-swap: Yes",
     "propertyOrder" : 1600,
```


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```
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "notEnforcedIpsCacheSize" : {
      "title" : "Not Enforced IP Cache Size",
      "description" : "Size of the cache to be used if Not Enforced IP Cache Flag is enabled.
(property name: com.sun.identity.agents.config.notenforced.ip.cache.size) <br>Hot-swap: Yes",
      "propertyOrder" : 8200,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "integer",
          "required" : true
        }
      }
    },
    "webServiceAuthorizationErrorContentFile" : {
      "title" : "Web Service Authorization Error Content File",
      "description" : "The name of file that contains content used by the
Agent to generate an authorization error fault for clients. (property name:
com.sun.identity.agents.config.webservice.autherror.content) <br>Hot-swap: Yes",
      "propertyOrder" : 2600,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "ignorePathInfo" : {
      "title" : "Ignore Path Info in Request URL",
      "description" : "The path info will be stripped from the request URL while doing Not
Enforced List check and url policy evaluation if the value is set to true. (property name:
com.sun.identity.agents.config.ignore.path.info) <br>Hot-swap: Yes",
      "propertyOrder" : 18600,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
```


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```
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "userPrincipalFlag" : {
      "title" : "User Principal Flag",
      "description" : "Use principal instead of just the user-ID for authenticating the user.
(property name: com.sun.identity.agents.config.user.principal) <br>Hot-swap: Yes",
      "propertyOrder" : 800,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "authServiceProtocol" : {
      "title" : "OpenAM Authentication Service Protocol",
      "description" : "Protocol to be used by the OpenAM authentication service. (property name:
com.iplanet.am.server.protocol) <br>Hot-swap: No",
      "propertyOrder" : 10900,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "postDataPreserveCacheEntryMaxEntries" : {
      "title" : "PDP Maximum Number of Cache Entries",
      "description" : "Maximum number of entries to hold in the PDP cache (Property name:
org.forgerock.openam.agents.config.postdata.preserve.cache.entry.max.entries) (Agent 5 only).",
      "propertyOrder" : 13550,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
```


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```
          "type" : "string",
          "required" : true
        }
      }
    },
    "notEnforcedRuleCompoundSeparator" : {
      "title" : "Not Enforced Compound Rule Separator",
      "description" : "Specifies a separator for not enforced compound rules (Agent 5 only). The
format for compound rules requires a list of IP rules, a separator (by default the | character),
and a list of URI rules. For example, GET 192.168.1.1-192.168.4.3 | /images/* Configure a
different separator (for example, &&) when working with the REGEX keyword to avoid invalid regular
expressions.",
      "propertyOrder" : 7450,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "logoutUrlPrioritized" : {
      "title" : "Logout URL Prioritized",
      "description" : "Specifies if failover sequence for Logout URLs should be prioritized as defined
in the OpenAM Login URL list. (property name: com.sun.identity.agents.config.logout.url.prioritized)
<br>Hot-swap: Yes",
      "propertyOrder" : 12500,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "notEnforcedUrisCacheSize" : {
      "title" : "Not Enforced URIs Cache Size",
      "description" : "Size of the cache to be used if caching of not enforced URI list evaluation
results is enabled. (property name: com.sun.identity.agents.config.notenforced.uri.cache.size)
<br>Hot-swap: Yes",
      "propertyOrder" : 7800,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
```


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```
          "type" : "integer",
          "required" : true
        }
      }
    },
    "notEnforcedIps" : {
      "title" : "Not Enforced Client IP List",
      "description" : "No authentication and authorization protection from agent are
required for the requests coming from these client IP addresses. (property name:
com.sun.identity.agents.config.notenforced.ip) <br>Hot-swap: Yes <br> Examples: <br> 192.18.145.*
<br> 192.18.146.123",
      "propertyOrder" : 7900,
      "items" : {
        "type" : "string"
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "array",
          "required" : true
        }
      }
    },
    "continuousSecurityCookies" : {
      "title" : "Continuous Security Cookies",
      "description" : "The name of the cookies to be sent as part of the payload during policy
evaluation, which can be accessed via the 'environment' variable in a policy script. The 'key' is
the name of the cookie to be sent, and the 'value' is the name which it will appear as in the policy
evaluation script. It is possible to map multiple cookies to the same name (they will simply appear
as an array in the evaluation script). If the cookie doesn't exist, then the empty string will be
sent.",
      "propertyOrder" : 3210,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "object",
          "required" : true
        }
      }
    },
    "privilegedAttributesToLowerCase" : {
      "title" : "Privileged Attributes To Lower Case",
      "description" : "(Not used in Agent 5 onwards) <br>Maps the privileged
attribute types to whether they should be converted to lowercase. (property name:
```


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```
 com.sun.identity.agents.config.privileged.attribute.tolowercase) <br> Valid Keys: the privileged
 attribute types, such as Group, Role. <br>Valid value: true, false. <br>Hot-swap: Yes  <br> Example:
 <br> Enter Group in Map Key field, and enter false in Corresponding Map Value field.",
      "propertyOrder" : 9600,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "object",
          "required" : true
        }
      }
    },
    "portCheckSetting" : {
      "title" : "Port Check Setting",
      "description" : "Map of port versus protocol entries with the key being the listening port
 number and value being the listening protocol to be used by the Agent to identify requests with
 invalid port numbers. (property name: com.sun.identity.agents.config.port.check.setting) <br>Hot-
swap: Yes <br> Example: <br> To map port 80 to protocol http: enter 80 in Map Key field, and enter
 http in Corresponding Map Value field.",
      "propertyOrder" : 7400,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "object",
          "required" : true
        }
      }
    },
    "clientIpHeader" : {
      "title" : "Client IP Address Header",
      "description" : "HTTP header name that holds the IP address of the client. (property name:
 com.sun.identity.agents.config.client.ip.header) <br>Hot-swap: Yes",
      "propertyOrder" : 1000,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
```


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```
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "customAuthenticationHandlers" : {
      "title" : "Custom Authentication Handler",
      "description" : "Application specific authentication handler to authenticate the logged on user
with the application server. (property name: com.sun.identity.agents.config.auth.handler)  <br>Valid
key: the web application name. <br>Valid value: the authentication handler class name. <br>Hot-swap:
Yes  <br>Example: <br>To set authentication handler for application BankApp: enter BankApp in Map
Key field, and enter authentication handler class name BankAuthHandler in Corresponding Map Value
field.",
      "propertyOrder" : 3200,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "object",
          "required" : true
        }
      }
    },
    "possibleXssCodeElements" : {
      "title" : "Possible XSS code elements",
      "description" : "If one of these strings occurs in the request, the client is redirected to an
error page. (property name: com.sun.identity.agents.config.xss.code.elements) <br>Hot-swap: Yes",
      "propertyOrder" : 12800,
      "items" : {
        "type" : "string"
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "array",
          "required" : true
        }
      }
    },
    "profileAttributeMap" : {
      "title" : "Profile Attribute Mapping",
      "description" : "Maps the profile attributes to be populated under
specific names for the currently authenticated user. (property name:
```


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```
 com.sun.identity.agents.config.profile.attribute.mapping) <br>Hot-swap: Yes <br> Example: <br> To
 populate the value of profile attribute cn under name CUSTOM-Common-Name: enter cn in Map Key field,
 and enter CUSTOM-Common-Name in Corresponding Map Value field. <br> To populate the value of profile
 attribute mail under name CUSTOM-Email: enter mail in Map Key field, and enter CUSTOM-Email in
 Corresponding Map Value field.",
      "propertyOrder" : 8800,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "object",
          "required" : true
        }
      }
    },
    "fqdnMapping" : {
      "title" : "FQDN Virtual Host Map",
      "description" : "Maps virtual, invalid, or partial hostnames, and IP addresses to the FQDN to
 access protected resources. (property name: com.sun.identity.agents.config.fqdn.mapping) <br>Hot-
swap: Yes <br> Examples: <br>  To map the partial hostname myserver to myserver.mydomain.com: enter
 myserver in the Map Key field and myserver.mydomain.com in the Corresponding Map Value field. To map
 a virtual server rst.hostname.com that points to the actual server abc.hostname.com: enter valid1 in
 the Map Key field and rst.hostname.com in the Corresponding Map Value field.",
      "propertyOrder" : 6600,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "object",
          "required" : true
        }
      }
    },
    "customLogoutHandlers" : {
      "title" : "Custom Logout Handler",
      "description" : "Application specific logout handler to log out a user with the application
 server. (property name: com.sun.identity.agents.config.logout.handler)  <br>Valid key: the web
 application name. <br>Valid value: the logout handler class name. <br>Hot-swap: Yes <br> Example:
 <br>To set logout handler for application BankApp: enter BankApp in Map Key field, and enter logout
 handler class name BankLogoutHandler in Corresponding Map Value field.",
      "propertyOrder" : 3300,
```


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```
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "object",
          "required" : true
        }
      }
    },
    "applicationLogoutHandlers" : {
      "title" : "Application Logout Handler",
      "description" : "An application-specific Map that identifies a handler to be used for logout
processing. (property name: com.sun.identity.agents.config.logout.application.handler) <br>Valid
key: the web application name. <br>Valid value: the application logout handler class name. <br>For
this property, a global value can be set to apply to all the applications that don't have their own
specific logout handler. <br>Hot-swap: Yes <br> Examples:  <br>To set a global application logout
handler: leave Map Key field empty, and enter the global application logout handler class name
GlobalApplicationLogoutHandler in Corresponding Map Value field. <br>To set the logout handler for
application BankApp: enter BankApp in Map Key field, and enter the application logout handler class
name BankAppLogoutHandler in Corresponding Map Value field.",
      "propertyOrder" : 5900,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "object",
          "required" : true
        }
      }
    },
    "postDataStickySessionMode" : {
      "title" : "PDP Stickysession mode",
      "description" : "The PDP mechanism needs sticky loadbalancing, the URL mode will
append a querystring, while the Cookie mode will create a cookie. (property name:
com.sun.identity.agents.config.postdata.preserve.stickysession.mode)",
      "propertyOrder" : 13400,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
```


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```
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "userTokenName" : {
      "title" : "User Token Name",
      "description" : "Session property name for user-ID of the authenticated user in session.
(property name: com.sun.identity.agents.config.user.token) <br>Hot-swap: Yes",
      "propertyOrder" : 900,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "cdssoRootUrl" : {
      "title" : "Agent Root URL for CDSSO",
      "description" : "The agent root URL for CDSSO. The valid value is in the following format:
<br>protocol://hostname:port/<br> The protocol represents the protocol used, such as http or https.
The hostname represents the host name of the machine on which the agent resides. The port represents
the port number on which the agent is installed. The slash following the port number is required.",
      "propertyOrder" : 22700,
      "items" : {
        "type" : "string"
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "array",
          "required" : true
        }
      }
    },
    "jbossWebAuthenticationAvailable" : {
      "title" : "WebAuthentication Available",
      "description" : "(Not used in Agent 5 onwards) <br>Enable agent to make programmatic
authentication with the JBoss web container using WebAuthentication feature. (property name:
com.sun.identity.agents.config.jboss.webauth.available) <br>Hot-swap: Yes",
      "propertyOrder" : 12300,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
```


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```
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "resourceAccessDeniedUri" : {
      "title" : "Resource Access Denied URI",
      "description" : "An application-specific Map that identifies a URI of the customized access
denied page. (property name: com.sun.identity.agents.config.access.denied.uri) <br>Valid key: the
web application name. <br>Valid value: the customized application access denied page URI. <br>For
this property, a global value can be set to apply to all the applications that don't have their own
specific access denied page. <br>Hot-swap: Yes <br> Examples: <br>To set a global access denied page:
leave Map Key field empty, and enter the global access denied page URI /sample/accessdenied.html in
Corresponding Map Value field. <br> To set the access denied page URI for application BankApp: enter
BankApp in Map Key field, and enter the application access denied page URI /BankApp/accessdenied.html
in Corresponding Map Value field.",
      "propertyOrder" : 2700,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "object",
          "required" : true
        }
      }
    },
    "invertNotEnforcedUris" : {
      "title" : "Invert Not Enforced URIs",
      "description" : "Inverts protection of  URIs specified in Not Enforced URIs list. When set
to true, it indicates that the URIs specified should be enforced and all other URIs should be
not enforced by the Agent. (property name: com.sun.identity.agents.config.notenforced.uri.invert)
<br>Hot-swap: Yes",
      "propertyOrder" : 7600,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
```


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```
    "notEnforcedUrisCacheEnabled" : {
      "title" : "Not Enforced URIs Cache Enabled",
      "description" : "Enables the caching of the Not Enforced URIs list evaluation results. (property
 name: com.sun.identity.agents.config.notenforced.uri.cache.enable) <br>Hot-swap: Yes",
      "propertyOrder" : 7700,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "notEnforcedUris" : {
      "title" : "Not Enforced URIs",
      "description" : "List of URIs for which protection is not enforced by the Agent. (property
 name: com.sun.identity.agents.config.notenforced.uri) <br>Hot-swap: Yes <br> Examples: <br> /BankApp/
public/* <br> /BankApp/images/*",
      "propertyOrder" : 7500,
      "items" : {
        "type" : "string"
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "array",
          "required" : true
        }
      }
    },
    "loginFormUri" : {
      "title" : "Login Form URI",
      "description" : "List of absolute URIs corresponding to an application's web.xml form-login-page
 element. (property name: com.sun.identity.agents.config.login.form) <br>Hot-swap: Yes <br> Example:
 <br> /BankApp/jsp/login.jsp",
      "propertyOrder" : 2800,
      "items" : {
        "type" : "string"
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "array",
          "required" : true
```


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```
        }
      }
    },
    "logoutIntrospection" : {
      "title" : "Logout Introspect Enabled",
      "description" : "Allows the Agent to search HTTP request body to locate logout parameter.
 (property name: com.sun.identity.agents.config.logout.introspect.enabled) <br>Hot-swap: Yes",
      "propertyOrder" : 6200,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "postDataStickySessionKeyValue" : {
      "title" : "PDP Stickysession key-value",
      "description" : "The provided key-value pair will be used for adding to
 the URL or creating the cookie. <br>Example: <br>Set 'lb=server1' to append to
 the querystring or to have 'lb' cookie with 'server1' value. (property name:
 com.sun.identity.agents.config.postdata.preserve.stickysession.value)",
      "propertyOrder" : 13500,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "loginErrorUri" : {
      "title" : "Login Error URI",
      "description" : "List of absolute URIs corresponding to an application's web.xml form-error-
page element. (property name: com.sun.identity.agents.config.login.error.uri) <br>Hot-swap: Yes <br>
 Example: <br> /BankApp/jsp/error.jsp",
      "propertyOrder" : 2900,
      "items" : {
        "type" : "string"
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "array",
```


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```
          "required" : true
        }
      }
    },
    "userDataCacheNotifications" : {
      "title" : "Enable Notification of User Data Caches",
      "description" : "Enable notifications for amsdk and IdRepo Caches. (property name:
com.sun.identity.idm.remote.notification.enabled) <br>Hot-swap: No",
      "propertyOrder" : 10500,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "agentNotificationUrl" : {
      "title" : "Agent Notification URL",
      "description" : "URL used by agent to register notification listeners. (property name:
com.sun.identity.client.notification.url) <br>Hot-swap: No",
      "propertyOrder" : 300,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "policyClientResourceComparators" : {
      "title" : "Policy Client Resource Comparators",
      "description" : "Resource Comparators to be used for different service names. (property name:
com.sun.identity.policy.client.resourceComparators) <br>Hot-swap: No",
      "propertyOrder" : 11600,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "authServiceHost" : {
```


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```
      "title" : "OpenAM Authentication Service Host Name",
      "description" : "Host name to be used by the OpenAM authentication service. (property name:
com.iplanet.am.server.host) <br>Hot-swap: No",
      "propertyOrder" : 11000,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "webServiceInternalErrorContentFile" : {
      "title" : "Web Service Internal Error Content File",
      "description" : "The name of file that contains content used by the
Agent to generate an internal error fault for clients. (property name:
com.sun.identity.agents.config.webservice.internalerror.content) <br>Hot-swap: Yes",
      "propertyOrder" : 2500,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "authServicePort" : {
      "title" : "OpenAM Authentication Service Port",
      "description" : "Port to be used by the OpenAM authentication service. (property name:
com.iplanet.am.server.port) <br>Hot-swap: No",
      "propertyOrder" : 11100,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "integer",
          "required" : true
        }
      }
    },
    "cdsso" : {
      "title" : "Cross Domain SSO",
      "description" : "Enables Cross Domain Single SignOn. (property name:
com.sun.identity.agents.config.cdsso.enable) <br>Hot-swap: Yes",
      "propertyOrder" : 5000,
```


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```
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "remoteLogFilename" : {
      "title" : "Remote Log File Name",
      "description" : "Name of file stored on OpenAM server that contains agent audit messages.
(property name: com.sun.identity.agents.config.remote.logfile) <br>Hot-swap: Yes",
      "propertyOrder" : 1700,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "privilegedSessionAttribute" : {
      "title" : "Privileged Session Attribute",
      "description" : "(Not used in Agent 5 onwards) <br>List of session property
names which hold privileged attributes for the authenticated user. (property name:
com.sun.identity.agents.config.privileged.session.attribute) <br>Hot-swap: Yes <br> Example: <br>
UserToken",
      "propertyOrder" : 9700,
      "items" : {
        "type" : "string"
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "array",
          "required" : true
        }
      }
    },
    "applicationLogoutUris" : {
      "title" : "Application Logout URI",
      "description" : "An application-specific Map that identifies a request URI which indicates
a logout event. (property name: com.sun.identity.agents.config.logout.uri) <br>Valid key: the web
application name. <br>Valid value: the application logout URI. <br>For this property, a global value
```


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```
 can be set to apply to all the applications that don't have their own specific logout URI. <br>Hot-
swap: Yes <br> Examples: <br>To set a global application logout URI: leave Map Key field empty, and
 enter the global application logout URI /logout.jsp in Corresponding Map Value field. <br> To set the
 logout URI for application BankApp: enter BankApp in Map Key field, and enter the application logout
 URI /BankApp/logout.jsp in Corresponding Map Value field.",
      "propertyOrder" : 6000,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "object",
          "required" : true
        }
      }
    },
    "customResponseHeader" : {
      "title" : "Custom Response Header",
      "description" : "Map specifies the custom headers that are set by the Agent on the client
 browser. The key is the header name and the value represents the header value. (property name:
 com.sun.identity.agents.config.response.header) <br>Hot-swap: Yes <br> Example: <br>  To set the
 custom header Cache-Control to value no-cache: enter Cache-Control in Map Key field, and enter no-
cache in Corresponding Map Value field.",
      "propertyOrder" : 7000,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "object",
          "required" : true
        }
      }
    },
    "policyEvaluationApplication" : {
      "title" : "Application",
      "description" : "Which application contains the policies to evaluate with. (property name:
 org.forgerock.openam.agents.config.policy.evaluation.application) <br>Hot-swap: Yes",
      "propertyOrder" : 5500,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
```


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```
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "ssoCacheEnabled" : {
      "title" : "SSO Cache Enable",
      "description" : "Specifies if the SSO Cache is active for the agent.
Cache is used through public APIs exposed by the agent SDK. (property name:
com.sun.identity.agents.config.amsso.cache.enable) <br>Hot-swap: Yes",
      "propertyOrder" : 4500,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "sessionAttributeMap" : {
      "title" : "Session Attribute Mapping",
      "description" : "Maps the session attributes to be populated under
specific names for the currently authenticated user. (property name:
com.sun.identity.agents.config.session.attribute.mapping) <br>Hot-swap: Yes  <br> Example: <br>  To
populate the value of session attribute UserToken under name CUSTOM-userid: enter UserToken in Map
Key field, and enter CUSTOM-userid in Corresponding Map Value field.",
      "propertyOrder" : 9000,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "object",
          "required" : true
        }
      }
    },
    "userDataCachePollingTime" : {
      "title" : "User Data Cache Polling Time",
      "description" : "Cache update time in minutes for user management data. If set to '0' no updates
happen. (property name: com.iplanet.am.sdk.remote.pollingTime) <br>Hot-swap: No",
      "propertyOrder" : 10600,
```


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```
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "integer",
          "required" : true
        }
      }
    },
    "encryptionProvider" : {
      "title" : "Encryption Provider",
      "description" : "Specifies the encryption provider implementation to be used by the Agent.
(property name: com.iplanet.security.encryptor) <br>Hot-swap: No",
      "propertyOrder" : 10400,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "filterMode" : {
      "title" : "Agent Filter Mode",
      "description" : "Specifies the mode of operation of the Filter. (property name:
com.sun.identity.agents.config.filter.mode) <br>Valid key: the web application name. <br>Valid
values: ALL, J2EE_POLICY (Not used in Agent 5 onwards), URL_POLICY, SSO_ONLY, NONE <br>For this
property, a global value can be set to apply to all the applications that don't have their own
specific filter mode. <br>Hot-swap: No <br>Examples: <br>To set ALL as the global filter mode:
leave Map Key field empty, and enter ALL in Corresponding Map Value field. <br>To set URL_POLICY
as the filter mode for application BankApp: enter BankApp in Map Key field, and enter URL_POLICY in
Corresponding Map Value field.",
      "propertyOrder" : 500,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "object",
          "required" : true
        }
      }
```


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```
    },
    "policyActionBooleanValues" : {
      "title" : "Policy Client Boolean Action Values",
      "description" : "Boolean action values for policy action names. (property name:
 com.sun.identity.policy.client.booleanActionValues) <br>Hot-swap: No",
      "propertyOrder" : 11500,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "amLoginUrl" : {
      "title" : "OpenAM Login URL",
      "description" : "OpenAM login page URL. (property name:
 com.sun.identity.agents.config.login.url) <br>Hot-swap: Yes <br> Example: <br> http://host:port/
opensso/UI/Login",
      "propertyOrder" : 3700,
      "items" : {
        "type" : "string"
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "array",
          "required" : true
        }
      }
    },
    "urlPolicyEnvGetParameters" : {
      "title" : "URL Policy Env GET Parameters",
      "description" : "List of HTTP GET request parameters whose names and values will be
 set in the environment map for URL policy evaluation at OpenAM server. (property name:
 com.sun.identity.agents.config.policy.env.get.param) <br>Hot-swap: Yes <br> Examples: <br> name <br>
 phonenumber",
      "propertyOrder" : 11800,
      "items" : {
        "type" : "string"
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
```


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```
          "type" : "array",
          "required" : true
        }
      }
    },
    "customProperties" : {
      "title" : "Custom Properties",
      "description" : "Additional properties that allow users to augment the set of properties
 supported by agent. (property name: com.sun.identity.agents.config.freeformproperties) <br>Hot-
swap: Yes <br> Examples: <br> customproperty=custom-value1 <br> customlist[0]=customlist-
value-0 <br> customlist[1]=customlist-value-1 <br> custommap[key1]=custommap-value-1 <br>
 custommap[key2]=custommap-value-2",
      "propertyOrder" : 12200,
      "items" : {
        "type" : "string"
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "array",
          "required" : true
        }
      }
    },
    "responseAttributeMap" : {
      "title" : "Response Attribute Mapping",
      "description" : "Maps the policy response attributes to be populated
 under specific names for the currently authenticated user. (property name:
 com.sun.identity.agents.config.response.attribute.mapping) <br>Hot-swap: Yes <br> Example: <br> To
 populate the value of response attribute uid under name CUSTOM-USER-NAME: enter uid in Map Key field,
 and enter CUSTOM-USER-NAME in Corresponding Map Value field.",
      "propertyOrder" : 9200,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "object",
          "required" : true
        }
      }
    },
    "urlPolicyEnvPostParameters" : {
      "title" : "URL Policy Env POST Parameters",
      "description" : "List of HTTP POST request parameters whose names and values will
 be set in the environment map for URL policy evaluation at OpenAM server. (property name:
```


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```
com.sun.identity.agents.config.policy.env.post.param) <br>Hot-swap: Yes <br> Examples: <br> name <br>
phonenumber",
     "propertyOrder" : 11900,
     "items" : {
       "type" : "string"
     },
     "type" : "object",
     "exampleValue" : "",
     "properties" : {
       "inherited" : {
         "type" : "boolean",
         "required" : true
       },
       "value" : {
         "type" : "array",
         "required" : true
       }
     }
   },
   "invertNotEnforcedIps" : {
     "title" : "Not Enforced IP Invert List",
     "description" : "Client IP Addresses to invert protection of IP addresses listed in the related
Not Enforced Client IP List. (property name: com.sun.identity.agents.config.notenforced.ip.invert)
<br>Hot-swap: Yes",
     "propertyOrder" : 8000,
     "type" : "object",
     "exampleValue" : "",
     "properties" : {
       "inherited" : {
         "type" : "boolean",
         "required" : true
       },
       "value" : {
         "type" : "boolean",
         "required" : true
       }
     }
   },
   "cdssoTrustedIdProvider" : {
     "title" : "CDSSO Trusted ID Provider",
     "description" : "List of OpenAM Server/ID providers that should be trusted
by the agent, when evaluating the CDC Liberty Responses. (property name:
com.sun.identity.agents.config.cdsso.trusted.id.provider) <br>Hot-swap: Yes <br> Example: <br>
http://host:port/opensso/cdcservlet",
     "propertyOrder" : 5600,
     "items" : {
       "type" : "string"
     },
     "type" : "object",
     "exampleValue" : "",
     "properties" : {
       "inherited" : {
         "type" : "boolean",
         "required" : true
       },
       "value" : {
         "type" : "array",
         "required" : true
       }
```


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```
      }
    },
    "webServiceResponseProcessor" : {
      "title" : "Web Service Response Processor",
      "description" : "An implementation class of interface
 com.sun.identity.agents.filter.IWebServiceResponseProcessor that can be used to process the web-
service responses. (property name: com.sun.identity.agents.config.webservice.responseprocessor)
 <br>Hot-swap: Yes",
      "propertyOrder" : 2400,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "webServiceEndpoints" : {
      "title" : "Web Service End Points",
      "description" : "A list of Web Application end points that represent Web Services. (property
 name: com.sun.identity.agents.config.webservice.endpoint) <br>Hot-swap: Yes",
      "propertyOrder" : 2100,
      "items" : {
        "type" : "string"
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "array",
          "required" : true
        }
      }
    },
    "logoutRequestParameters" : {
      "title" : "Logout Request Parameter",
      "description" : "An application-specific Map that identifies a parameter
 which when present in the HTTP request indicates a logout event. (property name:
 com.sun.identity.agents.config.logout.request.param)  <br>Valid key: the web application name.
 <br>Valid value: the logout request parameter. <br>For this property, a global value can be set to
 apply to all the applications that don't have their own specific logout request parameter. <br>Hot-
swap: Yes  <br> Examples: <br>To set a global application logout request parameter: leave Map Key
 field empty, and enter the global application logout request parameter logoutparam in Corresponding
 Map Value field. <br> To set the logout request parameter for application BankApp: enter BankApp in
 Map Key field, and enter the logout request parameter logoutparam in Corresponding Map Value field.",
      "propertyOrder" : 6100,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
```


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```
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "object",
          "required" : true
        }
      }
    },
    "localAuditRotationSize" : {
      "title" : "Local Audit Log Rotation Size",
      "description" : "Size limit when a local audit log file is rotated to a new file. (property
name: com.sun.identity.agents.config.local.log.size) <br>Hot-swap: Yes",
      "propertyOrder" : 1900,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "integer",
          "required" : true
        }
      }
    },
    "probeLogoutUrl" : {
      "title" : "Logout URL Probe",
      "description" : "Specifies if agent will check the availability of these urls before redirecting
to them. (property name: com.sun.identity.agents.config.logout.url.probe.enabled) <br>Hot-swap: Yes",
      "propertyOrder" : 12600,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "jwtName" : {
      "title" : "JWT Cookie Name",
      "description" : "The name used by the agent to set the OIDC JWT on the user's browser. (Agent 5
only).",
      "propertyOrder" : 11201,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
```


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```
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "privilegedAttributeMap" : {
      "title" : "Privileged Attribute Mapping",
      "description" : "(Not used in Agent 5 onwards) <br>Map if using Enable Privileged Attribute
 Mapping. (property name: com.sun.identity.agents.config.privileged.attribute.mapping) <br>Hot-
swap: Yes <br> Examples: <br> To map UUID id=manager,ou=group,dc=openam,dc=forgerock,dc=org
 to the principal name am_manager_role specified in webapp's deployment descriptor: enter
 id=manager,ou=group,dc=openam,dc=forgerock,dc=org in Map Key field, and enter am_manager_role in
 Corresponding Map Value field. <br> To  map UUID id=employee,ou=group,dc=openam,dc=forgerock,dc=org
 to the principal name am_employee_role  specified in webapp's deployment descriptor: enter
 id=employee,ou=group,dc=openam,dc=forgerock,dc=org in Map Key field, and enter am_employee_role in
 Corresponding Map Value field.",
      "propertyOrder" : 9900,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "object",
          "required" : true
        }
      }
    },
    "conditionalLoginUrl" : {
      "title" : "OpenAM Conditional Login URL",
      "description" : "(Only used in Agent 5 onwards) (property name:
 org.forgerock.openam.agents.config.conditional.login.url) <br>Hot-swap: Yes <br> Examples: <br>
 match|url?param1=value1&param2=value2 <br> match/path|?param1=value1&param2=value2&param3=value3",
      "propertyOrder" : 4010,
      "items" : {
        "type" : "string"
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "array",
          "required" : true
        }
```


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```
      }
    },
    "responseAttributeFetchMode" : {
      "title" : "Response Attribute Fetch Mode",
      "description" : "The mode of fetching policy response attributes. (property name:
com.sun.identity.agents.config.response.attribute.fetch.mode) <br>Hot-swap: Yes",
      "propertyOrder" : 9100,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "legacyRedirectUri" : {
      "title" : "Legacy User Agent Redirect URI",
      "description" : "An intermediate URI used by the Agent to redirect legacy user agent requests.
(property name: com.sun.identity.agents.config.legacy.redirect.uri) <br>Hot-swap: Yes",
      "propertyOrder" : 6900,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "enableClientPolling" : {
      "title" : "Enable Client Polling",
      "description" : "Specifies if the session client must use polling for updating
session information and not depend upon server notifications. (property name:
com.iplanet.am.session.client.polling.enable) <br>Hot-swap: No",
      "propertyOrder" : 10200,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "continuousSecurityHeaders" : {
      "title" : "Continuous Security Headers",
```


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```
     "description" : "The name of the headers in the user's original request, that will be sent
as part of the payload during policy evaluation, which can then be accessed via the 'environment'
variable in a policy script. The 'key' is the name of the header to be sent, and the 'value' is the
name which it will appear as in the policy evaluation script.It is possible to map multiple headers
to the same name (they will simply appear as an array in the evaluation script). If the header
doesn't exist, then the empty string will be sent.",
     "propertyOrder" : 3211,
     "patternProperties" : {
       ".*" : {
         "type" : "string"
       }
     },
     "type" : "object",
     "exampleValue" : "",
     "properties" : {
       "inherited" : {
         "type" : "boolean",
         "required" : true
       },
       "value" : {
         "type" : "object",
         "required" : true
       }
     }
   },
   "portCheckEnabled" : {
     "title" : "Port Check Enable",
     "description" : "Indicates if port check functionality is enabled or disabled. (property name:
com.sun.identity.agents.config.port.check.enable) <br>Hot-swap: Yes",
     "propertyOrder" : 7200,
     "type" : "object",
     "exampleValue" : "",
     "properties" : {
       "inherited" : {
         "type" : "boolean",
         "required" : true
       },
       "value" : {
         "type" : "boolean",
         "required" : true
       }
     }
   },
   "userAttributeName" : {
     "title" : "User Attribute Name",
     "description" : "Name of the attribute which contains the user-ID. (property name:
com.sun.identity.agents.config.user.attribute.name) <br>Hot-swap: Yes",
     "propertyOrder" : 700,
     "type" : "object",
     "exampleValue" : "",
     "properties" : {
       "inherited" : {
         "type" : "boolean",
         "required" : true
       },
       "value" : {
         "type" : "string",
         "required" : true
       }
```


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```
      }
    },
    "xssDetectionRedirectUri" : {
      "title" : "XSS detection redirect URI",
      "description" : "An application-specific Map that identifies a URI of the customized page if
 XSS code has been deteced. (property name: com.sun.identity.agents.config.xss.redirect.uri) <br>Hot-
swap: Yes <br>Examples: <br>To set a redirect target for application BankApp: enter BankApp in Map Key
 field, and enter a redirect URI in Corresponding Map Value field.",
      "propertyOrder" : 12900,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "object",
          "required" : true
        }
      }
    },
    "alternativeAgentPort" : {
      "title" : "Alternative Agent Port Name",
      "description" : "Port number identifying the Agent protected server listening port
 to the client browsers if different from the actual listening port. (property name:
 com.sun.identity.agents.config.agent.port) <br>Hot-swap: Yes",
      "propertyOrder" : 4200,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "privilegedAttributeType" : {
      "title" : "Privileged Attribute Type",
      "description" : "(Not used in Agent 5 onwards) <br>List of privileged attribute types that will
 be fetched for each user. (property name: com.sun.identity.agents.config.privileged.attribute.type)
 <br>Hot-swap: Yes <br> Example: <br> Group",
      "propertyOrder" : 9500,
      "items" : {
        "type" : "string"
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
```


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```
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "array",
          "required" : true
        }
      }
    },
    "missingPostDataPreservationEntryUri" : {
      "title" : "Missing PDP entry URI",
      "description" : "An application-specific URI Map that is used in case the referenced
PDP entry cannot be found in the local cache (due to ttl). In such cases it will redirect
to the specified URI, otherwise it will show a HTTP 403 Forbidden error. (property name:
com.sun.identity.agents.config.postdata.preservce.cache.noentry.url)<br>Examples: <br>To set a
redirect target for application BankApp: enter Bankapp in Map Key field and enter a redirect URI in
corresponding Map Value field.",
      "propertyOrder" : 13200,
      "items" : {
        "type" : "string"
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "array",
          "required" : true
        }
      }
    },
    "cdssoSecureCookies" : {
      "title" : "CDSSO Secure Enable",
      "description" : "The SSO Token cookie set by the agent in the different domains in CDSSO mode
will be marked secure. Only transmitted if the communications channel with host is a secure one.
(property name: com.sun.identity.agents.config.cdsso.secure.enable) <br>Hot-swap: Yes",
      "propertyOrder" : 5700,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "conditionalLogoutUrl" : {
      "title" : "OpenAM Conditional Logout URL",
      "description" : "(Only used in Agent 5 onwards) (property name:
org.forgerock.openam.agents.config.conditional.logout.url) <br>Hot-swap: Yes <br> Examples: <br>
match|url?param1=value1&param2=value2 <br> match/path|?param1=value1&param2=value2&param3=value3",
      "propertyOrder" : 12550,
```


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```
      "items" : {
        "type" : "string"
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "array",
          "required" : true
        }
      }
    },
    "userMappingMode" : {
      "title" : "User Mapping Mode",
      "description" : "Specifies mechanism agent uses to determine user-ID. (property name:
com.sun.identity.agents.config.user.mapping.mode) <br>Hot-swap: Yes",
      "propertyOrder" : 600,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "cookieResetDomains" : {
      "title" : "Cookies Reset Domain Map",
      "description" : "Maps cookie names specified in Cookie Reset Name List to value
being the domain of this cookie to be used when a reset event occurs. (property name:
com.sun.identity.agents.config.cookie.reset.domain) <br>Hot-swap: Yes",
      "propertyOrder" : 4800,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "object",
          "required" : true
        }
      }
    },
    "loginContentFile" : {
```


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```
     "title" : "Login Content File Name",
     "description" : "Complete path and name of custom login content file. (property name:
com.sun.identity.agents.config.login.content.file) <br>Hot-swap: Yes",
     "propertyOrder" : 3100,
     "type" : "object",
     "exampleValue" : "",
     "properties" : {
       "inherited" : {
         "type" : "boolean",
         "required" : true
       },
       "value" : {
         "type" : "string",
         "required" : true
       }
     }
   },
   "privilegedAttributeMappingEnabled" : {
     "title" : "Enable Privileged Attribute Mapping",
     "description" : "(Not used in Agent 5 onwards) <br>Enable a mapping from the
original value of an attribute to another value. To satisfy container-specific
restrictions on character set being used in certain configuration files. (property name:
com.sun.identity.agents.config.privileged.attribute.mapping.enable) <br>Hot-swap: Yes",
     "propertyOrder" : 9800,
     "type" : "object",
     "exampleValue" : "",
     "properties" : {
       "inherited" : {
         "type" : "boolean",
         "required" : true
       },
       "value" : {
         "type" : "boolean",
         "required" : true
       }
     }
   },
   "clientHostnameHeader" : {
     "title" : "Client Hostname Header",
     "description" : "HTTP header name that holds the Hostname of the client. (property name:
com.sun.identity.agents.config.client.hostname.header) <br>Hot-swap: Yes",
     "propertyOrder" : 1100,
     "type" : "object",
     "exampleValue" : "",
     "properties" : {
       "inherited" : {
         "type" : "boolean",
         "required" : true
       },
       "value" : {
         "type" : "string",
         "required" : true
       }
     }
   },
   "fqdnCheck" : {
     "title" : "FQDN Check",
     "description" : "Enables checking of fqdn default value and fqdn map values. (property name:
com.sun.identity.agents.config.fqdn.check.enable) <br>Hot-swap: Yes",
```


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```
      "propertyOrder" : 6400,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "useInternalLogin" : {
      "title" : "Use Internal Login",
      "description" : "Set to false if want to customize Login Content File instead of default
internal content provided. (property name: com.sun.identity.agents.config.login.use.internal)
<br>Hot-swap: Yes",
      "propertyOrder" : 3000,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "localeCountry" : {
      "title" : "Locale Country",
      "description" : "(property name: com.sun.identity.agents.config.locale.country) <br>Hot-swap:
No",
      "propertyOrder" : 1400,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "cookieResetPaths" : {
      "title" : "Cookies Reset Path Map",
      "description" : "Maps cookie names specified in Cookie Reset Name List to value
being the path of this cookie to be used when a reset event occurs. (property name:
com.sun.identity.agents.config.cookie.reset.path) <br>Hot-swap: Yes",
      "propertyOrder" : 4900,
      "patternProperties" : {
        ".*" : {
```


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```
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "object",
          "required" : true
        }
      }
    },
    "policyNotifications" : {
      "title" : "Enable Policy Notifications",
      "description" : "Enable Notifications for remote policy client. (property name:
com.sun.identity.agents.notification.enabled) <br>Hot-swap: No",
      "propertyOrder" : 11200,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "probeLoginUrl" : {
      "title" : "Login URL Probe",
      "description" : "Specifies if agent will check the availability of these urls before redirecting
to them. (property name: com.sun.identity.agents.config.login.url.probe.enabled) <br>Hot-swap: Yes",
      "propertyOrder" : 3900,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "serviceDataCacheTime" : {
      "title" : "Service Data Cache Time",
      "description" : "Cache update time in minutes for service configuration data. If set to '0' no
updates happen. (property name: com.sun.identity.sm.cacheTime) <br>Hot-swap: No",
      "propertyOrder" : 10800,
      "type" : "object",
      "exampleValue" : "",
```


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```
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "integer",
          "required" : true
        }
      }
    },
    "userpassword" : {
      "title" : "Password",
      "description" : "",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "string",
      "format" : "password",
      "exampleValue" : ""
    },
    "fqdnDefault" : {
      "title" : "FQDN Default",
      "description" : "Fully qualified hostname that the users should use in order to access
resources. (property name: com.sun.identity.agents.config.fqdn.default) <br>Hot-swap: Yes",
      "propertyOrder" : 6500,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "headerAttributeDateFormat" : {
      "title" : "Fetch Attribute Date Format",
      "description" : "Format of date attribute values to be used when the attribute is
being set as HTTP header. Format is based on java.text.SimpleDateFormat. (property name:
com.sun.identity.agents.config.attribute.date.format) <br>Hot-swap: Yes",
      "propertyOrder" : 8400,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "cdssoRedirectUri" : {
      "title" : "CDSSO Redirect URI",
```


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```
      "description" : "An intermediate URI that is used by the Agent for processing CDSSO requests.
(property name: com.sun.identity.agents.config.cdsso.redirect.uri) <br>Hot-swap: Yes",
      "propertyOrder" : 5100,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "customVerificationHandlers" : {
      "title" : "Custom Verification Handler",
      "description" : "Application specific verification handler to validate the user credentials with
the local repository. (property name: com.sun.identity.agents.config.verification.handler) <br>Valid
key: the web application name. <br>Valid value: the verification handler class name. <br>Hot-swap:
Yes <br> Example: <br> To set verification handler for application BankApp: enter BankApp in Map Key
field, and enter verification handler class name BankVerificationHandler in Corresponding Map Value
field.",
      "propertyOrder" : 3400,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "object",
          "required" : true
        }
      }
    },
    "localAuditLogRotation" : {
      "title" : "Rotate Local Audit Log",
      "description" : "Flag to indicate that audit log files should be rotated when reaching a certain
size. (property name: com.sun.identity.agents.config.local.log.rotate) <br>Hot-swap: Yes",
      "propertyOrder" : 1800,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
```


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```
      }
    },
    "postDataCacheTtl" : {
      "title" : "PDP entry TTL",
      "description" : "This value tells how long a given POST entry should be stored
in the local cache (in milliseconds), default value is 300000. (property name:
com.sun.identity.agents.config.postdata.preserve.cache.entry.ttl)",
      "propertyOrder" : 13300,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "integer",
          "required" : true
        }
      }
    },
    "debugLevel" : {
      "title" : "Agent Debug Level",
      "description" : "Specifies type of agent debug messages to log. (property name:
com.iplanet.services.debug.level) <br>Hot-swap: Yes",
      "propertyOrder" : 10000,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "profileAttributeFetchMode" : {
      "title" : "Profile Attribute Fetch Mode",
      "description" : "The mode of fetching profile attributes. (property name:
com.sun.identity.agents.config.profile.attribute.fetch.mode) <br>Hot-swap: Yes",
      "propertyOrder" : 8700,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "urlPolicyEnvJsessionParameters" : {
      "title" : "URL Policy Env jsession Parameters",
```


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```
      "description" : "List of HTTP SESSION attributes whose names and values will be
set in the environment map for URL policy evaluation at OpenAM server. (property name:
com.sun.identity.agents.config.policy.env.jsession.param) <br>Hot-swap: Yes <br> Examples: <br> name
<br> phonenumber",
      "propertyOrder" : 12000,
      "items" : {
        "type" : "string"
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "array",
          "required" : true
        }
      }
    },
    "webServiceProcessGetEnabled" : {
      "title" : "Web Service Process GET Enable",
      "description" : "Flag to indicates if the processing of HTTP GET requests for Web Service
endpoints is enabled. (property name: com.sun.identity.agents.config.webservice.process.get.enable)
<br>Hot-swap: Yes",
      "propertyOrder" : 2200,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "loginUrlPrioritized" : {
      "title" : "Login URL Prioritized",
      "description" : "Specifies if failover sequence for Login URLs or CDSSO URLs
should be prioritized as defined in the OpenAM Login URL list. (property name:
com.sun.identity.agents.config.login.url.prioritized) <br>Hot-swap: Yes",
      "propertyOrder" : 3800,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
```


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```
   "httpSessionBinding" : {
     "title" : "HTTP Session Binding",
     "description" : "If true will invalidate the http session when login has failed, user
has no SSO session, or principal user name does not match SSO user name. (property name:
com.sun.identity.agents.config.httpsession.binding) <br>Hot-swap: Yes",
     "propertyOrder" : 3500,
     "type" : "object",
     "exampleValue" : "",
     "properties" : {
       "inherited" : {
         "type" : "boolean",
         "required" : true
       },
       "value" : {
         "type" : "boolean",
         "required" : true
       }
     }
   },
   "policyEvaluationRealm" : {
     "title" : "Realm",
     "description" : "Which realm to start evaluating from. (property name:
org.forgerock.openam.agents.config.policy.evaluation.realm) <br>Hot-swap: Yes",
     "propertyOrder" : 5400,
     "type" : "object",
     "exampleValue" : "",
     "properties" : {
       "inherited" : {
         "type" : "boolean",
         "required" : true
       },
       "value" : {
         "type" : "string",
         "required" : true
       }
     }
   },
   "cookieAttributeMultiValueSeparator" : {
     "title" : "Cookie Separator Character",
     "description" : "Character that will be used to separate multiple values
of the same attribute when it is being set as a cookie. (property name:
com.sun.identity.agents.config.attribute.cookie.separator) <br>Hot-swap: Yes",
     "propertyOrder" : 8300,
     "type" : "object",
     "exampleValue" : "",
     "properties" : {
       "inherited" : {
         "type" : "boolean",
         "required" : true
       },
       "value" : {
         "type" : "string",
         "required" : true
       }
     }
   },
   "gotoParameterName" : {
     "title" : "Goto Parameter Name",
```


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```
      "description" : "Property used only when CDSSO is enabled. Default value should
 be changed only when the login URL has a landing page specified <br> Example :
 com.sun.identity.agents.config.cdsso.cdcservlet.url = http://host:port/opensso/cdcservlet?
goto=http://agent:port/landing.jsp <br> The parameter is used by the Agent to append the original
 request URL to this cdcserlet URL. This parameter is consumed by the landing page to redirect to
 the original URL. (property name: com.sun.identity.agents.config.redirect.param) <br>Hot-swap: Yes
 <br> Example: com.sun.identity.agents.config.redirect.param = goto2<br> The complete URL sent for
 authentication will be <br> http://host:port/opensso/cdcservlet?goto=http://agent:port/landing.jsp?
goto2=http://agent.port/original.jsp",
      "propertyOrder" : 3600,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "sessionAttributeFetchMode" : {
      "title" : "Session Attribute Fetch Mode",
      "description" : "The mode of fetching session attributes. (property name:
 com.sun.identity.agents.config.session.attribute.fetch.mode) <br>Hot-swap: Yes",
      "propertyOrder" : 8900,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "bypassPrincipalList" : {
      "title" : "Bypass Principal List",
      "description" : "List of principals that are bypassed by the Agent for authentication and search
 purposes. (property name: com.sun.identity.agents.config.bypass.principal) <br>Hot-swap: Yes <br>
 Examples: <br> guest <br> testuser",
      "propertyOrder" : 9300,
      "items" : {
        "type" : "string"
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "array",
```


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```
          "required" : true
        }
      }
    },
    "portCheckFile" : {
      "title" : "Port Check File",
      "description" : "Name or complete path of a file that has the necessary content needed to handle
requests that need port correction. (property name: com.sun.identity.agents.config.port.check.file)
<br>Hot-swap: Yes",
      "propertyOrder" : 7300,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "postDataPreservation" : {
      "title" : "Post Data Preservation enabled",
      "description" : "Post Data Preservation functionality basically stores any POST
data before redirecting the user to the login screen and after successful login the agent
will generate a page that autosubmits the same POST to the original URL. (property name:
com.sun.identity.agents.config.postdata.preserve.enable)",
      "propertyOrder" : 13100,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "cookieResetEnabled" : {
      "title" : "Cookie Reset",
      "description" : "Agent resets cookies in the response before redirecting to authentication.
(property name: com.sun.identity.agents.config.cookie.reset.enable) <br>Hot-swap: Yes",
      "propertyOrder" : 4600,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
```


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```
      }
    },
    "webSocketConnectionIntervalInMinutes" : {
      "title" : "Web Socket Connection Interval",
      "description" : "Interval in minutes by which agents reopen their web socket connection to
ensure a fair distribution of connections across OpenAM servers. (Agent 5 only).",
      "propertyOrder" : 12105,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "policyClientClockSkew" : {
      "title" : "Policy Client Clock Skew",
      "description" : "Time in seconds which is allowed to accommodate the time difference
between the OpenAM server machine and the remote policy client machine. (property name:
com.sun.identity.policy.client.clockSkew) <br>Hot-swap: No",
      "propertyOrder" : 11700,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "integer",
          "required" : true
        }
      }
    },
    "configurationReloadInterval" : {
      "title" : "Configuration Reload Interval",
      "description" : "Interval in seconds between configuration reloads. (property name:
com.sun.identity.agents.config.load.interval) <br>Hot-swap: Yes",
      "propertyOrder" : 1200,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "integer",
          "required" : true
        }
      }
    },
    "auditAccessType" : {
      "title" : "Audit Access Types",
```


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```
      "description" : "Types of messages to log based on user URL access attempts. (property name:
 com.sun.identity.agents.config.audit.accesstype) <br>Hot-swap: Yes",
      "propertyOrder" : 1500,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    }
  }
}
```

1.76. Jdbc

1.76.1. Realm Operations

Resource path: `/realm-config/services/audit/JDBC`

Resource version: `1.0`

1.76.1.1. create

Usage:

```
am> create Jdbc --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "jdbcBuffering" : {
      "type" : "object",
      "title" : "Buffering",
      "propertyOrder" : 3,
      "properties" : {
```


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```
       "bufferingMaxSize" : {
         "title" : "Buffer Size (number of events)",
         "description" : "Size of the queue where events are buffered before they are written to
the database.<br><br>This queue has to be big enough to store all incoming events that have not yet
been written to the database.<p>If the queue reaches capacity, the process will block until a write
occurs.",
         "propertyOrder" : 4400,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       },
       "bufferingMaxBatchedEvents" : {
         "title" : "Max Batched Events",
         "description" : "Specifies the maximum number of batched statements the database can support
per connection.",
         "propertyOrder" : 4700,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       },
       "bufferingWriteInterval" : {
         "title" : "Write Interval",
         "description" : "Specifies the interval (seconds) at which buffered events are written to
the database.",
         "propertyOrder" : 4500,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       },
       "bufferingEnabled" : {
         "title" : "Buffering Enabled",
         "description" : "Enables or disables audit event buffering.",
         "propertyOrder" : 4300,
         "required" : true,
         "type" : "boolean",
         "exampleValue" : ""
       },
       "bufferingWriterThreads" : {
         "title" : "Writer Threads",
         "description" : "Specifies the number of threads used to write the buffered events.",
         "propertyOrder" : 4600,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       }
     }
   },
   "jdbcDatabaseConfig" : {
     "type" : "object",
     "title" : "Database Configuration",
     "propertyOrder" : 2,
     "properties" : {
       "idleTimeout" : {
         "title" : "Maximum Connection Idle Timeout (seconds)",
         "description" : "Specifies the maximum idle time before the connection is closed, in
seconds.",
         "propertyOrder" : 3900,
         "required" : true,
         "type" : "string",
```


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```
          "exampleValue" : ""
        },
        "connectionTimeout" : {
          "title" : "Connection Timeout (seconds)",
          "description" : "Specifies the maximum wait time before failing the connection, in
seconds.",
          "propertyOrder" : 3800,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "password" : {
          "title" : "Database Password",
          "description" : "Specifies the password to access the database server.",
          "propertyOrder" : 3700,
          "required" : true,
          "type" : "string",
          "format" : "password",
          "exampleValue" : ""
        },
        "databaseType" : {
          "title" : "Database Type",
          "description" : "Select the database to use for logging audit events.<br><br>Identifies the
database in use, for example MySQL, Oracle, or SQL.",
          "propertyOrder" : 3300,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "minIdle" : {
          "title" : "Minimum Idle Connections",
          "description" : "Specifies the minimum number of idle connections in the connection pool.",
          "propertyOrder" : 4100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "jdbcUrl" : {
          "title" : "JDBC Database URL",
          "description" : "URL of the JDBC database.",
          "propertyOrder" : 3400,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "driverClassName" : {
          "title" : "JDBC Driver",
          "description" : "Fully qualified JDBC driver class name.",
          "propertyOrder" : 3500,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "username" : {
          "title" : "Database Username",
          "description" : "Specifies the username to access the database server.",
          "propertyOrder" : 3600,
          "required" : true,
          "type" : "string",
```


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```
          "exampleValue" : ""
        },
        "maxPoolSize" : {
          "title" : "Maximum Connections",
          "description" : "Specifies the maximum number of connections in the connection pool.",
          "propertyOrder" : 4200,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "maxLifetime" : {
          "title" : "Maximum Connection Time (seconds)",
          "description" : "Specifies the maximum time a JDBC connection can be open, in seconds.",
          "propertyOrder" : 4000,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    },
    "commonHandlerPlugin" : {
      "type" : "object",
      "title" : "Audit Event Handler Factory",
      "propertyOrder" : 1,
      "properties" : {
        "handlerFactory" : {
          "title" : "Factory Class Name",
          "description" : "The fully qualified class name of the factory
responsible for creating the Audit Event Handler. The class must implement
<code>org.forgerock.openam.audit.AuditEventHandlerFactory</code>.",
          "propertyOrder" : 4800,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    },
    "commonHandler" : {
      "type" : "object",
      "title" : "General Handler Configuration",
      "propertyOrder" : 0,
      "properties" : {
        "enabled" : {
          "title" : "Enabled",
          "description" : "Enables or disables an audit event handler.",
          "propertyOrder" : 3100,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "topics" : {
          "title" : "Topics",
          "description" : "List of topics handled by an audit event handler.",
          "propertyOrder" : 3200,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
```


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```
          "exampleValue" : ""
        }
      }
    }
  }
}
```

1.76.1.2. delete

Usage:

```
am> delete Jdbc --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.76.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action Jdbc --realm Realm --actionName getAllTypes
```

1.76.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action Jdbc --realm Realm --actionName getCreatableTypes
```

1.76.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action Jdbc --realm Realm --actionName nextdescendents
```

1.76.1.6. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

```
am> query Jdbc --realm Realm --filter filter
```


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Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.76.1.7. read

Usage:

```
am> read Jdbc --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.76.1.8. update

Usage:

```
am> update Jdbc --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "jdbcBuffering" : {
      "type" : "object",
      "title" : "Buffering",
      "propertyOrder" : 3,
      "properties" : {
        "bufferingMaxSize" : {
          "title" : "Buffer Size (number of events)",
          "description" : "Size of the queue where events are buffered before they are written to
 the database.<br><br>This queue has to be big enough to store all incoming events that have not yet
 been written to the database.<p>If the queue reaches capacity, the process will block until a write
 occurs.",
          "propertyOrder" : 4400,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "bufferingMaxBatchedEvents" : {
```


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```
          "title" : "Max Batched Events",
          "description" : "Specifies the maximum number of batched statements the database can support
per connection.",
          "propertyOrder" : 4700,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "bufferingWriteInterval" : {
          "title" : "Write Interval",
          "description" : "Specifies the interval (seconds) at which buffered events are written to
the database.",
          "propertyOrder" : 4500,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "bufferingEnabled" : {
          "title" : "Buffering Enabled",
          "description" : "Enables or disables audit event buffering.",
          "propertyOrder" : 4300,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "bufferingWriterThreads" : {
          "title" : "Writer Threads",
          "description" : "Specifies the number of threads used to write the buffered events.",
          "propertyOrder" : 4600,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    },
    "jdbcDatabaseConfig" : {
      "type" : "object",
      "title" : "Database Configuration",
      "propertyOrder" : 2,
      "properties" : {
        "idleTimeout" : {
          "title" : "Maximum Connection Idle Timeout (seconds)",
          "description" : "Specifies the maximum idle time before the connection is closed, in
seconds.",
          "propertyOrder" : 3900,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "connectionTimeout" : {
          "title" : "Connection Timeout (seconds)",
          "description" : "Specifies the maximum wait time before failing the connection, in
seconds.",
          "propertyOrder" : 3800,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "password" : {
```


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```
          "title" : "Database Password",
          "description" : "Specifies the password to access the database server.",
          "propertyOrder" : 3700,
          "required" : true,
          "type" : "string",
          "format" : "password",
          "exampleValue" : ""
        },
        "databaseType" : {
          "title" : "Database Type",
          "description" : "Select the database to use for logging audit events.<br><br>Identifies the
database in use, for example MySQL, Oracle, or SQL.",
          "propertyOrder" : 3300,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "minIdle" : {
          "title" : "Minimum Idle Connections",
          "description" : "Specifies the minimum number of idle connections in the connection pool.",
          "propertyOrder" : 4100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "jdbcUrl" : {
          "title" : "JDBC Database URL",
          "description" : "URL of the JDBC database.",
          "propertyOrder" : 3400,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "driverClassName" : {
          "title" : "JDBC Driver",
          "description" : "Fully qualified JDBC driver class name.",
          "propertyOrder" : 3500,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "username" : {
          "title" : "Database Username",
          "description" : "Specifies the username to access the database server.",
          "propertyOrder" : 3600,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "maxPoolSize" : {
          "title" : "Maximum Connections",
          "description" : "Specifies the maximum number of connections in the connection pool.",
          "propertyOrder" : 4200,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "maxLifetime" : {
          "title" : "Maximum Connection Time (seconds)",
```


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```
          "description" : "Specifies the maximum time a JDBC connection can be open, in seconds.",
          "propertyOrder" : 4000,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    },
    "commonHandlerPlugin" : {
      "type" : "object",
      "title" : "Audit Event Handler Factory",
      "propertyOrder" : 1,
      "properties" : {
        "handlerFactory" : {
          "title" : "Factory Class Name",
          "description" : "The fully qualified class name of the factory
 responsible for creating the Audit Event Handler. The class must implement
 <code>org.forgerock.openam.audit.AuditEventHandlerFactory</code>.",
          "propertyOrder" : 4800,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    },
    "commonHandler" : {
      "type" : "object",
      "title" : "General Handler Configuration",
      "propertyOrder" : 0,
      "properties" : {
        "enabled" : {
          "title" : "Enabled",
          "description" : "Enables or disables an audit event handler.",
          "propertyOrder" : 3100,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "topics" : {
          "title" : "Topics",
          "description" : "List of topics handled by an audit event handler.",
          "propertyOrder" : 3200,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        }
      }
    }
  }
}
```

1.76.2. Global Operations

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Resource path: `/global-config/services/audit/JDBC`

Resource version: `1.0`

1.76.2.1. create

Usage:

```
am> create Jdbc --global --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "jdbcDatabaseConfig" : {
      "type" : "object",
      "title" : "Database Configuration",
      "propertyOrder" : 2,
      "properties" : {
        "username" : {
          "title" : "Database Username",
          "description" : "Specifies the username to access the database server.",
          "propertyOrder" : 3600,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "driverClassName" : {
          "title" : "JDBC Driver",
          "description" : "Fully qualified JDBC driver class name.",
          "propertyOrder" : 3500,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "databaseType" : {
          "title" : "Database Type",
          "description" : "Select the database to use for logging audit events.<br><br>Identifies the
 database in use, for example MySQL, Oracle, or SQL.",
          "propertyOrder" : 3300,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "maxLifetime" : {
          "title" : "Maximum Connection Time (seconds)",
          "description" : "Specifies the maximum time a JDBC connection can be open, in seconds.",
```


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```
          "propertyOrder" : 4000,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "idleTimeout" : {
          "title" : "Maximum Connection Idle Timeout (seconds)",
          "description" : "Specifies the maximum idle time before the connection is closed, in
seconds.",
          "propertyOrder" : 3900,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "maxPoolSize" : {
          "title" : "Maximum Connections",
          "description" : "Specifies the maximum number of connections in the connection pool.",
          "propertyOrder" : 4200,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "password" : {
          "title" : "Database Password",
          "description" : "Specifies the password to access the database server.",
          "propertyOrder" : 3700,
          "required" : true,
          "type" : "string",
          "format" : "password",
          "exampleValue" : ""
        },
        "minIdle" : {
          "title" : "Minimum Idle Connections",
          "description" : "Specifies the minimum number of idle connections in the connection pool.",
          "propertyOrder" : 4100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "jdbcUrl" : {
          "title" : "JDBC Database URL",
          "description" : "URL of the JDBC database.",
          "propertyOrder" : 3400,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "connectionTimeout" : {
          "title" : "Connection Timeout (seconds)",
          "description" : "Specifies the maximum wait time before failing the connection, in
seconds.",
          "propertyOrder" : 3800,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    },
    "commonHandler" : {
```


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```
      "type" : "object",
      "title" : "General Handler Configuration",
      "propertyOrder" : 0,
      "properties" : {
        "topics" : {
          "title" : "Topics",
          "description" : "List of topics handled by an audit event handler.",
          "propertyOrder" : 3200,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "enabled" : {
          "title" : "Enabled",
          "description" : "Enables or disables an audit event handler.",
          "propertyOrder" : 3100,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        }
      }
    },
    "jdbcBuffering" : {
      "type" : "object",
      "title" : "Buffering",
      "propertyOrder" : 3,
      "properties" : {
        "bufferingEnabled" : {
          "title" : "Buffering Enabled",
          "description" : "Enables or disables audit event buffering.",
          "propertyOrder" : 4300,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "bufferingWriteInterval" : {
          "title" : "Write Interval",
          "description" : "Specifies the interval (seconds) at which buffered events are written to
the database.",
          "propertyOrder" : 4500,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "bufferingMaxSize" : {
          "title" : "Buffer Size (number of events)",
          "description" : "Size of the queue where events are buffered before they are written to
the database.<br><br>This queue has to be big enough to store all incoming events that have not yet
been written to the database.<p>If the queue reaches capacity, the process will block until a write
occurs.",
          "propertyOrder" : 4400,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "bufferingWriterThreads" : {
```


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```
          "title" : "Writer Threads",
          "description" : "Specifies the number of threads used to write the buffered events.",
          "propertyOrder" : 4600,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "bufferingMaxBatchedEvents" : {
          "title" : "Max Batched Events",
          "description" : "Specifies the maximum number of batched statements the database can support
 per connection.",
          "propertyOrder" : 4700,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    },
    "commonHandlerPlugin" : {
      "type" : "object",
      "title" : "Audit Event Handler Factory",
      "propertyOrder" : 1,
      "properties" : {
        "handlerFactory" : {
          "title" : "Factory Class Name",
          "description" : "The fully qualified class name of the factory
 responsible for creating the Audit Event Handler. The class must implement
 <code>org.forgerock.openam.audit.AuditEventHandlerFactory</code>.",
          "propertyOrder" : 4800,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    }
  }
}
```

1.76.2.2. delete

Usage:

```
am> delete Jdbc --global --id id
```

Parameters:

--id

The unique identifier for the resource.

1.76.2.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

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Usage:

```
am> action Jdbc --global --actionName getAllTypes
```

1.76.2.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action Jdbc --global --actionName getCreatableTypes
```

1.76.2.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action Jdbc --global --actionName nextdescendents
```

1.76.2.6. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

```
am> query Jdbc --global --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.76.2.7. read

Usage:

```
am> read Jdbc --global --id id
```

Parameters:

--id

The unique identifier for the resource.

1.76.2.8. update

Usage:

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```
am> update Jdbc --global --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "jdbcDatabaseConfig" : {
      "type" : "object",
      "title" : "Database Configuration",
      "propertyOrder" : 2,
      "properties" : {
        "username" : {
          "title" : "Database Username",
          "description" : "Specifies the username to access the database server.",
          "propertyOrder" : 3600,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "driverClassName" : {
          "title" : "JDBC Driver",
          "description" : "Fully qualified JDBC driver class name.",
          "propertyOrder" : 3500,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "databaseType" : {
          "title" : "Database Type",
          "description" : "Select the database to use for logging audit events.<br><br>Identifies the
 database in use, for example MySQL, Oracle, or SQL.",
          "propertyOrder" : 3300,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "maxLifetime" : {
          "title" : "Maximum Connection Time (seconds)",
          "description" : "Specifies the maximum time a JDBC connection can be open, in seconds.",
          "propertyOrder" : 4000,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "idleTimeout" : {
          "title" : "Maximum Connection Idle Timeout (seconds)",
          "description" : "Specifies the maximum idle time before the connection is closed, in
 seconds.",
          "propertyOrder" : 3900,
```


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```
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "maxPoolSize" : {
          "title" : "Maximum Connections",
          "description" : "Specifies the maximum number of connections in the connection pool.",
          "propertyOrder" : 4200,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "password" : {
          "title" : "Database Password",
          "description" : "Specifies the password to access the database server.",
          "propertyOrder" : 3700,
          "required" : true,
          "type" : "string",
          "format" : "password",
          "exampleValue" : ""
        },
        "minIdle" : {
          "title" : "Minimum Idle Connections",
          "description" : "Specifies the minimum number of idle connections in the connection pool.",
          "propertyOrder" : 4100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "jdbcUrl" : {
          "title" : "JDBC Database URL",
          "description" : "URL of the JDBC database.",
          "propertyOrder" : 3400,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "connectionTimeout" : {
          "title" : "Connection Timeout (seconds)",
          "description" : "Specifies the maximum wait time before failing the connection, in
seconds.",
          "propertyOrder" : 3800,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    },
    "commonHandler" : {
      "type" : "object",
      "title" : "General Handler Configuration",
      "propertyOrder" : 0,
      "properties" : {
        "topics" : {
          "title" : "Topics",
          "description" : "List of topics handled by an audit event handler.",
          "propertyOrder" : 3200,
          "required" : true,
          "items" : {
```


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```
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "enabled" : {
          "title" : "Enabled",
          "description" : "Enables or disables an audit event handler.",
          "propertyOrder" : 3100,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        }
      }
    },
    "jdbcBuffering" : {
      "type" : "object",
      "title" : "Buffering",
      "propertyOrder" : 3,
      "properties" : {
        "bufferingEnabled" : {
          "title" : "Buffering Enabled",
          "description" : "Enables or disables audit event buffering.",
          "propertyOrder" : 4300,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "bufferingWriteInterval" : {
          "title" : "Write Interval",
          "description" : "Specifies the interval (seconds) at which buffered events are written to
the database.",
          "propertyOrder" : 4500,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "bufferingMaxSize" : {
          "title" : "Buffer Size (number of events)",
          "description" : "Size of the queue where events are buffered before they are written to
the database.<br><br>This queue has to be big enough to store all incoming events that have not yet
been written to the database.<p>If the queue reaches capacity, the process will block until a write
occurs.",
          "propertyOrder" : 4400,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "bufferingWriterThreads" : {
          "title" : "Writer Threads",
          "description" : "Specifies the number of threads used to write the buffered events.",
          "propertyOrder" : 4600,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "bufferingMaxBatchedEvents" : {
          "title" : "Max Batched Events",
```


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```
          "description" : "Specifies the maximum number of batched statements the database can support
 per connection.",
          "propertyOrder" : 4700,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    },
    "commonHandlerPlugin" : {
      "type" : "object",
      "title" : "Audit Event Handler Factory",
      "propertyOrder" : 1,
      "properties" : {
        "handlerFactory" : {
          "title" : "Factory Class Name",
          "description" : "The fully qualified class name of the factory
 responsible for creating the Audit Event Handler. The class must implement
 <code>org.forgerock.openam.audit.AuditEventHandlerFactory</code>.",
          "propertyOrder" : 4800,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    }
  }
}
```

1.77. JdbcModule

1.77.1. Realm Operations

Resource path: `/realm-config/authentication/modules/jdbc`

Resource version: `1.0`

1.77.1.1. create

Usage:

```
am> create JdbcModule --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

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--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "connectionType" : {
      "title" : "Connection Type",
      "description" : "Controls how the authentication module will obtain the JDBC connection to
 the database.<br><br>If the connection type is non-persistent JDBC connection then the JDBC driver
 must be available to the OpenAM web-app. If the connection type is JNDI, the OpenAM web application
 deployment descriptor <code>web.xml</code> must be updated to include the correct JNDI JDBC resource
 information. The J2EE container must also be configured with the correct JNDI JDBC configuration.",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "password" : {
      "title" : "Database Password",
      "description" : "The password used to authenticate to the database<br><br><i>NB </i>Only used
 when connection type is JDBC",
      "propertyOrder" : 600,
      "required" : true,
      "type" : "string",
      "format" : "password",
      "exampleValue" : ""
    },
    "connectionPoolJndiName" : {
      "title" : "Connection Pool JNDI Name",
      "description" : "The JNDI URL to the JDBC connection pool<br><br>The JNDI URL refers to the
 JDBC connection pool created in the J2EE container for the authentication database.<br/><br/><i>NB </
i>Only used when connection type is JNDI",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "passwordColumn" : {
      "title" : "Password Column Name",
      "description" : "The name of the column in the database containing the user
 passwords<br><br>This property will be used to retrieve the correct column containing the password
 from the results table returned by the database",
      "propertyOrder" : 700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "username" : {
      "title" : "Database Username",
      "description" : "This username will be used to authenticate to the database<br><br><i>NB </
i>Only used when connection type is JDBC",
      "propertyOrder" : 500,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "passwordTransformClass" : {
```


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```
      "title" : "Class to Transform Password Syntax",
      "description" : "This class is used to transform the supplied credentials from the
 database.<br><br>The default implementation for this property is <code>ClearTextTransform</
code> that performs no transformation. If the supplied credentials need to be transformed
 before comparing with the password field retrieved from the database, a custom implementation
 should be provided. Any custom implementation must implement the following interface
 <code>com.sun.identity.authentication.modules.jdbc.JDBCPasswordSyntaxTransform</code>",
      "propertyOrder" : 900,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "jdbcUrl" : {
      "title" : "JDBC URL",
      "description" : "The JDBC URL used to initialise the JDBC driver<br><br><i>NB </i>Only used when
 connection type is JDBC",
      "propertyOrder" : 400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "passwordStatement" : {
      "title" : "Prepared Statement",
      "description" : "The SQL statement used to search the database for user passwords<br><br>The
 SQL statement used to search the database for the user password. A single property of the supplied
 username is provided by the module. The result of the search should be a single row that contains the
 password for the user under the specified column.",
      "propertyOrder" : 800,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "jdbcDriver" : {
      "title" : "JDBC Driver",
      "description" : "The classname of the JDBC driver to use.<br><br>The fully qualified class name
 of the JDBC driver to use to connect to the database. Only Oracle or MySQL drivers are supported.
 JDBC drivers for other database may work, but the database will be treated as if it was Oracle.<br/
><br/><i>NB </i>Only used when connection type is JDBC",
      "propertyOrder" : 300,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "authenticationLevel" : {
      "title" : "Authentication Level",
      "description" : "The authentication level associated with this module.<br><br>Each
 authentication module has an authentication level that can be used to indicate the level of security
 associated with the module; 0 is the lowest (and the default).",
      "propertyOrder" : 1000,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    }
  }
}
```


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1.77.1.2. delete

Usage:

```
am> delete JdbcModule --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.77.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action JdbcModule --realm Realm --actionName getAllTypes
```

1.77.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action JdbcModule --realm Realm --actionName getCreatableTypes
```

1.77.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action JdbcModule --realm Realm --actionName nextdescendents
```

1.77.1.6. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

```
am> query JdbcModule --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

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1.77.1.7. read

Usage:

```
am> read JdbcModule --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.77.1.8. update

Usage:

```
am> update JdbcModule --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "connectionType" : {
      "title" : "Connection Type",
      "description" : "Controls how the authentication module will obtain the JDBC connection to
 the database.<br><br>If the connection type is non-persistent JDBC connection then the JDBC driver
 must be available to the OpenAM web-app. If the connection type is JNDI, the OpenAM web application
 deployment descriptor <code>web.xml</code> must be updated to include the correct JNDI JDBC resource
 information. The J2EE container must also be configured with the correct JNDI JDBC configuration.",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "password" : {
      "title" : "Database Password",
      "description" : "The password used to authenticate to the database<br><br><i>NB </i>Only used
 when connection type is JDBC",
      "propertyOrder" : 600,
      "required" : true,
      "type" : "string",
      "format" : "password",
      "exampleValue" : ""
    },
    "connectionPoolJndiName" : {
      "title" : "Connection Pool JNDI Name",
```


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```
      "description" : "The JNDI URL to the JDBC connection pool<br><br>The JNDI URL refers to the
 JDBC connection pool created in the J2EE container for the authentication database.<br/><br/><i>NB </
i>Only used when connection type is JNDI",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "passwordColumn" : {
      "title" : "Password Column Name",
      "description" : "The name of the column in the database containing the user
 passwords<br><br>This property will be used to retrieve the correct column containing the password
 from the results table returned by the database",
      "propertyOrder" : 700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "username" : {
      "title" : "Database Username",
      "description" : "This username will be used to authenticate to the database<br><br><i>NB </
i>Only used when connection type is JDBC",
      "propertyOrder" : 500,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "passwordTransformClass" : {
      "title" : "Class to Transform Password Syntax",
      "description" : "This class is used to transform the supplied credentials from the
 database.<br><br>The default implementation for this property is <code>ClearTextTransform</
code> that performs no transformation. If the supplied credentials need to be transformed
 before comparing with the password field retrieved from the database, a custom implementation
 should be provided. Any custom implementation must implement the following interface
 <code>com.sun.identity.authentication.modules.jdbc.JDBCPasswordSyntaxTransform</code>",
      "propertyOrder" : 900,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "jdbcUrl" : {
      "title" : "JDBC URL",
      "description" : "The JDBC URL used to initialise the JDBC driver<br><br><i>NB </i>Only used when
 connection type is JDBC",
      "propertyOrder" : 400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "passwordStatement" : {
      "title" : "Prepared Statement",
      "description" : "The SQL statement used to search the database for user passwords<br><br>The
 SQL statement used to search the database for the user password. A single property of the supplied
 username is provided by the module. The result of the search should be a single row that contains the
 password for the user under the specified column.",
      "propertyOrder" : 800,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
```


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```
    },
    "jdbcDriver" : {
      "title" : "JDBC Driver",
      "description" : "The classname of the JDBC driver to use.<br><br>The fully qualified class name
 of the JDBC driver to use to connect to the database. Only Oracle or MySQL drivers are supported.
 JDBC drivers for other database may work, but the database will be treated as if it was Oracle.<br/
><br/><i>NB </i>Only used when connection type is JDBC",
      "propertyOrder" : 300,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "authenticationLevel" : {
      "title" : "Authentication Level",
      "description" : "The authentication level associated with this module.<br><br>Each
 authentication module has an authentication level that can be used to indicate the level of security
 associated with the module; 0 is the lowest (and the default).",
      "propertyOrder" : 1000,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    }
  }
}
```

1.77.2. Global Operations

Resource path: `/global-config/authentication/modules/jdbc`

Resource version: `1.0`

1.77.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action JdbcModule --global --actionName getAllTypes
```

1.77.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action JdbcModule --global --actionName getCreatableTypes
```

1.77.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

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Usage:

```
am> action JdbcModule --global --actionName nextdescendents
```

1.77.2.4. read

Usage:

```
am> read JdbcModule --global
```

1.77.2.5. update

Usage:

```
am> update JdbcModule --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "defaults" : {
      "properties" : {
        "jdbcDriver" : {
          "title" : "JDBC Driver",
          "description" : "The classname of the JDBC driver to use.<br><br>The fully qualified
 class name of the JDBC driver to use to connect to the database. Only Oracle or MySQL drivers are
 supported. JDBC drivers for other database may work, but the database will be treated as if it was
 Oracle.<br/><br/><i>NB </i>Only used when connection type is JDBC",
          "propertyOrder" : 300,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "passwordColumn" : {
          "title" : "Password Column Name",
          "description" : "The name of the column in the database containing the user
 passwords<br><br>This property will be used to retrieve the correct column containing the password
 from the results table returned by the database",
          "propertyOrder" : 700,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "authenticationLevel" : {
          "title" : "Authentication Level",
          "description" : "The authentication level associated with this module.<br><br>Each
 authentication module has an authentication level that can be used to indicate the level of security
 associated with the module; 0 is the lowest (and the default).",
          "propertyOrder" : 1000,
          "required" : true,
```


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```
          "type" : "integer",
          "exampleValue" : ""
        },
        "username" : {
          "title" : "Database Username",
          "description" : "This username will be used to authenticate to the database<br><br><i>NB </
i>Only used when connection type is JDBC",
          "propertyOrder" : 500,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "passwordTransformClass" : {
          "title" : "Class to Transform Password Syntax",
          "description" : "This class is used to transform the supplied credentials from the
 database.<br><br>The default implementation for this property is <code>ClearTextTransform</
code> that performs no transformation. If the supplied credentials need to be transformed
 before comparing with the password field retrieved from the database, a custom implementation
 should be provided. Any custom implementation must implement the following interface
 <code>com.sun.identity.authentication.modules.jdbc.JDBCPasswordSyntaxTransform</code>",
          "propertyOrder" : 900,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "passwordStatement" : {
          "title" : "Prepared Statement",
          "description" : "The SQL statement used to search the database for user passwords<br><br>The
 SQL statement used to search the database for the user password. A single property of the supplied
 username is provided by the module. The result of the search should be a single row that contains the
 password for the user under the specified column.",
          "propertyOrder" : 800,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "connectionPoolJndiName" : {
          "title" : "Connection Pool JNDI Name",
          "description" : "The JNDI URL to the JDBC connection pool<br><br>The JNDI URL refers to the
 JDBC connection pool created in the J2EE container for the authentication database.<br/><br/><i>NB </
i>Only used when connection type is JNDI",
          "propertyOrder" : 200,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "connectionType" : {
          "title" : "Connection Type",
          "description" : "Controls how the authentication module will obtain the JDBC connection to
 the database.<br><br>If the connection type is non-persistent JDBC connection then the JDBC driver
 must be available to the OpenAM web-app. If the connection type is JNDI, the OpenAM web application
 deployment descriptor <code>web.xml</code> must be updated to include the correct JNDI JDBC resource
 information. The J2EE container must also be configured with the correct JNDI JDBC configuration.",
          "propertyOrder" : 100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "jdbcUrl" : {
```


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```
          "title" : "JDBC URL",
          "description" : "The JDBC URL used to initialise the JDBC driver<br><br><i>NB </i>Only used
 when connection type is JDBC",
          "propertyOrder" : 400,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "password" : {
          "title" : "Database Password",
          "description" : "The password used to authenticate to the database<br><br><i>NB </i>Only
 used when connection type is JDBC",
          "propertyOrder" : 600,
          "required" : true,
          "type" : "string",
          "format" : "password",
          "exampleValue" : ""
        }
      },
      "type" : "object",
      "title" : "Realm Defaults"
    }
  }
}
```

1.78. Jms

1.78.1. Realm Operations

Resource path: `/realm-config/services/audit/JMS`

Resource version: `1.0`

1.78.1.1. create

Usage:

```
am> create Jms --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
```


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```
 "properties" : {
   "jmsConfiguration" : {
     "type" : "object",
     "title" : "JMS Configuration",
     "propertyOrder" : 2,
     "properties" : {
       "jndiTopicName" : {
         "title" : "JMS Topic Name",
         "description" : "JNDI lookup name for the JMS topic",
         "propertyOrder" : 6700,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       },
       "jndiConnectionFactoryName" : {
         "title" : "JMS Connection Factory Name",
         "description" : "Specifies the JNDI lookup name for the connection factory exposed by your
JMS message broker. OpenAM performs a JNDI lookup on this name to locate your broker's connection
factory.<p><p>See the documentation for your JMS message broker for the required value.<p>The default
is the connection factory name for Apache ActiveMQ.",
         "propertyOrder" : 6800,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       },
       "deliveryMode" : {
         "title" : "Delivery Mode",
         "description" : "Specifies whether JMS messages used to transmit audit events use persistent
or non-persistent delivery.<p><p>With persistent delivery, the JMS provider ensures that messages
are not lost in transit in case of a provider failure by logging messages to storage when they are
sent.<p>Specify the delivery mode as persistent if it is unacceptable for delivery of audit events
to be lost in JMS transit. If the possible loss of audit events is acceptable, choose non-persistent
delivery, which provides better performance.",
         "propertyOrder" : 6400,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       },
       "sessionMode" : {
         "title" : "Session Mode",
         "description" : "Specifies the JMS session acknowledgement mode: <code>AUTO</code>,
<code>CLIENT</code>, or <code>DUPS_OK</code>.<p><ul><li>Auto mode guarantees once-only delivery of
JMS messages used to transmit audit events.</li><li>Duplicates OK mode ensures that messages are
delivered at least once.</li><li>Client mode does not ensure delivery.</li></ul><p>Use the default
setting unless your JMS broker implementation requires otherwise. See your broker documentation for
more information.",
         "propertyOrder" : 6500,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       },
       "jndiContextProperties" : {
         "title" : "JNDI Context Properties",
         "description" : "Specifies JNDI properties that OpenAM uses to connect to the JMS message
broker to which OpenAM will publish audit events.<p><p>OpenAM acts as a JMS client, using a JMS
connection factory to connect to your JMS message broker. In order for OpenAM to connect to the
broker, the JNDI context properties must conform to those needed by the broker. See the documentation
for your JMS message broker for required values.<p>The default properties are example properties for
connecting to Apache ActiveMQ.",
```


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```
          "propertyOrder" : 6600,
          "required" : true,
          "patternProperties" : {
            ".*" : {
              "type" : "string"
            }
          },
          "type" : "object",
          "exampleValue" : ""
        }
      }
    },
    "batchEvents" : {
      "type" : "object",
      "title" : "Batch Events",
      "propertyOrder" : 3,
      "properties" : {
        "maxBatchedEvents" : {
          "title" : "Max Batched",
          "description" : "Maximum number of events per batch.",
          "propertyOrder" : 7100,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "shutdownTimeoutSec" : {
          "title" : "Shutdown Timeout",
          "description" : "Application waiting period (seconds) for worker thread termination.",
          "propertyOrder" : 7500,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "insertTimeoutSec" : {
          "title" : "Insert Timeout",
          "description" : "Waiting period (seconds) for available capacity, when a new event enters
the queue.",
          "propertyOrder" : 7300,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "batchThreadCount" : {
          "title" : "Thread Count",
          "description" : "Number of concurrent threads that pull events from the batch queue.",
          "propertyOrder" : 7200,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "batchEnabled" : {
          "title" : "Batch enabled",
          "description" : "Boolean for batch delivery of audit events.",
          "propertyOrder" : 6900,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "batchCapacity" : {
```


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```
          "title" : "Capacity",
          "description" : "Maximum event count in the batch queue; additional events are dropped.",
          "propertyOrder" : 7000,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "pollTimeoutSec" : {
          "title" : "Polling Timeout",
          "description" : "Worker thread waiting period (seconds) for the next event, before going
idle.",
          "propertyOrder" : 7400,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        }
      }
    },
    "commonHandler" : {
      "type" : "object",
      "title" : "General Handler Configuration",
      "propertyOrder" : 0,
      "properties" : {
        "enabled" : {
          "title" : "Enabled",
          "description" : "Enables or disables an audit event handler.",
          "propertyOrder" : 6200,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "topics" : {
          "title" : "Topics",
          "description" : "List of topics handled by an audit event handler.",
          "propertyOrder" : 6300,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        }
      }
    },
    "commonHandlerPlugin" : {
      "type" : "object",
      "title" : "Audit Event Handler Factory",
      "propertyOrder" : 1,
      "properties" : {
        "handlerFactory" : {
          "title" : "Factory Class Name",
          "description" : "The fully qualified class name of the factory
responsible for creating the Audit Event Handler. The class must implement
<code>org.forgerock.openam.audit.AuditEventHandlerFactory</code>.",
          "propertyOrder" : 7600,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
```


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```
      }
    }
  }
}
```

1.78.1.2. delete

Usage:

```
am> delete Jms --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.78.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action Jms --realm Realm --actionName getAllTypes
```

1.78.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action Jms --realm Realm --actionName getCreatableTypes
```

1.78.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action Jms --realm Realm --actionName nextdescendents
```

1.78.1.6. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

```
am> query Jms --realm Realm --filter filter
```

Parameters:

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--filter

A CREST formatted query filter, where "true" will query all.

1.78.1.7. read

Usage:

```
am> read Jms --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.78.1.8. update

Usage:

```
am> update Jms --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "jmsConfiguration" : {
      "type" : "object",
      "title" : "JMS Configuration",
      "propertyOrder" : 2,
      "properties" : {
        "jndiTopicName" : {
          "title" : "JMS Topic Name",
          "description" : "JNDI lookup name for the JMS topic",
          "propertyOrder" : 6700,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "jndiConnectionFactoryName" : {
          "title" : "JMS Connection Factory Name",
          "description" : "Specifies the JNDI lookup name for the connection factory exposed by your
 JMS message broker. OpenAM performs a JNDI lookup on this name to locate your broker's connection
 factory.<p><p>See the documentation for your JMS message broker for the required value.<p>The default
 is the connection factory name for Apache ActiveMQ.",
```


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```
          "propertyOrder" : 6800,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "deliveryMode" : {
          "title" : "Delivery Mode",
          "description" : "Specifies whether JMS messages used to transmit audit events use persistent
or non-persistent delivery.<p><p>With persistent delivery, the JMS provider ensures that messages
are not lost in transit in case of a provider failure by logging messages to storage when they are
sent.<p>Specify the delivery mode as persistent if it is unacceptable for delivery of audit events
to be lost in JMS transit. If the possible loss of audit events is acceptable, choose non-persistent
delivery, which provides better performance.",
          "propertyOrder" : 6400,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "sessionMode" : {
          "title" : "Session Mode",
          "description" : "Specifies the JMS session acknowledgement mode: <code>AUTO</code>,
<code>CLIENT</code>, or <code>DUPS_OK</code>.<p><ul><li>Auto mode guarantees once-only delivery of
JMS messages used to transmit audit events.</li><li>Duplicates OK mode ensures that messages are
delivered at least once.</li><li>Client mode does not ensure delivery.</li></ul><p>Use the default
setting unless your JMS broker implementation requires otherwise. See your broker documentation for
more information.",
          "propertyOrder" : 6500,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "jndiContextProperties" : {
          "title" : "JNDI Context Properties",
          "description" : "Specifies JNDI properties that OpenAM uses to connect to the JMS message
broker to which OpenAM will publish audit events.<p><p>OpenAM acts as a JMS client, using a JMS
connection factory to connect to your JMS message broker. In order for OpenAM to connect to the
broker, the JNDI context properties must conform to those needed by the broker. See the documentation
for your JMS message broker for required values.<p>The default properties are example properties for
connecting to Apache ActiveMQ.",
          "propertyOrder" : 6600,
          "required" : true,
          "patternProperties" : {
            ".*" : {
              "type" : "string"
            }
          },
          "type" : "object",
          "exampleValue" : ""
        }
      }
    },
    "batchEvents" : {
      "type" : "object",
      "title" : "Batch Events",
      "propertyOrder" : 3,
      "properties" : {
        "maxBatchedEvents" : {
          "title" : "Max Batched",
          "description" : "Maximum number of events per batch.",
```


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```
          "propertyOrder" : 7100,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "shutdownTimeoutSec" : {
          "title" : "Shutdown Timeout",
          "description" : "Application waiting period (seconds) for worker thread termination.",
          "propertyOrder" : 7500,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "insertTimeoutSec" : {
          "title" : "Insert Timeout",
          "description" : "Waiting period (seconds) for available capacity, when a new event enters
the queue.",
          "propertyOrder" : 7300,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "batchThreadCount" : {
          "title" : "Thread Count",
          "description" : "Number of concurrent threads that pull events from the batch queue.",
          "propertyOrder" : 7200,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "batchEnabled" : {
          "title" : "Batch enabled",
          "description" : "Boolean for batch delivery of audit events.",
          "propertyOrder" : 6900,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "batchCapacity" : {
          "title" : "Capacity",
          "description" : "Maximum event count in the batch queue; additional events are dropped.",
          "propertyOrder" : 7000,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "pollTimeoutSec" : {
          "title" : "Polling Timeout",
          "description" : "Worker thread waiting period (seconds) for the next event, before going
idle.",
          "propertyOrder" : 7400,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        }
      }
    },
    "commonHandler" : {
      "type" : "object",
```


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```
      "title" : "General Handler Configuration",
      "propertyOrder" : 0,
      "properties" : {
        "enabled" : {
          "title" : "Enabled",
          "description" : "Enables or disables an audit event handler.",
          "propertyOrder" : 6200,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "topics" : {
          "title" : "Topics",
          "description" : "List of topics handled by an audit event handler.",
          "propertyOrder" : 6300,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        }
      }
    },
    "commonHandlerPlugin" : {
      "type" : "object",
      "title" : "Audit Event Handler Factory",
      "propertyOrder" : 1,
      "properties" : {
        "handlerFactory" : {
          "title" : "Factory Class Name",
          "description" : "The fully qualified class name of the factory
 responsible for creating the Audit Event Handler. The class must implement
 <code>org.forgerock.openam.audit.AuditEventHandlerFactory</code>.",
          "propertyOrder" : 7600,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    }
  }
}
```

1.78.2. Global Operations

Resource path: `/global-config/services/audit/JMS`

Resource version: `1.0`

1.78.2.1. create

Usage:

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```
am> create Jms --global --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "batchEvents" : {
      "type" : "object",
      "title" : "Batch Events",
      "propertyOrder" : 3,
      "properties" : {
        "pollTimeoutSec" : {
          "title" : "Polling Timeout",
          "description" : "Worker thread waiting period (seconds) for the next event, before going
 idle.",
          "propertyOrder" : 7400,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "batchCapacity" : {
          "title" : "Capacity",
          "description" : "Maximum event count in the batch queue; additional events are dropped.",
          "propertyOrder" : 7000,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "maxBatchedEvents" : {
          "title" : "Max Batched",
          "description" : "Maximum number of events per batch.",
          "propertyOrder" : 7100,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "batchEnabled" : {
          "title" : "Batch enabled",
          "description" : "Boolean for batch delivery of audit events.",
          "propertyOrder" : 6900,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "insertTimeoutSec" : {
          "title" : "Insert Timeout",
          "description" : "Waiting period (seconds) for available capacity, when a new event enters
 the queue.",
          "propertyOrder" : 7300,
```


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```
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "shutdownTimeoutSec" : {
          "title" : "Shutdown Timeout",
          "description" : "Application waiting period (seconds) for worker thread termination.",
          "propertyOrder" : 7500,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "batchThreadCount" : {
          "title" : "Thread Count",
          "description" : "Number of concurrent threads that pull events from the batch queue.",
          "propertyOrder" : 7200,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        }
      }
    },
    "commonHandler" : {
      "type" : "object",
      "title" : "General Handler Configuration",
      "propertyOrder" : 0,
      "properties" : {
        "enabled" : {
          "title" : "Enabled",
          "description" : "Enables or disables an audit event handler.",
          "propertyOrder" : 6200,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "topics" : {
          "title" : "Topics",
          "description" : "List of topics handled by an audit event handler.",
          "propertyOrder" : 6300,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        }
      }
    },
    "jmsConfiguration" : {
      "type" : "object",
      "title" : "JMS Configuration",
      "propertyOrder" : 2,
      "properties" : {
        "jndiContextProperties" : {
          "title" : "JNDI Context Properties",
          "description" : "Specifies JNDI properties that OpenAM uses to connect to the JMS message
broker to which OpenAM will publish audit events.<p><p>OpenAM acts as a JMS client, using a JMS
connection factory to connect to your JMS message broker. In order for OpenAM to connect to the
broker, the JNDI context properties must conform to those needed by the broker. See the documentation
```


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```
for your JMS message broker for required values.<p>The default properties are example properties for
connecting to Apache ActiveMQ.",
         "propertyOrder" : 6600,
         "required" : true,
         "patternProperties" : {
           ".*" : {
             "type" : "string"
           }
         },
         "type" : "object",
         "exampleValue" : ""
       },
       "deliveryMode" : {
         "title" : "Delivery Mode",
         "description" : "Specifies whether JMS messages used to transmit audit events use persistent
or non-persistent delivery.<p><p>With persistent delivery, the JMS provider ensures that messages
are not lost in transit in case of a provider failure by logging messages to storage when they are
sent.<p>Specify the delivery mode as persistent if it is unacceptable for delivery of audit events
to be lost in JMS transit. If the possible loss of audit events is acceptable, choose non-persistent
delivery, which provides better performance.",
         "propertyOrder" : 6400,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       },
       "sessionMode" : {
         "title" : "Session Mode",
         "description" : "Specifies the JMS session acknowledgement mode: <code>AUTO</code>,
<code>CLIENT</code>, or <code>DUPS_OK</code>.<p><ul><li>Auto mode guarantees once-only delivery of
JMS messages used to transmit audit events.</li><li>Duplicates OK mode ensures that messages are
delivered at least once.</li><li>Client mode does not ensure delivery.</li></ul><p>Use the default
setting unless your JMS broker implementation requires otherwise. See your broker documentation for
more information.",
         "propertyOrder" : 6500,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       },
       "jndiConnectionFactoryName" : {
         "title" : "JMS Connection Factory Name",
         "description" : "Specifies the JNDI lookup name for the connection factory exposed by your
JMS message broker. OpenAM performs a JNDI lookup on this name to locate your broker's connection
factory.<p><p>See the documentation for your JMS message broker for the required value.<p>The default
is the connection factory name for Apache ActiveMQ.",
         "propertyOrder" : 6800,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       },
       "jndiTopicName" : {
         "title" : "JMS Topic Name",
         "description" : "JNDI lookup name for the JMS topic",
         "propertyOrder" : 6700,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       }
     }
   },
```


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```
    "commonHandlerPlugin" : {
      "type" : "object",
      "title" : "Audit Event Handler Factory",
      "propertyOrder" : 1,
      "properties" : {
        "handlerFactory" : {
          "title" : "Factory Class Name",
          "description" : "The fully qualified class name of the factory
 responsible for creating the Audit Event Handler. The class must implement
 <code>org.forgerock.openam.audit.AuditEventHandlerFactory</code>.",
          "propertyOrder" : 7600,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    }
  }
}
```

1.78.2.2. delete

Usage:

```
am> delete Jms --global --id id
```

Parameters:

--id

The unique identifier for the resource.

1.78.2.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action Jms --global --actionName getAllTypes
```

1.78.2.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action Jms --global --actionName getCreatableTypes
```

1.78.2.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

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Usage:

```
am> action Jms --global --actionName nextdescendents
```

1.78.2.6. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

```
am> query Jms --global --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.78.2.7. read

Usage:

```
am> read Jms --global --id id
```

Parameters:

--id

The unique identifier for the resource.

1.78.2.8. update

Usage:

```
am> update Jms --global --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "batchEvents" : {
      "type" : "object",
      "title" : "Batch Events",
      "propertyOrder" : 3,
```


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```
     "properties" : {
       "pollTimeoutSec" : {
         "title" : "Polling Timeout",
         "description" : "Worker thread waiting period (seconds) for the next event, before going
idle.",
         "propertyOrder" : 7400,
         "required" : true,
         "type" : "integer",
         "exampleValue" : ""
       },
       "batchCapacity" : {
         "title" : "Capacity",
         "description" : "Maximum event count in the batch queue; additional events are dropped.",
         "propertyOrder" : 7000,
         "required" : true,
         "type" : "integer",
         "exampleValue" : ""
       },
       "maxBatchedEvents" : {
         "title" : "Max Batched",
         "description" : "Maximum number of events per batch.",
         "propertyOrder" : 7100,
         "required" : true,
         "type" : "integer",
         "exampleValue" : ""
       },
       "batchEnabled" : {
         "title" : "Batch enabled",
         "description" : "Boolean for batch delivery of audit events.",
         "propertyOrder" : 6900,
         "required" : true,
         "type" : "boolean",
         "exampleValue" : ""
       },
       "insertTimeoutSec" : {
         "title" : "Insert Timeout",
         "description" : "Waiting period (seconds) for available capacity, when a new event enters
the queue.",
         "propertyOrder" : 7300,
         "required" : true,
         "type" : "integer",
         "exampleValue" : ""
       },
       "shutdownTimeoutSec" : {
         "title" : "Shutdown Timeout",
         "description" : "Application waiting period (seconds) for worker thread termination.",
         "propertyOrder" : 7500,
         "required" : true,
         "type" : "integer",
         "exampleValue" : ""
       },
       "batchThreadCount" : {
         "title" : "Thread Count",
         "description" : "Number of concurrent threads that pull events from the batch queue.",
         "propertyOrder" : 7200,
         "required" : true,
         "type" : "integer",
         "exampleValue" : ""
       }
```


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```
      }
    },
    "commonHandler" : {
      "type" : "object",
      "title" : "General Handler Configuration",
      "propertyOrder" : 0,
      "properties" : {
        "enabled" : {
          "title" : "Enabled",
          "description" : "Enables or disables an audit event handler.",
          "propertyOrder" : 6200,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "topics" : {
          "title" : "Topics",
          "description" : "List of topics handled by an audit event handler.",
          "propertyOrder" : 6300,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        }
      }
    },
    "jmsConfiguration" : {
      "type" : "object",
      "title" : "JMS Configuration",
      "propertyOrder" : 2,
      "properties" : {
        "jndiContextProperties" : {
          "title" : "JNDI Context Properties",
          "description" : "Specifies JNDI properties that OpenAM uses to connect to the JMS message
broker to which OpenAM will publish audit events.<p><p>OpenAM acts as a JMS client, using a JMS
connection factory to connect to your JMS message broker. In order for OpenAM to connect to the
broker, the JNDI context properties must conform to those needed by the broker. See the documentation
for your JMS message broker for required values.<p>The default properties are example properties for
connecting to Apache ActiveMQ.",
          "propertyOrder" : 6600,
          "required" : true,
          "patternProperties" : {
            ".*" : {
              "type" : "string"
            }
          },
          "type" : "object",
          "exampleValue" : ""
        },
        "deliveryMode" : {
          "title" : "Delivery Mode",
          "description" : "Specifies whether JMS messages used to transmit audit events use persistent
or non-persistent delivery.<p><p>With persistent delivery, the JMS provider ensures that messages
are not lost in transit in case of a provider failure by logging messages to storage when they are
sent.<p>Specify the delivery mode as persistent if it is unacceptable for delivery of audit events
to be lost in JMS transit. If the possible loss of audit events is acceptable, choose non-persistent
delivery, which provides better performance.",
```


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```
          "propertyOrder" : 6400,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "sessionMode" : {
          "title" : "Session Mode",
          "description" : "Specifies the JMS session acknowledgement mode: <code>AUTO</code>,
 <code>CLIENT</code>, or <code>DUPS_OK</code>.<p><ul><li>Auto mode guarantees once-only delivery of
 JMS messages used to transmit audit events.</li><li>Duplicates OK mode ensures that messages are
 delivered at least once.</li><li>Client mode does not ensure delivery.</li></ul><p>Use the default
 setting unless your JMS broker implementation requires otherwise. See your broker documentation for
 more information.",
          "propertyOrder" : 6500,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "jndiConnectionFactoryName" : {
          "title" : "JMS Connection Factory Name",
          "description" : "Specifies the JNDI lookup name for the connection factory exposed by your
 JMS message broker. OpenAM performs a JNDI lookup on this name to locate your broker's connection
 factory.<p><p>See the documentation for your JMS message broker for the required value.<p>The default
 is the connection factory name for Apache ActiveMQ.",
          "propertyOrder" : 6800,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "jndiTopicName" : {
          "title" : "JMS Topic Name",
          "description" : "JNDI lookup name for the JMS topic",
          "propertyOrder" : 6700,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    },
    "commonHandlerPlugin" : {
      "type" : "object",
      "title" : "Audit Event Handler Factory",
      "propertyOrder" : 1,
      "properties" : {
        "handlerFactory" : {
          "title" : "Factory Class Name",
          "description" : "The fully qualified class name of the factory
 responsible for creating the Audit Event Handler. The class must implement
 <code>org.forgerock.openam.audit.AuditEventHandlerFactory</code>.",
          "propertyOrder" : 7600,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    }
  }
}
```


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1.79. Json

1.79.1. Realm Operations

Resource path: `/realm-config/services/audit/JSON`

Resource version: `1.0`

1.79.1.1. create

Usage:

```
am> create Json --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "jsonFileRotation" : {
      "type" : "object",
      "title" : "File Rotation",
      "propertyOrder" : 3,
      "properties" : {
        "rotationEnabled" : {
          "title" : "Rotation Enabled",
          "description" : "Enables and disables audit file rotation.",
          "propertyOrder" : 600,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "rotationMaxFileSize" : {
          "title" : "Maximum File Size",
          "description" : "Maximum size, in bytes, which an audit file can grow to before rotation is
 triggered. A negative or zero value indicates this policy is disabled.",
          "propertyOrder" : 700,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "rotationFilePrefix" : {
          "title" : "File Rotation Prefix",
          "description" : "Prefix to prepend to audit files when rotating audit files.",
          "propertyOrder" : 800,
```


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```
          "required" : false,
          "type" : "string",
          "exampleValue" : ""
        },
        "rotationFileSuffix" : {
          "title" : "File Rotation Suffix",
          "description" : "Suffix to append to audit files when they are rotated. Suffix should be a
timestamp.",
          "propertyOrder" : 900,
          "required" : false,
          "type" : "string",
          "exampleValue" : ""
        },
        "rotationTimes" : {
          "title" : "Rotation Times",
          "description" : "Durations after midnight to trigger file rotation, in seconds.",
          "propertyOrder" : 1100,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "rotationInterval" : {
          "title" : "Rotation Interval",
          "description" : "Interval to trigger audit file rotations, in seconds. A negative or zero
value disables this feature.",
          "propertyOrder" : 1000,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    },
    "jsonConfig" : {
      "type" : "object",
      "title" : "JSON Configuration",
      "propertyOrder" : 2,
      "properties" : {
        "location" : {
          "title" : "Log Directory",
          "description" : "Directory in which to store audit log JSON files.",
          "propertyOrder" : 500,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "rotationRetentionCheckInterval" : {
          "title" : "File Rotation Retention Check Interval",
          "description" : "Interval to check time-based file rotation policies, in seconds.",
          "propertyOrder" : 1800,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "elasticsearchCompatible" : {
          "title" : "ElasticSearch JSON Format Compatible",
```


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```
          "description" : "JSON format should be transformed to be compatible with  ElasticSearch
format restrictions.",
          "propertyOrder" : 1700,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        }
      }
    },
    "jsonBuffering" : {
      "type" : "object",
      "title" : "Buffering",
      "propertyOrder" : 5,
      "properties" : {
        "bufferingMaxSize" : {
          "title" : "Batch Size",
          "description" : "Maximum number of events that can be buffered (default/minimum: 100000)",
          "propertyOrder" : 1500,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "bufferingWriteInterval" : {
          "title" : "Write interval",
          "description" : "Interval at which buffered events are written to a file, in milliseconds.",
          "propertyOrder" : 1600,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    },
    "commonHandlerPlugin" : {
      "type" : "object",
      "title" : "Audit Event Handler Factory",
      "propertyOrder" : 1,
      "properties" : {
        "handlerFactory" : {
          "title" : "Factory Class Name",
          "description" : "The fully qualified class name of the factory
responsible for creating the Audit Event Handler. The class must implement
<code>org.forgerock.openam.audit.AuditEventHandlerFactory</code>.",
          "propertyOrder" : 1900,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    },
    "jsonFileRetention" : {
      "type" : "object",
      "title" : "File Retention",
      "propertyOrder" : 4,
      "properties" : {
        "retentionMaxDiskSpaceToUse" : {
          "title" : "Maximum Disk Space",
          "description" : "The maximum amount of disk space the audit files can occupy, in bytes. A
negative or zero value indicates this policy is disabled.",
          "propertyOrder" : 1300,
```


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```
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "retentionMinFreeSpaceRequired" : {
          "title" : "Minimum Free Space Required",
          "description" : "Minimum amount of disk space required, in bytes, on the system where audit
 files are stored. A negative or zero value indicates this policy is disabled.",
          "propertyOrder" : 1400,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "retentionMaxNumberOfHistoryFiles" : {
          "title" : "Maximum Number of Historical Files",
          "description" : "Maximum number of backup audit files allowed. A value of <code>-1</code>
 disables pruning of old history files.",
          "propertyOrder" : 1200,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    },
    "commonHandler" : {
      "type" : "object",
      "title" : "General Handler Configuration",
      "propertyOrder" : 0,
      "properties" : {
        "topics" : {
          "title" : "Topics",
          "description" : "List of topics handled by an audit event handler.",
          "propertyOrder" : 400,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "enabled" : {
          "title" : "Enabled",
          "description" : "Enables or disables an audit event handler.",
          "propertyOrder" : 300,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        }
      }
    }
  }
}
```

1.79.1.2. delete

Usage:

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```
am> delete Json --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.79.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action Json --realm Realm --actionName getAllTypes
```

1.79.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action Json --realm Realm --actionName getCreatableTypes
```

1.79.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action Json --realm Realm --actionName nextdescendents
```

1.79.1.6. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

```
am> query Json --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.79.1.7. read

Usage:

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```
am> read Json --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.79.1.8. update

Usage:

```
am> update Json --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "jsonFileRotation" : {
      "type" : "object",
      "title" : "File Rotation",
      "propertyOrder" : 3,
      "properties" : {
        "rotationEnabled" : {
          "title" : "Rotation Enabled",
          "description" : "Enables and disables audit file rotation.",
          "propertyOrder" : 600,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "rotationMaxFileSize" : {
          "title" : "Maximum File Size",
          "description" : "Maximum size, in bytes, which an audit file can grow to before rotation is
 triggered. A negative or zero value indicates this policy is disabled.",
          "propertyOrder" : 700,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "rotationFilePrefix" : {
          "title" : "File Rotation Prefix",
          "description" : "Prefix to prepend to audit files when rotating audit files.",
          "propertyOrder" : 800,
          "required" : false,
          "type" : "string",
          "exampleValue" : ""
```


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```
       },
       "rotationFileSuffix" : {
         "title" : "File Rotation Suffix",
         "description" : "Suffix to append to audit files when they are rotated. Suffix should be a
timestamp.",
         "propertyOrder" : 900,
         "required" : false,
         "type" : "string",
         "exampleValue" : ""
       },
       "rotationTimes" : {
         "title" : "Rotation Times",
         "description" : "Durations after midnight to trigger file rotation, in seconds.",
         "propertyOrder" : 1100,
         "required" : true,
         "items" : {
           "type" : "string"
         },
         "type" : "array",
         "exampleValue" : ""
       },
       "rotationInterval" : {
         "title" : "Rotation Interval",
         "description" : "Interval to trigger audit file rotations, in seconds. A negative or zero
value disables this feature.",
         "propertyOrder" : 1000,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       }
     }
   },
   "jsonConfig" : {
     "type" : "object",
     "title" : "JSON Configuration",
     "propertyOrder" : 2,
     "properties" : {
       "location" : {
         "title" : "Log Directory",
         "description" : "Directory in which to store audit log JSON files.",
         "propertyOrder" : 500,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       },
       "rotationRetentionCheckInterval" : {
         "title" : "File Rotation Retention Check Interval",
         "description" : "Interval to check time-based file rotation policies, in seconds.",
         "propertyOrder" : 1800,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       },
       "elasticsearchCompatible" : {
         "title" : "ElasticSearch JSON Format Compatible",
         "description" : "JSON format should be transformed to be compatible with  ElasticSearch
format restrictions.",
         "propertyOrder" : 1700,
         "required" : true,
```


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```
          "type" : "boolean",
          "exampleValue" : ""
        }
      }
    },
    "jsonBuffering" : {
      "type" : "object",
      "title" : "Buffering",
      "propertyOrder" : 5,
      "properties" : {
        "bufferingMaxSize" : {
          "title" : "Batch Size",
          "description" : "Maximum number of events that can be buffered (default/minimum: 100000)",
          "propertyOrder" : 1500,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "bufferingWriteInterval" : {
          "title" : "Write interval",
          "description" : "Interval at which buffered events are written to a file, in milliseconds.",
          "propertyOrder" : 1600,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    },
    "commonHandlerPlugin" : {
      "type" : "object",
      "title" : "Audit Event Handler Factory",
      "propertyOrder" : 1,
      "properties" : {
        "handlerFactory" : {
          "title" : "Factory Class Name",
          "description" : "The fully qualified class name of the factory
responsible for creating the Audit Event Handler. The class must implement
<code>org.forgerock.openam.audit.AuditEventHandlerFactory</code>.",
          "propertyOrder" : 1900,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    },
    "jsonFileRetention" : {
      "type" : "object",
      "title" : "File Retention",
      "propertyOrder" : 4,
      "properties" : {
        "retentionMaxDiskSpaceToUse" : {
          "title" : "Maximum Disk Space",
          "description" : "The maximum amount of disk space the audit files can occupy, in bytes. A
negative or zero value indicates this policy is disabled.",
          "propertyOrder" : 1300,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
```


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```
        "retentionMinFreeSpaceRequired" : {
          "title" : "Minimum Free Space Required",
          "description" : "Minimum amount of disk space required, in bytes, on the system where audit
 files are stored. A negative or zero value indicates this policy is disabled.",
          "propertyOrder" : 1400,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "retentionMaxNumberOfHistoryFiles" : {
          "title" : "Maximum Number of Historical Files",
          "description" : "Maximum number of backup audit files allowed. A value of <code>-1</code>
 disables pruning of old history files.",
          "propertyOrder" : 1200,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    },
    "commonHandler" : {
      "type" : "object",
      "title" : "General Handler Configuration",
      "propertyOrder" : 0,
      "properties" : {
        "topics" : {
          "title" : "Topics",
          "description" : "List of topics handled by an audit event handler.",
          "propertyOrder" : 400,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "enabled" : {
          "title" : "Enabled",
          "description" : "Enables or disables an audit event handler.",
          "propertyOrder" : 300,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        }
      }
    }
  }
}
```

1.79.2. Global Operations

Resource path: `/global-config/services/audit/JSON`

Resource version: `1.0`

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1.79.2.1. create

Usage:

```
am> create Json --global --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "jsonBuffering" : {
      "type" : "object",
      "title" : "Buffering",
      "propertyOrder" : 5,
      "properties" : {
        "bufferingMaxSize" : {
          "title" : "Batch Size",
          "description" : "Maximum number of events that can be buffered (default/minimum: 100000)",
          "propertyOrder" : 1500,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "bufferingWriteInterval" : {
          "title" : "Write interval",
          "description" : "Interval at which buffered events are written to a file, in milliseconds.",
          "propertyOrder" : 1600,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    },
    "jsonFileRetention" : {
      "type" : "object",
      "title" : "File Retention",
      "propertyOrder" : 4,
      "properties" : {
        "retentionMinFreeSpaceRequired" : {
          "title" : "Minimum Free Space Required",
          "description" : "Minimum amount of disk space required, in bytes, on the system where audit
 files are stored. A negative or zero value indicates this policy is disabled.",
          "propertyOrder" : 1400,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "retentionMaxDiskSpaceToUse" : {
          "title" : "Maximum Disk Space",
```


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```
          "description" : "The maximum amount of disk space the audit files can occupy, in bytes. A
negative or zero value indicates this policy is disabled.",
          "propertyOrder" : 1300,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "retentionMaxNumberOfHistoryFiles" : {
          "title" : "Maximum Number of Historical Files",
          "description" : "Maximum number of backup audit files allowed. A value of <code>-1</code>
disables pruning of old history files.",
          "propertyOrder" : 1200,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    },
    "jsonConfig" : {
      "type" : "object",
      "title" : "JSON Configuration",
      "propertyOrder" : 2,
      "properties" : {
        "location" : {
          "title" : "Log Directory",
          "description" : "Directory in which to store audit log JSON files.",
          "propertyOrder" : 500,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "elasticsearchCompatible" : {
          "title" : "ElasticSearch JSON Format Compatible",
          "description" : "JSON format should be transformed to be compatible with  ElasticSearch
format restrictions.",
          "propertyOrder" : 1700,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "rotationRetentionCheckInterval" : {
          "title" : "File Rotation Retention Check Interval",
          "description" : "Interval to check time-based file rotation policies, in seconds.",
          "propertyOrder" : 1800,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    },
    "jsonFileRotation" : {
      "type" : "object",
      "title" : "File Rotation",
      "propertyOrder" : 3,
      "properties" : {
        "rotationEnabled" : {
          "title" : "Rotation Enabled",
          "description" : "Enables and disables audit file rotation.",
          "propertyOrder" : 600,
```


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```
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "rotationFileSuffix" : {
          "title" : "File Rotation Suffix",
          "description" : "Suffix to append to audit files when they are rotated. Suffix should be a
timestamp.",
          "propertyOrder" : 900,
          "required" : false,
          "type" : "string",
          "exampleValue" : ""
        },
        "rotationTimes" : {
          "title" : "Rotation Times",
          "description" : "Durations after midnight to trigger file rotation, in seconds.",
          "propertyOrder" : 1100,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "rotationInterval" : {
          "title" : "Rotation Interval",
          "description" : "Interval to trigger audit file rotations, in seconds. A negative or zero
value disables this feature.",
          "propertyOrder" : 1000,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "rotationFilePrefix" : {
          "title" : "File Rotation Prefix",
          "description" : "Prefix to prepend to audit files when rotating audit files.",
          "propertyOrder" : 800,
          "required" : false,
          "type" : "string",
          "exampleValue" : ""
        },
        "rotationMaxFileSize" : {
          "title" : "Maximum File Size",
          "description" : "Maximum size, in bytes, which an audit file can grow to before rotation is
triggered. A negative or zero value indicates this policy is disabled.",
          "propertyOrder" : 700,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    },
    "commonHandler" : {
      "type" : "object",
      "title" : "General Handler Configuration",
      "propertyOrder" : 0,
      "properties" : {
        "topics" : {
          "title" : "Topics",
```


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```
          "description" : "List of topics handled by an audit event handler.",
          "propertyOrder" : 400,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "enabled" : {
          "title" : "Enabled",
          "description" : "Enables or disables an audit event handler.",
          "propertyOrder" : 300,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        }
      }
    },
    "commonHandlerPlugin" : {
      "type" : "object",
      "title" : "Audit Event Handler Factory",
      "propertyOrder" : 1,
      "properties" : {
        "handlerFactory" : {
          "title" : "Factory Class Name",
          "description" : "The fully qualified class name of the factory
 responsible for creating the Audit Event Handler. The class must implement
 <code>org.forgerock.openam.audit.AuditEventHandlerFactory</code>.",
          "propertyOrder" : 1900,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    }
  }
}
```

1.79.2.2. delete

Usage:

```
am> delete Json --global --id id
```

Parameters:

--id

The unique identifier for the resource.

1.79.2.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

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Usage:

```
am> action Json --global --actionName getAllTypes
```

1.79.2.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action Json --global --actionName getCreatableTypes
```

1.79.2.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action Json --global --actionName nextdescendents
```

1.79.2.6. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

```
am> query Json --global --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.79.2.7. read

Usage:

```
am> read Json --global --id id
```

Parameters:

--id

The unique identifier for the resource.

1.79.2.8. update

Usage:

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```
am> update Json --global --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "jsonBuffering" : {
      "type" : "object",
      "title" : "Buffering",
      "propertyOrder" : 5,
      "properties" : {
        "bufferingMaxSize" : {
          "title" : "Batch Size",
          "description" : "Maximum number of events that can be buffered (default/minimum: 100000)",
          "propertyOrder" : 1500,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "bufferingWriteInterval" : {
          "title" : "Write interval",
          "description" : "Interval at which buffered events are written to a file, in milliseconds.",
          "propertyOrder" : 1600,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    },
    "jsonFileRetention" : {
      "type" : "object",
      "title" : "File Retention",
      "propertyOrder" : 4,
      "properties" : {
        "retentionMinFreeSpaceRequired" : {
          "title" : "Minimum Free Space Required",
          "description" : "Minimum amount of disk space required, in bytes, on the system where audit
 files are stored. A negative or zero value indicates this policy is disabled.",
          "propertyOrder" : 1400,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "retentionMaxDiskSpaceToUse" : {
          "title" : "Maximum Disk Space",
          "description" : "The maximum amount of disk space the audit files can occupy, in bytes. A
 negative or zero value indicates this policy is disabled.",
          "propertyOrder" : 1300,
          "required" : true,
```


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```
          "type" : "string",
          "exampleValue" : ""
        },
        "retentionMaxNumberOfHistoryFiles" : {
          "title" : "Maximum Number of Historical Files",
          "description" : "Maximum number of backup audit files allowed. A value of <code>-1</code>
disables pruning of old history files.",
          "propertyOrder" : 1200,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    },
    "jsonConfig" : {
      "type" : "object",
      "title" : "JSON Configuration",
      "propertyOrder" : 2,
      "properties" : {
        "location" : {
          "title" : "Log Directory",
          "description" : "Directory in which to store audit log JSON files.",
          "propertyOrder" : 500,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "elasticsearchCompatible" : {
          "title" : "ElasticSearch JSON Format Compatible",
          "description" : "JSON format should be transformed to be compatible with  ElasticSearch
format restrictions.",
          "propertyOrder" : 1700,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "rotationRetentionCheckInterval" : {
          "title" : "File Rotation Retention Check Interval",
          "description" : "Interval to check time-based file rotation policies, in seconds.",
          "propertyOrder" : 1800,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    },
    "jsonFileRotation" : {
      "type" : "object",
      "title" : "File Rotation",
      "propertyOrder" : 3,
      "properties" : {
        "rotationEnabled" : {
          "title" : "Rotation Enabled",
          "description" : "Enables and disables audit file rotation.",
          "propertyOrder" : 600,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
```


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```
       "rotationFileSuffix" : {
         "title" : "File Rotation Suffix",
         "description" : "Suffix to append to audit files when they are rotated. Suffix should be a
timestamp.",
         "propertyOrder" : 900,
         "required" : false,
         "type" : "string",
         "exampleValue" : ""
       },
       "rotationTimes" : {
         "title" : "Rotation Times",
         "description" : "Durations after midnight to trigger file rotation, in seconds.",
         "propertyOrder" : 1100,
         "required" : true,
         "items" : {
           "type" : "string"
         },
         "type" : "array",
         "exampleValue" : ""
       },
       "rotationInterval" : {
         "title" : "Rotation Interval",
         "description" : "Interval to trigger audit file rotations, in seconds. A negative or zero
value disables this feature.",
         "propertyOrder" : 1000,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       },
       "rotationFilePrefix" : {
         "title" : "File Rotation Prefix",
         "description" : "Prefix to prepend to audit files when rotating audit files.",
         "propertyOrder" : 800,
         "required" : false,
         "type" : "string",
         "exampleValue" : ""
       },
       "rotationMaxFileSize" : {
         "title" : "Maximum File Size",
         "description" : "Maximum size, in bytes, which an audit file can grow to before rotation is
triggered. A negative or zero value indicates this policy is disabled.",
         "propertyOrder" : 700,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       }
     }
   },
   "commonHandler" : {
     "type" : "object",
     "title" : "General Handler Configuration",
     "propertyOrder" : 0,
     "properties" : {
       "topics" : {
         "title" : "Topics",
         "description" : "List of topics handled by an audit event handler.",
         "propertyOrder" : 400,
         "required" : true,
         "items" : {
```


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```
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "enabled" : {
          "title" : "Enabled",
          "description" : "Enables or disables an audit event handler.",
          "propertyOrder" : 300,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        }
      }
    },
    "commonHandlerPlugin" : {
      "type" : "object",
      "title" : "Audit Event Handler Factory",
      "propertyOrder" : 1,
      "properties" : {
        "handlerFactory" : {
          "title" : "Factory Class Name",
          "description" : "The fully qualified class name of the factory
 responsible for creating the Audit Event Handler. The class must implement
 <code>org.forgerock.openam.audit.AuditEventHandlerFactory</code>.",
          "propertyOrder" : 1900,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    }
  }
}
```

1.80. JwtProofOfPossessionModule

1.80.1. Realm Operations

Resource path: `/realm-config/authentication/modules/authJwtPoP`

Resource version: `1.0`

1.80.1.1. create

Usage:

```
am> create JwtProofOfPossessionModule --realm Realm --id id --body body
```

Parameters:

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--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "responseEncryptionCipher" : {
      "title" : "Response Encryption Cipher",
      "description" : "The authenticated encryption (AEAD) scheme to use for the response.",
      "propertyOrder" : 350,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "subjectJwkSetAttr" : {
      "title" : "Subject JWK Set Attribute",
      "description" : "Subject profile attribute that contains a JWK Set of confirmation and
 encryption keys.",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "authenticationLevel" : {
      "title" : "Authentication Level",
      "description" : "The authentication level associated with this module.",
      "propertyOrder" : 10000,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "challengeSigningKey" : {
      "title" : "Challenge Signing Key",
      "description" : "Name of the key (in the AM keystore) to use to sign challenges.",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "responseEncryptionMethod" : {
      "title" : "Response Encryption Scheme",
      "description" : "Key exchange method to use for responses: ephemeral elliptic curve Diffie-
Hellman (ECDHE)key agreement or using a pre-shared key (PSK) from the subject's JWK Set.",
      "propertyOrder" : 300,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "enableTlsSessionBinding" : {
      "title" : "Use TLS Session Binding",
      "description" : "If enabled the response must arrive in the same TLS (HTTPS) session as the
 challenge was issued.",
      "propertyOrder" : 400,
```


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```
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    }
  }
}
```

1.80.1.2. delete

Usage:

```
am> delete JwtProofOfPossessionModule --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.80.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action JwtProofOfPossessionModule --realm Realm --actionName getAllTypes
```

1.80.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action JwtProofOfPossessionModule --realm Realm --actionName getCreatableTypes
```

1.80.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action JwtProofOfPossessionModule --realm Realm --actionName nextdescendents
```

1.80.1.6. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

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```
am> query JwtProofOfPossessionModule --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.80.1.7. read

Usage:

```
am> read JwtProofOfPossessionModule --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.80.1.8. update

Usage:

```
am> update JwtProofOfPossessionModule --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "responseEncryptionCipher" : {
      "title" : "Response Encryption Cipher",
      "description" : "The authenticated encryption (AEAD) scheme to use for the response.",
      "propertyOrder" : 350,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "subjectJwkSetAttr" : {
      "title" : "Subject JWK Set Attribute",
      "description" : "Subject profile attribute that contains a JWK Set of confirmation and
 encryption keys.",
      "propertyOrder" : 100,
```


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```
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "authenticationLevel" : {
      "title" : "Authentication Level",
      "description" : "The authentication level associated with this module.",
      "propertyOrder" : 10000,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "challengeSigningKey" : {
      "title" : "Challenge Signing Key",
      "description" : "Name of the key (in the AM keystore) to use to sign challenges.",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "responseEncryptionMethod" : {
      "title" : "Response Encryption Scheme",
      "description" : "Key exchange method to use for responses: ephemeral elliptic curve Diffie-
Hellman (ECDHE)key agreement or using a pre-shared key (PSK) from the subject's JWK Set.",
      "propertyOrder" : 300,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "enableTlsSessionBinding" : {
      "title" : "Use TLS Session Binding",
      "description" : "If enabled the response must arrive in the same TLS (HTTPS) session as the
 challenge was issued.",
      "propertyOrder" : 400,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    }
  }
}
```

1.80.2. Global Operations

Resource path: `/global-config/authentication/modules/authJwtPoP`

Resource version: `1.0`

1.80.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action JwtProofOfPossessionModule --global --actionName getAllTypes
```


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1.80.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action JwtProofOfPossessionModule --global --actionName getCreatableTypes
```

1.80.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action JwtProofOfPossessionModule --global --actionName nextdescendents
```

1.80.2.4. read

Usage:

```
am> read JwtProofOfPossessionModule --global
```

1.80.2.5. update

Usage:

```
am> update JwtProofOfPossessionModule --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "defaults" : {
      "properties" : {
        "responseEncryptionMethod" : {
          "title" : "Response Encryption Scheme",
          "description" : "Key exchange method to use for responses: ephemeral elliptic curve Diffie-
Hellman (ECDHE)key agreement or using a pre-shared key (PSK) from the subject's JWK Set.",
          "propertyOrder" : 300,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "authenticationLevel" : {
          "title" : "Authentication Level",
          "description" : "The authentication level associated with this module.",
          "propertyOrder" : 10000,
```


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```
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "challengeSigningKey" : {
          "title" : "Challenge Signing Key",
          "description" : "Name of the key (in the AM keystore) to use to sign challenges.",
          "propertyOrder" : 200,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "subjectJwkSetAttr" : {
          "title" : "Subject JWK Set Attribute",
          "description" : "Subject profile attribute that contains a JWK Set of confirmation and
 encryption keys.",
          "propertyOrder" : 100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "responseEncryptionCipher" : {
          "title" : "Response Encryption Cipher",
          "description" : "The authenticated encryption (AEAD) scheme to use for the response.",
          "propertyOrder" : 350,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "enableTlsSessionBinding" : {
          "title" : "Use TLS Session Binding",
          "description" : "If enabled the response must arrive in the same TLS (HTTPS) session as the
 challenge was issued.",
          "propertyOrder" : 400,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        }
      },
      "type" : "object",
      "title" : "Realm Defaults"
    }
  }
}
```

1.81. KbaQuestions

1.81.1. Realm Operations

KBA resource is responsible for delivering up configured security questions.

Resource path: `/selfservice/kba`

Resource version: `1.0`

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1.81.1.1. read

Read the configured security questions.

Usage:

```
am> read KbaQuestions --realm Realm
```

1.82. LdapModule

1.82.1. Realm Operations

Resource path: `/realm-config/authentication/modules/ldap`

Resource version: `1.0`

1.82.1.1. create

Usage:

```
am> create LdapModule --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "openam-auth-ldap-connection-mode" : {
      "title" : "LDAP Connection Mode",
      "description" : "Defines which protocol/operation is used to establish the connection to the
 LDAP Directory Server.<br><br>If 'LDAP' is selected, the connection <b>won't be secured</b> and
 passwords are transferred in <b>cleartext</b> over the network.<br/> If 'LDAPS' is selected, the
 connection is secured via SSL or TLS. <br/> If 'StartTLS' is selected, the connection is secured by
 using StartTLS extended operation.",
      "propertyOrder" : 1000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "trustAllServerCertificates" : {
      "title" : "Trust All Server Certificates",
      "description" : "Enables a <code>X509TrustManager</code> that trusts all
 certificates.<br><br>This feature will allow the LDAP authentication module to connect to LDAP
```


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```
 servers protected by self signed or invalid certificates (such as invalid hostname).<br/><br/><i>NB
 </i>Use this feature with care as it bypasses the normal certificate verification process",
      "propertyOrder" : 1600,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "userBindDN" : {
      "title" : "Bind User DN",
      "description" : "The DN of an admin user used by the module to authentication to the LDAP
 server<br><br>The LDAP module requires an administration account in order to perform functionality
 such as password reset.<br/><br/><i>NB </i><code>cn=Directory Manager</code> should not be used in
 production systems.",
      "propertyOrder" : 400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "userSearchFilter" : {
      "title" : "User Search Filter",
      "description" : "This search filter will be appended to the standard user search
 filter.<br><br>This attribute can be used to append a custom search filter to the standard filter.
 For example: <code>(objectClass=person)</code>would result in the following user search filter:<br/
><br/><code>(&(uid=<i>user</i>)(objectClass=person))</code>",
      "propertyOrder" : 800,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "returnUserDN" : {
      "title" : "Return User DN to DataStore",
      "description" : "Controls whether the DN or the username is returned as the authentication
 principal.",
      "propertyOrder" : 1200,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "authenticationLevel" : {
      "title" : "Authentication Level",
      "description" : "The authentication level associated with this module.<br><br>Each
 authentication module has an authentication level that can be used to indicate the level of security
 associated with the module; 0 is the lowest (and the default). ",
      "propertyOrder" : 2000,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "connectionHeartbeatInterval" : {
      "title" : "LDAP Connection Heartbeat Interval",
      "description" : "Specifies how often should OpenAM send a heartbeat request to the
 directory.<br><br>This setting controls how often OpenAM <b>should</b> send a heartbeat search
 request to the configured directory. If a connection becomes unresponsive (e.g. due to a network
 error) then it may take up to the interval period before the problem is detected. Use along with the
 Heartbeat Time Unit parameter to define the exact interval. Zero or negative value will result in
 disabling heartbeat requests.",
      "propertyOrder" : 1700,
      "required" : true,
      "type" : "integer",
```


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```
     "exampleValue" : ""
   },
   "userProfileRetrievalAttribute" : {
     "title" : "Attribute Used to Retrieve User Profile",
     "description" : "The LDAP module will use this attribute to search of the profile of an
authenticated user.<br><br>This is the attribute used to find the profile of the authenticated user.
Normally this will be the same attribute used to find the user account. The value will be the name of
the user used for authentication.",
     "propertyOrder" : 600,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "beheraPasswordPolicySupportEnabled" : {
     "title" : "LDAP Behera Password Policy Support",
     "description" : "Enables support for modern LDAP password policies<br><br>LDAP Behera Password
policies are supported by modern LDAP servers such as OpenDJ. If this functionality is disabled then
only the older Netscape VCHU password policy standard will be enforced.",
     "propertyOrder" : 1500,
     "required" : true,
     "type" : "boolean",
     "exampleValue" : ""
   },
   "minimumPasswordLength" : {
     "title" : "Minimum Password Length",
     "description" : "Enforced when the user is resetting their password as part of the
authentication.<br><br>If the user needs to reset their password as part of the authentication
process, the authentication module can enforce a minimum password length. This is separate from any
password length controls from the underlying LDAP server. If the external LDAP server password policy
is enforcing password length, set this value to 0 to avoid confusion.",
     "propertyOrder" : 1400,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "primaryLdapServer" : {
     "title" : "Primary LDAP Server",
     "description" : "Use this list to set the primary LDAP server used for authentication.
<br><br>The LDAP authentication module will use this list as the primary server for authentication. A
single entry must be in the format:<br/><br/><code>ldap_server:port</code><br/><br/>Multiple entries
allow associations between OpenAM servers and a LDAP server. The format is:<br/><br/><code>local
server name | server:port</code><br/><br/>The local server name is the full name of the server from
the list of servers and sites.",
     "propertyOrder" : 100,
     "required" : true,
     "items" : {
       "type" : "string"
     },
     "type" : "array",
     "exampleValue" : ""
   },
   "operationTimeout" : {
     "title" : "LDAP operations timeout",
     "description" : "Defines the timeout in seconds OpenAM should wait for a response of the
Directory Server - <code>0</code> means no timeout.<br><br>If the Directory Server's host is down
completely or the TCP connection became stale OpenAM waits until operation timeouts from the OS or
the JVM are applied. However this setting allows more granular control within OpenAM itself. A value
of <code>0</code> means NO timeout is applied on OpenAM level and the timeouts from the JVM or OS
will apply.",
```


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```
      "propertyOrder" : 1900,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "userSearchAttributes" : {
      "title" : "Attributes Used to Search for a User to be Authenticated",
      "description" : "The attributes specified in this list form the LDAP search filter.<br><br>The
 default value of uid will form the following search filter of <code>uid=<i>user</i></code>, if there
 are multiple values such as uid and cn, the module will create a search filter as follows <code>(|
(uid=<i>user</i>)(cn=<i>user</i>))</code>",
      "propertyOrder" : 700,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "connectionHeartbeatTimeUnit" : {
      "title" : "LDAP Connection Heartbeat Time Unit",
      "description" : "Defines the time unit corresponding to the Heartbeat Interval
 setting.<br><br>This setting controls how often OpenAM <b>should</b> send a heartbeat search request
 to the configured directory. If a connection becomes unresponsive (e.g. due to a network error) then
 it may take up to the interval period before the problem is detected. Use along with the Heartbeat
 Interval parameter to define the exact interval.",
      "propertyOrder" : 1800,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "userSearchStartDN" : {
      "title" : "DN to Start User Search",
      "description" : "The search for accounts to be authenticated start from this base DN <br><br>For
 a single server just enter the Base DN to be searched. Multiple OpenAM servers can have different
 base DNs for the search The format is as follows:<br/><br/><code>local server name | search DN</
code><br/><br/><i>NB </i>The local server name is the full name of the server from the list of servers
 and sites.",
      "propertyOrder" : 300,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "secondaryLdapServer" : {
      "title" : "Secondary LDAP Server",
      "description" : "Use this list to set the secondary (failover) LDAP server used for
 authentication.<br><br>If the primary LDAP server fails, the LDAP authentication module will failover
 to the secondary server. A single entry must be in the format:<br/><br/><code>ldap_server:port</
code><br/><br/>Multiple entries allow associations between OpenAM servers and a LDAP server. The
 format is:<br/><br/><code>local server name | server:port</code><br/><br/><i>NB </i>The local server
 name is the full name of the server from the list of servers and sites.",
      "propertyOrder" : 200,
      "required" : true,
      "items" : {
        "type" : "string"
      },
```


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```
      "type" : "array",
      "exampleValue" : ""
    },
    "profileAttributeMappings" : {
      "title" : "User Creation Attributes",
      "description" : "Controls the mapping of local attribute to external attribute for dynamic
 profile creation.<br><br>If dynamic profile creation is enabled; this feature allows for a mapping
 between the attribute/values retrieved from the users authenticated profile and the attribute/values
 that will be provisioned into their matching account in the data store.<br/><br/>The format of this
 property is: <br/><br/><code> local attr1|external attr1</code>",
      "propertyOrder" : 1300,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "userBindPassword" : {
      "title" : "Bind User Password",
      "description" : "The password of the administration account.",
      "propertyOrder" : 500,
      "required" : true,
      "type" : "string",
      "format" : "password",
      "exampleValue" : ""
    },
    "searchScope" : {
      "title" : "Search Scope",
      "description" : "The level in the Directory Server that will be searched for a matching
 user profile.<br><br>This attribute controls how the directory is searched.<br/><br/
><ul><li><code>OBJECT</code>: Only the Base DN is searched.</li><li><code>ONELEVEL</code>: Only the
 single level below (and not the Base DN) is searched</li><li><code>SUBTREE</code>: The Base DN and
 all levels below are searched</li></ul>",
      "propertyOrder" : 900,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```


1.82.1.2. delete

Usage:

```
am> delete LdapModule --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

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1.82.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action LdapModule --realm Realm --actionName getAllTypes
```

1.82.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action LdapModule --realm Realm --actionName getCreatableTypes
```

1.82.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action LdapModule --realm Realm --actionName nextdescendents
```

1.82.1.6. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

```
am> query LdapModule --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.82.1.7. read

Usage:

```
am> read LdapModule --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

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1.82.1.8. update

Usage:

```
am> update LdapModule --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "openam-auth-ldap-connection-mode" : {
      "title" : "LDAP Connection Mode",
      "description" : "Defines which protocol/operation is used to establish the connection to the
LDAP Directory Server.<br><br>If 'LDAP' is selected, the connection <b>won't be secured</b> and
passwords are transferred in <b>cleartext</b> over the network.<br/> If 'LDAPS' is selected, the
connection is secured via SSL or TLS. <br/> If 'StartTLS' is selected, the connection is secured by
using StartTLS extended operation.",
      "propertyOrder" : 1000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "trustAllServerCertificates" : {
      "title" : "Trust All Server Certificates",
      "description" : "Enables a <code>X509TrustManager</code> that trusts all
certificates.<br><br>This feature will allow the LDAP authentication module to connect to LDAP
servers protected by self signed or invalid certificates (such as invalid hostname).<br/><br/><i>NB
</i>Use this feature with care as it bypasses the normal certificate verification process",
      "propertyOrder" : 1600,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "userBindDN" : {
      "title" : "Bind User DN",
      "description" : "The DN of an admin user used by the module to authentication to the LDAP
server<br><br>The LDAP module requires an administration account in order to perform functionality
such as password reset.<br/><br/><i>NB </i><code>cn=Directory Manager</code> should not be used in
production systems.",
      "propertyOrder" : 400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "userSearchFilter" : {
      "title" : "User Search Filter",
      "description" : "This search filter will be appended to the standard user search
filter.<br><br>This attribute can be used to append a custom search filter to the standard filter.
```


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```
 For example: <code>(objectClass=person)</code>would result in the following user search filter:<br/
><br/><code>(&(uid=<i>user</i>)(objectClass=person))</code>",
      "propertyOrder" : 800,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "returnUserDN" : {
      "title" : "Return User DN to DataStore",
      "description" : "Controls whether the DN or the username is returned as the authentication
 principal.",
      "propertyOrder" : 1200,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "authenticationLevel" : {
      "title" : "Authentication Level",
      "description" : "The authentication level associated with this module.<br><br>Each
 authentication module has an authentication level that can be used to indicate the level of security
 associated with the module; 0 is the lowest (and the default). ",
      "propertyOrder" : 2000,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "connectionHeartbeatInterval" : {
      "title" : "LDAP Connection Heartbeat Interval",
      "description" : "Specifies how often should OpenAM send a heartbeat request to the
 directory.<br><br>This setting controls how often OpenAM <b>should</b> send a heartbeat search
 request to the configured directory. If a connection becomes unresponsive (e.g. due to a network
 error) then it may take up to the interval period before the problem is detected. Use along with the
 Heartbeat Time Unit parameter to define the exact interval. Zero or negative value will result in
 disabling heartbeat requests.",
      "propertyOrder" : 1700,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "userProfileRetrievalAttribute" : {
      "title" : "Attribute Used to Retrieve User Profile",
      "description" : "The LDAP module will use this attribute to search of the profile of an
 authenticated user.<br><br>This is the attribute used to find the profile of the authenticated user.
 Normally this will be the same attribute used to find the user account. The value will be the name of
 the user used for authentication.",
      "propertyOrder" : 600,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "beheraPasswordPolicySupportEnabled" : {
      "title" : "LDAP Behera Password Policy Support",
      "description" : "Enables support for modern LDAP password policies<br><br>LDAP Behera Password
 policies are supported by modern LDAP servers such as OpenDJ. If this functionality is disabled then
 only the older Netscape VCHU password policy standard will be enforced.",
      "propertyOrder" : 1500,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
```


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```
    },
    "minimumPasswordLength" : {
      "title" : "Minimum Password Length",
      "description" : "Enforced when the user is resetting their password as part of the
 authentication.<br><br>If the user needs to reset their password as part of the authentication
 process, the authentication module can enforce a minimum password length. This is separate from any
 password length controls from the underlying LDAP server. If the external LDAP server password policy
 is enforcing password length, set this value to 0 to avoid confusion.",
      "propertyOrder" : 1400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "primaryLdapServer" : {
      "title" : "Primary LDAP Server",
      "description" : "Use this list to set the primary LDAP server used for authentication.
 <br><br>The LDAP authentication module will use this list as the primary server for authentication. A
 single entry must be in the format:<br/><br/><code>ldap_server:port</code><br/><br/>Multiple entries
 allow associations between OpenAM servers and a LDAP server. The format is:<br/><br/><code>local
 server name | server:port</code><br/><br/>The local server name is the full name of the server from
 the list of servers and sites.",
      "propertyOrder" : 100,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "operationTimeout" : {
      "title" : "LDAP operations timeout",
      "description" : "Defines the timeout in seconds OpenAM should wait for a response of the
 Directory Server - <code>0</code> means no timeout.<br><br>If the Directory Server's host is down
 completely or the TCP connection became stale OpenAM waits until operation timeouts from the OS or
 the JVM are applied. However this setting allows more granular control within OpenAM itself. A value
 of <code>0</code> means NO timeout is applied on OpenAM level and the timeouts from the JVM or OS
 will apply.",
      "propertyOrder" : 1900,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "userSearchAttributes" : {
      "title" : "Attributes Used to Search for a User to be Authenticated",
      "description" : "The attributes specified in this list form the LDAP search filter.<br><br>The
 default value of uid will form the following search filter of <code>uid=<i>user</i></code>, if there
 are multiple values such as uid and cn, the module will create a search filter as follows <code>(|
(uid=<i>user</i>)(cn=<i>user</i>))</code>",
      "propertyOrder" : 700,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "connectionHeartbeatTimeUnit" : {
      "title" : "LDAP Connection Heartbeat Time Unit",
```


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```
      "description" : "Defines the time unit corresponding to the Heartbeat Interval
 setting.<br><br>This setting controls how often OpenAM <b>should</b> send a heartbeat search request
 to the configured directory. If a connection becomes unresponsive (e.g. due to a network error) then
 it may take up to the interval period before the problem is detected. Use along with the Heartbeat
 Interval parameter to define the exact interval.",
      "propertyOrder" : 1800,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "userSearchStartDN" : {
      "title" : "DN to Start User Search",
      "description" : "The search for accounts to be authenticated start from this base DN <br><br>For
 a single server just enter the Base DN to be searched. Multiple OpenAM servers can have different
 base DNs for the search The format is as follows:<br/><br/><code>local server name | search DN</
code><br/><br/><i>NB </i>The local server name is the full name of the server from the list of servers
 and sites.",
      "propertyOrder" : 300,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "secondaryLdapServer" : {
      "title" : "Secondary LDAP Server",
      "description" : "Use this list to set the secondary (failover) LDAP server used for
 authentication.<br><br>If the primary LDAP server fails, the LDAP authentication module will failover
 to the secondary server. A single entry must be in the format:<br/><br/><code>ldap_server:port</
code><br/><br/>Multiple entries allow associations between OpenAM servers and a LDAP server. The
 format is:<br/><br/><code>local server name | server:port</code><br/><br/><i>NB </i>The local server
 name is the full name of the server from the list of servers and sites.",
      "propertyOrder" : 200,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "profileAttributeMappings" : {
      "title" : "User Creation Attributes",
      "description" : "Controls the mapping of local attribute to external attribute for dynamic
 profile creation.<br><br>If dynamic profile creation is enabled; this feature allows for a mapping
 between the attribute/values retrieved from the users authenticated profile and the attribute/values
 that will be provisioned into their matching account in the data store.<br/><br/>The format of this
 property is: <br/><br/><code> local attr1|external attr1</code>",
      "propertyOrder" : 1300,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "userBindPassword" : {
      "title" : "Bind User Password",
      "description" : "The password of the administration account.",
```


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```
      "propertyOrder" : 500,
      "required" : true,
      "type" : "string",
      "format" : "password",
      "exampleValue" : ""
    },
    "searchScope" : {
      "title" : "Search Scope",
      "description" : "The level in the Directory Server that will be searched for a matching
 user profile.<br><br>This attribute controls how the directory is searched.<br/><br/
><ul><li><code>OBJECT</code>: Only the Base DN is searched.</li><li><code>ONELEVEL</code>: Only the
 single level below (and not the Base DN) is searched</li><li><code>SUBTREE</code>: The Base DN and
 all levels below are searched</li></ul>",
      "propertyOrder" : 900,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```

1.82.2. Global Operations

Resource path: `/global-config/authentication/modules/ldap`

Resource version: `1.0`

1.82.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action LdapModule --global --actionName getAllTypes
```

1.82.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action LdapModule --global --actionName getCreatableTypes
```

1.82.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action LdapModule --global --actionName nextdescendents
```


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1.82.2.4. read

Usage:

```
am> read LdapModule --global
```

1.82.2.5. update

Usage:

```
am> update LdapModule --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "defaults" : {
      "properties" : {
        "userSearchFilter" : {
          "title" : "User Search Filter",
          "description" : "This search filter will be appended to the standard user search
 filter.<br><br>This attribute can be used to append a custom search filter to the standard filter.
 For example: <code>(objectClass=person)</code>would result in the following user search filter:<br/
><br/><code>(&(uid=<i>user</i>)(objectClass=person))</code>",
          "propertyOrder" : 800,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "beheraPasswordPolicySupportEnabled" : {
          "title" : "LDAP Behera Password Policy Support",
          "description" : "Enables support for modern LDAP password policies<br><br>LDAP Behera
 Password policies are supported by modern LDAP servers such as OpenDJ. If this functionality is
 disabled then only the older Netscape VCHU password policy standard will be enforced.",
          "propertyOrder" : 1500,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "userSearchStartDN" : {
          "title" : "DN to Start User Search",
          "description" : "The search for accounts to be authenticated start from this base DN
 <br><br>For a single server just enter the Base DN to be searched. Multiple OpenAM servers can have
 different base DNs for the search The format is as follows:<br/><br/><code>local server name | search
 DN</code><br/><br/><i>NB </i>The local server name is the full name of the server from the list of
 servers and sites.",
          "propertyOrder" : 300,
          "required" : true,
          "items" : {
            "type" : "string"
          },
```


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```
          "type" : "array",
          "exampleValue" : ""
        },
        "profileAttributeMappings" : {
          "title" : "User Creation Attributes",
          "description" : "Controls the mapping of local attribute to external attribute for dynamic
 profile creation.<br><br>If dynamic profile creation is enabled; this feature allows for a mapping
 between the attribute/values retrieved from the users authenticated profile and the attribute/values
 that will be provisioned into their matching account in the data store.<br/><br/>The format of this
 property is: <br/><br/><code> local attr1|external attr1</code>",
          "propertyOrder" : 1300,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "minimumPasswordLength" : {
          "title" : "Minimum Password Length",
          "description" : "Enforced when the user is resetting their password as part of the
 authentication.<br><br>If the user needs to reset their password as part of the authentication
 process, the authentication module can enforce a minimum password length. This is separate from any
 password length controls from the underlying LDAP server. If the external LDAP server password policy
 is enforcing password length, set this value to 0 to avoid confusion.",
          "propertyOrder" : 1400,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "userBindDN" : {
          "title" : "Bind User DN",
          "description" : "The DN of an admin user used by the module to authentication to the LDAP
 server<br><br>The LDAP module requires an administration account in order to perform functionality
 such as password reset.<br/><br/><i>NB </i><code>cn=Directory Manager</code> should not be used in
 production systems.",
          "propertyOrder" : 400,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "secondaryLdapServer" : {
          "title" : "Secondary LDAP Server",
          "description" : "Use this list to set the secondary (failover) LDAP server used for
 authentication.<br><br>If the primary LDAP server fails, the LDAP authentication module will failover
 to the secondary server. A single entry must be in the format:<br/><br/><code>ldap_server:port</
code><br/><br/>Multiple entries allow associations between OpenAM servers and a LDAP server. The
 format is:<br/><br/><code>local server name | server:port</code><br/><br/><i>NB </i>The local server
 name is the full name of the server from the list of servers and sites.",
          "propertyOrder" : 200,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "primaryLdapServer" : {
          "title" : "Primary LDAP Server",
```


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```
          "description" : "Use this list to set the primary LDAP server used for authentication.
 <br><br>The LDAP authentication module will use this list as the primary server for authentication. A
 single entry must be in the format:<br/><br/><code>ldap_server:port</code><br/><br/>Multiple entries
 allow associations between OpenAM servers and a LDAP server. The format is:<br/><br/><code>local
 server name | server:port</code><br/><br/>The local server name is the full name of the server from
 the list of servers and sites.",
          "propertyOrder" : 100,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "userSearchAttributes" : {
          "title" : "Attributes Used to Search for a User to be Authenticated",
          "description" : "The attributes specified in this list form the LDAP search
 filter.<br><br>The default value of uid will form the following search filter of <code>uid=<i>user</
i></code>, if there are multiple values such as uid and cn, the module will create a search filter as
 follows <code>(|(uid=<i>user</i>)(cn=<i>user</i>))</code>",
          "propertyOrder" : 700,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "authenticationLevel" : {
          "title" : "Authentication Level",
          "description" : "The authentication level associated with this module.<br><br>Each
 authentication module has an authentication level that can be used to indicate the level of security
 associated with the module; 0 is the lowest (and the default). ",
          "propertyOrder" : 2000,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "searchScope" : {
          "title" : "Search Scope",
          "description" : "The level in the Directory Server that will be searched for a
 matching user profile.<br><br>This attribute controls how the directory is searched.<br/><br/
><ul><li><code>OBJECT</code>: Only the Base DN is searched.</li><li><code>ONELEVEL</code>: Only the
 single level below (and not the Base DN) is searched</li><li><code>SUBTREE</code>: The Base DN and
 all levels below are searched</li></ul>",
          "propertyOrder" : 900,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "trustAllServerCertificates" : {
          "title" : "Trust All Server Certificates",
          "description" : "Enables a <code>X509TrustManager</code> that trusts all
 certificates.<br><br>This feature will allow the LDAP authentication module to connect to LDAP
 servers protected by self signed or invalid certificates (such as invalid hostname).<br/><br/><i>NB
 </i>Use this feature with care as it bypasses the normal certificate verification process",
          "propertyOrder" : 1600,
          "required" : true,
          "type" : "boolean",
```


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```
          "exampleValue" : ""
        },
        "returnUserDN" : {
          "title" : "Return User DN to DataStore",
          "description" : "Controls whether the DN or the username is returned as the authentication
principal.",
          "propertyOrder" : 1200,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "openam-auth-ldap-connection-mode" : {
          "title" : "LDAP Connection Mode",
          "description" : "Defines which protocol/operation is used to establish the connection to
the LDAP Directory Server.<br><br>If 'LDAP' is selected, the connection <b>won't be secured</b> and
passwords are transferred in <b>cleartext</b> over the network.<br/> If 'LDAPS' is selected, the
connection is secured via SSL or TLS. <br/> If 'StartTLS' is selected, the connection is secured by
using StartTLS extended operation.",
          "propertyOrder" : 1000,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "connectionHeartbeatInterval" : {
          "title" : "LDAP Connection Heartbeat Interval",
          "description" : "Specifies how often should OpenAM send a heartbeat request to the
directory.<br><br>This setting controls how often OpenAM <b>should</b> send a heartbeat search
request to the configured directory. If a connection becomes unresponsive (e.g. due to a network
error) then it may take up to the interval period before the problem is detected. Use along with the
Heartbeat Time Unit parameter to define the exact interval. Zero or negative value will result in
disabling heartbeat requests.",
          "propertyOrder" : 1700,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "connectionHeartbeatTimeUnit" : {
          "title" : "LDAP Connection Heartbeat Time Unit",
          "description" : "Defines the time unit corresponding to the Heartbeat Interval
setting.<br><br>This setting controls how often OpenAM <b>should</b> send a heartbeat search request
to the configured directory. If a connection becomes unresponsive (e.g. due to a network error) then
it may take up to the interval period before the problem is detected. Use along with the Heartbeat
Interval parameter to define the exact interval.",
          "propertyOrder" : 1800,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "operationTimeout" : {
          "title" : "LDAP operations timeout",
          "description" : "Defines the timeout in seconds OpenAM should wait for a response of the
Directory Server - <code>0</code> means no timeout.<br><br>If the Directory Server's host is down
completely or the TCP connection became stale OpenAM waits until operation timeouts from the OS or
the JVM are applied. However this setting allows more granular control within OpenAM itself. A value
of <code>0</code> means NO timeout is applied on OpenAM level and the timeouts from the JVM or OS
will apply.",
          "propertyOrder" : 1900,
          "required" : true,
          "type" : "integer",
```


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```
          "exampleValue" : ""
        },
        "userBindPassword" : {
          "title" : "Bind User Password",
          "description" : "The password of the administration account.",
          "propertyOrder" : 500,
          "required" : true,
          "type" : "string",
          "format" : "password",
          "exampleValue" : ""
        },
        "userProfileRetrievalAttribute" : {
          "title" : "Attribute Used to Retrieve User Profile",
          "description" : "The LDAP module will use this attribute to search of the profile of an
 authenticated user.<br><br>This is the attribute used to find the profile of the authenticated user.
 Normally this will be the same attribute used to find the user account. The value will be the name of
 the user used for authentication.",
          "propertyOrder" : 600,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      },
      "type" : "object",
      "title" : "Realm Defaults"
    }
  }
}
```

1.83. LegacyUserSelfService

1.83.1. Realm Operations

Resource path: `/realm-config/services/security`

Resource version: `1.0`

1.83.1.1. create

Usage:

```
am> create LegacyUserSelfService --realm Realm --body body
```

Parameters:

`--body`

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
```


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```
 "properties" : {
   "userRegisteredDestination" : {
     "title" : "Destination After Successful Self-Registration",
     "description" : "Specifies the behavior when self-registration has successfully completed.",
     "propertyOrder" : 800,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "protectedUserAttributes" : {
     "title" : "Protected User Attributes",
     "description" : "A list of user profile attributes. Users modifying any of the attributes in
this list will be required to enter a password as confirmation before the change is accepted. This
option applies to XUI deployments only.",
     "propertyOrder" : 900,
     "required" : true,
     "items" : {
       "type" : "string"
     },
     "type" : "array",
     "exampleValue" : ""
   },
   "forgotPasswordTokenLifetime" : {
     "title" : "Forgot Password Token Lifetime (seconds)",
     "description" : "Maximum life time for the token that allows a user to process a forgotten
password using the REST API.",
     "propertyOrder" : 600,
     "required" : true,
     "type" : "integer",
     "exampleValue" : ""
   },
   "selfServiceEnabled" : {
     "title" : "Legacy Self-Service REST Endpoint",
     "description" : "Specify whether to enable the legacy self-service endpoint.<p>OpenAM supports
two User Self-Service components: the Legacy User Self-Service, which is based on a Java SDK and is
available in OpenAM versions prior to OpenAM 13, and a common REST-based/XUI-based User Self-Service
available in OpenAM 13 and later.<p>The Legacy User Self-Service will be deprecated in a future
release.",
     "propertyOrder" : 100,
     "required" : true,
     "type" : "boolean",
     "exampleValue" : ""
   },
   "selfRegistrationEnabled" : {
     "title" : "Self-Registration for Users",
     "description" : "If enabled, new users can sign up using a REST API client.",
     "propertyOrder" : 200,
     "required" : true,
     "type" : "boolean",
     "exampleValue" : ""
   },
   "selfRegistrationConfirmationUrl" : {
     "title" : "Self-Registration Confirmation Email URL",
     "description" : "This page handles the HTTP GET request when the user clicks the link sent by
email in the confirmation request.",
     "propertyOrder" : 400,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
```


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```
    },
    "confirmationIdHmacKey" : {
      "title" : "Confirmation Id HMAC Signing Key",
      "description" : "256-bit key (base64-encoded) to use for HMAC signing of the legacy self-service
 confirmation email links.",
      "propertyOrder" : 1000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "forgotPasswordEnabled" : {
      "title" : "Forgot Password for Users",
      "description" : "If enabled, users can assign themselves a new password using a REST API
 client.",
      "propertyOrder" : 500,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "selfRegistrationTokenLifetime" : {
      "title" : "Self-Registration Token LifeTime (seconds)",
      "description" : "Maximum life time for the token allowing User Self-Registration using the REST
 API.",
      "propertyOrder" : 300,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "forgotPasswordConfirmationUrl" : {
      "title" : "Forgot Password Confirmation Email URL",
      "description" : "This page handles the HTTP GET request when the user clicks the link sent by
 email in the confirmation request.",
      "propertyOrder" : 700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```

1.83.1.2. delete

Usage:

```
am> delete LegacyUserSelfService --realm Realm
```

1.83.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action LegacyUserSelfService --realm Realm --actionName getAllTypes
```


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1.83.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action LegacyUserSelfService --realm Realm --actionName getCreatableTypes
```

1.83.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action LegacyUserSelfService --realm Realm --actionName nextdescendents
```

1.83.1.6. read

Usage:

```
am> read LegacyUserSelfService --realm Realm
```

1.83.1.7. update

Usage:

```
am> update LegacyUserSelfService --realm Realm --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "userRegisteredDestination" : {
      "title" : "Destination After Successful Self-Registration",
      "description" : "Specifies the behavior when self-registration has successfully completed.",
      "propertyOrder" : 800,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "protectedUserAttributes" : {
      "title" : "Protected User Attributes",
      "description" : "A list of user profile attributes. Users modifying any of the attributes in
 this list will be required to enter a password as confirmation before the change is accepted. This
 option applies to XUI deployments only.",
      "propertyOrder" : 900,
      "required" : true,
      "items" : {
```


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```
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "forgotPasswordTokenLifetime" : {
      "title" : "Forgot Password Token Lifetime (seconds)",
      "description" : "Maximum life time for the token that allows a user to process a forgotten
password using the REST API.",
      "propertyOrder" : 600,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "selfServiceEnabled" : {
      "title" : "Legacy Self-Service REST Endpoint",
      "description" : "Specify whether to enable the legacy self-service endpoint.<p>OpenAM supports
two User Self-Service components: the Legacy User Self-Service, which is based on a Java SDK and is
available in OpenAM versions prior to OpenAM 13, and a common REST-based/XUI-based User Self-Service
available in OpenAM 13 and later.<p>The Legacy User Self-Service will be deprecated in a future
release.",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "selfRegistrationEnabled" : {
      "title" : "Self-Registration for Users",
      "description" : "If enabled, new users can sign up using a REST API client.",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "selfRegistrationConfirmationUrl" : {
      "title" : "Self-Registration Confirmation Email URL",
      "description" : "This page handles the HTTP GET request when the user clicks the link sent by
email in the confirmation request.",
      "propertyOrder" : 400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "confirmationIdHmacKey" : {
      "title" : "Confirmation Id HMAC Signing Key",
      "description" : "256-bit key (base64-encoded) to use for HMAC signing of the legacy self-service
confirmation email links.",
      "propertyOrder" : 1000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "forgotPasswordEnabled" : {
      "title" : "Forgot Password for Users",
      "description" : "If enabled, users can assign themselves a new password using a REST API
client.",
      "propertyOrder" : 500,
      "required" : true,
      "type" : "boolean",
```


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```
      "exampleValue" : ""
    },
    "selfRegistrationTokenLifetime" : {
      "title" : "Self-Registration Token LifeTime (seconds)",
      "description" : "Maximum life time for the token allowing User Self-Registration using the REST
 API.",
      "propertyOrder" : 300,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "forgotPasswordConfirmationUrl" : {
      "title" : "Forgot Password Confirmation Email URL",
      "description" : "This page handles the HTTP GET request when the user clicks the link sent by
 email in the confirmation request.",
      "propertyOrder" : 700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```

1.83.2. Global Operations

Resource path: `/global-config/services/security`

Resource version: `1.0`

1.83.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action LegacyUserSelfService --global --actionName getAllTypes
```

1.83.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action LegacyUserSelfService --global --actionName getCreatableTypes
```

1.83.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action LegacyUserSelfService --global --actionName nextdescendents
```


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1.83.2.4. read

Usage:

```
am> read LegacyUserSelfService --global
```

1.83.2.5. update

Usage:

```
am> update LegacyUserSelfService --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "defaults" : {
      "properties" : {
        "userRegisteredDestination" : {
          "title" : "Destination After Successful Self-Registration",
          "description" : "Specifies the behavior when self-registration has successfully completed.",
          "propertyOrder" : 800,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "confirmationIdHmacKey" : {
          "title" : "Confirmation Id HMAC Signing Key",
          "description" : "256-bit key (base64-encoded) to use for HMAC signing of the legacy self-
service confirmation email links.",
          "propertyOrder" : 1000,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "selfRegistrationConfirmationUrl" : {
          "title" : "Self-Registration Confirmation Email URL",
          "description" : "This page handles the HTTP GET request when the user clicks the link sent
 by email in the confirmation request.",
          "propertyOrder" : 400,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "selfRegistrationTokenLifetime" : {
          "title" : "Self-Registration Token LifeTime (seconds)",
          "description" : "Maximum life time for the token allowing User Self-Registration using the
 REST API.",
          "propertyOrder" : 300,
          "required" : true,
          "type" : "integer",
```


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```
          "exampleValue" : ""
        },
        "selfRegistrationEnabled" : {
          "title" : "Self-Registration for Users",
          "description" : "If enabled, new users can sign up using a REST API client.",
          "propertyOrder" : 200,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "forgotPasswordConfirmationUrl" : {
          "title" : "Forgot Password Confirmation Email URL",
          "description" : "This page handles the HTTP GET request when the user clicks the link sent
by email in the confirmation request.",
          "propertyOrder" : 700,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "selfServiceEnabled" : {
          "title" : "Legacy Self-Service REST Endpoint",
          "description" : "Specify whether to enable the legacy self-service endpoint.<p>OpenAM
supports two User Self-Service components: the Legacy User Self-Service, which is based on a Java
SDK and is available in OpenAM versions prior to OpenAM 13, and a common REST-based/XUI-based User
Self-Service available in OpenAM 13 and later.<p>The Legacy User Self-Service will be deprecated in a
future release.",
          "propertyOrder" : 100,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "forgotPasswordEnabled" : {
          "title" : "Forgot Password for Users",
          "description" : "If enabled, users can assign themselves a new password using a REST API
client.",
          "propertyOrder" : 500,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "forgotPasswordTokenLifetime" : {
          "title" : "Forgot Password Token Lifetime (seconds)",
          "description" : "Maximum life time for the token that allows a user to process a forgotten
password using the REST API.",
          "propertyOrder" : 600,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "protectedUserAttributes" : {
          "title" : "Protected User Attributes",
          "description" : "A list of user profile attributes. Users modifying any of the attributes in
this list will be required to enter a password as confirmation before the change is accepted. This
option applies to XUI deployments only.",
          "propertyOrder" : 900,
          "required" : true,
          "items" : {
            "type" : "string"
          },
```


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```
          "type" : "array",
          "exampleValue" : ""
        }
      },
      "type" : "object",
      "title" : "Realm Defaults"
    }
  }
}
```

1.84. Logging

1.84.1. Global Operations

Resource path: `/global-config/services/logging`

Resource version: `1.0`

1.84.1.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action Logging --global --actionName getAllTypes
```

1.84.1.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action Logging --global --actionName getCreatableTypes
```

1.84.1.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action Logging --global --actionName nextdescendents
```

1.84.1.4. read

Usage:

```
am> read Logging --global
```


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1.84.1.5. update

Usage:

```
am> update Logging --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "general" : {
      "type" : "object",
      "title" : "General",
      "propertyOrder" : 0,
      "properties" : {
        "filesPerKeystore" : {
          "title" : "Number of Files per Archive",
          "description" : "Controls the number of logs files that will be archived by the secure
 logging system.",
          "propertyOrder" : 2600,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "certificateStore" : {
          "title" : "Logging Certificate Store Location",
          "description" : "The path to the Java keystore containing the logging system
 certificate.<br><br>The secure logging system will use the certificate alias of <code>Logger</code>
 to locate the certificate in the specified keystore.",
          "propertyOrder" : 2400,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "buffering" : {
          "title" : "Time Buffering",
          "description" : "Enable or Disable log buffering<br><br>When enabled OpenAM holds all log
 records in a memory buffer that it periodically flush to the repository. The period is set in the
 <i>Buffer Time</i> property.",
          "propertyOrder" : 3000,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "signingAlgorithm" : {
          "title" : "Secure Logging Signing Algorithm ",
          "description" : "Determines the algorithm used to digitally sign the log records.",
          "propertyOrder" : 2300,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "fields" : {
```


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```
          "title" : "Configurable Log Fields",
          "description" : "Controls the fields that are logged by OpenAM.<br><br>This property is the
list of fields that are logged by default. Administrators can choose to limit the information logged
by OpenAM.",
          "propertyOrder" : 1900,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "bufferTime" : {
          "title" : "Buffer Time",
          "description" : "The maximum time (in seconds) OpenAM will hold log records in memory before
flushing to the underlying repository.",
          "propertyOrder" : 2900,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "resolveHostName" : {
          "title" : "Log Record Resolve Host Name",
          "description" : "Enable this to have OpenAM perform a DNS host lookup to populate the host
name field for log records.<br><br><i>Note:</i> Enabling this functionality will increase the load of
the logging system and the OpenAM host must have DNS configured. ",
          "propertyOrder" : 900,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "verifyPeriod" : {
          "title" : "Log Verification Frequency",
          "description" : "The frequency (in seconds) that OpenAM verifies security of the log
files.<br><br>When secure logging is enabled, this is the period that OpenAM will check the integrity
of the log files.",
          "propertyOrder" : 2000,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "signaturePeriod" : {
          "title" : "Log Signature Time",
          "description" : "The frequency (in seconds) that OpenAM will digitally sign the log
records.<br><br>When secure logging is enabled, this is the period that OpenAM will digitally
signed the contents of the log files. The log signatures form the basis of the log file integrity
checking.",
          "propertyOrder" : 2100,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "bufferSize" : {
          "title" : "Buffer Size",
          "description" : "The number of log records held in memory before the log records will be
flushed to the logfile or the database.",
          "propertyOrder" : 2700,
          "required" : true,
          "type" : "integer",
```


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```
          "exampleValue" : ""
        },
        "type" : {
          "title" : "Logging Type",
          "description" : "Specifies whether to log to a database, Syslog, or to the filing
system.<br><br>If you choose database then be sure to set the connection attributes correctly,
including the JDBC driver to use.",
          "propertyOrder" : 1000,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "security" : {
          "title" : "Secure Logging",
          "description" : "Enable or Disable secure logging.<br><br>Enabling this setting will cause
OpenAM to digitally sign and verify the contents of the log files to help prevent and detect log file
tampering. A certificate must be configured for this functionality to be enabled. ",
          "propertyOrder" : 2200,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "status" : {
          "title" : "Log Status",
          "description" : "Enable the OpenAM logging system.<p><p>OpenAM supports two Audit Logging
Services: the legacy Logging Service, which is based on a Java SDK and is available in OpenAM
versions prior to OpenAM 13.5, and a new common REST-based Audit Logging Service available from
OpenAM 13.5.<p><p>The legacy Logging Service will be deprecated in a future release.",
          "propertyOrder" : 800,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "jdkLoggingLevel" : {
          "title" : "Logging Level",
          "description" : "Control the level of JDK logging within OpenAM. ",
          "propertyOrder" : 3100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    },
    "database" : {
      "type" : "object",
      "title" : "Database",
      "propertyOrder" : 2,
      "properties" : {
        "maxRecords" : {
          "title" : "Maximum Number of Records",
          "description" : "The maximum number of records read from the logs via the Logging API",
          "propertyOrder" : 2500,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "password" : {
          "title" : "Database User Password",
```


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```
          "description" : "When logging to a database, set this to the password used to connect to the
database. If this attribute is incorrectly set, OpenAM performance suffers.",
          "propertyOrder" : 1200,
          "required" : true,
          "type" : "string",
          "format" : "password",
          "exampleValue" : ""
        },
        "user" : {
          "title" : "Database User Name",
          "description" : "When logging to a database, set this to the user name used to connect to
the database. If this attribute is incorrectly set, OpenAM performance suffers.",
          "propertyOrder" : 1100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "driver" : {
          "title" : "Database Driver Name",
          "description" : "When logging to a database, set this to the class name of the JDBC driver
used to connect to the database.<br><br>The default is for Oracle. OpenAM also works with the MySQL
database driver.",
          "propertyOrder" : 1300,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "databaseFailureMemoryBufferSize" : {
          "title" : "DB Failure Memory Buffer Size",
          "description" : "Max number of log records held in memory if DB logging fails.<br><br>This
is the maximum number of log records that will be held in memory if the database is unavailable.
When the buffer is full, new log records cause the oldest record in the buffer to be cleared. OpenAM
monitoring records the number of log entries cleared when the database was unavailable.<br/><br/>If
the value of this property is less than that of the <i>Buffer Size</i> then the buffer size value
will take precedence. ",
          "propertyOrder" : 2800,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        }
      }
    },
    "file" : {
      "type" : "object",
      "title" : "File",
      "propertyOrder" : 1,
      "properties" : {
        "prefix" : {
          "title" : "Logfile Rotation Prefix",
          "description" : "The name of the log files will be prefixed with the supplied
value.<br><br>This field defines the log file prefix. The prefix will be added to the name of all
logfiles.<br/><br/><i>Note:</i> Only used when time-based log rotation is enabled.",
          "propertyOrder" : 400,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "rotationInterval" : {
          "title" : "Logfile Rotation Interval",
```


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```
          "description" : "The rotation interval (in minutes).<br><br>The rotation interval determines
 the frequency of when the log files will be rotated. If the value is <code>-1</code>, then time based
 rotation is disabled and log file size based rotation is enabled.",
          "propertyOrder" : 600,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "rotationEnabled" : {
          "title" : "Log Rotation",
          "description" : "Enable log rotation to cause new log files to be created when configured
 thresholds are reached, such as <i>Maximum Log Size</i> or <i>Logfile Rotation Interval</i>.",
          "propertyOrder" : 100,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "maxFileSize" : {
          "title" : "Maximum Log Size",
          "description" : "Maximum size of a log file, in bytes.",
          "propertyOrder" : 200,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "location" : {
          "title" : "Log File Location",
          "description" : "The path to the location of the log files<br><br>This property controls
 the location of the log files; the value of this property varies on whether File or DB logging is
 in use:<p><ul><li>File: The full pathname to the directory containing the log files.</li><li>DB: The
 JDBC URL to the database used to store the log file database.</li></ul>",
          "propertyOrder" : 700,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "numberHistoryFiles" : {
          "title" : "Number of History Files",
          "description" : "Sets the number of history files for each log that OpenAM keeps, including
 time-based histories.<p><p>The previously live file is moved and is included in the history count,
 and a new log is created to serve as the live log file. Any log file in the history count that goes
 over the number specified here will be deleted.<p><p>For time-based logs, a new set of logs will be
 created when OpenAM is started because of the time-based file names that are used.",
          "propertyOrder" : 300,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "suffix" : {
          "title" : "Logfile Rotation Suffix",
          "description" : "The name of the log files will be suffixed with the supplied
 value.<br><br>This field defines the log file suffix. If no suffix is provided, then the following
 default suffix format will be used: <code>-MM.dd.yy-kk.mm</code>. The suffix allows use of Date
 and Time patterns defined in <a href=\"http://download.oracle.com/javase/6/docs/api/java/text/
SimpleDateFormat.html\"><code>SimpleDateFormat</code></a><p><p><i>Note:</i> This field is only used if
 the time based rotation is enabled.",
          "propertyOrder" : 500,
          "required" : true,
          "type" : "string",
```


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```
          "exampleValue" : ""
        }
      }
    },
    "syslog" : {
      "type" : "object",
      "title" : "Syslog",
      "propertyOrder" : 3,
      "properties" : {
        "protocol" : {
          "title" : "Syslog transport protocol",
          "description" : "The protocol to use to connect to the syslog server.",
          "propertyOrder" : 1600,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "port" : {
          "title" : "Syslog server port",
          "description" : "The port number the syslog server is configured to listen to.",
          "propertyOrder" : 1500,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "facility" : {
          "title" : "Syslog facility",
          "description" : "Syslog uses the facility level to determine the type of program that is
 logging the message.",
          "propertyOrder" : 1700,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "host" : {
          "title" : "Syslog server host",
          "description" : "The URL or IP address of the syslog server, for example <code>http://
mysyslog.example.com</code>, or <code>localhost</code>.",
          "propertyOrder" : 1400,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "timeout" : {
          "title" : "Syslog connection timeout",
          "description" : "The amount of time to wait when attempting to connect to the syslog server
 before reporting a failure, in seconds.",
          "propertyOrder" : 1800,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        }
      }
    }
  }
}
```


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1.85. MembershipModule

1.85.1. Realm Operations

Resource path: `/realm-config/authentication/modules/membership`

Resource version: `1.0`

1.85.1.1. create

Usage:

```
am> create MembershipModule --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "authenticationLevel" : {
      "title" : "Authentication Level",
      "description" : "The authentication level associated with this module.<br><br>Each
 authentication module has an authentication level that can be used to indicate the level of security
 associated with the module; 0 is the lowest (and the default).",
      "propertyOrder" : 400,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "defaultUserRoles" : {
      "title" : "Default User Roles",
      "description" : "The role DN's that will be assigned to the user.<br><br><i>NB </i>Roles are
 only supported in Sun Directory Server Enterprise Edition",
      "propertyOrder" : 200,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
```


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```
    "minimumPasswordLength" : {
      "title" : "Minimum Password Length",
      "description" : "The minimum length of the user password.<br><br>Setting this value to 0
 disables this functionality.<br/><br/><i>NB </i>This feature is separate from any password policy in
 the underlying data store",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "defaultUserStatus" : {
      "title" : "User Status After Registration",
      "description" : "Determines if the user account should be automatically active after
 registration completes.",
      "propertyOrder" : 300,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```

1.85.1.2. delete

Usage:

```
am> delete MembershipModule --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.85.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action MembershipModule --realm Realm --actionName getAllTypes
```

1.85.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action MembershipModule --realm Realm --actionName getCreatableTypes
```


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1.85.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action MembershipModule --realm Realm --actionName nextdescendents
```

1.85.1.6. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

```
am> query MembershipModule --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.85.1.7. read

Usage:

```
am> read MembershipModule --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.85.1.8. update

Usage:

```
am> update MembershipModule --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

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--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "authenticationLevel" : {
      "title" : "Authentication Level",
      "description" : "The authentication level associated with this module.<br><br>Each
 authentication module has an authentication level that can be used to indicate the level of security
 associated with the module; 0 is the lowest (and the default).",
      "propertyOrder" : 400,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "defaultUserRoles" : {
      "title" : "Default User Roles",
      "description" : "The role DN's that will be assigned to the user.<br><br><i>NB </i>Roles are
 only supported in Sun Directory Server Enterprise Edition",
      "propertyOrder" : 200,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "minimumPasswordLength" : {
      "title" : "Minimum Password Length",
      "description" : "The minimum length of the user password.<br><br>Setting this value to 0
 disables this functionality.<br/><br/><i>NB </i>This feature is separate from any password policy in
 the underlying data store",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "defaultUserStatus" : {
      "title" : "User Status After Registration",
      "description" : "Determines if the user account should be automatically active after
 registration completes.",
      "propertyOrder" : 300,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```

1.85.2. Global Operations

Resource path: `/global-config/authentication/modules/membership`

Resource version: `1.0`

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1.85.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action MembershipModule --global --actionName getAllTypes
```

1.85.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action MembershipModule --global --actionName getCreatableTypes
```

1.85.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action MembershipModule --global --actionName nextdescendents
```

1.85.2.4. read

Usage:

```
am> read MembershipModule --global
```

1.85.2.5. update

Usage:

```
am> update MembershipModule --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "defaults" : {
      "properties" : {
```


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```
        "minimumPasswordLength" : {
          "title" : "Minimum Password Length",
          "description" : "The minimum length of the user password.<br><br>Setting this value to 0
 disables this functionality.<br/><br/><i>NB </i>This feature is separate from any password policy in
 the underlying data store",
          "propertyOrder" : 100,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "authenticationLevel" : {
          "title" : "Authentication Level",
          "description" : "The authentication level associated with this module.<br><br>Each
 authentication module has an authentication level that can be used to indicate the level of security
 associated with the module; 0 is the lowest (and the default).",
          "propertyOrder" : 400,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "defaultUserStatus" : {
          "title" : "User Status After Registration",
          "description" : "Determines if the user account should be automatically active after
 registration completes.",
          "propertyOrder" : 300,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "defaultUserRoles" : {
          "title" : "Default User Roles",
          "description" : "The role DN's that will be assigned to the user.<br><br><i>NB </i>Roles are
 only supported in Sun Directory Server Enterprise Edition",
          "propertyOrder" : 200,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        }
      },
      "type" : "object",
      "title" : "Realm Defaults"
    }
  }
}
```

1.86. ModifyAuthLevel

1.86.1. Realm Operations

Resource path: `/realm-config/authentication/authenticationtrees/nodes/ModifyAuthLevelNode`

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Resource version: `1.0`

1.86.1.1. create

Usage:

```
am> create ModifyAuthLevel --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "authLevelIncrement" : {
      "title" : "Value to add",
      "description" : "Value which is added to the authentication level.Value may be negative to
 decrease the authentication level.",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    }
  }
}
```

1.86.1.2. delete

Usage:

```
am> delete ModifyAuthLevel --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.86.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

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Usage:

```
am> action ModifyAuthLevel --realm Realm --actionName getAllTypes
```

1.86.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action ModifyAuthLevel --realm Realm --actionName getCreatableTypes
```

1.86.1.5. listOutcomes

List the available outcomes for the node type.

Usage:

```
am> action ModifyAuthLevel --realm Realm --body body --actionName listOutcomes
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "title" : "Some configuration of the node. This does not need to be complete against the
 configuration schema."
}
```

1.86.1.6. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action ModifyAuthLevel --realm Realm --actionName nextdescendents
```

1.86.1.7. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

```
am> query ModifyAuthLevel --realm Realm --filter filter
```

Parameters:

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--filter

A CREST formatted query filter, where "true" will query all.

1.86.1.8. read

Usage:

```
am> read ModifyAuthLevel --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.86.1.9. update

Usage:

```
am> update ModifyAuthLevel --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "authLevelIncrement" : {
      "title" : "Value to add",
      "description" : "Value which is added to the authentication level.Value may be negative to
 decrease the authentication level.",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    }
  }
}
```

1.86.2. Global Operations

Resource path: `/global-config/authentication/authenticationtrees/nodes/ModifyAuthLevelNode`

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Resource version: `1.0`

1.86.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action ModifyAuthLevel --global --actionName getAllTypes
```

1.86.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action ModifyAuthLevel --global --actionName getCreatableTypes
```

1.86.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action ModifyAuthLevel --global --actionName nextdescendents
```

1.86.2.4. read

Usage:

```
am> read ModifyAuthLevel --global
```

1.86.2.5. update

Usage:

```
am> update ModifyAuthLevel --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object"
}
```


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1.87. Monitoring

1.87.1. Global Operations

Resource path: `/global-config/services/monitoring`

Resource version: `1.0`

1.87.1.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action Monitoring --global --actionName getAllTypes
```

1.87.1.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action Monitoring --global --actionName getCreatableTypes
```

1.87.1.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action Monitoring --global --actionName nextdescendents
```

1.87.1.4. read

Usage:

```
am> read Monitoring --global
```

1.87.1.5. update

Usage:

```
am> update Monitoring --global --body body
```

Parameters:

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--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "rmiEnabled" : {
      "title" : "Monitoring RMI interface status",
      "description" : "Enable / Disable the JMX access to the monitoring system",
      "propertyOrder" : 600,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "httpEnabled" : {
      "title" : "Monitoring HTTP interface status",
      "description" : "Enable / Disable the HTTP access to the monitoring system ",
      "propertyOrder" : 300,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "authfilePath" : {
      "title" : "Monitoring HTTP interface authentication file path",
      "description" : "Path to the monitoring system authentication file<br><br>The
<code>openam_mon_auth</code> file contains the username and password of the account used to
protect the monitoring interfaces. The default username is <code>demo</code> with a password of
<code>changeit</code>. Use the <code>ampassword</code> command to encrypt a new password.",
      "propertyOrder" : 400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sessionHistoryWindowSize" : {
      "title" : "Session monitoring history size",
      "description" : "Size of the window of most recent session operations to record to expose via
monitoring system. Valid range is 100 - 1000000.",
      "propertyOrder" : 1000,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "policyHistoryWindowSize" : {
      "title" : "Policy evaluation monitoring history size",
      "description" : "Size of the window of most recent policy evaluations to record to expose via
monitoring system. Valid range is 100 - 1000000.",
      "propertyOrder" : 900,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "snmpPort" : {
      "title" : "Monitoring SNMP Port",
      "description" : "Port number for the SNMP monitoring interface",
      "propertyOrder" : 700,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
```


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```
    },
    "httpPort" : {
      "title" : "Monitoring HTTP Port",
      "description" : "Port number for the HTTP monitoring interface",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "enabled" : {
      "title" : "Monitoring Status",
      "description" : "Enable / Disable the monitoring system",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "snmpEnabled" : {
      "title" : "Monitoring SNMP interface status",
      "description" : "Enable / Disable the SNMP access to the monitoring system",
      "propertyOrder" : 800,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "rmiPort" : {
      "title" : "Monitoring RMI Port",
      "description" : "Port number for the JMX monitoring interface",
      "propertyOrder" : 500,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    }
  }
}
```


1.88. MsisdnModule

1.88.1. Realm Operations

Resource path: `/realm-config/authentication/modules/msisdn`

Resource version: `1.0`

1.88.1.1. create

Usage:

```
am> create MsisdnModule --realm Realm --id id --body body
```

Parameters:

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--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "authenticationLevel" : {
      "title" : "Authentication Level",
      "description" : "The authentication level associated with this module.<br><br>Each
 authentication module has an authentication level that can be used to indicate the level of security
 associated with the module; 0 is the lowest (and the default).",
      "propertyOrder" : 1200,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "msisdnRequestSearchLocations" : {
      "title" : "MSISDN Header Search Attribute",
      "description" : "Controls the elements that are searched by the authentication module ",
      "propertyOrder" : 900,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "userProfileMsisdnAttribute" : {
      "title" : "Attribute To Use To Search LDAP",
      "description" : "The name of the attribute searched in the user profiles for the MSISDN number",
      "propertyOrder" : 500,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "msisdnParameterNames" : {
      "title" : "MSISDN Number Search Parameter Name",
      "description" : "Name of the HTTP cookie, header or query parameter containing the MSISDN
 number<br><br>The MSISDN authentication module will check the incoming HTTP cookie, header or
 query parameter of the request for the MSISDN number. The order of checking is as follows:<br/><br/
><ol><li>Cookie</li><li>Header</li><li>Query</li></ol><br/><br/><i>NB </i>The <i>MSISDN Header Search
 Attribute</i> controls what elements of the request is searched",
      "propertyOrder" : 200,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "ldapProviderUrl" : {
      "title" : "LDAP Server and Port ",
      "description" : "Use this list to set the LDAP server used to search for the MSISDN number.
 <br><br>The MSISDN authentication module will use this list as the server that is searched for a
```


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```
 matching MSISDN number. A single entry must be in the format:<br/><br/><code>ldap_server:port</
code><br/><br/>Multiple entries allow associations between OpenAM servers and a LDAP server. The
 format is:<br/><br/><code>local server name | server:port</code><br/><br/>The local server name is
 the full name of the server from the list of servers and sites.",
      "propertyOrder" : 300,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "baseSearchDN" : {
      "title" : "LDAP Start Search DN",
      "description" : "The start point in the LDAP server for the MSISDN search<br><br>When entering
 multiple entries, each entry must be prefixed with a local server name. Multiple entries allow
 different search Base DNs depending on the OpenAM server in use. The format is:<br/><br/><code>local
 server name | base dn</code><br/><br/>The local server name is the full name of the server from the
 list of servers and sites.",
      "propertyOrder" : 400,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "returnUserDN" : {
      "title" : "Return User DN to DataStore",
      "description" : "Controls whether the DN or the username is returned as the authentication
 principal.",
      "propertyOrder" : 1100,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "ldapSslEnabled" : {
      "title" : "SSL/TLS for LDAP Access",
      "description" : "",
      "propertyOrder" : 800,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "ldapUserBindPassword" : {
      "title" : "LDAP Server Authentication Password",
      "description" : "The password for the authentication user",
      "propertyOrder" : 700,
      "required" : true,
      "type" : "string",
      "format" : "password",
      "exampleValue" : ""
    },
    "ldapUserBindDN" : {
      "title" : "LDAP Server Authentication User ",
      "description" : "DN of the user used by the module to authenticate to the LDAP server<br><br>The
 MSISDN module authenticates to the LDAP server in order to search for a matching number. The DN
 entered here represents the account used for said authentication and must have read/search access to
 the LDAP server.",
```


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```
      "propertyOrder" : 600,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "trustedGatewayIPAddresses" : {
      "title" : "Trusted Gateway IP Address",
      "description" : "The list of IP address that are trusted to send MSISDN authentication
 requests.<br><br>The client IP address of the authentication request is checked against this list, if
 the client IP is not listed then the authentication module will fail.<br/><br/><i>NB </i>If the list
 is empty then all hosts will be trusted.",
      "propertyOrder" : 100,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "msisdnUserNamingAttribute" : {
      "title" : "LDAP Attribute Used to Retrieve User Profile",
      "description" : "The name of the attribute returned from the user profile matched against the
 supplied MSISDN number",
      "propertyOrder" : 1000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```

1.88.1.2. delete

Usage:

```
am> delete MsisdnModule --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.88.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action MsisdnModule --realm Realm --actionName getAllTypes
```


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1.88.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action MsisdnModule --realm Realm --actionName getCreatableTypes
```

1.88.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action MsisdnModule --realm Realm --actionName nextdescendents
```

1.88.1.6. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

```
am> query MsisdnModule --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.88.1.7. read

Usage:

```
am> read MsisdnModule --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.88.1.8. update

Usage:

```
am> update MsisdnModule --realm Realm --id id --body body
```

Parameters:

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--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "authenticationLevel" : {
      "title" : "Authentication Level",
      "description" : "The authentication level associated with this module.<br><br>Each
 authentication module has an authentication level that can be used to indicate the level of security
 associated with the module; 0 is the lowest (and the default).",
      "propertyOrder" : 1200,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "msisdnRequestSearchLocations" : {
      "title" : "MSISDN Header Search Attribute",
      "description" : "Controls the elements that are searched by the authentication module ",
      "propertyOrder" : 900,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "userProfileMsisdnAttribute" : {
      "title" : "Attribute To Use To Search LDAP",
      "description" : "The name of the attribute searched in the user profiles for the MSISDN number",
      "propertyOrder" : 500,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "msisdnParameterNames" : {
      "title" : "MSISDN Number Search Parameter Name",
      "description" : "Name of the HTTP cookie, header or query parameter containing the MSISDN
 number<br><br>The MSISDN authentication module will check the incoming HTTP cookie, header or
 query parameter of the request for the MSISDN number. The order of checking is as follows:<br/><br/
><ol><li>Cookie</li><li>Header</li><li>Query</li></ol><br/><br/><i>NB </i>The <i>MSISDN Header Search
 Attribute</i> controls what elements of the request is searched",
      "propertyOrder" : 200,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "ldapProviderUrl" : {
      "title" : "LDAP Server and Port ",
      "description" : "Use this list to set the LDAP server used to search for the MSISDN number.
 <br><br>The MSISDN authentication module will use this list as the server that is searched for a
```


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```
 matching MSISDN number. A single entry must be in the format:<br/><br/><code>ldap_server:port</
code><br/><br/>Multiple entries allow associations between OpenAM servers and a LDAP server. The
 format is:<br/><br/><code>local server name | server:port</code><br/><br/>The local server name is
 the full name of the server from the list of servers and sites.",
      "propertyOrder" : 300,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "baseSearchDN" : {
      "title" : "LDAP Start Search DN",
      "description" : "The start point in the LDAP server for the MSISDN search<br><br>When entering
 multiple entries, each entry must be prefixed with a local server name. Multiple entries allow
 different search Base DNs depending on the OpenAM server in use. The format is:<br/><br/><code>local
 server name | base dn</code><br/><br/>The local server name is the full name of the server from the
 list of servers and sites.",
      "propertyOrder" : 400,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "returnUserDN" : {
      "title" : "Return User DN to DataStore",
      "description" : "Controls whether the DN or the username is returned as the authentication
 principal.",
      "propertyOrder" : 1100,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "ldapSslEnabled" : {
      "title" : "SSL/TLS for LDAP Access",
      "description" : "",
      "propertyOrder" : 800,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "ldapUserBindPassword" : {
      "title" : "LDAP Server Authentication Password",
      "description" : "The password for the authentication user",
      "propertyOrder" : 700,
      "required" : true,
      "type" : "string",
      "format" : "password",
      "exampleValue" : ""
    },
    "ldapUserBindDN" : {
      "title" : "LDAP Server Authentication User ",
      "description" : "DN of the user used by the module to authenticate to the LDAP server<br><br>The
 MSISDN module authenticates to the LDAP server in order to search for a matching number. The DN
 entered here represents the account used for said authentication and must have read/search access to
 the LDAP server.",
```


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```
      "propertyOrder" : 600,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "trustedGatewayIPAddresses" : {
      "title" : "Trusted Gateway IP Address",
      "description" : "The list of IP address that are trusted to send MSISDN authentication
 requests.<br><br>The client IP address of the authentication request is checked against this list, if
 the client IP is not listed then the authentication module will fail.<br/><br/><i>NB </i>If the list
 is empty then all hosts will be trusted.",
      "propertyOrder" : 100,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "msisdnUserNamingAttribute" : {
      "title" : "LDAP Attribute Used to Retrieve User Profile",
      "description" : "The name of the attribute returned from the user profile matched against the
 supplied MSISDN number",
      "propertyOrder" : 1000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```

1.88.2. Global Operations

Resource path: `/global-config/authentication/modules/msisdn`

Resource version: `1.0`

1.88.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action MsisdnModule --global --actionName getAllTypes
```

1.88.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action MsisdnModule --global --actionName getCreatableTypes
```


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1.88.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action MsisdnModule --global --actionName nextdescendents
```

1.88.2.4. read

Usage:

```
am> read MsisdnModule --global
```

1.88.2.5. update

Usage:

```
am> update MsisdnModule --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "defaults" : {
      "properties" : {
        "trustedGatewayIPAddresses" : {
          "title" : "Trusted Gateway IP Address",
          "description" : "The list of IP address that are trusted to send MSISDN authentication
 requests.<br><br>The client IP address of the authentication request is checked against this list, if
 the client IP is not listed then the authentication module will fail.<br/><br/><i>NB </i>If the list
 is empty then all hosts will be trusted.",
          "propertyOrder" : 100,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "ldapSslEnabled" : {
          "title" : "SSL/TLS for LDAP Access",
          "description" : "",
          "propertyOrder" : 800,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "msisdnParameterNames" : {
```


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```
          "title" : "MSISDN Number Search Parameter Name",
          "description" : "Name of the HTTP cookie, header or query parameter containing the MSISDN
 number<br><br>The MSISDN authentication module will check the incoming HTTP cookie, header or
 query parameter of the request for the MSISDN number. The order of checking is as follows:<br/><br/
><ol><li>Cookie</li><li>Header</li><li>Query</li></ol><br/><br/><i>NB </i>The <i>MSISDN Header Search
 Attribute</i> controls what elements of the request is searched",
          "propertyOrder" : 200,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "returnUserDN" : {
          "title" : "Return User DN to DataStore",
          "description" : "Controls whether the DN or the username is returned as the authentication
 principal.",
          "propertyOrder" : 1100,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "ldapUserBindDN" : {
          "title" : "LDAP Server Authentication User ",
          "description" : "DN of the user used by the module to authenticate to the LDAP
 server<br><br>The MSISDN module authenticates to the LDAP server in order to search for a matching
 number. The DN entered here represents the account used for said authentication and must have read/
search access to the LDAP server.",
          "propertyOrder" : 600,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "msisdnRequestSearchLocations" : {
          "title" : "MSISDN Header Search Attribute",
          "description" : "Controls the elements that are searched by the authentication module ",
          "propertyOrder" : 900,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "ldapProviderUrl" : {
          "title" : "LDAP Server and Port ",
          "description" : "Use this list to set the LDAP server used to search for the MSISDN number.
 <br><br>The MSISDN authentication module will use this list as the server that is searched for a
 matching MSISDN number. A single entry must be in the format:<br/><br/><code>ldap_server:port</
code><br/><br/>Multiple entries allow associations between OpenAM servers and a LDAP server. The
 format is:<br/><br/><code>local server name | server:port</code><br/><br/>The local server name is
 the full name of the server from the list of servers and sites.",
          "propertyOrder" : 300,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
```


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```
          "exampleValue" : ""
        },
        "userProfileMsisdnAttribute" : {
          "title" : "Attribute To Use To Search LDAP",
          "description" : "The name of the attribute searched in the user profiles for the MSISDN
 number",
          "propertyOrder" : 500,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "authenticationLevel" : {
          "title" : "Authentication Level",
          "description" : "The authentication level associated with this module.<br><br>Each
 authentication module has an authentication level that can be used to indicate the level of security
 associated with the module; 0 is the lowest (and the default).",
          "propertyOrder" : 1200,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "msisdnUserNamingAttribute" : {
          "title" : "LDAP Attribute Used to Retrieve User Profile",
          "description" : "The name of the attribute returned from the user profile matched against
 the supplied MSISDN number",
          "propertyOrder" : 1000,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "baseSearchDN" : {
          "title" : "LDAP Start Search DN",
          "description" : "The start point in the LDAP server for the MSISDN search<br><br>When
 entering multiple entries, each entry must be prefixed with a local server name. Multiple entries
 allow different search Base DNs depending on the OpenAM server in use. The format is:<br/><br/
><code>local server name | base dn</code><br/><br/>The local server name is the full name of the
 server from the list of servers and sites.",
          "propertyOrder" : 400,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "ldapUserBindPassword" : {
          "title" : "LDAP Server Authentication Password",
          "description" : "The password for the authentication user",
          "propertyOrder" : 700,
          "required" : true,
          "type" : "string",
          "format" : "password",
          "exampleValue" : ""
        }
      },
      "type" : "object",
      "title" : "Realm Defaults"
    }
  }
```


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```
}
```

1.89. MultiFederationProtocol

1.89.1. Global Operations

Resource path: `/global-config/services/federation/multi`

Resource version: `1.0`

1.89.1.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action MultiFederationProtocol --global --actionName getAllTypes
```

1.89.1.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action MultiFederationProtocol --global --actionName getCreatableTypes
```

1.89.1.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action MultiFederationProtocol --global --actionName nextdescendents
```

1.89.1.4. read

Usage:

```
am> read MultiFederationProtocol --global
```

1.89.1.5. update

Usage:

```
am> update MultiFederationProtocol --global --body body
```


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Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "singleLogoutHandlerList" : {
      "title" : "Single Logout Handler List",
      "description" : "List of Logout handlers for each supported federation protocol<br><br>The
 multi-federation protocol engine supports Single Logout. Each federation protocol
 requires a different single logout handler. Logout handler must implement the
 <code>com.sun.identity.multiprotocol.SingleLogoutHandler</code> interface.",
      "propertyOrder" : 100,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    }
  }
}
```

1.90. Naming

1.90.1. Global Operations

Resource path: `/global-config/services/naming`

Resource version: `1.0`

1.90.1.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action Naming --global --actionName getAllTypes
```

1.90.1.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action Naming --global --actionName getCreatableTypes
```


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1.90.1.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action Naming --global --actionName nextdescendents
```

1.90.1.4. read

Usage:

```
am> read Naming --global
```

1.90.1.5. update

Usage:

```
am> update Naming --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "generalConfig" : {
      "type" : "object",
      "title" : "General Configuration",
      "propertyOrder" : 0,
      "properties" : {
        "authUrl" : {
          "title" : "Authentication Service URL",
          "description" : "Specifies the endpoint used by the authentication service.",
          "propertyOrder" : 500,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "sessionUrl" : {
          "title" : "Session Service URL",
          "description" : "Specifies the endpoint used by the session service.",
          "propertyOrder" : 200,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "policyUrl" : {
          "title" : "Policy Service URL",
          "description" : "Specifies the endpoint used by the policy service.",
          "propertyOrder" : 400,
```


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```
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "loggingUrl" : {
          "title" : "Logging Service URL",
          "description" : "Specifies the endpoint used by the logging service.",
          "propertyOrder" : 300,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "profileUrl" : {
          "title" : "Profile Service URL",
          "description" : "Specifies the endpoint used by the profile service.<p><p>This attribute is
deprecated.",
          "propertyOrder" : 100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    },
    "endpointConfig" : {
      "type" : "object",
      "title" : "Endpoint Configuration",
      "propertyOrder" : 2,
      "properties" : {
        "federationAssertionManagerUrl" : {
          "title" : "Federation Assertion Manager Service URL",
          "description" : "Specifies the ID-FF assertion manager endpoint.",
          "propertyOrder" : 1000,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "stsUrl" : {
          "title" : "Security Token Service Endpoint URL",
          "description" : "Specifies the STS endpoint.",
          "propertyOrder" : 1500,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "securityTokenManagerUrl" : {
          "title" : "Security Token Manager URL",
          "description" : "Specifies the security token manager endpoint.",
          "propertyOrder" : 1100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "idsvcsRestUrl" : {
          "title" : "Identity REST Services Endpoint URL",
          "description" : "Specifies the endpoint for the Identity REST services.",
          "propertyOrder" : 1400,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
```


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```
        },
        "stsMexUrl" : {
          "title" : "Security Token Service MEX Endpoint URL",
          "description" : "Specifies the STS MEX endpoint.",
          "propertyOrder" : 1600,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "jaxwsUrl" : {
          "title" : "Identity Web Services Endpoint URL",
          "description" : "Specifies the endpoint for the Identity WSDL services.",
          "propertyOrder" : 1300,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    },
    "federationConfig" : {
      "type" : "object",
      "title" : "Federation Configuration",
      "propertyOrder" : 1,
      "properties" : {
        "jaxrpcUrl" : {
          "title" : "JAXRPC Endpoint URL",
          "description" : "Specifies the JAXRPC endpoint URL used by the remote IDM/SMS APIs.",
          "propertyOrder" : 1200,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "samlAssertionManagerUrl" : {
          "title" : "SAML Assertion Manager Service URL",
          "description" : "Specifies the SAML v1 assertion service endpoint.",
          "propertyOrder" : 900,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "samlAwareServletUrl" : {
          "title" : "SAML Web Profile/Artifact Service URL",
          "description" : "Specifies the SAML v1 endpoint.",
          "propertyOrder" : 600,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "samlPostServletUrl" : {
          "title" : "SAML Web Profile/POST Service URL",
          "description" : "Specifies the SAML v1 Web Profile endpoint.",
          "propertyOrder" : 800,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "samlSoapReceiverUrl" : {
          "title" : "SAML SOAP Service URL",
          "description" : "Specifies the SAML v1 SOAP service endpoint.",
```


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```
          "propertyOrder" : 700,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    }
  }
}
```

1.91. OAuth2ClientAgentGroups

1.91.1. Realm Operations

Agent Groups handler that is responsible for managing agent groups

Resource path: `/realm-config/agents/groups/OAuth2Client`

Resource version: `1.0`

1.91.1.1. create

Usage:

```
am> create OAuth2ClientAgentGroups --realm Realm --id id --body body
```

Parameters:

`--id`

The unique identifier for the resource.

`--body`

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "advancedOAuth2ClientConfig" : {
      "type" : "object",
      "title" : "Advanced",
      "propertyOrder" : 1,
      "properties" : {
        "responseTypes" : {
          "title" : "Response Types",
          "description" : "Response types this client will support and use.",
          "propertyOrder" : 23800,
          "required" : true,
          "items" : {
            "type" : "string"
          },
```


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```
          "type" : "array",
          "exampleValue" : ""
        },
        "tokenEndpointAuthMethod" : {
          "title" : "Token Endpoint Authentication Method",
          "description" : "The authentication method with which a client authenticates to the
 authorization server at the token endpoint. The authentication method applies to OIDC requests with
 the openid scope.",
          "propertyOrder" : 24000,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "contacts" : {
          "title" : "Contacts",
          "description" : "Email addresses of users who can administrate this client.",
          "propertyOrder" : 23900,
          "required" : false,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "updateAccessToken" : {
          "title" : "Access Token",
          "description" : "The access token used to update the client.",
          "propertyOrder" : 25100,
          "required" : false,
          "type" : "string",
          "exampleValue" : ""
        },
        "mixUpMitigation" : {
          "title" : "OAuth 2.0 Mix-Up Mitigation enabled",
          "description" : "Enables OAuth 2.0 mix-up mitigation on the authorization server
 side.<br><br>Enable this setting only if this OAuth 2.0 client supports the <a href=\"https://
tools.ietf.org/html/draft-ietf-oauth-mix-up-mitigation-01\">OAuth 2.0 Mix-Up Mitigation draft</a>,
 otherwise OpenAM will fail to validate access token requests received from this client.",
          "propertyOrder" : 26300,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "sectorIdentifierUri" : {
          "title" : "Sector Identifier URI",
          "description" : "The Host component of this URL is used in the computation of pairwise
 Subject Identifiers.",
          "propertyOrder" : 24300,
          "required" : false,
          "type" : "string",
          "exampleValue" : ""
        },
        "subjectType" : {
          "title" : "Subject Type",
          "description" : "The subject type added to responses for this client.",
          "propertyOrder" : 24400,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
```


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```
       },
       "isConsentImplied" : {
         "title" : "Implied consent",
         "description" : "When enabled, the resource owner will not be asked for consent during
authorization flows. The OAuth2 Provider must be configured to allow clients to skip consent.",
         "propertyOrder" : 26200,
         "required" : true,
         "type" : "boolean",
         "exampleValue" : ""
       },
       "name" : {
         "title" : "Display name",
         "description" : "A client name that may be relevant to the resource owner when considering
approval.<br><br>The name may be entered as a single string or as pipe separated strings for
locale and localized name; e.g. \"en|The ExampleCo Intranet\". Locale strings are in the format
<code>language + \"_\" + country + \"_\" + variant</code>, e.g. en, en_GB, en_US_WIN. If the locale
is omitted, the name is displayed to all users having undefined locales. e.g. \"The ExampleCo
Intranet\".",
         "propertyOrder" : 23500,
         "required" : false,
         "items" : {
           "type" : "string"
         },
         "type" : "array",
         "exampleValue" : ""
       },
       "requestUris" : {
         "title" : "Request uris",
         "description" : "Array of request_uri values that are pre-registered by the RP for use at
the OP.<br><br>The entire Request URI MUST NOT exceed 512 ASCII characters and MUST use either HTTP
or HTTPS. Otherwise the value will be ignored.",
         "propertyOrder" : 23700,
         "required" : false,
         "items" : {
           "type" : "string"
         },
         "type" : "array",
         "exampleValue" : ""
       },
       "descriptions" : {
         "title" : "Display description",
         "description" : "A description of the client or other information that may be relevant
to the resource owner when considering approval.<br><br>The description may be entered as a single
string or as pipe separated strings for locale and localized name; e.g. \"en|The company intranet
is requesting the following access permission\". Locale strings are in the format <code>language
+ \"_\" + country + \"_\" + variant</code>, e.g. en, en_GB, en_US_WIN. If the locale is omitted,
the description is displayed to all users having undefined locales. e.g. \"The company intranet is
requesting the following access permission\".",
         "propertyOrder" : 23600,
         "required" : false,
         "items" : {
           "type" : "string"
         },
         "type" : "array",
         "exampleValue" : ""
       }
     }
   },
   "signEncOAuth2ClientConfig" : {
```


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```
      "type" : "object",
      "title" : "Signing and Encryption",
      "propertyOrder" : 3,
      "properties" : {
        "requestParameterEncryptedAlg" : {
          "title" : "Request parameter encryption algorithm",
          "description" : "JWE algorithm for encrypting the request parameter.",
          "propertyOrder" : 27600,
          "required" : false,
          "type" : "string",
          "exampleValue" : ""
        },
        "tokenEndpointAuthSigningAlgorithm" : {
          "title" : "Token Endpoint Authentication Signing Algorithm",
          "description" : "The JWS algorithm that MUST be used for signing the JWT used to
authenticate the Client at the Token Endpointfor the private_key_jwt and client_secret_jwt
authentication methods. All Token Requests using these authentication methods from this Client MUST
be rejected, if the JWT is not signed with this algorithm.",
          "propertyOrder" : 24130,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "idTokenPublicEncryptionKey" : {
          "title" : "Client ID Token Public Encryption Key",
          "description" : "A Base64 encoded public key for encrypting ID Tokens.",
          "propertyOrder" : 24900,
          "required" : false,
          "type" : "string",
          "exampleValue" : ""
        },
        "idTokenEncryptionAlgorithm" : {
          "title" : "ID Token Encryption Algorithm",
          "description" : "Algorithm the ID Token for this client must be encrypted with.",
          "propertyOrder" : 24700,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "jwksCacheTimeout" : {
          "title" : "JWKs URI content cache timeout in ms",
          "description" : "To avoid loading the JWKS URI content for every token encryption, the JWKS
content is cached. This timeout defines the maximum of time the JWKS URI content can be cached before
being refreshed.",
          "propertyOrder" : 24110,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "userinfoEncryptedResponseAlg" : {
          "title" : "User info encrypted response algorithm",
          "description" : "JWE algorithm for encrypting UserInfo Responses. If both signing and
encryption are requested, the response will be signed then encrypted, with the result being a Nested
JWT. The default, if omitted, is that no encryption is performed.",
          "propertyOrder" : 27300,
          "required" : false,
          "type" : "string",
          "exampleValue" : ""
        },
```


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```
        "userinfoEncryptedResponseEncryptionAlgorithm" : {
          "title" : "User info encrypted response encryption algorithm",
          "description" : "JWE enc algorithm for encrypting UserInfo Responses. If userinfo encrypted
 response algorithm is specified, the default for this value is A128CBC-HS256. When user info
 encrypted response encryption is included, user info encrypted response algorithm MUST also be
 provided.<br><br>OpenAM supports the following token encryption algorithms:<ul><li><code>A128GCM</
code>, <code>A192GCM</code>, and <code>A256GCM</code> - AES in Galois Counter Mode (GCM) authenticated
 encryption mode.</li><li><code>A128CBC-HS256</code>, <code>A192CBC-HS384</code>, and <code>A256CBC-
HS512</code> - AES encryption in CBC mode, with HMAC-SHA-2 for integrity.</li></ul>",
          "propertyOrder" : 27400,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "jwkStoreCacheMissCacheTime" : {
          "title" : "JWKs URI content cache miss cache time",
          "description" : "To avoid loading the JWKS URI content for every token signature
 verification, especially when the kid is not in the jwks content already cached, the JWKS content
 will be cache for a minimum period of time. This cache miss cache time defines the minimum of time
 the JWKS URI content is cache.",
          "propertyOrder" : 24120,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "idTokenEncryptionEnabled" : {
          "title" : "Enable ID Token Encryption",
          "description" : "Select to enable ID token encryption.",
          "propertyOrder" : 24600,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "jwkSet" : {
          "title" : "Json Web Key",
          "description" : "Raw JSON Web Key value containing the client's public keys.",
          "propertyOrder" : 24200,
          "required" : false,
          "type" : "string",
          "exampleValue" : ""
        },
        "requestParameterEncryptedEncryptionAlgorithm" : {
          "title" : "Request parameter encryption method",
          "description" : "JWE enc algorithm for encrypting the request parameter.<br><br>OpenAM
 supports the following token encryption algorithms:<ul><li><code>A128GCM</code>, <code>A192GCM</
code>, and <code>A256GCM</code> - AES in Galois Counter Mode (GCM) authenticated encryption mode.</
li><li><code>A128CBC-HS256</code>, <code>A192CBC-HS384</code>, and <code>A256CBC-HS512</code> - AES
 encryption in CBC mode, with HMAC-SHA-2 for integrity.</li></ul>",
          "propertyOrder" : 27700,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "clientJwtPublicKey" : {
          "title" : "Client JWT Bearer Public Key",
          "description" : "A Base64 encoded X509 certificate, containing the public key, represented
 as a UTF-8 PEM file, of the key pair for signing the Client Bearer JWT.",
          "propertyOrder" : 25400,
          "required" : false,
```


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```
          "type" : "string",
          "exampleValue" : ""
        },
        "publicKeyLocation" : {
          "title" : "Public key selector",
          "description" : "Select the public key for this client to come from either the jwks_uri,
 manual jwks or X509 field.",
          "propertyOrder" : 25700,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "userinfoResponseFormat" : {
          "title" : "User info response format.",
          "description" : "The user info endpoint offers different output format. See http://
openid.net/specs/openid-connect-core-1_0.html#UserInfoResponse",
          "propertyOrder" : 27100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "jwksUri" : {
          "title" : "Json Web Key URI",
          "description" : "The uri that contains the client's public keys in Json Web Key format.",
          "propertyOrder" : 24100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "requestParameterSignedAlg" : {
          "title" : "Request parameter signing algorithm",
          "description" : "JWS algorithm for signing the request parameter.",
          "propertyOrder" : 27500,
          "required" : false,
          "type" : "string",
          "exampleValue" : ""
        },
        "userinfoSignedResponseAlg" : {
          "title" : "User info signed response algorithm",
          "description" : "JWS algorithm for signing UserInfo Responses. If this is specified, the
 response will be JWT <a href=\"https://tools.ietf.org/html/rfc7519\">JWT</a> serialized, and signed
 using JWS. The default, if omitted, is for the UserInfo Response to return the Claims as a UTF-8
 encoded JSON object using the application/json content-type.",
          "propertyOrder" : 27200,
          "required" : false,
          "type" : "string",
          "exampleValue" : ""
        },
        "idTokenEncryptionMethod" : {
          "title" : "ID Token Encryption Method",
          "description" : "Encryption method the ID Token for this client must be encrypted with.",
          "propertyOrder" : 24800,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "idTokenSignedResponseAlg" : {
          "title" : "ID Token Signing Algorithm",
          "description" : "Algorithm the ID Token for this client must be signed with.",
```


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```
          "propertyOrder" : 24500,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    },
    "coreOpenIDClientConfig" : {
      "type" : "object",
      "title" : "OpenID Connect",
      "propertyOrder" : 2,
      "properties" : {
        "clientSessionUri" : {
          "title" : "Client Session URI",
          "description" : "This is the URI that will be used to check messages sent to the session
 management endpoints. This URI must match the origin of the message",
          "propertyOrder" : 25200,
          "required" : false,
          "type" : "string",
          "exampleValue" : ""
        },
        "defaultMaxAgeEnabled" : {
          "title" : "Default Max Age Enabled",
          "description" : "Whether or not the default max age is enforced.",
          "propertyOrder" : 25600,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "defaultMaxAge" : {
          "title" : "Default Max Age",
          "description" : "Minimum value 1. Sets the maximum length of time in seconds a session
 may be active after the authorization service has succeeded before the user must actively re-
authenticate.",
          "propertyOrder" : 25500,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "claims" : {
          "title" : "Claim(s)",
          "description" : "List of claim name translations, which will override those specified for
 the AS. Claims are values that are presented to the user to inform them what data is being made
 available to the Client.<br><br>Claims may be entered as simple strings or pipe separated strings
 representing the internal claim name, locale, and localized description; e.g. \"name|en|Your full
 name\". Locale strings are in the format <code>language + \"_\" + country + \"_\" + variant</code>,
 e.g. en, en_GB, en_US_WIN. If the locale and pipe is omitted, the description is displayed to all
 users having undefined locales. e.g. \"name|Your full name\". <i>NB</i> If the description is also
 omitted, nothing is displayed to all users, e.g. specifying \"name|\" would allow the claim \"name\"
 to be used by the client, but would not display it to the user when it was requested.<p>If a value is
 not given here, the value will be computed from the OAuth 2 Provider settings.</p>",
          "propertyOrder" : 23400,
          "required" : false,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
```


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```
       "postLogoutRedirectUri" : {
         "title" : "Post Logout Redirect URIs",
         "description" : "URIs that can be redirected to after the client logout process.",
         "propertyOrder" : 25000,
         "required" : false,
         "items" : {
           "type" : "string"
         },
         "type" : "array",
         "exampleValue" : ""
       },
       "jwtTokenLifetime" : {
         "title" : "OpenID Connect JWT Token Lifetime (seconds)",
         "description" : "The time in seconds a JWT is valid for. <i>NB</i> If this field is set to
 zero, JWT Token Lifetime of the OAuth2 Provider is used instead of.",
         "propertyOrder" : 26100,
         "required" : true,
         "type" : "integer",
         "exampleValue" : ""
       }
     }
   },
   "coreOAuth2ClientConfig" : {
     "type" : "object",
     "title" : "Core",
     "propertyOrder" : 0,
     "properties" : {
       "authorizationCodeLifetime" : {
         "title" : "Authorization Code Lifetime (seconds)",
         "description" : "The time in seconds an authorization code is valid for. <i>NB</i> If this
 field is set to zero, Authorization Code Lifetime of the OAuth2 Provider is used instead of.",
         "propertyOrder" : 25800,
         "required" : true,
         "type" : "integer",
         "exampleValue" : ""
       },
       "scopes" : {
         "title" : "Scope(s)",
         "description" : "Scope(s). Scopes are strings that are presented to the user for approval
 and included in tokens so that the protected resource may make decisions about what to give access
 to.<br><br>Scopes may be entered as simple strings or pipe separated strings representing the
 internal scope name, locale, and localized description; e.g. \"read|en|Permission to view email
 messages in your account\". Locale strings are in the format <code>language + \"_\" + country + \"_
\" + variant</code>, e.g. en, en_GB, en_US_WIN. If the locale and pipe is omitted, the description
 is displayed to all users having undefined locales. e.g. \"read|Permission to view email messages in
 your account\". <i>NB</i> If the description is also omitted, nothing is displayed to all users, e.g.
 specifying \"read|\" would allow the scope \"read\" to be used by the client, but would not display
 it to the user when it was requested.",
         "propertyOrder" : 23300,
         "required" : false,
         "items" : {
           "type" : "string"
         },
         "type" : "array",
         "exampleValue" : ""
       },
       "clientType" : {
         "title" : "Client type",
```


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```
          "description" : "Type of OAuth 2.0 client. Confidential clients can keep their password
 secret, and are typically web apps or other server-based clients. Public clients run the risk
 of exposing their password to a host or user agent, such as rich browser applications or desktop
 clients.",
          "propertyOrder" : 23100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "redirectionUris" : {
          "title" : "Redirection URIs",
          "description" : "Redirection URIs (optional for confidential clients). Complete URIs or URIs
 consisting of protocol + authority + path are registered so that the OAuth 2.0 provider can trust
 that tokens are sent to trusted entities. If multiple URI's are registered, the client MUST specify
 the URI that the user should be redirected to following approval. May not contain a fragment (#).",
          "propertyOrder" : 23200,
          "required" : false,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "accessTokenLifetime" : {
          "title" : "Access Token Lifetime (seconds)",
          "description" : "The time in seconds an access token is valid for. <i>NB</i> If this field
 is set to zero, Access Token Lifetime of the OAuth2 Provider is used instead of.",
          "propertyOrder" : 26000,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "refreshTokenLifetime" : {
          "title" : "Refresh Token Lifetime (seconds)",
          "description" : "The time in seconds a refresh token is valid for. <i>NB</i> If this field
 is set to zero, Refresh Token Lifetime of the OAuth2 Provider is used instead. If this field is set
 to -1, the token will never expire.",
          "propertyOrder" : 25900,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "defaultScopes" : {
          "title" : "Default Scope(s)",
          "description" : "Default Scope(s). Scopes automatically given to tokens.<br><br>Default
 Scopes may be entered as simple strings or pipe separated strings representing the internal scope
 name, locale, and localized description; e.g. \"read|en|Permission to view email messages in your
 account\". Locale strings are in the format <code>language + \"_\" + country + \"_\" + variant</
code>, e.g. en, en_GB, en_US_WIN. If the locale and pipe is omitted, the description is displayed to
 all users having undefined locales. e.g. \"read|Permission to view email messages in your account
\". <i>NB</i> If the description is also omitted, nothing is displayed to all users, e.g. specifying
 \"read|\" would allow the scope \"read\" to be used by the client, but would not display it to the
 user when it was requested.",
          "propertyOrder" : 23700,
          "required" : false,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
```


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```
          "exampleValue" : ""
        },
        "status" : {
          "title" : "Status",
          "description" : "Status of the agent configuration.",
          "propertyOrder" : 200,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "clientName" : {
          "title" : "Client Name",
          "description" : "This value is a readable name for this client.",
          "propertyOrder" : 25300,
          "required" : false,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        }
      }
    },
    "coreUmaClientConfig" : {
      "type" : "object",
      "title" : "UMA",
      "propertyOrder" : 4,
      "properties" : {
        "claimsRedirectionUris" : {
          "title" : "Claims Redirection URIs",
          "description" : "Redirection URIs for returning to the client from UMA claims collection
 (not yet supported). If multiple URIs are registered, the client MUST specify the URI that the user
 should be redirected to following approval. May not contain a fragment (#).",
          "propertyOrder" : 23200,
          "required" : false,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        }
      }
    }
  }
}
```

1.91.1.2. delete

Usage:

```
am> delete OAuth2ClientAgentGroups --realm Realm --id id
```

Parameters:

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--id

The unique identifier for the resource.

1.91.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action OAuth2ClientAgentGroups --realm Realm --actionName getAllTypes
```

1.91.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action OAuth2ClientAgentGroups --realm Realm --actionName getCreatableTypes
```

1.91.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action OAuth2ClientAgentGroups --realm Realm --actionName nextdescendents
```

1.91.1.6. query

Querying the agent groups of a specific type

Usage:

```
am> query OAuth2ClientAgentGroups --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.91.1.7. read

Usage:

```
am> read OAuth2ClientAgentGroups --realm Realm --id id
```

Parameters:

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--id

The unique identifier for the resource.

1.91.1.8. update

Usage:

```
am> update OAuth2ClientAgentGroups --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "advancedOAuth2ClientConfig" : {
      "type" : "object",
      "title" : "Advanced",
      "propertyOrder" : 1,
      "properties" : {
        "responseTypes" : {
          "title" : "Response Types",
          "description" : "Response types this client will support and use.",
          "propertyOrder" : 23800,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "tokenEndpointAuthMethod" : {
          "title" : "Token Endpoint Authentication Method",
          "description" : "The authentication method with which a client authenticates to the
 authorization server at the token endpoint. The authentication method applies to OIDC requests with
 the openid scope.",
          "propertyOrder" : 24000,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "contacts" : {
          "title" : "Contacts",
          "description" : "Email addresses of users who can administrate this client.",
          "propertyOrder" : 23900,
          "required" : false,
          "items" : {
            "type" : "string"
```


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```
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "updateAccessToken" : {
          "title" : "Access Token",
          "description" : "The access token used to update the client.",
          "propertyOrder" : 25100,
          "required" : false,
          "type" : "string",
          "exampleValue" : ""
        },
        "mixUpMitigation" : {
          "title" : "OAuth 2.0 Mix-Up Mitigation enabled",
          "description" : "Enables OAuth 2.0 mix-up mitigation on the authorization server
 side.<br><br>Enable this setting only if this OAuth 2.0 client supports the <a href=\"https://
tools.ietf.org/html/draft-ietf-oauth-mix-up-mitigation-01\">OAuth 2.0 Mix-Up Mitigation draft</a>,
 otherwise OpenAM will fail to validate access token requests received from this client.",
          "propertyOrder" : 26300,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "sectorIdentifierUri" : {
          "title" : "Sector Identifier URI",
          "description" : "The Host component of this URL is used in the computation of pairwise
 Subject Identifiers.",
          "propertyOrder" : 24300,
          "required" : false,
          "type" : "string",
          "exampleValue" : ""
        },
        "subjectType" : {
          "title" : "Subject Type",
          "description" : "The subject type added to responses for this client.",
          "propertyOrder" : 24400,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "isConsentImplied" : {
          "title" : "Implied consent",
          "description" : "When enabled, the resource owner will not be asked for consent during
 authorization flows. The OAuth2 Provider must be configured to allow clients to skip consent.",
          "propertyOrder" : 26200,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "name" : {
          "title" : "Display name",
          "description" : "A client name that may be relevant to the resource owner when considering
 approval.<br><br>The name may be entered as a single string or as pipe separated strings for
 locale and localized name; e.g. \"en|The ExampleCo Intranet\". Locale strings are in the format
 <code>language + \"_\" + country + \"_\" + variant</code>, e.g. en, en_GB, en_US_WIN. If the locale
 is omitted, the name is displayed to all users having undefined locales. e.g. \"The ExampleCo
 Intranet\".",
          "propertyOrder" : 23500,
          "required" : false,
```


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```
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "requestUris" : {
          "title" : "Request uris",
          "description" : "Array of request_uri values that are pre-registered by the RP for use at
the OP.<br><br>The entire Request URI MUST NOT exceed 512 ASCII characters and MUST use either HTTP
or HTTPS. Otherwise the value will be ignored.",
          "propertyOrder" : 23700,
          "required" : false,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "descriptions" : {
          "title" : "Display description",
          "description" : "A description of the client or other information that may be relevant
to the resource owner when considering approval.<br><br>The description may be entered as a single
string or as pipe separated strings for locale and localized name; e.g. \"en|The company intranet
is requesting the following access permission\". Locale strings are in the format <code>language
+ \"_\" + country + \"_\" + variant</code>, e.g. en, en_GB, en_US_WIN. If the locale is omitted,
the description is displayed to all users having undefined locales. e.g. \"The company intranet is
requesting the following access permission\".",
          "propertyOrder" : 23600,
          "required" : false,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        }
      }
    },
    "signEncOAuth2ClientConfig" : {
      "type" : "object",
      "title" : "Signing and Encryption",
      "propertyOrder" : 3,
      "properties" : {
        "requestParameterEncryptedAlg" : {
          "title" : "Request parameter encryption algorithm",
          "description" : "JWE algorithm for encrypting the request parameter.",
          "propertyOrder" : 27600,
          "required" : false,
          "type" : "string",
          "exampleValue" : ""
        },
        "tokenEndpointAuthSigningAlgorithm" : {
          "title" : "Token Endpoint Authentication Signing Algorithm",
          "description" : "The JWS algorithm that MUST be used for signing the JWT used to
authenticate the Client at the Token Endpointfor the private_key_jwt and client_secret_jwt
authentication methods. All Token Requests using these authentication methods from this Client MUST
be rejected, if the JWT is not signed with this algorithm.",
          "propertyOrder" : 24130,
          "required" : true,
```


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```
          "type" : "string",
          "exampleValue" : ""
        },
        "idTokenPublicEncryptionKey" : {
          "title" : "Client ID Token Public Encryption Key",
          "description" : "A Base64 encoded public key for encrypting ID Tokens.",
          "propertyOrder" : 24900,
          "required" : false,
          "type" : "string",
          "exampleValue" : ""
        },
        "idTokenEncryptionAlgorithm" : {
          "title" : "ID Token Encryption Algorithm",
          "description" : "Algorithm the ID Token for this client must be encrypted with.",
          "propertyOrder" : 24700,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "jwksCacheTimeout" : {
          "title" : "JWKs URI content cache timeout in ms",
          "description" : "To avoid loading the JWKS URI content for every token encryption, the JWKS
 content is cached. This timeout defines the maximum of time the JWKS URI content can be cached before
 being refreshed.",
          "propertyOrder" : 24110,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "userinfoEncryptedResponseAlg" : {
          "title" : "User info encrypted response algorithm",
          "description" : "JWE algorithm for encrypting UserInfo Responses. If both signing and
 encryption are requested, the response will be signed then encrypted, with the result being a Nested
 JWT. The default, if omitted, is that no encryption is performed.",
          "propertyOrder" : 27300,
          "required" : false,
          "type" : "string",
          "exampleValue" : ""
        },
        "userinfoEncryptedResponseEncryptionAlgorithm" : {
          "title" : "User info encrypted response encryption algorithm",
          "description" : "JWE enc algorithm for encrypting UserInfo Responses. If userinfo encrypted
 response algorithm is specified, the default for this value is A128CBC-HS256. When user info
 encrypted response encryption is included, user info encrypted response algorithm MUST also be
 provided.<br><br>OpenAM supports the following token encryption algorithms:<ul><li><code>A128GCM</
code>, <code>A192GCM</code>, and <code>A256GCM</code> - AES in Galois Counter Mode (GCM) authenticated
 encryption mode.</li><li><code>A128CBC-HS256</code>, <code>A192CBC-HS384</code>, and <code>A256CBC-
HS512</code> - AES encryption in CBC mode, with HMAC-SHA-2 for integrity.</li></ul>",
          "propertyOrder" : 27400,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "jwkStoreCacheMissCacheTime" : {
          "title" : "JWKs URI content cache miss cache time",
          "description" : "To avoid loading the JWKS URI content for every token signature
 verification, especially when the kid is not in the jwks content already cached, the JWKS content
 will be cache for a minimum period of time. This cache miss cache time defines the minimum of time
 the JWKS URI content is cache.",
```


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```
          "propertyOrder" : 24120,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "idTokenEncryptionEnabled" : {
          "title" : "Enable ID Token Encryption",
          "description" : "Select to enable ID token encryption.",
          "propertyOrder" : 24600,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "jwkSet" : {
          "title" : "Json Web Key",
          "description" : "Raw JSON Web Key value containing the client's public keys.",
          "propertyOrder" : 24200,
          "required" : false,
          "type" : "string",
          "exampleValue" : ""
        },
        "requestParameterEncryptedEncryptionAlgorithm" : {
          "title" : "Request parameter encryption method",
          "description" : "JWE enc algorithm for encrypting the request parameter.<br><br>OpenAM
 supports the following token encryption algorithms:<ul><li><code>A128GCM</code>, <code>A192GCM</
code>, and <code>A256GCM</code> - AES in Galois Counter Mode (GCM) authenticated encryption mode.</
li><li><code>A128CBC-HS256</code>, <code>A192CBC-HS384</code>, and <code>A256CBC-HS512</code> - AES
 encryption in CBC mode, with HMAC-SHA-2 for integrity.</li></ul>",
          "propertyOrder" : 27700,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "clientJwtPublicKey" : {
          "title" : "Client JWT Bearer Public Key",
          "description" : "A Base64 encoded X509 certificate, containing the public key, represented
 as a UTF-8 PEM file, of the key pair for signing the Client Bearer JWT.",
          "propertyOrder" : 25400,
          "required" : false,
          "type" : "string",
          "exampleValue" : ""
        },
        "publicKeyLocation" : {
          "title" : "Public key selector",
          "description" : "Select the public key for this client to come from either the jwks_uri,
 manual jwks or X509 field.",
          "propertyOrder" : 25700,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "userinfoResponseFormat" : {
          "title" : "User info response format.",
          "description" : "The user info endpoint offers different output format. See http://
openid.net/specs/openid-connect-core-1_0.html#UserInfoResponse",
          "propertyOrder" : 27100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
```


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```
       },
       "jwksUri" : {
         "title" : "Json Web Key URI",
         "description" : "The uri that contains the client's public keys in Json Web Key format.",
         "propertyOrder" : 24100,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       },
       "requestParameterSignedAlg" : {
         "title" : "Request parameter signing algorithm",
         "description" : "JWS algorithm for signing the request parameter.",
         "propertyOrder" : 27500,
         "required" : false,
         "type" : "string",
         "exampleValue" : ""
       },
       "userinfoSignedResponseAlg" : {
         "title" : "User info signed response algorithm",
         "description" : "JWS algorithm for signing UserInfo Responses. If this is specified, the
response will be JWT <a href=\"https://tools.ietf.org/html/rfc7519\">JWT</a> serialized, and signed
using JWS. The default, if omitted, is for the UserInfo Response to return the Claims as a UTF-8
encoded JSON object using the application/json content-type.",
         "propertyOrder" : 27200,
         "required" : false,
         "type" : "string",
         "exampleValue" : ""
       },
       "idTokenEncryptionMethod" : {
         "title" : "ID Token Encryption Method",
         "description" : "Encryption method the ID Token for this client must be encrypted with.",
         "propertyOrder" : 24800,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       },
       "idTokenSignedResponseAlg" : {
         "title" : "ID Token Signing Algorithm",
         "description" : "Algorithm the ID Token for this client must be signed with.",
         "propertyOrder" : 24500,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       }
     }
   },
   "coreOpenIDClientConfig" : {
     "type" : "object",
     "title" : "OpenID Connect",
     "propertyOrder" : 2,
     "properties" : {
       "clientSessionUri" : {
         "title" : "Client Session URI",
         "description" : "This is the URI that will be used to check messages sent to the session
management endpoints. This URI must match the origin of the message",
         "propertyOrder" : 25200,
         "required" : false,
         "type" : "string",
         "exampleValue" : ""
```


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```
        },
        "defaultMaxAgeEnabled" : {
          "title" : "Default Max Age Enabled",
          "description" : "Whether or not the default max age is enforced.",
          "propertyOrder" : 25600,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "defaultMaxAge" : {
          "title" : "Default Max Age",
          "description" : "Minimum value 1. Sets the maximum length of time in seconds a session
 may be active after the authorization service has succeeded before the user must actively re-
authenticate.",
          "propertyOrder" : 25500,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "claims" : {
          "title" : "Claim(s)",
          "description" : "List of claim name translations, which will override those specified for
 the AS. Claims are values that are presented to the user to inform them what data is being made
 available to the Client.<br><br>Claims may be entered as simple strings or pipe separated strings
 representing the internal claim name, locale, and localized description; e.g. \"name|en|Your full
 name\". Locale strings are in the format <code>language + \"_\" + country + \"_\" + variant</code>,
 e.g. en, en_GB, en_US_WIN. If the locale and pipe is omitted, the description is displayed to all
 users having undefined locales. e.g. \"name|Your full name\". <i>NB</i> If the description is also
 omitted, nothing is displayed to all users, e.g. specifying \"name|\" would allow the claim \"name\"
 to be used by the client, but would not display it to the user when it was requested.<p>If a value is
 not given here, the value will be computed from the OAuth 2 Provider settings.</p>",
          "propertyOrder" : 23400,
          "required" : false,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "postLogoutRedirectUri" : {
          "title" : "Post Logout Redirect URIs",
          "description" : "URIs that can be redirected to after the client logout process.",
          "propertyOrder" : 25000,
          "required" : false,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "jwtTokenLifetime" : {
          "title" : "OpenID Connect JWT Token Lifetime (seconds)",
          "description" : "The time in seconds a JWT is valid for. <i>NB</i> If this field is set to
 zero, JWT Token Lifetime of the OAuth2 Provider is used instead of.",
          "propertyOrder" : 26100,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        }
```


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```
      }
    },
    "coreOAuth2ClientConfig" : {
      "type" : "object",
      "title" : "Core",
      "propertyOrder" : 0,
      "properties" : {
        "authorizationCodeLifetime" : {
          "title" : "Authorization Code Lifetime (seconds)",
          "description" : "The time in seconds an authorization code is valid for. <i>NB</i> If this
 field is set to zero, Authorization Code Lifetime of the OAuth2 Provider is used instead of.",
          "propertyOrder" : 25800,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "scopes" : {
          "title" : "Scope(s)",
          "description" : "Scope(s). Scopes are strings that are presented to the user for approval
 and included in tokens so that the protected resource may make decisions about what to give access
 to.<br><br>Scopes may be entered as simple strings or pipe separated strings representing the
 internal scope name, locale, and localized description; e.g. \"read|en|Permission to view email
 messages in your account\". Locale strings are in the format <code>language + \"_\" + country + \"_
\" + variant</code>, e.g. en, en_GB, en_US_WIN. If the locale and pipe is omitted, the description
 is displayed to all users having undefined locales. e.g. \"read|Permission to view email messages in
 your account\". <i>NB</i> If the description is also omitted, nothing is displayed to all users, e.g.
 specifying \"read|\" would allow the scope \"read\" to be used by the client, but would not display
 it to the user when it was requested.",
          "propertyOrder" : 23300,
          "required" : false,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "clientType" : {
          "title" : "Client type",
          "description" : "Type of OAuth 2.0 client. Confidential clients can keep their password
 secret, and are typically web apps or other server-based clients. Public clients run the risk
 of exposing their password to a host or user agent, such as rich browser applications or desktop
 clients.",
          "propertyOrder" : 23100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "redirectionUris" : {
          "title" : "Redirection URIs",
          "description" : "Redirection URIs (optional for confidential clients). Complete URIs or URIs
 consisting of protocol + authority + path are registered so that the OAuth 2.0 provider can trust
 that tokens are sent to trusted entities. If multiple URI's are registered, the client MUST specify
 the URI that the user should be redirected to following approval. May not contain a fragment (#).",
          "propertyOrder" : 23200,
          "required" : false,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
```


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```
          "exampleValue" : ""
        },
        "accessTokenLifetime" : {
          "title" : "Access Token Lifetime (seconds)",
          "description" : "The time in seconds an access token is valid for. <i>NB</i> If this field
 is set to zero, Access Token Lifetime of the OAuth2 Provider is used instead of.",
          "propertyOrder" : 26000,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "refreshTokenLifetime" : {
          "title" : "Refresh Token Lifetime (seconds)",
          "description" : "The time in seconds a refresh token is valid for. <i>NB</i> If this field
 is set to zero, Refresh Token Lifetime of the OAuth2 Provider is used instead. If this field is set
 to -1, the token will never expire.",
          "propertyOrder" : 25900,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "defaultScopes" : {
          "title" : "Default Scope(s)",
          "description" : "Default Scope(s). Scopes automatically given to tokens.<br><br>Default
 Scopes may be entered as simple strings or pipe separated strings representing the internal scope
 name, locale, and localized description; e.g. \"read|en|Permission to view email messages in your
 account\". Locale strings are in the format <code>language + \"_\" + country + \"_\" + variant</
code>, e.g. en, en_GB, en_US_WIN. If the locale and pipe is omitted, the description is displayed to
 all users having undefined locales. e.g. \"read|Permission to view email messages in your account
\". <i>NB</i> If the description is also omitted, nothing is displayed to all users, e.g. specifying
 \"read|\" would allow the scope \"read\" to be used by the client, but would not display it to the
 user when it was requested.",
          "propertyOrder" : 23700,
          "required" : false,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "status" : {
          "title" : "Status",
          "description" : "Status of the agent configuration.",
          "propertyOrder" : 200,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "clientName" : {
          "title" : "Client Name",
          "description" : "This value is a readable name for this client.",
          "propertyOrder" : 25300,
          "required" : false,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        }
```


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```
      }
    },
    "coreUmaClientConfig" : {
      "type" : "object",
      "title" : "UMA",
      "propertyOrder" : 4,
      "properties" : {
        "claimsRedirectionUris" : {
          "title" : "Claims Redirection URIs",
          "description" : "Redirection URIs for returning to the client from UMA claims collection
 (not yet supported). If multiple URIs are registered, the client MUST specify the URI that the user
 should be redirected to following approval. May not contain a fragment (#).",
          "propertyOrder" : 23200,
          "required" : false,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        }
      }
    }
  }
}
```

1.92. OAuth2Clients

1.92.1. Realm Operations

Agents handler that is responsible for managing agents

Resource path: `/realm-config/agents/OAuth2Client`

Resource version: `1.0`

1.92.1.1. create

Usage:

```
am> create OAuth2Clients --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
```


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```
  "type" : "object",
  "properties" : {
    "advancedOAuth2ClientConfig" : {
      "type" : "object",
      "title" : "Advanced",
      "propertyOrder" : 1,
      "properties" : {
        "responseTypes" : {
          "title" : "Response Types",
          "description" : "Response types this client will support and use.",
          "propertyOrder" : 23800,
          "items" : {
            "type" : "string"
          },
          "type" : "object",
          "exampleValue" : "",
          "properties" : {
            "inherited" : {
              "type" : "boolean",
              "required" : true
            },
            "value" : {
              "type" : "array",
              "required" : true
            }
          }
        },
        "mixUpMitigation" : {
          "title" : "OAuth 2.0 Mix-Up Mitigation enabled",
          "description" : "Enables OAuth 2.0 mix-up mitigation on the authorization server
 side.<br><br>Enable this setting only if this OAuth 2.0 client supports the <a href=\"https://
tools.ietf.org/html/draft-ietf-oauth-mix-up-mitigation-01\">OAuth 2.0 Mix-Up Mitigation draft</a>,
 otherwise OpenAM will fail to validate access token requests received from this client.",
          "propertyOrder" : 26300,
          "type" : "object",
          "exampleValue" : "",
          "properties" : {
            "inherited" : {
              "type" : "boolean",
              "required" : true
            },
            "value" : {
              "type" : "boolean",
              "required" : true
            }
          }
        },
        "sectorIdentifierUri" : {
          "title" : "Sector Identifier URI",
          "description" : "The Host component of this URL is used in the computation of pairwise
 Subject Identifiers.",
          "propertyOrder" : 24300,
          "type" : "object",
          "exampleValue" : "",
          "properties" : {
            "inherited" : {
              "type" : "boolean",
              "required" : true
            },
```


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```
            "value" : {
              "type" : "string",
              "required" : false
            }
          }
        },
        "subjectType" : {
          "title" : "Subject Type",
          "description" : "The subject type added to responses for this client.",
          "propertyOrder" : 24400,
          "type" : "object",
          "exampleValue" : "",
          "properties" : {
            "inherited" : {
              "type" : "boolean",
              "required" : true
            },
            "value" : {
              "type" : "string",
              "required" : true
            }
          }
        },
        "name" : {
          "title" : "Display name",
          "description" : "A client name that may be relevant to the resource owner when considering
approval.<br><br>The name may be entered as a single string or as pipe separated strings for
locale and localized name; e.g. \"en|The ExampleCo Intranet\". Locale strings are in the format
<code>language + \"_\" + country + \"_\" + variant</code>, e.g. en, en_GB, en_US_WIN. If the locale
is omitted, the name is displayed to all users having undefined locales. e.g. \"The ExampleCo
Intranet\".",
          "propertyOrder" : 23500,
          "items" : {
            "type" : "string"
          },
          "type" : "object",
          "exampleValue" : "",
          "properties" : {
            "inherited" : {
              "type" : "boolean",
              "required" : true
            },
            "value" : {
              "type" : "array",
              "required" : false
            }
          }
        },
        "contacts" : {
          "title" : "Contacts",
          "description" : "Email addresses of users who can administrate this client.",
          "propertyOrder" : 23900,
          "items" : {
            "type" : "string"
          },
          "type" : "object",
          "exampleValue" : "",
          "properties" : {
            "inherited" : {
```


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```
              "type" : "boolean",
              "required" : true
            },
            "value" : {
              "type" : "array",
              "required" : false
            }
          }
        },
        "isConsentImplied" : {
          "title" : "Implied consent",
          "description" : "When enabled, the resource owner will not be asked for consent during
authorization flows. The OAuth2 Provider must be configured to allow clients to skip consent.",
          "propertyOrder" : 26200,
          "type" : "object",
          "exampleValue" : "",
          "properties" : {
            "inherited" : {
              "type" : "boolean",
              "required" : true
            },
            "value" : {
              "type" : "boolean",
              "required" : true
            }
          }
        },
        "updateAccessToken" : {
          "title" : "Access Token",
          "description" : "The access token used to update the client.",
          "propertyOrder" : 25100,
          "type" : "object",
          "exampleValue" : "",
          "properties" : {
            "inherited" : {
              "type" : "boolean",
              "required" : true
            },
            "value" : {
              "type" : "string",
              "required" : false
            }
          }
        },
        "tokenEndpointAuthMethod" : {
          "title" : "Token Endpoint Authentication Method",
          "description" : "The authentication method with which a client authenticates to the
authorization server at the token endpoint. The authentication method applies to OIDC requests with
the openid scope.",
          "propertyOrder" : 24000,
          "type" : "object",
          "exampleValue" : "",
          "properties" : {
            "inherited" : {
              "type" : "boolean",
              "required" : true
            },
            "value" : {
              "type" : "string",
```


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```
              "required" : true
            }
          }
        },
        "descriptions" : {
          "title" : "Display description",
          "description" : "A description of the client or other information that may be relevant
to the resource owner when considering approval.<br><br>The description may be entered as a single
string or as pipe separated strings for locale and localized name; e.g. \"en|The company intranet
is requesting the following access permission\". Locale strings are in the format <code>language
+ \"_\" + country + \"_\" + variant</code>, e.g. en, en_GB, en_US_WIN. If the locale is omitted,
the description is displayed to all users having undefined locales. e.g. \"The company intranet is
requesting the following access permission\".",
          "propertyOrder" : 23600,
          "items" : {
            "type" : "string"
          },
          "type" : "object",
          "exampleValue" : "",
          "properties" : {
            "inherited" : {
              "type" : "boolean",
              "required" : true
            },
            "value" : {
              "type" : "array",
              "required" : false
            }
          }
        },
        "requestUris" : {
          "title" : "Request uris",
          "description" : "Array of request_uri values that are pre-registered by the RP for use at
the OP.<br><br>The entire Request URI MUST NOT exceed 512 ASCII characters and MUST use either HTTP
or HTTPS. Otherwise the value will be ignored.",
          "propertyOrder" : 23700,
          "items" : {
            "type" : "string"
          },
          "type" : "object",
          "exampleValue" : "",
          "properties" : {
            "inherited" : {
              "type" : "boolean",
              "required" : true
            },
            "value" : {
              "type" : "array",
              "required" : false
            }
          }
        }
      }
    },
    "coreOpenIDClientConfig" : {
      "type" : "object",
      "title" : "OpenID Connect",
      "propertyOrder" : 2,
      "properties" : {
```


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```
        "claims" : {
          "title" : "Claim(s)",
          "description" : "List of claim name translations, which will override those specified for
 the AS. Claims are values that are presented to the user to inform them what data is being made
 available to the Client.<br><br>Claims may be entered as simple strings or pipe separated strings
 representing the internal claim name, locale, and localized description; e.g. \"name|en|Your full
 name\". Locale strings are in the format <code>language + \"_\" + country + \"_\" + variant</code>,
 e.g. en, en_GB, en_US_WIN. If the locale and pipe is omitted, the description is displayed to all
 users having undefined locales. e.g. \"name|Your full name\". <i>NB</i> If the description is also
 omitted, nothing is displayed to all users, e.g. specifying \"name|\" would allow the claim \"name\"
 to be used by the client, but would not display it to the user when it was requested.<p>If a value is
 not given here, the value will be computed from the OAuth 2 Provider settings.</p>",
          "propertyOrder" : 23400,
          "items" : {
            "type" : "string"
          },
          "type" : "object",
          "exampleValue" : "",
          "properties" : {
            "inherited" : {
              "type" : "boolean",
              "required" : true
            },
            "value" : {
              "type" : "array",
              "required" : false
            }
          }
        },
        "defaultMaxAge" : {
          "title" : "Default Max Age",
          "description" : "Minimum value 1. Sets the maximum length of time in seconds a session
 may be active after the authorization service has succeeded before the user must actively re-
authenticate.",
          "propertyOrder" : 25500,
          "type" : "object",
          "exampleValue" : "",
          "properties" : {
            "inherited" : {
              "type" : "boolean",
              "required" : true
            },
            "value" : {
              "type" : "integer",
              "required" : true
            }
          }
        },
        "postLogoutRedirectUri" : {
          "title" : "Post Logout Redirect URIs",
          "description" : "URIs that can be redirected to after the client logout process.",
          "propertyOrder" : 25000,
          "items" : {
            "type" : "string"
          },
          "type" : "object",
          "exampleValue" : "",
          "properties" : {
            "inherited" : {
```


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```
              "type" : "boolean",
              "required" : true
            },
            "value" : {
              "type" : "array",
              "required" : false
            }
          }
        },
        "jwtTokenLifetime" : {
          "title" : "OpenID Connect JWT Token Lifetime (seconds)",
          "description" : "The time in seconds a JWT is valid for. <i>NB</i> If this field is set to
zero, JWT Token Lifetime of the OAuth2 Provider is used instead of.",
          "propertyOrder" : 26100,
          "type" : "object",
          "exampleValue" : "",
          "properties" : {
            "inherited" : {
              "type" : "boolean",
              "required" : true
            },
            "value" : {
              "type" : "integer",
              "required" : true
            }
          }
        },
        "clientSessionUri" : {
          "title" : "Client Session URI",
          "description" : "This is the URI that will be used to check messages sent to the session
management endpoints. This URI must match the origin of the message",
          "propertyOrder" : 25200,
          "type" : "object",
          "exampleValue" : "",
          "properties" : {
            "inherited" : {
              "type" : "boolean",
              "required" : true
            },
            "value" : {
              "type" : "string",
              "required" : false
            }
          }
        },
        "defaultMaxAgeEnabled" : {
          "title" : "Default Max Age Enabled",
          "description" : "Whether or not the default max age is enforced.",
          "propertyOrder" : 25600,
          "type" : "object",
          "exampleValue" : "",
          "properties" : {
            "inherited" : {
              "type" : "boolean",
              "required" : true
            },
            "value" : {
              "type" : "boolean",
              "required" : true
```


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```
            }
          }
        }
      }
    },
    "signEncOAuth2ClientConfig" : {
      "type" : "object",
      "title" : "Signing and Encryption",
      "propertyOrder" : 3,
      "properties" : {
        "idTokenSignedResponseAlg" : {
          "title" : "ID Token Signing Algorithm",
          "description" : "Algorithm the ID Token for this client must be signed with.",
          "propertyOrder" : 24500,
          "type" : "object",
          "exampleValue" : "",
          "properties" : {
            "inherited" : {
              "type" : "boolean",
              "required" : true
            },
            "value" : {
              "type" : "string",
              "required" : true
            }
          }
        },
        "idTokenEncryptionEnabled" : {
          "title" : "Enable ID Token Encryption",
          "description" : "Select to enable ID token encryption.",
          "propertyOrder" : 24600,
          "type" : "object",
          "exampleValue" : "",
          "properties" : {
            "inherited" : {
              "type" : "boolean",
              "required" : true
            },
            "value" : {
              "type" : "boolean",
              "required" : true
            }
          }
        },
        "userinfoEncryptedResponseAlg" : {
          "title" : "User info encrypted response algorithm",
          "description" : "JWE algorithm for encrypting UserInfo Responses. If both signing and
encryption are requested, the response will be signed then encrypted, with the result being a Nested
JWT. The default, if omitted, is that no encryption is performed.",
          "propertyOrder" : 27300,
          "type" : "object",
          "exampleValue" : "",
          "properties" : {
            "inherited" : {
              "type" : "boolean",
              "required" : true
            },
            "value" : {
              "type" : "string",
```


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```
            "required" : false
          }
        }
      },
      "idTokenEncryptionMethod" : {
        "title" : "ID Token Encryption Method",
        "description" : "Encryption method the ID Token for this client must be encrypted with.",
        "propertyOrder" : 24800,
        "type" : "object",
        "exampleValue" : "",
        "properties" : {
          "inherited" : {
            "type" : "boolean",
            "required" : true
          },
          "value" : {
            "type" : "string",
            "required" : true
          }
        }
      },
      "jwkSet" : {
        "title" : "Json Web Key",
        "description" : "Raw JSON Web Key value containing the client's public keys.",
        "propertyOrder" : 24200,
        "type" : "object",
        "exampleValue" : "",
        "properties" : {
          "inherited" : {
            "type" : "boolean",
            "required" : true
          },
          "value" : {
            "type" : "string",
            "required" : false
          }
        }
      },
      "idTokenEncryptionAlgorithm" : {
        "title" : "ID Token Encryption Algorithm",
        "description" : "Algorithm the ID Token for this client must be encrypted with.",
        "propertyOrder" : 24700,
        "type" : "object",
        "exampleValue" : "",
        "properties" : {
          "inherited" : {
            "type" : "boolean",
            "required" : true
          },
          "value" : {
            "type" : "string",
            "required" : true
          }
        }
      },
      "jwksCacheTimeout" : {
        "title" : "JWKs URI content cache timeout in ms",
```


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```
          "description" : "To avoid loading the JWKS URI content for every token encryption, the JWKS
 content is cached. This timeout defines the maximum of time the JWKS URI content can be cached before
 being refreshed.",
          "propertyOrder" : 24110,
          "type" : "object",
          "exampleValue" : "",
          "properties" : {
            "inherited" : {
              "type" : "boolean",
              "required" : true
            },
            "value" : {
              "type" : "integer",
              "required" : true
            }
          }
        },
        "jwkStoreCacheMissCacheTime" : {
          "title" : "JWKs URI content cache miss cache time",
          "description" : "To avoid loading the JWKS URI content for every token signature
 verification, especially when the kid is not in the jwks content already cached, the JWKS content
 will be cache for a minimum period of time. This cache miss cache time defines the minimum of time
 the JWKS URI content is cache.",
          "propertyOrder" : 24120,
          "type" : "object",
          "exampleValue" : "",
          "properties" : {
            "inherited" : {
              "type" : "boolean",
              "required" : true
            },
            "value" : {
              "type" : "integer",
              "required" : true
            }
          }
        },
        "userinfoEncryptedResponseEncryptionAlgorithm" : {
          "title" : "User info encrypted response encryption algorithm",
          "description" : "JWE enc algorithm for encrypting UserInfo Responses. If userinfo encrypted
 response algorithm is specified, the default for this value is A128CBC-HS256. When user info
 encrypted response encryption is included, user info encrypted response algorithm MUST also be
 provided.<br><br>OpenAM supports the following token encryption algorithms:<ul><li><code>A128GCM</
code>, <code>A192GCM</code>, and <code>A256GCM</code> - AES in Galois Counter Mode (GCM) authenticated
 encryption mode.</li><li><code>A128CBC-HS256</code>, <code>A192CBC-HS384</code>, and <code>A256CBC-
HS512</code> - AES encryption in CBC mode, with HMAC-SHA-2 for integrity.</li></ul>",
          "propertyOrder" : 27400,
          "type" : "object",
          "exampleValue" : "",
          "properties" : {
            "inherited" : {
              "type" : "boolean",
              "required" : true
            },
            "value" : {
              "type" : "string",
              "required" : true
            }
          }
```


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```
        },
        "userinfoResponseFormat" : {
          "title" : "User info response format.",
          "description" : "The user info endpoint offers different output format. See http://
openid.net/specs/openid-connect-core-1_0.html#UserInfoResponse",
          "propertyOrder" : 27100,
          "type" : "object",
          "exampleValue" : "",
          "properties" : {
            "inherited" : {
              "type" : "boolean",
              "required" : true
            },
            "value" : {
              "type" : "string",
              "required" : true
            }
          }
        },
        "requestParameterEncryptedAlg" : {
          "title" : "Request parameter encryption algorithm",
          "description" : "JWE algorithm for encrypting the request parameter.",
          "propertyOrder" : 27600,
          "type" : "object",
          "exampleValue" : "",
          "properties" : {
            "inherited" : {
              "type" : "boolean",
              "required" : true
            },
            "value" : {
              "type" : "string",
              "required" : false
            }
          }
        },
        "idTokenPublicEncryptionKey" : {
          "title" : "Client ID Token Public Encryption Key",
          "description" : "A Base64 encoded public key for encrypting ID Tokens.",
          "propertyOrder" : 24900,
          "type" : "object",
          "exampleValue" : "",
          "properties" : {
            "inherited" : {
              "type" : "boolean",
              "required" : true
            },
            "value" : {
              "type" : "string",
              "required" : false
            }
          }
        },
        "clientJwtPublicKey" : {
          "title" : "Client JWT Bearer Public Key",
          "description" : "A Base64 encoded X509 certificate, containing the public key, represented
 as a UTF-8 PEM file, of the key pair for signing the Client Bearer JWT.",
          "propertyOrder" : 25400,
          "type" : "object",
```


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```
          "exampleValue" : "",
          "properties" : {
            "inherited" : {
              "type" : "boolean",
              "required" : true
            },
            "value" : {
              "type" : "string",
              "required" : false
            }
          }
        },
        "publicKeyLocation" : {
          "title" : "Public key selector",
          "description" : "Select the public key for this client to come from either the jwks_uri,
 manual jwks or X509 field.",
          "propertyOrder" : 25700,
          "type" : "object",
          "exampleValue" : "",
          "properties" : {
            "inherited" : {
              "type" : "boolean",
              "required" : true
            },
            "value" : {
              "type" : "string",
              "required" : true
            }
          }
        },
        "requestParameterEncryptedEncryptionAlgorithm" : {
          "title" : "Request parameter encryption method",
          "description" : "JWE enc algorithm for encrypting the request parameter.<br><br>OpenAM
 supports the following token encryption algorithms:<ul><li><code>A128GCM</code>, <code>A192GCM</
code>, and <code>A256GCM</code> - AES in Galois Counter Mode (GCM) authenticated encryption mode.</
li><li><code>A128CBC-HS256</code>, <code>A192CBC-HS384</code>, and <code>A256CBC-HS512</code> - AES
 encryption in CBC mode, with HMAC-SHA-2 for integrity.</li></ul>",
          "propertyOrder" : 27700,
          "type" : "object",
          "exampleValue" : "",
          "properties" : {
            "inherited" : {
              "type" : "boolean",
              "required" : true
            },
            "value" : {
              "type" : "string",
              "required" : true
            }
          }
        },
        "jwksUri" : {
          "title" : "Json Web Key URI",
          "description" : "The uri that contains the client's public keys in Json Web Key format.",
          "propertyOrder" : 24100,
          "type" : "object",
          "exampleValue" : "",
          "properties" : {
            "inherited" : {
```


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```
              "type" : "boolean",
              "required" : true
            },
            "value" : {
              "type" : "string",
              "required" : true
            }
          }
        },
        "tokenEndpointAuthSigningAlgorithm" : {
          "title" : "Token Endpoint Authentication Signing Algorithm",
          "description" : "The JWS algorithm that MUST be used for signing the JWT used to
authenticate the Client at the Token Endpointfor the private_key_jwt and client_secret_jwt
authentication methods. All Token Requests using these authentication methods from this Client MUST
be rejected, if the JWT is not signed with this algorithm.",
          "propertyOrder" : 24130,
          "type" : "object",
          "exampleValue" : "",
          "properties" : {
            "inherited" : {
              "type" : "boolean",
              "required" : true
            },
            "value" : {
              "type" : "string",
              "required" : true
            }
          }
        },
        "userinfoSignedResponseAlg" : {
          "title" : "User info signed response algorithm",
          "description" : "JWS algorithm for signing UserInfo Responses. If this is specified, the
response will be JWT <a href=\"https://tools.ietf.org/html/rfc7519\">JWT</a> serialized, and signed
using JWS. The default, if omitted, is for the UserInfo Response to return the Claims as a UTF-8
encoded JSON object using the application/json content-type.",
          "propertyOrder" : 27200,
          "type" : "object",
          "exampleValue" : "",
          "properties" : {
            "inherited" : {
              "type" : "boolean",
              "required" : true
            },
            "value" : {
              "type" : "string",
              "required" : false
            }
          }
        },
        "requestParameterSignedAlg" : {
          "title" : "Request parameter signing algorithm",
          "description" : "JWS algorithm for signing the request parameter.",
          "propertyOrder" : 27500,
          "type" : "object",
          "exampleValue" : "",
          "properties" : {
            "inherited" : {
              "type" : "boolean",
              "required" : true
```


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```
            },
            "value" : {
              "type" : "string",
              "required" : false
            }
          }
        }
      }
    },
    "coreOAuth2ClientConfig" : {
      "type" : "object",
      "title" : "Core",
      "propertyOrder" : 0,
      "properties" : {
        "status" : {
          "title" : "Status",
          "description" : "Status of the agent configuration.",
          "propertyOrder" : 200,
          "type" : "object",
          "exampleValue" : "",
          "properties" : {
            "inherited" : {
              "type" : "boolean",
              "required" : true
            },
            "value" : {
              "type" : "string",
              "required" : true
            }
          }
        },
        "accessTokenLifetime" : {
          "title" : "Access Token Lifetime (seconds)",
          "description" : "The time in seconds an access token is valid for. <i>NB</i> If this field
is set to zero, Access Token Lifetime of the OAuth2 Provider is used instead of.",
          "propertyOrder" : 26000,
          "type" : "object",
          "exampleValue" : "",
          "properties" : {
            "inherited" : {
              "type" : "boolean",
              "required" : true
            },
            "value" : {
              "type" : "integer",
              "required" : true
            }
          }
        },
        "redirectionUris" : {
          "title" : "Redirection URIs",
          "description" : "Redirection URIs (optional for confidential clients). Complete URIs or URIs
consisting of protocol + authority + path are registered so that the OAuth 2.0 provider can trust
that tokens are sent to trusted entities. If multiple URI's are registered, the client MUST specify
the URI that the user should be redirected to following approval. May not contain a fragment (#).",
          "propertyOrder" : 23200,
          "items" : {
            "type" : "string"
          },
```


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```
          "type" : "object",
          "exampleValue" : "",
          "properties" : {
            "inherited" : {
              "type" : "boolean",
              "required" : true
            },
            "value" : {
              "type" : "array",
              "required" : false
            }
          }
        },
        "agentgroup" : {
          "title" : "Group",
          "description" : "Add the client to a group to allow inheritance of property values from
 the group. <br>Changing the group will update inherited property values. <br>Remove the group by
 selecting the name and pressing <code>BACKSPACE</code>. Inherited property values are copied to the
 client.",
          "propertyOrder" : 100,
          "required" : false,
          "type" : "string",
          "exampleValue" : ""
        },
        "defaultScopes" : {
          "title" : "Default Scope(s)",
          "description" : "Default Scope(s). Scopes automatically given to tokens.<br><br>Default
 Scopes may be entered as simple strings or pipe separated strings representing the internal scope
 name, locale, and localized description; e.g. \"read|en|Permission to view email messages in your
 account\". Locale strings are in the format <code>language + \"_\" + country + \"_\" + variant</
code>, e.g. en, en_GB, en_US_WIN. If the locale and pipe is omitted, the description is displayed to
 all users having undefined locales. e.g. \"read|Permission to view email messages in your account
\". <i>NB</i> If the description is also omitted, nothing is displayed to all users, e.g. specifying
 \"read|\" would allow the scope \"read\" to be used by the client, but would not display it to the
 user when it was requested.",
          "propertyOrder" : 23700,
          "items" : {
            "type" : "string"
          },
          "type" : "object",
          "exampleValue" : "",
          "properties" : {
            "inherited" : {
              "type" : "boolean",
              "required" : true
            },
            "value" : {
              "type" : "array",
              "required" : false
            }
          }
        },
        "authorizationCodeLifetime" : {
          "title" : "Authorization Code Lifetime (seconds)",
          "description" : "The time in seconds an authorization code is valid for. <i>NB</i> If this
 field is set to zero, Authorization Code Lifetime of the OAuth2 Provider is used instead of.",
          "propertyOrder" : 25800,
          "type" : "object",
          "exampleValue" : "",
```


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```
          "properties" : {
            "inherited" : {
              "type" : "boolean",
              "required" : true
            },
            "value" : {
              "type" : "integer",
              "required" : true
            }
          }
        },
        "refreshTokenLifetime" : {
          "title" : "Refresh Token Lifetime (seconds)",
          "description" : "The time in seconds a refresh token is valid for. <i>NB</i> If this field
is set to zero, Refresh Token Lifetime of the OAuth2 Provider is used instead. If this field is set
to -1, the token will never expire.",
          "propertyOrder" : 25900,
          "type" : "object",
          "exampleValue" : "",
          "properties" : {
            "inherited" : {
              "type" : "boolean",
              "required" : true
            },
            "value" : {
              "type" : "integer",
              "required" : true
            }
          }
        },
        "clientName" : {
          "title" : "Client Name",
          "description" : "This value is a readable name for this client.",
          "propertyOrder" : 25300,
          "items" : {
            "type" : "string"
          },
          "type" : "object",
          "exampleValue" : "",
          "properties" : {
            "inherited" : {
              "type" : "boolean",
              "required" : true
            },
            "value" : {
              "type" : "array",
              "required" : false
            }
          }
        },
        "clientType" : {
          "title" : "Client type",
          "description" : "Type of OAuth 2.0 client. Confidential clients can keep their password
secret, and are typically web apps or other server-based clients. Public clients run the risk
of exposing their password to a host or user agent, such as rich browser applications or desktop
clients.",
          "propertyOrder" : 23100,
          "type" : "object",
          "exampleValue" : "",
```


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```
          "properties" : {
            "inherited" : {
              "type" : "boolean",
              "required" : true
            },
            "value" : {
              "type" : "string",
              "required" : true
            }
          }
        },
        "userpassword" : {
          "title" : "Client secret",
          "description" : "Client secret. Used when the client authenticates to OpenAM.",
          "propertyOrder" : 23000,
          "required" : true,
          "type" : "string",
          "format" : "password",
          "exampleValue" : ""
        },
        "scopes" : {
          "title" : "Scope(s)",
          "description" : "Scope(s). Scopes are strings that are presented to the user for approval
 and included in tokens so that the protected resource may make decisions about what to give access
 to.<br><br>Scopes may be entered as simple strings or pipe separated strings representing the
 internal scope name, locale, and localized description; e.g. \"read|en|Permission to view email
 messages in your account\". Locale strings are in the format <code>language + \"_\" + country + \"_
\" + variant</code>, e.g. en, en_GB, en_US_WIN. If the locale and pipe is omitted, the description
 is displayed to all users having undefined locales. e.g. \"read|Permission to view email messages in
 your account\". <i>NB</i> If the description is also omitted, nothing is displayed to all users, e.g.
 specifying \"read|\" would allow the scope \"read\" to be used by the client, but would not display
 it to the user when it was requested.",
          "propertyOrder" : 23300,
          "items" : {
            "type" : "string"
          },
          "type" : "object",
          "exampleValue" : "",
          "properties" : {
            "inherited" : {
              "type" : "boolean",
              "required" : true
            },
            "value" : {
              "type" : "array",
              "required" : false
            }
          }
        }
      }
    },
    "coreUmaClientConfig" : {
      "type" : "object",
      "title" : "UMA",
      "propertyOrder" : 4,
      "properties" : {
        "claimsRedirectionUris" : {
          "title" : "Claims Redirection URIs",
```


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```
          "description" : "Redirection URIs for returning to the client from UMA claims collection
 (not yet supported). If multiple URIs are registered, the client MUST specify the URI that the user
 should be redirected to following approval. May not contain a fragment (#).",
          "propertyOrder" : 23200,
          "items" : {
            "type" : "string"
          },
          "type" : "object",
          "exampleValue" : "",
          "properties" : {
            "inherited" : {
              "type" : "boolean",
              "required" : true
            },
            "value" : {
              "type" : "array",
              "required" : false
            }
          }
        }
      }
    }
  }
}
```

1.92.1.2. delete

Usage:

```
am> delete OAuth2Clients --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.92.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action OAuth2Clients --realm Realm --actionName getAllTypes
```

1.92.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

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```
am> action OAuth2Clients --realm Realm --actionName getCreatableTypes
```

1.92.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action OAuth2Clients --realm Realm --actionName nextdescendents
```

1.92.1.6. query

Querying the agents of a specific type

Usage:

```
am> query OAuth2Clients --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.92.1.7. read

Usage:

```
am> read OAuth2Clients --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.92.1.8. update

Usage:

```
am> update OAuth2Clients --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

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--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "advancedOAuth2ClientConfig" : {
      "type" : "object",
      "title" : "Advanced",
      "propertyOrder" : 1,
      "properties" : {
        "responseTypes" : {
          "title" : "Response Types",
          "description" : "Response types this client will support and use.",
          "propertyOrder" : 23800,
          "items" : {
            "type" : "string"
          },
          "type" : "object",
          "exampleValue" : "",
          "properties" : {
            "inherited" : {
              "type" : "boolean",
              "required" : true
            },
            "value" : {
              "type" : "array",
              "required" : true
            }
          }
        },
        "mixUpMitigation" : {
          "title" : "OAuth 2.0 Mix-Up Mitigation enabled",
          "description" : "Enables OAuth 2.0 mix-up mitigation on the authorization server
 side.<br><br>Enable this setting only if this OAuth 2.0 client supports the <a href=\"https://
tools.ietf.org/html/draft-ietf-oauth-mix-up-mitigation-01\">OAuth 2.0 Mix-Up Mitigation draft</a>,
 otherwise OpenAM will fail to validate access token requests received from this client.",
          "propertyOrder" : 26300,
          "type" : "object",
          "exampleValue" : "",
          "properties" : {
            "inherited" : {
              "type" : "boolean",
              "required" : true
            },
            "value" : {
              "type" : "boolean",
              "required" : true
            }
          }
        },
        "sectorIdentifierUri" : {
          "title" : "Sector Identifier URI",
          "description" : "The Host component of this URL is used in the computation of pairwise
 Subject Identifiers.",
          "propertyOrder" : 24300,
          "type" : "object",
          "exampleValue" : "",
```


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```
          "properties" : {
            "inherited" : {
              "type" : "boolean",
              "required" : true
            },
            "value" : {
              "type" : "string",
              "required" : false
            }
          }
        },
        "subjectType" : {
          "title" : "Subject Type",
          "description" : "The subject type added to responses for this client.",
          "propertyOrder" : 24400,
          "type" : "object",
          "exampleValue" : "",
          "properties" : {
            "inherited" : {
              "type" : "boolean",
              "required" : true
            },
            "value" : {
              "type" : "string",
              "required" : true
            }
          }
        },
        "name" : {
          "title" : "Display name",
          "description" : "A client name that may be relevant to the resource owner when considering
approval.<br><br>The name may be entered as a single string or as pipe separated strings for
locale and localized name; e.g. \"en|The ExampleCo Intranet\". Locale strings are in the format
<code>language + \"_\" + country + \"_\" + variant</code>, e.g. en, en_GB, en_US_WIN. If the locale
is omitted, the name is displayed to all users having undefined locales. e.g. \"The ExampleCo
Intranet\".",
          "propertyOrder" : 23500,
          "items" : {
            "type" : "string"
          },
          "type" : "object",
          "exampleValue" : "",
          "properties" : {
            "inherited" : {
              "type" : "boolean",
              "required" : true
            },
            "value" : {
              "type" : "array",
              "required" : false
            }
          }
        },
        "contacts" : {
          "title" : "Contacts",
          "description" : "Email addresses of users who can administrate this client.",
          "propertyOrder" : 23900,
          "items" : {
            "type" : "string"
```


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```
        },
        "type" : "object",
        "exampleValue" : "",
        "properties" : {
          "inherited" : {
            "type" : "boolean",
            "required" : true
          },
          "value" : {
            "type" : "array",
            "required" : false
          }
        }
      },
      "isConsentImplied" : {
        "title" : "Implied consent",
        "description" : "When enabled, the resource owner will not be asked for consent during
authorization flows. The OAuth2 Provider must be configured to allow clients to skip consent.",
        "propertyOrder" : 26200,
        "type" : "object",
        "exampleValue" : "",
        "properties" : {
          "inherited" : {
            "type" : "boolean",
            "required" : true
          },
          "value" : {
            "type" : "boolean",
            "required" : true
          }
        }
      },
      "updateAccessToken" : {
        "title" : "Access Token",
        "description" : "The access token used to update the client.",
        "propertyOrder" : 25100,
        "type" : "object",
        "exampleValue" : "",
        "properties" : {
          "inherited" : {
            "type" : "boolean",
            "required" : true
          },
          "value" : {
            "type" : "string",
            "required" : false
          }
        }
      },
      "tokenEndpointAuthMethod" : {
        "title" : "Token Endpoint Authentication Method",
        "description" : "The authentication method with which a client authenticates to the
authorization server at the token endpoint. The authentication method applies to OIDC requests with
the openid scope.",
        "propertyOrder" : 24000,
        "type" : "object",
        "exampleValue" : "",
        "properties" : {
          "inherited" : {
```


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```
              "type" : "boolean",
              "required" : true
            },
            "value" : {
              "type" : "string",
              "required" : true
            }
          }
        },
        "descriptions" : {
          "title" : "Display description",
          "description" : "A description of the client or other information that may be relevant
to the resource owner when considering approval.<br><br>The description may be entered as a single
string or as pipe separated strings for locale and localized name; e.g. \"en|The company intranet
is requesting the following access permission\". Locale strings are in the format <code>language
+ \"_\" + country + \"_\" + variant</code>, e.g. en, en_GB, en_US_WIN. If the locale is omitted,
the description is displayed to all users having undefined locales. e.g. \"The company intranet is
requesting the following access permission\".",
          "propertyOrder" : 23600,
          "items" : {
            "type" : "string"
          },
          "type" : "object",
          "exampleValue" : "",
          "properties" : {
            "inherited" : {
              "type" : "boolean",
              "required" : true
            },
            "value" : {
              "type" : "array",
              "required" : false
            }
          }
        },
        "requestUris" : {
          "title" : "Request uris",
          "description" : "Array of request_uri values that are pre-registered by the RP for use at
the OP.<br><br>The entire Request URI MUST NOT exceed 512 ASCII characters and MUST use either HTTP
or HTTPS. Otherwise the value will be ignored.",
          "propertyOrder" : 23700,
          "items" : {
            "type" : "string"
          },
          "type" : "object",
          "exampleValue" : "",
          "properties" : {
            "inherited" : {
              "type" : "boolean",
              "required" : true
            },
            "value" : {
              "type" : "array",
              "required" : false
            }
          }
        }
      }
    },
```


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```
    "coreOpenIDClientConfig" : {
      "type" : "object",
      "title" : "OpenID Connect",
      "propertyOrder" : 2,
      "properties" : {
        "claims" : {
          "title" : "Claim(s)",
          "description" : "List of claim name translations, which will override those specified for
 the AS. Claims are values that are presented to the user to inform them what data is being made
 available to the Client.<br><br>Claims may be entered as simple strings or pipe separated strings
 representing the internal claim name, locale, and localized description; e.g. \"name|en|Your full
 name\". Locale strings are in the format <code>language + \"_\" + country + \"_\" + variant</code>,
 e.g. en, en_GB, en_US_WIN. If the locale and pipe is omitted, the description is displayed to all
 users having undefined locales. e.g. \"name|Your full name\". <i>NB</i> If the description is also
 omitted, nothing is displayed to all users, e.g. specifying \"name|\" would allow the claim \"name\"
 to be used by the client, but would not display it to the user when it was requested.<p>If a value is
 not given here, the value will be computed from the OAuth 2 Provider settings.</p>",
          "propertyOrder" : 23400,
          "items" : {
            "type" : "string"
          },
          "type" : "object",
          "exampleValue" : "",
          "properties" : {
            "inherited" : {
              "type" : "boolean",
              "required" : true
            },
            "value" : {
              "type" : "array",
              "required" : false
            }
          }
        },
        "defaultMaxAge" : {
          "title" : "Default Max Age",
          "description" : "Minimum value 1. Sets the maximum length of time in seconds a session
 may be active after the authorization service has succeeded before the user must actively re-
authenticate.",
          "propertyOrder" : 25500,
          "type" : "object",
          "exampleValue" : "",
          "properties" : {
            "inherited" : {
              "type" : "boolean",
              "required" : true
            },
            "value" : {
              "type" : "integer",
              "required" : true
            }
          }
        },
        "postLogoutRedirectUri" : {
          "title" : "Post Logout Redirect URIs",
          "description" : "URIs that can be redirected to after the client logout process.",
          "propertyOrder" : 25000,
          "items" : {
            "type" : "string"
```


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```
          },
          "type" : "object",
          "exampleValue" : "",
          "properties" : {
            "inherited" : {
              "type" : "boolean",
              "required" : true
            },
            "value" : {
              "type" : "array",
              "required" : false
            }
          }
        },
        "jwtTokenLifetime" : {
          "title" : "OpenID Connect JWT Token Lifetime (seconds)",
          "description" : "The time in seconds a JWT is valid for. <i>NB</i> If this field is set to
zero, JWT Token Lifetime of the OAuth2 Provider is used instead of.",
          "propertyOrder" : 26100,
          "type" : "object",
          "exampleValue" : "",
          "properties" : {
            "inherited" : {
              "type" : "boolean",
              "required" : true
            },
            "value" : {
              "type" : "integer",
              "required" : true
            }
          }
        },
        "clientSessionUri" : {
          "title" : "Client Session URI",
          "description" : "This is the URI that will be used to check messages sent to the session
management endpoints. This URI must match the origin of the message",
          "propertyOrder" : 25200,
          "type" : "object",
          "exampleValue" : "",
          "properties" : {
            "inherited" : {
              "type" : "boolean",
              "required" : true
            },
            "value" : {
              "type" : "string",
              "required" : false
            }
          }
        },
        "defaultMaxAgeEnabled" : {
          "title" : "Default Max Age Enabled",
          "description" : "Whether or not the default max age is enforced.",
          "propertyOrder" : 25600,
          "type" : "object",
          "exampleValue" : "",
          "properties" : {
            "inherited" : {
              "type" : "boolean",
```


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```
            "required" : true
          },
          "value" : {
            "type" : "boolean",
            "required" : true
          }
        }
      }
    }
  },
  "signEncOAuth2ClientConfig" : {
    "type" : "object",
    "title" : "Signing and Encryption",
    "propertyOrder" : 3,
    "properties" : {
      "idTokenSignedResponseAlg" : {
        "title" : "ID Token Signing Algorithm",
        "description" : "Algorithm the ID Token for this client must be signed with.",
        "propertyOrder" : 24500,
        "type" : "object",
        "exampleValue" : "",
        "properties" : {
          "inherited" : {
            "type" : "boolean",
            "required" : true
          },
          "value" : {
            "type" : "string",
            "required" : true
          }
        }
      },
      "idTokenEncryptionEnabled" : {
        "title" : "Enable ID Token Encryption",
        "description" : "Select to enable ID token encryption.",
        "propertyOrder" : 24600,
        "type" : "object",
        "exampleValue" : "",
        "properties" : {
          "inherited" : {
            "type" : "boolean",
            "required" : true
          },
          "value" : {
            "type" : "boolean",
            "required" : true
          }
        }
      },
      "userinfoEncryptedResponseAlg" : {
        "title" : "User info encrypted response algorithm",
        "description" : "JWE algorithm for encrypting UserInfo Responses. If both signing and
encryption are requested, the response will be signed then encrypted, with the result being a Nested
JWT. The default, if omitted, is that no encryption is performed.",
        "propertyOrder" : 27300,
        "type" : "object",
        "exampleValue" : "",
        "properties" : {
          "inherited" : {
```


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```
            "type" : "boolean",
            "required" : true
          },
          "value" : {
            "type" : "string",
            "required" : false
          }
        }
      },
      "idTokenEncryptionMethod" : {
        "title" : "ID Token Encryption Method",
        "description" : "Encryption method the ID Token for this client must be encrypted with.",
        "propertyOrder" : 24800,
        "type" : "object",
        "exampleValue" : "",
        "properties" : {
          "inherited" : {
            "type" : "boolean",
            "required" : true
          },
          "value" : {
            "type" : "string",
            "required" : true
          }
        }
      },
      "jwkSet" : {
        "title" : "Json Web Key",
        "description" : "Raw JSON Web Key value containing the client's public keys.",
        "propertyOrder" : 24200,
        "type" : "object",
        "exampleValue" : "",
        "properties" : {
          "inherited" : {
            "type" : "boolean",
            "required" : true
          },
          "value" : {
            "type" : "string",
            "required" : false
          }
        }
      },
      "idTokenEncryptionAlgorithm" : {
        "title" : "ID Token Encryption Algorithm",
        "description" : "Algorithm the ID Token for this client must be encrypted with.",
        "propertyOrder" : 24700,
        "type" : "object",
        "exampleValue" : "",
        "properties" : {
          "inherited" : {
            "type" : "boolean",
            "required" : true
          },
          "value" : {
            "type" : "string",
            "required" : true
          }
        }
```


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```
        },
        "jwksCacheTimeout" : {
          "title" : "JWKs URI content cache timeout in ms",
          "description" : "To avoid loading the JWKS URI content for every token encryption, the JWKS
 content is cached. This timeout defines the maximum of time the JWKS URI content can be cached before
 being refreshed.",
          "propertyOrder" : 24110,
          "type" : "object",
          "exampleValue" : "",
          "properties" : {
            "inherited" : {
              "type" : "boolean",
              "required" : true
            },
            "value" : {
              "type" : "integer",
              "required" : true
            }
          }
        },
        "jwkStoreCacheMissCacheTime" : {
          "title" : "JWKs URI content cache miss cache time",
          "description" : "To avoid loading the JWKS URI content for every token signature
 verification, especially when the kid is not in the jwks content already cached, the JWKS content
 will be cache for a minimum period of time. This cache miss cache time defines the minimum of time
 the JWKS URI content is cache.",
          "propertyOrder" : 24120,
          "type" : "object",
          "exampleValue" : "",
          "properties" : {
            "inherited" : {
              "type" : "boolean",
              "required" : true
            },
            "value" : {
              "type" : "integer",
              "required" : true
            }
          }
        },
        "userinfoEncryptedResponseEncryptionAlgorithm" : {
          "title" : "User info encrypted response encryption algorithm",
          "description" : "JWE enc algorithm for encrypting UserInfo Responses. If userinfo encrypted
 response algorithm is specified, the default for this value is A128CBC-HS256. When user info
 encrypted response encryption is included, user info encrypted response algorithm MUST also be
 provided.<br><br>OpenAM supports the following token encryption algorithms:<ul><li><code>A128GCM</
code>, <code>A192GCM</code>, and <code>A256GCM</code> - AES in Galois Counter Mode (GCM) authenticated
 encryption mode.</li><li><code>A128CBC-HS256</code>, <code>A192CBC-HS384</code>, and <code>A256CBC-
HS512</code> - AES encryption in CBC mode, with HMAC-SHA-2 for integrity.</li></ul>",
          "propertyOrder" : 27400,
          "type" : "object",
          "exampleValue" : "",
          "properties" : {
            "inherited" : {
              "type" : "boolean",
              "required" : true
            },
            "value" : {
              "type" : "string",
```


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```
              "required" : true
            }
          }
        },
        "userinfoResponseFormat" : {
          "title" : "User info response format.",
          "description" : "The user info endpoint offers different output format. See http://
openid.net/specs/openid-connect-core-1_0.html#UserInfoResponse",
          "propertyOrder" : 27100,
          "type" : "object",
          "exampleValue" : "",
          "properties" : {
            "inherited" : {
              "type" : "boolean",
              "required" : true
            },
            "value" : {
              "type" : "string",
              "required" : true
            }
          }
        },
        "requestParameterEncryptedAlg" : {
          "title" : "Request parameter encryption algorithm",
          "description" : "JWE algorithm for encrypting the request parameter.",
          "propertyOrder" : 27600,
          "type" : "object",
          "exampleValue" : "",
          "properties" : {
            "inherited" : {
              "type" : "boolean",
              "required" : true
            },
            "value" : {
              "type" : "string",
              "required" : false
            }
          }
        },
        "idTokenPublicEncryptionKey" : {
          "title" : "Client ID Token Public Encryption Key",
          "description" : "A Base64 encoded public key for encrypting ID Tokens.",
          "propertyOrder" : 24900,
          "type" : "object",
          "exampleValue" : "",
          "properties" : {
            "inherited" : {
              "type" : "boolean",
              "required" : true
            },
            "value" : {
              "type" : "string",
              "required" : false
            }
          }
        },
        "clientJwtPublicKey" : {
          "title" : "Client JWT Bearer Public Key",
```


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```
          "description" : "A Base64 encoded X509 certificate, containing the public key, represented
 as a UTF-8 PEM file, of the key pair for signing the Client Bearer JWT.",
          "propertyOrder" : 25400,
          "type" : "object",
          "exampleValue" : "",
          "properties" : {
            "inherited" : {
              "type" : "boolean",
              "required" : true
            },
            "value" : {
              "type" : "string",
              "required" : false
            }
          }
        },
        "publicKeyLocation" : {
          "title" : "Public key selector",
          "description" : "Select the public key for this client to come from either the jwks_uri,
 manual jwks or X509 field.",
          "propertyOrder" : 25700,
          "type" : "object",
          "exampleValue" : "",
          "properties" : {
            "inherited" : {
              "type" : "boolean",
              "required" : true
            },
            "value" : {
              "type" : "string",
              "required" : true
            }
          }
        },
        "requestParameterEncryptedEncryptionAlgorithm" : {
          "title" : "Request parameter encryption method",
          "description" : "JWE enc algorithm for encrypting the request parameter.<br><br>OpenAM
 supports the following token encryption algorithms:<ul><li><code>A128GCM</code>, <code>A192GCM</
code>, and <code>A256GCM</code> - AES in Galois Counter Mode (GCM) authenticated encryption mode.</
li><li><code>A128CBC-HS256</code>, <code>A192CBC-HS384</code>, and <code>A256CBC-HS512</code> - AES
 encryption in CBC mode, with HMAC-SHA-2 for integrity.</li></ul>",
          "propertyOrder" : 27700,
          "type" : "object",
          "exampleValue" : "",
          "properties" : {
            "inherited" : {
              "type" : "boolean",
              "required" : true
            },
            "value" : {
              "type" : "string",
              "required" : true
            }
          }
        },
        "jwksUri" : {
          "title" : "Json Web Key URI",
          "description" : "The uri that contains the client's public keys in Json Web Key format.",
          "propertyOrder" : 24100,
```


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```
          "type" : "object",
          "exampleValue" : "",
          "properties" : {
            "inherited" : {
              "type" : "boolean",
              "required" : true
            },
            "value" : {
              "type" : "string",
              "required" : true
            }
          }
        },
        "tokenEndpointAuthSigningAlgorithm" : {
          "title" : "Token Endpoint Authentication Signing Algorithm",
          "description" : "The JWS algorithm that MUST be used for signing the JWT used to
authenticate the Client at the Token Endpointfor the private_key_jwt and client_secret_jwt
authentication methods. All Token Requests using these authentication methods from this Client MUST
be rejected, if the JWT is not signed with this algorithm.",
          "propertyOrder" : 24130,
          "type" : "object",
          "exampleValue" : "",
          "properties" : {
            "inherited" : {
              "type" : "boolean",
              "required" : true
            },
            "value" : {
              "type" : "string",
              "required" : true
            }
          }
        },
        "userinfoSignedResponseAlg" : {
          "title" : "User info signed response algorithm",
          "description" : "JWS algorithm for signing UserInfo Responses. If this is specified, the
response will be JWT <a href=\"https://tools.ietf.org/html/rfc7519\">JWT</a> serialized, and signed
using JWS. The default, if omitted, is for the UserInfo Response to return the Claims as a UTF-8
encoded JSON object using the application/json content-type.",
          "propertyOrder" : 27200,
          "type" : "object",
          "exampleValue" : "",
          "properties" : {
            "inherited" : {
              "type" : "boolean",
              "required" : true
            },
            "value" : {
              "type" : "string",
              "required" : false
            }
          }
        },
        "requestParameterSignedAlg" : {
          "title" : "Request parameter signing algorithm",
          "description" : "JWS algorithm for signing the request parameter.",
          "propertyOrder" : 27500,
          "type" : "object",
          "exampleValue" : "",
```


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```
          "properties" : {
            "inherited" : {
              "type" : "boolean",
              "required" : true
            },
            "value" : {
              "type" : "string",
              "required" : false
            }
          }
        }
      }
    },
    "coreOAuth2ClientConfig" : {
      "type" : "object",
      "title" : "Core",
      "propertyOrder" : 0,
      "properties" : {
        "status" : {
          "title" : "Status",
          "description" : "Status of the agent configuration.",
          "propertyOrder" : 200,
          "type" : "object",
          "exampleValue" : "",
          "properties" : {
            "inherited" : {
              "type" : "boolean",
              "required" : true
            },
            "value" : {
              "type" : "string",
              "required" : true
            }
          }
        },
        "accessTokenLifetime" : {
          "title" : "Access Token Lifetime (seconds)",
          "description" : "The time in seconds an access token is valid for. <i>NB</i> If this field
is set to zero, Access Token Lifetime of the OAuth2 Provider is used instead of.",
          "propertyOrder" : 26000,
          "type" : "object",
          "exampleValue" : "",
          "properties" : {
            "inherited" : {
              "type" : "boolean",
              "required" : true
            },
            "value" : {
              "type" : "integer",
              "required" : true
            }
          }
        },
        "redirectionUris" : {
          "title" : "Redirection URIs",
          "description" : "Redirection URIs (optional for confidential clients). Complete URIs or URIs
consisting of protocol + authority + path are registered so that the OAuth 2.0 provider can trust
that tokens are sent to trusted entities. If multiple URI's are registered, the client MUST specify
the URI that the user should be redirected to following approval. May not contain a fragment (#).",
```


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```
          "propertyOrder" : 23200,
          "items" : {
            "type" : "string"
          },
          "type" : "object",
          "exampleValue" : "",
          "properties" : {
            "inherited" : {
              "type" : "boolean",
              "required" : true
            },
            "value" : {
              "type" : "array",
              "required" : false
            }
          }
        },
        "agentgroup" : {
          "title" : "Group",
          "description" : "Add the client to a group to allow inheritance of property values from
 the group. <br>Changing the group will update inherited property values. <br>Remove the group by
 selecting the name and pressing <code>BACKSPACE</code>. Inherited property values are copied to the
 client.",
          "propertyOrder" : 100,
          "required" : false,
          "type" : "string",
          "exampleValue" : ""
        },
        "defaultScopes" : {
          "title" : "Default Scope(s)",
          "description" : "Default Scope(s). Scopes automatically given to tokens.<br><br>Default
 Scopes may be entered as simple strings or pipe separated strings representing the internal scope
 name, locale, and localized description; e.g. \"read|en|Permission to view email messages in your
 account\". Locale strings are in the format <code>language + \"_\" + country + \"_\" + variant</
code>, e.g. en, en_GB, en_US_WIN. If the locale and pipe is omitted, the description is displayed to
 all users having undefined locales. e.g. \"read|Permission to view email messages in your account
\". <i>NB</i> If the description is also omitted, nothing is displayed to all users, e.g. specifying
 \"read|\" would allow the scope \"read\" to be used by the client, but would not display it to the
 user when it was requested.",
          "propertyOrder" : 23700,
          "items" : {
            "type" : "string"
          },
          "type" : "object",
          "exampleValue" : "",
          "properties" : {
            "inherited" : {
              "type" : "boolean",
              "required" : true
            },
            "value" : {
              "type" : "array",
              "required" : false
            }
          }
        },
        "authorizationCodeLifetime" : {
          "title" : "Authorization Code Lifetime (seconds)",
```


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```
          "description" : "The time in seconds an authorization code is valid for. <i>NB</i> If this
field is set to zero, Authorization Code Lifetime of the OAuth2 Provider is used instead of.",
          "propertyOrder" : 25800,
          "type" : "object",
          "exampleValue" : "",
          "properties" : {
            "inherited" : {
              "type" : "boolean",
              "required" : true
            },
            "value" : {
              "type" : "integer",
              "required" : true
            }
          }
        },
        "refreshTokenLifetime" : {
          "title" : "Refresh Token Lifetime (seconds)",
          "description" : "The time in seconds a refresh token is valid for. <i>NB</i> If this field
is set to zero, Refresh Token Lifetime of the OAuth2 Provider is used instead. If this field is set
to -1, the token will never expire.",
          "propertyOrder" : 25900,
          "type" : "object",
          "exampleValue" : "",
          "properties" : {
            "inherited" : {
              "type" : "boolean",
              "required" : true
            },
            "value" : {
              "type" : "integer",
              "required" : true
            }
          }
        },
        "clientName" : {
          "title" : "Client Name",
          "description" : "This value is a readable name for this client.",
          "propertyOrder" : 25300,
          "items" : {
            "type" : "string"
          },
          "type" : "object",
          "exampleValue" : "",
          "properties" : {
            "inherited" : {
              "type" : "boolean",
              "required" : true
            },
            "value" : {
              "type" : "array",
              "required" : false
            }
          }
        },
        "clientType" : {
          "title" : "Client type",
          "description" : "Type of OAuth 2.0 client. Confidential clients can keep their password
secret, and are typically web apps or other server-based clients. Public clients run the risk
```


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```
 of exposing their password to a host or user agent, such as rich browser applications or desktop
 clients.",
          "propertyOrder" : 23100,
          "type" : "object",
          "exampleValue" : "",
          "properties" : {
            "inherited" : {
              "type" : "boolean",
              "required" : true
            },
            "value" : {
              "type" : "string",
              "required" : true
            }
          }
        },
        "userpassword" : {
          "title" : "Client secret",
          "description" : "Client secret. Used when the client authenticates to OpenAM.",
          "propertyOrder" : 23000,
          "required" : true,
          "type" : "string",
          "format" : "password",
          "exampleValue" : ""
        },
        "scopes" : {
          "title" : "Scope(s)",
          "description" : "Scope(s). Scopes are strings that are presented to the user for approval
 and included in tokens so that the protected resource may make decisions about what to give access
 to.<br><br>Scopes may be entered as simple strings or pipe separated strings representing the
 internal scope name, locale, and localized description; e.g. \"read|en|Permission to view email
 messages in your account\". Locale strings are in the format <code>language + \"_\" + country + \"_
\" + variant</code>, e.g. en, en_GB, en_US_WIN. If the locale and pipe is omitted, the description
 is displayed to all users having undefined locales. e.g. \"read|Permission to view email messages in
 your account\". <i>NB</i> If the description is also omitted, nothing is displayed to all users, e.g.
 specifying \"read|\" would allow the scope \"read\" to be used by the client, but would not display
 it to the user when it was requested.",
          "propertyOrder" : 23300,
          "items" : {
            "type" : "string"
          },
          "type" : "object",
          "exampleValue" : "",
          "properties" : {
            "inherited" : {
              "type" : "boolean",
              "required" : true
            },
            "value" : {
              "type" : "array",
              "required" : false
            }
          }
        }
      }
    },
    "coreUmaClientConfig" : {
      "type" : "object",
      "title" : "UMA",
```


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```
      "propertyOrder" : 4,
      "properties" : {
        "claimsRedirectionUris" : {
          "title" : "Claims Redirection URIs",
          "description" : "Redirection URIs for returning to the client from UMA claims collection
 (not yet supported). If multiple URIs are registered, the client MUST specify the URI that the user
 should be redirected to following approval. May not contain a fragment (#).",
          "propertyOrder" : 23200,
          "items" : {
            "type" : "string"
          },
          "type" : "object",
          "exampleValue" : "",
          "properties" : {
            "inherited" : {
              "type" : "boolean",
              "required" : true
            },
            "value" : {
              "type" : "array",
              "required" : false
            }
          }
        }
      }
    }
  }
}
```

1.93. OAuth2Module

1.93.1. Realm Operations

Resource path: `/realm-config/authentication/modules/oauth2`

Resource version: `1.0`

1.93.1.1. create

Usage:

```
am> create OAuth2Module --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

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--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "clientSecret" : {
      "title" : "Client Secret",
      "description" : "OAuth client_secret parameter<br><br>For more information on the OAuth
 client_secret parameter refer to the <a href=\"http://tools.ietf.org/html/rfc6749#section-2.3.1\"
 target=\"_blank\">RFC 6749</a>, section 2.3.1",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "string",
      "format" : "password",
      "exampleValue" : ""
    },
    "smtpSslEnabled" : {
      "title" : "SMTP SSL Enabled",
      "description" : "Tick this option if the SMTP Server provides SSL",
      "propertyOrder" : 2700,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "accessTokenParameterName" : {
      "title" : "OAuth2 Access Token Profile Service Parameter name",
      "description" : "The name of the parameter that will contain the access token value when
 accessing the profile service",
      "propertyOrder" : 700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "openidConnectIssuer" : {
      "title" : "Token Issuer",
      "description" : "Required when the 'openid' scope is included. Value must match the iss field in
 issued ID Token<br/>e.g. accounts.google.com<br><br>The issuer value MUST be provided when OAuth 2.0
 Mix-Up Mitigation is enabled.",
      "propertyOrder" : 3200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "smtpUsername" : {
      "title" : "SMTP User Name",
      "description" : "If the SMTP Service requires authentication, configure the user name here",
      "propertyOrder" : 2500,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "smtpHostName" : {
      "title" : "SMTP host",
      "description" : "The mail host that will be used by the Email Gateway implementation",
      "propertyOrder" : 2300,
      "required" : true,
      "type" : "string",
```


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```
      "exampleValue" : ""
    },
    "userProfileServiceUrl" : {
      "title" : "User Profile Service URL",
      "description" : "User profile information URL<br><br>This URL endpoint provides user profile
 information and is provided by the OAuth Identity Provider<br/><br/><i>NB </i>This URL should return
 JSON objects in response",
      "propertyOrder" : 500,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "smtpHostPort" : {
      "title" : "SMTP port",
      "description" : "The TCP port that will be used by the SMTP gateway",
      "propertyOrder" : 2400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "createAccount" : {
      "title" : "Create account if it does not exist",
      "description" : "If the OAuth2 account does not exist in the local OpenAM data store, an account
 will be created dynamically.<br><br>If this is enabled, the account mapper could create the account
 dynamically if there is no account mapped. Before creating the account, a dialog prompting for
 a password and asking for an activation code can be shown if the parameter \"Prompt for password
 setting and activation code\" is enabled.<br /><br />If this flag is not enabled, 3 alternative
 options exist:<br/><br/><ol><li>The accounts need to have a user profile in the OpenAM User Data
 Store</li><li>The user does not have a user profile and the \"Ignore Profile\" is set in the
 Authentication Service of the realm.</li><li>The account is mapped to an anonymous account (see
 parameter \"Map to anonymous user\" and \"Anonymous User\")</li></ol>",
      "propertyOrder" : 1600,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "attributeMapperConfiguration" : {
      "title" : "Attribute Mapper Configuration",
      "description" : "Mapping of OAuth attributes to local OpenAM attributes<br><br>Attribute
 configuration that will be used to map the user info obtained from the OAuth 2.0 Provider to the
 local user data store in the OpenAM.<br/><br/>Example: <code>OAuth2.0_attribute=local_attribute</
code>",
      "propertyOrder" : 1300,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "mapToAnonymousUser" : {
      "title" : "Map to anonymous user",
      "description" : "Enabled anonymous user access to OpenAM for OAuth authenticated users<br><br>If
 selected, the authenticated users in the OAuth 2.0 Provider will be mapped to the anonymous user
 configured in the next parameter.<br/>If not selected the users authenticated will be mapped by the
 parameters configured in the account mapper.<br/><br/><i>NB </i>If <i>Create account if it does not
 exist</i> is enabled, that parameter takes precedence.",
      "propertyOrder" : 1800,
      "required" : true,
```


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```
      "type" : "boolean",
      "exampleValue" : ""
    },
    "oauth2LogoutServiceUrl" : {
      "title" : "OAuth 2.0 Provider logout service",
      "description" : "The URL of the OAuth Identity Providers Logout service<br><br>OAuth 2.0
 Identity Providers can have a logout service. If this logout functionality is required then the URL
 of the Logout endpoint should configured here.",
      "propertyOrder" : 2000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "saveAttributesInSession" : {
      "title" : "Save attributes in the session",
      "description" : "If this option is enabled, the attributes configured in the attribute mapper
 will be saved into the OpenAM session",
      "propertyOrder" : 1400,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "anonymousUserName" : {
      "title" : "Anonymous User",
      "description" : "Username of the OpenAM anonymous user<br><br>The username of the user that will
 represent the anonymous user. This user account must already exist in the realm.",
      "propertyOrder" : 1900,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "openidConnectContextValue" : {
      "title" : "OpenID Connect validation configuration value",
      "description" : "Required when the 'openid' scope is included. The discovery url, or jwk
 url, or the client_secret, corresponding to the selection above.<br><br>If discovery or jwk url
 entered, entry must be in valid url format, <br/>e.g. https://accounts.google.com/.well-known/openid-
configuration<br/><i>NB </i>If client_secret entered, entry is ignored and the value of the Client
 Secret is used.",
      "propertyOrder" : 3100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "authenticationEndpointUrl" : {
      "title" : "Authentication Endpoint URL",
      "description" : "OAuth authentication endpoint URL<br><br>This is the URL endpoint for OAuth
 authentication provided by the OAuth Identity Provider",
      "propertyOrder" : 300,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "smtpFromAddress" : {
      "title" : "SMTP From address",
      "description" : "The email address on behalf of whom the messages will be sent",
      "propertyOrder" : 2800,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
```


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```
    },
    "attributeMappingClasses" : {
      "title" : "Attribute Mapper",
      "description" : "Name of the class that implements the attribute mapping<br><br>This
 class maps the OAuth properties into OpenAM properties. A custom attribute
 mapper can be provided.<br/><br/>A custom attribute mapper must implement the
 <code>org.forgerock.openam.authentication.modules.common.mapping.AttributeMapper</code>
 interface.<br/>Provided implementations
 are:<ul><li>org.forgerock.openam.authentication.modules.common.mapping.JsonAttributeMapper</
li><li>org.forgerock.openam.authentication.modules.oidc.JwtAttributeMapper (can only be used when
 using the openid scope)</li></ul>String constructor parameters can be provided by appending <code>|</
code> separated values.",
      "propertyOrder" : 1200,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "accountMapperConfiguration" : {
      "title" : "Account Mapper Configuration",
      "description" : "Mapping of OAuth account to local OpenAM account<br><br>Attribute configuration
 that will be used to map the account of the user authenticated in the OAuth 2.0 Provider to the local
 data store in the OpenAM. Example: <code>OAuth2.0_attribute=local_attribute</code>",
      "propertyOrder" : 1100,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "oauth2EmailAttribute" : {
      "title" : "Email attribute in OAuth2 Response",
      "description" : "Attribute from the OAuth2 response used to send activation code
 emails.<br><br>The attribute in the response from the profile service in the OAuth 2.0 Provider that
 contains the email address of the authenticated user. This address will be used to send an email with
 an activation code when the accounts are allowed to be created dynamically.",
      "propertyOrder" : 1500,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "mailGatewayClass" : {
      "title" : "Mail Server Gateway implementation class",
      "description" : "The class used by the module to send email.<br><br>This class is used by the
 module to send email. A custom implementation can be provided.<br/><br/>The custom implementation
 must implement the <code>org.forgerock.openam.authentication.modules.oauth2.EmailGateway</code>",
      "propertyOrder" : 2200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "clientId" : {
      "title" : "Client Id",
      "description" : "OAuth client_id parameter<br><br>For more information on the OAuth client_id
 parameter refer to the <a href=\"http://tools.ietf.org/html/rfc6749#section-2.3.1\" target=\"_blank
\">RFC 6749</a>, section 2.3.1",
```


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```
      "propertyOrder" : 100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "smtpPassword" : {
      "title" : "SMTP User Password",
      "description" : "The Password of the SMTP User Name",
      "propertyOrder" : 2600,
      "required" : true,
      "type" : "string",
      "format" : "password",
      "exampleValue" : ""
    },
    "accountProviderClass" : {
      "title" : "Account Provider",
      "description" : "Name of the class implementing the account provider.<br><br>This class
 is used by the module to find the account from the attributes mapped by the Account Mapper
 <code>org.forgerock.openam.authentication.modules.common.mapping.AccountProvider</code>
 interface.<br/>String constructor parameters can be provided by appending <code>|</code> separated
 values.",
      "propertyOrder" : 900,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "authenticationLevel" : {
      "title" : "Authentication Level",
      "description" : "The authentication level associated with this module.<br><br>Each
 authentication module has an authentication level that can be used to indicate the level of security
 associated with the module; 0 is the lowest (and the default).",
      "propertyOrder" : 2900,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "openidConnectContextType" : {
      "title" : "OpenID Connect validation configuration type",
      "description" : "Required when the 'openid' scope is included. Please select either 1. the
 issuer discovery url, 2. the issuer jwk url, or 3. the client_secret.",
      "propertyOrder" : 3000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "accountMapperClass" : {
      "title" : "Account Mapper",
      "description" : "Name of the class implementing the attribute mapping for the account
 search.<br><br>This class is used by the module to map from the account information
 received from the OAuth Identity Provider into OpenAM.<br/><br/>The class must implement
 the <code>org.forgerock.openam.authentication.modules.common.mapping.AttributeMapper</code>
 interface.<br/>Provided implementations
 are:<ul><li>org.forgerock.openam.authentication.modules.common.mapping.JsonAttributeMapper</
li><li>org.forgerock.openam.authentication.modules.oidc.JwtAttributeMapper (can only be used when
 using the openid scope)</li></ul>String constructor parameters can be provided by appending <code>|</
code> separated values.",
      "propertyOrder" : 1000,
      "required" : true,
      "type" : "string",
```


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```
      "exampleValue" : ""
    },
    "logoutBehaviour" : {
      "title" : "Logout options",
      "description" : "Controls how Logout options will be presented to the user.<br><br>The OAuth
 module has the following logout options for the user:<br/><br/><ul><li>Prompt: Prompt the user to
 logout from the OAuth 2.0 Provider</li><li>Logout: Logout from the OAuth 2.0 Provider and do not
 prompt</li><li>Do not logout: Do not logout the user from the OAuth 2.0 Provider and do not prompt</
li></ul>",
      "propertyOrder" : 2100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "scope" : {
      "title" : "Scope",
      "description" : "OAuth scope; list of user profile properties<br><br>According to the OAuth
 2.0 Authorization Framework, scope is a space-separated list of user profile attributes that the
 client application requires. The list depends on the permissions that the resource owner grants to
 the client application.<br/><br/> Some authorization servers use non-standard separators for scopes.
 For example, Facebook takes a comma-separated list.<br/><br/> Default: <code>email, read_stream</
code> (Facebook example)",
      "propertyOrder" : 600,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "ssoProxyUrl" : {
      "title" : "Proxy URL",
      "description" : "The URL to the OpenAM OAuth proxy JSP<br><br>This URL should only be changed
 from the default, if an external server is performing the GET to POST proxying. The default is
 <code>/openam/oauth2c/OAuthProxy.jsp</code>",
      "propertyOrder" : 800,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "accessTokenEndpointUrl" : {
      "title" : "Access Token Endpoint URL",
      "description" : "OAuth access token endpoint URL<br><br>This is the URL endpoint for
 access token retrieval provided by the OAuth Identity Provider. Refer to the <a href=\"http://
tools.ietf.org/html/rfc6749#section-3.2\" target=\"_blank\">RFC 6749</a>, section 3.2",
      "propertyOrder" : 400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "mixUpMitigation" : {
      "title" : "OAuth 2.0 Mix-Up Mitigation enabled",
      "description" : "Enables OAuth 2.0 mix-up mitigation<br><br>The authorization
 server must support the <a href=\"https://tools.ietf.org/html/draft-ietf-oauth-mix-up-
mitigation-01#section-3.1\">OAuth 2.0 Mix-Up Mitigation draft</a>, otherwise OpenAM will fail to
 validate responses from the authorization server. If only the OAuth 2.0 protocol is utilized, make
 sure that the accepted issuer value is set in the \"Token Issuer\" setting.",
      "propertyOrder" : 3300,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
```


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```
    "promptForPassword" : {
      "title" : "Prompt for password setting and activation code",
      "description" : "Users must set a password and complete the activation flow during dynamic
 profile creation.<br><br>If this is enabled, the user must set a password before the system creates
 an account dynamically and an activation code will be sent to the user's email address. The account
 will be created only if the password and activation code are properly set. <br />If this is disabled,
 the account will be created transparently without prompting the user.",
      "propertyOrder" : 1700,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    }
  }
}
```

1.93.1.2. delete

Usage:

```
am> delete OAuth2Module --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.93.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action OAuth2Module --realm Realm --actionName getAllTypes
```

1.93.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action OAuth2Module --realm Realm --actionName getCreatableTypes
```

1.93.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action OAuth2Module --realm Realm --actionName nextdescendents
```


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1.93.1.6. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

```
am> query OAuth2Module --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.93.1.7. read

Usage:

```
am> read OAuth2Module --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.93.1.8. update

Usage:

```
am> update OAuth2Module --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "clientSecret" : {
      "title" : "Client Secret",
      "description" : "OAuth client_secret parameter<br><br>For more information on the OAuth
 client_secret parameter refer to the <a href=\"http://tools.ietf.org/html/rfc6749#section-2.3.1\"
 target=\"_blank\">RFC 6749</a>, section 2.3.1",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "string",
      "format" : "password",
```


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```
      "exampleValue" : ""
    },
    "smtpSslEnabled" : {
      "title" : "SMTP SSL Enabled",
      "description" : "Tick this option if the SMTP Server provides SSL",
      "propertyOrder" : 2700,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "accessTokenParameterName" : {
      "title" : "OAuth2 Access Token Profile Service Parameter name",
      "description" : "The name of the parameter that will contain the access token value when
accessing the profile service",
      "propertyOrder" : 700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "openidConnectIssuer" : {
      "title" : "Token Issuer",
      "description" : "Required when the 'openid' scope is included. Value must match the iss field in
issued ID Token<br/>e.g. accounts.google.com<br><br>The issuer value MUST be provided when OAuth 2.0
Mix-Up Mitigation is enabled.",
      "propertyOrder" : 3200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "smtpUsername" : {
      "title" : "SMTP User Name",
      "description" : "If the SMTP Service requires authentication, configure the user name here",
      "propertyOrder" : 2500,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "smtpHostName" : {
      "title" : "SMTP host",
      "description" : "The mail host that will be used by the Email Gateway implementation",
      "propertyOrder" : 2300,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "userProfileServiceUrl" : {
      "title" : "User Profile Service URL",
      "description" : "User profile information URL<br><br>This URL endpoint provides user profile
information and is provided by the OAuth Identity Provider<br/><br/><i>NB </i>This URL should return
JSON objects in response",
      "propertyOrder" : 500,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "smtpHostPort" : {
      "title" : "SMTP port",
      "description" : "The TCP port that will be used by the SMTP gateway",
      "propertyOrder" : 2400,
```


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```
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "createAccount" : {
      "title" : "Create account if it does not exist",
      "description" : "If the OAuth2 account does not exist in the local OpenAM data store, an account
 will be created dynamically.<br><br>If this is enabled, the account mapper could create the account
 dynamically if there is no account mapped. Before creating the account, a dialog prompting for
 a password and asking for an activation code can be shown if the parameter \"Prompt for password
 setting and activation code\" is enabled.<br /><br />If this flag is not enabled, 3 alternative
 options exist:<br/><br/><ol><li>The accounts need to have a user profile in the OpenAM User Data
 Store</li><li>The user does not have a user profile and the \"Ignore Profile\" is set in the
 Authentication Service of the realm.</li><li>The account is mapped to an anonymous account (see
 parameter \"Map to anonymous user\" and \"Anonymous User\")</li></ol>",
      "propertyOrder" : 1600,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "attributeMapperConfiguration" : {
      "title" : "Attribute Mapper Configuration",
      "description" : "Mapping of OAuth attributes to local OpenAM attributes<br><br>Attribute
 configuration that will be used to map the user info obtained from the OAuth 2.0 Provider to the
 local user data store in the OpenAM.<br/><br/>Example: <code>OAuth2.0_attribute=local_attribute</
code>",
      "propertyOrder" : 1300,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "mapToAnonymousUser" : {
      "title" : "Map to anonymous user",
      "description" : "Enabled anonymous user access to OpenAM for OAuth authenticated users<br><br>If
 selected, the authenticated users in the OAuth 2.0 Provider will be mapped to the anonymous user
 configured in the next parameter.<br/>If not selected the users authenticated will be mapped by the
 parameters configured in the account mapper.<br/><br/><i>NB </i>If <i>Create account if it does not
 exist</i> is enabled, that parameter takes precedence.",
      "propertyOrder" : 1800,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "oauth2LogoutServiceUrl" : {
      "title" : "OAuth 2.0 Provider logout service",
      "description" : "The URL of the OAuth Identity Providers Logout service<br><br>OAuth 2.0
 Identity Providers can have a logout service. If this logout functionality is required then the URL
 of the Logout endpoint should configured here.",
      "propertyOrder" : 2000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "saveAttributesInSession" : {
      "title" : "Save attributes in the session",
```


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```
      "description" : "If this option is enabled, the attributes configured in the attribute mapper
 will be saved into the OpenAM session",
      "propertyOrder" : 1400,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "anonymousUserName" : {
      "title" : "Anonymous User",
      "description" : "Username of the OpenAM anonymous user<br><br>The username of the user that will
 represent the anonymous user. This user account must already exist in the realm.",
      "propertyOrder" : 1900,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "openidConnectContextValue" : {
      "title" : "OpenID Connect validation configuration value",
      "description" : "Required when the 'openid' scope is included. The discovery url, or jwk
 url, or the client_secret, corresponding to the selection above.<br><br>If discovery or jwk url
 entered, entry must be in valid url format, <br/>e.g. https://accounts.google.com/.well-known/openid-
configuration<br/><i>NB </i>If client_secret entered, entry is ignored and the value of the Client
 Secret is used.",
      "propertyOrder" : 3100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "authenticationEndpointUrl" : {
      "title" : "Authentication Endpoint URL",
      "description" : "OAuth authentication endpoint URL<br><br>This is the URL endpoint for OAuth
 authentication provided by the OAuth Identity Provider",
      "propertyOrder" : 300,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "smtpFromAddress" : {
      "title" : "SMTP From address",
      "description" : "The email address on behalf of whom the messages will be sent",
      "propertyOrder" : 2800,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "attributeMappingClasses" : {
      "title" : "Attribute Mapper",
      "description" : "Name of the class that implements the attribute mapping<br><br>This
 class maps the OAuth properties into OpenAM properties. A custom attribute
 mapper can be provided.<br/><br/>A custom attribute mapper must implement the
 <code>org.forgerock.openam.authentication.modules.common.mapping.AttributeMapper</code>
 interface.<br/>Provided implementations
 are:<ul><li>org.forgerock.openam.authentication.modules.common.mapping.JsonAttributeMapper</
li><li>org.forgerock.openam.authentication.modules.oidc.JwtAttributeMapper (can only be used when
 using the openid scope)</li></ul>String constructor parameters can be provided by appending <code>|</
code> separated values.",
      "propertyOrder" : 1200,
      "required" : true,
      "items" : {
```


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```
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "accountMapperConfiguration" : {
      "title" : "Account Mapper Configuration",
      "description" : "Mapping of OAuth account to local OpenAM account<br><br>Attribute configuration
 that will be used to map the account of the user authenticated in the OAuth 2.0 Provider to the local
 data store in the OpenAM. Example: <code>OAuth2.0_attribute=local_attribute</code>",
      "propertyOrder" : 1100,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "oauth2EmailAttribute" : {
      "title" : "Email attribute in OAuth2 Response",
      "description" : "Attribute from the OAuth2 response used to send activation code
 emails.<br><br>The attribute in the response from the profile service in the OAuth 2.0 Provider that
 contains the email address of the authenticated user. This address will be used to send an email with
 an activation code when the accounts are allowed to be created dynamically.",
      "propertyOrder" : 1500,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "mailGatewayClass" : {
      "title" : "Mail Server Gateway implementation class",
      "description" : "The class used by the module to send email.<br><br>This class is used by the
 module to send email. A custom implementation can be provided.<br/><br/>The custom implementation
 must implement the <code>org.forgerock.openam.authentication.modules.oauth2.EmailGateway</code>",
      "propertyOrder" : 2200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "clientId" : {
      "title" : "Client Id",
      "description" : "OAuth client_id parameter<br><br>For more information on the OAuth client_id
 parameter refer to the <a href=\"http://tools.ietf.org/html/rfc6749#section-2.3.1\" target=\"_blank
\">RFC 6749</a>, section 2.3.1",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "smtpPassword" : {
      "title" : "SMTP User Password",
      "description" : "The Password of the SMTP User Name",
      "propertyOrder" : 2600,
      "required" : true,
      "type" : "string",
      "format" : "password",
      "exampleValue" : ""
    },
    "accountProviderClass" : {
```


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```
      "title" : "Account Provider",
      "description" : "Name of the class implementing the account provider.<br><br>This class
 is used by the module to find the account from the attributes mapped by the Account Mapper
 <code>org.forgerock.openam.authentication.modules.common.mapping.AccountProvider</code>
 interface.<br/>String constructor parameters can be provided by appending <code>|</code> separated
 values.",
      "propertyOrder" : 900,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "authenticationLevel" : {
      "title" : "Authentication Level",
      "description" : "The authentication level associated with this module.<br><br>Each
 authentication module has an authentication level that can be used to indicate the level of security
 associated with the module; 0 is the lowest (and the default).",
      "propertyOrder" : 2900,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "openidConnectContextType" : {
      "title" : "OpenID Connect validation configuration type",
      "description" : "Required when the 'openid' scope is included. Please select either 1. the
 issuer discovery url, 2. the issuer jwk url, or 3. the client_secret.",
      "propertyOrder" : 3000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "accountMapperClass" : {
      "title" : "Account Mapper",
      "description" : "Name of the class implementing the attribute mapping for the account
 search.<br><br>This class is used by the module to map from the account information
 received from the OAuth Identity Provider into OpenAM.<br/><br/>The class must implement
 the <code>org.forgerock.openam.authentication.modules.common.mapping.AttributeMapper</code>
 interface.<br/>Provided implementations
 are:<ul><li>org.forgerock.openam.authentication.modules.common.mapping.JsonAttributeMapper</
li><li>org.forgerock.openam.authentication.modules.oidc.JwtAttributeMapper (can only be used when
 using the openid scope)</li></ul>String constructor parameters can be provided by appending <code>|</
code> separated values.",
      "propertyOrder" : 1000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "logoutBehaviour" : {
      "title" : "Logout options",
      "description" : "Controls how Logout options will be presented to the user.<br><br>The OAuth
 module has the following logout options for the user:<br/><br/><ul><li>Prompt: Prompt the user to
 logout from the OAuth 2.0 Provider</li><li>Logout: Logout from the OAuth 2.0 Provider and do not
 prompt</li><li>Do not logout: Do not logout the user from the OAuth 2.0 Provider and do not prompt</
li></ul>",
      "propertyOrder" : 2100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "scope" : {
```


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```
      "title" : "Scope",
      "description" : "OAuth scope; list of user profile properties<br><br>According to the OAuth
 2.0 Authorization Framework, scope is a space-separated list of user profile attributes that the
 client application requires. The list depends on the permissions that the resource owner grants to
 the client application.<br/><br/> Some authorization servers use non-standard separators for scopes.
 For example, Facebook takes a comma-separated list.<br/><br/> Default: <code>email, read_stream</
code> (Facebook example)",
      "propertyOrder" : 600,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "ssoProxyUrl" : {
      "title" : "Proxy URL",
      "description" : "The URL to the OpenAM OAuth proxy JSP<br><br>This URL should only be changed
 from the default, if an external server is performing the GET to POST proxying. The default is
 <code>/openam/oauth2c/OAuthProxy.jsp</code>",
      "propertyOrder" : 800,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "accessTokenEndpointUrl" : {
      "title" : "Access Token Endpoint URL",
      "description" : "OAuth access token endpoint URL<br><br>This is the URL endpoint for
 access token retrieval provided by the OAuth Identity Provider. Refer to the <a href=\"http://
tools.ietf.org/html/rfc6749#section-3.2\" target=\"_blank\">RFC 6749</a>, section 3.2",
      "propertyOrder" : 400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "mixUpMitigation" : {
      "title" : "OAuth 2.0 Mix-Up Mitigation enabled",
      "description" : "Enables OAuth 2.0 mix-up mitigation<br><br>The authorization
 server must support the <a href=\"https://tools.ietf.org/html/draft-ietf-oauth-mix-up-
mitigation-01#section-3.1\">OAuth 2.0 Mix-Up Mitigation draft</a>, otherwise OpenAM will fail to
 validate responses from the authorization server. If only the OAuth 2.0 protocol is utilized, make
 sure that the accepted issuer value is set in the \"Token Issuer\" setting.",
      "propertyOrder" : 3300,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "promptForPassword" : {
      "title" : "Prompt for password setting and activation code",
      "description" : "Users must set a password and complete the activation flow during dynamic
 profile creation.<br><br>If this is enabled, the user must set a password before the system creates
 an account dynamically and an activation code will be sent to the user's email address. The account
 will be created only if the password and activation code are properly set. <br />If this is disabled,
 the account will be created transparently without prompting the user.",
      "propertyOrder" : 1700,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    }
  }
}
```


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1.93.2. Global Operations

Resource path: `/global-config/authentication/modules/oauth2`

Resource version: `1.0`

1.93.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action OAuth2Module --global --actionName getAllTypes
```

1.93.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action OAuth2Module --global --actionName getCreatableTypes
```

1.93.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action OAuth2Module --global --actionName nextdescendents
```

1.93.2.4. read

Usage:

```
am> read OAuth2Module --global
```

1.93.2.5. update

Usage:

```
am> update OAuth2Module --global --body body
```

Parameters:

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--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "defaults" : {
      "properties" : {
        "anonymousUserName" : {
          "title" : "Anonymous User",
          "description" : "Username of the OpenAM anonymous user<br><br>The username of the user that
 will represent the anonymous user. This user account must already exist in the realm.",
          "propertyOrder" : 1900,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "mapToAnonymousUser" : {
          "title" : "Map to anonymous user",
          "description" : "Enabled anonymous user access to OpenAM for OAuth authenticated
 users<br><br>If selected, the authenticated users in the OAuth 2.0 Provider will be mapped to the
 anonymous user configured in the next parameter.<br/>If not selected the users authenticated will be
 mapped by the parameters configured in the account mapper.<br/><br/><i>NB </i>If <i>Create account if
 it does not exist</i> is enabled, that parameter takes precedence.",
          "propertyOrder" : 1800,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "openidConnectContextType" : {
          "title" : "OpenID Connect validation configuration type",
          "description" : "Required when the 'openid' scope is included. Please select either 1. the
 issuer discovery url, 2. the issuer jwk url, or 3. the client_secret.",
          "propertyOrder" : 3000,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "scope" : {
          "title" : "Scope",
          "description" : "OAuth scope; list of user profile properties<br><br>According to the OAuth
 2.0 Authorization Framework, scope is a space-separated list of user profile attributes that the
 client application requires. The list depends on the permissions that the resource owner grants to
 the client application.<br/><br/> Some authorization servers use non-standard separators for scopes.
 For example, Facebook takes a comma-separated list.<br/><br/> Default: <code>email, read_stream</
code> (Facebook example)",
          "propertyOrder" : 600,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "mailGatewayClass" : {
          "title" : "Mail Server Gateway implementation class",
          "description" : "The class used by the module to send email.<br><br>This class is used by
 the module to send email. A custom implementation can be provided.<br/><br/>The custom implementation
 must implement the <code>org.forgerock.openam.authentication.modules.oauth2.EmailGateway</code>",
          "propertyOrder" : 2200,
          "required" : true,
```


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```
          "type" : "string",
          "exampleValue" : ""
        },
        "oauth2EmailAttribute" : {
          "title" : "Email attribute in OAuth2 Response",
          "description" : "Attribute from the OAuth2 response used to send activation code
 emails.<br><br>The attribute in the response from the profile service in the OAuth 2.0 Provider that
 contains the email address of the authenticated user. This address will be used to send an email with
 an activation code when the accounts are allowed to be created dynamically.",
          "propertyOrder" : 1500,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "userProfileServiceUrl" : {
          "title" : "User Profile Service URL",
          "description" : "User profile information URL<br><br>This URL endpoint provides user profile
 information and is provided by the OAuth Identity Provider<br/><br/><i>NB </i>This URL should return
 JSON objects in response",
          "propertyOrder" : 500,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "promptForPassword" : {
          "title" : "Prompt for password setting and activation code",
          "description" : "Users must set a password and complete the activation flow during dynamic
 profile creation.<br><br>If this is enabled, the user must set a password before the system creates
 an account dynamically and an activation code will be sent to the user's email address. The account
 will be created only if the password and activation code are properly set. <br />If this is disabled,
 the account will be created transparently without prompting the user.",
          "propertyOrder" : 1700,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "createAccount" : {
          "title" : "Create account if it does not exist",
          "description" : "If the OAuth2 account does not exist in the local OpenAM data store, an
 account will be created dynamically.<br><br>If this is enabled, the account mapper could create
 the account dynamically if there is no account mapped. Before creating the account, a dialog
 prompting for a password and asking for an activation code can be shown if the parameter \"Prompt
 for password setting and activation code\" is enabled.<br /><br />If this flag is not enabled, 3
 alternative options exist:<br/><br/><ol><li>The accounts need to have a user profile in the OpenAM
 User Data Store</li><li>The user does not have a user profile and the \"Ignore Profile\" is set in
 the Authentication Service of the realm.</li><li>The account is mapped to an anonymous account (see
 parameter \"Map to anonymous user\" and \"Anonymous User\")</li></ol>",
          "propertyOrder" : 1600,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "mixUpMitigation" : {
          "title" : "OAuth 2.0 Mix-Up Mitigation enabled",
          "description" : "Enables OAuth 2.0 mix-up mitigation<br><br>The authorization
 server must support the <a href=\"https://tools.ietf.org/html/draft-ietf-oauth-mix-up-
mitigation-01#section-3.1\">OAuth 2.0 Mix-Up Mitigation draft</a>, otherwise OpenAM will fail to
 validate responses from the authorization server. If only the OAuth 2.0 protocol is utilized, make
 sure that the accepted issuer value is set in the \"Token Issuer\" setting.",
```


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```
          "propertyOrder" : 3300,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "accountProviderClass" : {
          "title" : "Account Provider",
          "description" : "Name of the class implementing the account provider.<br><br>This
 class is used by the module to find the account from the attributes mapped by the Account
 Mapper <code>org.forgerock.openam.authentication.modules.common.mapping.AccountProvider</code>
 interface.<br/>String constructor parameters can be provided by appending <code>|</code> separated
 values.",
          "propertyOrder" : 900,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "clientId" : {
          "title" : "Client Id",
          "description" : "OAuth client_id parameter<br><br>For more information on the OAuth
 client_id parameter refer to the <a href=\"http://tools.ietf.org/html/rfc6749#section-2.3.1\" target=
\"_blank\">RFC 6749</a>, section 2.3.1",
          "propertyOrder" : 100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "smtpHostName" : {
          "title" : "SMTP host",
          "description" : "The mail host that will be used by the Email Gateway implementation",
          "propertyOrder" : 2300,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "accessTokenParameterName" : {
          "title" : "OAuth2 Access Token Profile Service Parameter name",
          "description" : "The name of the parameter that will contain the access token value when
 accessing the profile service",
          "propertyOrder" : 700,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "smtpPassword" : {
          "title" : "SMTP User Password",
          "description" : "The Password of the SMTP User Name",
          "propertyOrder" : 2600,
          "required" : true,
          "type" : "string",
          "format" : "password",
          "exampleValue" : ""
        },
        "smtpHostPort" : {
          "title" : "SMTP port",
          "description" : "The TCP port that will be used by the SMTP gateway",
          "propertyOrder" : 2400,
          "required" : true,
          "type" : "string",
```


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```
          "exampleValue" : ""
        },
        "smtpSslEnabled" : {
          "title" : "SMTP SSL Enabled",
          "description" : "Tick this option if the SMTP Server provides SSL",
          "propertyOrder" : 2700,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "authenticationEndpointUrl" : {
          "title" : "Authentication Endpoint URL",
          "description" : "OAuth authentication endpoint URL<br><br>This is the URL endpoint for OAuth
 authentication provided by the OAuth Identity Provider",
          "propertyOrder" : 300,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "accountMapperClass" : {
          "title" : "Account Mapper",
          "description" : "Name of the class implementing the attribute mapping for the
 account search.<br><br>This class is used by the module to map from the account information
 received from the OAuth Identity Provider into OpenAM.<br/><br/>The class must implement
 the <code>org.forgerock.openam.authentication.modules.common.mapping.AttributeMapper</code>
 interface.<br/>Provided implementations
 are:<ul><li>org.forgerock.openam.authentication.modules.common.mapping.JsonAttributeMapper</
li><li>org.forgerock.openam.authentication.modules.oidc.JwtAttributeMapper (can only be used when
 using the openid scope)</li></ul>String constructor parameters can be provided by appending <code>|</
code> separated values.",
          "propertyOrder" : 1000,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "openidConnectIssuer" : {
          "title" : "Token Issuer",
          "description" : "Required when the 'openid' scope is included. Value must match the iss
 field in issued ID Token<br/>e.g. accounts.google.com<br><br>The issuer value MUST be provided when
 OAuth 2.0 Mix-Up Mitigation is enabled.",
          "propertyOrder" : 3200,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "openidConnectContextValue" : {
          "title" : "OpenID Connect validation configuration value",
          "description" : "Required when the 'openid' scope is included. The discovery url, or jwk
 url, or the client_secret, corresponding to the selection above.<br><br>If discovery or jwk url
 entered, entry must be in valid url format, <br/>e.g. https://accounts.google.com/.well-known/openid-
configuration<br/><i>NB </i>If client_secret entered, entry is ignored and the value of the Client
 Secret is used.",
          "propertyOrder" : 3100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "attributeMapperConfiguration" : {
          "title" : "Attribute Mapper Configuration",
```


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```
          "description" : "Mapping of OAuth attributes to local OpenAM attributes<br><br>Attribute
 configuration that will be used to map the user info obtained from the OAuth 2.0 Provider to the
 local user data store in the OpenAM.<br/><br/>Example: <code>OAuth2.0_attribute=local_attribute</
code>",
          "propertyOrder" : 1300,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "smtpUsername" : {
          "title" : "SMTP User Name",
          "description" : "If the SMTP Service requires authentication, configure the user name here",
          "propertyOrder" : 2500,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "saveAttributesInSession" : {
          "title" : "Save attributes in the session",
          "description" : "If this option is enabled, the attributes configured in the attribute
 mapper will be saved into the OpenAM session",
          "propertyOrder" : 1400,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "accessTokenEndpointUrl" : {
          "title" : "Access Token Endpoint URL",
          "description" : "OAuth access token endpoint URL<br><br>This is the URL endpoint for
 access token retrieval provided by the OAuth Identity Provider. Refer to the <a href=\"http://
tools.ietf.org/html/rfc6749#section-3.2\" target=\"_blank\">RFC 6749</a>, section 3.2",
          "propertyOrder" : 400,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "attributeMappingClasses" : {
          "title" : "Attribute Mapper",
          "description" : "Name of the class that implements the attribute
 mapping<br><br>This class maps the OAuth properties into OpenAM properties. A custom
 attribute mapper can be provided.<br/><br/>A custom attribute mapper must implement the
 <code>org.forgerock.openam.authentication.modules.common.mapping.AttributeMapper</code>
 interface.<br/>Provided implementations
 are:<ul><li>org.forgerock.openam.authentication.modules.common.mapping.JsonAttributeMapper</
li><li>org.forgerock.openam.authentication.modules.oidc.JwtAttributeMapper (can only be used when
 using the openid scope)</li></ul>String constructor parameters can be provided by appending <code>|</
code> separated values.",
          "propertyOrder" : 1200,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "authenticationLevel" : {
```


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```
          "title" : "Authentication Level",
          "description" : "The authentication level associated with this module.<br><br>Each
 authentication module has an authentication level that can be used to indicate the level of security
 associated with the module; 0 is the lowest (and the default).",
          "propertyOrder" : 2900,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "smtpFromAddress" : {
          "title" : "SMTP From address",
          "description" : "The email address on behalf of whom the messages will be sent",
          "propertyOrder" : 2800,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "ssoProxyUrl" : {
          "title" : "Proxy URL",
          "description" : "The URL to the OpenAM OAuth proxy JSP<br><br>This URL should only be
 changed from the default, if an external server is performing the GET to POST proxying. The default
 is <code>/openam/oauth2c/OAuthProxy.jsp</code>",
          "propertyOrder" : 800,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "logoutBehaviour" : {
          "title" : "Logout options",
          "description" : "Controls how Logout options will be presented to the user.<br><br>The OAuth
 module has the following logout options for the user:<br/><br/><ul><li>Prompt: Prompt the user to
 logout from the OAuth 2.0 Provider</li><li>Logout: Logout from the OAuth 2.0 Provider and do not
 prompt</li><li>Do not logout: Do not logout the user from the OAuth 2.0 Provider and do not prompt</
li></ul>",
          "propertyOrder" : 2100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "accountMapperConfiguration" : {
          "title" : "Account Mapper Configuration",
          "description" : "Mapping of OAuth account to local OpenAM account<br><br>Attribute
 configuration that will be used to map the account of the user authenticated in the OAuth 2.0
 Provider to the local data store in the OpenAM. Example: <code>OAuth2.0_attribute=local_attribute</
code>",
          "propertyOrder" : 1100,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "clientSecret" : {
          "title" : "Client Secret",
          "description" : "OAuth client_secret parameter<br><br>For more information on the OAuth
 client_secret parameter refer to the <a href=\"http://tools.ietf.org/html/rfc6749#section-2.3.1\"
 target=\"_blank\">RFC 6749</a>, section 2.3.1",
          "propertyOrder" : 200,
```


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```
          "required" : true,
          "type" : "string",
          "format" : "password",
          "exampleValue" : ""
        },
        "oauth2LogoutServiceUrl" : {
          "title" : "OAuth 2.0 Provider logout service",
          "description" : "The URL of the OAuth Identity Providers Logout service<br><br>OAuth 2.0
 Identity Providers can have a logout service. If this logout functionality is required then the URL
 of the Logout endpoint should configured here.",
          "propertyOrder" : 2000,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      },
      "type" : "object",
      "title" : "Realm Defaults"
    }
  }
}
```

1.94. OAuth2Provider

1.94.1. Realm Operations

Resource path: `/realm-config/services/oauth-oidc`

Resource version: `1.0`

1.94.1.1. create

Usage:

```
am> create OAuth2Provider --realm Realm --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "advancedOIDCConfig" : {
      "type" : "object",
      "title" : "Advanced OpenID Connect",
      "propertyOrder" : 4,
      "properties" : {
        "loaMapping" : {
```


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```
          "title" : "OpenID Connect acr_values to Auth Chain Mapping",
          "description" : "Maps OpenID Connect ACR values to authentication chains. For more details,
 see the <a href=\"http://openid.net/specs/openid-connect-core-1_0.html#AuthRequest\" target=\"_blank
\">acr_values parameter</a> in the OpenID Connect authentication request specification.",
          "propertyOrder" : 310,
          "required" : false,
          "patternProperties" : {
            ".*" : { }
          },
          "type" : "object",
          "exampleValue" : ""
        },
        "authorisedOpenIdConnectSSOClients" : {
          "title" : "Authorized OIDC SSO Clients",
          "description" : "Clients authorized to use OpenID Connect ID tokens as SSO
 Tokens.<br><br>Allows clients to act with the full authority of the user. Grant this permission only
 to trusted clients.",
          "propertyOrder" : 446,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "defaultACR" : {
          "title" : "OpenID Connect Default acr Claim",
          "description" : "Default value to use as the <code>acr</code> claim in an OpenID Connect ID
 Token when using the default authentication chain.",
          "propertyOrder" : 320,
          "required" : false,
          "type" : "string",
          "exampleValue" : ""
        },
        "supportedRequestParameterEncryptionEnc" : {
          "title" : "Request Parameter Encryption Methods Supported",
          "description" : "Encryption methods supported to decrypt Request parameter.<br><br>OpenAM
 supports the following Request parameter encryption algorithms:<ul><li><code>A128GCM</code>,
 <code>A192GCM</code>, and <code>A256GCM</code> - AES in Galois Counter Mode (GCM) authenticated
 encryption mode.</li><li><code>A128CBC-HS256</code>, <code>A192CBC-HS384</code>, and <code>A256CBC-
HS512</code> - AES encryption in CBC mode, with HMAC-SHA-2 for integrity.</li></ul>",
          "propertyOrder" : 444,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "amrMappings" : {
          "title" : "OpenID Connect id_token amr Values to Auth Module Mappings",
          "description" : "Specify <code>amr</code> values to be returned in the OpenID Connect
 <code>id_token</code>. Once authentication has completed, the authentication modules that were used
 from the authentication service will be mapped to the <code>amr</code> values. If you do not require
 <code>amr</code> values, or are not providing OpenID Connect tokens, leave this field blank.",
          "propertyOrder" : 330,
          "required" : false,
          "patternProperties" : {
            ".*" : { }
```


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```
          },
          "type" : "object",
          "exampleValue" : ""
        },
        "storeOpsTokens" : {
          "title" : "Store Ops Tokens",
          "description" : "Whether OpenAM will store the <i>ops</i> tokens corresponding to OpenID
 Connect sessions in the CTS store. Note that session management related endpoints will not work when
 this setting is disabled.",
          "propertyOrder" : 410,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "claimsParameterSupported" : {
          "title" : "Enable \"claims_parameter_supported\"",
          "description" : "If enabled, clients will be able to request individual claims using the
 <code>claims</code> request parameter, as per <a href=\"http://openid.net/specs/openid-connect-
core-1_0.html#ClaimsParameter\" target=\"_blank\">section 5.5 of the OpenID Connect specification</
a>.",
          "propertyOrder" : 250,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "alwaysAddClaimsToToken" : {
          "title" : "Always Return Claims in ID Tokens",
          "description" : "If enabled, include scope-derived claims in the <code>id_token</code>,
 even if an access token is also returned that could provide access to get the claims from the
 <code>userinfo</code> endpoint.<br><br>If not enabled, if an access token is requested the client
 must use it to access the <code>userinfo</code> endpoint for scope-derived claims, as they will not
 be included in the ID token.",
          "propertyOrder" : 360,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "supportedTokenEndpointAuthenticationSigningAlgorithms" : {
          "title" : "Supported Token Endpoint JWS Signing Algorithms.",
          "description" : "Supported JWS Signing Algorithms for 'private_key_jwt' JWT based
 authentication method.",
          "propertyOrder" : 445,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "jkwsURI" : {
          "title" : "Remote JSON Web Key URL",
          "description" : "The Remote URL where the providers JSON Web Key can be retrieved.<p><p>If
 this setting is not configured, then OpenAM provides a local URL to access the public key of the
 private key used to sign ID tokens.",
          "propertyOrder" : 140,
          "required" : false,
          "type" : "string",
          "exampleValue" : ""
        },
```


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```
        "supportedRequestParameterSigningAlgorithms" : {
          "title" : "Request Parameter Signing Algorithms Supported",
          "description" : "Algorithms supported to verify signature of Request parameterOpenAM
 supports signing algorithms listed in JSON Web Algorithms (JWA): <a href=\"http://tools.ietf.org/
html/draft-ietf-jose-json-web-algorithms#section-3.1\">\"alg\" (Algorithm) Header Parameter Values
 for JWS</a>:<ul><li><code>HS256</code> - HMAC with SHA-256.</li><li><code>HS384</code> - HMAC with
 SHA-384.</li><li><code>HS512</code> - HMAC with SHA-512.</li><li><code>ES256</code> - ECDSA with
 SHA-256 and NIST standard P-256 elliptic curve.</li><li><code>ES384</code> - ECDSA with SHA-384 and
 NIST standard P-384 elliptic curve.</li><li><code>ES512</code> - ECDSA with SHA-512 and NIST standard
 P-521 elliptic curve.</li><li><code>RS256</code> - RSASSA-PKCS-v1_5 using SHA-256.</li></ul>",
          "propertyOrder" : 442,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "supportedRequestParameterEncryptionAlgorithms" : {
          "title" : "Request Parameter Encryption Algorithms Supported",
          "description" : "Encryption algorithms supported to decrypt Request parameter.<br><br>OpenAM
 supports the following ID token encryption algorithms:<ul><li><code>RSA-OAEP</code> - RSA with
 Optimal Asymmetric Encryption Padding (OAEP) with SHA-1 and MGF-1.</li><li><code>RSA-OAEP-256</
code> - RSA with OAEP with SHA-256 and MGF-1.</li><li><code>A128KW</code> - AES Key Wrapping with
 128-bit key derived from the client secret.</li><li><code>RSA1_5</code> - RSA with PKCS#1 v1.5
 padding.</li><li><code>A256KW</code> - AES Key Wrapping with 256-bit key derived from the client
 secret.</li><li><code>dir</code> - Direct encryption with AES using the hashed client secret.</
li><li><code>A192KW</code> - AES Key Wrapping with 192-bit key derived from the client secret.</li></
ul>",
          "propertyOrder" : 443,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "idTokenInfoClientAuthenticationEnabled" : {
          "title" : "Idtokeninfo Endpoint Requires Client Authentication",
          "description" : "When enabled, the <code>/oauth2/idtokeninfo</code> endpoint requires
 client authentication if the signing algorithm is set to <code>HS256</code>, <code>HS384</code>, or
 <code>HS512</code>.",
          "propertyOrder" : 225,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        }
      }
    },
    "consent" : {
      "type" : "object",
      "title" : "Consent",
      "propertyOrder" : 6,
      "properties" : {
        "supportedRcsRequestEncryptionAlgorithms" : {
          "title" : "Remote Consent Service Request Encryption Algorithms Supported",
          "description" : "Encryption algorithms supported to encrypt Remote Consent Service
 requests.<br><br>OpenAM supports the following encryption algorithms:<ul><li><code>RSA1_5</code> -
 RSA with PKCS#1 v1.5 padding.</li><li><code>RSA-OAEP</code> - RSA with Optimal Asymmetric Encryption
```


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```
 Padding (OAEP) with SHA-1 and MGF-1.</li><li><code>RSA-OAEP-256</code> - RSA with OAEP with SHA-256
 and MGF-1.</li><li><code>A128KW</code> - AES Key Wrapping with 128-bit key derived from the client
 secret.</li><li><code>A192KW</code> - AES Key Wrapping with 192-bit key derived from the client
 secret.</li><li><code>A256KW</code> - AES Key Wrapping with 256-bit key derived from the client
 secret.</li><li><code>dir</code> - Direct encryption with AES using the hashed client secret.</li></
ul>",
          "propertyOrder" : 450,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "supportedRcsRequestSigningAlgorithms" : {
          "title" : "Remote Consent Service Request Signing Algorithms Supported",
          "description" : "Algorithms supported to sign consent_request JWTs for Remote Consent
 Services.<br><br>OpenAM supports signing algorithms listed in JSON Web Algorithms (JWA): <a
 href=\"http://tools.ietf.org/html/draft-ietf-jose-json-web-algorithms#section-3.1\">\"alg
\" (Algorithm) Header Parameter Values for JWS</a>:<ul><li><code>HS256</code> - HMAC with
 SHA-256.</li><li><code>HS384</code> - HMAC with SHA-384.</li><li><code>HS512</code> - HMAC
 with SHA-512.</li><li><code>ES256</code> - ECDSA with SHA-256 and NIST standard P-256 elliptic
 curve.</li><li><code>ES384</code> - ECDSA with SHA-384 and NIST standard P-384 elliptic
 curve.</li><li><code>ES512</code> - ECDSA with SHA-512 and NIST standard P-521 elliptic curve.</
li><li><code>RS256</code> - RSASSA-PKCS-v1_5 using SHA-256.</li></ul>",
          "propertyOrder" : 449,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "supportedRcsResponseEncryptionMethods" : {
          "title" : "Remote Consent Service Response Encryption Methods Supported",
          "description" : "Encryption methods supported to decrypt Remote Consent Service
 responses.<br><br>OpenAM supports the following encryption methods:<ul><li><code>A128GCM</code>,
 <code>A192GCM</code>, and <code>A256GCM</code> - AES in Galois Counter Mode (GCM) authenticated
 encryption mode.</li><li><code>A128CBC-HS256</code>, <code>A192CBC-HS384</code>, and <code>A256CBC-
HS512</code> - AES encryption in CBC mode, with HMAC-SHA-2 for integrity.</li></ul>",
          "propertyOrder" : 454,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "supportedRcsRequestEncryptionMethods" : {
          "title" : "Remote Consent Service Request Encryption Methods Supported",
          "description" : "Encryption methods supported to encrypt Remote Consent Service
 requests.<br><br>OpenAM supports the following encryption methods:<ul><li><code>A128GCM</code>,
 <code>A192GCM</code>, and <code>A256GCM</code> - AES in Galois Counter Mode (GCM) authenticated
 encryption mode.</li><li><code>A128CBC-HS256</code>, <code>A192CBC-HS384</code>, and <code>A256CBC-
HS512</code> - AES encryption in CBC mode, with HMAC-SHA-2 for integrity.</li></ul>",
          "propertyOrder" : 451,
          "required" : true,
          "items" : {
            "type" : "string"
```


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```
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "supportedRcsResponseEncryptionAlgorithms" : {
          "title" : "Remote Consent Service Response Encryption Algorithms Supported",
          "description" : "Encryption algorithms supported to decrypt Remote Consent Service
 responses.<br><br>OpenAM supports the following encryption algorithms:<ul><li><code>RSA1_5</code> -
 RSA with PKCS#1 v1.5 padding.</li><li><code>RSA-OAEP</code> - RSA with Optimal Asymmetric Encryption
 Padding (OAEP) with SHA-1 and MGF-1.</li><li><code>RSA-OAEP-256</code> - RSA with OAEP with SHA-256
 and MGF-1.</li><li><code>A128KW</code> - AES Key Wrapping with 128-bit key derived from the client
 secret.</li><li><code>A192KW</code> - AES Key Wrapping with 192-bit key derived from the client
 secret.</li><li><code>A256KW</code> - AES Key Wrapping with 256-bit key derived from the client
 secret.</li><li><code>dir</code> - Direct encryption with AES using the hashed client secret.</li></
ul>",
          "propertyOrder" : 453,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "clientsCanSkipConsent" : {
          "title" : "Allow Clients to Skip Consent",
          "description" : "If enabled, clients may be configured so that the resource owner will not
 be asked for consent during authorization flows.",
          "propertyOrder" : 420,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "remoteConsentServiceId" : {
          "title" : "Remote Consent Service ID",
          "description" : "The ID of an existing remote consent service agent.",
          "propertyOrder" : 448,
          "required" : false,
          "type" : "string",
          "exampleValue" : ""
        },
        "enableRemoteConsent" : {
          "title" : "Enable Remote Consent",
          "description" : "",
          "propertyOrder" : 447,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "supportedRcsResponseSigningAlgorithms" : {
          "title" : "Remote Consent Service Response Signing Algorithms Supported",
          "description" : "Algorithms supported to verify signed consent_response JWT from
 Remote Consent Services.<br><br>OpenAM supports signing algorithms listed in JSON Web Algorithms
 (JWA): <a href=\"http://tools.ietf.org/html/draft-ietf-jose-json-web-algorithms#section-3.1\">
\"alg\" (Algorithm) Header Parameter Values for JWS</a>:<ul><li><code>HS256</code> - HMAC
 with SHA-256.</li><li><code>HS384</code> - HMAC with SHA-384.</li><li><code>HS512</code> -
 HMAC with SHA-512.</li><li><code>ES256</code> - ECDSA with SHA-256 and NIST standard P-256
 elliptic curve.</li><li><code>ES384</code> - ECDSA with SHA-384 and NIST standard P-384 elliptic
 curve.</li><li><code>ES512</code> - ECDSA with SHA-512 and NIST standard P-521 elliptic curve.</
li><li><code>RS256</code> - RSASSA-PKCS-v1_5 using SHA-256.</li></ul>",
```


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```
          "propertyOrder" : 452,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "savedConsentAttribute" : {
          "title" : "Saved Consent Attribute Name",
          "description" : "Name of a multi-valued attribute on resource owner profiles where OpenAM
 can save authorization consent decisions.<p><p>When the resource owner chooses to save the decision
 to authorize access for a client application, then OpenAM updates the resource owner's profile to
 avoid having to prompt the resource owner to grant authorization when the client issues subsequent
 authorization requests.",
          "propertyOrder" : 110,
          "required" : false,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    },
    "clientDynamicRegistrationConfig" : {
      "type" : "object",
      "title" : "Client Dynamic Registration",
      "propertyOrder" : 2,
      "properties" : {
        "generateRegistrationAccessTokens" : {
          "title" : "Generate Registration Access Tokens",
          "description" : "Whether to generate Registration Access Tokens for clients that register by
 using open dynamic client registration. Such tokens allow the client to access the <a href=\"http://
openid.net/specs/openid-connect-registration-1_0.html#ClientConfigurationEndpoint\" target=\"_blank
\">Client Configuration Endpoint</a> as per the OpenID Connect specification. This setting has no
 effect if Allow Open Dynamic Client Registration is disabled.",
          "propertyOrder" : 290,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "dynamicClientRegistrationScope" : {
          "title" : "Scope to give access to dynamic client registration",
          "description" : "Mandatory scope required when registering a new OAuth2 client.",
          "propertyOrder" : 455,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "allowDynamicRegistration" : {
          "title" : "Allow Open Dynamic Client Registration",
          "description" : "Allow clients to register without an access token. If enabled, you
 should consider adding some form of rate limiting. For more information, see  <a href=\"http://
openid.net/specs/openid-connect-registration-1_0.html#ClientRegistration\" target=\"_blank\">Client
 Registration</a> in the OpenID Connect specification.",
          "propertyOrder" : 280,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "dynamicClientRegistrationSoftwareStatementRequired" : {
```


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```
          "title" : "Require Software Statement for Dynamic Client Registration",
          "description" : "When enabled, a software statement JWT containing at least the <code>iss</
code> (issuer) claim must be provided when registering an OAuth 2.0 client dynamically.",
          "propertyOrder" : 271,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "requiredSoftwareStatementAttestedAttributes" : {
          "title" : "Required Software Statement Attested Attributes",
          "description" : "The client attributes that are required to be present in the software
 statement JWT when registering an OAuth 2.0 client dynamically. Only applies if Require Software
 Statements for Dynamic Client Registration is enabled.<br><br>Leave blank to allow any attributes to
 be present.",
          "propertyOrder" : 272,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        }
      }
    },
    "advancedOAuth2Config" : {
      "type" : "object",
      "title" : "Advanced",
      "propertyOrder" : 1,
      "properties" : {
        "keypairName" : {
          "title" : "Token Signing RSA Public/Private Key Pair",
          "description" : "The public/private key pair used by RS256.<br><br>The
 public/private key pair will be retrieved from the keystore referenced by the property
 <code>com.sun.identity.saml.xmlsig.keystore</code>.",
          "propertyOrder" : 240,
          "required" : false,
          "type" : "string",
          "exampleValue" : ""
        },
        "tokenSigningAlgorithm" : {
          "title" : "OAuth2 Token Signing Algorithm",
          "description" : "Algorithm used to sign stateless OAuth 2.0 tokens in order to detect
 tampering.<br><br>OpenAM supports signing algorithms listed in JSON Web Algorithms (JWA):
 <a href=\"http://tools.ietf.org/html/draft-ietf-jose-json-web-algorithms#section-3.1\">\"alg
\" (Algorithm) Header Parameter Values for JWS</a>:<ul><li><code>HS256</code> - HMAC with
 SHA-256.</li><li><code>HS384</code> - HMAC with SHA-384.</li><li><code>HS512</code> - HMAC
 with SHA-512.</li><li><code>ES256</code> - ECDSA with SHA-256 and NIST standard P-256 elliptic
 curve.</li><li><code>ES384</code> - ECDSA with SHA-384 and NIST standard P-384 elliptic
 curve.</li><li><code>ES512</code> - ECDSA with SHA-512 and NIST standard P-521 elliptic curve.</
li><li><code>RS256</code> - RSASSA-PKCS-v1_5 using SHA-256.</li></ul>",
          "propertyOrder" : 220,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "scopeImplementationClass" : {
          "title" : "Scope Implementation Class",
          "description" : "The class that contains the required scope implementation, must implement
 the <code>org.forgerock.oauth2.core.ScopeValidator</code> interface.",
```


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```
          "propertyOrder" : 70,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "customLoginUrlTemplate" : {
          "title" : "Custom Login URL Template",
          "description" : "Custom URL for handling login, to override the default OpenAM login
 page.<br><br>Supports Freemarker syntax, with the following variables:<table><tr><th>Variable</
th><th>Description</th></tr><tr><td><code>gotoUrl</code></td><td><p>The URL to redirect to after
 login.</p></td></tr><tr><td><code>acrValues</code></td><td><p>The Authentication Context Class
 Reference (acr) values for the authorization request.</p></td></tr><tr><td><code>realm</code></
td><td><p>The OpenAM realm the authorization request was made on.</p></td></tr><tr><td><code>module</
code></td><td><p>The name of the OpenAM authentication module requested to perform resource
 owner authentication.</p></td></tr><tr><td><code>service</code></td><td><p>The name of the
 OpenAM authentication chain requested to perform resource owner authentication.</p></td></
tr><tr><td><code>locale</code></td><td><p>A space-separated list of locales, ordered by
 preference.</p></td></tr></table>The following example template redirects users to a non-OpenAM
 front end to handle login, which will then redirect back to the <code>/oauth2/authorize</code>
 endpoint with any required parameters:<p> <code>http://mylogin.com/login?goto=${goto}&lt;#if
 acrValues??&gt;&amp;acr_values=${acrValues}&lt;&#x2F;#if&gt;&lt;#if realm??&gt;&amp;realm=
${realm}&lt;&#x2F;#if&gt;&lt;#if module??&gt;&amp;module=${module}&lt;&#x2F;#if&gt;&lt;#if
 service??&gt;&amp;service=${service}&lt;&#x2F;#if&gt;&lt;#if locale??&gt;&amp;locale=
${locale}&lt;&#x2F;#if&gt;</code><br><b>NOTE</b>: Default OpenAM login page is constructed using
 \"Base URL Source\" service.",
          "propertyOrder" : 60,
          "required" : false,
          "type" : "string",
          "exampleValue" : ""
        },
        "tokenSigningHmacSharedSecret" : {
          "title" : "Token Signing HMAC Shared Secret",
          "description" : "Base64-encoded key used by HS256, HS384 and HS512.",
          "propertyOrder" : 230,
          "required" : true,
          "type" : "string",
          "format" : "password",
          "exampleValue" : ""
        },
        "hashSalt" : {
          "title" : "Subject Identifier Hash Salt",
          "description" : "If <i>pairwise</i> subject types are supported, it is <em>STRONGLY
 RECOMMENDED</em> to change this value. It is used in the salting of hashes for returning
 specific <code>sub</code> claims to individuals using the same <code>request_uri</code> or
 <code>sector_identifier_uri</code>.",
          "propertyOrder" : 260,
          "required" : false,
          "type" : "string",
          "exampleValue" : "changeme"
        },
        "createdTimestampAttribute" : {
          "title" : "Created Timestamp Attribute Name",
          "description" : "The identity Data Store attribute used to return created timestamp
 values.",
          "propertyOrder" : 350,
          "required" : false,
          "type" : "string",
          "exampleValue" : ""
        },
```


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```
        "authenticationAttributes" : {
          "title" : "User Profile Attribute(s) the Resource Owner is Authenticated On",
          "description" : "Names of profile attributes that resource owners use to log in. You can add
 others to the default, for example <code>mail</code>.",
          "propertyOrder" : 100,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "tokenCompressionEnabled" : {
          "title" : "Stateless Token Compression",
          "description" : "Whether stateless access and refresh tokens should be compressed.",
          "propertyOrder" : 223,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "responseTypeClasses" : {
          "title" : "Response Type Plugins",
          "description" : "List of plugins that handle the valid <code>response_type</code>
 values.<br><br>OAuth 2.0 clients pass response types as parameters to the OAuth 2.0 Authorization
 endpoint (<code>/oauth2/authorize</code>) to indicate which grant type is requested from the
 provider. For example, the client passes <code>code</code> when requesting an authorization code,
 and <code>token</code> when requesting an access token.<p><p>Values in this list take the form
 <code>response-type|plugin-class-name</code>.",
          "propertyOrder" : 90,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "tokenSigningECDSAKeyAlias" : {
          "title" : "Token Signing ECDSA Public/Private Key Pair Alias",
          "description" : "The list of public/private key pairs used for the elliptic curve algorithms
 (ES256/ES384/ES512). Add an entry to specify an alias for a specific elliptic curve algorithm, for
 example <code>ES256|es256Alias</code>.<br><br>Each of the public/private key pairs will be retrieved
 from the keystore referenced by the property <code>com.sun.identity.saml.xmlsig.keystore</code>.",
          "propertyOrder" : 241,
          "required" : false,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "codeVerifierEnforced" : {
          "title" : "Code Verifier Parameter Required",
          "description" : "If enabled, requests using the authorization code grant require a
 <code>code_challenge</code> attribute.<br><br>For more information, read the <a href=\"https://
tools.ietf.org/html/draft-ietf-oauth-spop-12\">draft specification for this feature</a>.",
          "propertyOrder" : 270,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
```


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```
      },
      "displayNameAttribute" : {
        "title" : "User Display Name attribute",
        "description" : "The profile attribute that contains the name to be displayed for the user
on the consent page.",
        "propertyOrder" : 120,
        "required" : true,
        "type" : "string",
        "exampleValue" : ""
      },
      "defaultScopes" : {
        "title" : "Default Client Scopes",
        "description" : "List of scopes a client will be granted if they request registration
without specifying which scopes they want. Default scopes are NOT auto-granted to clients created
through the OpenAM console.",
        "propertyOrder" : 200,
        "required" : false,
        "items" : {
          "type" : "string"
        },
        "type" : "array",
        "exampleValue" : ""
      },
      "modifiedTimestampAttribute" : {
        "title" : "Modified Timestamp Attribute Name",
        "description" : "The identity Data Store attribute used to return modified timestamp
values.",
        "propertyOrder" : 340,
        "required" : false,
        "type" : "string",
        "exampleValue" : ""
      },
      "moduleMessageEnabledInPasswordGrant" : {
        "title" : "Enable Auth Module Messages for Password Credentials Grant",
        "description" : "If enabled, authentication module failure messages are used to create
Resource Owner Password Credentials Grant failure messages. If disabled, a standard authentication
failed message is used.<br><br>The Password Grant Type requires the <code>grant_type=password</code>
parameter.",
        "propertyOrder" : 440,
        "required" : true,
        "type" : "boolean",
        "exampleValue" : ""
      },
      "supportedScopes" : {
        "title" : "Supported Scopes",
        "description" : "The set of supported scopes, with translations.<br><br><p>Scopes may be
entered as simple strings or pipe-separated strings representing the internal scope name, locale,
and localized description.</p><p>For example: <code>read|en|Permission to view email messages in
your account</code></p><p>Locale strings are in the format: <code>language_country_variant</code>,
for example <code>en</code>, <code>en_GB</code>, or <code>en_US_WIN</code>.</p><p>If the locale and
pipe is omitted, the description is displayed to all users that have undefined locales.</p><p>If
the description is also omitted, nothing is displayed on the consent page for the scope. For example
specifying <code>read|</code> would allow the scope read to be used by the client, but would not
display it to the user on the consent page when requested.</p>",
        "propertyOrder" : 130,
        "required" : true,
        "items" : {
          "type" : "string"
        },
```


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```
          "type" : "array",
          "exampleValue" : ""
        },
        "supportedSubjectTypes" : {
          "title" : "Subject Types supported",
          "description" : "List of subject types supported. Valid values are:<ul><li><code>public</
code> - Each client receives the same subject (<code>sub</code>) value.</li><li><code>pairwise</code>
 - Each client receives a different subject (<code>sub</code>) value, to prevent correlation between
 clients.</li></ul>",
          "propertyOrder" : 150,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        }
      }
    },
    "coreOIDCConfig" : {
      "type" : "object",
      "title" : "OpenID Connect",
      "propertyOrder" : 3,
      "properties" : {
        "supportedIDTokenEncryptionAlgorithms" : {
          "title" : "ID Token Encryption Algorithms supported",
          "description" : "Encryption algorithms supported to encrypt OpenID Connect ID tokens
 in order to hide its contents.<br><br>OpenAM supports the following ID token encryption
 algorithms:<ul><li><code>RSA-OAEP</code> - RSA with Optimal Asymmetric Encryption Padding (OAEP)
 with SHA-1 and MGF-1.</li><li><code>RSA-OAEP-256</code> - RSA with OAEP with SHA-256 and MGF-1.</
li><li><code>A128KW</code> - AES Key Wrapping with 128-bit key derived from the client secret.</
li><li><code>RSA1_5</code> - RSA with PKCS#1 v1.5 padding.</li><li><code>A256KW</code> - AES
 Key Wrapping with 256-bit key derived from the client secret.</li><li><code>dir</code> - Direct
 encryption with AES using the hashed client secret.</li><li><code>A192KW</code> - AES Key Wrapping
 with 192-bit key derived from the client secret.</li></ul>",
          "propertyOrder" : 170,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "jwtTokenLifetime" : {
          "title" : "OpenID Connect JWT Token Lifetime (seconds)",
          "description" : "The amount of time the JWT will be valid for, in seconds.",
          "propertyOrder" : 210,
          "required" : false,
          "type" : "integer",
          "exampleValue" : ""
        },
        "supportedIDTokenEncryptionMethods" : {
          "title" : "ID Token Encryption Methods supported",
          "description" : "Encryption methods supported to encrypt OpenID Connect ID tokens
 in order to hide its contents.<br><br>OpenAM supports the following ID token encryption
 algorithms:<ul><li><code>A128GCM</code>, <code>A192GCM</code>, and <code>A256GCM</code> - AES
 in Galois Counter Mode (GCM) authenticated encryption mode.</li><li><code>A128CBC-HS256</code>,
 <code>A192CBC-HS384</code>, and <code>A256CBC-HS512</code> - AES encryption in CBC mode, with HMAC-
SHA-2 for integrity.</li></ul>",
```


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```
          "propertyOrder" : 180,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "supportedIDTokenSigningAlgorithms" : {
          "title" : "ID Token Signing Algorithms supported",
          "description" : "Algorithms supported to sign OpenID Connect <code>id_tokens</
code>.<p><p>OpenAM supports signing algorithms listed in JSON Web Algorithms (JWA): <a href=\"http://
tools.ietf.org/html/draft-ietf-jose-json-web-algorithms#section-3.1\">\"alg\" (Algorithm) Header
 Parameter Values for JWS</a>:<ul><li><code>HS256</code> - HMAC with SHA-256.</li><li><code>HS384</
code> - HMAC with SHA-384.</li><li><code>HS512</code> - HMAC with SHA-512.</li><li><code>ES256</code>
 - ECDSA with SHA-256 and NIST standard P-256 elliptic curve.</li><li><code>ES384</code> - ECDSA with
 SHA-384 and NIST standard P-384 elliptic curve.</li><li><code>ES512</code> - ECDSA with SHA-512 and
 NIST standard P-521 elliptic curve.</li><li><code>RS256</code> - RSASSA-PKCS-v1_5 using SHA-256.</
li></ul>",
          "propertyOrder" : 160,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "supportedClaims" : {
          "title" : "Supported Claims",
          "description" : "Set of claims supported by the OpenID Connect <code>/oauth2/userinfo</
code> endpoint, with translations.<br><br>Claims may be entered as simple strings or pipe separated
 strings representing the internal claim name, locale, and localized description.<p><p>For example:
 <code>name|en|Your full name.</code>.<p>Locale strings are in the format: <code>language +
 \"_\" + country + \"_\" + variant</code>, for example <code>en</code>, <code>en_GB</code>, or
 <code>en_US_WIN</code>. If the locale and pipe is omitted, the description is displayed to all users
 that have undefined locales.<p><p>If the description is also omitted, nothing is displayed on the
 consent page for the claim. For example specifying <code>family_name|</code> would allow the claim
 <code>family_name</code> to be used by the client, but would not display it to the user on the
 consent page when requested.",
          "propertyOrder" : 190,
          "required" : false,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "oidcClaimsScript" : {
          "title" : "OIDC Claims Script",
          "description" : "The script that is run when issuing an ID token or making a request to the
 <i>userinfo</i> endpoint during OpenID requests.<p><p>The script gathers the scopes and populates
 claims, and has access to the access token, the user's identity and, if available, the user's
 session.",
          "propertyOrder" : 80,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "tokenEncryptionSigningKeyAlias" : {
```


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```
          "title" : "Token Encryption RSA Public/Private Key Pair Alias",
          "description" : "The list of public/private key pairs used for the RSA algorithms (RSA1_5/
RSA-OAEP/RSA-OAEP-256). Add an entry to specify an alias for a specific RSA algorithm, for example
 <code>RSA1_5|rsa1_5Alias</code>.<br><br>Each of the public/private key pairs will be retrieved from
 the keystore referenced by the property <code>com.sun.identity.saml.xmlsig.keystore</code>.",
          "propertyOrder" : 441,
          "required" : false,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        }
      }
    },
    "deviceCodeConfig" : {
      "type" : "object",
      "title" : "Device Flow",
      "propertyOrder" : 5,
      "properties" : {
        "completionUrl" : {
          "title" : "Device Completion URL",
          "description" : "The URL that the user will be sent to on completion of their OAuth 2.0
 login and consent when using the device code flow.",
          "propertyOrder" : 380,
          "required" : false,
          "type" : "string",
          "exampleValue" : ""
        },
        "devicePollInterval" : {
          "title" : "Device Polling Interval",
          "description" : "The polling frequency for devices waiting for tokens when using the device
 code flow.",
          "propertyOrder" : 400,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "verificationUrl" : {
          "title" : "Verification URL",
          "description" : "The URL that the user will be instructed to visit to complete their OAuth
 2.0 login and consent when using the device code flow.",
          "propertyOrder" : 370,
          "required" : false,
          "type" : "string",
          "exampleValue" : ""
        },
        "deviceCodeLifetime" : {
          "title" : "Device Code Lifetime (seconds)",
          "description" : "The lifetime of the device code, in seconds.",
          "propertyOrder" : 390,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        }
      }
    },
    "coreOAuth2Config" : {
      "type" : "object",
```


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```
      "title" : "Core",
      "propertyOrder" : 0,
      "properties" : {
        "codeLifetime" : {
          "title" : "Authorization Code Lifetime (seconds)",
          "description" : "The time an authorization code is valid for, in seconds.",
          "propertyOrder" : 10,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "statelessTokensEnabled" : {
          "title" : "Use Stateless Access & Refresh Tokens",
          "description" : "When enabled, OpenAM issues access and refresh tokens that can be inspected
 by resource servers.",
          "propertyOrder" : 3,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "refreshTokenLifetime" : {
          "title" : "Refresh Token Lifetime (seconds)",
          "description" : "The time in seconds a refresh token is valid for. If this field is set to
 <code>-1</code>, the token will never expire.",
          "propertyOrder" : 20,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "accessTokenLifetime" : {
          "title" : "Access Token Lifetime (seconds)",
          "description" : "The time an access token is valid for, in seconds.",
          "propertyOrder" : 30,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "issueRefreshTokenOnRefreshedToken" : {
          "title" : "Issue Refresh Tokens on Refreshing Access Tokens",
          "description" : "Whether to issue a refresh token when refreshing an access token.",
          "propertyOrder" : 50,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "issueRefreshToken" : {
          "title" : "Issue Refresh Tokens",
          "description" : "Whether to issue a refresh token when returning an access token.",
          "propertyOrder" : 40,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        }
      }
    }
  }
}
```


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1.94.1.2. delete

Usage:

```
am> delete OAuth2Provider --realm Realm
```

1.94.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action OAuth2Provider --realm Realm --actionName getAllTypes
```

1.94.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action OAuth2Provider --realm Realm --actionName getCreatableTypes
```

1.94.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action OAuth2Provider --realm Realm --actionName nextdescendents
```

1.94.1.6. read

Usage:

```
am> read OAuth2Provider --realm Realm
```

1.94.1.7. update

Usage:

```
am> update OAuth2Provider --realm Realm --body body
```

Parameters:

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--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "advancedOIDCConfig" : {
      "type" : "object",
      "title" : "Advanced OpenID Connect",
      "propertyOrder" : 4,
      "properties" : {
        "loaMapping" : {
          "title" : "OpenID Connect acr_values to Auth Chain Mapping",
          "description" : "Maps OpenID Connect ACR values to authentication chains. For more details,
 see the <a href=\"http://openid.net/specs/openid-connect-core-1_0.html#AuthRequest\" target=\"_blank
\">acr_values parameter</a> in the OpenID Connect authentication request specification.",
          "propertyOrder" : 310,
          "required" : false,
          "patternProperties" : {
            ".*" : { }
          },
          "type" : "object",
          "exampleValue" : ""
        },
        "authorisedOpenIdConnectSSOClients" : {
          "title" : "Authorized OIDC SSO Clients",
          "description" : "Clients authorized to use OpenID Connect ID tokens as SSO
 Tokens.<br><br>Allows clients to act with the full authority of the user. Grant this permission only
 to trusted clients.",
          "propertyOrder" : 446,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "defaultACR" : {
          "title" : "OpenID Connect Default acr Claim",
          "description" : "Default value to use as the <code>acr</code> claim in an OpenID Connect ID
 Token when using the default authentication chain.",
          "propertyOrder" : 320,
          "required" : false,
          "type" : "string",
          "exampleValue" : ""
        },
        "supportedRequestParameterEncryptionEnc" : {
          "title" : "Request Parameter Encryption Methods Supported",
          "description" : "Encryption methods supported to decrypt Request parameter.<br><br>OpenAM
 supports the following Request parameter encryption algorithms:<ul><li><code>A128GCM</code>,
 <code>A192GCM</code>, and <code>A256GCM</code> - AES in Galois Counter Mode (GCM) authenticated
 encryption mode.</li><li><code>A128CBC-HS256</code>, <code>A192CBC-HS384</code>, and <code>A256CBC-
HS512</code> - AES encryption in CBC mode, with HMAC-SHA-2 for integrity.</li></ul>",
          "propertyOrder" : 444,
          "required" : true,
          "items" : {
            "type" : "string"
          },
```


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```
          "type" : "array",
          "exampleValue" : ""
        },
        "amrMappings" : {
          "title" : "OpenID Connect id_token amr Values to Auth Module Mappings",
          "description" : "Specify <code>amr</code> values to be returned in the OpenID Connect
 <code>id_token</code>. Once authentication has completed, the authentication modules that were used
 from the authentication service will be mapped to the <code>amr</code> values. If you do not require
 <code>amr</code> values, or are not providing OpenID Connect tokens, leave this field blank.",
          "propertyOrder" : 330,
          "required" : false,
          "patternProperties" : {
            ".*" : { }
          },
          "type" : "object",
          "exampleValue" : ""
        },
        "storeOpsTokens" : {
          "title" : "Store Ops Tokens",
          "description" : "Whether OpenAM will store the <i>ops</i> tokens corresponding to OpenID
 Connect sessions in the CTS store. Note that session management related endpoints will not work when
 this setting is disabled.",
          "propertyOrder" : 410,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "claimsParameterSupported" : {
          "title" : "Enable \"claims_parameter_supported\"",
          "description" : "If enabled, clients will be able to request individual claims using the
 <code>claims</code> request parameter, as per <a href=\"http://openid.net/specs/openid-connect-
core-1_0.html#ClaimsParameter\" target=\"_blank\">section 5.5 of the OpenID Connect specification</
a>.",
          "propertyOrder" : 250,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "alwaysAddClaimsToToken" : {
          "title" : "Always Return Claims in ID Tokens",
          "description" : "If enabled, include scope-derived claims in the <code>id_token</code>,
 even if an access token is also returned that could provide access to get the claims from the
 <code>userinfo</code> endpoint.<br><br>If not enabled, if an access token is requested the client
 must use it to access the <code>userinfo</code> endpoint for scope-derived claims, as they will not
 be included in the ID token.",
          "propertyOrder" : 360,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "supportedTokenEndpointAuthenticationSigningAlgorithms" : {
          "title" : "Supported Token Endpoint JWS Signing Algorithms.",
          "description" : "Supported JWS Signing Algorithms for 'private_key_jwt' JWT based
 authentication method.",
          "propertyOrder" : 445,
          "required" : true,
          "items" : {
            "type" : "string"
          },
```


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```
          "type" : "array",
          "exampleValue" : ""
        },
        "jkwsURI" : {
          "title" : "Remote JSON Web Key URL",
          "description" : "The Remote URL where the providers JSON Web Key can be retrieved.<p><p>If
 this setting is not configured, then OpenAM provides a local URL to access the public key of the
 private key used to sign ID tokens.",
          "propertyOrder" : 140,
          "required" : false,
          "type" : "string",
          "exampleValue" : ""
        },
        "supportedRequestParameterSigningAlgorithms" : {
          "title" : "Request Parameter Signing Algorithms Supported",
          "description" : "Algorithms supported to verify signature of Request parameterOpenAM
 supports signing algorithms listed in JSON Web Algorithms (JWA): <a href=\"http://tools.ietf.org/
html/draft-ietf-jose-json-web-algorithms#section-3.1\">\"alg\" (Algorithm) Header Parameter Values
 for JWS</a>:<ul><li><code>HS256</code> - HMAC with SHA-256.</li><li><code>HS384</code> - HMAC with
 SHA-384.</li><li><code>HS512</code> - HMAC with SHA-512.</li><li><code>ES256</code> - ECDSA with
 SHA-256 and NIST standard P-256 elliptic curve.</li><li><code>ES384</code> - ECDSA with SHA-384 and
 NIST standard P-384 elliptic curve.</li><li><code>ES512</code> - ECDSA with SHA-512 and NIST standard
 P-521 elliptic curve.</li><li><code>RS256</code> - RSASSA-PKCS-v1_5 using SHA-256.</li></ul>",
          "propertyOrder" : 442,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "supportedRequestParameterEncryptionAlgorithms" : {
          "title" : "Request Parameter Encryption Algorithms Supported",
          "description" : "Encryption algorithms supported to decrypt Request parameter.<br><br>OpenAM
 supports the following ID token encryption algorithms:<ul><li><code>RSA-OAEP</code> - RSA with
 Optimal Asymmetric Encryption Padding (OAEP) with SHA-1 and MGF-1.</li><li><code>RSA-OAEP-256</
code> - RSA with OAEP with SHA-256 and MGF-1.</li><li><code>A128KW</code> - AES Key Wrapping with
 128-bit key derived from the client secret.</li><li><code>RSA1_5</code> - RSA with PKCS#1 v1.5
 padding.</li><li><code>A256KW</code> - AES Key Wrapping with 256-bit key derived from the client
 secret.</li><li><code>dir</code> - Direct encryption with AES using the hashed client secret.</
li><li><code>A192KW</code> - AES Key Wrapping with 192-bit key derived from the client secret.</li></
ul>",
          "propertyOrder" : 443,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "idTokenInfoClientAuthenticationEnabled" : {
          "title" : "Idtokeninfo Endpoint Requires Client Authentication",
          "description" : "When enabled, the <code>/oauth2/idtokeninfo</code> endpoint requires
 client authentication if the signing algorithm is set to <code>HS256</code>, <code>HS384</code>, or
 <code>HS512</code>.",
          "propertyOrder" : 225,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
```


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```
        }
      }
    },
    "consent" : {
      "type" : "object",
      "title" : "Consent",
      "propertyOrder" : 6,
      "properties" : {
        "supportedRcsRequestEncryptionAlgorithms" : {
          "title" : "Remote Consent Service Request Encryption Algorithms Supported",
          "description" : "Encryption algorithms supported to encrypt Remote Consent Service
 requests.<br><br>OpenAM supports the following encryption algorithms:<ul><li><code>RSA1_5</code> -
 RSA with PKCS#1 v1.5 padding.</li><li><code>RSA-OAEP</code> - RSA with Optimal Asymmetric Encryption
 Padding (OAEP) with SHA-1 and MGF-1.</li><li><code>RSA-OAEP-256</code> - RSA with OAEP with SHA-256
 and MGF-1.</li><li><code>A128KW</code> - AES Key Wrapping with 128-bit key derived from the client
 secret.</li><li><code>A192KW</code> - AES Key Wrapping with 192-bit key derived from the client
 secret.</li><li><code>A256KW</code> - AES Key Wrapping with 256-bit key derived from the client
 secret.</li><li><code>dir</code> - Direct encryption with AES using the hashed client secret.</li></
ul>",
          "propertyOrder" : 450,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "supportedRcsRequestSigningAlgorithms" : {
          "title" : "Remote Consent Service Request Signing Algorithms Supported",
          "description" : "Algorithms supported to sign consent_request JWTs for Remote Consent
 Services.<br><br>OpenAM supports signing algorithms listed in JSON Web Algorithms (JWA): <a
 href=\"http://tools.ietf.org/html/draft-ietf-jose-json-web-algorithms#section-3.1\">\"alg
\" (Algorithm) Header Parameter Values for JWS</a>:<ul><li><code>HS256</code> - HMAC with
 SHA-256.</li><li><code>HS384</code> - HMAC with SHA-384.</li><li><code>HS512</code> - HMAC
 with SHA-512.</li><li><code>ES256</code> - ECDSA with SHA-256 and NIST standard P-256 elliptic
 curve.</li><li><code>ES384</code> - ECDSA with SHA-384 and NIST standard P-384 elliptic
 curve.</li><li><code>ES512</code> - ECDSA with SHA-512 and NIST standard P-521 elliptic curve.</
li><li><code>RS256</code> - RSASSA-PKCS-v1_5 using SHA-256.</li></ul>",
          "propertyOrder" : 449,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "supportedRcsResponseEncryptionMethods" : {
          "title" : "Remote Consent Service Response Encryption Methods Supported",
          "description" : "Encryption methods supported to decrypt Remote Consent Service
 responses.<br><br>OpenAM supports the following encryption methods:<ul><li><code>A128GCM</code>,
 <code>A192GCM</code>, and <code>A256GCM</code> - AES in Galois Counter Mode (GCM) authenticated
 encryption mode.</li><li><code>A128CBC-HS256</code>, <code>A192CBC-HS384</code>, and <code>A256CBC-
HS512</code> - AES encryption in CBC mode, with HMAC-SHA-2 for integrity.</li></ul>",
          "propertyOrder" : 454,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
```


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```
          "exampleValue" : ""
        },
        "supportedRcsRequestEncryptionMethods" : {
          "title" : "Remote Consent Service Request Encryption Methods Supported",
          "description" : "Encryption methods supported to encrypt Remote Consent Service
 requests.<br><br>OpenAM supports the following encryption methods:<ul><li><code>A128GCM</code>,
 <code>A192GCM</code>, and <code>A256GCM</code> - AES in Galois Counter Mode (GCM) authenticated
 encryption mode.</li><li><code>A128CBC-HS256</code>, <code>A192CBC-HS384</code>, and <code>A256CBC-
HS512</code> - AES encryption in CBC mode, with HMAC-SHA-2 for integrity.</li></ul>",
          "propertyOrder" : 451,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "supportedRcsResponseEncryptionAlgorithms" : {
          "title" : "Remote Consent Service Response Encryption Algorithms Supported",
          "description" : "Encryption algorithms supported to decrypt Remote Consent Service
 responses.<br><br>OpenAM supports the following encryption algorithms:<ul><li><code>RSA1_5</code> -
 RSA with PKCS#1 v1.5 padding.</li><li><code>RSA-OAEP</code> - RSA with Optimal Asymmetric Encryption
 Padding (OAEP) with SHA-1 and MGF-1.</li><li><code>RSA-OAEP-256</code> - RSA with OAEP with SHA-256
 and MGF-1.</li><li><code>A128KW</code> - AES Key Wrapping with 128-bit key derived from the client
 secret.</li><li><code>A192KW</code> - AES Key Wrapping with 192-bit key derived from the client
 secret.</li><li><code>A256KW</code> - AES Key Wrapping with 256-bit key derived from the client
 secret.</li><li><code>dir</code> - Direct encryption with AES using the hashed client secret.</li></
ul>",
          "propertyOrder" : 453,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "clientsCanSkipConsent" : {
          "title" : "Allow Clients to Skip Consent",
          "description" : "If enabled, clients may be configured so that the resource owner will not
 be asked for consent during authorization flows.",
          "propertyOrder" : 420,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "remoteConsentServiceId" : {
          "title" : "Remote Consent Service ID",
          "description" : "The ID of an existing remote consent service agent.",
          "propertyOrder" : 448,
          "required" : false,
          "type" : "string",
          "exampleValue" : ""
        },
        "enableRemoteConsent" : {
          "title" : "Enable Remote Consent",
          "description" : "",
          "propertyOrder" : 447,
          "required" : true,
          "type" : "boolean",
```


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```
          "exampleValue" : ""
        },
        "supportedRcsResponseSigningAlgorithms" : {
          "title" : "Remote Consent Service Response Signing Algorithms Supported",
          "description" : "Algorithms supported to verify signed consent_response JWT from
 Remote Consent Services.<br><br>OpenAM supports signing algorithms listed in JSON Web Algorithms
 (JWA): <a href=\"http://tools.ietf.org/html/draft-ietf-jose-json-web-algorithms#section-3.1\">
\"alg\" (Algorithm) Header Parameter Values for JWS</a>:<ul><li><code>HS256</code> - HMAC
 with SHA-256.</li><li><code>HS384</code> - HMAC with SHA-384.</li><li><code>HS512</code> -
 HMAC with SHA-512.</li><li><code>ES256</code> - ECDSA with SHA-256 and NIST standard P-256
 elliptic curve.</li><li><code>ES384</code> - ECDSA with SHA-384 and NIST standard P-384 elliptic
 curve.</li><li><code>ES512</code> - ECDSA with SHA-512 and NIST standard P-521 elliptic curve.</
li><li><code>RS256</code> - RSASSA-PKCS-v1_5 using SHA-256.</li></ul>",
          "propertyOrder" : 452,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "savedConsentAttribute" : {
          "title" : "Saved Consent Attribute Name",
          "description" : "Name of a multi-valued attribute on resource owner profiles where OpenAM
 can save authorization consent decisions.<p><p>When the resource owner chooses to save the decision
 to authorize access for a client application, then OpenAM updates the resource owner's profile to
 avoid having to prompt the resource owner to grant authorization when the client issues subsequent
 authorization requests.",
          "propertyOrder" : 110,
          "required" : false,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    },
    "clientDynamicRegistrationConfig" : {
      "type" : "object",
      "title" : "Client Dynamic Registration",
      "propertyOrder" : 2,
      "properties" : {
        "generateRegistrationAccessTokens" : {
          "title" : "Generate Registration Access Tokens",
          "description" : "Whether to generate Registration Access Tokens for clients that register by
 using open dynamic client registration. Such tokens allow the client to access the <a href=\"http://
openid.net/specs/openid-connect-registration-1_0.html#ClientConfigurationEndpoint\" target=\"_blank
\">Client Configuration Endpoint</a> as per the OpenID Connect specification. This setting has no
 effect if Allow Open Dynamic Client Registration is disabled.",
          "propertyOrder" : 290,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "dynamicClientRegistrationScope" : {
          "title" : "Scope to give access to dynamic client registration",
          "description" : "Mandatory scope required when registering a new OAuth2 client.",
          "propertyOrder" : 455,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
```


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```
        },
        "allowDynamicRegistration" : {
          "title" : "Allow Open Dynamic Client Registration",
          "description" : "Allow clients to register without an access token. If enabled, you
 should consider adding some form of rate limiting. For more information, see  <a href=\"http://
openid.net/specs/openid-connect-registration-1_0.html#ClientRegistration\" target=\"_blank\">Client
 Registration</a> in the OpenID Connect specification.",
          "propertyOrder" : 280,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "dynamicClientRegistrationSoftwareStatementRequired" : {
          "title" : "Require Software Statement for Dynamic Client Registration",
          "description" : "When enabled, a software statement JWT containing at least the <code>iss</
code> (issuer) claim must be provided when registering an OAuth 2.0 client dynamically.",
          "propertyOrder" : 271,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "requiredSoftwareStatementAttestedAttributes" : {
          "title" : "Required Software Statement Attested Attributes",
          "description" : "The client attributes that are required to be present in the software
 statement JWT when registering an OAuth 2.0 client dynamically. Only applies if Require Software
 Statements for Dynamic Client Registration is enabled.<br><br>Leave blank to allow any attributes to
 be present.",
          "propertyOrder" : 272,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        }
      }
    },
    "advancedOAuth2Config" : {
      "type" : "object",
      "title" : "Advanced",
      "propertyOrder" : 1,
      "properties" : {
        "keypairName" : {
          "title" : "Token Signing RSA Public/Private Key Pair",
          "description" : "The public/private key pair used by RS256.<br><br>The
 public/private key pair will be retrieved from the keystore referenced by the property
 <code>com.sun.identity.saml.xmlsig.keystore</code>.",
          "propertyOrder" : 240,
          "required" : false,
          "type" : "string",
          "exampleValue" : ""
        },
        "tokenSigningAlgorithm" : {
          "title" : "OAuth2 Token Signing Algorithm",
          "description" : "Algorithm used to sign stateless OAuth 2.0 tokens in order to detect
 tampering.<br><br>OpenAM supports signing algorithms listed in JSON Web Algorithms (JWA):
 <a href=\"http://tools.ietf.org/html/draft-ietf-jose-json-web-algorithms#section-3.1\">\"alg
\" (Algorithm) Header Parameter Values for JWS</a>:<ul><li><code>HS256</code> - HMAC with
 SHA-256.</li><li><code>HS384</code> - HMAC with SHA-384.</li><li><code>HS512</code> - HMAC
```


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```
 with SHA-512.</li><li><code>ES256</code> - ECDSA with SHA-256 and NIST standard P-256 elliptic
 curve.</li><li><code>ES384</code> - ECDSA with SHA-384 and NIST standard P-384 elliptic
 curve.</li><li><code>ES512</code> - ECDSA with SHA-512 and NIST standard P-521 elliptic curve.</
li><li><code>RS256</code> - RSASSA-PKCS-v1_5 using SHA-256.</li></ul>",
          "propertyOrder" : 220,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "scopeImplementationClass" : {
          "title" : "Scope Implementation Class",
          "description" : "The class that contains the required scope implementation, must implement
 the <code>org.forgerock.oauth2.core.ScopeValidator</code> interface.",
          "propertyOrder" : 70,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "customLoginUrlTemplate" : {
          "title" : "Custom Login URL Template",
          "description" : "Custom URL for handling login, to override the default OpenAM login
 page.<br><br>Supports Freemarker syntax, with the following variables:<table><tr><th>Variable</
th><th>Description</th></tr><tr><td><code>gotoUrl</code></td><td><p>The URL to redirect to after
 login.</p></td></tr><tr><td><code>acrValues</code></td><td><p>The Authentication Context Class
 Reference (acr) values for the authorization request.</p></td></tr><tr><td><code>realm</code></
td><td><p>The OpenAM realm the authorization request was made on.</p></td></tr><tr><td><code>module</
code></td><td><p>The name of the OpenAM authentication module requested to perform resource
 owner authentication.</p></td></tr><tr><td><code>service</code></td><td><p>The name of the
 OpenAM authentication chain requested to perform resource owner authentication.</p></td></
tr><tr><td><code>locale</code></td><td><p>A space-separated list of locales, ordered by
 preference.</p></td></tr></table>The following example template redirects users to a non-OpenAM
 front end to handle login, which will then redirect back to the <code>/oauth2/authorize</code>
 endpoint with any required parameters:<p> <code>http://mylogin.com/login?goto=${goto}&lt;#if
 acrValues??&gt;&amp;acr_values=${acrValues}&lt;&#x2F;#if&gt;&lt;#if realm??&gt;&amp;realm=
${realm}&lt;&#x2F;#if&gt;&lt;#if module??&gt;&amp;module=${module}&lt;&#x2F;#if&gt;&lt;#if
 service??&gt;&amp;service=${service}&lt;&#x2F;#if&gt;&lt;#if locale??&gt;&amp;locale=
${locale}&lt;&#x2F;#if&gt;</code><br><b>NOTE</b>: Default OpenAM login page is constructed using
 \"Base URL Source\" service.",
          "propertyOrder" : 60,
          "required" : false,
          "type" : "string",
          "exampleValue" : ""
        },
        "tokenSigningHmacSharedSecret" : {
          "title" : "Token Signing HMAC Shared Secret",
          "description" : "Base64-encoded key used by HS256, HS384 and HS512.",
          "propertyOrder" : 230,
          "required" : true,
          "type" : "string",
          "format" : "password",
          "exampleValue" : ""
        },
        "hashSalt" : {
          "title" : "Subject Identifier Hash Salt",
          "description" : "If <i>pairwise</i> subject types are supported, it is <em>STRONGLY
 RECOMMENDED</em> to change this value. It is used in the salting of hashes for returning
 specific <code>sub</code> claims to individuals using the same <code>request_uri</code> or
 <code>sector_identifier_uri</code>.",
          "propertyOrder" : 260,
```


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```
          "required" : false,
          "type" : "string",
          "exampleValue" : "changeme"
        },
        "createdTimestampAttribute" : {
          "title" : "Created Timestamp Attribute Name",
          "description" : "The identity Data Store attribute used to return created timestamp
values.",
          "propertyOrder" : 350,
          "required" : false,
          "type" : "string",
          "exampleValue" : ""
        },
        "authenticationAttributes" : {
          "title" : "User Profile Attribute(s) the Resource Owner is Authenticated On",
          "description" : "Names of profile attributes that resource owners use to log in. You can add
others to the default, for example <code>mail</code>.",
          "propertyOrder" : 100,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "tokenCompressionEnabled" : {
          "title" : "Stateless Token Compression",
          "description" : "Whether stateless access and refresh tokens should be compressed.",
          "propertyOrder" : 223,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "responseTypeClasses" : {
          "title" : "Response Type Plugins",
          "description" : "List of plugins that handle the valid <code>response_type</code>
values.<br><br>OAuth 2.0 clients pass response types as parameters to the OAuth 2.0 Authorization
endpoint (<code>/oauth2/authorize</code>) to indicate which grant type is requested from the
provider. For example, the client passes <code>code</code> when requesting an authorization code,
and <code>token</code> when requesting an access token.<p><p>Values in this list take the form
<code>response-type|plugin-class-name</code>.",
          "propertyOrder" : 90,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "tokenSigningECDSAKeyAlias" : {
          "title" : "Token Signing ECDSA Public/Private Key Pair Alias",
          "description" : "The list of public/private key pairs used for the elliptic curve algorithms
(ES256/ES384/ES512). Add an entry to specify an alias for a specific elliptic curve algorithm, for
example <code>ES256|es256Alias</code>.<br><br>Each of the public/private key pairs will be retrieved
from the keystore referenced by the property <code>com.sun.identity.saml.xmlsig.keystore</code>.",
          "propertyOrder" : 241,
          "required" : false,
          "items" : {
            "type" : "string"
```


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```
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "codeVerifierEnforced" : {
          "title" : "Code Verifier Parameter Required",
          "description" : "If enabled, requests using the authorization code grant require a
 <code>code_challenge</code> attribute.<br><br>For more information, read the <a href=\"https://
tools.ietf.org/html/draft-ietf-oauth-spop-12\">draft specification for this feature</a>.",
          "propertyOrder" : 270,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "displayNameAttribute" : {
          "title" : "User Display Name attribute",
          "description" : "The profile attribute that contains the name to be displayed for the user
 on the consent page.",
          "propertyOrder" : 120,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "defaultScopes" : {
          "title" : "Default Client Scopes",
          "description" : "List of scopes a client will be granted if they request registration
 without specifying which scopes they want. Default scopes are NOT auto-granted to clients created
 through the OpenAM console.",
          "propertyOrder" : 200,
          "required" : false,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "modifiedTimestampAttribute" : {
          "title" : "Modified Timestamp Attribute Name",
          "description" : "The identity Data Store attribute used to return modified timestamp
 values.",
          "propertyOrder" : 340,
          "required" : false,
          "type" : "string",
          "exampleValue" : ""
        },
        "moduleMessageEnabledInPasswordGrant" : {
          "title" : "Enable Auth Module Messages for Password Credentials Grant",
          "description" : "If enabled, authentication module failure messages are used to create
 Resource Owner Password Credentials Grant failure messages. If disabled, a standard authentication
 failed message is used.<br><br>The Password Grant Type requires the <code>grant_type=password</code>
 parameter.",
          "propertyOrder" : 440,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "supportedScopes" : {
          "title" : "Supported Scopes",
```


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```
          "description" : "The set of supported scopes, with translations.<br><br><p>Scopes may be
 entered as simple strings or pipe-separated strings representing the internal scope name, locale,
 and localized description.</p><p>For example: <code>read|en|Permission to view email messages in
 your account</code></p><p>Locale strings are in the format: <code>language_country_variant</code>,
 for example <code>en</code>, <code>en_GB</code>, or <code>en_US_WIN</code>.</p><p>If the locale and
 pipe is omitted, the description is displayed to all users that have undefined locales.</p><p>If
 the description is also omitted, nothing is displayed on the consent page for the scope. For example
 specifying <code>read|</code> would allow the scope read to be used by the client, but would not
 display it to the user on the consent page when requested.</p>",
          "propertyOrder" : 130,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "supportedSubjectTypes" : {
          "title" : "Subject Types supported",
          "description" : "List of subject types supported. Valid values are:<ul><li><code>public</
code> - Each client receives the same subject (<code>sub</code>) value.</li><li><code>pairwise</code>
 - Each client receives a different subject (<code>sub</code>) value, to prevent correlation between
 clients.</li></ul>",
          "propertyOrder" : 150,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        }
      }
    },
    "coreOIDCConfig" : {
      "type" : "object",
      "title" : "OpenID Connect",
      "propertyOrder" : 3,
      "properties" : {
        "supportedIDTokenEncryptionAlgorithms" : {
          "title" : "ID Token Encryption Algorithms supported",
          "description" : "Encryption algorithms supported to encrypt OpenID Connect ID tokens
 in order to hide its contents.<br><br>OpenAM supports the following ID token encryption
 algorithms:<ul><li><code>RSA-OAEP</code> - RSA with Optimal Asymmetric Encryption Padding (OAEP)
 with SHA-1 and MGF-1.</li><li><code>RSA-OAEP-256</code> - RSA with OAEP with SHA-256 and MGF-1.</
li><li><code>A128KW</code> - AES Key Wrapping with 128-bit key derived from the client secret.</
li><li><code>RSA1_5</code> - RSA with PKCS#1 v1.5 padding.</li><li><code>A256KW</code> - AES
 Key Wrapping with 256-bit key derived from the client secret.</li><li><code>dir</code> - Direct
 encryption with AES using the hashed client secret.</li><li><code>A192KW</code> - AES Key Wrapping
 with 192-bit key derived from the client secret.</li></ul>",
          "propertyOrder" : 170,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "jwtTokenLifetime" : {
          "title" : "OpenID Connect JWT Token Lifetime (seconds)",
```


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```
          "description" : "The amount of time the JWT will be valid for, in seconds.",
          "propertyOrder" : 210,
          "required" : false,
          "type" : "integer",
          "exampleValue" : ""
        },
        "supportedIDTokenEncryptionMethods" : {
          "title" : "ID Token Encryption Methods supported",
          "description" : "Encryption methods supported to encrypt OpenID Connect ID tokens
 in order to hide its contents.<br><br>OpenAM supports the following ID token encryption
 algorithms:<ul><li><code>A128GCM</code>, <code>A192GCM</code>, and <code>A256GCM</code> - AES
 in Galois Counter Mode (GCM) authenticated encryption mode.</li><li><code>A128CBC-HS256</code>,
 <code>A192CBC-HS384</code>, and <code>A256CBC-HS512</code> - AES encryption in CBC mode, with HMAC-
SHA-2 for integrity.</li></ul>",
          "propertyOrder" : 180,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "supportedIDTokenSigningAlgorithms" : {
          "title" : "ID Token Signing Algorithms supported",
          "description" : "Algorithms supported to sign OpenID Connect <code>id_tokens</
code>.<p><p>OpenAM supports signing algorithms listed in JSON Web Algorithms (JWA): <a href=\"http://
tools.ietf.org/html/draft-ietf-jose-json-web-algorithms#section-3.1\">\"alg\" (Algorithm) Header
 Parameter Values for JWS</a>:<ul><li><code>HS256</code> - HMAC with SHA-256.</li><li><code>HS384</
code> - HMAC with SHA-384.</li><li><code>HS512</code> - HMAC with SHA-512.</li><li><code>ES256</code>
 - ECDSA with SHA-256 and NIST standard P-256 elliptic curve.</li><li><code>ES384</code> - ECDSA with
 SHA-384 and NIST standard P-384 elliptic curve.</li><li><code>ES512</code> - ECDSA with SHA-512 and
 NIST standard P-521 elliptic curve.</li><li><code>RS256</code> - RSASSA-PKCS-v1_5 using SHA-256.</
li></ul>",
          "propertyOrder" : 160,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "supportedClaims" : {
          "title" : "Supported Claims",
          "description" : "Set of claims supported by the OpenID Connect <code>/oauth2/userinfo</
code> endpoint, with translations.<br><br>Claims may be entered as simple strings or pipe separated
 strings representing the internal claim name, locale, and localized description.<p><p>For example:
 <code>name|en|Your full name.</code>.<p>Locale strings are in the format: <code>language +
 \"_\" + country + \"_\" + variant</code>, for example <code>en</code>, <code>en_GB</code>, or
 <code>en_US_WIN</code>. If the locale and pipe is omitted, the description is displayed to all users
 that have undefined locales.<p><p>If the description is also omitted, nothing is displayed on the
 consent page for the claim. For example specifying <code>family_name|</code> would allow the claim
 <code>family_name</code> to be used by the client, but would not display it to the user on the
 consent page when requested.",
          "propertyOrder" : 190,
          "required" : false,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
```


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```
          "exampleValue" : ""
        },
        "oidcClaimsScript" : {
          "title" : "OIDC Claims Script",
          "description" : "The script that is run when issuing an ID token or making a request to the
 <i>userinfo</i> endpoint during OpenID requests.<p><p>The script gathers the scopes and populates
 claims, and has access to the access token, the user's identity and, if available, the user's
 session.",
          "propertyOrder" : 80,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "tokenEncryptionSigningKeyAlias" : {
          "title" : "Token Encryption RSA Public/Private Key Pair Alias",
          "description" : "The list of public/private key pairs used for the RSA algorithms (RSA1_5/
RSA-OAEP/RSA-OAEP-256). Add an entry to specify an alias for a specific RSA algorithm, for example
 <code>RSA1_5|rsa1_5Alias</code>.<br><br>Each of the public/private key pairs will be retrieved from
 the keystore referenced by the property <code>com.sun.identity.saml.xmlsig.keystore</code>.",
          "propertyOrder" : 441,
          "required" : false,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        }
      }
    },
    "deviceCodeConfig" : {
      "type" : "object",
      "title" : "Device Flow",
      "propertyOrder" : 5,
      "properties" : {
        "completionUrl" : {
          "title" : "Device Completion URL",
          "description" : "The URL that the user will be sent to on completion of their OAuth 2.0
 login and consent when using the device code flow.",
          "propertyOrder" : 380,
          "required" : false,
          "type" : "string",
          "exampleValue" : ""
        },
        "devicePollInterval" : {
          "title" : "Device Polling Interval",
          "description" : "The polling frequency for devices waiting for tokens when using the device
 code flow.",
          "propertyOrder" : 400,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "verificationUrl" : {
          "title" : "Verification URL",
          "description" : "The URL that the user will be instructed to visit to complete their OAuth
 2.0 login and consent when using the device code flow.",
          "propertyOrder" : 370,
          "required" : false,
          "type" : "string",
```


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```
          "exampleValue" : ""
        },
        "deviceCodeLifetime" : {
          "title" : "Device Code Lifetime (seconds)",
          "description" : "The lifetime of the device code, in seconds.",
          "propertyOrder" : 390,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        }
      }
    },
    "coreOAuth2Config" : {
      "type" : "object",
      "title" : "Core",
      "propertyOrder" : 0,
      "properties" : {
        "codeLifetime" : {
          "title" : "Authorization Code Lifetime (seconds)",
          "description" : "The time an authorization code is valid for, in seconds.",
          "propertyOrder" : 10,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "statelessTokensEnabled" : {
          "title" : "Use Stateless Access & Refresh Tokens",
          "description" : "When enabled, OpenAM issues access and refresh tokens that can be inspected
by resource servers.",
          "propertyOrder" : 3,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "refreshTokenLifetime" : {
          "title" : "Refresh Token Lifetime (seconds)",
          "description" : "The time in seconds a refresh token is valid for. If this field is set to
<code>-1</code>, the token will never expire.",
          "propertyOrder" : 20,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "accessTokenLifetime" : {
          "title" : "Access Token Lifetime (seconds)",
          "description" : "The time an access token is valid for, in seconds.",
          "propertyOrder" : 30,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "issueRefreshTokenOnRefreshedToken" : {
          "title" : "Issue Refresh Tokens on Refreshing Access Tokens",
          "description" : "Whether to issue a refresh token when refreshing an access token.",
          "propertyOrder" : 50,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
```


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```
        "issueRefreshToken" : {
          "title" : "Issue Refresh Tokens",
          "description" : "Whether to issue a refresh token when returning an access token.",
          "propertyOrder" : 40,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        }
      }
    }
  }
}
```

1.94.2. Global Operations

Resource path: `/global-config/services/oauth-oidc`

Resource version: `1.0`

1.94.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action OAuth2Provider --global --actionName getAllTypes
```

1.94.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action OAuth2Provider --global --actionName getCreatableTypes
```

1.94.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action OAuth2Provider --global --actionName nextdescendents
```

1.94.2.4. read

Usage:

```
am> read OAuth2Provider --global
```


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1.94.2.5. update

Usage:

```
am> update OAuth2Provider --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "blacklistPollInterval" : {
      "title" : "Blacklist Poll Interval (seconds)",
      "description" : "How frequently to poll for token blacklist changes from other servers, in
 seconds.<br><br>How often each server will poll the CTS for token blacklist changes from other
 servers. This is used to maintain a highly compressed view of the overall current token blacklist
 improving performance. A lower number will reduce the delay for blacklisted tokens to propagate to
 all servers at the cost of increased CTS load. Set to 0 to disable this feature completely.",
      "propertyOrder" : 1,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "agentIdTokenSigningKeyAlias" : {
      "title" : "ID Token Signing Key Alias for Agent Clients",
      "description" : "The alias for the RSA key that should be used signing ID tokens for Agent
 OAuth2 Clients",
      "propertyOrder" : 4,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "blacklistPurgeDelay" : {
      "title" : "Blacklist Purge Delay (minutes)",
      "description" : "Length of time to blacklist tokens beyond their expiry time.<br><br>Allows
 additional time to account for clock skew to ensure that a token has expired before it is removed
 from the blacklist.",
      "propertyOrder" : 2,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "statelessGrantTokenUpgradeCompatibilityMode" : {
      "title" : "Stateless Grant Token Upgrade Compatibility Mode",
      "description" : "Enable OpenAM to consume and create stateless OAuth 2.0 tokens in two different
 formats simultaneously.<br><br>Enable this option when upgrading OpenAM to allow the new instance
 to create and consume stateless OAuth 2.0 tokens in both the previous format, and the new format.
 Disable this option once all OpenAM instances in the cluster have been upgraded.",
      "propertyOrder" : 5,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "blacklistCacheSize" : {
```


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```
      "title" : "Token Blacklist Cache Size",
      "description" : "Number of blacklisted tokens to cache in memory to speed up blacklist checks
and reduce load on the CTS.",
      "propertyOrder" : 0,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "idTokenAuthenticitySecret" : {
      "title" : "Authenticity Secret",
      "description" : "A secret to use when signing data that will be sent back to AM so that
authenticity can be assured when they are presented back to OpenAM.",
      "propertyOrder" : 3,
      "required" : true,
      "type" : "string",
      "format" : "password",
      "exampleValue" : ""
    },
    "defaults" : {
      "properties" : {
        "coreOAuth2Config" : {
          "type" : "object",
          "title" : "Core",
          "propertyOrder" : 0,
          "properties" : {
            "accessTokenLifetime" : {
              "title" : "Access Token Lifetime (seconds)",
              "description" : "The time an access token is valid for, in seconds.",
              "propertyOrder" : 30,
              "required" : true,
              "type" : "integer",
              "exampleValue" : ""
            },
            "issueRefreshTokenOnRefreshedToken" : {
              "title" : "Issue Refresh Tokens on Refreshing Access Tokens",
              "description" : "Whether to issue a refresh token when refreshing an access token.",
              "propertyOrder" : 50,
              "required" : true,
              "type" : "boolean",
              "exampleValue" : ""
            },
            "codeLifetime" : {
              "title" : "Authorization Code Lifetime (seconds)",
              "description" : "The time an authorization code is valid for, in seconds.",
              "propertyOrder" : 10,
              "required" : true,
              "type" : "integer",
              "exampleValue" : ""
            },
            "issueRefreshToken" : {
              "title" : "Issue Refresh Tokens",
              "description" : "Whether to issue a refresh token when returning an access token.",
              "propertyOrder" : 40,
              "required" : true,
              "type" : "boolean",
              "exampleValue" : ""
            },
            "refreshTokenLifetime" : {
              "title" : "Refresh Token Lifetime (seconds)",
```


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```
              "description" : "The time in seconds a refresh token is valid for. If this field is set
 to <code>-1</code>, the token will never expire.",
              "propertyOrder" : 20,
              "required" : true,
              "type" : "integer",
              "exampleValue" : ""
            },
            "statelessTokensEnabled" : {
              "title" : "Use Stateless Access & Refresh Tokens",
              "description" : "When enabled, OpenAM issues access and refresh tokens that can be
 inspected by resource servers.",
              "propertyOrder" : 3,
              "required" : true,
              "type" : "boolean",
              "exampleValue" : ""
            }
          }
        },
        "consent" : {
          "type" : "object",
          "title" : "Consent",
          "propertyOrder" : 6,
          "properties" : {
            "supportedRcsResponseSigningAlgorithms" : {
              "title" : "Remote Consent Service Response Signing Algorithms Supported",
              "description" : "Algorithms supported to verify signed consent_response JWT from
 Remote Consent Services.<br><br>OpenAM supports signing algorithms listed in JSON Web Algorithms
 (JWA): <a href=\"http://tools.ietf.org/html/draft-ietf-jose-json-web-algorithms#section-3.1\">
\"alg\" (Algorithm) Header Parameter Values for JWS</a>:<ul><li><code>HS256</code> - HMAC
 with SHA-256.</li><li><code>HS384</code> - HMAC with SHA-384.</li><li><code>HS512</code> -
 HMAC with SHA-512.</li><li><code>ES256</code> - ECDSA with SHA-256 and NIST standard P-256
 elliptic curve.</li><li><code>ES384</code> - ECDSA with SHA-384 and NIST standard P-384 elliptic
 curve.</li><li><code>ES512</code> - ECDSA with SHA-512 and NIST standard P-521 elliptic curve.</
li><li><code>RS256</code> - RSASSA-PKCS-v1_5 using SHA-256.</li></ul>",
              "propertyOrder" : 452,
              "required" : true,
              "items" : {
                "type" : "string"
              },
              "type" : "array",
              "exampleValue" : ""
            },
            "supportedRcsResponseEncryptionAlgorithms" : {
              "title" : "Remote Consent Service Response Encryption Algorithms Supported",
              "description" : "Encryption algorithms supported to decrypt Remote Consent Service
 responses.<br><br>OpenAM supports the following encryption algorithms:<ul><li><code>RSA1_5</code> -
 RSA with PKCS#1 v1.5 padding.</li><li><code>RSA-OAEP</code> - RSA with Optimal Asymmetric Encryption
 Padding (OAEP) with SHA-1 and MGF-1.</li><li><code>RSA-OAEP-256</code> - RSA with OAEP with SHA-256
 and MGF-1.</li><li><code>A128KW</code> - AES Key Wrapping with 128-bit key derived from the client
 secret.</li><li><code>A192KW</code> - AES Key Wrapping with 192-bit key derived from the client
 secret.</li><li><code>A256KW</code> - AES Key Wrapping with 256-bit key derived from the client
 secret.</li><li><code>dir</code> - Direct encryption with AES using the hashed client secret.</li></
ul>",
              "propertyOrder" : 453,
              "required" : true,
              "items" : {
                "type" : "string"
              },
              "type" : "array",
```


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```
              "exampleValue" : ""
            },
            "supportedRcsRequestEncryptionMethods" : {
              "title" : "Remote Consent Service Request Encryption Methods Supported",
              "description" : "Encryption methods supported to encrypt Remote Consent Service
 requests.<br><br>OpenAM supports the following encryption methods:<ul><li><code>A128GCM</code>,
 <code>A192GCM</code>, and <code>A256GCM</code> - AES in Galois Counter Mode (GCM) authenticated
 encryption mode.</li><li><code>A128CBC-HS256</code>, <code>A192CBC-HS384</code>, and <code>A256CBC-
HS512</code> - AES encryption in CBC mode, with HMAC-SHA-2 for integrity.</li></ul>",
              "propertyOrder" : 451,
              "required" : true,
              "items" : {
                "type" : "string"
              },
              "type" : "array",
              "exampleValue" : ""
            },
            "supportedRcsRequestSigningAlgorithms" : {
              "title" : "Remote Consent Service Request Signing Algorithms Supported",
              "description" : "Algorithms supported to sign consent_request JWTs for Remote
 Consent Services.<br><br>OpenAM supports signing algorithms listed in JSON Web Algorithms
 (JWA): <a href=\"http://tools.ietf.org/html/draft-ietf-jose-json-web-algorithms#section-3.1\">
\"alg\" (Algorithm) Header Parameter Values for JWS</a>:<ul><li><code>HS256</code> - HMAC
 with SHA-256.</li><li><code>HS384</code> - HMAC with SHA-384.</li><li><code>HS512</code> -
 HMAC with SHA-512.</li><li><code>ES256</code> - ECDSA with SHA-256 and NIST standard P-256
 elliptic curve.</li><li><code>ES384</code> - ECDSA with SHA-384 and NIST standard P-384 elliptic
 curve.</li><li><code>ES512</code> - ECDSA with SHA-512 and NIST standard P-521 elliptic curve.</
li><li><code>RS256</code> - RSASSA-PKCS-v1_5 using SHA-256.</li></ul>",
              "propertyOrder" : 449,
              "required" : true,
              "items" : {
                "type" : "string"
              },
              "type" : "array",
              "exampleValue" : ""
            },
            "clientsCanSkipConsent" : {
              "title" : "Allow Clients to Skip Consent",
              "description" : "If enabled, clients may be configured so that the resource owner will
 not be asked for consent during authorization flows.",
              "propertyOrder" : 420,
              "required" : true,
              "type" : "boolean",
              "exampleValue" : ""
            },
            "supportedRcsResponseEncryptionMethods" : {
              "title" : "Remote Consent Service Response Encryption Methods Supported",
              "description" : "Encryption methods supported to decrypt Remote Consent Service
 responses.<br><br>OpenAM supports the following encryption methods:<ul><li><code>A128GCM</code>,
 <code>A192GCM</code>, and <code>A256GCM</code> - AES in Galois Counter Mode (GCM) authenticated
 encryption mode.</li><li><code>A128CBC-HS256</code>, <code>A192CBC-HS384</code>, and <code>A256CBC-
HS512</code> - AES encryption in CBC mode, with HMAC-SHA-2 for integrity.</li></ul>",
              "propertyOrder" : 454,
              "required" : true,
              "items" : {
                "type" : "string"
              },
              "type" : "array",
              "exampleValue" : ""
```


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```
            },
            "supportedRcsRequestEncryptionAlgorithms" : {
              "title" : "Remote Consent Service Request Encryption Algorithms Supported",
              "description" : "Encryption algorithms supported to encrypt Remote Consent Service
 requests.<br><br>OpenAM supports the following encryption algorithms:<ul><li><code>RSA1_5</code> -
 RSA with PKCS#1 v1.5 padding.</li><li><code>RSA-OAEP</code> - RSA with Optimal Asymmetric Encryption
 Padding (OAEP) with SHA-1 and MGF-1.</li><li><code>RSA-OAEP-256</code> - RSA with OAEP with SHA-256
 and MGF-1.</li><li><code>A128KW</code> - AES Key Wrapping with 128-bit key derived from the client
 secret.</li><li><code>A192KW</code> - AES Key Wrapping with 192-bit key derived from the client
 secret.</li><li><code>A256KW</code> - AES Key Wrapping with 256-bit key derived from the client
 secret.</li><li><code>dir</code> - Direct encryption with AES using the hashed client secret.</li></
ul>",
              "propertyOrder" : 450,
              "required" : true,
              "items" : {
                "type" : "string"
              },
              "type" : "array",
              "exampleValue" : ""
            },
            "remoteConsentServiceId" : {
              "title" : "Remote Consent Service ID",
              "description" : "The ID of an existing remote consent service agent.",
              "propertyOrder" : 448,
              "required" : false,
              "type" : "string",
              "exampleValue" : ""
            },
            "savedConsentAttribute" : {
              "title" : "Saved Consent Attribute Name",
              "description" : "Name of a multi-valued attribute on resource owner profiles where
 OpenAM can save authorization consent decisions.<p><p>When the resource owner chooses to save the
 decision to authorize access for a client application, then OpenAM updates the resource owner's
 profile to avoid having to prompt the resource owner to grant authorization when the client issues
 subsequent authorization requests.",
              "propertyOrder" : 110,
              "required" : false,
              "type" : "string",
              "exampleValue" : ""
            },
            "enableRemoteConsent" : {
              "title" : "Enable Remote Consent",
              "description" : "",
              "propertyOrder" : 447,
              "required" : true,
              "type" : "boolean",
              "exampleValue" : ""
            }
          }
        },
        "advancedOAuth2Config" : {
          "type" : "object",
          "title" : "Advanced",
          "propertyOrder" : 1,
          "properties" : {
            "tokenSigningAlgorithm" : {
              "title" : "OAuth2 Token Signing Algorithm",
              "description" : "Algorithm used to sign stateless OAuth 2.0 tokens in order to
 detect tampering.<br><br>OpenAM supports signing algorithms listed in JSON Web Algorithms
```


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```
 (JWA): <a href=\"http://tools.ietf.org/html/draft-ietf-jose-json-web-algorithms#section-3.1\">
\"alg\" (Algorithm) Header Parameter Values for JWS</a>:<ul><li><code>HS256</code> - HMAC
 with SHA-256.</li><li><code>HS384</code> - HMAC with SHA-384.</li><li><code>HS512</code> -
 HMAC with SHA-512.</li><li><code>ES256</code> - ECDSA with SHA-256 and NIST standard P-256
 elliptic curve.</li><li><code>ES384</code> - ECDSA with SHA-384 and NIST standard P-384 elliptic
 curve.</li><li><code>ES512</code> - ECDSA with SHA-512 and NIST standard P-521 elliptic curve.</
li><li><code>RS256</code> - RSASSA-PKCS-v1_5 using SHA-256.</li></ul>",
              "propertyOrder" : 220,
              "required" : true,
              "type" : "string",
              "exampleValue" : ""
            },
            "moduleMessageEnabledInPasswordGrant" : {
              "title" : "Enable Auth Module Messages for Password Credentials Grant",
              "description" : "If enabled, authentication module failure messages are used to create
 Resource Owner Password Credentials Grant failure messages. If disabled, a standard authentication
 failed message is used.<br><br>The Password Grant Type requires the <code>grant_type=password</code>
 parameter.",
              "propertyOrder" : 440,
              "required" : true,
              "type" : "boolean",
              "exampleValue" : ""
            },
            "codeVerifierEnforced" : {
              "title" : "Code Verifier Parameter Required",
              "description" : "If enabled, requests using the authorization code grant require a
 <code>code_challenge</code> attribute.<br><br>For more information, read the <a href=\"https://
tools.ietf.org/html/draft-ietf-oauth-spop-12\">draft specification for this feature</a>.",
              "propertyOrder" : 270,
              "required" : true,
              "type" : "boolean",
              "exampleValue" : ""
            },
            "defaultScopes" : {
              "title" : "Default Client Scopes",
              "description" : "List of scopes a client will be granted if they request registration
 without specifying which scopes they want. Default scopes are NOT auto-granted to clients created
 through the OpenAM console.",
              "propertyOrder" : 200,
              "required" : false,
              "items" : {
                "type" : "string"
              },
              "type" : "array",
              "exampleValue" : ""
            },
            "supportedScopes" : {
              "title" : "Supported Scopes",
              "description" : "The set of supported scopes, with translations.<br><br><p>Scopes may
 be entered as simple strings or pipe-separated strings representing the internal scope name, locale,
 and localized description.</p><p>For example: <code>read|en|Permission to view email messages in
 your account</code></p><p>Locale strings are in the format: <code>language_country_variant</code>,
 for example <code>en</code>, <code>en_GB</code>, or <code>en_US_WIN</code>.</p><p>If the locale and
 pipe is omitted, the description is displayed to all users that have undefined locales.</p><p>If
 the description is also omitted, nothing is displayed on the consent page for the scope. For example
 specifying <code>read|</code> would allow the scope read to be used by the client, but would not
 display it to the user on the consent page when requested.</p>",
              "propertyOrder" : 130,
              "required" : true,
```


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```
              "items" : {
                "type" : "string"
              },
              "type" : "array",
              "exampleValue" : ""
            },
            "keypairName" : {
              "title" : "Token Signing RSA Public/Private Key Pair",
              "description" : "The public/private key pair used by RS256.<br><br>The
 public/private key pair will be retrieved from the keystore referenced by the property
 <code>com.sun.identity.saml.xmlsig.keystore</code>.",
              "propertyOrder" : 240,
              "required" : false,
              "type" : "string",
              "exampleValue" : ""
            },
            "tokenSigningECDSAKeyAlias" : {
              "title" : "Token Signing ECDSA Public/Private Key Pair Alias",
              "description" : "The list of public/private key pairs used for the elliptic
 curve algorithms (ES256/ES384/ES512). Add an entry to specify an alias for a specific
 elliptic curve algorithm, for example <code>ES256|es256Alias</code>.<br><br>Each of the
 public/private key pairs will be retrieved from the keystore referenced by the property
 <code>com.sun.identity.saml.xmlsig.keystore</code>.",
              "propertyOrder" : 241,
              "required" : false,
              "items" : {
                "type" : "string"
              },
              "type" : "array",
              "exampleValue" : ""
            },
            "responseTypeClasses" : {
              "title" : "Response Type Plugins",
              "description" : "List of plugins that handle the valid <code>response_type</code>
 values.<br><br>OAuth 2.0 clients pass response types as parameters to the OAuth 2.0 Authorization
 endpoint (<code>/oauth2/authorize</code>) to indicate which grant type is requested from the
 provider. For example, the client passes <code>code</code> when requesting an authorization code,
 and <code>token</code> when requesting an access token.<p><p>Values in this list take the form
 <code>response-type|plugin-class-name</code>.",
              "propertyOrder" : 90,
              "required" : true,
              "items" : {
                "type" : "string"
              },
              "type" : "array",
              "exampleValue" : ""
            },
            "customLoginUrlTemplate" : {
              "title" : "Custom Login URL Template",
              "description" : "Custom URL for handling login, to override the default OpenAM login
 page.<br><br>Supports Freemarker syntax, with the following variables:<table><tr><th>Variable</
th><th>Description</th></tr><tr><td><code>gotoUrl</code></td><td><p>The URL to redirect to after
 login.</p></td></tr><tr><td><code>acrValues</code></td><td><p>The Authentication Context Class
 Reference (acr) values for the authorization request.</p></td></tr><tr><td><code>realm</code></
td><td><p>The OpenAM realm the authorization request was made on.</p></td></tr><tr><td><code>module</
code></td><td><p>The name of the OpenAM authentication module requested to perform resource
 owner authentication.</p></td></tr><tr><td><code>service</code></td><td><p>The name of the
 OpenAM authentication chain requested to perform resource owner authentication.</p></td></
tr><tr><td><code>locale</code></td><td><p>A space-separated list of locales, ordered by
```


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```
 preference.</p></td></tr></table>The following example template redirects users to a non-OpenAM
 front end to handle login, which will then redirect back to the <code>/oauth2/authorize</code>
 endpoint with any required parameters:<p> <code>http://mylogin.com/login?goto=${goto}&lt;#if
 acrValues??&gt;&amp;acr_values=${acrValues}&lt;&#x2F;#if&gt;&lt;#if realm??&gt;&amp;realm=
${realm}&lt;&#x2F;#if&gt;&lt;#if module??&gt;&amp;module=${module}&lt;&#x2F;#if&gt;&lt;#if
 service??&gt;&amp;service=${service}&lt;&#x2F;#if&gt;&lt;#if locale??&gt;&amp;locale=
${locale}&lt;&#x2F;#if&gt;</code><br><b>NOTE</b>: Default OpenAM login page is constructed using
 \"Base URL Source\" service.",
              "propertyOrder" : 60,
              "required" : false,
              "type" : "string",
              "exampleValue" : ""
            },
            "scopeImplementationClass" : {
              "title" : "Scope Implementation Class",
              "description" : "The class that contains the required scope implementation, must
 implement the <code>org.forgerock.oauth2.core.ScopeValidator</code> interface.",
              "propertyOrder" : 70,
              "required" : true,
              "type" : "string",
              "exampleValue" : ""
            },
            "tokenCompressionEnabled" : {
              "title" : "Stateless Token Compression",
              "description" : "Whether stateless access and refresh tokens should be compressed.",
              "propertyOrder" : 223,
              "required" : true,
              "type" : "boolean",
              "exampleValue" : ""
            },
            "hashSalt" : {
              "title" : "Subject Identifier Hash Salt",
              "description" : "If <i>pairwise</i> subject types are supported, it is <em>STRONGLY
 RECOMMENDED</em> to change this value. It is used in the salting of hashes for returning
 specific <code>sub</code> claims to individuals using the same <code>request_uri</code> or
 <code>sector_identifier_uri</code>.",
              "propertyOrder" : 260,
              "required" : false,
              "type" : "string",
              "exampleValue" : "changeme"
            },
            "createdTimestampAttribute" : {
              "title" : "Created Timestamp Attribute Name",
              "description" : "The identity Data Store attribute used to return created timestamp
 values.",
              "propertyOrder" : 350,
              "required" : false,
              "type" : "string",
              "exampleValue" : ""
            },
            "modifiedTimestampAttribute" : {
              "title" : "Modified Timestamp Attribute Name",
              "description" : "The identity Data Store attribute used to return modified timestamp
 values.",
              "propertyOrder" : 340,
              "required" : false,
              "type" : "string",
              "exampleValue" : ""
            },
```


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```
            "tokenSigningHmacSharedSecret" : {
              "title" : "Token Signing HMAC Shared Secret",
              "description" : "Base64-encoded key used by HS256, HS384 and HS512.",
              "propertyOrder" : 230,
              "required" : true,
              "type" : "string",
              "format" : "password",
              "exampleValue" : ""
            },
            "supportedSubjectTypes" : {
              "title" : "Subject Types supported",
              "description" : "List of subject types supported. Valid values
 are:<ul><li><code>public</code> - Each client receives the same subject (<code>sub</code>) value.</
li><li><code>pairwise</code> - Each client receives a different subject (<code>sub</code>) value, to
 prevent correlation between clients.</li></ul>",
              "propertyOrder" : 150,
              "required" : true,
              "items" : {
                "type" : "string"
              },
              "type" : "array",
              "exampleValue" : ""
            },
            "authenticationAttributes" : {
              "title" : "User Profile Attribute(s) the Resource Owner is Authenticated On",
              "description" : "Names of profile attributes that resource owners use to log in. You can
 add others to the default, for example <code>mail</code>.",
              "propertyOrder" : 100,
              "required" : true,
              "items" : {
                "type" : "string"
              },
              "type" : "array",
              "exampleValue" : ""
            },
            "displayNameAttribute" : {
              "title" : "User Display Name attribute",
              "description" : "The profile attribute that contains the name to be displayed for the
 user on the consent page.",
              "propertyOrder" : 120,
              "required" : true,
              "type" : "string",
              "exampleValue" : ""
            }
          }
        },
        "advancedOIDCConfig" : {
          "type" : "object",
          "title" : "Advanced OpenID Connect",
          "propertyOrder" : 4,
          "properties" : {
            "idTokenInfoClientAuthenticationEnabled" : {
              "title" : "Idtokeninfo Endpoint Requires Client Authentication",
              "description" : "When enabled, the <code>/oauth2/idtokeninfo</code> endpoint requires
 client authentication if the signing algorithm is set to <code>HS256</code>, <code>HS384</code>, or
 <code>HS512</code>.",
              "propertyOrder" : 225,
              "required" : true,
              "type" : "boolean",
```


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```
              "exampleValue" : ""
            },
            "defaultACR" : {
              "title" : "OpenID Connect Default acr Claim",
              "description" : "Default value to use as the <code>acr</code> claim in an OpenID Connect
 ID Token when using the default authentication chain.",
              "propertyOrder" : 320,
              "required" : false,
              "type" : "string",
              "exampleValue" : ""
            },
            "supportedRequestParameterEncryptionEnc" : {
              "title" : "Request Parameter Encryption Methods Supported",
              "description" : "Encryption methods supported to decrypt Request
 parameter.<br><br>OpenAM supports the following Request parameter encryption
 algorithms:<ul><li><code>A128GCM</code>, <code>A192GCM</code>, and <code>A256GCM</code> - AES
 in Galois Counter Mode (GCM) authenticated encryption mode.</li><li><code>A128CBC-HS256</code>,
 <code>A192CBC-HS384</code>, and <code>A256CBC-HS512</code> - AES encryption in CBC mode, with HMAC-
SHA-2 for integrity.</li></ul>",
              "propertyOrder" : 444,
              "required" : true,
              "items" : {
                "type" : "string"
              },
              "type" : "array",
              "exampleValue" : ""
            },
            "jkwsURI" : {
              "title" : "Remote JSON Web Key URL",
              "description" : "The Remote URL where the providers JSON Web Key can be
 retrieved.<p><p>If this setting is not configured, then OpenAM provides a local URL to access the
 public key of the private key used to sign ID tokens.",
              "propertyOrder" : 140,
              "required" : false,
              "type" : "string",
              "exampleValue" : ""
            },
            "alwaysAddClaimsToToken" : {
              "title" : "Always Return Claims in ID Tokens",
              "description" : "If enabled, include scope-derived claims in the <code>id_token</
code>, even if an access token is also returned that could provide access to get the claims from the
 <code>userinfo</code> endpoint.<br><br>If not enabled, if an access token is requested the client
 must use it to access the <code>userinfo</code> endpoint for scope-derived claims, as they will not
 be included in the ID token.",
              "propertyOrder" : 360,
              "required" : true,
              "type" : "boolean",
              "exampleValue" : ""
            },
            "loaMapping" : {
              "title" : "OpenID Connect acr_values to Auth Chain Mapping",
              "description" : "Maps OpenID Connect ACR values to authentication chains. For more
 details, see the <a href=\"http://openid.net/specs/openid-connect-core-1_0.html#AuthRequest\" target=
\"_blank\">acr_values parameter</a> in the OpenID Connect authentication request specification.",
              "propertyOrder" : 310,
              "required" : false,
              "patternProperties" : {
                ".*" : { }
              },
```


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```
              "type" : "object",
              "exampleValue" : ""
            },
            "storeOpsTokens" : {
              "title" : "Store Ops Tokens",
              "description" : "Whether OpenAM will store the <i>ops</i> tokens corresponding to OpenID
 Connect sessions in the CTS store. Note that session management related endpoints will not work when
 this setting is disabled.",
              "propertyOrder" : 410,
              "required" : true,
              "type" : "boolean",
              "exampleValue" : ""
            },
            "amrMappings" : {
              "title" : "OpenID Connect id_token amr Values to Auth Module Mappings",
              "description" : "Specify <code>amr</code> values to be returned in the OpenID Connect
 <code>id_token</code>. Once authentication has completed, the authentication modules that were used
 from the authentication service will be mapped to the <code>amr</code> values. If you do not require
 <code>amr</code> values, or are not providing OpenID Connect tokens, leave this field blank.",
              "propertyOrder" : 330,
              "required" : false,
              "patternProperties" : {
                ".*" : { }
              },
              "type" : "object",
              "exampleValue" : ""
            },
            "claimsParameterSupported" : {
              "title" : "Enable \"claims_parameter_supported\"",
              "description" : "If enabled, clients will be able to request individual claims using
 the <code>claims</code> request parameter, as per <a href=\"http://openid.net/specs/openid-connect-
core-1_0.html#ClaimsParameter\" target=\"_blank\">section 5.5 of the OpenID Connect specification</
a>.",
              "propertyOrder" : 250,
              "required" : true,
              "type" : "boolean",
              "exampleValue" : ""
            },
            "authorisedOpenIdConnectSSOClients" : {
              "title" : "Authorized OIDC SSO Clients",
              "description" : "Clients authorized to use OpenID Connect ID tokens as SSO
 Tokens.<br><br>Allows clients to act with the full authority of the user. Grant this permission only
 to trusted clients.",
              "propertyOrder" : 446,
              "required" : true,
              "items" : {
                "type" : "string"
              },
              "type" : "array",
              "exampleValue" : ""
            },
            "supportedTokenEndpointAuthenticationSigningAlgorithms" : {
              "title" : "Supported Token Endpoint JWS Signing Algorithms.",
              "description" : "Supported JWS Signing Algorithms for 'private_key_jwt' JWT based
 authentication method.",
              "propertyOrder" : 445,
              "required" : true,
              "items" : {
                "type" : "string"
```


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```
              },
              "type" : "array",
              "exampleValue" : ""
            },
            "supportedRequestParameterSigningAlgorithms" : {
              "title" : "Request Parameter Signing Algorithms Supported",
              "description" : "Algorithms supported to verify signature of Request parameterOpenAM
 supports signing algorithms listed in JSON Web Algorithms (JWA): <a href=\"http://tools.ietf.org/
html/draft-ietf-jose-json-web-algorithms#section-3.1\">\"alg\" (Algorithm) Header Parameter Values
 for JWS</a>:<ul><li><code>HS256</code> - HMAC with SHA-256.</li><li><code>HS384</code> - HMAC with
 SHA-384.</li><li><code>HS512</code> - HMAC with SHA-512.</li><li><code>ES256</code> - ECDSA with
 SHA-256 and NIST standard P-256 elliptic curve.</li><li><code>ES384</code> - ECDSA with SHA-384 and
 NIST standard P-384 elliptic curve.</li><li><code>ES512</code> - ECDSA with SHA-512 and NIST standard
 P-521 elliptic curve.</li><li><code>RS256</code> - RSASSA-PKCS-v1_5 using SHA-256.</li></ul>",
              "propertyOrder" : 442,
              "required" : true,
              "items" : {
                "type" : "string"
              },
              "type" : "array",
              "exampleValue" : ""
            },
            "supportedRequestParameterEncryptionAlgorithms" : {
              "title" : "Request Parameter Encryption Algorithms Supported",
              "description" : "Encryption algorithms supported to decrypt Request
 parameter.<br><br>OpenAM supports the following ID token encryption algorithms:<ul><li><code>RSA-
OAEP</code> - RSA with Optimal Asymmetric Encryption Padding (OAEP) with SHA-1 and MGF-1.</
li><li><code>RSA-OAEP-256</code> - RSA with OAEP with SHA-256 and MGF-1.</li><li><code>A128KW</code>
 - AES Key Wrapping with 128-bit key derived from the client secret.</li><li><code>RSA1_5</code> -
 RSA with PKCS#1 v1.5 padding.</li><li><code>A256KW</code> - AES Key Wrapping with 256-bit key derived
 from the client secret.</li><li><code>dir</code> - Direct encryption with AES using the hashed client
 secret.</li><li><code>A192KW</code> - AES Key Wrapping with 192-bit key derived from the client
 secret.</li></ul>",
              "propertyOrder" : 443,
              "required" : true,
              "items" : {
                "type" : "string"
              },
              "type" : "array",
              "exampleValue" : ""
            }
          }
        },
        "clientDynamicRegistrationConfig" : {
          "type" : "object",
          "title" : "Client Dynamic Registration",
          "propertyOrder" : 2,
          "properties" : {
            "dynamicClientRegistrationScope" : {
              "title" : "Scope to give access to dynamic client registration",
              "description" : "Mandatory scope required when registering a new OAuth2 client.",
              "propertyOrder" : 455,
              "required" : true,
              "type" : "string",
              "exampleValue" : ""
            },
            "generateRegistrationAccessTokens" : {
              "title" : "Generate Registration Access Tokens",
```


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              "description" : "Whether to generate Registration Access Tokens for clients that
 register by using open dynamic client registration. Such tokens allow the client to access the <a
 href=\"http://openid.net/specs/openid-connect-registration-1_0.html#ClientConfigurationEndpoint\"
 target=\"_blank\">Client Configuration Endpoint</a> as per the OpenID Connect specification. This
 setting has no effect if Allow Open Dynamic Client Registration is disabled.",
              "propertyOrder" : 290,
              "required" : true,
              "type" : "boolean",
              "exampleValue" : ""
            },
            "requiredSoftwareStatementAttestedAttributes" : {
              "title" : "Required Software Statement Attested Attributes",
              "description" : "The client attributes that are required to be present in the software
 statement JWT when registering an OAuth 2.0 client dynamically. Only applies if Require Software
 Statements for Dynamic Client Registration is enabled.<br><br>Leave blank to allow any attributes to
 be present.",
              "propertyOrder" : 272,
              "required" : true,
              "items" : {
                "type" : "string"
              },
              "type" : "array",
              "exampleValue" : ""
            },
            "allowDynamicRegistration" : {
              "title" : "Allow Open Dynamic Client Registration",
              "description" : "Allow clients to register without an access token. If enabled, you
 should consider adding some form of rate limiting. For more information, see  <a href=\"http://
openid.net/specs/openid-connect-registration-1_0.html#ClientRegistration\" target=\"_blank\">Client
 Registration</a> in the OpenID Connect specification.",
              "propertyOrder" : 280,
              "required" : true,
              "type" : "boolean",
              "exampleValue" : ""
            },
            "dynamicClientRegistrationSoftwareStatementRequired" : {
              "title" : "Require Software Statement for Dynamic Client Registration",
              "description" : "When enabled, a software statement JWT containing at least the
 <code>iss</code> (issuer) claim must be provided when registering an OAuth 2.0 client dynamically.",
              "propertyOrder" : 271,
              "required" : true,
              "type" : "boolean",
              "exampleValue" : ""
            }
          }
        },
        "coreOIDCConfig" : {
          "type" : "object",
          "title" : "OpenID Connect",
          "propertyOrder" : 3,
          "properties" : {
            "jwtTokenLifetime" : {
              "title" : "OpenID Connect JWT Token Lifetime (seconds)",
              "description" : "The amount of time the JWT will be valid for, in seconds.",
              "propertyOrder" : 210,
              "required" : false,
              "type" : "integer",
              "exampleValue" : ""
            },
```


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```
            "supportedIDTokenEncryptionAlgorithms" : {
              "title" : "ID Token Encryption Algorithms supported",
              "description" : "Encryption algorithms supported to encrypt OpenID Connect ID
 tokens in order to hide its contents.<br><br>OpenAM supports the following ID token encryption
 algorithms:<ul><li><code>RSA-OAEP</code> - RSA with Optimal Asymmetric Encryption Padding (OAEP)
 with SHA-1 and MGF-1.</li><li><code>RSA-OAEP-256</code> - RSA with OAEP with SHA-256 and MGF-1.</
li><li><code>A128KW</code> - AES Key Wrapping with 128-bit key derived from the client secret.</
li><li><code>RSA1_5</code> - RSA with PKCS#1 v1.5 padding.</li><li><code>A256KW</code> - AES
 Key Wrapping with 256-bit key derived from the client secret.</li><li><code>dir</code> - Direct
 encryption with AES using the hashed client secret.</li><li><code>A192KW</code> - AES Key Wrapping
 with 192-bit key derived from the client secret.</li></ul>",
              "propertyOrder" : 170,
              "required" : true,
              "items" : {
                "type" : "string"
              },
              "type" : "array",
              "exampleValue" : ""
            },
            "supportedIDTokenSigningAlgorithms" : {
              "title" : "ID Token Signing Algorithms supported",
              "description" : "Algorithms supported to sign OpenID Connect <code>id_tokens</
code>.<p><p>OpenAM supports signing algorithms listed in JSON Web Algorithms (JWA): <a href=\"http://
tools.ietf.org/html/draft-ietf-jose-json-web-algorithms#section-3.1\">\"alg\" (Algorithm) Header
 Parameter Values for JWS</a>:<ul><li><code>HS256</code> - HMAC with SHA-256.</li><li><code>HS384</
code> - HMAC with SHA-384.</li><li><code>HS512</code> - HMAC with SHA-512.</li><li><code>ES256</code>
 - ECDSA with SHA-256 and NIST standard P-256 elliptic curve.</li><li><code>ES384</code> - ECDSA with
 SHA-384 and NIST standard P-384 elliptic curve.</li><li><code>ES512</code> - ECDSA with SHA-512 and
 NIST standard P-521 elliptic curve.</li><li><code>RS256</code> - RSASSA-PKCS-v1_5 using SHA-256.</
li></ul>",
              "propertyOrder" : 160,
              "required" : true,
              "items" : {
                "type" : "string"
              },
              "type" : "array",
              "exampleValue" : ""
            },
            "tokenEncryptionSigningKeyAlias" : {
              "title" : "Token Encryption RSA Public/Private Key Pair Alias",
              "description" : "The list of public/private key pairs used for the RSA algorithms
 (RSA1_5/RSA-OAEP/RSA-OAEP-256). Add an entry to specify an alias for a specific RSA algorithm,
 for example <code>RSA1_5|rsa1_5Alias</code>.<br><br>Each of the public/private key pairs will be
 retrieved from the keystore referenced by the property <code>com.sun.identity.saml.xmlsig.keystore</
code>.",
              "propertyOrder" : 441,
              "required" : false,
              "items" : {
                "type" : "string"
              },
              "type" : "array",
              "exampleValue" : ""
            },
            "oidcClaimsScript" : {
              "title" : "OIDC Claims Script",
              "description" : "The script that is run when issuing an ID token or making a request
 to the <i>userinfo</i> endpoint during OpenID requests.<p><p>The script gathers the scopes and
 populates claims, and has access to the access token, the user's identity and, if available, the
 user's session.",
```


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```
              "propertyOrder" : 80,
              "required" : true,
              "type" : "string",
              "exampleValue" : ""
            },
            "supportedIDTokenEncryptionMethods" : {
              "title" : "ID Token Encryption Methods supported",
              "description" : "Encryption methods supported to encrypt OpenID Connect ID
 tokens in order to hide its contents.<br><br>OpenAM supports the following ID token encryption
 algorithms:<ul><li><code>A128GCM</code>, <code>A192GCM</code>, and <code>A256GCM</code> - AES
 in Galois Counter Mode (GCM) authenticated encryption mode.</li><li><code>A128CBC-HS256</code>,
 <code>A192CBC-HS384</code>, and <code>A256CBC-HS512</code> - AES encryption in CBC mode, with HMAC-
SHA-2 for integrity.</li></ul>",
              "propertyOrder" : 180,
              "required" : true,
              "items" : {
                "type" : "string"
              },
              "type" : "array",
              "exampleValue" : ""
            },
            "supportedClaims" : {
              "title" : "Supported Claims",
              "description" : "Set of claims supported by the OpenID Connect <code>/oauth2/
userinfo</code> endpoint, with translations.<br><br>Claims may be entered as simple strings or pipe
 separated strings representing the internal claim name, locale, and localized description.<p><p>For
 example: <code>name|en|Your full name.</code>.<p>Locale strings are in the format: <code>language
 + \"_\" + country + \"_\" + variant</code>, for example <code>en</code>, <code>en_GB</code>, or
 <code>en_US_WIN</code>. If the locale and pipe is omitted, the description is displayed to all users
 that have undefined locales.<p><p>If the description is also omitted, nothing is displayed on the
 consent page for the claim. For example specifying <code>family_name|</code> would allow the claim
 <code>family_name</code> to be used by the client, but would not display it to the user on the
 consent page when requested.",
              "propertyOrder" : 190,
              "required" : false,
              "items" : {
                "type" : "string"
              },
              "type" : "array",
              "exampleValue" : ""
            }
          }
        },
        "deviceCodeConfig" : {
          "type" : "object",
          "title" : "Device Flow",
          "propertyOrder" : 5,
          "properties" : {
            "verificationUrl" : {
              "title" : "Verification URL",
              "description" : "The URL that the user will be instructed to visit to complete their
 OAuth 2.0 login and consent when using the device code flow.",
              "propertyOrder" : 370,
              "required" : false,
              "type" : "string",
              "exampleValue" : ""
            },
            "deviceCodeLifetime" : {
              "title" : "Device Code Lifetime (seconds)",
```


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```
              "description" : "The lifetime of the device code, in seconds.",
              "propertyOrder" : 390,
              "required" : true,
              "type" : "integer",
              "exampleValue" : ""
            },
            "completionUrl" : {
              "title" : "Device Completion URL",
              "description" : "The URL that the user will be sent to on completion of their OAuth 2.0
 login and consent when using the device code flow.",
              "propertyOrder" : 380,
              "required" : false,
              "type" : "string",
              "exampleValue" : ""
            },
            "devicePollInterval" : {
              "title" : "Device Polling Interval",
              "description" : "The polling frequency for devices waiting for tokens when using the
 device code flow.",
              "propertyOrder" : 400,
              "required" : true,
              "type" : "integer",
              "exampleValue" : ""
            }
          }
        }
      },
      "type" : "object",
      "title" : "Realm Defaults"
    }
  }
}
```


1.95. OAuth2RemoteConsentAgentGroups

1.95.1. Realm Operations

Agent Groups handler that is responsible for managing agent groups

Resource path: `/realm-config/agents/groups/RemoteConsentAgent`

Resource version: `1.0`

1.95.1.1. create

Usage:

```
am> create OAuth2RemoteConsentAgentGroups --realm Realm --id id --body body
```

Parameters:

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--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "publicKeyLocation" : {
      "title" : "Public key selector",
      "description" : "",
      "propertyOrder" : 34700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "jwkStoreCacheMissCacheTime" : {
      "title" : "JWKs URI content cache miss cache time",
      "description" : "To avoid loading the JWKS URI content for every operation, especially when
 the kid is not in the jwks content already cached, the JWKS content will be cached for a minimum
 period of time. This cache miss cache time defines the minimum amount of time the JWKS URI content is
 cached.",
      "propertyOrder" : 35000,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "userpassword" : {
      "title" : "Remote Consent Service secret",
      "description" : "Used when the Remote Consent Service authenticates to OpenAM.",
      "propertyOrder" : 33000,
      "required" : true,
      "type" : "string",
      "format" : "password",
      "exampleValue" : ""
    },
    "remoteConsentRequestSigningAlgorithm" : {
      "title" : "Consent request Signing Algorithm",
      "description" : "Signing algorithm to be used when signing the consent request JWT.",
      "propertyOrder" : 34500,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "remoteConsentRequestEncryptionMethod" : {
      "title" : "Consent request Encryption Method",
      "description" : "Encryption method to be used when encrypting the consent request JWT.",
      "propertyOrder" : 34300,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "jwksCacheTimeout" : {
      "title" : "JWKs URI content cache timeout in ms",
```


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```
      "description" : "To avoid loading the JWKS URI content for every operation, the JWKS content is
 cached. This timeout defines the maximum amount of time the JWKS URI content can be cached before
 being refreshed.",
      "propertyOrder" : 34900,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "remoteConsentResponseEncryptionMethod" : {
      "title" : "Consent response encryption method",
      "description" : "The encryption method to be used by the provider when decrypting the remote
 consent response JWT received from the Remote Consent Service.<br><br>OpenAM supports the following
 token encryption algorithms: <ul><li><code>A128GCM</code>, <code>A192GCM</code>, and <code>A256GCM</
code> - AES in Galois Counter Mode (GCM) authenticated encryption mode.</li><li><code>A128CBC-HS256</
code>, <code>A192CBC-HS384</code>, and <code>A256CBC-HS512</code> - AES encryption in CBC mode, with
 HMAC-SHA-2 for integrity.</li></ul>",
      "propertyOrder" : 34600,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "remoteConsentRedirectUrl" : {
      "title" : "Redirect URL",
      "description" : "The Remote Consent Service's URL to which the authorization server should
 redirect the user in order to obtain their consent.",
      "propertyOrder" : 34000,
      "required" : false,
      "type" : "string",
      "exampleValue" : ""
    },
    "jwksUri" : {
      "title" : "Json Web Key URI",
      "description" : "The URI that contains the Remote Consent Service secret's public keys in Json
 Web Key format.",
      "propertyOrder" : 34800,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "jwkSet" : {
      "title" : "Json Web Key",
      "description" : "Raw JSON Web Key value containing the Remote Consent Service's public keys.",
      "propertyOrder" : 35100,
      "required" : false,
      "type" : "string",
      "exampleValue" : ""
    },
    "remoteConsentRequestEncryptionEnabled" : {
      "title" : "Enable consent request Encryption",
      "description" : "Enables encryption of the consent request JWT.",
      "propertyOrder" : 34100,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "remoteConsentResponseEncryptionAlgorithm" : {
      "title" : "Consent response encryption algorithm",
      "description" : "The encryption algorithm to be used by the provider when decrypting the remote
 consent response JWT received from the Remote Consent Service.",
```


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```
      "propertyOrder" : 34500,
      "required" : false,
      "type" : "string",
      "exampleValue" : ""
    },
    "remoteConsentResponseSigningAlg" : {
      "title" : "Consent response signing algorithm",
      "description" : "The signing algorithm to be used by the provider when verifying the signature
 of the consent response JWT received from the Remote Consent Service.",
      "propertyOrder" : 34400,
      "required" : false,
      "type" : "string",
      "exampleValue" : ""
    },
    "requestTimeLimit" : {
      "title" : "Consent Request Time Limit",
      "description" : "The amount of seconds for which the consent request JWT sent to the Remote
 Consent Service should be considered valid.",
      "propertyOrder" : 35200,
      "required" : false,
      "type" : "integer",
      "exampleValue" : ""
    },
    "remoteConsentRequestEncryptionAlgorithm" : {
      "title" : "Consent request Encryption Algorithm",
      "description" : "Encryption algorithm to be used when encrypting the consent request JWT.",
      "propertyOrder" : 34200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```

1.95.1.2. delete

Usage:

```
am> delete OAuth2RemoteConsentAgentGroups --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.95.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action OAuth2RemoteConsentAgentGroups --realm Realm --actionName getAllTypes
```


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1.95.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action OAuth2RemoteConsentAgentGroups --realm Realm --actionName getCreatableTypes
```

1.95.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action OAuth2RemoteConsentAgentGroups --realm Realm --actionName nextdescendents
```

1.95.1.6. query

Querying the agent groups of a specific type

Usage:

```
am> query OAuth2RemoteConsentAgentGroups --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.95.1.7. read

Usage:

```
am> read OAuth2RemoteConsentAgentGroups --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.95.1.8. update

Usage:

```
am> update OAuth2RemoteConsentAgentGroups --realm Realm --id id --body body
```

Parameters:

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--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "publicKeyLocation" : {
      "title" : "Public key selector",
      "description" : "",
      "propertyOrder" : 34700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "jwkStoreCacheMissCacheTime" : {
      "title" : "JWKs URI content cache miss cache time",
      "description" : "To avoid loading the JWKS URI content for every operation, especially when
 the kid is not in the jwks content already cached, the JWKS content will be cached for a minimum
 period of time. This cache miss cache time defines the minimum amount of time the JWKS URI content is
 cached.",
      "propertyOrder" : 35000,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "userpassword" : {
      "title" : "Remote Consent Service secret",
      "description" : "Used when the Remote Consent Service authenticates to OpenAM.",
      "propertyOrder" : 33000,
      "required" : true,
      "type" : "string",
      "format" : "password",
      "exampleValue" : ""
    },
    "remoteConsentRequestSigningAlgorithm" : {
      "title" : "Consent request Signing Algorithm",
      "description" : "Signing algorithm to be used when signing the consent request JWT.",
      "propertyOrder" : 34500,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "remoteConsentRequestEncryptionMethod" : {
      "title" : "Consent request Encryption Method",
      "description" : "Encryption method to be used when encrypting the consent request JWT.",
      "propertyOrder" : 34300,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "jwksCacheTimeout" : {
      "title" : "JWKs URI content cache timeout in ms",
```


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```
      "description" : "To avoid loading the JWKS URI content for every operation, the JWKS content is
 cached. This timeout defines the maximum amount of time the JWKS URI content can be cached before
 being refreshed.",
      "propertyOrder" : 34900,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "remoteConsentResponseEncryptionMethod" : {
      "title" : "Consent response encryption method",
      "description" : "The encryption method to be used by the provider when decrypting the remote
 consent response JWT received from the Remote Consent Service.<br><br>OpenAM supports the following
 token encryption algorithms: <ul><li><code>A128GCM</code>, <code>A192GCM</code>, and <code>A256GCM</
code> - AES in Galois Counter Mode (GCM) authenticated encryption mode.</li><li><code>A128CBC-HS256</
code>, <code>A192CBC-HS384</code>, and <code>A256CBC-HS512</code> - AES encryption in CBC mode, with
 HMAC-SHA-2 for integrity.</li></ul>",
      "propertyOrder" : 34600,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "remoteConsentRedirectUrl" : {
      "title" : "Redirect URL",
      "description" : "The Remote Consent Service's URL to which the authorization server should
 redirect the user in order to obtain their consent.",
      "propertyOrder" : 34000,
      "required" : false,
      "type" : "string",
      "exampleValue" : ""
    },
    "jwksUri" : {
      "title" : "Json Web Key URI",
      "description" : "The URI that contains the Remote Consent Service secret's public keys in Json
 Web Key format.",
      "propertyOrder" : 34800,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "jwkSet" : {
      "title" : "Json Web Key",
      "description" : "Raw JSON Web Key value containing the Remote Consent Service's public keys.",
      "propertyOrder" : 35100,
      "required" : false,
      "type" : "string",
      "exampleValue" : ""
    },
    "remoteConsentRequestEncryptionEnabled" : {
      "title" : "Enable consent request Encryption",
      "description" : "Enables encryption of the consent request JWT.",
      "propertyOrder" : 34100,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "remoteConsentResponseEncryptionAlgorithm" : {
      "title" : "Consent response encryption algorithm",
      "description" : "The encryption algorithm to be used by the provider when decrypting the remote
 consent response JWT received from the Remote Consent Service.",
```


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```
      "propertyOrder" : 34500,
      "required" : false,
      "type" : "string",
      "exampleValue" : ""
    },
    "remoteConsentResponseSigningAlg" : {
      "title" : "Consent response signing algorithm",
      "description" : "The signing algorithm to be used by the provider when verifying the signature
 of the consent response JWT received from the Remote Consent Service.",
      "propertyOrder" : 34400,
      "required" : false,
      "type" : "string",
      "exampleValue" : ""
    },
    "requestTimeLimit" : {
      "title" : "Consent Request Time Limit",
      "description" : "The amount of seconds for which the consent request JWT sent to the Remote
 Consent Service should be considered valid.",
      "propertyOrder" : 35200,
      "required" : false,
      "type" : "integer",
      "exampleValue" : ""
    },
    "remoteConsentRequestEncryptionAlgorithm" : {
      "title" : "Consent request Encryption Algorithm",
      "description" : "Encryption algorithm to be used when encrypting the consent request JWT.",
      "propertyOrder" : 34200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```


1.96. OAuth2SoftwarePublisherAgentGroups

1.96.1. Realm Operations

Agent Groups handler that is responsible for managing agent groups

Resource path: `/realm-config/agents/groups/SoftwarePublisher`

Resource version: `1.0`

1.96.1.1. create

Usage:

```
am> create OAuth2SoftwarePublisherAgentGroups --realm Realm --id id --body body
```

Parameters:

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--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "issuer" : {
      "title" : "Software publisher issuer.",
      "description" : "Identifier for the software publisher, generally represented as a URL.",
      "propertyOrder" : 33001,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "userpassword" : {
      "title" : "Software publisher secret",
      "description" : "Software publisher secret. Used when software statement signatures are HMAC
 based.",
      "propertyOrder" : 33000,
      "required" : true,
      "type" : "string",
      "format" : "password",
      "exampleValue" : ""
    },
    "jwkStoreCacheMissCacheTime" : {
      "title" : "JWKs URI content cache miss cache time",
      "description" : "To avoid loading the JWKS URI content for every operation, especially when
 the kid is not in the jwks content already cached, the JWKS content will be cached for a minimum
 period of time. This cache miss cache time defines the minimum amount of time the JWKS URI content is
 cached.",
      "propertyOrder" : 35000,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "publicKeyLocation" : {
      "title" : "Public key selector",
      "description" : "Select how the Software Publisher's public keys should be retrieved by the
 provider when validating software statement signatures.",
      "propertyOrder" : 34700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "jwksCacheTimeout" : {
      "title" : "JWKs URI content cache timeout in ms",
      "description" : "To avoid loading the JWKS URI content for every operation, the JWKS content is
 cached. This timeout defines the maximum amount of time the JWKS URI content can be cached before
 being refreshed.",
      "propertyOrder" : 34900,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
```


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```
    },
    "softwareStatementSigningAlgorithm" : {
      "title" : "Software statement signing Algorithm",
      "description" : "Signing algorithm to be used when verifying software statement signatures.",
      "propertyOrder" : 34500,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "jwkSet" : {
      "title" : "Json Web Key",
      "description" : "Raw JSON Web Key value containing the Software Publisher's public keys.",
      "propertyOrder" : 35100,
      "required" : false,
      "type" : "string",
      "exampleValue" : ""
    },
    "jwksUri" : {
      "title" : "Json Web Key URI",
      "description" : "The URI that contains the Software Publisher's public keys in Json Web Key
 format.",
      "propertyOrder" : 34800,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```

1.96.1.2. delete

Usage:

```
am> delete OAuth2SoftwarePublisherAgentGroups --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.96.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action OAuth2SoftwarePublisherAgentGroups --realm Realm --actionName getAllTypes
```

1.96.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

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Usage:

```
am> action OAuth2SoftwarePublisherAgentGroups --realm Realm --actionName getCreatableTypes
```

1.96.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action OAuth2SoftwarePublisherAgentGroups --realm Realm --actionName nextdescendents
```

1.96.1.6. query

Querying the agent groups of a specific type

Usage:

```
am> query OAuth2SoftwarePublisherAgentGroups --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.96.1.7. read

Usage:

```
am> read OAuth2SoftwarePublisherAgentGroups --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.96.1.8. update

Usage:

```
am> update OAuth2SoftwarePublisherAgentGroups --realm Realm --id id --body body
```

Parameters:

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--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "issuer" : {
      "title" : "Software publisher issuer.",
      "description" : "Identifier for the software publisher, generally represented as a URL.",
      "propertyOrder" : 33001,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "userpassword" : {
      "title" : "Software publisher secret",
      "description" : "Software publisher secret. Used when software statement signatures are HMAC
based.",
      "propertyOrder" : 33000,
      "required" : true,
      "type" : "string",
      "format" : "password",
      "exampleValue" : ""
    },
    "jwkStoreCacheMissCacheTime" : {
      "title" : "JWKs URI content cache miss cache time",
      "description" : "To avoid loading the JWKS URI content for every operation, especially when
the kid is not in the jwks content already cached, the JWKS content will be cached for a minimum
period of time. This cache miss cache time defines the minimum amount of time the JWKS URI content is
cached.",
      "propertyOrder" : 35000,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "publicKeyLocation" : {
      "title" : "Public key selector",
      "description" : "Select how the Software Publisher's public keys should be retrieved by the
provider when validating software statement signatures.",
      "propertyOrder" : 34700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "jwksCacheTimeout" : {
      "title" : "JWKs URI content cache timeout in ms",
      "description" : "To avoid loading the JWKS URI content for every operation, the JWKS content is
cached. This timeout defines the maximum amount of time the JWKS URI content can be cached before
being refreshed.",
      "propertyOrder" : 34900,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
```


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```
    "softwareStatementSigningAlgorithm" : {
      "title" : "Software statement signing Algorithm",
      "description" : "Signing algorithm to be used when verifying software statement signatures.",
      "propertyOrder" : 34500,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "jwkSet" : {
      "title" : "Json Web Key",
      "description" : "Raw JSON Web Key value containing the Software Publisher's public keys.",
      "propertyOrder" : 35100,
      "required" : false,
      "type" : "string",
      "exampleValue" : ""
    },
    "jwksUri" : {
      "title" : "Json Web Key URI",
      "description" : "The URI that contains the Software Publisher's public keys in Json Web Key
 format.",
      "propertyOrder" : 34800,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```

1.97. OAuth2UserApplications

1.97.1. Realm Operations

This endpoint exposes a list of all the applications (clients) that the user authorized using OAuth 2.0. Access for those applications can then be revoked on a per-client basis.

Resource path: `/users/{user}/oauth2/applications`

Resource version: `1.0`

1.97.1.1. delete

Delete the tokens for the specified client ID.

Usage:

```
am> delete OAuth2UserApplications --realm Realm --id id --user user
```

Parameters:

--id

The unique identifier for the resource.

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--user

This endpoint exposes a list of all the applications (clients) that the user authorized using OAuth 2.0. Access for those applications can then be revoked on a per-client basis.

1.97.1.2. query

Get a list of the applications that have been granted OAuth 2.0 access. Only `_queryFilter=true` is supported.

Usage:

```
am> query OAuth2UserApplications --realm Realm --filter filter --user user
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

--user

This endpoint exposes a list of all the applications (clients) that the user authorized using OAuth 2.0. Access for those applications can then be revoked on a per-client basis.

1.98. OathModule

1.98.1. Realm Operations

Resource path: `/realm-config/authentication/modules/oath`

Resource version: `1.0`

1.98.1.1. create

Usage:

```
am> create OathModule --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

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--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "timeStepSize" : {
      "title" : "TOTP Time Step Interval",
      "description" : "The TOTP time step in seconds that the OTP device uses to generate the
OTP.<br><br>This is the time interval that one OTP is valid for. For example, if the time step is 30
seconds, then a new OTP will be generated every 30 seconds. This makes a single OTP valid for only 30
seconds.",
      "propertyOrder" : 1000,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "forgerock-oath-sharedsecret-implementation-class" : {
      "title" : "The Shared Secret Provider Class",
      "description" : "The fully qualified class name for the Shared Secret Provider
extension.<br><br>The class that is used to process the user profile attribute used to store the user
secret key.",
      "propertyOrder" : 1300,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "hotpWindowSize" : {
      "title" : "HOTP Window Size",
      "description" : "The size of the window to resynchronize with the client.<br><br>This sets the
window that the OTP device and the server counter can be out of sync. For example, if the window size
is 100 and the servers last successful login was at counter value 2, then the server will accept a
OTP from the OTP device that is from device counter 3 to 102.",
      "propertyOrder" : 600,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "lastLoginTimeAttribute" : {
      "title" : "Last Login Time Attribute",
      "description" : "Attribute to store the time of the users last login. This is required if TOTP
is chosen as the OATH algorithm.<br><br>This attribute stores the last time a user logged in to
prevent time based attacks. The value is stored as a number (Unix Time).",
      "propertyOrder" : 1200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "addChecksum" : {
      "title" : "Add Checksum Digit",
      "description" : "This adds a checksum digit to the OTP.<br><br>This adds a digit to the end
of the OTP generated to be used as a checksum to verify the OTP was generated correctly. This is in
addition to the actual password length. You should only set this if your device supports it.",
      "propertyOrder" : 800,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
```


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```
   "forgerock-oath-maximum-clock-drift" : {
     "title" : "Maximum Allowed Clock Drift",
     "description" : "Number of time steps a client is allowed to get out of sync with the server
before manual resynchronisation is required. This should be greater than the TOTP Time Steps
value.<br><br>As this checks the time drift over multiple requests it needs to be greater than the
value specified in TOTP Time Steps.",
     "propertyOrder" : 1500,
     "required" : true,
     "type" : "integer",
     "exampleValue" : ""
   },
   "secretKeyAttribute" : {
     "title" : "Secret Key Attribute Name",
     "description" : "The name of the attribute in the user profile to store the user secret key.",
     "propertyOrder" : 400,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "hotpCounterAttribute" : {
     "title" : "Counter Attribute Name",
     "description" : "The name of the attribute in the user profile to store the user counter. This
is required if HOTP is chosen as the OATH algorithm.",
     "propertyOrder" : 700,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "stepsInWindow" : {
     "title" : "TOTP Time Steps",
     "description" : "The number of time steps to check before and after receiving a OTP.<br><br>This
is the number of time step intervals to check the received OTP against both forward in time and back
in time. For example, with 2 time steps and a time step interval of 30 seconds the server will allow
a clock drift between client and server of 89 seconds. (2-30 second steps and 29 seconds for the
interval that the OTP arrived in)",
     "propertyOrder" : 1100,
     "required" : true,
     "type" : "integer",
     "exampleValue" : ""
   },
   "authenticationLevel" : {
     "title" : "Authentication Level",
     "description" : "The authentication level associated with this module.<br><br>Each
authentication module has an authentication level that can be used to indicate the level of security
associated with the module; 0 is the lowest (and the default).",
     "propertyOrder" : 100,
     "required" : true,
     "type" : "integer",
     "exampleValue" : ""
   },
   "minimumSecretKeyLength" : {
     "title" : "Minimum Secret Key Length",
     "description" : "Number of hexadecimal characters allowed for the Secret Key.",
     "propertyOrder" : 300,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "oathAlgorithm" : {
```


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```
      "title" : "OATH Algorithm to Use",
      "description" : "Choose the algorithm your device uses to generate the OTP.<br><br>HOTP uses a
 counter value that is incremented every time a new OTP is generated. TOTP generates a new OTP every
 few seconds as specified by the time step interval.",
      "propertyOrder" : 500,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "passwordLength" : {
      "title" : "One Time Password Length ",
      "description" : "The length of the generated OTP in digits. Must be 6 digits or longer.",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "truncationOffset" : {
      "title" : "Truncation Offset",
      "description" : "This adds an offset to the generation of the OTP.<br><br>This is an option used
 by the HOTP algorithm that not all devices support. This should be left default unless you know your
 device uses a offset.",
      "propertyOrder" : 900,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "forgerock-oath-observed-clock-drift-attribute-name" : {
      "title" : "Clock Drift Attribute Name",
      "description" : "The name of the attribute in the user profile to store the clock drift. If left
 empty then clock drift checking is disabled.<br><br>The name of the attribute used to store the last
 observed clock drift which is used to indicated when a manual resynchronisation is required.",
      "propertyOrder" : 1400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "oathOtpMaxRetry" : {
      "title" : "One Time Password Max Retry",
      "description" : "The number of times entry of the OTP may be attempted. Minimum is 1 maximum is
 10 and default is 3.",
      "propertyOrder" : null,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    }
  }
}
```

1.98.1.2. delete

Usage:

```
am> delete OathModule --realm Realm --id id
```

Parameters:

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--id

The unique identifier for the resource.

1.98.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action OathModule --realm Realm --actionName getAllTypes
```

1.98.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action OathModule --realm Realm --actionName getCreatableTypes
```

1.98.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action OathModule --realm Realm --actionName nextdescendents
```

1.98.1.6. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

```
am> query OathModule --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.98.1.7. read

Usage:

```
am> read OathModule --realm Realm --id id
```

Parameters:

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--id

The unique identifier for the resource.

1.98.1.8. update

Usage:

```
am> update OathModule --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "timeStepSize" : {
      "title" : "TOTP Time Step Interval",
      "description" : "The TOTP time step in seconds that the OTP device uses to generate the
 OTP.<br><br>This is the time interval that one OTP is valid for. For example, if the time step is 30
 seconds, then a new OTP will be generated every 30 seconds. This makes a single OTP valid for only 30
 seconds.",
      "propertyOrder" : 1000,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "forgerock-oath-sharedsecret-implementation-class" : {
      "title" : "The Shared Secret Provider Class",
      "description" : "The fully qualified class name for the Shared Secret Provider
 extension.<br><br>The class that is used to process the user profile attribute used to store the user
 secret key.",
      "propertyOrder" : 1300,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "hotpWindowSize" : {
      "title" : "HOTP Window Size",
      "description" : "The size of the window to resynchronize with the client.<br><br>This sets the
 window that the OTP device and the server counter can be out of sync. For example, if the window size
 is 100 and the servers last successful login was at counter value 2, then the server will accept a
 OTP from the OTP device that is from device counter 3 to 102.",
      "propertyOrder" : 600,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "lastLoginTimeAttribute" : {
```


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```
     "title" : "Last Login Time Attribute",
     "description" : "Attribute to store the time of the users last login. This is required if TOTP
is chosen as the OATH algorithm.<br><br>This attribute stores the last time a user logged in to
prevent time based attacks. The value is stored as a number (Unix Time).",
     "propertyOrder" : 1200,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "addChecksum" : {
     "title" : "Add Checksum Digit",
     "description" : "This adds a checksum digit to the OTP.<br><br>This adds a digit to the end
of the OTP generated to be used as a checksum to verify the OTP was generated correctly. This is in
addition to the actual password length. You should only set this if your device supports it.",
     "propertyOrder" : 800,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "forgerock-oath-maximum-clock-drift" : {
     "title" : "Maximum Allowed Clock Drift",
     "description" : "Number of time steps a client is allowed to get out of sync with the server
before manual resynchronisation is required. This should be greater than the TOTP Time Steps
value.<br><br>As this checks the time drift over multiple requests it needs to be greater than the
value specified in TOTP Time Steps.",
     "propertyOrder" : 1500,
     "required" : true,
     "type" : "integer",
     "exampleValue" : ""
   },
   "secretKeyAttribute" : {
     "title" : "Secret Key Attribute Name",
     "description" : "The name of the attribute in the user profile to store the user secret key.",
     "propertyOrder" : 400,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "hotpCounterAttribute" : {
     "title" : "Counter Attribute Name",
     "description" : "The name of the attribute in the user profile to store the user counter. This
is required if HOTP is chosen as the OATH algorithm.",
     "propertyOrder" : 700,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "stepsInWindow" : {
     "title" : "TOTP Time Steps",
     "description" : "The number of time steps to check before and after receiving a OTP.<br><br>This
is the number of time step intervals to check the received OTP against both forward in time and back
in time. For example, with 2 time steps and a time step interval of 30 seconds the server will allow
a clock drift between client and server of 89 seconds. (2-30 second steps and 29 seconds for the
interval that the OTP arrived in)",
     "propertyOrder" : 1100,
     "required" : true,
     "type" : "integer",
     "exampleValue" : ""
   },
```


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```
   "authenticationLevel" : {
     "title" : "Authentication Level",
     "description" : "The authentication level associated with this module.<br><br>Each
authentication module has an authentication level that can be used to indicate the level of security
associated with the module; 0 is the lowest (and the default).",
     "propertyOrder" : 100,
     "required" : true,
     "type" : "integer",
     "exampleValue" : ""
   },
   "minimumSecretKeyLength" : {
     "title" : "Minimum Secret Key Length",
     "description" : "Number of hexadecimal characters allowed for the Secret Key.",
     "propertyOrder" : 300,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "oathAlgorithm" : {
     "title" : "OATH Algorithm to Use",
     "description" : "Choose the algorithm your device uses to generate the OTP.<br><br>HOTP uses a
counter value that is incremented every time a new OTP is generated. TOTP generates a new OTP every
few seconds as specified by the time step interval.",
     "propertyOrder" : 500,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "passwordLength" : {
     "title" : "One Time Password Length ",
     "description" : "The length of the generated OTP in digits. Must be 6 digits or longer.",
     "propertyOrder" : 200,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "truncationOffset" : {
     "title" : "Truncation Offset",
     "description" : "This adds an offset to the generation of the OTP.<br><br>This is an option used
by the HOTP algorithm that not all devices support. This should be left default unless you know your
device uses a offset.",
     "propertyOrder" : 900,
     "required" : true,
     "type" : "integer",
     "exampleValue" : ""
   },
   "forgerock-oath-observed-clock-drift-attribute-name" : {
     "title" : "Clock Drift Attribute Name",
     "description" : "The name of the attribute in the user profile to store the clock drift. If left
empty then clock drift checking is disabled.<br><br>The name of the attribute used to store the last
observed clock drift which is used to indicated when a manual resynchronisation is required.",
     "propertyOrder" : 1400,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "oathOtpMaxRetry" : {
     "title" : "One Time Password Max Retry",
```


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```
      "description" : "The number of times entry of the OTP may be attempted. Minimum is 1 maximum is
 10 and default is 3.",
      "propertyOrder" : null,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    }
  }
}
```

1.98.2. Global Operations

Resource path: `/global-config/authentication/modules/oath`

Resource version: `1.0`

1.98.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action OathModule --global --actionName getAllTypes
```

1.98.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action OathModule --global --actionName getCreatableTypes
```

1.98.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action OathModule --global --actionName nextdescendents
```

1.98.2.4. read

Usage:

```
am> read OathModule --global
```

1.98.2.5. update

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Usage:

```
am> update OathModule --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "defaults" : {
      "properties" : {
        "stepsInWindow" : {
          "title" : "TOTP Time Steps",
          "description" : "The number of time steps to check before and after receiving a
OTP.<br><br>This is the number of time step intervals to check the received OTP against both forward
in time and back in time. For example, with 2 time steps and a time step interval of 30 seconds the
server will allow a clock drift between client and server of 89 seconds. (2-30 second steps and 29
seconds for the interval that the OTP arrived in)",
          "propertyOrder" : 1100,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "forgerock-oath-maximum-clock-drift" : {
          "title" : "Maximum Allowed Clock Drift",
          "description" : "Number of time steps a client is allowed to get out of sync with the
server before manual resynchronisation is required. This should be greater than the TOTP Time Steps
value.<br><br>As this checks the time drift over multiple requests it needs to be greater than the
value specified in TOTP Time Steps.",
          "propertyOrder" : 1500,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "authenticationLevel" : {
          "title" : "Authentication Level",
          "description" : "The authentication level associated with this module.<br><br>Each
authentication module has an authentication level that can be used to indicate the level of security
associated with the module; 0 is the lowest (and the default).",
          "propertyOrder" : 100,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "secretKeyAttribute" : {
          "title" : "Secret Key Attribute Name",
          "description" : "The name of the attribute in the user profile to store the user secret
key.",
          "propertyOrder" : 400,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "oathAlgorithm" : {
          "title" : "OATH Algorithm to Use",
```


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```
          "description" : "Choose the algorithm your device uses to generate the OTP.<br><br>HOTP uses
a counter value that is incremented every time a new OTP is generated. TOTP generates a new OTP every
few seconds as specified by the time step interval.",
          "propertyOrder" : 500,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "hotpWindowSize" : {
          "title" : "HOTP Window Size",
          "description" : "The size of the window to resynchronize with the client.<br><br>This sets
the window that the OTP device and the server counter can be out of sync. For example, if the window
size is 100 and the servers last successful login was at counter value 2, then the server will accept
a OTP from the OTP device that is from device counter 3 to 102.",
          "propertyOrder" : 600,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "passwordLength" : {
          "title" : "One Time Password Length ",
          "description" : "The length of the generated OTP in digits. Must be 6 digits or longer.",
          "propertyOrder" : 200,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "hotpCounterAttribute" : {
          "title" : "Counter Attribute Name",
          "description" : "The name of the attribute in the user profile to store the user counter.
This is required if HOTP is chosen as the OATH algorithm.",
          "propertyOrder" : 700,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "timeStepSize" : {
          "title" : "TOTP Time Step Interval",
          "description" : "The TOTP time step in seconds that the OTP device uses to generate the
OTP.<br><br>This is the time interval that one OTP is valid for. For example, if the time step is 30
seconds, then a new OTP will be generated every 30 seconds. This makes a single OTP valid for only 30
seconds.",
          "propertyOrder" : 1000,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "minimumSecretKeyLength" : {
          "title" : "Minimum Secret Key Length",
          "description" : "Number of hexadecimal characters allowed for the Secret Key.",
          "propertyOrder" : 300,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "oathOtpMaxRetry" : {
          "title" : "One Time Password Max Retry",
          "description" : "The number of times entry of the OTP may be attempted. Minimum is 1 maximum
is 10 and default is 3.",
```


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```
          "propertyOrder" : null,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "forgerock-oath-sharedsecret-implementation-class" : {
          "title" : "The Shared Secret Provider Class",
          "description" : "The fully qualified class name for the Shared Secret Provider
extension.<br><br>The class that is used to process the user profile attribute used to store the user
secret key.",
          "propertyOrder" : 1300,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "addChecksum" : {
          "title" : "Add Checksum Digit",
          "description" : "This adds a checksum digit to the OTP.<br><br>This adds a digit to the end
of the OTP generated to be used as a checksum to verify the OTP was generated correctly. This is in
addition to the actual password length. You should only set this if your device supports it.",
          "propertyOrder" : 800,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "lastLoginTimeAttribute" : {
          "title" : "Last Login Time Attribute",
          "description" : "Attribute to store the time of the users last login. This is required if
TOTP is chosen as the OATH algorithm.<br><br>This attribute stores the last time a user logged in to
prevent time based attacks. The value is stored as a number (Unix Time).",
          "propertyOrder" : 1200,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "truncationOffset" : {
          "title" : "Truncation Offset",
          "description" : "This adds an offset to the generation of the OTP.<br><br>This is an option
used by the HOTP algorithm that not all devices support. This should be left default unless you know
your device uses a offset.",
          "propertyOrder" : 900,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "forgerock-oath-observed-clock-drift-attribute-name" : {
          "title" : "Clock Drift Attribute Name",
          "description" : "The name of the attribute in the user profile to store the clock drift. If
left empty then clock drift checking is disabled.<br><br>The name of the attribute used to store the
last observed clock drift which is used to indicated when a manual resynchronisation is required.",
          "propertyOrder" : 1400,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      },
      "type" : "object",
      "title" : "Realm Defaults"
    }
```


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```
  }
}
```

1.99. OathUserDevices

1.99.1. Realm Operations

The Oath devices service is responsible for exposing functions to change the collection of OATH authentication devices. The supported methods are action, delete, query

Resource path: `/users/{user}/devices/2fa/oath`

Resource version: `1.0`

1.99.1.1. checkOathDevice

Checks if the user's Authenticator OATH module is 'skippable' and returns the resultas a boolean

Usage:

```
am> action OathUserDevices --realm Realm --body body --user user --actionName checkOathDevice
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "$schema" : "http://json-schema.org/draft-04/schema#",
  "description" : "Oath user device check action request schema",
  "type" : "object",
  "title" : "Oath user device check action request schema"
}
```

--user

The Oath devices service is responsible for exposing functions to change the collection of OATH authentication devices. The supported methods are action, delete, query

1.99.1.2. delete

Delete Oath user device

Usage:

```
am> delete OathUserDevices --realm Realm --id id --user user
```

Parameters:

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--id

The unique identifier for the resource.

--user

The Oath devices service is responsible for exposing functions to change the collection of OATH authentication devices. The supported methods are action, delete, query

1.99.1.3. query

Query the user's device profile

Usage:

```
am> query OathUserDevices --realm Realm --filter filter --user user
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all. Fields that can be queried: [*]

--user

The Oath devices service is responsible for exposing functions to change the collection of OATH authentication devices. The supported methods are action, delete, query

1.99.1.4. resetOathDevice

Sets the user's 'skippable' selection of Authenticator OATH module to default (NOT_SET) and deletes their profiles attribute

Usage:

```
am> action OathUserDevices --realm Realm --body body --user user --actionName resetOathDevice
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "description" : "Oath user device reset action request schema",
  "type" : "object",
  "title" : "Oath user device reset action request schema"
}
```

--user

The Oath devices service is responsible for exposing functions to change the collection of OATH authentication devices. The supported methods are action, delete, query

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1.99.1.5. skipOathDevice

Sets the user's ability to skip an Authenticator OATH module

Usage:

```
am> action OathUserDevices --realm Realm --body body --user user --actionName skipOathDevice
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "description" : "Oath user device skip action request schema",
  "type" : "object",
  "title" : "Oath user device skip action request schema",
  "properties" : {
    "value" : {
      "type" : "boolean",
      "title" : "Skip OATH module response value",
      "description" : "True if the OATH device is set to skipped"
    }
  },
  "required" : [ "value" ]
}
```

--user

The Oath devices service is responsible for exposing functions to change the collection of OATH authentication devices. The supported methods are action, delete, query

1.100. OpenDJ

1.100.1. Realm Operations

Resource path: `/realm-config/services/id-repositories/LDAPv3ForOpenDS`

Resource version: `1.0`

1.100.1.1. create

Usage:

```
am> create OpenDJ --realm Realm --id id --body body
```

Parameters:

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--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "sun-idrepo-ldapv3-config-users-search-attribute" : {
      "title" : "LDAP Users  Search Attribute",
      "description" : "",
      "propertyOrder" : 2100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-people-container-value" : {
      "title" : "LDAP People Container Value",
      "description" : "",
      "propertyOrder" : 5100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-user-objectclass" : {
      "title" : "LDAP User Object Class",
      "description" : "",
      "propertyOrder" : 2300,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-group-attributes" : {
      "title" : "LDAP Groups Attributes",
      "description" : "",
      "propertyOrder" : 3400,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-connection-mode" : {
      "title" : "LDAP Connection Mode",
      "description" : "Defines which protocol/operation is used to establish the connection to the
LDAP Directory Server.<br><br>If 'LDAP' is selected, the connection <b>won't be secured</b> and
passwords are transferred in <b>cleartext</b> over the network.<br/> If 'LDAPS' is selected, the
connection is secured via SSL or TLS. <br/> If 'StartTLS' is selected, the connection is secured by
using StartTLS extended operation.",
      "propertyOrder" : 1000,
      "required" : true,
      "type" : "string",
```


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```
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-psearch-scope" : {
      "title" : "Persistent Search Scope",
      "description" : "",
      "propertyOrder" : 5700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-connection_pool_min_size" : {
      "title" : "LDAP Connection Pool Minimum Size",
      "description" : "",
      "propertyOrder" : 1100,
      "required" : false,
      "type" : "integer",
      "exampleValue" : ""
    },
    "com.iplanet.am.ldap.connection.delay.between.retries" : {
      "title" : "The Delay Time Between Retries",
      "description" : "In milliseconds.",
      "propertyOrder" : 5800,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-people-container-name" : {
      "title" : "LDAP People Container Naming Attribute",
      "description" : "",
      "propertyOrder" : 5000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-isactive" : {
      "title" : "Attribute Name of User Status",
      "description" : "",
      "propertyOrder" : 2600,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-connection_pool_max_size" : {
      "title" : "LDAP Connection Pool Maximum Size",
      "description" : "",
      "propertyOrder" : 1200,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-dncache-enabled" : {
      "title" : "DN Cache",
      "description" : "Used to enable/disable the DN Cache within the OpenAM repository
implementation.<br><br>The DN Cache is used to cache DN lookups which tend to happen in bursts during
authentication. The DN Cache can become out of date when a user is moved or renamed in the underlying
LDAP store and this is not reflected in a persistent search result. Enable when the underlying LDAP
store supports persistent search and move/rename (mod_dn) results are available.",
      "propertyOrder" : 5900,
      "required" : true,
```


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```
      "type" : "boolean",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-memberof" : {
      "title" : "Attribute Name for Group Membership",
      "description" : "",
      "propertyOrder" : 3500,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-organization_name" : {
      "title" : "LDAP Organization DN",
      "description" : "",
      "propertyOrder" : 900,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "openam-idrepo-ldapv3-heartbeat-interval" : {
      "title" : "LDAP Connection Heartbeat Interval",
      "description" : "Specifies how often should OpenAM send a heartbeat request to the
directory.<br><br>This setting controls how often OpenAM <b>should</b> send a heartbeat search
request to the configured directory. If a connection becomes unresponsive (e.g. due to a network
error) then it may take up to the interval period before the problem is detected. Use along with the
Heartbeat Time Unit parameter to define the exact interval. Zero or negative value will result in
disabling heartbeat requests.",
      "propertyOrder" : 1300,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "sunIdRepoSupportedOperations" : {
      "title" : "LDAPv3 Plug-in Supported Types and Operations",
      "description" : "",
      "propertyOrder" : 1900,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-group-objectclass" : {
      "title" : "LDAP Groups Object Class",
      "description" : "",
      "propertyOrder" : 3300,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-authpw" : {
      "title" : "LDAP Bind Password",
      "description" : "",
      "propertyOrder" : 800,
      "required" : true,
```


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```
      "type" : "string",
      "format" : "password",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-ldap-server" : {
      "title" : "LDAP Server",
      "description" : "Format: LDAP server host name:port | server_ID | site_ID",
      "propertyOrder" : 600,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-createuser-attr-mapping" : {
      "title" : "Create User Attribute Mapping",
      "description" : "Format: attribute name or TargetAttributeName=SourceAttributeName",
      "propertyOrder" : 2500,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-authid" : {
      "title" : "LDAP Bind DN",
      "description" : "A user or admin with sufficient access rights to perform the supported
operations.",
      "propertyOrder" : 700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-users-search-filter" : {
      "title" : "LDAP Users  Search Filter",
      "description" : "",
      "propertyOrder" : 2200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-auth-kba-attr" : {
      "title" : "Knowledge Based Authentication Attribute Name",
      "description" : "",
      "propertyOrder" : 5300,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-group-container-value" : {
      "title" : "LDAP Groups Container Value",
      "description" : "",
      "propertyOrder" : 3200,
      "required" : true,
```


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```
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-inactive" : {
      "title" : "User Status Inactive Value",
      "description" : "",
      "propertyOrder" : 2800,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-auth-kba-index-attr" : {
      "title" : "Knowledge Based Authentication Active Index",
      "description" : "",
      "propertyOrder" : 5400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "openam-idrepo-ldapv3-affinity-enabled" : {
      "title" : "Affinity Enabled",
      "description" : "Enables affinity based request load balancing when accessing the user store
servers (based on DN). It is imperative that the connection string setting is set to the same value
for all OpenAM servers in the deployment when this feature is enabled.",
      "propertyOrder" : 6200,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-memberurl" : {
      "title" : "Attribute Name of Group Member URL",
      "description" : "",
      "propertyOrder" : 3700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-time-limit" : {
      "title" : "Search Timeout",
      "description" : "In seconds.",
      "propertyOrder" : 1600,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-uniquemember" : {
      "title" : "Attribute Name of Unique Member",
      "description" : "",
      "propertyOrder" : 3600,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-groups-search-filter" : {
      "title" : "LDAP Groups Search Filter",
      "description" : "",
      "propertyOrder" : 3000,
      "required" : true,
      "type" : "string",
```


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```
      "exampleValue" : ""
    },
    "sunIdRepoAttributeMapping" : {
      "title" : "Attribute Name Mapping",
      "description" : "",
      "propertyOrder" : 1800,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-dncache-size" : {
      "title" : "DN Cache Size",
      "description" : "In DN items, only used when DN Cache is enabled.",
      "propertyOrder" : 6000,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-group-container-name" : {
      "title" : "LDAP Groups Container Naming Attribute",
      "description" : "",
      "propertyOrder" : 3100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-groups-search-attribute" : {
      "title" : "LDAP Groups Search Attribute",
      "description" : "",
      "propertyOrder" : 2900,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "openam-idrepo-ldapv3-heartbeat-timeunit" : {
      "title" : "LDAP Connection Heartbeat Time Unit",
      "description" : "Defines the time unit corresponding to the Heartbeat Interval
setting.<br><br>This setting controls how often OpenAM <b>should</b> send a heartbeat search request
to the configured directory. If a connection becomes unresponsive (e.g. due to a network error) then
it may take up to the interval period before the problem is detected. Use along with the Heartbeat
Interval parameter to define the exact interval.",
      "propertyOrder" : 1400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-psearch-filter" : {
      "title" : "Persistent Search Filter",
      "description" : "",
      "propertyOrder" : 5600,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-search-scope" : {
      "title" : "LDAPv3 Plug-in Search Scope",
```


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```
      "description" : "",
      "propertyOrder" : 2000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-max-result" : {
      "title" : "Maximum Results Returned from Search",
      "description" : "",
      "propertyOrder" : 1500,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-active" : {
      "title" : "User Status Active Value",
      "description" : "",
      "propertyOrder" : 2700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sunIdRepoClass" : {
      "title" : "LDAPv3 Repository Plug-in Class Name",
      "description" : "",
      "propertyOrder" : 1700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-psearchbase" : {
      "title" : "Persistent Search Base DN",
      "description" : "",
      "propertyOrder" : 5500,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-user-attributes" : {
      "title" : "LDAP User Attributes",
      "description" : "",
      "propertyOrder" : 2400,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "openam-idrepo-ldapv3-behera-support-enabled" : {
      "title" : "Behera Support Enabled",
      "description" : "When enabled, Behera draft control will be used in the outgoing requests for
operations that may modify password value. This will allow OpenAM to display password policy related
error messages when password policies are not met.",
      "propertyOrder" : 6100,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
```


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```
    "sun-idrepo-ldapv3-config-auth-naming-attr" : {
      "title" : "Authentication Naming Attribute",
      "description" : "",
      "propertyOrder" : 5200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```

1.100.1.2. delete

Usage:

```
am> delete OpenDJ --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.100.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action OpenDJ --realm Realm --actionName getAllTypes
```

1.100.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action OpenDJ --realm Realm --actionName getCreatableTypes
```

1.100.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action OpenDJ --realm Realm --actionName nextdescendents
```

1.100.1.6. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

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Usage:

```
am> query OpenDJ --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.100.1.7. read

Usage:

```
am> read OpenDJ --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.100.1.8. update

Usage:

```
am> update OpenDJ --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "sun-idrepo-ldapv3-config-users-search-attribute" : {
      "title" : "LDAP Users  Search Attribute",
      "description" : "",
      "propertyOrder" : 2100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-people-container-value" : {
      "title" : "LDAP People Container Value",
      "description" : "",
      "propertyOrder" : 5100,
      "required" : true,
```


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```
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-user-objectclass" : {
      "title" : "LDAP User Object Class",
      "description" : "",
      "propertyOrder" : 2300,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-group-attributes" : {
      "title" : "LDAP Groups Attributes",
      "description" : "",
      "propertyOrder" : 3400,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-connection-mode" : {
      "title" : "LDAP Connection Mode",
      "description" : "Defines which protocol/operation is used to establish the connection to the
LDAP Directory Server.<br><br>If 'LDAP' is selected, the connection <b>won't be secured</b> and
passwords are transferred in <b>cleartext</b> over the network.<br/> If 'LDAPS' is selected, the
connection is secured via SSL or TLS. <br/> If 'StartTLS' is selected, the connection is secured by
using StartTLS extended operation.",
      "propertyOrder" : 1000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-psearch-scope" : {
      "title" : "Persistent Search Scope",
      "description" : "",
      "propertyOrder" : 5700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-connection_pool_min_size" : {
      "title" : "LDAP Connection Pool Minimum Size",
      "description" : "",
      "propertyOrder" : 1100,
      "required" : false,
      "type" : "integer",
      "exampleValue" : ""
    },
    "com.iplanet.am.ldap.connection.delay.between.retries" : {
      "title" : "The Delay Time Between Retries",
      "description" : "In milliseconds.",
      "propertyOrder" : 5800,
      "required" : true,
      "type" : "integer",
```


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```
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-people-container-name" : {
      "title" : "LDAP People Container Naming Attribute",
      "description" : "",
      "propertyOrder" : 5000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-isactive" : {
      "title" : "Attribute Name of User Status",
      "description" : "",
      "propertyOrder" : 2600,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-connection_pool_max_size" : {
      "title" : "LDAP Connection Pool Maximum Size",
      "description" : "",
      "propertyOrder" : 1200,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-dncache-enabled" : {
      "title" : "DN Cache",
      "description" : "Used to enable/disable the DN Cache within the OpenAM repository
implementation.<br><br>The DN Cache is used to cache DN lookups which tend to happen in bursts during
authentication. The DN Cache can become out of date when a user is moved or renamed in the underlying
LDAP store and this is not reflected in a persistent search result. Enable when the underlying LDAP
store supports persistent search and move/rename (mod_dn) results are available.",
      "propertyOrder" : 5900,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-memberof" : {
      "title" : "Attribute Name for Group Membership",
      "description" : "",
      "propertyOrder" : 3500,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-organization_name" : {
      "title" : "LDAP Organization DN",
      "description" : "",
      "propertyOrder" : 900,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "openam-idrepo-ldapv3-heartbeat-interval" : {
      "title" : "LDAP Connection Heartbeat Interval",
      "description" : "Specifies how often should OpenAM send a heartbeat request to the
directory.<br><br>This setting controls how often OpenAM <b>should</b> send a heartbeat search
request to the configured directory. If a connection becomes unresponsive (e.g. due to a network
```


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```
error) then it may take up to the interval period before the problem is detected. Use along with the
Heartbeat Time Unit parameter to define the exact interval. Zero or negative value will result in
disabling heartbeat requests.",
     "propertyOrder" : 1300,
     "required" : true,
     "type" : "integer",
     "exampleValue" : ""
   },
   "sunIdRepoSupportedOperations" : {
     "title" : "LDAPv3 Plug-in Supported Types and Operations",
     "description" : "",
     "propertyOrder" : 1900,
     "required" : true,
     "items" : {
       "type" : "string"
     },
     "type" : "array",
     "exampleValue" : ""
   },
   "sun-idrepo-ldapv3-config-group-objectclass" : {
     "title" : "LDAP Groups Object Class",
     "description" : "",
     "propertyOrder" : 3300,
     "required" : true,
     "items" : {
       "type" : "string"
     },
     "type" : "array",
     "exampleValue" : ""
   },
   "sun-idrepo-ldapv3-config-authpw" : {
     "title" : "LDAP Bind Password",
     "description" : "",
     "propertyOrder" : 800,
     "required" : true,
     "type" : "string",
     "format" : "password",
     "exampleValue" : ""
   },
   "sun-idrepo-ldapv3-config-ldap-server" : {
     "title" : "LDAP Server",
     "description" : "Format: LDAP server host name:port | server_ID | site_ID",
     "propertyOrder" : 600,
     "required" : true,
     "items" : {
       "type" : "string"
     },
     "type" : "array",
     "exampleValue" : ""
   },
   "sun-idrepo-ldapv3-config-createuser-attr-mapping" : {
     "title" : "Create User Attribute Mapping",
     "description" : "Format: attribute name or TargetAttributeName=SourceAttributeName",
     "propertyOrder" : 2500,
     "required" : true,
     "items" : {
       "type" : "string"
     },
     "type" : "array",
```


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```
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-authid" : {
      "title" : "LDAP Bind DN",
      "description" : "A user or admin with sufficient access rights to perform the supported
operations.",
      "propertyOrder" : 700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-users-search-filter" : {
      "title" : "LDAP Users  Search Filter",
      "description" : "",
      "propertyOrder" : 2200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-auth-kba-attr" : {
      "title" : "Knowledge Based Authentication Attribute Name",
      "description" : "",
      "propertyOrder" : 5300,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-group-container-value" : {
      "title" : "LDAP Groups Container Value",
      "description" : "",
      "propertyOrder" : 3200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-inactive" : {
      "title" : "User Status Inactive Value",
      "description" : "",
      "propertyOrder" : 2800,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-auth-kba-index-attr" : {
      "title" : "Knowledge Based Authentication Active Index",
      "description" : "",
      "propertyOrder" : 5400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "openam-idrepo-ldapv3-affinity-enabled" : {
      "title" : "Affinity Enabled",
      "description" : "Enables affinity based request load balancing when accessing the user store
servers (based on DN). It is imperative that the connection string setting is set to the same value
for all OpenAM servers in the deployment when this feature is enabled.",
```


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```
      "propertyOrder" : 6200,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-memberurl" : {
      "title" : "Attribute Name of Group Member URL",
      "description" : "",
      "propertyOrder" : 3700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-time-limit" : {
      "title" : "Search Timeout",
      "description" : "In seconds.",
      "propertyOrder" : 1600,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-uniquemember" : {
      "title" : "Attribute Name of Unique Member",
      "description" : "",
      "propertyOrder" : 3600,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-groups-search-filter" : {
      "title" : "LDAP Groups Search Filter",
      "description" : "",
      "propertyOrder" : 3000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sunIdRepoAttributeMapping" : {
      "title" : "Attribute Name Mapping",
      "description" : "",
      "propertyOrder" : 1800,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-dncache-size" : {
      "title" : "DN Cache Size",
      "description" : "In DN items, only used when DN Cache is enabled.",
      "propertyOrder" : 6000,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-group-container-name" : {
      "title" : "LDAP Groups Container Naming Attribute",
      "description" : "",
```


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```
      "propertyOrder" : 3100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-groups-search-attribute" : {
      "title" : "LDAP Groups Search Attribute",
      "description" : "",
      "propertyOrder" : 2900,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "openam-idrepo-ldapv3-heartbeat-timeunit" : {
      "title" : "LDAP Connection Heartbeat Time Unit",
      "description" : "Defines the time unit corresponding to the Heartbeat Interval
setting.<br><br>This setting controls how often OpenAM <b>should</b> send a heartbeat search request
to the configured directory. If a connection becomes unresponsive (e.g. due to a network error) then
it may take up to the interval period before the problem is detected. Use along with the Heartbeat
Interval parameter to define the exact interval.",
      "propertyOrder" : 1400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-psearch-filter" : {
      "title" : "Persistent Search Filter",
      "description" : "",
      "propertyOrder" : 5600,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-search-scope" : {
      "title" : "LDAPv3 Plug-in Search Scope",
      "description" : "",
      "propertyOrder" : 2000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-max-result" : {
      "title" : "Maximum Results Returned from Search",
      "description" : "",
      "propertyOrder" : 1500,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-active" : {
      "title" : "User Status Active Value",
      "description" : "",
      "propertyOrder" : 2700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sunIdRepoClass" : {
      "title" : "LDAPv3 Repository Plug-in Class Name",
```


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```
      "description" : "",
      "propertyOrder" : 1700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-psearchbase" : {
      "title" : "Persistent Search Base DN",
      "description" : "",
      "propertyOrder" : 5500,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-user-attributes" : {
      "title" : "LDAP User Attributes",
      "description" : "",
      "propertyOrder" : 2400,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "openam-idrepo-ldapv3-behera-support-enabled" : {
      "title" : "Behera Support Enabled",
      "description" : "When enabled, Behera draft control will be used in the outgoing requests for
 operations that may modify password value. This will allow OpenAM to display password policy related
 error messages when password policies are not met.",
      "propertyOrder" : 6100,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-auth-naming-attr" : {
      "title" : "Authentication Naming Attribute",
      "description" : "",
      "propertyOrder" : 5200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```

1.101. OpenIdConnectModule

1.101.1. Realm Operations

Resource path: `/realm-config/authentication/modules/openidconnect`

Resource version: `1.0`

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1.101.1.1. create

Usage:

```
am> create OpenIdConnectModule --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "cryptoContextType" : {
      "title" : "OpenID Connect validation configuration type",
      "description" : "Please select either 1. the issuer discovery url, 2. the issuer jwk url, or 3.
 the client_secret.",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "jwtToLdapAttributeMappings" : {
      "title" : "Mapping of jwt attributes to local LDAP attributes",
      "description" : "Format: jwt_attribute=local_ldap_attribute<br><br>Mappings allow jwt entries to
 drive principal lookup. This entry determines how to translate between local LDAP attributes and the
 entries in the jwt. See <a href=\"http://openid.net/specs/openid-connect-core-1_0.html#ScopeClaims
\" target=\"_blank\">OpenID Connect Core 1.0 Specification</a> section 5.4 on how to request the
 inclusion of additional attributes in issued ID Tokens.",
      "propertyOrder" : 600,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "clientSecret" : {
      "title" : "Client Secret",
      "description" : "OAuth client_secret parameter<br><br>For more information on the OAuth
 client_secret parameter refer to the <a href=\"http://tools.ietf.org/html/rfc6749#section-2.3.1\"
 target=\"_blank\">RFC 6749</a>, section 2.3.1",
      "propertyOrder" : 301,
      "required" : true,
      "type" : "string",
      "format" : "password",
      "exampleValue" : ""
    },
    "audienceName" : {
      "title" : "Audience name",
```


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```
     "description" : "A case sensitive string<br><br>The audience name for this OpenID Conenct
module. This will be used to check that the ID token received is intended for this module as an
audience.",
     "propertyOrder" : 700,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "idTokenIssuer" : {
     "title" : "Name of OpenID Connect ID Token Issuer",
     "description" : "Value must match the iss field in issued ID Token",
     "propertyOrder" : 500,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "accountProviderClass" : {
     "title" : "Account provider class",
     "description" : "Name of the class implementing the account provider.<br><br>This class
is used by the module to find the account from the attributes mapped by the Account Mapper
<code>org.forgerock.openam.authentication.modules.common.mapping.AccountProvider</code> interface.",
     "propertyOrder" : 100,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "acceptedAuthorizedParties" : {
     "title" : "List of accepted authorized parties",
     "description" : "A list of case sensitive strings which can be either string or URI
values<br><br>A list of authorized parties which this module will accept ID tokens from. This will be
checked against the authorized party claim of the ID token.",
     "propertyOrder" : 800,
     "required" : true,
     "items" : {
       "type" : "string"
     },
     "type" : "array",
     "exampleValue" : ""
   },
   "idTokenHeaderName" : {
     "title" : "Name of header referencing the ID Token",
     "description" : "",
     "propertyOrder" : 400,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "principalMapperClass" : {
     "title" : "Principal mapper class",
     "description" : "Class which implements mapping of jwt state to a Principal in
the local identity repository<br><br>Any custom implementation must implement the
<code>org.forgerock.openam.authentication.modules.common.mapping.AttributeMapper</code> interface.",
     "propertyOrder" : 900,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "cryptoContextValue" : {
     "title" : "OpenID Connect validation configuration value",
```


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```
      "description" : "The discovery url, or jwk url, or the client_secret, corresponding to the
 selection above.<br><br>If discovery or jwk url entered, entry must be in valid url format, <br/>e.g.
 https://accounts.google.com/.well-known/openid-configuration<br/><i>NB </i>If client_secret entered,
 entry is ignored and the value of the Client Secret is used.",
      "propertyOrder" : 300,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "useSubClaimIfNoMatch" : {
      "title" : "Use \"sub\" claim if no match",
      "description" : "If no account is found that matches, whether to use the \"sub\" claim as the
 principal name or (if false) to fail.",
      "propertyOrder" : 1000,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    }
  }
}
```

1.101.1.2. delete

Usage:

```
am> delete OpenIdConnectModule --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.101.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action OpenIdConnectModule --realm Realm --actionName getAllTypes
```

1.101.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action OpenIdConnectModule --realm Realm --actionName getCreatableTypes
```

1.101.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

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Usage:

```
am> action OpenIdConnectModule --realm Realm --actionName nextdescendents
```

1.101.1.6. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

```
am> query OpenIdConnectModule --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.101.1.7. read

Usage:

```
am> read OpenIdConnectModule --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.101.1.8. update

Usage:

```
am> update OpenIdConnectModule --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "cryptoContextType" : {
      "title" : "OpenID Connect validation configuration type",
      "description" : "Please select either 1. the issuer discovery url, 2. the issuer jwk url, or 3.
 the client_secret.",
```


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```
      "propertyOrder" : 200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "jwtToLdapAttributeMappings" : {
      "title" : "Mapping of jwt attributes to local LDAP attributes",
      "description" : "Format: jwt_attribute=local_ldap_attribute<br><br>Mappings allow jwt entries to
 drive principal lookup. This entry determines how to translate between local LDAP attributes and the
 entries in the jwt. See <a href=\"http://openid.net/specs/openid-connect-core-1_0.html#ScopeClaims
\" target=\"_blank\">OpenID Connect Core 1.0 Specification</a> section 5.4 on how to request the
 inclusion of additional attributes in issued ID Tokens.",
      "propertyOrder" : 600,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "clientSecret" : {
      "title" : "Client Secret",
      "description" : "OAuth client_secret parameter<br><br>For more information on the OAuth
 client_secret parameter refer to the <a href=\"http://tools.ietf.org/html/rfc6749#section-2.3.1\"
 target=\"_blank\">RFC 6749</a>, section 2.3.1",
      "propertyOrder" : 301,
      "required" : true,
      "type" : "string",
      "format" : "password",
      "exampleValue" : ""
    },
    "audienceName" : {
      "title" : "Audience name",
      "description" : "A case sensitive string<br><br>The audience name for this OpenID Conenct
 module. This will be used to check that the ID token received is intended for this module as an
 audience.",
      "propertyOrder" : 700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "idTokenIssuer" : {
      "title" : "Name of OpenID Connect ID Token Issuer",
      "description" : "Value must match the iss field in issued ID Token",
      "propertyOrder" : 500,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "accountProviderClass" : {
      "title" : "Account provider class",
      "description" : "Name of the class implementing the account provider.<br><br>This class
 is used by the module to find the account from the attributes mapped by the Account Mapper
 <code>org.forgerock.openam.authentication.modules.common.mapping.AccountProvider</code> interface.",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
```


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```
    "acceptedAuthorizedParties" : {
      "title" : "List of accepted authorized parties",
      "description" : "A list of case sensitive strings which can be either string or URI
 values<br><br>A list of authorized parties which this module will accept ID tokens from. This will be
 checked against the authorized party claim of the ID token.",
      "propertyOrder" : 800,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "idTokenHeaderName" : {
      "title" : "Name of header referencing the ID Token",
      "description" : "",
      "propertyOrder" : 400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "principalMapperClass" : {
      "title" : "Principal mapper class",
      "description" : "Class which implements mapping of jwt state to a Principal in
 the local identity repository<br><br>Any custom implementation must implement the
 <code>org.forgerock.openam.authentication.modules.common.mapping.AttributeMapper</code> interface.",
      "propertyOrder" : 900,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "cryptoContextValue" : {
      "title" : "OpenID Connect validation configuration value",
      "description" : "The discovery url, or jwk url, or the client_secret, corresponding to the
 selection above.<br><br>If discovery or jwk url entered, entry must be in valid url format, <br/>e.g.
 https://accounts.google.com/.well-known/openid-configuration<br/><i>NB </i>If client_secret entered,
 entry is ignored and the value of the Client Secret is used.",
      "propertyOrder" : 300,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "useSubClaimIfNoMatch" : {
      "title" : "Use \"sub\" claim if no match",
      "description" : "If no account is found that matches, whether to use the \"sub\" claim as the
 principal name or (if false) to fail.",
      "propertyOrder" : 1000,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    }
  }
}
```


1.101.2. Global Operations

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Resource path: `/global-config/authentication/modules/openidconnect`

Resource version: `1.0`

1.101.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action OpenIdConnectModule --global --actionName getAllTypes
```

1.101.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action OpenIdConnectModule --global --actionName getCreatableTypes
```

1.101.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action OpenIdConnectModule --global --actionName nextdescendents
```

1.101.2.4. read

Usage:

```
am> read OpenIdConnectModule --global
```

1.101.2.5. update

Usage:

```
am> update OpenIdConnectModule --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "defaults" : {
```


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```
     "properties" : {
       "cryptoContextValue" : {
         "title" : "OpenID Connect validation configuration value",
         "description" : "The discovery url, or jwk url, or the client_secret, corresponding to the
selection above.<br><br>If discovery or jwk url entered, entry must be in valid url format, <br/>e.g.
https://accounts.google.com/.well-known/openid-configuration<br/><i>NB </i>If client_secret entered,
entry is ignored and the value of the Client Secret is used.",
         "propertyOrder" : 300,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       },
       "principalMapperClass" : {
         "title" : "Principal mapper class",
         "description" : "Class which implements mapping of jwt state to a Principal
in the local identity repository<br><br>Any custom implementation must implement the
<code>org.forgerock.openam.authentication.modules.common.mapping.AttributeMapper</code> interface.",
         "propertyOrder" : 900,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       },
       "idTokenIssuer" : {
         "title" : "Name of OpenID Connect ID Token Issuer",
         "description" : "Value must match the iss field in issued ID Token",
         "propertyOrder" : 500,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       },
       "audienceName" : {
         "title" : "Audience name",
         "description" : "A case sensitive string<br><br>The audience name for this OpenID Conenct
module. This will be used to check that the ID token received is intended for this module as an
audience.",
         "propertyOrder" : 700,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       },
       "acceptedAuthorizedParties" : {
         "title" : "List of accepted authorized parties",
         "description" : "A list of case sensitive strings which can be either string or URI
values<br><br>A list of authorized parties which this module will accept ID tokens from. This will be
checked against the authorized party claim of the ID token.",
         "propertyOrder" : 800,
         "required" : true,
         "items" : {
           "type" : "string"
         },
         "type" : "array",
         "exampleValue" : ""
       },
       "jwtToLdapAttributeMappings" : {
         "title" : "Mapping of jwt attributes to local LDAP attributes",
         "description" : "Format: jwt_attribute=local_ldap_attribute<br><br>Mappings allow jwt
entries to drive principal lookup. This entry determines how to translate between local LDAP
attributes and the entries in the jwt. See <a href=\"http://openid.net/specs/openid-connect-
```


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```
core-1_0.html#ScopeClaims\" target=\"_blank\">OpenID Connect Core 1.0 Specification</a> section 5.4 on
 how to request the inclusion of additional attributes in issued ID Tokens.",
          "propertyOrder" : 600,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "clientSecret" : {
          "title" : "Client Secret",
          "description" : "OAuth client_secret parameter<br><br>For more information on the OAuth
 client_secret parameter refer to the <a href=\"http://tools.ietf.org/html/rfc6749#section-2.3.1\"
 target=\"_blank\">RFC 6749</a>, section 2.3.1",
          "propertyOrder" : 301,
          "required" : true,
          "type" : "string",
          "format" : "password",
          "exampleValue" : ""
        },
        "idTokenHeaderName" : {
          "title" : "Name of header referencing the ID Token",
          "description" : "",
          "propertyOrder" : 400,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "accountProviderClass" : {
          "title" : "Account provider class",
          "description" : "Name of the class implementing the account provider.<br><br>This
 class is used by the module to find the account from the attributes mapped by the Account Mapper
 <code>org.forgerock.openam.authentication.modules.common.mapping.AccountProvider</code> interface.",
          "propertyOrder" : 100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "cryptoContextType" : {
          "title" : "OpenID Connect validation configuration type",
          "description" : "Please select either 1. the issuer discovery url, 2. the issuer jwk url, or
 3. the client_secret.",
          "propertyOrder" : 200,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "useSubClaimIfNoMatch" : {
          "title" : "Use \"sub\" claim if no match",
          "description" : "If no account is found that matches, whether to use the \"sub\" claim as
 the principal name or (if false) to fail.",
          "propertyOrder" : 1000,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        }
      },
      "type" : "object",
```


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```
      "title" : "Realm Defaults"
    }
  }
}
```

1.102. PasswordCollector

1.102.1. Realm Operations

Resource path: `/realm-config/authentication/authenticationtrees/nodes/PasswordCollectorNode`

Resource version: `1.0`

1.102.1.1. create

Usage:

```
am> create PasswordCollector --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object"
}
```

1.102.1.2. delete

Usage:

```
am> delete PasswordCollector --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

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1.102.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action PasswordCollector --realm Realm --actionName getAllTypes
```

1.102.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action PasswordCollector --realm Realm --actionName getCreatableTypes
```

1.102.1.5. listOutcomes

List the available outcomes for the node type.

Usage:

```
am> action PasswordCollector --realm Realm --body body --actionName listOutcomes
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "title" : "Some configuration of the node. This does not need to be complete against the
 configuration schema."
}
```

1.102.1.6. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action PasswordCollector --realm Realm --actionName nextdescendents
```

1.102.1.7. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

```
am> query PasswordCollector --realm Realm --filter filter
```

Parameters:

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--filter

A CREST formatted query filter, where "true" will query all.

1.102.1.8. read

Usage:

```
am> read PasswordCollector --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.102.1.9. update

Usage:

```
am> update PasswordCollector --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object"
}
```

1.102.2. Global Operations

Resource path: `/global-config/authentication/authenticationtrees/nodes/PasswordCollectorNode`

Resource version: `1.0`

1.102.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action PasswordCollector --global --actionName getAllTypes
```


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1.102.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action PasswordCollector --global --actionName getCreatableTypes
```

1.102.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action PasswordCollector --global --actionName nextdescendents
```

1.102.2.4. read

Usage:

```
am> read PasswordCollector --global
```

1.102.2.5. update

Usage:

```
am> update PasswordCollector --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object"
}
```

1.103. PendingUmaRequests

1.103.1. Realm Operations

Pending UMA requests provider is responsible for allowing, denying and querying the guest requests for user resources. Awailable actions are Query, Read, Deny (all requests or one request), Approve (all requests or one request)

Resource path: `/users/{user}/uma/pendingrequests`

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Resource version: `1.0`

1.103.1.1. approve

Approve the pending request and grant access to the requesting user.

Usage:

```
am> action PendingUmaRequests --realm Realm --id id --body body --user user --actionName approve
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "$schema" : "http://json-schema.org/draft-04/schema#",
  "description" : "Approve action request schema.",
  "type" : "object",
  "title" : "Approve action request schema",
  "properties" : {
    "scopes" : {
      "type" : "array",
      "title" : "Approve request scopes",
      "description" : "The list of the scopes the requesting user gets access to.",
      "items" : {
        "type" : "string"
      }
    }
  },
  "required" : [ "scopes" ]
}
```

--user

Pending UMA requests provider is responsible for allowing, denying and querying the guest requests for user resources. Available actions are Query, Read, Deny (all requests or one request), Approve (all requests or one request)

1.103.1.2. approveAll

Approve every pending requests and grant access to the requesting user.

Usage:

```
am> action PendingUmaRequests --realm Realm --body body --user user --actionName approveAll
```

Parameters:

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--body

The resource in JSON format, described by the following JSON schema:

```
{
  "$schema" : "http://json-schema.org/draft-04/schema#",
  "description" : "Approve action request schema.",
  "type" : "object",
  "title" : "Approve action request schema",
  "properties" : {
    "scopes" : {
      "type" : "array",
      "title" : "Approve request scopes",
      "description" : "The list of the scopes the requesting user gets access to.",
      "items" : {
        "type" : "string"
      }
    }
  },
  "required" : [ "scopes" ]
}
```

--user

Pending UMA requests provider is responsible for allowing, denying and querying the guest requests for user resources. Available actions are Query, Read, Deny (all requests or one request), Approve (all requests or one request)

1.103.1.3. query

Query the collection of pending requests.

Usage:

```
am> query PendingUmaRequests --realm Realm --filter filter --user user
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all. Fields that can be queried: [*]

--user

Pending UMA requests provider is responsible for allowing, denying and querying the guest requests for user resources. Available actions are Query, Read, Deny (all requests or one request), Approve (all requests or one request)

1.103.1.4. read

Read pending request

Usage:

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```
am> read PendingUmaRequests --realm Realm --id id --user user
```

Parameters:

--id

The unique identifier for the resource.

--user

Pending UMA requests provider is responsible for allowing, denying and querying the guest requests for user resources. Available actions are Query, Read, Deny (all requests or one request), Approve (all requests or one request)

1.104. PersistentCookieModule

1.104.1. Realm Operations

Resource path: `/realm-config/authentication/modules/persistentcookie`

Resource version: `1.0`

1.104.1.1. create

Usage:

```
am> create PersistentCookieModule --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "enforceClientIP" : {
      "title" : "Enforce Client IP",
      "description" : "Enforces that the persistent cookie can only be used from the same client IP to
 which the cookie was issued.",
      "propertyOrder" : 300,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
```


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```
    "maxLife" : {
      "title" : "Max Life",
      "description" : "The maximum length of time the persistent cookie is valid for, in hours.",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "cookieName" : {
      "title" : "Persistent Cookie Name",
      "description" : "Sets the name of the persistent cookie",
      "propertyOrder" : null,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "idleTimeout" : {
      "title" : "Idle Timeout",
      "description" : "The maximum idle time between requests before the cookie is invalidated, in
 hours.",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "useSecureCookie" : {
      "title" : "Use secure cookie",
      "description" : "Sets the persistent cookie as \"Secure\"",
      "propertyOrder" : 400,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "useHttpOnlyCookie" : {
      "title" : "Use HTTP only cookie",
      "description" : "Sets the persistent cookie as \"HttpOnly\"",
      "propertyOrder" : 500,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "hmacKey" : {
      "title" : "HMAC Signing Key",
      "description" : "Base64-encoded 256-bit key to use for HMAC signing of the cookie.",
      "propertyOrder" : 600,
      "required" : true,
      "type" : "string",
      "format" : "password",
      "exampleValue" : ""
    }
  }
}
```

1.104.1.2. delete

Usage:

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```
am> delete PersistentCookieModule --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.104.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action PersistentCookieModule --realm Realm --actionName getAllTypes
```

1.104.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action PersistentCookieModule --realm Realm --actionName getCreatableTypes
```

1.104.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action PersistentCookieModule --realm Realm --actionName nextdescendents
```

1.104.1.6. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

```
am> query PersistentCookieModule --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.104.1.7. read

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Usage:

```
am> read PersistentCookieModule --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.104.1.8. update

Usage:

```
am> update PersistentCookieModule --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "enforceClientIP" : {
      "title" : "Enforce Client IP",
      "description" : "Enforces that the persistent cookie can only be used from the same client IP to
 which the cookie was issued.",
      "propertyOrder" : 300,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "maxLife" : {
      "title" : "Max Life",
      "description" : "The maximum length of time the persistent cookie is valid for, in hours.",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "cookieName" : {
      "title" : "Persistent Cookie Name",
      "description" : "Sets the name of the persistent cookie",
      "propertyOrder" : null,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "idleTimeout" : {
      "title" : "Idle Timeout",
```


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```
      "description" : "The maximum idle time between requests before the cookie is invalidated, in
 hours.",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "useSecureCookie" : {
      "title" : "Use secure cookie",
      "description" : "Sets the persistent cookie as \"Secure\"",
      "propertyOrder" : 400,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "useHttpOnlyCookie" : {
      "title" : "Use HTTP only cookie",
      "description" : "Sets the persistent cookie as \"HttpOnly\"",
      "propertyOrder" : 500,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "hmacKey" : {
      "title" : "HMAC Signing Key",
      "description" : "Base64-encoded 256-bit key to use for HMAC signing of the cookie.",
      "propertyOrder" : 600,
      "required" : true,
      "type" : "string",
      "format" : "password",
      "exampleValue" : ""
    }
  }
}
```

1.104.2. Global Operations

Resource path: `/global-config/authentication/modules/persistentcookie`

Resource version: `1.0`

1.104.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action PersistentCookieModule --global --actionName getAllTypes
```

1.104.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

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Usage:

```
am> action PersistentCookieModule --global --actionName getCreatableTypes
```

1.104.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action PersistentCookieModule --global --actionName nextdescendents
```

1.104.2.4. read

Usage:

```
am> read PersistentCookieModule --global
```

1.104.2.5. update

Usage:

```
am> update PersistentCookieModule --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "defaults" : {
      "properties" : {
        "useHttpOnlyCookie" : {
          "title" : "Use HTTP only cookie",
          "description" : "Sets the persistent cookie as \"HttpOnly\"",
          "propertyOrder" : 500,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "hmacKey" : {
          "title" : "HMAC Signing Key",
          "description" : "Base64-encoded 256-bit key to use for HMAC signing of the cookie.",
          "propertyOrder" : 600,
          "required" : true,
          "type" : "string",
          "format" : "password",
          "exampleValue" : ""
        },
        "idleTimeout" : {
```


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```
          "title" : "Idle Timeout",
          "description" : "The maximum idle time between requests before the cookie is invalidated, in
 hours.",
          "propertyOrder" : 100,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "maxLife" : {
          "title" : "Max Life",
          "description" : "The maximum length of time the persistent cookie is valid for, in hours.",
          "propertyOrder" : 200,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "cookieName" : {
          "title" : "Persistent Cookie Name",
          "description" : "Sets the name of the persistent cookie",
          "propertyOrder" : null,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "useSecureCookie" : {
          "title" : "Use secure cookie",
          "description" : "Sets the persistent cookie as \"Secure\"",
          "propertyOrder" : 400,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "enforceClientIP" : {
          "title" : "Enforce Client IP",
          "description" : "Enforces that the persistent cookie can only be used from the same client
 IP to which the cookie was issued.",
          "propertyOrder" : 300,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        }
      },
      "type" : "object",
      "title" : "Realm Defaults"
    }
  }
}
```


1.105. Platform

1.105.1. Global Operations

Resource path: `/global-config/services/platform`

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Resource version: `1.0`

1.105.1.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action Platform --global --actionName getAllTypes
```

1.105.1.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action Platform --global --actionName getCreatableTypes
```

1.105.1.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action Platform --global --actionName nextdescendents
```

1.105.1.4. read

Usage:

```
am> read Platform --global
```

1.105.1.5. update

Usage:

```
am> update Platform --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

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```
{
  "type" : "object",
  "properties" : {
    "locale" : {
      "title" : "Platform Locale",
      "description" : "Set the fallback locale used when the user locale cannot be determined.",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "cookieDomains" : {
      "title" : "Cookie Domains",
      "description" : "Set the list of domains into which OpenAM writes cookies.<br><br>If you set
 multiple cookie domains, OpenAM still only sets the cookie in the domain the client uses to access
 OpenAM. If this property is left blank, then the fully qualified domain name of the server is used to
 set the cookie domain, meaning that a host cookie rather than a domain cookie is set.",
      "propertyOrder" : 200,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    }
  }
}
```

1.106. Policies

1.106.1. Realm Operations

The Policy resource with copy and move support endpoint is responsible for managing policies. It supports all the operations that previous version of Policy resource endpoint supports - create, read, update, delete, query, evalute and evaluateTree action - with two new actions move and copy for copying and moving policies between realms

Resource path: `/policies`

Resource version: `2.1`

1.106.1.1. copy

Copy a list of policies

Usage:

```
am> action Policies --realm Realm --body body --actionName copy
```

Parameters:

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--body

The resource in JSON format, described by the following JSON schema:

```
{
  "$schema" : "http://json-schema.org/draft-04/schema#",
  "description" : "Policy copy action schema",
  "type" : "object",
  "title" : "Policy copy action schema",
  "properties" : {
    "from" : {
      "title" : "Copy/move from",
      "description" : "Policy copy/move origin parameters",
      "type" : "object",
      "properties" : {
        "application" : {
          "title" : "Application",
          "description" : "The policy set in which the input policies are located",
          "type" : "string"
        }
      },
      "required" : [ "application" ]
    },
    "to" : {
      "type" : "object",
      "title" : "Copy/Move To",
      "description" : "Policy copy/move destination parameters",
      "properties" : {
        "application" : {
          "title" : "Application",
          "description" : "The policy set in which to place the output policy. Required when copying
or moving a policy to a different policy set.",
          "type" : "string"
        },
        "realm" : {
          "title" : "Realm",
          "description" : "The realm in which to place the output policy. If not specified, OpenAM
copies or moves the policy within the realm identified in the URL. Required when copying or moving a
policy to a different realm.",
          "type" : "string"
        },
        "namePostfix" : {
          "title" : "Name postfix",
          "description" : "A value appended to output policy names in order to prevent name clashes",
          "type" : "string"
        }
      },
      "required" : [ "namePostfix" ]
    },
    "resourceTypeMapping" : {
      "title" : "Resource type mapping",
      "description" : "One or more resource types mappings, where the left side of the mapping
specifies the UUID of a resource type used by the input policies and the right side of the mapping
specifies the UUID of a resource type used by the output policies. The two resource types should have
the same resource patterns",
      "type" : "object",
      "additionalProperties" : {
        "type" : "string"
      }
```


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```
    }
  },
  "required" : [ "from", "to" ]
}
```

1.106.1.2. create

Create new policy

Usage:

```
am> create Policies --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "$schema" : "http://json-schema.org/draft-04/schema#",
  "description" : "Json schema for the policy resource",
  "title" : "Policy Resource Schema",
  "type" : "object",
  "properties" : {
    "name" : {
      "title" : "Name",
      "description" : "String matching the name of the application",
      "type" : "string"
    },
    "active" : {
      "title" : "Active flag",
      "description" : "Boolean indicating whether OpenAM considers the policy active for evaluation
 purposes, defaults to false",
      "type" : "boolean"
    },
    "description" : {
      "title" : "Description",
      "description" : "String describing the policy",
      "type" : "string"
    },
    "applicationName" : {
      "title" : "Application name",
      "description" : "String containing the application name, such as \"iPlanetAMWebAgentService\",
 or \"mypolicyset\"",
      "type" : "string"
    },
    "actionValues" : {
      "title" : "Action values",
      "description" : "Set of string action names, each set to a boolean indicating whether the action
 is allowed. Chosen from the available actions provided by the associated Managing Resource Types
 resource type",
      "type" : "object",
```


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```
      "additionalProperties" : {
        "type" : "boolean"
      }
    },
    "resources" : {
      "title" : "Resources",
      "description" : "List of the resource name pattern strings to which the policy applies. Must
conform to the pattern templates provided by the associated Managing Resource Types resource type",
      "type" : "array",
      "items" : {
        "type" : "string"
      }
    },
    "subject" : {
      "title" : "Subject",
      "description" : "Specifies the subject conditions to which the policy applies, where subjects
can be combined by using the built-in types \"AND\", \"OR\", and \"NOT\", and where subject
implementations are pluggable",
      "type" : "object"
    },
    "condition" : {
      "title" : "Condition",
      "description" : "Specifies environment conditions, where conditions can be combined by using the
built-in types \"AND\", \"OR\", and \"NOT\", and where condition implementations are pluggable",
      "type" : "object",
      "properties" : {
        "type" : {
          "type" : "string"
        },
        "conditions" : {
          "type" : "array",
          "title" : "Condition",
          "description" : "Specifies environment conditions, where conditions can be combined by using
the built-in types \"AND\", \"OR\", and \"NOT\", and where condition implementations are pluggable",
          "items" : {
            "type" : "object"
          }
        }
      }
    },
    "resourceTypeUuid" : {
      "title" : "Resource Type UUID",
      "description" : "The UUIDs of the resource type associated with the policy",
      "type" : "string"
    },
    "resourceAttributes" : {
      "title" : "Resource Attributes",
      "description" : "List of attributes to return with decisions. These attributes are known as
response attributes",
      "type" : "array",
      "items" : {
        "type" : "object"
      }
    },
    "lastModifiedBy" : {
      "title" : "Last Modified By",
      "description" : "A string containing the universal identifier DN of the subject that most
recently updated the policy",
      "type" : "string"
```


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```
    },
    "lastModifiedDate" : {
      "title" : "Last Modified date",
      "description" : "An integer containing the last modified date and time, in number of seconds",
      "type" : "string"
    },
    "createdBy" : {
      "title" : "Created By",
      "description" : "A string containing the universal identifier DN of the subject that created the
 policy",
      "type" : "string"
    },
    "creationDate" : {
      "title" : "Creation Date",
      "description" : "An integer containing the creation date and time, in number of seconds",
      "type" : "string"
    }
  }
}
```

1.106.1.3. delete

Delete policy

Usage:

```
am> delete Policies --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.106.1.4. evaluate

Request policy decisions for specific resources

Usage:

```
am> action Policies --realm Realm --body body --actionName evaluate
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "$schema" : "http://json-schema.org/draft-04/schema#",
  "description" : "Evaluate action schema",
  "title" : "Evaluate action schema",
  "type" : "object",
  "properties" : {
    "resources" : {
      "type" : "array",
```


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```
      "title" : "Resources",
      "description" : "Specifies the list of resources for which to return decisions",
      "items" : {
        "type" : "string"
      }
    },
    "application" : {
      "title" : "Application",
      "description" : "Holds the name of the application, and defaults to \"iPlanetAMWebAgentService\"
 if not specified",
      "type" : "string"
    },
    "subject" : {
      "title" : "Subject",
      "description" : "Holds an object that represents the subject. You can specify one or more of the
 following keys. If you specify multiple keys, the subject can have multiple associated principals,
 and you can use subject conditions corresponding to any type in the request",
      "type" : "object",
      "properties" : {
        "ssoToken" : {
          "title" : "SSOToken",
          "description" : "The value is the SSO token ID string for the subject",
          "type" : "string"
        },
        "jwt" : {
          "title" : "JWT",
          "description" : "The value is a JWT string",
          "type" : "string"
        },
        "claims" : {
          "title" : "Claims",
          "description" : "The value is an object (map) of JWT claims to their values.",
          "type" : "object",
          "additionalProperties" : {
            "type" : "string"
          }
        }
      }
    },
    "environment" : {
      "title" : "Environment",
      "description" : "Holds a map of keys to lists of values",
      "type" : "object",
      "additionalProperties" : {
        "type" : "array",
        "items" : {
          "type" : "string"
        }
      }
    }
  },
  "required" : [ "resources", "application" ]
}
```

1.106.1.5. evaluateTree

Request policy decisions for a tree of resources

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Usage:

```
am> action Policies --realm Realm --body body --actionName evaluateTree
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "$schema" : "http://json-schema.org/draft-04/schema#",
  "description" : "Evaluate tree action schema",
  "title" : "Evaluate tree action schema",
  "type" : "object",
  "properties" : {
    "resource" : {
      "title" : "Resource",
      "description" : "Specifies the root resource for the decisions to return",
      "type" : "string"
    },
    "application" : {
      "title" : "Application",
      "description" : "Holds the name of the application, and defaults to \"iPlanetAMWebAgentService\"
 if not specified",
      "type" : "string"
    },
    "subject" : {
      "title" : "Subject",
      "description" : "Holds an object that represents the subject. You can specify one or more of the
 following keys. If you specify multiple keys, the subject can have multiple associated principals,
 and you can use subject conditions corresponding to any type in the request",
      "type" : "object",
      "properties" : {
        "ssoToken" : {
          "title" : "SSOToken",
          "description" : "The value is the SSO token ID string for the subject",
          "type" : "string"
        },
        "jwt" : {
          "title" : "JWT",
          "description" : "The value is a JWT string",
          "type" : "string"
        },
        "claims" : {
          "title" : "Claims",
          "description" : "The value is an object (map) of JWT claims to their values.",
          "type" : "object",
          "additionalProperties" : {
            "type" : "string"
          }
        }
      }
    },
    "environment" : {
      "title" : "Environment",
      "description" : "Holds a map of keys to lists of values",
      "type" : "object",
```


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```
      "additionalProperties" : {
        "type" : "array",
        "items" : {
          "type" : "string"
        }
      }
    }
  },
  "required" : [ "resources", "application" ]
}
```

1.106.1.6. move

Move a list of policies

Usage:

```
am> action Policies --realm Realm --body body --actionName move
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "$schema" : "http://json-schema.org/draft-04/schema#",
  "description" : "Policy copy action schema",
  "type" : "object",
  "title" : "Policy copy action schema",
  "properties" : {
    "from" : {
      "title" : "Copy/move from",
      "description" : "Policy copy/move origin parameters",
      "type" : "object",
      "properties" : {
        "application" : {
          "title" : "Application",
          "description" : "The policy set in which the input policies are located",
          "type" : "string"
        }
      },
      "required" : [ "application" ]
    },
    "to" : {
      "type" : "object",
      "title" : "Copy/Move To",
      "description" : "Policy copy/move destination parameters",
      "properties" : {
        "application" : {
          "title" : "Application",
          "description" : "The policy set in which to place the output policy. Required when copying
 or moving a policy to a different policy set.",
          "type" : "string"
        },
        "realm" : {
          "title" : "Realm",
```


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```
          "description" : "The realm in which to place the output policy. If not specified, OpenAM
 copies or moves the policy within the realm identified in the URL. Required when copying or moving a
 policy to a different realm.",
            "type" : "string"
          },
          "namePostfix" : {
            "title" : "Name postfix",
            "description" : "A value appended to output policy names in order to prevent name clashes",
            "type" : "string"
          }
        },
        "required" : [ "namePostfix" ]
      },
      "resourceTypeMapping" : {
        "title" : "Resource type mapping",
        "description" : "One or more resource types mappings, where the left side of the mapping
 specifies the UUID of a resource type used by the input policies and the right side of the mapping
 specifies the UUID of a resource type used by the output policies. The two resource types should have
 the same resource patterns",
        "type" : "object",
        "additionalProperties" : {
          "type" : "string"
        }
      }
    },
    "required" : [ "from", "to" ]
}
```

1.106.1.7. query

Query the stored policies

Usage:

```
am> query Policies --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all. Fields that can be queried: [*]

1.106.1.8. read

Read policy

Usage:

```
am> read Policies --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

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1.106.1.9. update

Update an existing policy

Usage:

```
am> update Policies --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "$schema" : "http://json-schema.org/draft-04/schema#",
  "description" : "Json schema for the policy resource",
  "title" : "Policy Resource Schema",
  "type" : "object",
  "properties" : {
    "name" : {
      "title" : "Name",
      "description" : "String matching the name of the application",
      "type" : "string"
    },
    "active" : {
      "title" : "Active flag",
      "description" : "Boolean indicating whether OpenAM considers the policy active for evaluation
 purposes, defaults to false",
      "type" : "boolean"
    },
    "description" : {
      "title" : "Description",
      "description" : "String describing the policy",
      "type" : "string"
    },
    "applicationName" : {
      "title" : "Application name",
      "description" : "String containing the application name, such as \"iPlanetAMWebAgentService\",
 or \"mypolicyset\"",
      "type" : "string"
    },
    "actionValues" : {
      "title" : "Action values",
      "description" : "Set of string action names, each set to a boolean indicating whether the action
 is allowed. Chosen from the available actions provided by the associated Managing Resource Types
 resource type",
      "type" : "object",
      "additionalProperties" : {
        "type" : "boolean"
      }
    },
    "resources" : {
      "title" : "Resources",
```


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```
     "description" : "List of the resource name pattern strings to which the policy applies. Must
conform to the pattern templates provided by the associated Managing Resource Types resource type",
     "type" : "array",
     "items" : {
       "type" : "string"
     }
   },
   "subject" : {
     "title" : "Subject",
     "description" : "Specifies the subject conditions to which the policy applies, where subjects
can be combined by using the built-in types \"AND\", \"OR\", and \"NOT\", and where subject
implementations are pluggable",
     "type" : "object"
   },
   "condition" : {
     "title" : "Condition",
     "description" : "Specifies environment conditions, where conditions can be combined by using the
built-in types \"AND\", \"OR\", and \"NOT\", and where condition implementations are pluggable",
     "type" : "object",
     "properties" : {
       "type" : {
         "type" : "string"
       },
       "conditions" : {
         "type" : "array",
         "title" : "Condition",
         "description" : "Specifies environment conditions, where conditions can be combined by using
the built-in types \"AND\", \"OR\", and \"NOT\", and where condition implementations are pluggable",
         "items" : {
           "type" : "object"
         }
       }
     }
   },
   "resourceTypeUuid" : {
     "title" : "Resource Type UUID",
     "description" : "The UUIDs of the resource type associated with the policy",
     "type" : "string"
   },
   "resourceAttributes" : {
     "title" : "Resource Attributes",
     "description" : "List of attributes to return with decisions. These attributes are known as
response attributes",
     "type" : "array",
     "items" : {
       "type" : "object"
     }
   },
   "lastModifiedBy" : {
     "title" : "Last Modified By",
     "description" : "A string containing the universal identifier DN of the subject that most
recently updated the policy",
     "type" : "string"
   },
   "lastModifiedDate" : {
     "title" : "Last Modified date",
     "description" : "An integer containing the last modified date and time, in number of seconds",
     "type" : "string"
   },
```


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```
    "createdBy" : {
      "title" : "Created By",
      "description" : "A string containing the universal identifier DN of the subject that created the
 policy",
      "type" : "string"
    },
    "creationDate" : {
      "title" : "Creation Date",
      "description" : "An integer containing the creation date and time, in number of seconds",
      "type" : "string"
    }
  }
}
```

1.107. PolicyAgents

1.107.1. Realm Operations

Agents handler that is responsible for managing agents

Resource path: `/realm-config/agents/2.2_Agent`

Resource version: `1.0`

1.107.1.1. create

Usage:

```
am> create PolicyAgents --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "userpassword" : {
      "title" : "Password",
      "description" : "",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "string",
      "format" : "password",
      "exampleValue" : ""
    },
```


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```
    "status" : {
      "title" : "Status",
      "description" : "Status of the agent configuration.",
      "propertyOrder" : 200,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "description" : {
      "title" : "Description",
      "description" : "",
      "propertyOrder" : 22400,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "cdssoRootUrl" : {
      "title" : "Agent Key Value(s)",
      "description" : "Set the agent properties with a key/value pair. This property is used
by OpenAM to receive agent requests for credential assertions about users. Currently, only
one property is valid and all other properties will be ignored. Use the following format: <br>
agentRootURL=protocol://hostname:port/ <br> The entry must be precise and agentRootURL is case
sensitive.",
      "propertyOrder" : 22500,
      "items" : {
        "type" : "string"
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "array",
          "required" : true
        }
      }
    }
  }
```


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```
}
```

1.107.1.2. delete

Usage:

```
am> delete PolicyAgents --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.107.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action PolicyAgents --realm Realm --actionName getAllTypes
```

1.107.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action PolicyAgents --realm Realm --actionName getCreatableTypes
```

1.107.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action PolicyAgents --realm Realm --actionName nextdescendents
```

1.107.1.6. query

Querying the agents of a specific type

Usage:

```
am> query PolicyAgents --realm Realm --filter filter
```

Parameters:

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--filter

A CREST formatted query filter, where "true" will query all.

1.107.1.7. read

Usage:

```
am> read PolicyAgents --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.107.1.8. update

Usage:

```
am> update PolicyAgents --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "userpassword" : {
      "title" : "Password",
      "description" : "",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "string",
      "format" : "password",
      "exampleValue" : ""
    },
    "status" : {
      "title" : "Status",
      "description" : "Status of the agent configuration.",
      "propertyOrder" : 200,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
```


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```
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "description" : {
      "title" : "Description",
      "description" : "",
      "propertyOrder" : 22400,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "cdssoRootUrl" : {
      "title" : "Agent Key Value(s)",
      "description" : "Set the agent properties with a key/value pair. This property is used
 by OpenAM to receive agent requests for credential assertions about users. Currently, only
 one property is valid and all other properties will be ignored. Use the following format: <br>
 agentRootURL=protocol://hostname:port/ <br> The entry must be precise and agentRootURL is case
 sensitive.",
      "propertyOrder" : 22500,
      "items" : {
        "type" : "string"
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "array",
          "required" : true
        }
      }
    }
  }
}
```


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1.108. PolicyConfiguration

1.108.1. Realm Operations

Resource path: `/realm-config/services/policyconfiguration`

Resource version: `1.0`

1.108.1.1. create

Usage:

```
am> create PolicyConfiguration --realm Realm --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "bindPassword" : {
      "title" : "LDAP Bind Password",
      "description" : "Bind password to connect to the directory server for policy information.",
      "propertyOrder" : 800,
      "required" : true,
      "type" : "string",
      "format" : "password",
      "exampleValue" : ""
    },
    "ldapServer" : {
      "title" : "Primary LDAP Server",
      "description" : "Configuration directory server host:port that OpenAM searches for policy
 information.<p><p>Format: <code>local OpenAM server name | hostname:port</code><p><p>Multiple
 entries must be prefixed by local server name. Make sure to place the multiple entries on a single
 line and separate the hostname:port URLs with a space. <p><p>For example, openam.example.com|
opendj.example.com:1389 opendj.example.com:2389",
      "propertyOrder" : 400,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "connectionPoolMinimumSize" : {
      "title" : "LDAP Connection Pool Minimum Size",
      "description" : "Minimum number of connections in the pool.",
      "propertyOrder" : 1700,
      "required" : true,
      "type" : "integer",
```


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```
      "exampleValue" : ""
    },
    "usersSearchScope" : {
      "title" : "LDAP Users Search Scope",
      "description" : "Search scope to find user entries.",
      "propertyOrder" : 1100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "usersSearchAttribute" : {
      "title" : "LDAP Users Search Attribute",
      "description" : "Naming attribute for user entries.",
      "propertyOrder" : 1300,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "usersBaseDn" : {
      "title" : "LDAP Users Base DN",
      "description" : "Base DN for LDAP Users subject searches.",
      "propertyOrder" : 500,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "policyHeartbeatInterval" : {
      "title" : "Heartbeat Interval",
      "description" : "Specifies how often should OpenAM send a heartbeat request to the
directory.<br><br>Use this option in case a firewall/loadbalancer can close idle connections, since
the heartbeat requests will ensure that the connections won't become idle.",
      "propertyOrder" : 1840,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "searchTimeout" : {
      "title" : "Search Timeout",
      "description" : "Time after which OpenAM returns an error for an incomplete search, in
seconds.",
      "propertyOrder" : 1500,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "subjectsResultTTL" : {
      "title" : "Subjects Result Time to Live",
      "description" : "Maximum time that OpenAM caches a subject result for evaluating policy
requests, in minutes. A value of <code>0</code> prevents OpenAM from caching subject evaluations for
policy decisions.",
      "propertyOrder" : 1900,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "bindDn" : {
      "title" : "LDAP Bind DN",
      "description" : "Bind DN to connect to the directory server for policy information.",
      "propertyOrder" : 700,
```


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```
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sslEnabled" : {
      "title" : "LDAP SSL/TLS",
      "description" : "If enabled, OpenAM connects securely to the directory server. This requires
that you install the directory server certificate.",
      "propertyOrder" : 1600,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "maximumSearchResults" : {
      "title" : "Maximum Results Returned from Search",
      "description" : "Search limit for LDAP searches.",
      "propertyOrder" : 1400,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "policyHeartbeatTimeUnit" : {
      "title" : "Heartbeat Unit",
      "description" : "Defines the time unit corresponding to the Heartbeat Interval
setting.<br><br>Use this option in case a firewall/loadbalancer can close idle connections, since the
heartbeat requests will ensure that the connections won't become idle.",
      "propertyOrder" : 1850,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "userAliasEnabled" : {
      "title" : "User Alias",
      "description" : "If enabled, OpenAM can evaluate policy for remote users aliased to local
users.",
      "propertyOrder" : 2000,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "connectionPoolMaximumSize" : {
      "title" : "LDAP Connection Pool Maximum Size",
      "description" : "Maximum number of connections in the pool.",
      "propertyOrder" : 1800,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "checkIfResourceTypeExists" : {
      "title" : "Check resources exist when Resource Server is updated",
      "description" : "Check all registered resources exist when updating Resource Server.
<p><p>Policy Set will check each registered Resource Types one by one against config datastore if
enabled. Consider disabling this option if you have large number of Resource Types registered to a
Policy Set.",
      "propertyOrder" : 2100,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
```


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```
    "realmSearchFilter" : {
      "title" : "LDAP Organization Search Filter",
      "description" : "Search filter to match organization entries.",
      "propertyOrder" : 900,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "usersSearchFilter" : {
      "title" : "LDAP Users Search Filter",
      "description" : "Search filter to match user entries.",
      "propertyOrder" : 1000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```

1.108.1.2. delete

Usage:

```
am> delete PolicyConfiguration --realm Realm
```

1.108.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action PolicyConfiguration --realm Realm --actionName getAllTypes
```

1.108.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action PolicyConfiguration --realm Realm --actionName getCreatableTypes
```

1.108.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action PolicyConfiguration --realm Realm --actionName nextdescendents
```

1.108.1.6. read

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Usage:

```
am> read PolicyConfiguration --realm Realm
```

1.108.1.7. update

Usage:

```
am> update PolicyConfiguration --realm Realm --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "bindPassword" : {
      "title" : "LDAP Bind Password",
      "description" : "Bind password to connect to the directory server for policy information.",
      "propertyOrder" : 800,
      "required" : true,
      "type" : "string",
      "format" : "password",
      "exampleValue" : ""
    },
    "ldapServer" : {
      "title" : "Primary LDAP Server",
      "description" : "Configuration directory server host:port that OpenAM searches for policy
 information.<p><p>Format: <code>local OpenAM server name | hostname:port</code><p><p>Multiple
 entries must be prefixed by local server name. Make sure to place the multiple entries on a single
 line and separate the hostname:port URLs with a space. <p><p>For example, openam.example.com|
opendj.example.com:1389 opendj.example.com:2389",
      "propertyOrder" : 400,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "connectionPoolMinimumSize" : {
      "title" : "LDAP Connection Pool Minimum Size",
      "description" : "Minimum number of connections in the pool.",
      "propertyOrder" : 1700,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "usersSearchScope" : {
      "title" : "LDAP Users Search Scope",
      "description" : "Search scope to find user entries.",
      "propertyOrder" : 1100,
      "required" : true,
      "type" : "string",
```


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```
      "exampleValue" : ""
    },
    "usersSearchAttribute" : {
      "title" : "LDAP Users Search Attribute",
      "description" : "Naming attribute for user entries.",
      "propertyOrder" : 1300,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "usersBaseDn" : {
      "title" : "LDAP Users Base DN",
      "description" : "Base DN for LDAP Users subject searches.",
      "propertyOrder" : 500,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "policyHeartbeatInterval" : {
      "title" : "Heartbeat Interval",
      "description" : "Specifies how often should OpenAM send a heartbeat request to the
directory.<br><br>Use this option in case a firewall/loadbalancer can close idle connections, since
the heartbeat requests will ensure that the connections won't become idle.",
      "propertyOrder" : 1840,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "searchTimeout" : {
      "title" : "Search Timeout",
      "description" : "Time after which OpenAM returns an error for an incomplete search, in
seconds.",
      "propertyOrder" : 1500,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "subjectsResultTTL" : {
      "title" : "Subjects Result Time to Live",
      "description" : "Maximum time that OpenAM caches a subject result for evaluating policy
requests, in minutes. A value of <code>0</code> prevents OpenAM from caching subject evaluations for
policy decisions.",
      "propertyOrder" : 1900,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "bindDn" : {
      "title" : "LDAP Bind DN",
      "description" : "Bind DN to connect to the directory server for policy information.",
      "propertyOrder" : 700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sslEnabled" : {
      "title" : "LDAP SSL/TLS",
      "description" : "If enabled, OpenAM connects securely to the directory server. This requires
that you install the directory server certificate.",
```


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```
      "propertyOrder" : 1600,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "maximumSearchResults" : {
      "title" : "Maximum Results Returned from Search",
      "description" : "Search limit for LDAP searches.",
      "propertyOrder" : 1400,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "policyHeartbeatTimeUnit" : {
      "title" : "Heartbeat Unit",
      "description" : "Defines the time unit corresponding to the Heartbeat Interval
setting.<br><br>Use this option in case a firewall/loadbalancer can close idle connections, since the
heartbeat requests will ensure that the connections won't become idle.",
      "propertyOrder" : 1850,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "userAliasEnabled" : {
      "title" : "User Alias",
      "description" : "If enabled, OpenAM can evaluate policy for remote users aliased to local
users.",
      "propertyOrder" : 2000,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "connectionPoolMaximumSize" : {
      "title" : "LDAP Connection Pool Maximum Size",
      "description" : "Maximum number of connections in the pool.",
      "propertyOrder" : 1800,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "checkIfResourceTypeExists" : {
      "title" : "Check resources exist when Resource Server is updated",
      "description" : "Check all registered resources exist when updating Resource Server.
<p><p>Policy Set will check each registered Resource Types one by one against config datastore if
enabled. Consider disabling this option if you have large number of Resource Types registered to a
Policy Set.",
      "propertyOrder" : 2100,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "realmSearchFilter" : {
      "title" : "LDAP Organization Search Filter",
      "description" : "Search filter to match organization entries.",
      "propertyOrder" : 900,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
```


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```
    "usersSearchFilter" : {
      "title" : "LDAP Users Search Filter",
      "description" : "Search filter to match user entries.",
      "propertyOrder" : 1000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```

1.108.2. Global Operations

Resource path: `/global-config/services/policyconfiguration`

Resource version: `1.0`

1.108.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action PolicyConfiguration --global --actionName getAllTypes
```

1.108.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action PolicyConfiguration --global --actionName getCreatableTypes
```

1.108.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action PolicyConfiguration --global --actionName nextdescendents
```

1.108.2.4. read

Usage:

```
am> read PolicyConfiguration --global
```


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1.108.2.5. update

Usage:

```
am> update PolicyConfiguration --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "resourceComparators" : {
      "title" : "Resource Comparator",
      "description" : "OpenAM uses resource comparators to match resources specified in policy rules.
 When setting comparators on the command line, separate fields with <code>|</code> characters.",
      "propertyOrder" : 100,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "continueEvaluationOnDeny" : {
      "title" : "Continue Evaluation on Deny Decision",
      "description" : "If no, then OpenAM stops evaluating policy as soon as it reaches a deny
 decision.",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "realmAliasReferrals" : {
      "title" : "Realm Alias Referrals",
      "description" : "If yes, then OpenAM allows creation of policies for HTTP and HTTPS resources
 whose FQDN matches the DNS alias for the realm even when no referral policy exists.",
      "propertyOrder" : 300,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "defaults" : {
      "properties" : {
        "searchTimeout" : {
          "title" : "Search Timeout",
          "description" : "Time after which OpenAM returns an error for an incomplete search, in
 seconds.",
          "propertyOrder" : 1500,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "maximumSearchResults" : {
          "title" : "Maximum Results Returned from Search",
```


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```
          "description" : "Search limit for LDAP searches.",
          "propertyOrder" : 1400,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "userAliasEnabled" : {
          "title" : "User Alias",
          "description" : "If enabled, OpenAM can evaluate policy for remote users aliased to local
 users.",
          "propertyOrder" : 2000,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "checkIfResourceTypeExists" : {
          "title" : "Check resources exist when Resource Server is updated",
          "description" : "Check all registered resources exist when updating Resource Server.
 <p><p>Policy Set will check each registered Resource Types one by one against config datastore if
 enabled. Consider disabling this option if you have large number of Resource Types registered to a
 Policy Set.",
          "propertyOrder" : 2100,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "ldapServer" : {
          "title" : "Primary LDAP Server",
          "description" : "Configuration directory server host:port that OpenAM searches for policy
 information.<p><p>Format: <code>local OpenAM server name | hostname:port</code><p><p>Multiple
 entries must be prefixed by local server name. Make sure to place the multiple entries on a single
 line and separate the hostname:port URLs with a space. <p><p>For example, openam.example.com|
opendj.example.com:1389 opendj.example.com:2389",
          "propertyOrder" : 400,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "usersBaseDn" : {
          "title" : "LDAP Users Base DN",
          "description" : "Base DN for LDAP Users subject searches.",
          "propertyOrder" : 500,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "usersSearchScope" : {
          "title" : "LDAP Users Search Scope",
          "description" : "Search scope to find user entries.",
          "propertyOrder" : 1100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "connectionPoolMinimumSize" : {
          "title" : "LDAP Connection Pool Minimum Size",
```


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```
          "description" : "Minimum number of connections in the pool.",
          "propertyOrder" : 1700,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "usersSearchFilter" : {
          "title" : "LDAP Users Search Filter",
          "description" : "Search filter to match user entries.",
          "propertyOrder" : 1000,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "sslEnabled" : {
          "title" : "LDAP SSL/TLS",
          "description" : "If enabled, OpenAM connects securely to the directory server. This requires
that you install the directory server certificate.",
          "propertyOrder" : 1600,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "policyHeartbeatTimeUnit" : {
          "title" : "Heartbeat Unit",
          "description" : "Defines the time unit corresponding to the Heartbeat Interval
setting.<br><br>Use this option in case a firewall/loadbalancer can close idle connections, since the
heartbeat requests will ensure that the connections won't become idle.",
          "propertyOrder" : 1850,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "bindDn" : {
          "title" : "LDAP Bind DN",
          "description" : "Bind DN to connect to the directory server for policy information.",
          "propertyOrder" : 700,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "realmSearchFilter" : {
          "title" : "LDAP Organization Search Filter",
          "description" : "Search filter to match organization entries.",
          "propertyOrder" : 900,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "policyHeartbeatInterval" : {
          "title" : "Heartbeat Interval",
          "description" : "Specifies how often should OpenAM send a heartbeat request to the
directory.<br><br>Use this option in case a firewall/loadbalancer can close idle connections, since
the heartbeat requests will ensure that the connections won't become idle.",
          "propertyOrder" : 1840,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
```


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```
        "subjectsResultTTL" : {
          "title" : "Subjects Result Time to Live",
          "description" : "Maximum time that OpenAM caches a subject result for evaluating policy
 requests, in minutes. A value of <code>0</code> prevents OpenAM from caching subject evaluations for
 policy decisions.",
          "propertyOrder" : 1900,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "bindPassword" : {
          "title" : "LDAP Bind Password",
          "description" : "Bind password to connect to the directory server for policy information.",
          "propertyOrder" : 800,
          "required" : true,
          "type" : "string",
          "format" : "password",
          "exampleValue" : ""
        },
        "connectionPoolMaximumSize" : {
          "title" : "LDAP Connection Pool Maximum Size",
          "description" : "Maximum number of connections in the pool.",
          "propertyOrder" : 1800,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "usersSearchAttribute" : {
          "title" : "LDAP Users Search Attribute",
          "description" : "Naming attribute for user entries.",
          "propertyOrder" : 1300,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      },
      "type" : "object",
      "title" : "Realm Defaults"
    }
  }
}
```

1.109. PushAuthenticationUserDevices

1.109.1. Realm Operations

The push authentication user devices service is responsible for exposing functions to change the collection of Push authentication devices. The supported methods are action, delete, query

Resource path: `/users/{user}/devices/push`

Resource version: `1.0`

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1.109.1.1. delete

Delete push user authentication device

Usage:

```
am> delete PushAuthenticationUserDevices --realm Realm --id id --user user
```

Parameters:

--id

The unique identifier for the resource.

--user

The push authentication user devices service is responsible for exposing functions to change the collection of Push authentication devices. The supported methods are action, delete, query

1.109.1.2. query

Query the user's device profile

Usage:

```
am> query PushAuthenticationUserDevices --realm Realm --filter filter --user user
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all. Fields that can be queried: [*]

--user

The push authentication user devices service is responsible for exposing functions to change the collection of Push authentication devices. The supported methods are action, delete, query

1.109.1.3. resetPushDevice

Query the user's device profile

Usage:

```
am> action PushAuthenticationUserDevices --realm Realm --user user --actionName resetPushDevice
```

Parameters:

--user

The push authentication user devices service is responsible for exposing functions to change the collection of Push authentication devices. The supported methods are action, delete, query

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1.110. PushNotification

1.110.1. Realm Operations

Resource path: `/realm-config/services/pushNotification`

Resource version: `1.0`

1.110.1.1. create

Usage:

```
am> create PushNotification --realm Realm --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "appleEndpoint" : {
      "title" : "SNS Endpoint for APNS",
      "description" : "The Simple Notification Service endpoint in Amazon Resource Name format, used
 to send push messages to the Apple Push Notification Service (APNS).",
      "propertyOrder" : 300,
      "required" : true,
      "type" : "string",
      "exampleValue" : "arn:aws:sns:us-east-1:1234567890:app/APNS/production"
    },
    "secret" : {
      "title" : "SNS Access Key Secret",
      "description" : "Amazon Simple Notification Service Access Key Secret. For more information, see
 <a href=\"https://aws.amazon.com/developers/access-keys/\">https://aws.amazon.com/developers/access-
keys/</a>.",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "string",
      "exampleValue" : "wJalrXUtnFEMI/K7MDENG/bPxRfiCYEXAMPLEKEY"
    },
    "mdCacheSize" : {
      "title" : "Response Cache Size",
      "description" : "Maximum size of the message dispatcher cache, in number of records. If set
 to <code>0</code> the cache can grow indefinitely. If the number of records that need to be stored
 exceeds this maximum, then older items in the cache will be removed to make space.",
      "propertyOrder" : 900,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "mdDuration" : {
```


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```
      "title" : "Response Cache Duration",
      "description" : "The minimum lifetime to keep unanswered message records in the message
 dispatcher cache, in seconds. To keep unanswered message records indefinitely, set this property to
 <code>0</code>.Should be tuned so that it is applicable to the use case of this service. For example,
 the ForgeRock Authenticator (Push) authentication module has a default timeout of 120 seconds.",
      "propertyOrder" : 700,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "accessKey" : {
      "title" : "SNS Access Key ID",
      "description" : "Amazon Simple Notification Service Access Key ID. For more information, see
 <a href=\"https://aws.amazon.com/developers/access-keys/\">https://aws.amazon.com/developers/access-
keys/</a>.",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "string",
      "exampleValue" : "AKIAIOSFODNN7EXAMPLE"
    },
    "region" : {
      "title" : "SNS Client Region",
      "description" : "Region of your registered Amazon Simple Notification Service client. For
 more information, see <a href=\"https://docs.aws.amazon.com/general/latest/gr/rande.html\">https://
docs.aws.amazon.com/general/latest/gr/rande.html</a>.",
      "propertyOrder" : 500,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "delegateFactory" : {
      "title" : "Message Transport Delegate Factory",
      "description" : "The fully qualified class name of the factory
 responsible for creating the PushNotificationDelegate. The class must implement
 <code>org.forgerock.openam.services.push.PushNotificationDelegate</code>.",
      "propertyOrder" : 600,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "mdConcurrency" : {
      "title" : "Response Cache Concurrency",
      "description" : "Level of concurrency to use when accessing the message dispatcher cache.
 Defaults to <code>16</code>, and must be greater than <code>0</code>. Choose a value to accommodate
 as many threads as will ever concurrently access the message dispatcher cache.",
      "propertyOrder" : 800,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "googleEndpoint" : {
      "title" : "SNS Endpoint for GCM",
      "description" : "The Simple Notification Service endpoint in Amazon Resource Name format, used
 to send push messages over Google Cloud Messaging (GCM).",
      "propertyOrder" : 400,
      "required" : true,
      "type" : "string",
      "exampleValue" : "arn:aws:sns:us-east-1:1234567890:app/GCM/production"
    }
```


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```
  }
}
```

1.110.1.2. delete

Usage:

```
am> delete PushNotification --realm Realm
```

1.110.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action PushNotification --realm Realm --actionName getAllTypes
```

1.110.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action PushNotification --realm Realm --actionName getCreatableTypes
```

1.110.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action PushNotification --realm Realm --actionName nextdescendents
```

1.110.1.6. read

Usage:

```
am> read PushNotification --realm Realm
```

1.110.1.7. update

Usage:

```
am> update PushNotification --realm Realm --body body
```

Parameters:

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--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "appleEndpoint" : {
      "title" : "SNS Endpoint for APNS",
      "description" : "The Simple Notification Service endpoint in Amazon Resource Name format, used
 to send push messages to the Apple Push Notification Service (APNS).",
      "propertyOrder" : 300,
      "required" : true,
      "type" : "string",
      "exampleValue" : "arn:aws:sns:us-east-1:1234567890:app/APNS/production"
    },
    "secret" : {
      "title" : "SNS Access Key Secret",
      "description" : "Amazon Simple Notification Service Access Key Secret. For more information, see
 <a href=\"https://aws.amazon.com/developers/access-keys/\">https://aws.amazon.com/developers/access-
keys/</a>.",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "string",
      "exampleValue" : "wJalrXUtnFEMI/K7MDENG/bPxRfiCYEXAMPLEKEY"
    },
    "mdCacheSize" : {
      "title" : "Response Cache Size",
      "description" : "Maximum size of the message dispatcher cache, in number of records. If set
 to <code>0</code> the cache can grow indefinitely. If the number of records that need to be stored
 exceeds this maximum, then older items in the cache will be removed to make space.",
      "propertyOrder" : 900,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "mdDuration" : {
      "title" : "Response Cache Duration",
      "description" : "The minimum lifetime to keep unanswered message records in the message
 dispatcher cache, in seconds. To keep unanswered message records indefinitely, set this property to
 <code>0</code>.Should be tuned so that it is applicable to the use case of this service. For example,
 the ForgeRock Authenticator (Push) authentication module has a default timeout of 120 seconds.",
      "propertyOrder" : 700,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "accessKey" : {
      "title" : "SNS Access Key ID",
      "description" : "Amazon Simple Notification Service Access Key ID. For more information, see
 <a href=\"https://aws.amazon.com/developers/access-keys/\">https://aws.amazon.com/developers/access-
keys/</a>.",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "string",
      "exampleValue" : "AKIAIOSFODNN7EXAMPLE"
    },
    "region" : {
      "title" : "SNS Client Region",
```


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```
      "description" : "Region of your registered Amazon Simple Notification Service client. For
 more information, see <a href=\"https://docs.aws.amazon.com/general/latest/gr/rande.html\">https://
docs.aws.amazon.com/general/latest/gr/rande.html</a>.",
      "propertyOrder" : 500,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "delegateFactory" : {
      "title" : "Message Transport Delegate Factory",
      "description" : "The fully qualified class name of the factory
 responsible for creating the PushNotificationDelegate. The class must implement
 <code>org.forgerock.openam.services.push.PushNotificationDelegate</code>.",
      "propertyOrder" : 600,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "mdConcurrency" : {
      "title" : "Response Cache Concurrency",
      "description" : "Level of concurrency to use when accessing the message dispatcher cache.
 Defaults to <code>16</code>, and must be greater than <code>0</code>. Choose a value to accommodate
 as many threads as will ever concurrently access the message dispatcher cache.",
      "propertyOrder" : 800,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "googleEndpoint" : {
      "title" : "SNS Endpoint for GCM",
      "description" : "The Simple Notification Service endpoint in Amazon Resource Name format, used
 to send push messages over Google Cloud Messaging (GCM).",
      "propertyOrder" : 400,
      "required" : true,
      "type" : "string",
      "exampleValue" : "arn:aws:sns:us-east-1:1234567890:app/GCM/production"
    }
  }
}
```

1.110.2. Global Operations

Resource path: `/global-config/services/pushNotification`

Resource version: `1.0`

1.110.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action PushNotification --global --actionName getAllTypes
```


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1.110.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action PushNotification --global --actionName getCreatableTypes
```

1.110.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action PushNotification --global --actionName nextdescendents
```

1.110.2.4. read

Usage:

```
am> read PushNotification --global
```

1.110.2.5. update

Usage:

```
am> update PushNotification --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "defaults" : {
      "properties" : {
        "googleEndpoint" : {
          "title" : "SNS Endpoint for GCM",
          "description" : "The Simple Notification Service endpoint in Amazon Resource Name format,
 used to send push messages over Google Cloud Messaging (GCM).",
          "propertyOrder" : 400,
          "required" : true,
          "type" : "string",
          "exampleValue" : "arn:aws:sns:us-east-1:1234567890:app/GCM/production"
        },
        "appleEndpoint" : {
          "title" : "SNS Endpoint for APNS",
          "description" : "The Simple Notification Service endpoint in Amazon Resource Name format,
 used to send push messages to the Apple Push Notification Service (APNS).",
          "propertyOrder" : 300,
```


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```
          "required" : true,
          "type" : "string",
          "exampleValue" : "arn:aws:sns:us-east-1:1234567890:app/APNS/production"
        },
        "region" : {
          "title" : "SNS Client Region",
          "description" : "Region of your registered Amazon Simple Notification Service client. For
 more information, see <a href=\"https://docs.aws.amazon.com/general/latest/gr/rande.html\">https://
docs.aws.amazon.com/general/latest/gr/rande.html</a>.",
          "propertyOrder" : 500,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "mdConcurrency" : {
          "title" : "Response Cache Concurrency",
          "description" : "Level of concurrency to use when accessing the message dispatcher cache.
 Defaults to <code>16</code>, and must be greater than <code>0</code>. Choose a value to accommodate
 as many threads as will ever concurrently access the message dispatcher cache.",
          "propertyOrder" : 800,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "mdDuration" : {
          "title" : "Response Cache Duration",
          "description" : "The minimum lifetime to keep unanswered message records in the message
 dispatcher cache, in seconds. To keep unanswered message records indefinitely, set this property to
 <code>0</code>.Should be tuned so that it is applicable to the use case of this service. For example,
 the ForgeRock Authenticator (Push) authentication module has a default timeout of 120 seconds.",
          "propertyOrder" : 700,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "secret" : {
          "title" : "SNS Access Key Secret",
          "description" : "Amazon Simple Notification Service Access Key Secret. For more information,
 see <a href=\"https://aws.amazon.com/developers/access-keys/\">https://aws.amazon.com/developers/
access-keys/</a>.",
          "propertyOrder" : 200,
          "required" : true,
          "type" : "string",
          "exampleValue" : "wJalrXUtnFEMI/K7MDENG/bPxRfiCYEXAMPLEKEY"
        },
        "delegateFactory" : {
          "title" : "Message Transport Delegate Factory",
          "description" : "The fully qualified class name of the factory
 responsible for creating the PushNotificationDelegate. The class must implement
 <code>org.forgerock.openam.services.push.PushNotificationDelegate</code>.",
          "propertyOrder" : 600,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "accessKey" : {
          "title" : "SNS Access Key ID",
```


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```
          "description" : "Amazon Simple Notification Service Access Key ID. For more information, see
 <a href=\"https://aws.amazon.com/developers/access-keys/\">https://aws.amazon.com/developers/access-
keys/</a>.",
          "propertyOrder" : 100,
          "required" : true,
          "type" : "string",
          "exampleValue" : "AKIAIOSFODNN7EXAMPLE"
        },
        "mdCacheSize" : {
          "title" : "Response Cache Size",
          "description" : "Maximum size of the message dispatcher cache, in number of records. If set
 to <code>0</code> the cache can grow indefinitely. If the number of records that need to be stored
 exceeds this maximum, then older items in the cache will be removed to make space.",
          "propertyOrder" : 900,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        }
      },
      "type" : "object",
      "title" : "Realm Defaults"
    }
  }
}
```

1.111. PushNotificationResponse

1.111.1. Realm Operations

Push Authentication depends on the secure verification of information sent from the server to the client, and from the client to the server. This allows the server to verify that the notification was received by the original device, and for the device to verify that only the server sent out the original request. This endpoint provides the place for the device to return responses to the server to requests received either by QR code or by push notification.

Resource path: `/push/sns/message`

Resource version: `1.0`

1.111.1.1. authenticate

Message sent from device to server in response to a request for authentication sent to the device via Push notification. This message is generally sent from the ForgeRock Authenticator app.

Usage:

```
am> action PushNotificationResponse --realm Realm --body body --actionName authenticate
```

Parameters:

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--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "messageId" : {
      "type" : "string",
      "title" : "Message ID",
      "description" : "Unique message identifier"
    },
    "jwt" : {
      "type" : "string",
      "title" : "JWT",
      "description" : "Signed JWT containing claims:\n* `response`: Response to challenge (Base64
 encoding of the HmacSHA256 hashing of the decoded shared secret and the decoded challenge)\n* `deny`:
 Indication that this auth attempt should be shut down (boolean)"
    }
  },
  "required" : [ "messageId", "jwt" ]
}
```

1.111.1.2. register

Message sent from device to server in response to a registration message received on the device via a QR code. This message is generally sent from the ForgeRock Authenticator app.

Usage:

```
am> action PushNotificationResponse --realm Realm --body body --actionName register
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

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```
{
  "type" : "object",
  "properties" : {
    "messageId" : {
      "type" : "string",
      "title" : "Message ID",
      "description" : "Unique message identifier"
    },
    "jwt" : {
      "type" : "string",
      "title" : "JWT",
      "description" : "Signed JWT containing claims:\n* `response`: Response to challenge (Base64
 encoding of the HmacSHA256 hashing of the decoded shared secret and the decoded challenge)\n*
 `mechanismUid`: The device-specific identifier for the just-registered mechanism (string)\n*
 `deviceId`: The registration token used by GCM or APNS (string)\n* `deviceType`: `android` or `ios`
 (string)\n* `communicationType`: `gcm` or `apns` (string)"
    }
  },
  "required" : [ "messageId", "jwt" ]
}
```

1.112. RadiusClient

1.112.1. Global Operations

Resource path: `/global-config/services/RadiusServerService/radiusClient`

Resource version: `1.0`

1.112.1.1. create

Usage:

```
am> create RadiusClient --global --id id --body body
```

Parameters:

`--id`

The unique identifier for the resource.

`--body`

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "clientSecret" : {
      "title" : "Client Secret",
```


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```
      "description" : "This secret shared between server and client for encryption of the user
 password.<br><br>This secret must be conveyed to the RADIUS client and entered into its configuration
 before the User-Password field of incoming Access-Request packets can be decrypted to validate the
 password for the represented by that packet. A default value is generated for you but you can enter a
 custom value if desired.",
      "propertyOrder" : 300,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "handlerConfig" : {
      "title" : "Handler Class Configuration Properties",
      "description" : "Properties needed by the handler class for its configuration.<br><br>These
 properties are provided to the handler via its <code>init</code> method prior to the call to handle
 the request packet. If these values are changed the next handler instance created for an incoming
 request will receive the updated values. Each entry assumes that the first '<code>=</code>' character
 incurred separates a key from its value. All entries are placed in a properties file handed to each
 handler instance.",
      "propertyOrder" : 900,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "clientIpAddress" : {
      "title" : "Client IP Address",
      "description" : "The IP Address of the client.<br><br><a href=\"http://tools.ietf.org/html/
rfc2865#section-5.4\" target=\"_blank\">Section 5.4 of the RADIUS Authentication Specification,
 RFC 2865</a>, indicates that the source IP address of the Access-Request packet <em>MUST</em> be
 used to identify a configured client and hence determine the shared secret to use for decrypting
 the User-Password field.<p><p>This property should hold the source IP address of the client. This
 should match the value obtained from Java's <code>InetSocketAddress.getAddress().toString()</code>
 function.<p><p>To verify the value, send an Access-Request packet to OpenAM's RADIUS port and watch
 for a message stating: <code>\"No Defined RADIUS Client matches IP address '/127.0.0.1'. Dropping
 request.\"</code>. The value used in this property should match the IP address returned in the single
 quotes.",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "clientPacketsLogged" : {
      "title" : "Log Packet Contents for this Client",
      "description" : "Indicates if full packet contents should be dumped to the log.<br><br>When
 troubleshooting issues with RADIUS it is helpful to know what was received in a given packet.
 Enabling this feature will cause packet contents to be logged in a human consumable format. The only
 caveat is that the USER_PASSWORD field will be obfiscated by replacing with asterisks. This should
 only be enabled for troubleshooting as it adds significant content to logs and slows processing.",
      "propertyOrder" : 500,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "handlerClass" : {
      "title" : "Handler Class",
      "description" : "The fully qualified name of a class to handle incoming
 RADIUS Access-Requests for this client.<br><br>This class must implement the
```


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```
 <code>com.sun.identity.authentication.modules.radius.server.spi.AccessRequestHandler</code> interface
 to handle incoming Access-Request packets and provide a suitable response. An instance of this class
 is created when configuration is first loaded to validate the class and then once for each new
 request. The configuration properties will only be passed for the request handling instances and not
 when validating the class.",
      "propertyOrder" : 700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```

1.112.1.2. delete

Usage:

```
am> delete RadiusClient --global --id id
```

Parameters:

--id

The unique identifier for the resource.

1.112.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action RadiusClient --global --actionName getAllTypes
```

1.112.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action RadiusClient --global --actionName getCreatableTypes
```

1.112.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action RadiusClient --global --actionName nextdescendents
```


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1.112.1.6. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

```
am> query RadiusClient --global --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.112.1.7. read

Usage:

```
am> read RadiusClient --global --id id
```

Parameters:

--id

The unique identifier for the resource.

1.112.1.8. update

Usage:

```
am> update RadiusClient --global --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "clientSecret" : {
      "title" : "Client Secret",
      "description" : "This secret shared between server and client for encryption of the user
 password.<br><br>This secret must be conveyed to the RADIUS client and entered into its configuration
 before the User-Password field of incoming Access-Request packets can be decrypted to validate the
 password for the represented by that packet. A default value is generated for you but you can enter a
 custom value if desired.",
      "propertyOrder" : 300,
      "required" : true,
```


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```
      "type" : "string",
      "exampleValue" : ""
    },
    "handlerConfig" : {
      "title" : "Handler Class Configuration Properties",
      "description" : "Properties needed by the handler class for its configuration.<br><br>These
 properties are provided to the handler via its <code>init</code> method prior to the call to handle
 the request packet. If these values are changed the next handler instance created for an incoming
 request will receive the updated values. Each entry assumes that the first '<code>=</code>' character
 incurred separates a key from its value. All entries are placed in a properties file handed to each
 handler instance.",
      "propertyOrder" : 900,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "clientIpAddress" : {
      "title" : "Client IP Address",
      "description" : "The IP Address of the client.<br><br><a href=\"http://tools.ietf.org/html/
rfc2865#section-5.4\" target=\"_blank\">Section 5.4 of the RADIUS Authentication Specification,
 RFC 2865</a>, indicates that the source IP address of the Access-Request packet <em>MUST</em> be
 used to identify a configured client and hence determine the shared secret to use for decrypting
 the User-Password field.<p><p>This property should hold the source IP address of the client. This
 should match the value obtained from Java's <code>InetSocketAddress.getAddress().toString()</code>
 function.<p><p>To verify the value, send an Access-Request packet to OpenAM's RADIUS port and watch
 for a message stating: <code>\"No Defined RADIUS Client matches IP address '/127.0.0.1'. Dropping
 request.\"</code>. The value used in this property should match the IP address returned in the single
 quotes.",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "clientPacketsLogged" : {
      "title" : "Log Packet Contents for this Client",
      "description" : "Indicates if full packet contents should be dumped to the log.<br><br>When
 troubleshooting issues with RADIUS it is helpful to know what was received in a given packet.
 Enabling this feature will cause packet contents to be logged in a human consumable format. The only
 caveat is that the USER_PASSWORD field will be obfiscated by replacing with asterisks. This should
 only be enabled for troubleshooting as it adds significant content to logs and slows processing.",
      "propertyOrder" : 500,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "handlerClass" : {
      "title" : "Handler Class",
      "description" : "The fully qualified name of a class to handle incoming
 RADIUS Access-Requests for this client.<br><br>This class must implement the
 <code>com.sun.identity.authentication.modules.radius.server.spi.AccessRequestHandler</code> interface
 to handle incoming Access-Request packets and provide a suitable response. An instance of this class
 is created when configuration is first loaded to validate the class and then once for each new
 request. The configuration properties will only be passed for the request handling instances and not
 when validating the class.",
      "propertyOrder" : 700,
      "required" : true,
```


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```
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```

1.113. RadiusModule

1.113.1. Realm Operations

Resource path: `/realm-config/authentication/modules/radius`

Resource version: `1.0`

1.113.1.1. create

Usage:

```
am> create RadiusModule --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "primaryRadiusServers" : {
      "title" : "Primary Radius Servers",
      "description" : "A list of primary Radius servers that will be used for
 authentication<br><br>The module will use these servers in preference to the secondary servers.
 A single entry must be in the format:<br/><br/><code>radius_server:port</code><br/><br/>Multiple
 entries allow associations between OpenAM servers and a Radius server. The format is:<br/><br/
><code>local server name | radius_server:port</code><br/><br/><i>NB </i>The local server name is the
 full name of the server from the list of servers and sites.",
      "propertyOrder" : 100,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "healthCheckInterval" : {
      "title" : "Health check interval",
```


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```
      "description" : "The interval between checks to unavailable RADIUS servers, in minutes.
 <br><br>Determines how often OpenAM checks an offline server's status. The check will send an invalid
 authentication request to the RADIUS server. Offline servers will not be used until the healthcheck
 was successful. Primary servers that become available will be used in preference to secondary
 servers.",
      "propertyOrder" : 600,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "authenticationLevel" : {
      "title" : "Authentication Level",
      "description" : "The authentication level associated with this module.<br><br>Each
 authentication module has an authentication level that can be used to indicate the level of security
 associated with the module; 0 is the lowest (and the default). ",
      "propertyOrder" : 700,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "serverTimeout" : {
      "title" : "Timeout",
      "description" : "Amount of time in seconds to wait for the RADIUS server response.<br><br>This
 sets the <code>SO_TIMEOUT</code> timeout on the packet. ",
      "propertyOrder" : 500,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "sharedSecret" : {
      "title" : "Shared Secret",
      "description" : "The secret shared between the RADIUS server and the authentication module.",
      "propertyOrder" : 300,
      "required" : true,
      "type" : "string",
      "format" : "password",
      "exampleValue" : ""
    },
    "serverPortNumber" : {
      "title" : "Port Number",
      "description" : "Port number on which the RADIUS server is listening.",
      "propertyOrder" : 400,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "secondaryRadiusServers" : {
      "title" : "Secondary Radius Servers",
      "description" : "A list of secondary Radius servers that will be used for authentication,
 in case the primary servers are unavailable.<br><br>The module will use secondary servers for
 authentication if all primary servers are unavailable. A single entry must be in the format:<br/><br/
><code>radius_server:port</code><br/><br/>Multiple entries allow associations between OpenAM servers
 and a Radius server. The format is:<br/><br/><code>local server name | radius_server:port</code><br/
><br/><i>NB </i>The local server name is the full name of the server from the list of servers and
 sites.",
      "propertyOrder" : 200,
      "required" : true,
      "items" : {
        "type" : "string"
```


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```
      },
      "type" : "array",
      "exampleValue" : ""
    }
  }
}
```

1.113.1.2. delete

Usage:

```
am> delete RadiusModule --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.113.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action RadiusModule --realm Realm --actionName getAllTypes
```

1.113.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action RadiusModule --realm Realm --actionName getCreatableTypes
```

1.113.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action RadiusModule --realm Realm --actionName nextdescendents
```

1.113.1.6. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

```
am> query RadiusModule --realm Realm --filter filter
```


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Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.113.1.7. read

Usage:

```
am> read RadiusModule --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.113.1.8. update

Usage:

```
am> update RadiusModule --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "primaryRadiusServers" : {
      "title" : "Primary Radius Servers",
      "description" : "A list of primary Radius servers that will be used for
 authentication<br><br>The module will use these servers in preference to the secondary servers.
 A single entry must be in the format:<br/><br/><code>radius_server:port</code><br/><br/>Multiple
 entries allow associations between OpenAM servers and a Radius server. The format is:<br/><br/
><code>local server name | radius_server:port</code><br/><br/><i>NB </i>The local server name is the
 full name of the server from the list of servers and sites.",
      "propertyOrder" : 100,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "healthCheckInterval" : {
```


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```
      "title" : "Health check interval",
      "description" : "The interval between checks to unavailable RADIUS servers, in minutes.
 <br><br>Determines how often OpenAM checks an offline server's status. The check will send an invalid
 authentication request to the RADIUS server. Offline servers will not be used until the healthcheck
 was successful. Primary servers that become available will be used in preference to secondary
 servers.",
      "propertyOrder" : 600,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "authenticationLevel" : {
      "title" : "Authentication Level",
      "description" : "The authentication level associated with this module.<br><br>Each
 authentication module has an authentication level that can be used to indicate the level of security
 associated with the module; 0 is the lowest (and the default). ",
      "propertyOrder" : 700,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "serverTimeout" : {
      "title" : "Timeout",
      "description" : "Amount of time in seconds to wait for the RADIUS server response.<br><br>This
 sets the <code>SO_TIMEOUT</code> timeout on the packet. ",
      "propertyOrder" : 500,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "sharedSecret" : {
      "title" : "Shared Secret",
      "description" : "The secret shared between the RADIUS server and the authentication module.",
      "propertyOrder" : 300,
      "required" : true,
      "type" : "string",
      "format" : "password",
      "exampleValue" : ""
    },
    "serverPortNumber" : {
      "title" : "Port Number",
      "description" : "Port number on which the RADIUS server is listening.",
      "propertyOrder" : 400,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "secondaryRadiusServers" : {
      "title" : "Secondary Radius Servers",
      "description" : "A list of secondary Radius servers that will be used for authentication,
 in case the primary servers are unavailable.<br><br>The module will use secondary servers for
 authentication if all primary servers are unavailable. A single entry must be in the format:<br/><br/
><code>radius_server:port</code><br/><br/>Multiple entries allow associations between OpenAM servers
 and a Radius server. The format is:<br/><br/><code>local server name | radius_server:port</code><br/
><br/><i>NB </i>The local server name is the full name of the server from the list of servers and
 sites.",
      "propertyOrder" : 200,
      "required" : true,
      "items" : {
```


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```
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    }
  }
}
```

1.113.2. Global Operations

Resource path: `/global-config/authentication/modules/radius`

Resource version: `1.0`

1.113.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action RadiusModule --global --actionName getAllTypes
```

1.113.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action RadiusModule --global --actionName getCreatableTypes
```

1.113.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action RadiusModule --global --actionName nextdescendents
```

1.113.2.4. read

Usage:

```
am> read RadiusModule --global
```

1.113.2.5. update

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Usage:

```
am> update RadiusModule --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "defaults" : {
      "properties" : {
        "serverTimeout" : {
          "title" : "Timeout",
          "description" : "Amount of time in seconds to wait for the RADIUS server
 response.<br><br>This sets the <code>SO_TIMEOUT</code> timeout on the packet. ",
          "propertyOrder" : 500,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "primaryRadiusServers" : {
          "title" : "Primary Radius Servers",
          "description" : "A list of primary Radius servers that will be used for
 authentication<br><br>The module will use these servers in preference to the secondary servers.
 A single entry must be in the format:<br/><br/><code>radius_server:port</code><br/><br/>Multiple
 entries allow associations between OpenAM servers and a Radius server. The format is:<br/><br/
><code>local server name | radius_server:port</code><br/><br/><i>NB </i>The local server name is the
 full name of the server from the list of servers and sites.",
          "propertyOrder" : 100,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "serverPortNumber" : {
          "title" : "Port Number",
          "description" : "Port number on which the RADIUS server is listening.",
          "propertyOrder" : 400,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "sharedSecret" : {
          "title" : "Shared Secret",
          "description" : "The secret shared between the RADIUS server and the authentication
 module.",
          "propertyOrder" : 300,
          "required" : true,
          "type" : "string",
          "format" : "password",
          "exampleValue" : ""
        },
```


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```
        "secondaryRadiusServers" : {
          "title" : "Secondary Radius Servers",
          "description" : "A list of secondary Radius servers that will be used for authentication,
 in case the primary servers are unavailable.<br><br>The module will use secondary servers for
 authentication if all primary servers are unavailable. A single entry must be in the format:<br/><br/
><code>radius_server:port</code><br/><br/>Multiple entries allow associations between OpenAM servers
 and a Radius server. The format is:<br/><br/><code>local server name | radius_server:port</code><br/
><br/><i>NB </i>The local server name is the full name of the server from the list of servers and
 sites.",
          "propertyOrder" : 200,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "authenticationLevel" : {
          "title" : "Authentication Level",
          "description" : "The authentication level associated with this module.<br><br>Each
 authentication module has an authentication level that can be used to indicate the level of security
 associated with the module; 0 is the lowest (and the default). ",
          "propertyOrder" : 700,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "healthCheckInterval" : {
          "title" : "Health check interval",
          "description" : "The interval between checks to unavailable RADIUS servers, in minutes.
 <br><br>Determines how often OpenAM checks an offline server's status. The check will send an invalid
 authentication request to the RADIUS server. Offline servers will not be used until the healthcheck
 was successful. Primary servers that become available will be used in preference to secondary
 servers.",
          "propertyOrder" : 600,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        }
      },
      "type" : "object",
      "title" : "Realm Defaults"
    }
  }
}
```


1.114. RadiusServer

1.114.1. Global Operations

Resource path: `/global-config/services/RadiusServerService`

Resource version: `1.0`

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1.114.1.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action RadiusServer --global --actionName getAllTypes
```

1.114.1.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action RadiusServer --global --actionName getCreatableTypes
```

1.114.1.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action RadiusServer --global --actionName nextdescendents
```

1.114.1.4. read

Usage:

```
am> read RadiusServer --global
```

1.114.1.5. update

Usage:

```
am> update RadiusServer --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "radiusThreadPoolMaxSize" : {
      "title" : "Thread Pool Max Size",
      "description" : "Maximum number of threads allowed in the pool. See also \"Thread Pool Core Size
\".",
      "propertyOrder" : 800,
      "required" : true,
      "type" : "integer",
```


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```
      "exampleValue" : ""
    },
    "radiusThreadPoolQueueSize" : {
      "title" : "Thread Pool Queue Size",
      "description" : "The number of requests that can be queued for the pool before further requests
 will be silently dropped. See also \"Thread Pool Core Size\" and \"Thread Pool Max Size\". Specify a
 value from <code>1</code> to <code>1000</code>.",
      "propertyOrder" : 1100,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "radiusListenerEnabled" : {
      "title" : "Enabled",
      "description" : "Enables the OpenAM RADIUS server to listen for requests on the listener port
 and to handle the requests.",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "radiusThreadPoolCoreSize" : {
      "title" : "Thread Pool Core Size",
      "description" : "When a RADIUS request is received and fewer than <code>corePoolSize</code>
 threads are running, a new thread is created to handle the request, even if other worker threads are
 idle. If there are more than \"Thread Pool Core Size\" but less than \"Thread Pool Max Size\" threads
 running, a new thread will be created only if the queue is full. By setting \"Thread Pool Core Size\"
 and \"Thread Pool Max Size\" to the same value, you create a fixed-size thread pool. Specify a value
 from <code>1</code> to <code>100</code>.",
      "propertyOrder" : 600,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "radiusThreadPoolKeepaliveSeconds" : {
      "title" : "Thread Pool Keep-Alive Seconds",
      "description" : "If the pool currently has more than Thread Pool Core Size threads, excess
 threads will be terminated if they have been idle for more than the Keep-Alive Seconds. Specify a
 value from <code>1</code> to <code>3600</code>.",
      "propertyOrder" : 1000,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "radiusServerPort" : {
      "title" : "Listener Port",
      "description" : "The UDP port on which each OpenAM server will listen for RADIUS Access-Request
 packets<br><br>According to the RADIUS Authentication Specification, <a href=\"http://tools.ietf.org/
html/rfc2865\" target=\"_blank\">RFC 2865</a>, the officially assigned port number for RADIUS is
 <code>1812</code>. Specify a value from <code>1024</code> to <code>65535</code>. All client requests
 are handled through the same port.",
      "propertyOrder" : 400,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    }
  }
}
```


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1.115. Realms

1.115.1. Global Operations

The endpoint for Realm operations

Resource path: `/global-config/realms`

Resource version: `1.0`

1.115.1.1. create

Create a Realm

Usage:

```
am> create Realms --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "$schema" : "http://json-schema.org/draft-04/schema#",
  "description" : "Represents a Realm Resource",
  "type" : "object",
  "title" : "Realm",
  "properties" : {
    "name" : {
      "type" : "string",
      "title" : "Name",
      "description" : "The name of the Realm"
    },
    "active" : {
      "type" : "boolean",
      "title" : "Active",
      "description" : "True if the Realm is active"
    },
    "parentPath" : {
      "type" : "string",
      "title" : "Parent",
      "description" : "The path of the Realm's parent Realm"
    },
    "aliases" : {
      "type" : "array",
      "title" : "Aliases",
      "description" : "Aliases which can be used reference to the Realm",
      "items" : {
        "type" : "string"
      }
    }
  },
```


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```
  "required" : [ "name", "active", "parentPath", "aliases" ]
}
```

1.115.1.2. delete

Delete a Realm

Usage:

```
am> delete Realms --global --id id
```

Parameters:

--id

The unique identifier for the resource.

1.115.1.3. query

Usage:

```
am> query Realms --global --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.115.1.4. read

Read a Realm

Usage:

```
am> read Realms --global --id id
```

Parameters:

--id

The unique identifier for the resource.

1.115.1.5. update

Update a Realm

Usage:

```
am> update Realms --global --id id --body body
```


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Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "$schema" : "http://json-schema.org/draft-04/schema#",
  "description" : "Represents a Realm Resource",
  "type" : "object",
  "title" : "Realm",
  "properties" : {
    "name" : {
      "type" : "string",
      "title" : "Name",
      "description" : "The name of the Realm"
    },
    "active" : {
      "type" : "boolean",
      "title" : "Active",
      "description" : "True if the Realm is active"
    },
    "parentPath" : {
      "type" : "string",
      "title" : "Parent",
      "description" : "The path of the Realm's parent Realm"
    },
    "aliases" : {
      "type" : "array",
      "title" : "Aliases",
      "description" : "Aliases which can be used reference to the Realm",
      "items" : {
        "type" : "string"
      }
    }
  },
  "required" : [ "name", "active", "parentPath", "aliases" ]
}
```

1.116. Records

1.116.1. Realm Operations

Service for creating records.

Resource path: `/records`

Resource version: `1.0`

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1.116.1.1. start

Starts recording.

Usage:

```
am> action Records --realm Realm --body body --actionName start
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "description" : "The properties of a Record, which can deserialized from json.",
  "type" : "object",
  "title" : "Record properties",
  "properties" : {
    "issueID" : {
      "description" : "A case number is a good choice for the issueID value.",
      "title" : "Issue ID",
      "type" : "integer",
      "format" : "int64"
    },
    "referenceID" : {
      "description" : "A second identifier to segregate multiple recording events for the same
 issue.",
      "title" : "Reference ID",
      "type" : "string"
    },
    "description" : {
      "description" : "A textual description of the recording event.",
      "title" : "Description",
      "type" : "string"
    },
    "threadDumpDelayInSeconds" : {
      "description" : "Object used to specify an interval at which thread dumps are taken. The initial
 thread dump is taken at the start of the recording event; subsequent thread dumps are taken at
 multiples of the delay interval.",
      "title" : "Thread dump delay in seconds",
      "type" : "integer",
      "format" : "int64"
    },
    "configExportPassword" : {
      "description" : "A key required to import the exported configuration.",
      "title" : "Config export password",
      "type" : "string"
    },
    "debugLevel" : {
      "description" : "The debug level to set for the recording event.",
      "title" : "Debug level",
      "type" : "string",
      "enum" : [ "OFF", "ERROR", "WARNING", "MESSAGE", "ON" ]
    },
    "autoStopTimeInMS" : {
      "description" : "Used to specify an event that automatically ends a recording period. For time-
based termination, specify a time object; for termination based on uncompressed file size, specify a
```


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```
 fileSize object. If you specify both time and fileSize objects, the event that occurs first causes
 recording to stop.",
      "title" : "Auto stop time in milliseconds",
      "type" : "integer",
      "format" : "int64"
    },
    "configExportSharePasswordEnabled" : {
      "description" : "Whether to show the password value in the ssoadm start-recording, ssoadm get-
recording-status, ssoadm stop-recording output and in the info.json file.",
      "title" : "Config export share password enabled",
      "type" : "boolean"
    },
    "autoStopFileSizeInKB" : {
      "description" : "Configures a recording period to terminate after the aggregate size of
 uncompressed debug logs has reached this size.",
      "title" : "Auto stop file size in KB",
      "type" : "integer",
      "format" : "int64"
    },
    "threadDumpEnabled" : {
      "description" : "Whether to dump threads during the recording event.",
      "title" : "Thread dump enabled",
      "type" : "boolean"
    },
    "configExportEnabled" : {
      "description" : "Whether to export the OpenAM configuration upon completion of the recording
 event.",
      "title" : "Config export enabled",
      "type" : "boolean"
    },
    "autoStopEnabled" : {
      "description" : "Whether auto stop is enabled.",
      "title" : "Auto stop enabled",
      "type" : "boolean"
    },
    "autoStopTimeEnabled" : {
      "description" : "Whether time is specified for the auto stop.",
      "title" : "Auto stop time enabled",
      "type" : "boolean"
    },
    "autoStopFileSizeEnabled" : {
      "description" : "Whether file size is enabled for the auto stop.",
      "title" : "Auto stop file size enabled",
      "type" : "boolean"
    },
    "zipEnabled" : {
      "description" : "Whether to compress the output directory into a zip file when recording has
 stopped.",
      "title" : "Zip enabled",
      "type" : "boolean"
    }
  }
}
```

1.116.1.2. status

Returns status of recording.

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Usage:

```
am> action Records --realm Realm --actionName status
```

1.116.1.3. stop

Stops recording.

Usage:

```
am> action Records --realm Realm --actionName stop
```

1.117. RemoteConsentAgent

1.117.1. Realm Operations

Agents handler that is responsible for managing agents

Resource path: `/realm-config/agents/RemoteConsentAgent`

Resource version: `1.0`

1.117.1.1. create

Usage:

```
am> create RemoteConsentAgent --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "jwkSet" : {
      "title" : "Json Web Key",
      "description" : "Raw JSON Web Key value containing the Remote Consent Service's public keys.",
      "propertyOrder" : 35100,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
```


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```
        },
        "value" : {
          "type" : "string",
          "required" : false
        }
      }
    },
    "remoteConsentResponseSigningAlg" : {
      "title" : "Consent response signing algorithm",
      "description" : "The signing algorithm to be used by the provider when verifying the signature
of the consent response JWT received from the Remote Consent Service.",
      "propertyOrder" : 34400,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : false
        }
      }
    },
    "publicKeyLocation" : {
      "title" : "Public key selector",
      "description" : "",
      "propertyOrder" : 34700,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "requestTimeLimit" : {
      "title" : "Consent Request Time Limit",
      "description" : "The amount of seconds for which the consent request JWT sent to the Remote
Consent Service should be considered valid.",
      "propertyOrder" : 35200,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "integer",
          "required" : false
        }
      }
```


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```
    },
    "remoteConsentRedirectUrl" : {
      "title" : "Redirect URL",
      "description" : "The Remote Consent Service's URL to which the authorization server should
redirect the user in order to obtain their consent.",
      "propertyOrder" : 34000,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : false
        }
      }
    },
    "remoteConsentRequestSigningAlgorithm" : {
      "title" : "Consent request Signing Algorithm",
      "description" : "Signing algorithm to be used when signing the consent request JWT.",
      "propertyOrder" : 34500,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "jwkStoreCacheMissCacheTime" : {
      "title" : "JWKs URI content cache miss cache time",
      "description" : "To avoid loading the JWKS URI content for every operation, especially when
the kid is not in the jwks content already cached, the JWKS content will be cached for a minimum
period of time. This cache miss cache time defines the minimum amount of time the JWKS URI content is
cached.",
      "propertyOrder" : 35000,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "integer",
          "required" : true
        }
      }
    },
    "jwksUri" : {
      "title" : "Json Web Key URI",
```


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```
      "description" : "The URI that contains the Remote Consent Service secret's public keys in Json
 Web Key format.",
      "propertyOrder" : 34800,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "remoteConsentResponseEncryptionMethod" : {
      "title" : "Consent response encryption method",
      "description" : "The encryption method to be used by the provider when decrypting the remote
 consent response JWT received from the Remote Consent Service.<br><br>OpenAM supports the following
 token encryption algorithms: <ul><li><code>A128GCM</code>, <code>A192GCM</code>, and <code>A256GCM</
code> - AES in Galois Counter Mode (GCM) authenticated encryption mode.</li><li><code>A128CBC-HS256</
code>, <code>A192CBC-HS384</code>, and <code>A256CBC-HS512</code> - AES encryption in CBC mode, with
 HMAC-SHA-2 for integrity.</li></ul>",
      "propertyOrder" : 34600,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "remoteConsentRequestEncryptionEnabled" : {
      "title" : "Enable consent request Encryption",
      "description" : "Enables encryption of the consent request JWT.",
      "propertyOrder" : 34100,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "jwksCacheTimeout" : {
      "title" : "JWKs URI content cache timeout in ms",
```


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```
      "description" : "To avoid loading the JWKS URI content for every operation, the JWKS content is
cached. This timeout defines the maximum amount of time the JWKS URI content can be cached before
being refreshed.",
      "propertyOrder" : 34900,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "integer",
          "required" : true
        }
      }
    },
    "remoteConsentResponseEncryptionAlgorithm" : {
      "title" : "Consent response encryption algorithm",
      "description" : "The encryption algorithm to be used by the provider when decrypting the remote
consent response JWT received from the Remote Consent Service.",
      "propertyOrder" : 34500,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : false
        }
      }
    },
    "userpassword" : {
      "title" : "Remote Consent Service secret",
      "description" : "Used when the Remote Consent Service authenticates to OpenAM.",
      "propertyOrder" : 33000,
      "required" : true,
      "type" : "string",
      "format" : "password",
      "exampleValue" : ""
    },
    "remoteConsentRequestEncryptionMethod" : {
      "title" : "Consent request Encryption Method",
      "description" : "Encryption method to be used when encrypting the consent request JWT.",
      "propertyOrder" : 34300,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
```


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```
      }
    },
    "remoteConsentRequestEncryptionAlgorithm" : {
      "title" : "Consent request Encryption Algorithm",
      "description" : "Encryption algorithm to be used when encrypting the consent request JWT.",
      "propertyOrder" : 34200,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    }
  }
}
```

1.117.1.2. delete

Usage:

```
am> delete RemoteConsentAgent --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.117.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action RemoteConsentAgent --realm Realm --actionName getAllTypes
```

1.117.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action RemoteConsentAgent --realm Realm --actionName getCreatableTypes
```


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1.117.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action RemoteConsentAgent --realm Realm --actionName nextdescendents
```

1.117.1.6. query

Querying the agents of a specific type

Usage:

```
am> query RemoteConsentAgent --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.117.1.7. read

Usage:

```
am> read RemoteConsentAgent --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.117.1.8. update

Usage:

```
am> update RemoteConsentAgent --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

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--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "jwkSet" : {
      "title" : "Json Web Key",
      "description" : "Raw JSON Web Key value containing the Remote Consent Service's public keys.",
      "propertyOrder" : 35100,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : false
        }
      }
    },
    "remoteConsentResponseSigningAlg" : {
      "title" : "Consent response signing algorithm",
      "description" : "The signing algorithm to be used by the provider when verifying the signature
 of the consent response JWT received from the Remote Consent Service.",
      "propertyOrder" : 34400,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : false
        }
      }
    },
    "publicKeyLocation" : {
      "title" : "Public key selector",
      "description" : "",
      "propertyOrder" : 34700,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
```


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```
   "requestTimeLimit" : {
     "title" : "Consent Request Time Limit",
     "description" : "The amount of seconds for which the consent request JWT sent to the Remote
Consent Service should be considered valid.",
     "propertyOrder" : 35200,
     "type" : "object",
     "exampleValue" : "",
     "properties" : {
       "inherited" : {
         "type" : "boolean",
         "required" : true
       },
       "value" : {
         "type" : "integer",
         "required" : false
       }
     }
   },
   "remoteConsentRedirectUrl" : {
     "title" : "Redirect URL",
     "description" : "The Remote Consent Service's URL to which the authorization server should
redirect the user in order to obtain their consent.",
     "propertyOrder" : 34000,
     "type" : "object",
     "exampleValue" : "",
     "properties" : {
       "inherited" : {
         "type" : "boolean",
         "required" : true
       },
       "value" : {
         "type" : "string",
         "required" : false
       }
     }
   },
   "remoteConsentRequestSigningAlgorithm" : {
     "title" : "Consent request Signing Algorithm",
     "description" : "Signing algorithm to be used when signing the consent request JWT.",
     "propertyOrder" : 34500,
     "type" : "object",
     "exampleValue" : "",
     "properties" : {
       "inherited" : {
         "type" : "boolean",
         "required" : true
       },
       "value" : {
         "type" : "string",
         "required" : true
       }
     }
   },
   "jwkStoreCacheMissCacheTime" : {
     "title" : "JWKs URI content cache miss cache time",
     "description" : "To avoid loading the JWKS URI content for every operation, especially when
the kid is not in the jwks content already cached, the JWKS content will be cached for a minimum
period of time. This cache miss cache time defines the minimum amount of time the JWKS URI content is
cached.",
```


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```
      "propertyOrder" : 35000,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "integer",
          "required" : true
        }
      }
    },
    "jwksUri" : {
      "title" : "Json Web Key URI",
      "description" : "The URI that contains the Remote Consent Service secret's public keys in Json
 Web Key format.",
      "propertyOrder" : 34800,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "remoteConsentResponseEncryptionMethod" : {
      "title" : "Consent response encryption method",
      "description" : "The encryption method to be used by the provider when decrypting the remote
 consent response JWT received from the Remote Consent Service.<br><br>OpenAM supports the following
 token encryption algorithms: <ul><li><code>A128GCM</code>, <code>A192GCM</code>, and <code>A256GCM</
code> - AES in Galois Counter Mode (GCM) authenticated encryption mode.</li><li><code>A128CBC-HS256</
code>, <code>A192CBC-HS384</code>, and <code>A256CBC-HS512</code> - AES encryption in CBC mode, with
 HMAC-SHA-2 for integrity.</li></ul>",
      "propertyOrder" : 34600,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "remoteConsentRequestEncryptionEnabled" : {
      "title" : "Enable consent request Encryption",
      "description" : "Enables encryption of the consent request JWT.",
      "propertyOrder" : 34100,
      "type" : "object",
```


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```
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "jwksCacheTimeout" : {
      "title" : "JWKs URI content cache timeout in ms",
      "description" : "To avoid loading the JWKS URI content for every operation, the JWKS content is
cached. This timeout defines the maximum amount of time the JWKS URI content can be cached before
being refreshed.",
      "propertyOrder" : 34900,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "integer",
          "required" : true
        }
      }
    },
    "remoteConsentResponseEncryptionAlgorithm" : {
      "title" : "Consent response encryption algorithm",
      "description" : "The encryption algorithm to be used by the provider when decrypting the remote
consent response JWT received from the Remote Consent Service.",
      "propertyOrder" : 34500,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : false
        }
      }
    },
    "userpassword" : {
      "title" : "Remote Consent Service secret",
      "description" : "Used when the Remote Consent Service authenticates to OpenAM.",
      "propertyOrder" : 33000,
      "required" : true,
      "type" : "string",
      "format" : "password",
      "exampleValue" : ""
    },
    "remoteConsentRequestEncryptionMethod" : {
```


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```
      "title" : "Consent request Encryption Method",
      "description" : "Encryption method to be used when encrypting the consent request JWT.",
      "propertyOrder" : 34300,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "remoteConsentRequestEncryptionAlgorithm" : {
      "title" : "Consent request Encryption Algorithm",
      "description" : "Encryption algorithm to be used when encrypting the consent request JWT.",
      "propertyOrder" : 34200,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    }
  }
}
```

1.118. RemoteConsentService

1.118.1. Realm Operations

Resource path: `/realm-config/services/RemoteConsentService`

Resource version: `1.0`

1.118.1.1. create

Usage:

```
am> create RemoteConsentService --realm Realm --body body
```


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Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "clientId" : {
      "title" : "Client Name",
      "description" : "The name used to identify this OAuth 2.0 remote consent service when
 referencedin other services.",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "signingKeyAlias" : {
      "title" : "Signing Key Alias",
      "description" : "The alias of the key in the default keystore to use for signing.",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "jwkStoreCacheTimeout" : {
      "title" : "JWK Store Cache Timeout (in minutes)",
      "description" : "The cache timeout for the JWK store of the authorization server, in minutes.",
      "propertyOrder" : 500,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "jwkStoreCacheMissCacheTime" : {
      "title" : "JWK Store Cache Miss Cache Time (in minutes)",
      "description" : "The length of time a cache miss is cached, in minutes.",
      "propertyOrder" : 600,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "encryptionKeyAlias" : {
      "title" : "Encryption Key Alias",
      "description" : "The alias of the key in the default keystore to use for encryption.",
      "propertyOrder" : 300,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "jwksUriAS" : {
      "title" : "Authorization Server jwk_uri",
      "description" : "The jwk_uri for retrieving the authorization server signing and encryption
 keys.",
      "propertyOrder" : 400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
```


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```
    "consentResponseTimeLimit" : {
      "title" : "Consent Response Time Limit (in minutes)",
      "description" : "The time limit set on the consent response JWT before it expires, in minutes.",
      "propertyOrder" : 700,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    }
  }
}
```

1.118.1.2. delete

Usage:

```
am> delete RemoteConsentService --realm Realm
```

1.118.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action RemoteConsentService --realm Realm --actionName getAllTypes
```

1.118.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action RemoteConsentService --realm Realm --actionName getCreatableTypes
```

1.118.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action RemoteConsentService --realm Realm --actionName nextdescendents
```

1.118.1.6. read

Usage:

```
am> read RemoteConsentService --realm Realm
```


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1.118.1.7. update

Usage:

```
am> update RemoteConsentService --realm Realm --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "clientId" : {
      "title" : "Client Name",
      "description" : "The name used to identify this OAuth 2.0 remote consent service when
 referencedin other services.",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "signingKeyAlias" : {
      "title" : "Signing Key Alias",
      "description" : "The alias of the key in the default keystore to use for signing.",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "jwkStoreCacheTimeout" : {
      "title" : "JWK Store Cache Timeout (in minutes)",
      "description" : "The cache timeout for the JWK store of the authorization server, in minutes.",
      "propertyOrder" : 500,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "jwkStoreCacheMissCacheTime" : {
      "title" : "JWK Store Cache Miss Cache Time (in minutes)",
      "description" : "The length of time a cache miss is cached, in minutes.",
      "propertyOrder" : 600,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "encryptionKeyAlias" : {
      "title" : "Encryption Key Alias",
      "description" : "The alias of the key in the default keystore to use for encryption.",
      "propertyOrder" : 300,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
```


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```
    "jwksUriAS" : {
      "title" : "Authorization Server jwk_uri",
      "description" : "The jwk_uri for retrieving the authorization server signing and encryption
 keys.",
      "propertyOrder" : 400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "consentResponseTimeLimit" : {
      "title" : "Consent Response Time Limit (in minutes)",
      "description" : "The time limit set on the consent response JWT before it expires, in minutes.",
      "propertyOrder" : 700,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    }
  }
}
```

1.118.2. Global Operations

Resource path: `/global-config/services/RemoteConsentService`

Resource version: `1.0`

1.118.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action RemoteConsentService --global --actionName getAllTypes
```

1.118.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action RemoteConsentService --global --actionName getCreatableTypes
```

1.118.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action RemoteConsentService --global --actionName nextdescendents
```


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1.118.2.4. read

Usage:

```
am> read RemoteConsentService --global
```

1.118.2.5. update

Usage:

```
am> update RemoteConsentService --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "defaults" : {
      "properties" : {
        "clientId" : {
          "title" : "Client Name",
          "description" : "The name used to identify this OAuth 2.0 remote consent service when
 referencedin other services.",
          "propertyOrder" : 100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "jwksUriAS" : {
          "title" : "Authorization Server jwk_uri",
          "description" : "The jwk_uri for retrieving the authorization server signing and encryption
 keys.",
          "propertyOrder" : 400,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "jwkStoreCacheMissCacheTime" : {
          "title" : "JWK Store Cache Miss Cache Time (in minutes)",
          "description" : "The length of time a cache miss is cached, in minutes.",
          "propertyOrder" : 600,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "encryptionKeyAlias" : {
          "title" : "Encryption Key Alias",
          "description" : "The alias of the key in the default keystore to use for encryption.",
          "propertyOrder" : 300,
          "required" : true,
          "type" : "string",
```


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```
          "exampleValue" : ""
        },
        "signingKeyAlias" : {
          "title" : "Signing Key Alias",
          "description" : "The alias of the key in the default keystore to use for signing.",
          "propertyOrder" : 200,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "consentResponseTimeLimit" : {
          "title" : "Consent Response Time Limit (in minutes)",
          "description" : "The time limit set on the consent response JWT before it expires, in
 minutes.",
          "propertyOrder" : 700,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "jwkStoreCacheTimeout" : {
          "title" : "JWK Store Cache Timeout (in minutes)",
          "description" : "The cache timeout for the JWK store of the authorization server, in
 minutes.",
          "propertyOrder" : 500,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        }
      },
      "type" : "object",
      "title" : "Realm Defaults"
    }
  }
}
```

1.119. RemoveSessionProperties

1.119.1. Realm Operations

Resource path: `/realm-config/authentication/authenticationtrees/nodes/RemoveSessionPropertiesNode`

Resource version: `1.0`

1.119.1.1. create

Usage:

```
am> create RemoveSessionProperties --realm Realm --id id --body body
```

Parameters:

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--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "propertyNames" : {
      "title" : "Property Names",
      "description" : "The names of session properties to remove that may have been contributed by
 nodes that executedearlier in the tree. If the properties do not exist, no error will be thrown.
 Names are case sensitive.",
      "propertyOrder" : 100,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    }
  }
}
```

1.119.1.2. delete

Usage:

```
am> delete RemoveSessionProperties --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.119.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action RemoveSessionProperties --realm Realm --actionName getAllTypes
```

1.119.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

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Usage:

```
am> action RemoveSessionProperties --realm Realm --actionName getCreatableTypes
```

1.119.1.5. listOutcomes

List the available outcomes for the node type.

Usage:

```
am> action RemoveSessionProperties --realm Realm --body body --actionName listOutcomes
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "title" : "Some configuration of the node. This does not need to be complete against the
 configuration schema."
}
```

1.119.1.6. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action RemoveSessionProperties --realm Realm --actionName nextdescendents
```

1.119.1.7. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

```
am> query RemoveSessionProperties --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.119.1.8. read

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Usage:

```
am> read RemoveSessionProperties --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.119.1.9. update

Usage:

```
am> update RemoveSessionProperties --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "propertyNames" : {
      "title" : "Property Names",
      "description" : "The names of session properties to remove that may have been contributed by
 nodes that executedearlier in the tree. If the properties do not exist, no error will be thrown.
 Names are case sensitive.",
      "propertyOrder" : 100,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    }
  }
}
```

1.119.2. Global Operations

Resource path: `/global-config/authentication/authenticationtrees/nodes/RemoveSessionPropertiesNode`

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Resource version: `1.0`

1.119.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action RemoveSessionProperties --global --actionName getAllTypes
```

1.119.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action RemoveSessionProperties --global --actionName getCreatableTypes
```

1.119.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action RemoveSessionProperties --global --actionName nextdescendents
```

1.119.2.4. read

Usage:

```
am> read RemoveSessionProperties --global
```

1.119.2.5. update

Usage:

```
am> update RemoveSessionProperties --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

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```
{
  "type" : "object"
}
```

1.120. ResourceSets

1.120.1. Realm Operations

Resource set resource provider is responsible for managing Resource Sets belonging to a user. Available operations are update, query, read, revoke all action.

Resource path: `/users/{user}/oauth2/resources/sets`

Resource version: `1.0`

1.120.1.1. query

Query the collection of the user's Resource Set.

Usage:

```
am> query ResourceSets --realm Realm --filter filter --user user
```

Parameters:

`--filter`

A CREST formatted query filter, where "true" will query all. Fields that can be queried: [*]

`--user`

Resource set resource provider is responsible for managing Resource Sets belonging to a user. Available operations are update, query, read, revoke all action.

1.120.1.2. read

Read Resource Set from the collection by id.

Usage:

```
am> read ResourceSets --realm Realm --id id --user user
```

Parameters:

`--id`

The unique identifier for the resource.

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--user

Resource set resource provider is responsible for managing Resource Sets belonging to a user. Available operations are update, query, read, revoke all action.

1.120.1.3. update

Update a Resource Set record.

Usage:

```
am> update ResourceSets --realm Realm --id id --body body --user user
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "$schema" : "http://json-schema.org/draft-04/schema#",
  "description" : "Describes the structure of the OpenAM representation of a user's OAuth Resource
 Set. For further  information see [insert link to the RSR standard], and documentation about UMA in
 OpenAM.",
  "type" : "object",
  "title" : "Resource Set resource schema",
  "properties" : {
    "scopes" : {
      "type" : "array",
      "title" : "Scopes",
      "description" : "List of Resource Set scopes.",
      "items" : {
        "type" : "string"
      }
    },
    "_id" : {
      "type" : "string",
      "title" : "Resource set id",
      "description" : "Unique identifier of the Resource Set."
    },
    "resourceServer" : {
      "type" : "string",
      "title" : "Resource server",
      "description" : "The resources server name."
    },
    "labels" : {
      "type" : "array",
      "title" : "Resource labels",
      "description" : "Labels of the resource.",
      "items" : {
```


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```
        "type" : "string"
      }
    },
    "name" : {
      "type" : "string",
      "title" : "Resource name",
      "description" : "Name of the resource."
    },
    "icon_uri" : {
      "type" : "string",
      "title" : "Icon uri",
      "description" : "Resource icon uri."
    },
    "resourceOwnerId" : {
      "type" : "string",
      "title" : "Resource owner",
      "description" : "Name of the resource owner."
    },
    "type" : {
      "type" : "string",
      "title" : "Resource type",
      "description" : "Type of the resources."
    }
  }
}
```

--user

Resource set resource provider is responsible for managing Resource Sets belonging to a user. Available operations are update, query, read, revoke all action.

1.121. ResourceTypes

1.121.1. Realm Operations

The Resource Types resource is responsible for managing resource types, which define a template for the resources that Managing Policies policies apply to, and the actions associated with those resources. Available operations are Query, Read, Create, Update, Delete

Resource path: `/resourcetypes`

Resource version: `1.0`

1.121.1.1. create

Create new resource type

Usage:

```
am> create ResourceTypes --realm Realm --id id --body body
```


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Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "$schema" : "http://json-schema.org/draft-04/schema#",
  "description" : "Resource Types Resource schema",
  "type" : "object",
  "title" : "Resource Types Resource schema",
  "properties" : {
    "uuid" : {
      "title" : "UUID",
      "description" : "Unique identifier of the record",
      "type" : "string"
    },
    "name" : {
      "title" : "Name",
      "description" : "Resource type name",
      "type" : "string"
    },
    "description" : {
      "title" : "Description",
      "description" : "Resource type description",
      "type" : "string"
    },
    "patterns" : {
      "title" : "Patterns",
      "description" : "Resource type patterns",
      "type" : "array",
      "items" : {
        "type" : "string"
      }
    },
    "actions" : {
      "title" : "Actions",
      "description" : "Resource type actions",
      "type" : "object",
      "additionalProperties" : {
        "type" : "boolean"
      }
    },
    "createdBy" : {
      "title" : "Created by",
      "description" : "A string containing the universal identifier DN of the subject created the
 resource type",
      "type" : "string"
    },
    "creationDate" : {
      "title" : "Creation date",
      "description" : "An integer containing the creation date and time, in ISO 8601 format",
      "type" : "number"
    },
```


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```
    "lastModifiedBy" : {
      "title" : "Last modifier",
      "description" : "A string containing the universal identifier DN of the subject that most
 recently updated the resource type. If the resource type has not been modified since it was created,
 this property will have the same value as createdBy",
      "type" : "string"
    },
    "lastModifiedDate" : {
      "title" : "Last modification date",
      "description" : "A string containing the last modified date and time, in ISO 8601 format. If the
 resource typ has not been modified since it was created, this property will have the same value as
 creationDate",
      "type" : "number"
    }
  }
}
```

1.121.1.2. delete

Delete resource type

Usage:

```
am> delete ResourceTypes --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.121.1.3. query

Query the collection of resource types

Usage:

```
am> query ResourceTypes --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all. Fields that can be queried: [*]

1.121.1.4. read

Read from the resource types collection by unique identifier

Usage:

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```
am> read ResourceTypes --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.121.1.5. update

Update an existing resource type

Usage:

```
am> update ResourceTypes --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "$schema" : "http://json-schema.org/draft-04/schema#",
  "description" : "Resource Types Resource schema",
  "type" : "object",
  "title" : "Resource Types Resource schema",
  "properties" : {
    "uuid" : {
      "title" : "UUID",
      "description" : "Unique identifier of the record",
      "type" : "string"
    },
    "name" : {
      "title" : "Name",
      "description" : "Resource type name",
      "type" : "string"
    },
    "description" : {
      "title" : "Description",
      "description" : "Resource type description",
      "type" : "string"
    },
    "patterns" : {
      "title" : "Patterns",
      "description" : "Resource type patterns",
      "type" : "array",
      "items" : {
        "type" : "string"
      }
    },
```


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```
    "actions" : {
      "title" : "Actions",
      "description" : "Resource type actions",
      "type" : "object",
      "additionalProperties" : {
        "type" : "boolean"
      }
    },
    "createdBy" : {
      "title" : "Created by",
      "description" : "A string containing the universal identifier DN of the subject created the
 resource type",
      "type" : "string"
    },
    "creationDate" : {
      "title" : "Creation date",
      "description" : "An integer containing the creation date and time, in ISO 8601 format",
      "type" : "number"
    },
    "lastModifiedBy" : {
      "title" : "Last modifier",
      "description" : "A string containing the universal identifier DN of the subject that most
 recently updated the resource type. If the resource type has not been modified since it was created,
 this property will have the same value as createdBy",
      "type" : "string"
    },
    "lastModifiedDate" : {
      "title" : "Last modification date",
      "description" : "A string containing the last modified date and time, in ISO 8601 format. If the
 resource typ has not been modified since it was created, this property will have the same value as
 creationDate",
      "type" : "number"
    }
  }
}
```

1.122. RestApis

1.122.1. Global Operations

Resource path: `/global-config/services/rest`

Resource version: `1.0`

1.122.1.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action RestApis --global --actionName getAllTypes
```


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1.122.1.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action RestApis --global --actionName getCreatableTypes
```

1.122.1.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action RestApis --global --actionName nextdescendents
```

1.122.1.4. read

Usage:

```
am> read RestApis --global
```

1.122.1.5. update

Usage:

```
am> update RestApis --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "defaultVersion" : {
      "title" : "Default Resource Version",
      "description" : "The API resource version to use when the REST request does not specify an
 explicit version. Choose from:<br><br><ul><li><code>Latest</code>. If an explicit version is not
 specified, the latest resource version of an API is used.</li><li><code>Oldest</code>. If an explicit
 version is not specified, the oldest supported resource version of an API is used. Note that since
 APIs may be deprecated and fall out of support, the oldest <i>supported</i> version may not be the
 first version.</li><li><code>None</code>. If an explicit version is not specified, the request will
 not be handled and an error status is returned.</li></ul>",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "string",
```


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```
      "exampleValue" : ""
    },
    "warningHeader" : {
      "title" : "Warning Header",
      "description" : "Whether to include a warning header in the response to a request which fails to
 include the <code>Accept-API-Version</code> header.",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "defaultProtocolVersion" : {
      "title" : "Default Protocol Version",
      "description" : "The API protocol version to use when a REST request does not specify an
 explicit version. Choose from:<br><br><ul><li><code>Oldest</code>. If an explicit version is not
 specified, the oldest protocol version is used.</li><li><code>Latest</code>. If an explicit version
 is not specified, the latest protocol version is used.</li><li><code>None</code>. If an explicit
 version is not specified, the request will not be handled and an error status is returned.</li></
ul>",
      "propertyOrder" : 400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "descriptionsState" : {
      "title" : "API Descriptions",
      "description" : "Whether API Explorer and API Docs are enabled in OpenAM and how the
 documentation for them is generated. Dynamic generation includes descriptions from any custom
 services and authentication modules you may have added. Static generation only includes services
 and authentication modules that were present when OpenAM was built. Note that dynamic documentation
 generation may not work in some application containers.",
      "propertyOrder" : 300,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```


1.123. SaeModule

1.123.1. Realm Operations

Resource path: `/realm-config/authentication/modules/sae`

Resource version: `1.0`

1.123.1.1. create

Usage:

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```
am> create SaeModule --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "authenticationLevel" : {
      "title" : "Authentication Level",
      "description" : "The authentication level associated with this module.<br><br>Each
 authentication module has an authentication level that can be used to indicate the level of security
 associated with the module; 0 is the lowest (and the default).",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    }
  }
}
```

1.123.1.2. delete

Usage:

```
am> delete SaeModule --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.123.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action SaeModule --realm Realm --actionName getAllTypes
```

1.123.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

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Usage:

```
am> action SaeModule --realm Realm --actionName getCreatableTypes
```

1.123.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action SaeModule --realm Realm --actionName nextdescendents
```

1.123.1.6. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

```
am> query SaeModule --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.123.1.7. read

Usage:

```
am> read SaeModule --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.123.1.8. update

Usage:

```
am> update SaeModule --realm Realm --id id --body body
```

Parameters:

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--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "authenticationLevel" : {
      "title" : "Authentication Level",
      "description" : "The authentication level associated with this module.<br><br>Each
 authentication module has an authentication level that can be used to indicate the level of security
 associated with the module; 0 is the lowest (and the default).",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    }
  }
}
```

1.123.2. Global Operations

Resource path: `/global-config/authentication/modules/sae`

Resource version: `1.0`

1.123.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action SaeModule --global --actionName getAllTypes
```

1.123.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action SaeModule --global --actionName getCreatableTypes
```

1.123.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

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Usage:

```
am> action SaeModule --global --actionName nextdescendents
```

1.123.2.4. read

Usage:

```
am> read SaeModule --global
```

1.123.2.5. update

Usage:

```
am> update SaeModule --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "defaults" : {
      "properties" : {
        "authenticationLevel" : {
          "title" : "Authentication Level",
          "description" : "The authentication level associated with this module.<br><br>Each
 authentication module has an authentication level that can be used to indicate the level of security
 associated with the module; 0 is the lowest (and the default).",
          "propertyOrder" : 100,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        }
      },
      "type" : "object",
      "title" : "Realm Defaults"
    }
  }
}
```

1.124. Saml2Entity

1.124.1. Realm Operations

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Resource path: `/realm-config/federation/entityproviders/saml2`

Resource version: `1.0`

1.124.1.1. create

Usage:

```
am> create Saml2Entity --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "metadata" : {
      "title" : "Metadata",
      "description" : "",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "entityConfig" : {
      "title" : "Entity Configuration",
      "description" : "",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```

1.124.1.2. delete

Usage:

```
am> delete Saml2Entity --realm Realm --id id
```

Parameters:

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--id

The unique identifier for the resource.

1.124.1.3. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

```
am> query Saml2Entity --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.124.1.4. read

Usage:

```
am> read Saml2Entity --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.124.1.5. update

Usage:

```
am> update Saml2Entity --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

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```
{
  "type" : "object",
  "properties" : {
    "metadata" : {
      "title" : "Metadata",
      "description" : "",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "entityConfig" : {
      "title" : "Entity Configuration",
      "description" : "",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```

1.125. Saml2Module

1.125.1. Realm Operations

Resource path: `/realm-config/authentication/modules/authSaml`

Resource version: `1.0`

1.125.1.1. create

Usage:

```
am> create Saml2Module --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "authComparison" : {
      "title" : "Comparison Type",
```


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```
     "description" : "(Optional) Use this parameter to specify a comparison method to evaluate the
requested context classes or statements. OpenAM accepts the following values: <pre>better</pre>,
<pre>exact</pre>, <pre>maximum</pre>, and <pre>minimum</pre>.",
     "propertyOrder" : 600,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "binding" : {
     "title" : "Response Binding",
     "description" : "Use this parameter to indicate what binding the IdP should use when
communicating with this SP.",
     "propertyOrder" : 1000,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "authnContextDeclRef" : {
     "title" : "Authentication Context Declaration Reference",
     "description" : "(Optional) Use this parameter to specify authentication context declaration
references. Separate multiple values with pipe characters (|).",
     "propertyOrder" : 800,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "authnContextClassRef" : {
     "title" : "Authentication Context Class Reference",
     "description" : "(Optional) Use this parameter to specify authentication context class
references. Separate multiple values with pipe characters (|).",
     "propertyOrder" : 700,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "authenticationLevel" : {
     "title" : "Authentication Level",
     "description" : "The authentication level associated with this module.<br><br>Each
authentication module has an authentication level that can be used to indicate the level of security
associated with the module; 0 is the lowest (and the default).",
     "propertyOrder" : 100,
     "required" : true,
     "type" : "integer",
     "exampleValue" : ""
   },
   "sloEnabled" : {
     "title" : "Single Logout Enabled",
     "description" : "Enable to attempt logout of the user's
IdP session at the point of session logout. Required the
<pre>org.forgerock.openam.authentication.modules.saml2.SAML2PostAuthenticationPlugin</pre> to be
active on the chain that includes this SAML2 module.",
     "propertyOrder" : 1400,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "sloRelay" : {
     "title" : "Single Logout URL",
```


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```
      "description" : "If Single Logout is enabled, this is the URL to which the user should be
 forwarded after successful IdP logout. This must be a fully-qualified URL (start with http...), or
 the redirect will not function.",
      "propertyOrder" : 1500,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "loginChain" : {
      "title" : "Linking Authentication Chain",
      "description" : "The authentication chain that will be executed when a user is required to be
 authenticated locally to match their user account with that of a remotely authenticated assertion.",
      "propertyOrder" : 500,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "entityName" : {
      "title" : "IdP Entity ID",
      "description" : "The entity name of the SAML2 IdP Service to use for this module (must be
 configured).",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "forceAuthn" : {
      "title" : "Force IdP Authentication",
      "description" : "Use this parameter to indicate whether the identity provider should force
 authentication (true) or can reuse existing security contexts (false).",
      "propertyOrder" : 1100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "reqBinding" : {
      "title" : "Request Binding",
      "description" : "Use this parameter to indicate what binding the SP should use when
 communicating with the IdP.",
      "propertyOrder" : 900,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "isPassive" : {
      "title" : "Passive Authentication",
      "description" : "Use this parameter to indicate whether the identity provider should
 authenticate passively (true) or not (false).",
      "propertyOrder" : 1200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "metaAlias" : {
      "title" : "SP MetaAlias",
      "description" : "MetaAlias for Service Provider. The format of this parameter is <pre>/
realm_name/SP</pre>",
      "propertyOrder" : 300,
      "required" : true,
```


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```
      "type" : "string",
      "exampleValue" : ""
    },
    "allowCreate" : {
      "title" : "Allow IdP to Create NameID",
      "description" : "Use this parameter to indicate whether the identity provider can create a new
 identifier for the principal if none exists (true) or not (false).",
      "propertyOrder" : 400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "nameIdFormat" : {
      "title" : "NameID Format",
      "description" : "(Optional) Use this parameter to specify a SAML Name
 Identifier format identifier such as <pre>urn:oasis:names:tc:SAML:2.0:nameid-
format:persistent</pre> <pre>urn:oasis:names:tc:SAML:2.0:nameid-format:transient</pre>
 <pre>urn:oasis:names:tc:SAML:2.0:nameid-format:unspecified</pre>",
      "propertyOrder" : 1300,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```


1.125.1.2. delete

Usage:

```
am> delete Saml2Module --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.125.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action Saml2Module --realm Realm --actionName getAllTypes
```

1.125.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

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```
am> action Saml2Module --realm Realm --actionName getCreatableTypes
```

1.125.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action Saml2Module --realm Realm --actionName nextdescendents
```

1.125.1.6. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

```
am> query Saml2Module --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.125.1.7. read

Usage:

```
am> read Saml2Module --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.125.1.8. update

Usage:

```
am> update Saml2Module --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

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--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "authComparison" : {
      "title" : "Comparison Type",
      "description" : "(Optional) Use this parameter to specify a comparison method to evaluate the
 requested context classes or statements. OpenAM accepts the following values: <pre>better</pre>,
 <pre>exact</pre>, <pre>maximum</pre>, and <pre>minimum</pre>.",
      "propertyOrder" : 600,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "binding" : {
      "title" : "Response Binding",
      "description" : "Use this parameter to indicate what binding the IdP should use when
 communicating with this SP.",
      "propertyOrder" : 1000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "authnContextDeclRef" : {
      "title" : "Authentication Context Declaration Reference",
      "description" : "(Optional) Use this parameter to specify authentication context declaration
 references. Separate multiple values with pipe characters (|).",
      "propertyOrder" : 800,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "authnContextClassRef" : {
      "title" : "Authentication Context Class Reference",
      "description" : "(Optional) Use this parameter to specify authentication context class
 references. Separate multiple values with pipe characters (|).",
      "propertyOrder" : 700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "authenticationLevel" : {
      "title" : "Authentication Level",
      "description" : "The authentication level associated with this module.<br><br>Each
 authentication module has an authentication level that can be used to indicate the level of security
 associated with the module; 0 is the lowest (and the default).",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "sloEnabled" : {
      "title" : "Single Logout Enabled",
      "description" : "Enable to attempt logout of the user's
 IdP session at the point of session logout. Required the
```


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```
<pre>org.forgerock.openam.authentication.modules.saml2.SAML2PostAuthenticationPlugin</pre> to be
active on the chain that includes this SAML2 module.",
     "propertyOrder" : 1400,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "sloRelay" : {
     "title" : "Single Logout URL",
     "description" : "If Single Logout is enabled, this is the URL to which the user should be
forwarded after successful IdP logout. This must be a fully-qualified URL (start with http...), or
the redirect will not function.",
     "propertyOrder" : 1500,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "loginChain" : {
     "title" : "Linking Authentication Chain",
     "description" : "The authentication chain that will be executed when a user is required to be
authenticated locally to match their user account with that of a remotely authenticated assertion.",
     "propertyOrder" : 500,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "entityName" : {
     "title" : "IdP Entity ID",
     "description" : "The entity name of the SAML2 IdP Service to use for this module (must be
configured).",
     "propertyOrder" : 200,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "forceAuthn" : {
     "title" : "Force IdP Authentication",
     "description" : "Use this parameter to indicate whether the identity provider should force
authentication (true) or can reuse existing security contexts (false).",
     "propertyOrder" : 1100,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "reqBinding" : {
     "title" : "Request Binding",
     "description" : "Use this parameter to indicate what binding the SP should use when
communicating with the IdP.",
     "propertyOrder" : 900,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "isPassive" : {
     "title" : "Passive Authentication",
     "description" : "Use this parameter to indicate whether the identity provider should
authenticate passively (true) or not (false).",
     "propertyOrder" : 1200,
     "required" : true,
```


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```
      "type" : "string",
      "exampleValue" : ""
    },
    "metaAlias" : {
      "title" : "SP MetaAlias",
      "description" : "MetaAlias for Service Provider. The format of this parameter is <pre>/
realm_name/SP</pre>",
      "propertyOrder" : 300,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "allowCreate" : {
      "title" : "Allow IdP to Create NameID",
      "description" : "Use this parameter to indicate whether the identity provider can create a new
 identifier for the principal if none exists (true) or not (false).",
      "propertyOrder" : 400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "nameIdFormat" : {
      "title" : "NameID Format",
      "description" : "(Optional) Use this parameter to specify a SAML Name
 Identifier format identifier such as <pre>urn:oasis:names:tc:SAML:2.0:nameid-
format:persistent</pre> <pre>urn:oasis:names:tc:SAML:2.0:nameid-format:transient</pre>
 <pre>urn:oasis:names:tc:SAML:2.0:nameid-format:unspecified</pre>",
      "propertyOrder" : 1300,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```


1.125.2. Global Operations

Resource path: `/global-config/authentication/modules/authSaml`

Resource version: `1.0`

1.125.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action Saml2Module --global --actionName getAllTypes
```

1.125.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

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Usage:

```
am> action Saml2Module --global --actionName getCreatableTypes
```

1.125.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action Saml2Module --global --actionName nextdescendents
```

1.125.2.4. read

Usage:

```
am> read Saml2Module --global
```

1.125.2.5. update

Usage:

```
am> update Saml2Module --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "defaults" : {
      "properties" : {
        "authnContextDeclRef" : {
          "title" : "Authentication Context Declaration Reference",
          "description" : "(Optional) Use this parameter to specify authentication context declaration
 references. Separate multiple values with pipe characters (|).",
          "propertyOrder" : 800,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "entityName" : {
          "title" : "IdP Entity ID",
          "description" : "The entity name of the SAML2 IdP Service to use for this module (must be
 configured).",
          "propertyOrder" : 200,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
```


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```
       "sloEnabled" : {
         "title" : "Single Logout Enabled",
         "description" : "Enable to attempt logout of the
user's IdP session at the point of session logout. Required the
<pre>org.forgerock.openam.authentication.modules.saml2.SAML2PostAuthenticationPlugin</pre> to be
active on the chain that includes this SAML2 module.",
         "propertyOrder" : 1400,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       },
       "authComparison" : {
         "title" : "Comparison Type",
         "description" : "(Optional) Use this parameter to specify a comparison method to evaluate
the requested context classes or statements. OpenAM accepts the following values: <pre>better</pre>,
<pre>exact</pre>, <pre>maximum</pre>, and <pre>minimum</pre>.",
         "propertyOrder" : 600,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       },
       "authnContextClassRef" : {
         "title" : "Authentication Context Class Reference",
         "description" : "(Optional) Use this parameter to specify authentication context class
references. Separate multiple values with pipe characters (|).",
         "propertyOrder" : 700,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       },
       "binding" : {
         "title" : "Response Binding",
         "description" : "Use this parameter to indicate what binding the IdP should use when
communicating with this SP.",
         "propertyOrder" : 1000,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       },
       "sloRelay" : {
         "title" : "Single Logout URL",
         "description" : "If Single Logout is enabled, this is the URL to which the user should be
forwarded after successful IdP logout. This must be a fully-qualified URL (start with http...), or
the redirect will not function.",
         "propertyOrder" : 1500,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       },
       "reqBinding" : {
         "title" : "Request Binding",
         "description" : "Use this parameter to indicate what binding the SP should use when
communicating with the IdP.",
         "propertyOrder" : 900,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       },
       "nameIdFormat" : {
```


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```
          "title" : "NameID Format",
          "description" : "(Optional) Use this parameter to specify a SAML Name
 Identifier format identifier such as <pre>urn:oasis:names:tc:SAML:2.0:nameid-
format:persistent</pre> <pre>urn:oasis:names:tc:SAML:2.0:nameid-format:transient</pre>
 <pre>urn:oasis:names:tc:SAML:2.0:nameid-format:unspecified</pre>",
          "propertyOrder" : 1300,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "metaAlias" : {
          "title" : "SP MetaAlias",
          "description" : "MetaAlias for Service Provider. The format of this parameter is <pre>/
realm_name/SP</pre>",
          "propertyOrder" : 300,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "loginChain" : {
          "title" : "Linking Authentication Chain",
          "description" : "The authentication chain that will be executed when a user is required
 to be authenticated locally to match their user account with that of a remotely authenticated
 assertion.",
          "propertyOrder" : 500,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "forceAuthn" : {
          "title" : "Force IdP Authentication",
          "description" : "Use this parameter to indicate whether the identity provider should force
 authentication (true) or can reuse existing security contexts (false).",
          "propertyOrder" : 1100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "authenticationLevel" : {
          "title" : "Authentication Level",
          "description" : "The authentication level associated with this module.<br><br>Each
 authentication module has an authentication level that can be used to indicate the level of security
 associated with the module; 0 is the lowest (and the default).",
          "propertyOrder" : 100,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "allowCreate" : {
          "title" : "Allow IdP to Create NameID",
          "description" : "Use this parameter to indicate whether the identity provider can create a
 new identifier for the principal if none exists (true) or not (false).",
          "propertyOrder" : 400,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "isPassive" : {
          "title" : "Passive Authentication",
```


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```
          "description" : "Use this parameter to indicate whether the identity provider should
 authenticate passively (true) or not (false).",
          "propertyOrder" : 1200,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      },
      "type" : "object",
      "title" : "Realm Defaults"
    }
  }
}
```

1.126. SamlV2ServiceConfiguration

1.126.1. Realm Operations

Resource path: `/realm-config/services/saml2`

Resource version: `1.0`

1.126.1.1. create

Usage:

```
am> create SamlV2ServiceConfiguration --realm Realm --body body
```

Parameters:

`--body`

The resource in JSON format, described by the following JSON schema:

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```
{
  "type" : "object",
  "properties" : {
    "metadataSigningKey" : {
      "title" : "Metadata signing key alias",
      "description" : "Specify the private key alias to be used to sign the given entity's metadata
 when requesting signed metadata, either by using exportmetadata.jsp or the <code>ssoadm</code>
 command.",
      "propertyOrder" : 1400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "metadataSigningKeyPass" : {
      "title" : "Metadata signing key password",
      "description" : "Specify the password used to retrieve the signing key from the keystore.",
      "propertyOrder" : 1500,
      "required" : true,
      "type" : "string",
      "format" : "password",
      "exampleValue" : ""
    }
  }
}
```

1.126.1.2. delete

Usage:

```
am> delete SamlV2ServiceConfiguration --realm Realm
```

1.126.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action SamlV2ServiceConfiguration --realm Realm --actionName getAllTypes
```

1.126.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action SamlV2ServiceConfiguration --realm Realm --actionName getCreatableTypes
```

1.126.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

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Usage:

```
am> action SamlV2ServiceConfiguration --realm Realm --actionName nextdescendents
```

1.126.1.6. read

Usage:

```
am> read SamlV2ServiceConfiguration --realm Realm
```

1.126.1.7. update

Usage:

```
am> update SamlV2ServiceConfiguration --realm Realm --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "metadataSigningKey" : {
      "title" : "Metadata signing key alias",
      "description" : "Specify the private key alias to be used to sign the given entity's metadata
 when requesting signed metadata, either by using exportmetadata.jsp or the <code>ssoadm</code>
 command.",
      "propertyOrder" : 1400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "metadataSigningKeyPass" : {
      "title" : "Metadata signing key password",
      "description" : "Specify the password used to retrieve the signing key from the keystore.",
      "propertyOrder" : 1500,
      "required" : true,
      "type" : "string",
      "format" : "password",
      "exampleValue" : ""
    }
  }
}
```

1.126.2. Global Operations

Resource path: `/global-config/services/saml2`

Resource version: `1.0`

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1.126.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action SamlV2ServiceConfiguration --global --actionName getAllTypes
```

1.126.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action SamlV2ServiceConfiguration --global --actionName getCreatableTypes
```

1.126.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action SamlV2ServiceConfiguration --global --actionName nextdescendents
```

1.126.2.4. read

Usage:

```
am> read SamlV2ServiceConfiguration --global
```

1.126.2.5. update

Usage:

```
am> update SamlV2ServiceConfiguration --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "signingCertValidation" : {
      "title" : "XML Signing Certificate Validation",
      "description" : "If enabled, then validate certificates used to sign documents.",
      "propertyOrder" : 1000,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
```


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```
    },
    "failOverEnabled" : {
      "title" : "Enable SAML v2.0 failover",
      "description" : "If enabled, OpenAM can failover SAML v2.0 requests to another instance.",
      "propertyOrder" : 1200,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "encryptedKeyInKeyInfo" : {
      "title" : "Include xenc:EncryptedKey inside ds:KeyInfo Element",
      "description" : "Specify whether to include the <code>xenc:EncryptedKey</code> property inside
the <code>ds:KeyInfo</code> element.",
      "propertyOrder" : 800,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "caCertValidation" : {
      "title" : "CA Certificate Validation",
      "description" : "If enabled, then validate CA certificates.",
      "propertyOrder" : 1100,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "bufferLength" : {
      "title" : "Buffer length (in bytes) to decompress request",
      "description" : "Specify the size of the buffer used for decompressing requests, in bytes.",
      "propertyOrder" : 1300,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "xmlSigningClass" : {
      "title" : "XML Signing SPI implementation class",
      "description" : "Used by the SAML2 engine to <em>sign</em> documents.",
      "propertyOrder" : 900,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "idpDiscoveryUrlSchema" : {
      "title" : "URL scheme for IdP Discovery Service",
      "description" : "Specifies the URL scheme to use.",
      "propertyOrder" : 600,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "nameIDInfoAttribute" : {
      "title" : "Attribute name for Name ID information",
      "description" : "User entry attribute to store name identifier information.",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "idpDiscoveryCookieDomain" : {
```


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```
      "title" : "Cookie domain for IdP Discovery Service",
      "description" : "Specifies the cookie domain for the IDP discovery service.",
      "propertyOrder" : 400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "xmlEncryptionClass" : {
      "title" : "XML Encryption SPI implementation class",
      "description" : "Used by the SAML2 engine to <em>encrypt</em> and <em>decrypt</em> documents.",
      "propertyOrder" : 700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "cacheCleanupInterval" : {
      "title" : "Cache cleanup interval (in seconds)",
      "description" : "Time between cache cleanup operations, in seconds.",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "idpDiscoveryCookieType" : {
      "title" : "Cookie type for IdP Discovery Service",
      "description" : "Specifies the cookie type to use.",
      "propertyOrder" : 500,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "nameIDInfoKeyAttribute" : {
      "title" : "Attribute name for Name ID information key",
      "description" : "User entry attribute to store the name identifier key.",
      "propertyOrder" : 300,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "defaults" : {
      "properties" : {
        "metadataSigningKeyPass" : {
          "title" : "Metadata signing key password",
          "description" : "Specify the password used to retrieve the signing key from the keystore.",
          "propertyOrder" : 1500,
          "required" : true,
          "type" : "string",
          "format" : "password",
          "exampleValue" : ""
        },
        "metadataSigningKey" : {
          "title" : "Metadata signing key alias",
          "description" : "Specify the private key alias to be used to sign the given entity's
 metadata when requesting signed metadata, either by using exportmetadata.jsp or the <code>ssoadm</
code> command.",
          "propertyOrder" : 1400,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
```


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```
        }
      },
      "type" : "object",
      "title" : "Realm Defaults"
    }
  }
}
```

1.127. SamlV2SoapBinding

1.127.1. Global Operations

Resource path: `/global-config/services/federation/saml2soapbinding`

Resource version: `1.0`

1.127.1.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action SamlV2SoapBinding --global --actionName getAllTypes
```

1.127.1.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action SamlV2SoapBinding --global --actionName getCreatableTypes
```

1.127.1.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action SamlV2SoapBinding --global --actionName nextdescendents
```

1.127.1.4. read

Usage:

```
am> read SamlV2SoapBinding --global
```


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1.127.1.5. update

Usage:

```
am> update SamlV2SoapBinding --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "requestHandlers" : {
      "title" : "Request Handler List",
      "description" : "List of handlers to deal with SAML v2.0 requests bound to SOAP. <p><p>The
 required format is: <code>key=<em>Meta Alias</em>|class=<em>Handler Class</em></code> <p><p>Set
 the <em>key</em> property for a request handler to the meta alias, and the <em>class</em>
 property to the name of the class that implements the handler.<p><p> For example: <code>key=/pdp|
class=com.sun.identity.xacml.plugins.XACMLAuthzDecisionQueryHandler</code>",
      "propertyOrder" : 100,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    }
  }
}
```

1.128. ScriptStore

1.128.1. Realm Operations

Resource path: `/realm-config/services/scripts`

Resource version: `1.0`

1.128.1.1. create

Usage:

```
am> create ScriptStore --realm Realm --id id --body body
```

Parameters:

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--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "language" : {
      "title" : "Script language",
      "description" : "The language the script is written in - JAVASCRIPT or GROOVY",
      "propertyOrder" : 1000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "name" : {
      "title" : "Script name",
      "description" : "The name provided for the script",
      "propertyOrder" : 1000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "description" : {
      "title" : "Script description",
      "description" : "An optional text string to help identify the script",
      "propertyOrder" : 1000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "createdBy" : {
      "title" : "Created by",
      "description" : "A string containing the universal identifier DN of the subject that created the
script",
      "propertyOrder" : 1000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "script" : {
      "title" : "Script",
      "description" : "The source code of the script. The source code is in UTF-8 format and encoded
into Base64",
      "propertyOrder" : 1000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "context" : {
      "title" : "Script type",
      "description" : "The script type. Supported values are: POLICY_CONDITION : Policy Condition
AUTHENTICATION_SERVER_SIDE : Server-side Authentication  AUTHENTICATION_CLIENT_SIDE : Client-side
Authentication - Note Client-side scripts must be written in JavaScript OIDC_CLAIMS : OIDC Claims",
      "propertyOrder" : 1000,
```


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```
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "lastModifiedDate" : {
      "title" : "Last modification date",
      "description" : "A string containing the last modified date and time, in ISO 8601 format. If
 the script has not been modified since it was created, this property will have the same value as
 creationDate",
      "propertyOrder" : 1000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "creationDate" : {
      "title" : "Creation date",
      "description" : "An integer containing the creation date and time, in ISO 8601 format",
      "propertyOrder" : 1000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "lastModifiedBy" : {
      "title" : "Last modifier",
      "description" : "A string containing the universal identifier DN of the subject that most
 recently updated the script. If the script has not been modified since it was created, this property
 will have the same value as createdBy",
      "propertyOrder" : 1000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```

1.128.1.2. delete

Usage:

```
am> delete ScriptStore --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.128.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action ScriptStore --realm Realm --actionName getAllTypes
```


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1.128.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action ScriptStore --realm Realm --actionName getCreatableTypes
```

1.128.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action ScriptStore --realm Realm --actionName nextdescendents
```

1.128.1.6. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

```
am> query ScriptStore --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.128.1.7. read

Usage:

```
am> read ScriptStore --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.128.1.8. update

Usage:

```
am> update ScriptStore --realm Realm --id id --body body
```

Parameters:

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--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "language" : {
      "title" : "Script language",
      "description" : "The language the script is written in - JAVASCRIPT or GROOVY",
      "propertyOrder" : 1000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "name" : {
      "title" : "Script name",
      "description" : "The name provided for the script",
      "propertyOrder" : 1000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "description" : {
      "title" : "Script description",
      "description" : "An optional text string to help identify the script",
      "propertyOrder" : 1000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "createdBy" : {
      "title" : "Created by",
      "description" : "A string containing the universal identifier DN of the subject that created the
 script",
      "propertyOrder" : 1000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "script" : {
      "title" : "Script",
      "description" : "The source code of the script. The source code is in UTF-8 format and encoded
 into Base64",
      "propertyOrder" : 1000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "context" : {
      "title" : "Script type",
      "description" : "The script type. Supported values are: POLICY_CONDITION : Policy Condition
 AUTHENTICATION_SERVER_SIDE : Server-side Authentication  AUTHENTICATION_CLIENT_SIDE : Client-side
 Authentication - Note Client-side scripts must be written in JavaScript OIDC_CLAIMS : OIDC Claims",
```


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```
      "propertyOrder" : 1000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "lastModifiedDate" : {
      "title" : "Last modification date",
      "description" : "A string containing the last modified date and time, in ISO 8601 format. If
 the script has not been modified since it was created, this property will have the same value as
 creationDate",
      "propertyOrder" : 1000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "creationDate" : {
      "title" : "Creation date",
      "description" : "An integer containing the creation date and time, in ISO 8601 format",
      "propertyOrder" : 1000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "lastModifiedBy" : {
      "title" : "Last modifier",
      "description" : "A string containing the universal identifier DN of the subject that most
 recently updated the script. If the script has not been modified since it was created, this property
 will have the same value as createdBy",
      "propertyOrder" : 1000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```

1.129. ScriptTypes

1.129.1. Global Operations

Resource path: `/global-config/services/scripting/contexts`

Resource version: `1.0`

1.129.1.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action ScriptTypes --global --actionName getAllTypes
```


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1.129.1.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action ScriptTypes --global --actionName getCreatableTypes
```

1.129.1.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action ScriptTypes --global --actionName nextdescendents
```

1.129.1.4. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

```
am> query ScriptTypes --global --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.129.1.5. read

Usage:

```
am> read ScriptTypes --global --id id
```

Parameters:

--id

The unique identifier for the resource.

1.129.1.6. update

Usage:

```
am> update ScriptTypes --global --id id --body body
```

Parameters:

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--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "defaultScript" : {
      "title" : "Default Script",
      "description" : "The source code that is presented as the default when creating a new script of
 this type.",
      "propertyOrder" : 1200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "languages" : {
      "title" : "Scripting languages",
      "description" : "The language the script is written in.<br><br>This is used to determine how to
 validate the script, as well as which engine to run the script within.",
      "propertyOrder" : 1100,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    }
  }
}
```

1.130. ScriptedDecision

1.130.1. Realm Operations

Resource path: `/realm-config/authentication/authenticationtrees/nodes/ScriptedDecisionNode`

Resource version: `1.0`

1.130.1.1. create

Usage:

```
am> create ScriptedDecision --realm Realm --id id --body body
```

Parameters:

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--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "outcomes" : {
      "title" : "outcomes",
      "description" : "",
      "propertyOrder" : 200,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "script" : {
      "title" : "Script",
      "description" : "The script to evaluate.",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```

1.130.1.2. delete

Usage:

```
am> delete ScriptedDecision --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.130.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action ScriptedDecision --realm Realm --actionName getAllTypes
```


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1.130.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action ScriptedDecision --realm Realm --actionName getCreatableTypes
```

1.130.1.5. listOutcomes

List the available outcomes for the node type.

Usage:

```
am> action ScriptedDecision --realm Realm --body body --actionName listOutcomes
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "title" : "Some configuration of the node. This does not need to be complete against the
 configuration schema."
}
```

1.130.1.6. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action ScriptedDecision --realm Realm --actionName nextdescendents
```

1.130.1.7. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

```
am> query ScriptedDecision --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.130.1.8. read

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Usage:

```
am> read ScriptedDecision --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.130.1.9. update

Usage:

```
am> update ScriptedDecision --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "outcomes" : {
      "title" : "outcomes",
      "description" : "",
      "propertyOrder" : 200,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "script" : {
      "title" : "Script",
      "description" : "The script to evaluate.",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```

1.130.2. Global Operations

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Resource path: `/global-config/authentication/authenticationtrees/nodes/ScriptedDecisionNode`

Resource version: `1.0`

1.130.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action ScriptedDecision --global --actionName getAllTypes
```

1.130.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action ScriptedDecision --global --actionName getCreatableTypes
```

1.130.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action ScriptedDecision --global --actionName nextdescendents
```

1.130.2.4. read

Usage:

```
am> read ScriptedDecision --global
```

1.130.2.5. update

Usage:

```
am> update ScriptedDecision --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object"
}
```


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1.131. ScriptedModule

1.131.1. Realm Operations

Resource path: `/realm-config/authentication/modules/scripted`

Resource version: `1.0`

1.131.1.1. create

Usage:

```
am> create ScriptedModule --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "authenticationLevel" : {
      "title" : "Authentication Level",
      "description" : "The authentication level associated with the authentication module.<br><br>Each
 authentication module has an authentication level that can be used to indicate the level of security
 associated with the module; 0 is the lowest (and the default).",
      "propertyOrder" : 400,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "serverScript" : {
      "title" : "Server-side Script",
      "description" : "The server-side script to execute.<br><br>This script will be run on the
 server, subsequent to any client script having returned.",
      "propertyOrder" : 300,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "clientScriptEnabled" : {
      "title" : "Client-side Script Enabled",
      "description" : "Enable this setting if the client-side script should be executed.",
      "propertyOrder" : 100,
      "required" : true,
```


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```
      "type" : "boolean",
      "exampleValue" : ""
    },
    "clientScript" : {
      "title" : "Client-side Script",
      "description" : "The client-side script.",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```

1.131.1.2. delete

Usage:

```
am> delete ScriptedModule --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.131.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action ScriptedModule --realm Realm --actionName getAllTypes
```

1.131.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action ScriptedModule --realm Realm --actionName getCreatableTypes
```

1.131.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action ScriptedModule --realm Realm --actionName nextdescendents
```


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1.131.1.6. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

```
am> query ScriptedModule --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.131.1.7. read

Usage:

```
am> read ScriptedModule --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.131.1.8. update

Usage:

```
am> update ScriptedModule --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "authenticationLevel" : {
      "title" : "Authentication Level",
      "description" : "The authentication level associated with the authentication module.<br><br>Each
 authentication module has an authentication level that can be used to indicate the level of security
 associated with the module; 0 is the lowest (and the default).",
      "propertyOrder" : 400,
      "required" : true,
```


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```
      "type" : "integer",
      "exampleValue" : ""
    },
    "serverScript" : {
      "title" : "Server-side Script",
      "description" : "The server-side script to execute.<br><br>This script will be run on the
 server, subsequent to any client script having returned.",
      "propertyOrder" : 300,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "clientScriptEnabled" : {
      "title" : "Client-side Script Enabled",
      "description" : "Enable this setting if the client-side script should be executed.",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "clientScript" : {
      "title" : "Client-side Script",
      "description" : "The client-side script.",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```

1.131.2. Global Operations

Resource path: `/global-config/authentication/modules/scripted`

Resource version: `1.0`

1.131.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action ScriptedModule --global --actionName getAllTypes
```

1.131.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action ScriptedModule --global --actionName getCreatableTypes
```


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1.131.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action ScriptedModule --global --actionName nextdescendents
```

1.131.2.4. read

Usage:

```
am> read ScriptedModule --global
```

1.131.2.5. update

Usage:

```
am> update ScriptedModule --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "defaults" : {
      "properties" : {
        "authenticationLevel" : {
          "title" : "Authentication Level",
          "description" : "The authentication level associated with the authentication
 module.<br><br>Each authentication module has an authentication level that can be used to indicate
 the level of security associated with the module; 0 is the lowest (and the default).",
          "propertyOrder" : 400,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "clientScript" : {
          "title" : "Client-side Script",
          "description" : "The client-side script.",
          "propertyOrder" : 200,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "serverScript" : {
          "title" : "Server-side Script",
          "description" : "The server-side script to execute.<br><br>This script will be run on the
 server, subsequent to any client script having returned.",
```


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```
          "propertyOrder" : 300,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "clientScriptEnabled" : {
          "title" : "Client-side Script Enabled",
          "description" : "Enable this setting if the client-side script should be executed.",
          "propertyOrder" : 100,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        }
      },
      "type" : "object",
      "title" : "Realm Defaults"
    }
  }
}
```

1.132. Scripting

1.132.1. Global Operations

Resource path: `/global-config/services/scripting`

Resource version: `1.0`

1.132.1.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action Scripting --global --actionName getAllTypes
```

1.132.1.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action Scripting --global --actionName getCreatableTypes
```

1.132.1.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

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Usage:

```
am> action Scripting --global --actionName nextdescendents
```

1.132.1.4. read

Usage:

```
am> read Scripting --global
```

1.132.1.5. update

Usage:

```
am> update Scripting --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "defaultContext" : {
      "title" : "Default Script Type",
      "description" : "The default script context type when creating a new script.",
      "propertyOrder" : 900,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```

1.133. ScriptingEngineConfiguration

1.133.1. Global Operations

Resource path: `/global-config/services/scripting/contexts/{contexts}/engineConfiguration`

Resource version: `1.0`

1.133.1.1. create

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Usage:

```
am> create ScriptingEngineConfiguration --global --contexts contexts --body body
```

Parameters:

--contexts

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "idleTimeout" : {
      "title" : "Thread idle timeout (seconds)",
      "description" : "Length of time (in seconds) to wait before terminating threads.<br><br>Length
 of time (in seconds) to wait before terminating threads that were started when the queue reached
 capacity. Only applies to threads beyond the core pool size (up to the maximum size).",
      "propertyOrder" : 500,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "whiteList" : {
      "title" : "Java class whitelist",
      "description" : "List of patterns of allowed Java classes that may be loaded/accessed by
 scripts.<br><br>Each Java class accessed by a script must match at least one of these patterns. Use
 '*' as a wildcard, e.g. <code>java.lang.*</code>",
      "propertyOrder" : 600,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "queueSize" : {
      "title" : "Thread pool queue size",
      "description" : "Size of queue to use for buffering script execution request when core pool is
 at capacity.<br><br>Use -1 for an unbounded queue (this disables the maximum pool size setting). For
 short, CPU-bound scripts, consider a small pool size and larger queue length. For I/O-bound scripts
 (e.g., REST calls) consider a larger maximum pool size and a smaller queue. Not hot-swappable:
 restart server for changes to take effect.",
      "propertyOrder" : 400,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "maxThreads" : {
      "title" : "Maximum thread pool size",
      "description" : "The maximum size of the thread pool from which scripts will operate.<br><br>New
 threads will be created up to this size once the task queue reaches capacity. Has no effect if the
 queue is unbounded.",
      "propertyOrder" : 300,
      "required" : true,
      "type" : "integer",
```


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```
      "exampleValue" : ""
    },
    "useSecurityManager" : {
      "title" : "Use system SecurityManager",
      "description" : "Indicates whether the system SecurityManager should also be consulted when
 checking access to Java classes.<br><br>If enabled, then the checkPackageAccess method will be called
 for each Java class accessed. If no SecurityManager is configured, then this has no effect.",
      "propertyOrder" : 800,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "blackList" : {
      "title" : "Java class blacklist",
      "description" : "List of patterns of Java classes that must not be accessed by a
 script.<br><br>This blacklist is applied after the whitelist to apply additional restrictions. For
 instance you may whitelist java.lang.* and then blacklist java.lang.System and java.lang.Runtime. It
 is recommended to always prefer specific whitelists where possible.",
      "propertyOrder" : 700,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "coreThreads" : {
      "title" : "Core thread pool size",
      "description" : "The core size of the thread pool from which scripts will operate.",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "serverTimeout" : {
      "title" : "Server-side Script Timeout",
      "description" : "The maximum execution time any individual script should take on the server (in
 seconds).<br><br>Server-side scripts will be forcibly stopped after this amount of execution time.",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    }
  }
}
```

1.133.1.2. delete

Usage:

```
am> delete ScriptingEngineConfiguration --global --contexts contexts
```

Parameters:

--contexts

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1.133.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action ScriptingEngineConfiguration --global --contexts contexts --actionName getAllTypes
```

Parameters:

--contexts

1.133.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action ScriptingEngineConfiguration --global --contexts contexts --actionName getCreatableTypes
```

Parameters:

--contexts

1.133.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action ScriptingEngineConfiguration --global --contexts contexts --actionName nextdescendents
```

Parameters:

--contexts

1.133.1.6. read

Usage:

```
am> read ScriptingEngineConfiguration --global --contexts contexts
```

Parameters:

--contexts

1.133.1.7. update

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Usage:

```
am> update ScriptingEngineConfiguration --global --contexts contexts --body body
```

Parameters:

--contexts

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "idleTimeout" : {
      "title" : "Thread idle timeout (seconds)",
      "description" : "Length of time (in seconds) to wait before terminating threads.<br><br>Length
 of time (in seconds) to wait before terminating threads that were started when the queue reached
 capacity. Only applies to threads beyond the core pool size (up to the maximum size).",
      "propertyOrder" : 500,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "whiteList" : {
      "title" : "Java class whitelist",
      "description" : "List of patterns of allowed Java classes that may be loaded/accessed by
 scripts.<br><br>Each Java class accessed by a script must match at least one of these patterns. Use
 '*' as a wildcard, e.g. <code>java.lang.*</code>",
      "propertyOrder" : 600,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "queueSize" : {
      "title" : "Thread pool queue size",
      "description" : "Size of queue to use for buffering script execution request when core pool is
 at capacity.<br><br>Use -1 for an unbounded queue (this disables the maximum pool size setting). For
 short, CPU-bound scripts, consider a small pool size and larger queue length. For I/O-bound scripts
 (e.g., REST calls) consider a larger maximum pool size and a smaller queue. Not hot-swappable:
 restart server for changes to take effect.",
      "propertyOrder" : 400,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "maxThreads" : {
      "title" : "Maximum thread pool size",
      "description" : "The maximum size of the thread pool from which scripts will operate.<br><br>New
 threads will be created up to this size once the task queue reaches capacity. Has no effect if the
 queue is unbounded.",
      "propertyOrder" : 300,
```


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```
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "useSecurityManager" : {
      "title" : "Use system SecurityManager",
      "description" : "Indicates whether the system SecurityManager should also be consulted when
 checking access to Java classes.<br><br>If enabled, then the checkPackageAccess method will be called
 for each Java class accessed. If no SecurityManager is configured, then this has no effect.",
      "propertyOrder" : 800,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "blackList" : {
      "title" : "Java class blacklist",
      "description" : "List of patterns of Java classes that must not be accessed by a
 script.<br><br>This blacklist is applied after the whitelist to apply additional restrictions. For
 instance you may whitelist java.lang.* and then blacklist java.lang.System and java.lang.Runtime. It
 is recommended to always prefer specific whitelists where possible.",
      "propertyOrder" : 700,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "coreThreads" : {
      "title" : "Core thread pool size",
      "description" : "The core size of the thread pool from which scripts will operate.",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "serverTimeout" : {
      "title" : "Server-side Script Timeout",
      "description" : "The maximum execution time any individual script should take on the server (in
 seconds).<br><br>Server-side scripts will be forcibly stopped after this amount of execution time.",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    }
  }
}
```

1.134. Scripts

1.134.1. Realm Operations

The script resources service is responsible for managing scripts used for client-side and server-side scripted authentication, custom policy conditions, and handling OpenID Connect claims. Scripts

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are represented in JSON and take the following form. Scripts are built from standard JSON objects and values (strings, numbers, objects, sets, arrays, true, false, and null). Each script has a system-generated universally unique identifier (UUID), which must be used when modifying existing scripts. Renaming a script will not affect the UUID

Resource path: `/scripts`

Resource version: `1.1`

1.134.1.1. create

Create a script in a realm. The value for script must be in UTF-8 format and then encoded into Base64.

Usage:

```
am> create Scripts --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "description" : "Script resource endpoint json schema",
  "type" : "object",
  "title" : "Script resource schema",
  "properties" : {
    "_id" : {
      "title" : "Script unique ID",
      "description" : "A unique ID for a script configuration, provided by the server",
      "type" : "string"
    },
    "name" : {
      "title" : "Script name",
      "description" : "The name provided for the script",
      "type" : "string"
    },
    "description" : {
      "title" : "Script description",
      "description" : "An optional text string to help identify the script",
      "type" : "string"
    },
    "script" : {
      "title" : "Script",
      "description" : "The source code of the script. The source code is in UTF-8 format and encoded
 into Base64",
      "type" : "string"
```


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```
    },
    "language" : {
      "title" : "Script language",
      "description" : "The language the script is written in - JAVASCRIPT or GROOVY",
      "type" : "string"
    },
    "context" : {
      "title" : "Script type",
      "description" : "The script type. Supported values are: POLICY_CONDITION : Policy Condition
 AUTHENTICATION_SERVER_SIDE : Server-side Authentication  AUTHENTICATION_CLIENT_SIDE : Client-side
 Authentication - Note Client-side scripts must be written in JavaScript OIDC_CLAIMS : OIDC Claims",
      "type" : "string"
    },
    "createdBy" : {
      "title" : "Created by",
      "description" : "A string containing the universal identifier DN of the subject that created the
 script",
      "type" : "string"
    },
    "creationDate" : {
      "title" : "Creation date",
      "description" : "An integer containing the creation date and time, in ISO 8601 format",
      "type" : "number"
    },
    "lastModifiedBy" : {
      "title" : "Last modifier",
      "description" : "A string containing the universal identifier DN of the subject that most
 recently updated the script. If the script has not been modified since it was created, this property
 will have the same value as createdBy",
      "type" : "string"
    },
    "lastModifiedDate" : {
      "title" : "Last modification date",
      "description" : "A string containing the last modified date and time, in ISO 8601 format. If
 the script has not been modified since it was created, this property will have the same value as
 creationDate",
      "type" : "number"
    }
  },
  "required" : [ "name", "description", "script", "language", "context" ]
}
```

1.134.1.2. delete

Delete an individual script in a realm specified by the UUID parameter

Usage:

```
am> delete Scripts --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

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1.134.1.3. query

List all the scripts in a realm, as well as any global scripts

Usage:

```
am> query Scripts --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all. Fields that can be queried: [*]

1.134.1.4. read

Read an individual script in a realm by specifying the UUID parameter

Usage:

```
am> read Scripts --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.134.1.5. update

Update an individual script in a realm specified by the UUID parameter

Usage:

```
am> update Scripts --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "description" : "Script resource endpoint json schema",
  "type" : "object",
  "title" : "Script resource schema",
  "properties" : {
    "_id" : {
      "title" : "Script unique ID",
      "description" : "A unique ID for a script configuration, provided by the server",
      "type" : "string"
```


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```
    },
    "name" : {
      "title" : "Script name",
      "description" : "The name provided for the script",
      "type" : "string"
    },
    "description" : {
      "title" : "Script description",
      "description" : "An optional text string to help identify the script",
      "type" : "string"
    },
    "script" : {
      "title" : "Script",
      "description" : "The source code of the script. The source code is in UTF-8 format and encoded
 into Base64",
      "type" : "string"
    },
    "language" : {
      "title" : "Script language",
      "description" : "The language the script is written in - JAVASCRIPT or GROOVY",
      "type" : "string"
    },
    "context" : {
      "title" : "Script type",
      "description" : "The script type. Supported values are: POLICY_CONDITION : Policy Condition
 AUTHENTICATION_SERVER_SIDE : Server-side Authentication  AUTHENTICATION_CLIENT_SIDE : Client-side
 Authentication - Note Client-side scripts must be written in JavaScript OIDC_CLAIMS : OIDC Claims",
      "type" : "string"
    },
    "createdBy" : {
      "title" : "Created by",
      "description" : "A string containing the universal identifier DN of the subject that created the
 script",
      "type" : "string"
    },
    "creationDate" : {
      "title" : "Creation date",
      "description" : "An integer containing the creation date and time, in ISO 8601 format",
      "type" : "number"
    },
    "lastModifiedBy" : {
      "title" : "Last modifier",
      "description" : "A string containing the universal identifier DN of the subject that most
 recently updated the script. If the script has not been modified since it was created, this property
 will have the same value as createdBy",
      "type" : "string"
    },
    "lastModifiedDate" : {
      "title" : "Last modification date",
      "description" : "A string containing the last modified date and time, in ISO 8601 format. If
 the script has not been modified since it was created, this property will have the same value as
 creationDate",
      "type" : "number"
    }
  },
  "required" : [ "name", "description", "script", "language", "context" ]
}
```


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1.134.1.6. validate

Validate a script. Include a JSON representation of the script and the script language, JAVASCRIPT or GROOVY, in the POST data. The value for script must be in UTF-8 format and then encoded into Base64

Usage:

```
am> action Scripts --realm Realm --body body --actionName validate
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "description" : "Validate action request schema",
  "type" : "object",
  "title" : "Validate request schema",
  "properties" : {
    "script" : {
      "title" : "Script",
      "description" : "The source code of the script. The source code is in UTF-8 format and encoded
 into Base64",
      "type" : "string"
    },
    "language" : {
      "title" : "Script language",
      "description" : "The language the script is written in - JAVASCRIPT or GROOVY",
      "type" : "string"
    }
  },
  "required" : [ "script", "language" ]
}
```

1.135. SdkProperties

1.135.1. Global Operations

An object of property key-value pairs

Resource path: `/global-config/servers/{serverName}/properties/sdk`

Resource version: `1.0`

1.135.1.1. read

Usage:

```
am> read SdkProperties --global --serverName serverName
```


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Parameters:

--serverName

An object of property key-value pairs

1.135.1.2. update

Usage:

```
am> update SdkProperties --global --serverName serverName --body body
```

Parameters:

--serverName

An object of property key-value pairs

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "amconfig.header.datastore" : {
      "title" : "Data Store",
      "type" : "object",
      "propertyOrder" : 0,
      "properties" : {
        "com.sun.identity.sm.enableDataStoreNotification" : {
          "title" : "Enable Datastore Notification",
          "type" : "object",
          "propertyOrder" : 0,
          "description" : "Specifies if backend datastore notification is enabled. If
 this value is set to 'false', then in-memory notification is enabled. (property name:
 com.sun.identity.sm.enableDataStoreNotification)",
          "properties" : {
            "value" : {
              "type" : "boolean",
              "required" : false
            },
            "inherited" : {
              "type" : "boolean",
              "required" : true
            }
          }
        },
        "com.sun.identity.sm.ldap.enableProxy" : {
          "title" : "Enable Directory Proxy",
          "type" : "object",
          "propertyOrder" : 1,
          "description" : "This indicates to Service Management that the Directory Proxy must be used
 for read, write, and/or modify operations to the Directory Server. This flag also determines if ACIs
 or delegation privileges are to be used. (property name: com.sun.identity.sm.ldap.enableProxy)",
          "properties" : {
```


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```
            "value" : {
              "type" : "boolean",
              "required" : false
            },
            "inherited" : {
              "type" : "boolean",
              "required" : true
            }
          }
        },
        "com.sun.identity.sm.notification.threadpool.size" : {
          "title" : "Notification Pool Size",
          "type" : "object",
          "propertyOrder" : 2,
          "description" : "Specifies the size of the sm notification thread pool (total number of
threads). (property name: com.sun.identity.sm.notification.threadpool.size)",
          "properties" : {
            "value" : {
              "type" : "integer",
              "required" : false
            },
            "inherited" : {
              "type" : "boolean",
              "required" : true
            }
          }
        }
      }
    },
    "amconfig.header.eventservice" : {
      "title" : "Event Service",
      "type" : "object",
      "propertyOrder" : 1,
      "properties" : {
        "com.iplanet.am.event.connection.num.retries" : {
          "title" : "Number of retries for Event Service connections",
          "type" : "object",
          "propertyOrder" : 0,
          "description" : "Specifies the number of attempts made to successfully re-establish the
Event Service connections. (property name: com.iplanet.am.event.connection.num.retries)",
          "properties" : {
            "value" : {
              "type" : "integer",
              "required" : false
            },
            "inherited" : {
              "type" : "boolean",
              "required" : true
            }
          }
        },
        "com.iplanet.am.event.connection.delay.between.retries" : {
          "title" : "Delay between Event Service connection retries",
          "type" : "object",
          "propertyOrder" : 1,
          "description" : "Specifies the delay in milliseconds between retries to re-establish the
Event Service connections. (property name: com.iplanet.am.event.connection.delay.between.retries)",
          "properties" : {
            "value" : {
```


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```
              "type" : "integer",
              "required" : false
            },
            "inherited" : {
              "type" : "boolean",
              "required" : true
            }
          }
        },
        "com.iplanet.am.event.connection.ldap.error.codes.retries" : {
          "title" : "Error codes for Event Service connection retries",
          "type" : "object",
          "propertyOrder" : 2,
          "description" : "This secifies the LDAP exception error codes for which
retries to re-establish Event Service connections will trigger. (property name:
com.iplanet.am.event.connection.ldap.error.codes.retries)",
          "properties" : {
            "value" : {
              "type" : "string",
              "required" : false
            },
            "inherited" : {
              "type" : "boolean",
              "required" : true
            }
          }
        },
        "com.sun.am.event.connection.disable.list" : {
          "title" : "Disabled Event Service Connection",
          "type" : "object",
          "propertyOrder" : 3,
          "description" : "Specifies which event connection (persistent search) to be disabled. There
are three valid values - aci, sm and um (case insensitive). Multiple values should be separated with
\",\". (property name: com.sun.am.event.connection.disable.list)",
          "properties" : {
            "value" : {
              "type" : "string",
              "required" : false
            },
            "inherited" : {
              "type" : "boolean",
              "required" : true
            }
          }
        }
      }
    },
    "amconfig.header.ldapconnection" : {
      "title" : "LDAP Connection",
      "type" : "object",
      "propertyOrder" : 2,
      "properties" : {
        "com.iplanet.am.ldap.connection.num.retries" : {
          "title" : "Number of retries for LDAP Connection",
          "type" : "object",
          "propertyOrder" : 0,
          "description" : "Specifies the number of attempts made to successfully re-establish LDAP
Connection. (property name: com.iplanet.am.ldap.connection.num.retries)",
          "properties" : {
```


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```
            "value" : {
              "type" : "integer",
              "required" : false
            },
            "inherited" : {
              "type" : "boolean",
              "required" : true
            }
          }
        },
        "com.iplanet.am.ldap.connection.delay.between.retries" : {
          "title" : "Delay between LDAP connection retries",
          "type" : "object",
          "propertyOrder" : 1,
          "description" : "Specifies the delay in milliseconds between retries to re-establish the
LDAP connections. (property name: com.iplanet.am.ldap.connection.delay.between.retries)",
          "properties" : {
            "value" : {
              "type" : "integer",
              "required" : false
            },
            "inherited" : {
              "type" : "boolean",
              "required" : true
            }
          }
        },
        "com.iplanet.am.ldap.connection.ldap.error.codes.retries" : {
          "title" : "Error codes for LDAP connection retries",
          "type" : "object",
          "propertyOrder" : 2,
          "description" : "This secifies the LDAP exception error codes for
which retries to re-establish LDAP connections will trigger. (property name:
com.iplanet.am.ldap.connection.ldap.error.codes.retries)",
          "properties" : {
            "value" : {
              "type" : "string",
              "required" : false
            },
            "inherited" : {
              "type" : "boolean",
              "required" : true
            }
          }
        }
      }
    },
    "amconfig.header.cachingreplica" : {
      "title" : "Caching and Replica",
      "type" : "object",
      "propertyOrder" : 3,
      "properties" : {
        "com.iplanet.am.sdk.cache.maxSize" : {
          "title" : "SDK Caching Max. Size",
          "type" : "object",
          "propertyOrder" : 0,
          "description" : "Specifies the size of the cache when SDK caching is enabled. The size
should be an integer greater than 0, or default size (10000) will be used. Changing this value will
reset (clear) the contents of the cache. (property name: com.iplanet.am.sdk.cache.maxSize)",
```


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```
          "properties" : {
            "value" : {
              "type" : "integer",
              "required" : false
            },
            "inherited" : {
              "type" : "boolean",
              "required" : true
            }
          }
        },
        "com.iplanet.am.replica.num.retries" : {
          "title" : "SDK Replica Retries",
          "type" : "object",
          "propertyOrder" : 1,
          "description" : "Specifies the number of times to retry when an Entry Not Found error is
returned to the SDK. (property name: com.iplanet.am.replica.num.retries)",
          "properties" : {
            "value" : {
              "type" : "integer",
              "required" : false
            },
            "inherited" : {
              "type" : "boolean",
              "required" : true
            }
          }
        },
        "com.iplanet.am.replica.delay.between.retries" : {
          "title" : "Delay between SDK Replica Retries",
          "type" : "object",
          "propertyOrder" : 2,
          "description" : "Specifies the delay time in milliseconds between the retries. (property
name: com.iplanet.am.replica.delay.between.retries)",
          "properties" : {
            "value" : {
              "type" : "integer",
              "required" : false
            },
            "inherited" : {
              "type" : "boolean",
              "required" : true
            }
          }
        }
      }
    },
    "amconfig.header.sdktimetoliveconfig" : {
      "title" : "Time To Live Configuration",
      "type" : "object",
      "propertyOrder" : 4,
      "properties" : {
        "com.iplanet.am.sdk.cache.entry.expire.enabled" : {
          "title" : "Cache Entry Expiration Enabled",
          "type" : "object",
          "propertyOrder" : 0,
          "description" : "If this property is set, the cache entries will expire
based on the time specified in User Entry Expiration Time property. (property name:
com.iplanet.am.sdk.cache.entry.expire.enabled)",
```


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```
          "properties" : {
            "value" : {
              "type" : "boolean",
              "required" : false
            },
            "inherited" : {
              "type" : "boolean",
              "required" : true
            }
          }
        },
        "com.iplanet.am.sdk.cache.entry.user.expire.time" : {
          "title" : "User Entry Expiration Time",
          "type" : "object",
          "propertyOrder" : 1,
          "description" : "This property specifies time in minutes for which the user entries remain
 valid in cache after their last modification. After this specified period of time elapses (after the
 last modification/read from the directory), the data for the entry that is cached will expire. At
 that instant new requests for data for these user entries will result in reading from the Directory.
 (property name: com.iplanet.am.sdk.cache.entry.user.expire.time)",
          "properties" : {
            "value" : {
              "type" : "integer",
              "required" : false
            },
            "inherited" : {
              "type" : "boolean",
              "required" : true
            }
          }
        },
        "com.iplanet.am.sdk.cache.entry.default.expire.time" : {
          "title" : "Default Entry Expiration Time",
          "type" : "object",
          "propertyOrder" : 2,
          "description" : "This property specifies time in minutes for which the non-user entries
 remain valid in cache after their last modification. After this specified period of time elapses
 (after the last modification/read from the directory), the data for the entry that is cached will
 expire. At that instant new requests for data for these non-user entries will result in reading from
 the Directory. (property name: com.iplanet.am.sdk.cache.entry.default.expire.time)",
          "properties" : {
            "value" : {
              "type" : "integer",
              "required" : false
            },
            "inherited" : {
              "type" : "boolean",
              "required" : true
            }
          }
        }
      }
    }
  }
}
```


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1.136. SecurID

1.136.1. Realm Operations

Resource path: `/realm-config/authentication/modules/securid`

Resource version: `1.0`

1.136.1.1. create

Usage:

```
am> create SecurID --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "serverConfigPath" : {
      "title" : "ACE/Server Configuration Path",
      "description" : "The path to the ACE/Server configuration files",
      "propertyOrder" : null,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "authenticationLevel" : {
      "title" : "Authentication Level",
      "description" : "The authentication level associated with this module.<br><br>Each
 authentication module has an authentication level that can be used to indicate the level of security
 associated with the module; 0 is the lowest (and the default). ",
      "propertyOrder" : null,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    }
  }
}
```

1.136.1.2. delete

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Usage:

```
am> delete SecurID --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.136.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action SecurID --realm Realm --actionName getAllTypes
```

1.136.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action SecurID --realm Realm --actionName getCreatableTypes
```

1.136.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action SecurID --realm Realm --actionName nextdescendents
```

1.136.1.6. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

```
am> query SecurID --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.136.1.7. read

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Usage:

```
am> read SecurID --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.136.1.8. update

Usage:

```
am> update SecurID --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "serverConfigPath" : {
      "title" : "ACE/Server Configuration Path",
      "description" : "The path to the ACE/Server configuration files",
      "propertyOrder" : null,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "authenticationLevel" : {
      "title" : "Authentication Level",
      "description" : "The authentication level associated with this module.<br><br>Each
 authentication module has an authentication level that can be used to indicate the level of security
 associated with the module; 0 is the lowest (and the default). ",
      "propertyOrder" : null,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    }
  }
}
```

1.136.2. Global Operations

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Resource path: `/global-config/authentication/modules/securid`

Resource version: `1.0`

1.136.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action SecurID --global --actionName getAllTypes
```

1.136.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action SecurID --global --actionName getCreatableTypes
```

1.136.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action SecurID --global --actionName nextdescendents
```

1.136.2.4. read

Usage:

```
am> read SecurID --global
```

1.136.2.5. update

Usage:

```
am> update SecurID --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

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```
{
  "type" : "object",
  "properties" : {
    "defaults" : {
      "properties" : {
        "serverConfigPath" : {
          "title" : "ACE/Server Configuration Path",
          "description" : "The path to the ACE/Server configuration files",
          "propertyOrder" : null,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "authenticationLevel" : {
          "title" : "Authentication Level",
          "description" : "The authentication level associated with this module.<br><br>Each
 authentication module has an authentication level that can be used to indicate the level of security
 associated with the module; 0 is the lowest (and the default). ",
          "propertyOrder" : null,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        }
      },
      "type" : "object",
      "title" : "Realm Defaults"
    }
  }
}
```


1.137. SecurityProperties

1.137.1. Global Operations

An object of property key-value pairs

Resource path: `/global-config/servers/{serverName}/properties/security`

Resource version: `1.0`

1.137.1.1. read

Usage:

```
am> read SecurityProperties --global --serverName serverName
```

Parameters:

`--serverName`

An object of property key-value pairs

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1.137.1.2. update

Usage:

```
am> update SecurityProperties --global --serverName serverName --body body
```

Parameters:

--serverName

An object of property key-value pairs

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "amconfig.header.encryption" : {
      "title" : "Encryption",
      "type" : "object",
      "propertyOrder" : 0,
      "properties" : {
        "am.encryption.pwd" : {
          "title" : "Password Encryption Key",
          "type" : "object",
          "propertyOrder" : 0,
          "description" : "The encryption key value for decrypting passwords stored in the Service
 Management System configuration. (property name: am.encryption.pwd)",
          "properties" : {
            "value" : {
              "type" : "string",
              "required" : false
            },
            "inherited" : {
              "type" : "boolean",
              "required" : true
            }
          }
        },
        "com.iplanet.security.encryptor" : {
          "title" : "Encryption class",
          "type" : "object",
          "propertyOrder" : 1,
          "description" : "The default encryption class. (property name:
 com.iplanet.security.encryptor)",
          "properties" : {
            "value" : {
              "type" : "string",
              "required" : false
            },
            "inherited" : {
              "type" : "boolean",
              "required" : true
            }
          }
        },
```


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```
       "com.iplanet.security.SecureRandomFactoryImpl" : {
         "title" : "Secure Random Factory Class",
         "type" : "object",
         "propertyOrder" : 2,
         "description" : "This property is used for specifying SecureRandomFactory class. Available
values for this property are com.iplanet.am.util.JSSSecureRandomFactoryImpl that is using JSS
and com.iplanet.am.util.SecureRandomFactoryImpl that is using pure Java only. (property name:
com.iplanet.security.SecureRandomFactoryImpl)",
         "properties" : {
           "value" : {
             "type" : "string",
             "required" : false
           },
           "inherited" : {
             "type" : "boolean",
             "required" : true
           }
         }
       }
     }
   },
   "amconfig.header.validation" : {
     "title" : "Validation",
     "type" : "object",
     "propertyOrder" : 1,
     "properties" : {
       "com.iplanet.services.comm.server.pllrequest.maxContentLength" : {
         "title" : "Platform Low Level Comm. Max. Content Length",
         "type" : "object",
         "propertyOrder" : 0,
         "description" : "Maximum content-length for an HttpRequest. (property name:
com.iplanet.services.comm.server.pllrequest.maxContentLength)",
         "properties" : {
           "value" : {
             "type" : "integer",
             "required" : false
           },
           "inherited" : {
             "type" : "boolean",
             "required" : true
           }
         }
       },
       "com.iplanet.am.clientIPCheckEnabled" : {
         "title" : "Client IP Address Check",
         "type" : "object",
         "propertyOrder" : 1,
         "description" : "Specifies whether or not the IP address of the client is checked in all
single sign on token creations or validations. (property name: com.iplanet.am.clientIPCheckEnabled)",
         "properties" : {
           "value" : {
             "type" : "boolean",
             "required" : false
           },
           "inherited" : {
             "type" : "boolean",
             "required" : true
           }
         }
```


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```
        }
      }
    },
    "amconfig.header.cookie" : {
      "title" : "Cookie",
      "type" : "object",
      "propertyOrder" : 2,
      "properties" : {
        "com.iplanet.am.cookie.name" : {
          "title" : "Cookie Name",
          "type" : "object",
          "propertyOrder" : 0,
          "description" : "The cookie name used by Authentication Service to set the valid
session handler ID. This name is used to retrieve the valid session information. (property name:
com.iplanet.am.cookie.name)",
          "properties" : {
            "value" : {
              "type" : "string",
              "required" : false
            },
            "inherited" : {
              "type" : "boolean",
              "required" : true
            }
          }
        },
        "com.iplanet.am.cookie.secure" : {
          "title" : "Secure Cookie",
          "type" : "object",
          "propertyOrder" : 1,
          "description" : "Specifies whether to set cookie in a secure mode in which the browser
will only return the cookie when a secure protocol such as HTTP(s) is used. (property name:
com.iplanet.am.cookie.secure)",
          "properties" : {
            "value" : {
              "type" : "boolean",
              "required" : false
            },
            "inherited" : {
              "type" : "boolean",
              "required" : true
            }
          }
        },
        "com.iplanet.am.cookie.encode" : {
          "title" : "Encode Cookie Value",
          "type" : "object",
          "propertyOrder" : 2,
          "description" : "Specifies whether to URL encode the cookie value. (property name:
com.iplanet.am.cookie.encode)",
          "properties" : {
            "value" : {
              "type" : "boolean",
              "required" : false
            },
            "inherited" : {
              "type" : "boolean",
              "required" : true
            }
```


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```
          }
        }
      }
    },
    "amconfig.header.securitykey" : {
      "title" : "Key Store",
      "type" : "object",
      "propertyOrder" : 3,
      "properties" : {
        "com.sun.identity.saml.xmlsig.keystore" : {
          "title" : "Keystore File",
          "type" : "object",
          "propertyOrder" : 0,
          "description" : "Specifies the location of the keystore file. (property name:
com.sun.identity.saml.xmlsig.keystore)",
          "properties" : {
            "value" : {
              "type" : "string",
              "required" : false
            },
            "inherited" : {
              "type" : "boolean",
              "required" : true
            }
          }
        },
        "com.sun.identity.saml.xmlsig.storetype" : {
          "title" : "Keystore Type",
          "type" : "object",
          "propertyOrder" : 1,
          "description" : "Specifies the keystore type. (property name:
com.sun.identity.saml.xmlsig.storetype)",
          "properties" : {
            "value" : {
              "type" : "string",
              "required" : false
            },
            "inherited" : {
              "type" : "boolean",
              "required" : true
            }
          }
        },
        "com.sun.identity.saml.xmlsig.storepass" : {
          "title" : "Keystore Password File",
          "type" : "object",
          "propertyOrder" : 2,
          "description" : "Specifies the location of the file that contains the password used to
access the keystore file. (property name: com.sun.identity.saml.xmlsig.storepass)",
          "properties" : {
            "value" : {
              "type" : "string",
              "required" : false
            },
            "inherited" : {
              "type" : "boolean",
              "required" : true
            }
          }
```


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```
      },
      "com.sun.identity.saml.xmlsig.keypass" : {
        "title" : "Private Key Password File",
        "type" : "object",
        "propertyOrder" : 3,
        "description" : "Specifies the location of the file that contains the
password used to protect the private key of a generated key pair. (property name:
com.sun.identity.saml.xmlsig.keypass)",
        "properties" : {
          "value" : {
            "type" : "string",
            "required" : false
          },
          "inherited" : {
            "type" : "boolean",
            "required" : true
          }
        }
      },
      "com.sun.identity.saml.xmlsig.certalias" : {
        "title" : "Certificate Alias",
        "type" : "object",
        "propertyOrder" : 4,
        "description" : "(property name: com.sun.identity.saml.xmlsig.certalias)",
        "properties" : {
          "value" : {
            "type" : "string",
            "required" : false
          },
          "inherited" : {
            "type" : "boolean",
            "required" : true
          }
        }
      }
    }
  },
  "amconfig.header.crlcache" : {
    "title" : "Certificate Revocation List Caching",
    "type" : "object",
    "propertyOrder" : 4,
    "properties" : {
      "com.sun.identity.crl.cache.directory.host" : {
        "title" : "LDAP server host name",
        "type" : "object",
        "propertyOrder" : 0,
        "description" : "",
        "properties" : {
          "value" : {
            "type" : "string",
            "required" : false
          },
          "inherited" : {
            "type" : "boolean",
            "required" : true
          }
        }
      },
      "com.sun.identity.crl.cache.directory.port" : {
```


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```
          "title" : "LDAP server port number",
          "type" : "object",
          "propertyOrder" : 1,
          "description" : "",
          "properties" : {
            "value" : {
              "type" : "integer",
              "required" : false
            },
            "inherited" : {
              "type" : "boolean",
              "required" : true
            }
          }
        },
        "com.sun.identity.crl.cache.directory.ssl" : {
          "title" : "SSL/TLS Enabled",
          "type" : "object",
          "propertyOrder" : 2,
          "description" : "",
          "properties" : {
            "value" : {
              "type" : "boolean",
              "required" : false
            },
            "inherited" : {
              "type" : "boolean",
              "required" : true
            }
          }
        },
        "com.sun.identity.crl.cache.directory.user" : {
          "title" : "LDAP server bind user name",
          "type" : "object",
          "propertyOrder" : 3,
          "description" : "",
          "properties" : {
            "value" : {
              "type" : "string",
              "required" : false
            },
            "inherited" : {
              "type" : "boolean",
              "required" : true
            }
          }
        },
        "com.sun.identity.crl.cache.directory.password" : {
          "title" : "LDAP server bind password",
          "type" : "object",
          "propertyOrder" : 4,
          "description" : "",
          "properties" : {
            "value" : {
              "type" : "string",
              "required" : false,
              "format" : "password"
            },
            "inherited" : {
```


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```
              "type" : "boolean",
              "required" : true
            }
          }
        },
        "com.sun.identity.crl.cache.directory.searchlocs" : {
          "title" : "LDAP search base DN",
          "type" : "object",
          "propertyOrder" : 5,
          "description" : "",
          "properties" : {
            "value" : {
              "type" : "string",
              "required" : false
            },
            "inherited" : {
              "type" : "boolean",
              "required" : true
            }
          }
        },
        "com.sun.identity.crl.cache.directory.searchattr" : {
          "title" : "Search Attributes",
          "type" : "object",
          "propertyOrder" : 6,
          "description" : "Any DN component of issuer's subjectDN can be used to retrieve CRL from
local LDAP server. It is single value string, like, \"cn\". All Root CA need to use the same search
attribute.",
          "properties" : {
            "value" : {
              "type" : "string",
              "required" : false
            },
            "inherited" : {
              "type" : "boolean",
              "required" : true
            }
          }
        }
      }
    },
    "amconfig.header.ocsp.check" : {
      "title" : "Online Certificate Status Protocol Check",
      "type" : "object",
      "propertyOrder" : 5,
      "properties" : {
        "com.sun.identity.authentication.ocspCheck" : {
          "title" : "Check Enabled",
          "type" : "object",
          "propertyOrder" : 0,
          "description" : "",
          "properties" : {
            "value" : {
              "type" : "boolean",
              "required" : false
            },
            "inherited" : {
              "type" : "boolean",
              "required" : true
```


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```
            }
          }
        },
        "com.sun.identity.authentication.ocsp.responder.url" : {
          "title" : "Responder URL",
          "type" : "object",
          "propertyOrder" : 1,
          "description" : "",
          "properties" : {
            "value" : {
              "type" : "string",
              "required" : false
            },
            "inherited" : {
              "type" : "boolean",
              "required" : true
            }
          }
        },
        "com.sun.identity.authentication.ocsp.responder.nickname" : {
          "title" : "Certificate Nickname",
          "type" : "object",
          "propertyOrder" : 2,
          "description" : "",
          "properties" : {
            "value" : {
              "type" : "string",
              "required" : false
            },
            "inherited" : {
              "type" : "boolean",
              "required" : true
            }
          }
        }
      }
    },
    "amconfig.header.deserialisationwhitelist" : {
      "title" : "Object Deserialisation Class Whitelist",
      "type" : "object",
      "propertyOrder" : 6,
      "properties" : {
        "openam.deserialisation.classes.whitelist" : {
          "title" : "Whitelist",
          "type" : "object",
          "propertyOrder" : 0,
          "description" : "The list of classes that are considered valid when OpenAM performs
Object deserialisation operations. The defaults should work for most installations. (property name:
openam.deserialisation.classes.whitelist)",
          "properties" : {
            "value" : {
              "type" : "string",
              "required" : false
            },
            "inherited" : {
              "type" : "boolean",
              "required" : true
            }
          }
```


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```
        }
      }
    }
  }
}
```

1.138. ServerInformation

1.138.1. Realm Operations

Provides information about the server.

Resource path: `/serverinfo`

Resource version: `1.1`

1.138.1.1. read

Read the server information.

Usage:

```
am> read ServerInformation --realm Realm --id id
```

Parameters:

`--id`

The unique identifier for the resource.

1.139. ServerVersion

1.139.1. Realm Operations

Server Version schema

Resource path: `/serverinfo/version`

Resource version: `1.0`

1.139.1.1. read

It returns information about OpenAM such as: version, revision and date

Usage:

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```
am> read ServerVersion --realm Realm
```

1.140. Servers

1.140.1. Global Operations

Servers resource provider is responsible for managing Servers and their configuration for an OpenAM instance.

Resource path: `/global-config/servers`

Resource version: `1.0`

1.140.1.1. clone

Clone the specified Server, keeping it's settings but using a different URL.

Usage:

```
am> action Servers --global --body body --actionName clone
```

Parameters:

`--body`

The resource in JSON format, described by the following JSON schema:

```
{
  "$schema" : "http://json-schema.org/draft-04/schema#",
  "description" : "Container for required data to clone a Server.",
  "type" : "object",
  "title" : "Clone Server Request schema",
  "properties" : {
    "clonedUrl" : {
      "type" : "string",
      "title" : "Cloned Server URL",
      "description" : "The new URL of the cloned server. Must be unique."
    }
  }
}
```

1.140.1.2. create

Create a Server.

Usage:

```
am> create Servers --global --id id --body body
```

Parameters:

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--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "$schema" : "http://json-schema.org/draft-04/schema#",
  "description" : "Describes the data that a Server Resource could contain.",
  "type" : "object",
  "title" : "Server resource schema",
  "properties" : {
    "_id" : {
      "type" : "string",
      "title" : "Server id",
      "description" : "Unique identifier of the Server."
    },
    "siteName" : {
      "type" : "string",
      "title" : "Site name",
      "description" : "The Server's name."
    },
    "url" : {
      "type" : "string",
      "title" : "Url",
      "description" : "The URL of the Server."
    }
  }
}
```

1.140.1.3. delete

Delete a Server.

Usage:

```
am> delete Servers --global --id id
```

Parameters:

--id

The unique identifier for the resource.

1.140.1.4. query

Query the collection of the Servers.

Usage:

```
am> query Servers --global --filter filter
```

Parameters:

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--filter

A CREST formatted query filter, where "true" will query all. Fields that can be queried: [*]

1.140.1.5. read

Read a Server.

Usage:

```
am> read Servers --global --id id
```

Parameters:

--id

The unique identifier for the resource.

1.141. Services

1.141.1. Realm Operations

The collection of services available on a realm.

Resource path: `/realm-config/services`

Resource version: `1.0`

1.141.1.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action Services --realm Realm --actionName getAllTypes
```

1.141.1.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action Services --realm Realm --actionName getCreatableTypes
```

1.141.1.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

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Usage:

```
am> action Services --realm Realm --actionName nextdescendents
```

1.141.1.4. query

Find services provisioned for the realm - query for a particular service by identifier, or request all services using `_queryFilter=true`

Usage:

```
am> query Services --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all. Fields that can be queried: [_id]

1.141.2. Global Operations

Global and default configuration for services

Resource path: `/global-config/services`

Resource version: `1.0`

1.141.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action Services --global --actionName getAllTypes
```

1.141.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action Services --global --actionName getCreatableTypes
```

1.141.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action Services --global --actionName nextdescendents
```


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1.142. Session

1.142.1. Realm Operations

Resource path: `/realm-config/services/session`

Resource version: `1.0`

1.142.1.1. create

Usage:

```
am> create Session --realm Realm --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "dynamic" : {
      "properties" : {
        "maxSessionTime" : {
          "title" : "Maximum Session Time",
          "description" : "Maximum time a session can remain valid before OpenAM requires the user to
 authenticate again, in minutes.",
          "propertyOrder" : 100,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "maxIdleTime" : {
          "title" : "Maximum Idle Time",
          "description" : "Maximum time a stateful session can remain idle before OpenAM requires the
 user to authenticate again, in minutes.",
          "propertyOrder" : 200,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "quotaLimit" : {
          "title" : "Active User Sessions",
          "description" : "Maximum number of concurrent stateful sessions OpenAM allows a user to
 have.",
          "propertyOrder" : 800,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "maxCachingTime" : {
```


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```
          "title" : "Maximum Caching Time",
          "description" : "Maximum time that external clients of AM are recommended to cache the
 session for, in minutes.",
          "propertyOrder" : 300,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        }
      },
      "type" : "object",
      "title" : "Dynamic Attributes"
    }
  }
}
```

1.142.1.2. delete

Usage:

```
am> delete Session --realm Realm
```

1.142.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action Session --realm Realm --actionName getAllTypes
```

1.142.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action Session --realm Realm --actionName getCreatableTypes
```

1.142.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action Session --realm Realm --actionName nextdescendents
```

1.142.1.6. read

Usage:

```
am> read Session --realm Realm
```


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1.142.1.7. update

Usage:

```
am> update Session --realm Realm --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "dynamic" : {
      "properties" : {
        "maxSessionTime" : {
          "title" : "Maximum Session Time",
          "description" : "Maximum time a session can remain valid before OpenAM requires the user to
 authenticate again, in minutes.",
          "propertyOrder" : 100,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "maxIdleTime" : {
          "title" : "Maximum Idle Time",
          "description" : "Maximum time a stateful session can remain idle before OpenAM requires the
 user to authenticate again, in minutes.",
          "propertyOrder" : 200,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "quotaLimit" : {
          "title" : "Active User Sessions",
          "description" : "Maximum number of concurrent stateful sessions OpenAM allows a user to
 have.",
          "propertyOrder" : 800,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "maxCachingTime" : {
          "title" : "Maximum Caching Time",
          "description" : "Maximum time that external clients of AM are recommended to cache the
 session for, in minutes.",
          "propertyOrder" : 300,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        }
      },
      "type" : "object",
      "title" : "Dynamic Attributes"
    }
```


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```
  }
}
```

1.142.2. Global Operations

Resource path: `/global-config/services/session`

Resource version: `1.0`

1.142.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action Session --global --actionName getAllTypes
```

1.142.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action Session --global --actionName getCreatableTypes
```

1.142.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action Session --global --actionName nextdescendents
```

1.142.2.4. read

Usage:

```
am> read Session --global
```

1.142.2.5. update

Usage:

```
am> update Session --global --body body
```

Parameters:

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--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "general" : {
      "type" : "object",
      "title" : "General",
      "propertyOrder" : 0,
      "properties" : {
        "latestAccessTimeUpdateFrequency" : {
          "title" : "Latest Access Time Update Frequency",
          "description" : "Defaults to <code>60</code> seconds. At most, OpenAM updates a session's
latest access time this often.<br><br>Subsequent touches to the session that occur less than the
specified number of seconds after an update will not cause additional updates to the session's
access time.<p><p>Refreshing a session returns the idle time as the number of seconds since an
update has occurred, which will be between <code>0</code> and the specified Latest Access Time Update
Frequency.",
          "propertyOrder" : null,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "timeoutHandlers" : {
          "title" : "Session Timeout Handler implementations",
          "description" : "Lists plugin classes implementing session timeout handlers. Specify the
fully qualified name.",
          "propertyOrder" : 1800,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "dnRestrictionOnly" : {
          "title" : "DN Restriction Only Enabled",
          "description" : "If enabled, OpenAM will not perform DNS lookups when checking restrictions
in cookie hijacking mode.",
          "propertyOrder" : 1300,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        }
      }
    },
    "search" : {
      "type" : "object",
      "title" : "Session Search",
      "propertyOrder" : 1,
      "properties" : {
        "maxSessionListSize" : {
          "title" : "Maximum Number of Search Results",
          "description" : "Maximum number of results from a session search. Do not set this attribute
to a large value, for example more than 1000, unless sufficient system resources are allocated.",
          "propertyOrder" : 400,
          "required" : true,
```


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```
          "type" : "integer",
          "exampleValue" : ""
        },
        "sessionListRetrievalTimeout" : {
          "title" : "Timeout for Search",
          "description" : "Time after which OpenAM sees an incomplete search as having failed, in
seconds.",
          "propertyOrder" : 500,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        }
      }
    },
    "stateless" : {
      "type" : "object",
      "title" : "Stateless Sessions",
      "propertyOrder" : 4,
      "properties" : {
        "openam-session-stateless-blacklist-purge-delay" : {
          "title" : "Blacklist Purge Delay (minutes)",
          "description" : "When added to the maximum session time, specifies the amount of time
that OpenAM tracks logged out sessions.<br><br>Increase the blacklist purge delay if you expect
system clock skews in a cluster of OpenAM servers to be greater than one minute. There is no need
to increase the blacklist purge delay for servers running a clock synchronization protocol, such
as Network Time Protocol.<p><p>Applies only to deployments using stateless sessions and session
blacklisting.",
          "propertyOrder" : 2700,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "statelessCompressionType" : {
          "title" : "Compression Algorithm",
          "description" : "If enabled the session state will be compressed before signing and
encryption.<br><br><strong>WARNING</strong>: Enabling compression may compromise encryption. This may
leak information about the content of the session state if encryption is enabled.",
          "propertyOrder" : 2900,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "openam-session-stateless-enable-session-blacklisting" : {
          "title" : "Enable Session Blacklisting",
          "description" : "Enables session blacklisting for logged out stateless sessions.<br><br>It
is recommended to enable this setting if the maximum session time is high. Blacklist state is stored
in the core token service (CTS) until the session token expires in order to ensure that session
tokens cannot continue to be used. Requires a server restart for changes to take effect.",
          "propertyOrder" : 2400,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "statelessSigningType" : {
          "title" : "Signing Algorithm Type",
          "description" : "Specifies the algorithm that OpenAM uses to sign a JSON Web Token (JWT)
containing a stateless session. Signing the JWT enables tampering detection. Note that OpenAM stores
stateless sessions in a JWT that resides in an HTTP cookie.<br><br>Applies only to deployments using
stateless sessions. OpenAM supports the following signing algorithms: <ul><li><strong>HS256</strong>.
```


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```
 HMAC using SHA-256.</li><li><strong>HS384</strong>. HMAC using SHA-384.</li><li><strong>HS512</
strong>. HMAC using SHA-512.</li><li><strong>RS256</strong>. RSASSA-PKCS1-v1_5 using SHA-256.</
li><li><strong>ES256</strong>. ECDSA using SHA-256 and NIST standard P-256 elliptic curve.</
li><li><strong>ES384</strong>. ECDSA using SHA-384 and NIST standard P-384 elliptic curve.</
li><li><strong>ES512</strong>. ECDSA using SHA-512 and NIST standard P-521 elliptic curve.</li></ul>",
          "propertyOrder" : 1900,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "statelessEncryptionType" : {
          "title" : "Encryption Algorithm",
          "description" : "Specifies the algorithm that OpenAM uses to encrypt JWTs containing
 stateless sessions.<br><br>Applies only to deployments using stateless sessions. OpenAM supports the
 following algorithms:<ul><li><strong>NONE</strong>. No encryption is selected.</li><li><strong>RSA</
strong>. Session content is encrypted with AES using a unique key. The key is then encrypted
 with an RSA public key and appended to the JWT.<p><p>OpenAM supports the three padding modes,
 which you can set using the <code>org.forgerock.openam.session.stateless.rsa.padding</code>
 advanced property:<ul><li><code>RSA1_5</code>. RSA with PKCS#1 v1.5 padding.</li><li><code>RSA-
OAEP</code>. RSA with optimal asymmetric encryption padding (OAEP) and SHA-1.</li><li><code>RSA-
OAEP-256</code>. RSA with OAEP padding and SHA-256.</li></ul></li><li><strong>AES KeyWrapping</
strong>. Session content is encrypted with AES using a unique key and is then wrapped using AES
 KeyWrap and the master key. This provides additional security, compared to RSA, at the cost of
 128 or 256 bits (or 32 bytes) depending on the size of the master key. This method provides
 authenticated encryption, which removes the need for a separate signature and decreases the
 byte size of the JWT. See <a href=\"https://tools.ietf.org/html/rfc3394\" target=\"_blank\">RFC
 3394</a>.</li><li><strong>Direct AES Encryption</strong>.  Session content is encrypted with
 direct AES encryption with a symmetric key. This method provides authenticated encryption,
 which removes the need for a separate signature and decreases the byte size of the JWT. </li></
ul><p><p><strong>Important</strong>: To prevent users from accidentally disabling all authentication
 support, which can be accomplished by disabling signing and not using an authenticated encryption
 mode, you must set the <code>org.forgerock.openam.session.stateless.signing.allownone</code> system
 property to <code>true</code> to turn off signing completely.",
          "propertyOrder" : 2200,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "openam-session-stateless-blacklist-poll-interval" : {
          "title" : "Blacklist Poll Interval (seconds)",
          "description" : "Specifies the interval at which OpenAM polls the Core Token Service for
 changes to logged out sessions, in seconds.<br><br>The longer the polling interval, the more time a
 malicious user has to connect to other OpenAM servers in a cluster and make use of a stolen session
 cookie. Shortening the polling interval improves the security for logged out sessions, but might
 incur a minimal decrease in overall OpenAM performance due to increased network activity. Set to
 <code>0</code> to disable this feature completely.<p><p>Applies only to deployments using stateless
 sessions and session blacklisting.",
          "propertyOrder" : 2600,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "statelessSigningHmacSecret" : {
          "title" : "Signing HMAC Shared Secret",
          "description" : "Specifies the shared secret that OpenAM uses when performing HMAC signing
 on the stateless session JWT.<p><p>Specify a shared secret when using a \"Signing Algorithm Type\"
 of <code>HS256</code>, <code>HS384</code>, or <code>HS512</code>. Applies only to deployments using
 stateless sessions.",
          "propertyOrder" : 2000,
```


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```
          "required" : true,
          "type" : "string",
          "format" : "password",
          "exampleValue" : ""
        },
        "openam-session-stateless-blacklist-cache-size" : {
          "title" : "Session Blacklist Cache Size",
          "description" : "Number of blacklisted stateless sessions to cache in memory to speed up
 blacklist checks and reduce load on the CTS. The cache size should be around the number of logouts
 expected in the maximum session time.<p><p>Applies only to deployments using stateless sessions.",
          "propertyOrder" : 2500,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "statelessEncryptionAesKey" : {
          "title" : "Symmetric AES Key",
          "description" : "AES key for use with Direct or AES KeyWrap encryption modes.<br><br>The
 symmetric AES key is a base64-encoded random key.<p><p>For direct encryption with <code>AES-GCM</
code> or for <code>AES-KeyWrap</code> with any content encryption method, this should be 128, 192, or
 256 bits.<p><p>For direct encryption with <code>AES-CBC-HMAC</code>, the key should be double those
 sizes (one half for the AES key, the other have for the HMAC key).<p><p>AES key sizes greater than
 128 bits require installation of the JCE Unlimited Strength policy files in your JRE.",
          "propertyOrder" : 2800,
          "required" : true,
          "type" : "string",
          "format" : "password",
          "exampleValue" : ""
        },
        "statelessEncryptionRsaCertAlias" : {
          "title" : "Encryption RSA Certificate Alias",
          "description" : "Specifies the alias of a certificate containing a public/private
 key pair that OpenAM uses when encrypting a JWT. Specify an encryption certificate alias
 when using an Encryption Algorithm Type of RSA.<p><p>Applies only to deployments using
 stateless sessions.<br><br>Certificate will be retrieved from the keystore referenced by the
 <code>com.sun.identity.saml.xmlsig.keystore</code> property.",
          "propertyOrder" : 2300,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "statelessSigningRsaCertAlias" : {
          "title" : "Signing RSA/ECDSA Certificate Alias",
          "description" : "Specify the alias of a certificate containing a public/private key pair
 that OpenAM uses when performing RSA or ECDSA signing on the stateless session JWT. Specify a signing
 certificate alias when using a \"Signing Algorithm Type\" of <code>RS256</code>, <code>ES256</code>,
 <code>ES384</code>, or <code>ES512</code>.<br><br>Certificate will be retrieved from the keystore
 specified by the <code>com.sun.identity.saml.xmlsig.keystore</code> property.",
          "propertyOrder" : 2100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    },
    "quotas" : {
      "type" : "object",
      "title" : "Session Quotas",
      "propertyOrder" : 3,
```


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```
      "properties" : {
        "quotaConstraintMaxWaitTime" : {
          "title" : "Read Timeout for Quota Constraint",
          "description" : "Maximum wait time after which OpenAM considers a search for live session
 count as having failed if quota constraints are enabled, in milliseconds.",
          "propertyOrder" : 900,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "iplanet-am-session-enable-session-constraint" : {
          "title" : "Enable Quota Constraints",
          "description" : "If on, then OpenAM allows you to set quota constraints on stateful
 sessions.",
          "propertyOrder" : 700,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "denyLoginWhenRepoDown" : {
          "title" : "Deny user login when session repository is down",
          "description" : "This property only takes effect when the session quota constraint is
 enabled, and the session data store is unavailable.",
          "propertyOrder" : 1100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "behaviourWhenQuotaExhausted" : {
          "title" : "Resulting behavior if session quota exhausted",
          "description" : "Specify the action to take if a session quota is
 exhausted:<ul><li><strong>Deny Access</strong>. New session creation requests will be denied.</
li><li><strong>Destroy Next Expiring</strong>. The session that would expire next will be destroyed.</
li><li><strong>Destroy Oldest</strong>. The oldest session will be destroyed.</li><li><strong>Destroy
 All</strong>. All previous sessions will be destroyed.</li></ul>",
          "propertyOrder" : 1000,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    },
    "notifications" : {
      "type" : "object",
      "title" : "Session Property Change Notifications",
      "propertyOrder" : 2,
      "properties" : {
        "notificationPropertyList" : {
          "title" : "Notification Properties",
          "description" : "Lists session properties for which OpenAM can send notifications upon
 modification. Session notification applies to stateful sessions only.",
          "propertyOrder" : 1200,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
```


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```
        "propertyChangeNotifications" : {
          "title" : "Enable Property Change Notifications",
          "description" : "If on, then OpenAM notifies other applications participating in SSO when a
 session property in the Notification Properties list changes on a stateful session.",
          "propertyOrder" : 600,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    },
    "dynamic" : {
      "properties" : {
        "maxSessionTime" : {
          "title" : "Maximum Session Time",
          "description" : "Maximum time a session can remain valid before OpenAM requires the user to
 authenticate again, in minutes.",
          "propertyOrder" : 100,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "quotaLimit" : {
          "title" : "Active User Sessions",
          "description" : "Maximum number of concurrent stateful sessions OpenAM allows a user to
 have.",
          "propertyOrder" : 800,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "maxIdleTime" : {
          "title" : "Maximum Idle Time",
          "description" : "Maximum time a stateful session can remain idle before OpenAM requires the
 user to authenticate again, in minutes.",
          "propertyOrder" : 200,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "maxCachingTime" : {
          "title" : "Maximum Caching Time",
          "description" : "Maximum time that external clients of AM are recommended to cache the
 session for, in minutes.",
          "propertyOrder" : 300,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        }
      },
      "type" : "object",
      "title" : "Dynamic Attributes"
    }
  }
}
```


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1.143. SessionProperties

1.143.1. Global Operations

An object of property key-value pairs

Resource path: `/global-config/servers/{serverName}/properties/session`

Resource version: `1.0`

1.143.1.1. read

Usage:

```
am> read SessionProperties --global --serverName serverName
```

Parameters:

`--serverName`

An object of property key-value pairs

1.143.1.2. update

Usage:

```
am> update SessionProperties --global --serverName serverName --body body
```

Parameters:

`--serverName`

An object of property key-value pairs

`--body`

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "amconfig.header.sessionthresholds" : {
      "title" : "Session Limits",
      "type" : "object",
      "propertyOrder" : 0,
      "properties" : {
        "org.forgerock.openam.session.service.access.persistence.caching.maxsize" : {
          "title" : "Maximum Session Cache Size",
          "type" : "object",
          "propertyOrder" : 0,
```


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```
          "description" : "The maximum number of sessions to cache in the per-server internal session
cache. (property name: org.forgerock.openam.session.service.access.persistence.caching.maxsize)",
          "properties" : {
            "value" : {
              "type" : "integer",
              "required" : false
            },
            "inherited" : {
              "type" : "boolean",
              "required" : true
            }
          }
        },
        "com.iplanet.am.session.invalidsessionmaxtime" : {
          "title" : "Invalidate Session Max Time",
          "type" : "object",
          "propertyOrder" : 1,
          "description" : "Duration in minutes after which the invalid session will be removed
from the session table if it is created and the user does not login. This value should always
be greater than the timeout value in the Authentication module properties file. (property name:
com.iplanet.am.session.invalidsessionmaxtime)",
          "properties" : {
            "value" : {
              "type" : "integer",
              "required" : false
            },
            "inherited" : {
              "type" : "boolean",
              "required" : true
            }
          }
        }
      }
    },
    "amconfig.header.sessionlogging" : {
      "title" : "Statistics",
      "type" : "object",
      "propertyOrder" : 1,
      "properties" : {
        "com.iplanet.am.stats.interval" : {
          "title" : "Logging Interval (in seconds)",
          "type" : "object",
          "propertyOrder" : 0,
          "description" : "Number of seconds to elapse between statistics logging. The interval
should be at least 5 seconds to avoid CPU saturation. An interval value less than 5 seconds will be
interpreted as 5 seconds. (property name: com.iplanet.am.stats.interval)",
          "properties" : {
            "value" : {
              "type" : "integer",
              "required" : false
            },
            "inherited" : {
              "type" : "boolean",
              "required" : true
            }
          }
        },
        "com.iplanet.services.stats.state" : {
          "title" : "State",
```


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```
        "type" : "object",
        "propertyOrder" : 1,
        "description" : "Statistics state 'file' will write to a file under the
specified directory, and 'console' will write into webserver log files. (property name:
com.iplanet.services.stats.state)",
        "properties" : {
          "value" : {
            "enum" : [ "off", "file", "console" ],
            "options" : {
              "enum_titles" : [ "Off", "File", "Console" ]
            },
            "type" : "string",
            "required" : false
          },
          "inherited" : {
            "type" : "boolean",
            "required" : true
          }
        }
      },
      "com.iplanet.services.stats.directory" : {
        "title" : "Directory",
        "type" : "object",
        "propertyOrder" : 2,
        "description" : "Directory where the statistic files will be created. Use forward slashes
\"/\" to separate directories, not backslash \"\\\". Spaces in the file name are allowed for Windows.
(property name: com.iplanet.services.stats.directory)",
        "properties" : {
          "value" : {
            "type" : "string",
            "required" : false
          },
          "inherited" : {
            "type" : "boolean",
            "required" : true
          }
        }
      },
      "com.sun.am.session.enableHostLookUp" : {
        "title" : "Enable Host Lookup",
        "type" : "object",
        "propertyOrder" : 3,
        "description" : "Enables or disables host lookup during session logging. (property name:
com.sun.am.session.enableHostLookUp)",
        "properties" : {
          "value" : {
            "type" : "boolean",
            "required" : false
          },
          "inherited" : {
            "type" : "boolean",
            "required" : true
          }
        }
      }
    }
  },
  "amconfig.header.sessionnotification" : {
    "title" : "Notification",
```


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```
      "type" : "object",
      "propertyOrder" : 2,
      "properties" : {
        "com.iplanet.am.notification.threadpool.size" : {
          "title" : "Notification Pool Size",
          "type" : "object",
          "propertyOrder" : 0,
          "description" : "Specifies the size of the notification thread pool (total number of
 threads). (property name: com.iplanet.am.notification.threadpool.size)",
          "properties" : {
            "value" : {
              "type" : "integer",
              "required" : false
            },
            "inherited" : {
              "type" : "boolean",
              "required" : true
            }
          }
        },
        "com.iplanet.am.notification.threadpool.threshold" : {
          "title" : "Notification Thread Pool Threshold",
          "type" : "object",
          "propertyOrder" : 1,
          "description" : "Specifies the maximum task queue length for serving notification threads.
 (property name: com.iplanet.am.notification.threadpool.threshold)",
          "properties" : {
            "value" : {
              "type" : "integer",
              "required" : false
            },
            "inherited" : {
              "type" : "boolean",
              "required" : true
            }
          }
        }
      }
    },
    "amconfig.header.sessionvalidation" : {
      "title" : "Validation",
      "type" : "object",
      "propertyOrder" : 3,
      "properties" : {
        "com.sun.am.session.caseInsensitiveDN" : {
          "title" : "Case Insensitive client DN comparison",
          "type" : "object",
          "propertyOrder" : 0,
          "description" : "Specifies if client distinguished name comparison is case insensitive/
sensitive. (property name: com.sun.am.session.caseInsensitiveDN)",
          "properties" : {
            "value" : {
              "type" : "boolean",
              "required" : false
            },
            "inherited" : {
              "type" : "boolean",
              "required" : true
            }
```


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```
          }
        }
      }
    }
  }
}
```

1.144. SessionPropertyWhiteList

1.144.1. Realm Operations

Resource path: `/realm-config/services/amSessionPropertyWhitelist`

Resource version: `1.0`

1.144.1.1. create

Usage:

```
am> create SessionPropertyWhiteList --realm Realm --body body
```

Parameters:

`--body`

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "sessionPropertyWhitelist" : {
      "title" : "Whitelisted Session Property Names",
      "description" : "A list of properties that users may read, edit the value of, or delete from
 their session.<p><p> Adding properties to sessions can impact OpenAM's performance. Because there is
 no size constraint limiting the set of properties that you can add to sessions, and no limit on the
 number of session properties you can add, keep in mind that adding session properties can increase
 the load on an OpenAM deployment in the following areas: <ul><li>OpenAM server memory</li><li>OpenDJ
 storage</li><li>OpenDJ replication</li></ul><p>Protected attributes will NOT be allowed to be set,
 edited or deleted, even if they are included in this whitelist.",
      "propertyOrder" : 100,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    }
  }
}
```


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1.144.1.2. delete

Usage:

```
am> delete SessionPropertyWhiteList --realm Realm
```

1.144.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action SessionPropertyWhiteList --realm Realm --actionName getAllTypes
```

1.144.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action SessionPropertyWhiteList --realm Realm --actionName getCreatableTypes
```

1.144.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action SessionPropertyWhiteList --realm Realm --actionName nextdescendents
```

1.144.1.6. read

Usage:

```
am> read SessionPropertyWhiteList --realm Realm
```

1.144.1.7. update

Usage:

```
am> update SessionPropertyWhiteList --realm Realm --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

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```
{
  "type" : "object",
  "properties" : {
    "sessionPropertyWhitelist" : {
      "title" : "Whitelisted Session Property Names",
      "description" : "A list of properties that users may read, edit the value of, or delete from
 their session.<p><p> Adding properties to sessions can impact OpenAM's performance. Because there is
 no size constraint limiting the set of properties that you can add to sessions, and no limit on the
 number of session properties you can add, keep in mind that adding session properties can increase
 the load on an OpenAM deployment in the following areas: <ul><li>OpenAM server memory</li><li>OpenDJ
 storage</li><li>OpenDJ replication</li></ul><p>Protected attributes will NOT be allowed to be set,
 edited or deleted, even if they are included in this whitelist.",
      "propertyOrder" : 100,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    }
  }
}
```

1.144.2. Global Operations

Resource path: `/global-config/services/amSessionPropertyWhitelist`

Resource version: `1.0`

1.144.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action SessionPropertyWhiteList --global --actionName getAllTypes
```

1.144.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action SessionPropertyWhiteList --global --actionName getCreatableTypes
```

1.144.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

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Usage:

```
am> action SessionPropertyWhiteList --global --actionName nextdescendents
```

1.144.2.4. read

Usage:

```
am> read SessionPropertyWhiteList --global
```

1.144.2.5. update

Usage:

```
am> update SessionPropertyWhiteList --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "defaults" : {
      "properties" : {
        "sessionPropertyWhitelist" : {
          "title" : "Whitelisted Session Property Names",
          "description" : "A list of properties that users may read, edit the value of, or delete from
 their session.<p><p> Adding properties to sessions can impact OpenAM's performance. Because there is
 no size constraint limiting the set of properties that you can add to sessions, and no limit on the
 number of session properties you can add, keep in mind that adding session properties can increase
 the load on an OpenAM deployment in the following areas: <ul><li>OpenAM server memory</li><li>OpenDJ
 storage</li><li>OpenDJ replication</li></ul><p>Protected attributes will NOT be allowed to be set,
 edited or deleted, even if they are included in this whitelist.",
          "propertyOrder" : 100,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        }
      },
      "type" : "object",
      "title" : "Realm Defaults"
    }
  }
}
```


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1.145. Sessions

1.145.1. Realm Operations

Represents Sessions that can queried via a REST interface.

Resource path: `/sessions`

Resource version: `3.0`

1.145.1.1. getSessionInfo

It reads and returns the information about the requested session.

Usage:

```
am> action Sessions --realm Realm --body body --actionName getSessionInfo
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "$schema" : "http://json-schema.org/draft-04/schema#",
  "description" : "Action request",
  "title" : "Action request",
  "type" : "object",
  "properties" : {
    "tokenId" : {
      "title" : "The tokenId",
      "description" : "The tokenId of the user you requests information for",
      "type" : "string"
    }
  },
  "required" : [ "tokenId" ]
}
```

1.145.1.2. getSessionProperties

It reads and returns all of the whitelisted properties for the requested session.

Usage:

```
am> action Sessions --realm Realm --body body --actionName getSessionProperties
```

Parameters:

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--body

The resource in JSON format, described by the following JSON schema:

```
{
  "$schema" : "http://json-schema.org/draft-04/schema#",
  "description" : "Action request",
  "title" : "Action request",
  "type" : "object",
  "properties" : {
    "tokenId" : {
      "title" : "The tokenId",
      "description" : "The tokenId of the user you requests information for",
      "type" : "string"
    }
  },
  "required" : [ "tokenId" ]
}
```

1.145.1.3. logout

It does logout from OpenAM

Usage:

```
am> action Sessions --realm Realm --body body --actionName logout
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "$schema" : "http://json-schema.org/draft-04/schema#",
  "description" : "Action request",
  "title" : "Action request",
  "type" : "object",
  "properties" : {
    "tokenId" : {
      "title" : "The tokenId",
      "description" : "The tokenId of the user you requests information for",
      "type" : "string"
    }
  },
  "required" : [ "tokenId" ]
}
```

1.145.1.4. logoutByHandle

It logs out sessions based on the provided session handles.

Usage:

```
am> action Sessions --realm Realm --body body --actionName logoutByHandle
```


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Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "$schema" : "http://json-schema.org/draft-04/schema#",
  "description" : "Logout By Handle request",
  "type" : "object",
  "title" : "Logout By Handle request",
  "properties" : {
    "sessionHandles" : {
      "title" : "Session handles",
      "description" : "The array of session handles that needs to be invalidated.",
      "type" : "array",
      "items" : {
        "type" : "string"
      }
    }
  },
  "required" : [ "sessionHandles" ]
}
```

1.145.1.5. query

It queries all sessions using the provided query filter.

Usage:

```
am> query Sessions --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all. Fields that can be queried: [username, realm]

1.145.1.6. refresh

Suggests to OpenAM that it should refresh this session (update it's latest access time and reset its idleTime to 0). This will only be obeyed if the time between the session's previous latest access time and now is greater than the value configured for the server's Latest Access Time Update Frequency setting, which defaults to 60 seconds.

Usage:

```
am> action Sessions --realm Realm --body body --actionName refresh
```

Parameters:

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--body

The resource in JSON format, described by the following JSON schema:

```
{
  "$schema" : "http://json-schema.org/draft-04/schema#",
  "description" : "Action request",
  "title" : "Action request",
  "type" : "object",
  "properties" : {
    "tokenId" : {
      "title" : "The tokenId",
      "description" : "The tokenId of the user you requests information for",
      "type" : "string"
    }
  },
  "required" : [ "tokenId" ]
}
```

1.145.1.7. updateSessionProperties

It updates and returns all of the whitelisted properties for the requested session.

Usage:

```
am> action Sessions --realm Realm --body body --actionName updateSessionProperties
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "$schema" : "http://json-schema.org/draft-04/schema#",
  "description" : "Action request",
  "title" : "Action request",
  "type" : "object",
  "properties" : {
    "tokenId" : {
      "title" : "The tokenId",
      "description" : "The tokenId of the user you requests information for",
      "type" : "string"
    }
  },
  "required" : [ "tokenId" ]
}
```

1.145.1.8. validate

It checks that the specified SSO Token Id is valid or not. If there is any problem getting or validating the token which causes an exception the json response will be false. In addition if the token is expired then the json response will be set to true. Otherwise it will be set to true.

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Usage:

```
am> action Sessions --realm Realm --body body --actionName validate
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "$schema" : "http://json-schema.org/draft-04/schema#",
  "description" : "Action request",
  "title" : "Action request",
  "type" : "object",
  "properties" : {
    "tokenId" : {
      "title" : "The tokenId",
      "description" : "The tokenId of the user you requests information for",
      "type" : "string"
    }
  },
  "required" : [ "tokenId" ]
}
```

1.146. SetSessionProperties

1.146.1. Realm Operations

Resource path: `/realm-config/authentication/authenticationtrees/nodes/SetSessionPropertiesNode`

Resource version: `1.0`

1.146.1.1. create

Usage:

```
am> create SetSessionProperties --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

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```
{
  "type" : "object",
  "properties" : {
    "properties" : {
      "title" : "Properties",
      "description" : "The properties to set on the user's session if/when it is created.",
      "propertyOrder" : 100,
      "required" : true,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : ""
    }
  }
}
```

1.146.1.2. delete

Usage:

```
am> delete SetSessionProperties --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.146.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action SetSessionProperties --realm Realm --actionName getAllTypes
```

1.146.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action SetSessionProperties --realm Realm --actionName getCreatableTypes
```

1.146.1.5. listOutcomes

List the available outcomes for the node type.

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Usage:

```
am> action SetSessionProperties --realm Realm --body body --actionName listOutcomes
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "title" : "Some configuration of the node. This does not need to be complete against the
 configuration schema."
}
```

1.146.1.6. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action SetSessionProperties --realm Realm --actionName nextdescendents
```

1.146.1.7. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

```
am> query SetSessionProperties --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.146.1.8. read

Usage:

```
am> read SetSessionProperties --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

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1.146.1.9. update

Usage:

```
am> update SetSessionProperties --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "properties" : {
      "title" : "Properties",
      "description" : "The properties to set on the user's session if/when it is created.",
      "propertyOrder" : 100,
      "required" : true,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : ""
    }
  }
}
```

1.146.2. Global Operations

Resource path: `/global-config/authentication/authenticationtrees/nodes/SetSessionPropertiesNode`

Resource version: `1.0`

1.146.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action SetSessionProperties --global --actionName getAllTypes
```


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1.146.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action SetSessionProperties --global --actionName getCreatableTypes
```

1.146.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action SetSessionProperties --global --actionName nextdescendents
```

1.146.2.4. read

Usage:

```
am> read SetSessionProperties --global
```

1.146.2.5. update

Usage:

```
am> update SetSessionProperties --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object"
}
```

1.147. SharedAgents

1.147.1. Realm Operations

Agents handler that is responsible for managing agents

Resource path: `/realm-config/agents/SharedAgent`

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Resource version: `1.0`

1.147.1.1. create

Usage:

```
am> create SharedAgents --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "status" : {
      "title" : "Status",
      "description" : "Status of the agent configuration.",
      "propertyOrder" : 200,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "agentProfilesAllowedToRead" : {
      "title" : "Agent Profiles allowed to Read.",
      "description" : "",
      "propertyOrder" : 22600,
      "items" : {
        "type" : "string"
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "array",
          "required" : true
```


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```
        }
      }
    },
    "cdssoRootUrl" : {
      "title" : "Agent Root URL for CDSSO",
      "description" : "The agent root URL for CDSSO. The valid value is in the following format:
<br>protocol://hostname:port/<br> The protocol represents the protocol used, such as http or https.
The hostname represents the host name of the machine on which the agent resides. The port represents
the port number on which the agent is installed. The slash following the port number is required.",
      "propertyOrder" : 22700,
      "items" : {
        "type" : "string"
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "array",
          "required" : true
        }
      }
    },
    "userpassword" : {
      "title" : "Password",
      "description" : "",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "string",
      "format" : "password",
      "exampleValue" : ""
    }
  }
}
```

1.147.1.2. delete

Usage:

```
am> delete SharedAgents --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.147.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

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Usage:

```
am> action SharedAgents --realm Realm --actionName getAllTypes
```

1.147.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action SharedAgents --realm Realm --actionName getCreatableTypes
```

1.147.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action SharedAgents --realm Realm --actionName nextdescendents
```

1.147.1.6. query

Querying the agents of a specific type

Usage:

```
am> query SharedAgents --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.147.1.7. read

Usage:

```
am> read SharedAgents --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.147.1.8. update

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Usage:

```
am> update SharedAgents --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "status" : {
      "title" : "Status",
      "description" : "Status of the agent configuration.",
      "propertyOrder" : 200,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "agentProfilesAllowedToRead" : {
      "title" : "Agent Profiles allowed to Read.",
      "description" : "",
      "propertyOrder" : 22600,
      "items" : {
        "type" : "string"
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "array",
          "required" : true
        }
      }
    },
    "cdssoRootUrl" : {
      "title" : "Agent Root URL for CDSSO",
      "description" : "The agent root URL for CDSSO. The valid value is in the following format:
 <br>protocol://hostname:port/<br> The protocol represents the protocol used, such as http or https.
```


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```
 The hostname represents the host name of the machine on which the agent resides. The port represents
 the port number on which the agent is installed. The slash following the port number is required.",
      "propertyOrder" : 22700,
      "items" : {
        "type" : "string"
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "array",
          "required" : true
        }
      }
    },
    "userpassword" : {
      "title" : "Password",
      "description" : "",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "string",
      "format" : "password",
      "exampleValue" : ""
    }
  }
}
```

1.148. Sites

1.148.1. Global Operations

This version 1.0 sites service represents a Sites resource with CQ operations on the users collection and CRUDPA operations available for the site item. Items can have server version 1.0 subresources.

Resource path: `/global-config/sites`

Resource version: `1.0`

1.148.1.1. create

Create new site entry

Usage:

```
am> create Sites --global --id id --body body
```

Parameters:

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--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "$schema" : "http://json-schema.org/draft-04/schema#",
  "description" : "Site schema.",
  "type" : "object",
  "title" : "Site schema",
  "properties" : {
    "_id" : {
      "type" : "string",
      "title" : "Name",
      "description" : "Site name."
    },
    "id" : {
      "type" : "string",
      "title" : "Site id",
      "description" : "Site's unique identifier.",
      "javaName" : "siteId"
    },
    "url" : {
      "type" : "string",
      "title" : "Primary URL",
      "description" : "Site primary URL."
    },
    "secondaryURLs" : {
      "type" : "array",
      "title" : "Secondary URLs",
      "description" : "Secondary URLs for this site.",
      "items" : {
        "type" : "string"
      }
    },
    "servers" : {
      "type" : "array",
      "title" : "Assigned Servers",
      "description" : "Servers assigned to this site.",
      "items" : {
        "type" : "object",
        "properties" : {
          "id" : {
            "type" : "string",
            "title" : "Server id",
            "description" : "Server's unique identifier for the site."
          },
          "url" : {
            "type" : "string",
            "title" : "Server URL",
            "description" : "Server URL of the site"
          }
        }
      }
    }
  }
```


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```
}
```

1.148.1.2. delete

Delete site entry

Usage:

```
am> delete Sites --global --id id
```

Parameters:

--id

The unique identifier for the resource.

1.148.1.3. query

Query the collection of site entries

Usage:

```
am> query Sites --global --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all. Fields that can be queried: [_id, url]

1.148.1.4. read

Read a site entry

Usage:

```
am> read Sites --global --id id
```

Parameters:

--id

The unique identifier for the resource.

1.148.1.5. schema

Sites schema action that returns the sites schema json

Usage:

```
am> action Sites --global --actionName schema
```


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1.148.1.6. template

Sites template action that returns a template json object for site insert

Usage:

```
am> action Sites --global --actionName template
```

1.148.1.7. update

Update a site entry

Usage:

```
am> update Sites --global --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "$schema" : "http://json-schema.org/draft-04/schema#",
  "description" : "Site schema.",
  "type" : "object",
  "title" : "Site schema",
  "properties" : {
    "_id" : {
      "type" : "string",
      "title" : "Name",
      "description" : "Site name."
    },
    "id" : {
      "type" : "string",
      "title" : "Site id",
      "description" : "Site's unique identifier.",
      "javaName" : "siteId"
    },
    "url" : {
      "type" : "string",
      "title" : "Primary URL",
      "description" : "Site primary URL."
    },
    "secondaryURLs" : {
      "type" : "array",
      "title" : "Secondary URLs",
      "description" : "Secondary URLs for this site.",
      "items" : {
        "type" : "string"
      }
```


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```
    },
    "servers" : {
      "type" : "array",
      "title" : "Assigned Servers",
      "description" : "Servers assigned to this site.",
      "items" : {
        "type" : "object",
        "properties" : {
          "id" : {
            "type" : "string",
            "title" : "Server id",
            "description" : "Server's unique identifier for the site."
          },
          "url" : {
            "type" : "string",
            "title" : "Server URL",
            "description" : "Server URL of the site"
          }
        }
      }
    }
  }
}
```

1.149. SoapSTSAgentGroups

1.149.1. Realm Operations

Agent Groups handler that is responsible for managing agent groups

Resource path: `/realm-config/agents/groups/SoapSTSAgent`

Resource version: `1.0`

1.149.1.1. create

Usage:

```
am> create SoapSTSAgentGroups --realm Realm --id id --body body
```

Parameters:

`--id`

The unique identifier for the resource.

`--body`

The resource in JSON format, described by the following JSON schema:

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```
{
  "type" : "object",
  "properties" : {
    "publishServicePollInterval" : {
      "title" : "Poll Interval",
      "description" : "Interval, in seconds, to poll the sts publish service for newly-published SOAP
 STS instances.",
      "propertyOrder" : 26300,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "userpassword" : {
      "title" : "Password",
      "description" : "",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "string",
      "format" : "password",
      "exampleValue" : ""
    }
  }
}
```

1.149.1.2. delete

Usage:

```
am> delete SoapSTSAgentGroups --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.149.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action SoapSTSAgentGroups --realm Realm --actionName getAllTypes
```

1.149.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action SoapSTSAgentGroups --realm Realm --actionName getCreatableTypes
```


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1.149.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action SoapSTSAgentGroups --realm Realm --actionName nextdescendents
```

1.149.1.6. query

Querying the agent groups of a specific type

Usage:

```
am> query SoapSTSAgentGroups --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.149.1.7. read

Usage:

```
am> read SoapSTSAgentGroups --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.149.1.8. update

Usage:

```
am> update SoapSTSAgentGroups --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

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```
{
  "type" : "object",
  "properties" : {
    "publishServicePollInterval" : {
      "title" : "Poll Interval",
      "description" : "Interval, in seconds, to poll the sts publish service for newly-published SOAP
 STS instances.",
      "propertyOrder" : 26300,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "userpassword" : {
      "title" : "Password",
      "description" : "",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "string",
      "format" : "password",
      "exampleValue" : ""
    }
  }
}
```

1.150. SoapStsAgents

1.150.1. Realm Operations

Agents handler that is responsible for managing agents

Resource path: `/realm-config/agents/SoapSTSAgent`

Resource version: `1.0`

1.150.1.1. create

Usage:

```
am> create SoapStsAgents --realm Realm --id id --body body
```

Parameters:

`--id`

The unique identifier for the resource.

`--body`

The resource in JSON format, described by the following JSON schema:

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```
{
  "type" : "object",
  "properties" : {
    "userpassword" : {
      "title" : "Password",
      "description" : "",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "string",
      "format" : "password",
      "exampleValue" : ""
    },
    "publishServicePollInterval" : {
      "title" : "Poll Interval",
      "description" : "Interval, in seconds, to poll the sts publish service for newly-published SOAP
 STS instances.",
      "propertyOrder" : 26300,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "integer",
          "required" : true
        }
      }
    }
  }
}
```

1.150.1.2. delete

Usage:

```
am> delete SoapStsAgents --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.150.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action SoapStsAgents --realm Realm --actionName getAllTypes
```


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1.150.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action SoapStsAgents --realm Realm --actionName getCreatableTypes
```

1.150.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action SoapStsAgents --realm Realm --actionName nextdescendents
```

1.150.1.6. query

Querying the agents of a specific type

Usage:

```
am> query SoapStsAgents --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.150.1.7. read

Usage:

```
am> read SoapStsAgents --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.150.1.8. update

Usage:

```
am> update SoapStsAgents --realm Realm --id id --body body
```

Parameters:

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--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "userpassword" : {
      "title" : "Password",
      "description" : "",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "string",
      "format" : "password",
      "exampleValue" : ""
    },
    "publishServicePollInterval" : {
      "title" : "Poll Interval",
      "description" : "Interval, in seconds, to poll the sts publish service for newly-published SOAP
 STS instances.",
      "propertyOrder" : 26300,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "integer",
          "required" : true
        }
      }
    }
  }
}
```

1.151. SocialAuthInstagramModule

1.151.1. Realm Operations

Resource path: `/realm-config/authentication/modules/authSocialInstagram`

Resource version: `1.0`

1.151.1.1. create

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Usage:

```
am> create SocialAuthInstagramModule --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "accountProvisioning" : {
      "type" : "object",
      "title" : "Account Provisioning",
      "propertyOrder" : 1,
      "properties" : {
        "accountMapperConfiguration" : {
          "title" : "Account Mapper Configuration",
          "description" : "Mapping of OAuth account to local OpenAM account<br><br>Attribute
 configuration that will be used to map the account of the user authenticated in the OAuth 2.0
 Provider to the local data store in the OpenAM. Example: <code>OAuth2.0_attribute=local_attribute</
code>",
          "propertyOrder" : 1600,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "accountProviderClass" : {
          "title" : "Account Provider",
          "description" : "Name of the class implementing the account provider.<br><br>This
 class is used by the module to find the account from the attributes mapped by the Account
 Mapper <code>org.forgerock.openam.authentication.modules.common.mapping.AccountProvider</code>
 interface.<br/>String constructor parameters can be provided by appending <code>|</code> separated
 values.",
          "propertyOrder" : 1400,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "attributeMappingClasses" : {
          "title" : "Attribute Mapper",
          "description" : "Name of the class that implements the attribute
 mapping<br><br>This class maps the OAuth properties into OpenAM properties. A custom
 attribute mapper can be provided.<br/><br/>A custom attribute mapper must implement the
 <code>org.forgerock.openam.authentication.modules.common.mapping.AttributeMapper</code>
 interface.<br/>Provided implementations
 are:<ul><li>org.forgerock.openam.authentication.modules.common.mapping.JsonAttributeMapper</
li><li>org.forgerock.openam.authentication.modules.oidc.JwtAttributeMapper (can only be used when
 using the openid scope)</li></ul>String constructor parameters can be provided by appending <code>|</
code> separated values.",
```


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```
          "propertyOrder" : 1700,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "saveAttributesInSession" : {
          "title" : "Save attributes in the session",
          "description" : "If this option is enabled, the attributes configured in the attribute
 mapper will be saved into the OpenAM session",
          "propertyOrder" : 2400,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "createAccount" : {
          "title" : "Create account if it does not exist",
          "description" : "If the OAuth2 account does not exist in the local OpenAM data store, an
 account will be created dynamically.<br><br>If this is enabled, the account mapper could create
 the account dynamically if there is no account mapped. Before creating the account, a dialog
 prompting for a password and asking for an activation code can be shown if the parameter \"Prompt
 for password setting and activation code\" is enabled.<br /><br />If this flag is not enabled, 3
 alternative options exist:<br/><br/><ol><li>The accounts need to have a user profile in the OpenAM
 User Data Store</li><li>The user does not have a user profile and the \"Ignore Profile\" is set in
 the Authentication Service of the realm.</li><li>The account is mapped to an anonymous account (see
 parameter \"Map to anonymous user\" and \"Anonymous User\")</li></ol>",
          "propertyOrder" : 1360,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "accountMapperClass" : {
          "title" : "Account Mapper",
          "description" : "Name of the class implementing the attribute mapping for the
 account search.<br><br>This class is used by the module to map from the account information
 received from the OAuth Identity Provider into OpenAM.<br/><br/>The class must implement
 the <code>org.forgerock.openam.authentication.modules.common.mapping.AttributeMapper</code>
 interface.<br/>Provided implementations
 are:<ul><li>org.forgerock.openam.authentication.modules.common.mapping.JsonAttributeMapper</
li><li>org.forgerock.openam.authentication.modules.oidc.JwtAttributeMapper (can only be used when
 using the openid scope)</li></ul>String constructor parameters can be provided by appending <code>|</
code> separated values.",
          "propertyOrder" : 1500,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "enableRegistrationService" : {
          "title" : "Use IDM as Registration Service",
          "description" : "Whether to use IDM as an external Registration Service to complete
 registration for new users.<br><br>IDM is called and passed these parameters:<br/><br/
><ul><li><code>clientToken</code>: Signed, encrypted JWT of the OAuth 2.0 authentication state.</
li><li><code>returnParams</code>: Encoded URL parameters, required to be returned to AM to resume
 authentication after registration in IDM is complete.</li></ul>",
          "propertyOrder" : 1350,
          "required" : true,
          "type" : "boolean",
```


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```
          "exampleValue" : ""
        },
        "mapToAnonymousUser" : {
          "title" : "Map to anonymous user",
          "description" : "Enabled anonymous user access to OpenAM for OAuth authenticated
 users<br><br>If selected, the authenticated users in the OAuth 2.0 Provider will be mapped to the
 anonymous user configured in the next parameter.<br/>If not selected the users authenticated will be
 mapped by the parameters configured in the account mapper.<br/><br/><i>NB </i>If <i>Create account if
 it does not exist</i> is enabled, that parameter takes precedence.",
          "propertyOrder" : 2000,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "attributeMapperConfiguration" : {
          "title" : "Attribute Mapper Configuration",
          "description" : "Mapping of OAuth attributes to local OpenAM attributes<br><br>Attribute
 configuration that will be used to map the user info obtained from the OAuth 2.0 Provider to the
 local user data store in the OpenAM.<br/><br/>Example: <code>OAuth2.0_attribute=local_attribute</
code>",
          "propertyOrder" : 1800,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "anonymousUserName" : {
          "title" : "Anonymous User",
          "description" : "Username of the OpenAM anonymous user<br><br>The username of the user that
 will represent the anonymous user. This user account must already exist in the realm.",
          "propertyOrder" : 2100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    },
    "core" : {
      "type" : "object",
      "title" : "Core",
      "propertyOrder" : 0,
      "properties" : {
        "provider" : {
          "title" : "Social Provider",
          "description" : "Social Provider for which this module is being setup.",
          "propertyOrder" : 200,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "logoutServiceUrl" : {
          "title" : "OAuth 2.0 Provider Logout Service",
          "description" : "The URL of the Identity Provider's
 logout service.<br><br>To enable IdP logout, you must also add
 <code>org.forgerock.openam.authentication.modules.oauth2.OAuth2PostAuthnPlugin</code> to the
 <em>Authentication Post Processing Classes</em> setting. Navigate to Authentication > Settings > Post
 Authentication Processing.",
```


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```
          "propertyOrder" : 2150,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "usesBasicAuth" : {
          "title" : "Use Basic Auth",
          "description" : "When enabled, the client will use basic auth for authenticating with  the
 social auth provider. Enabled by default.",
          "propertyOrder" : 1200,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "ssoProxyUrl" : {
          "title" : "Proxy URL",
          "description" : "The URL to the OpenAM OAuth proxy JSP<br><br>This URL should only be
 changed from the default, if an external server is performing the GET to POST proxying. The default
 is <code>/openam/oauth2c/OAuthProxy.jsp</code>",
          "propertyOrder" : 1300,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "authorizeEndpoint" : {
          "title" : "Authentication Endpoint URL",
          "description" : "OAuth authentication endpoint URL<br><br>This is the URL endpoint for OAuth
 authentication provided by the OAuth Identity Provider",
          "propertyOrder" : 600,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "userInfoEndpoint" : {
          "title" : "User Profile Service URL",
          "description" : "User profile information URL<br><br>This URL endpoint provides user profile
 information and is provided by the OAuth Identity Provider<br/><br/><i>NB </i>This URL should return
 JSON objects in response",
          "propertyOrder" : 800,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "clientId" : {
          "title" : "Client Id",
          "description" : "OAuth client_id parameter<br><br>For more information on the OAuth
 client_id parameter refer to the <a href=\"http://tools.ietf.org/html/rfc6749#section-2.3.1\" target=
\"_blank\">RFC 6749</a>, section 2.3.1",
          "propertyOrder" : 400,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "logoutBehaviour" : {
          "title" : "Logout Options",
          "description" : "Specify logout behavior.<br><br>The following options are available
 for logging out of the OAuth 2.0 Provider when the user logs out of AM:<br/><ul><li>prompt:
 Ask the user whether to log out from the OAuth 2.0 Provider</li><li>logout: Log out from
 the OAuth 2.0 Provider without asking the user</li><li>donotlogout: Do not log out the
```


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```
 user from the OAuth 2.0 Provider</li></ul><br/>To enable IdP logout, you must also add
 <code>org.forgerock.openam.authentication.modules.oauth2.OAuth2PostAuthnPlugin</code> to the
 <em>Authentication Post Processing Classes</em> setting. Navigate to Authentication > Settings > Post
 Authentication Processing.",
          "propertyOrder" : 2155,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "scope" : {
          "title" : "Scope",
          "description" : "OAuth scope; list of user profile properties<br><br>According to the OAuth
 2.0 Authorization Framework, scope is a space-separated list of user profile attributes that the
 client application requires. The list depends on the permissions that the resource owner grants to
 the client application.<br/><br/> Some authorization servers use non-standard separators for scopes.
 For example, Facebook takes a comma-separated list.<br/><br/>",
          "propertyOrder" : 900,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "scopeDelimiter" : {
          "title" : "Scope Delimiter",
          "description" : "Delimiter used to separate scope values. Default value is space.",
          "propertyOrder" : 1000,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "authenticationLevel" : {
          "title" : "Authentication Level",
          "description" : "The authentication level associated with this module.<br><br>Each
 authentication module has an authentication level that can be used to indicate the level of security
 associated with the module; 0 is the lowest (and the default).",
          "propertyOrder" : 100,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "tokenEndpoint" : {
          "title" : "Access Token Endpoint URL",
          "description" : "OAuth access token endpoint URL<br><br>This is the URL endpoint for
 access token retrieval provided by the OAuth Identity Provider. Refer to the <a href=\"http://
tools.ietf.org/html/rfc6749#section-3.2\" target=\"_blank\">RFC 6749</a>, section 3.2",
          "propertyOrder" : 700,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "subjectProperty" : {
          "title" : "Subject Property",
          "description" : "Property used to identify which attribute an auth server identifies a user
 by.",
          "propertyOrder" : 1100,
          "required" : true,
          "type" : "string",
```


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```
          "exampleValue" : ""
        },
        "clientSecret" : {
          "title" : "Client Secret",
          "description" : "OAuth client_secret parameter<br><br>For more information on the OAuth
 client_secret parameter refer to the <a href=\"http://tools.ietf.org/html/rfc6749#section-2.3.1\"
 target=\"_blank\">RFC 6749</a>, section 2.3.1",
          "propertyOrder" : 500,
          "required" : true,
          "type" : "string",
          "format" : "password",
          "exampleValue" : ""
        }
      }
    }
  }
}
```

1.151.1.2. delete

Usage:

```
am> delete SocialAuthInstagramModule --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.151.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action SocialAuthInstagramModule --realm Realm --actionName getAllTypes
```

1.151.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action SocialAuthInstagramModule --realm Realm --actionName getCreatableTypes
```

1.151.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

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```
am> action SocialAuthInstagramModule --realm Realm --actionName nextdescendents
```

1.151.1.6. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

```
am> query SocialAuthInstagramModule --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.151.1.7. read

Usage:

```
am> read SocialAuthInstagramModule --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.151.1.8. update

Usage:

```
am> update SocialAuthInstagramModule --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "accountProvisioning" : {
      "type" : "object",
      "title" : "Account Provisioning",
      "propertyOrder" : 1,
      "properties" : {
```


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```
        "accountMapperConfiguration" : {
          "title" : "Account Mapper Configuration",
          "description" : "Mapping of OAuth account to local OpenAM account<br><br>Attribute
 configuration that will be used to map the account of the user authenticated in the OAuth 2.0
 Provider to the local data store in the OpenAM. Example: <code>OAuth2.0_attribute=local_attribute</
code>",
          "propertyOrder" : 1600,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "accountProviderClass" : {
          "title" : "Account Provider",
          "description" : "Name of the class implementing the account provider.<br><br>This
 class is used by the module to find the account from the attributes mapped by the Account
 Mapper <code>org.forgerock.openam.authentication.modules.common.mapping.AccountProvider</code>
 interface.<br/>String constructor parameters can be provided by appending <code>|</code> separated
 values.",
          "propertyOrder" : 1400,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "attributeMappingClasses" : {
          "title" : "Attribute Mapper",
          "description" : "Name of the class that implements the attribute
 mapping<br><br>This class maps the OAuth properties into OpenAM properties. A custom
 attribute mapper can be provided.<br/><br/>A custom attribute mapper must implement the
 <code>org.forgerock.openam.authentication.modules.common.mapping.AttributeMapper</code>
 interface.<br/>Provided implementations
 are:<ul><li>org.forgerock.openam.authentication.modules.common.mapping.JsonAttributeMapper</
li><li>org.forgerock.openam.authentication.modules.oidc.JwtAttributeMapper (can only be used when
 using the openid scope)</li></ul>String constructor parameters can be provided by appending <code>|</
code> separated values.",
          "propertyOrder" : 1700,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "saveAttributesInSession" : {
          "title" : "Save attributes in the session",
          "description" : "If this option is enabled, the attributes configured in the attribute
 mapper will be saved into the OpenAM session",
          "propertyOrder" : 2400,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "createAccount" : {
          "title" : "Create account if it does not exist",
          "description" : "If the OAuth2 account does not exist in the local OpenAM data store, an
 account will be created dynamically.<br><br>If this is enabled, the account mapper could create
 the account dynamically if there is no account mapped. Before creating the account, a dialog
```


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```
 prompting for a password and asking for an activation code can be shown if the parameter \"Prompt
 for password setting and activation code\" is enabled.<br /><br />If this flag is not enabled, 3
 alternative options exist:<br/><br/><ol><li>The accounts need to have a user profile in the OpenAM
 User Data Store</li><li>The user does not have a user profile and the \"Ignore Profile\" is set in
 the Authentication Service of the realm.</li><li>The account is mapped to an anonymous account (see
 parameter \"Map to anonymous user\" and \"Anonymous User\")</li></ol>",
          "propertyOrder" : 1360,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "accountMapperClass" : {
          "title" : "Account Mapper",
          "description" : "Name of the class implementing the attribute mapping for the
 account search.<br><br>This class is used by the module to map from the account information
 received from the OAuth Identity Provider into OpenAM.<br/><br/>The class must implement
 the <code>org.forgerock.openam.authentication.modules.common.mapping.AttributeMapper</code>
 interface.<br/>Provided implementations
 are:<ul><li>org.forgerock.openam.authentication.modules.common.mapping.JsonAttributeMapper</
li><li>org.forgerock.openam.authentication.modules.oidc.JwtAttributeMapper (can only be used when
 using the openid scope)</li></ul>String constructor parameters can be provided by appending <code>|</
code> separated values.",
          "propertyOrder" : 1500,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "enableRegistrationService" : {
          "title" : "Use IDM as Registration Service",
          "description" : "Whether to use IDM as an external Registration Service to complete
 registration for new users.<br><br>IDM is called and passed these parameters:<br/><br/
><ul><li><code>clientToken</code>: Signed, encrypted JWT of the OAuth 2.0 authentication state.</
li><li><code>returnParams</code>: Encoded URL parameters, required to be returned to AM to resume
 authentication after registration in IDM is complete.</li></ul>",
          "propertyOrder" : 1350,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "mapToAnonymousUser" : {
          "title" : "Map to anonymous user",
          "description" : "Enabled anonymous user access to OpenAM for OAuth authenticated
 users<br><br>If selected, the authenticated users in the OAuth 2.0 Provider will be mapped to the
 anonymous user configured in the next parameter.<br/>If not selected the users authenticated will be
 mapped by the parameters configured in the account mapper.<br/><br/><i>NB </i>If <i>Create account if
 it does not exist</i> is enabled, that parameter takes precedence.",
          "propertyOrder" : 2000,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "attributeMapperConfiguration" : {
          "title" : "Attribute Mapper Configuration",
          "description" : "Mapping of OAuth attributes to local OpenAM attributes<br><br>Attribute
 configuration that will be used to map the user info obtained from the OAuth 2.0 Provider to the
 local user data store in the OpenAM.<br/><br/>Example: <code>OAuth2.0_attribute=local_attribute</
code>",
          "propertyOrder" : 1800,
          "required" : true,
```


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```
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "anonymousUserName" : {
          "title" : "Anonymous User",
          "description" : "Username of the OpenAM anonymous user<br><br>The username of the user that
will represent the anonymous user. This user account must already exist in the realm.",
          "propertyOrder" : 2100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    },
    "core" : {
      "type" : "object",
      "title" : "Core",
      "propertyOrder" : 0,
      "properties" : {
        "provider" : {
          "title" : "Social Provider",
          "description" : "Social Provider for which this module is being setup.",
          "propertyOrder" : 200,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "logoutServiceUrl" : {
          "title" : "OAuth 2.0 Provider Logout Service",
          "description" : "The URL of the Identity Provider's
logout service.<br><br>To enable IdP logout, you must also add
<code>org.forgerock.openam.authentication.modules.oauth2.OAuth2PostAuthnPlugin</code> to the
<em>Authentication Post Processing Classes</em> setting. Navigate to Authentication > Settings > Post
Authentication Processing.",
          "propertyOrder" : 2150,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "usesBasicAuth" : {
          "title" : "Use Basic Auth",
          "description" : "When enabled, the client will use basic auth for authenticating with  the
social auth provider. Enabled by default.",
          "propertyOrder" : 1200,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "ssoProxyUrl" : {
          "title" : "Proxy URL",
          "description" : "The URL to the OpenAM OAuth proxy JSP<br><br>This URL should only be
changed from the default, if an external server is performing the GET to POST proxying. The default
is <code>/openam/oauth2c/OAuthProxy.jsp</code>",
          "propertyOrder" : 1300,
          "required" : true,
          "type" : "string",
```


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```
          "exampleValue" : ""
        },
        "authorizeEndpoint" : {
          "title" : "Authentication Endpoint URL",
          "description" : "OAuth authentication endpoint URL<br><br>This is the URL endpoint for OAuth
 authentication provided by the OAuth Identity Provider",
          "propertyOrder" : 600,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "userInfoEndpoint" : {
          "title" : "User Profile Service URL",
          "description" : "User profile information URL<br><br>This URL endpoint provides user profile
 information and is provided by the OAuth Identity Provider<br/><br/><i>NB </i>This URL should return
 JSON objects in response",
          "propertyOrder" : 800,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "clientId" : {
          "title" : "Client Id",
          "description" : "OAuth client_id parameter<br><br>For more information on the OAuth
 client_id parameter refer to the <a href=\"http://tools.ietf.org/html/rfc6749#section-2.3.1\" target=
\"_blank\">RFC 6749</a>, section 2.3.1",
          "propertyOrder" : 400,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "logoutBehaviour" : {
          "title" : "Logout Options",
          "description" : "Specify logout behavior.<br><br>The following options are available
 for logging out of the OAuth 2.0 Provider when the user logs out of AM:<br/><ul><li>prompt:
 Ask the user whether to log out from the OAuth 2.0 Provider</li><li>logout: Log out from
 the OAuth 2.0 Provider without asking the user</li><li>donotlogout: Do not log out the
 user from the OAuth 2.0 Provider</li></ul><br/>To enable IdP logout, you must also add
 <code>org.forgerock.openam.authentication.modules.oauth2.OAuth2PostAuthnPlugin</code> to the
 <em>Authentication Post Processing Classes</em> setting. Navigate to Authentication > Settings > Post
 Authentication Processing.",
          "propertyOrder" : 2155,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "scope" : {
          "title" : "Scope",
          "description" : "OAuth scope; list of user profile properties<br><br>According to the OAuth
 2.0 Authorization Framework, scope is a space-separated list of user profile attributes that the
 client application requires. The list depends on the permissions that the resource owner grants to
 the client application.<br/><br/> Some authorization servers use non-standard separators for scopes.
 For example, Facebook takes a comma-separated list.<br/><br/>",
          "propertyOrder" : 900,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
```


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```
          "exampleValue" : ""
        },
        "scopeDelimiter" : {
          "title" : "Scope Delimiter",
          "description" : "Delimiter used to separate scope values. Default value is space.",
          "propertyOrder" : 1000,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "authenticationLevel" : {
          "title" : "Authentication Level",
          "description" : "The authentication level associated with this module.<br><br>Each
 authentication module has an authentication level that can be used to indicate the level of security
 associated with the module; 0 is the lowest (and the default).",
          "propertyOrder" : 100,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "tokenEndpoint" : {
          "title" : "Access Token Endpoint URL",
          "description" : "OAuth access token endpoint URL<br><br>This is the URL endpoint for
 access token retrieval provided by the OAuth Identity Provider. Refer to the <a href=\"http://
tools.ietf.org/html/rfc6749#section-3.2\" target=\"_blank\">RFC 6749</a>, section 3.2",
          "propertyOrder" : 700,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "subjectProperty" : {
          "title" : "Subject Property",
          "description" : "Property used to identify which attribute an auth server identifies a user
 by.",
          "propertyOrder" : 1100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "clientSecret" : {
          "title" : "Client Secret",
          "description" : "OAuth client_secret parameter<br><br>For more information on the OAuth
 client_secret parameter refer to the <a href=\"http://tools.ietf.org/html/rfc6749#section-2.3.1\"
 target=\"_blank\">RFC 6749</a>, section 2.3.1",
          "propertyOrder" : 500,
          "required" : true,
          "type" : "string",
          "format" : "password",
          "exampleValue" : ""
        }
      }
    }
  }
}
```


1.151.2. Global Operations

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Resource path: `/global-config/authentication/modules/authSocialInstagram`

Resource version: `1.0`

1.151.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action SocialAuthInstagramModule --global --actionName getAllTypes
```

1.151.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action SocialAuthInstagramModule --global --actionName getCreatableTypes
```

1.151.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action SocialAuthInstagramModule --global --actionName nextdescendents
```

1.151.2.4. read

Usage:

```
am> read SocialAuthInstagramModule --global
```

1.151.2.5. update

Usage:

```
am> update SocialAuthInstagramModule --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "defaults" : {
```


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```
     "properties" : {
       "usesBasicAuth" : {
         "title" : "Use Basic Auth",
         "description" : "When enabled, the client will use basic auth for authenticating with  the
 social auth provider. Enabled by default.",
         "propertyOrder" : 1200,
         "required" : true,
         "type" : "boolean",
         "exampleValue" : ""
       },
       "clientSecret" : {
         "title" : "Client Secret",
         "description" : "OAuth client_secret parameter<br><br>For more information on the OAuth
 client_secret parameter refer to the <a href=\"http://tools.ietf.org/html/rfc6749#section-2.3.1\"
 target=\"_blank\">RFC 6749</a>, section 2.3.1",
         "propertyOrder" : 500,
         "required" : true,
         "type" : "string",
         "format" : "password",
         "exampleValue" : ""
       },
       "clientId" : {
         "title" : "Client Id",
         "description" : "OAuth client_id parameter<br><br>For more information on the OAuth
 client_id parameter refer to the <a href=\"http://tools.ietf.org/html/rfc6749#section-2.3.1\" target=
\"_blank\">RFC 6749</a>, section 2.3.1",
         "propertyOrder" : 400,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       },
       "createAccount" : {
         "title" : "Create account if it does not exist",
         "description" : "If the OAuth2 account does not exist in the local OpenAM data store, an
 account will be created dynamically.<br><br>If this is enabled, the account mapper could create
 the account dynamically if there is no account mapped. Before creating the account, a dialog
 prompting for a password and asking for an activation code can be shown if the parameter \"Prompt
 for password setting and activation code\" is enabled.<br /><br />If this flag is not enabled, 3
 alternative options exist:<br/><br/><ol><li>The accounts need to have a user profile in the OpenAM
 User Data Store</li><li>The user does not have a user profile and the \"Ignore Profile\" is set in
 the Authentication Service of the realm.</li><li>The account is mapped to an anonymous account (see
 parameter \"Map to anonymous user\" and \"Anonymous User\")</li></ol>",
         "propertyOrder" : 1360,
         "required" : true,
         "type" : "boolean",
         "exampleValue" : ""
       },
       "scopeDelimiter" : {
         "title" : "Scope Delimiter",
         "description" : "Delimiter used to separate scope values. Default value is space.",
         "propertyOrder" : 1000,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       },
       "authorizeEndpoint" : {
         "title" : "Authentication Endpoint URL",
         "description" : "OAuth authentication endpoint URL<br><br>This is the URL endpoint for OAuth
 authentication provided by the OAuth Identity Provider",
```


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```
          "propertyOrder" : 600,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "ssoProxyUrl" : {
          "title" : "Proxy URL",
          "description" : "The URL to the OpenAM OAuth proxy JSP<br><br>This URL should only be
 changed from the default, if an external server is performing the GET to POST proxying. The default
 is <code>/openam/oauth2c/OAuthProxy.jsp</code>",
          "propertyOrder" : 1300,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "provider" : {
          "title" : "Social Provider",
          "description" : "Social Provider for which this module is being setup.",
          "propertyOrder" : 200,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "saveAttributesInSession" : {
          "title" : "Save attributes in the session",
          "description" : "If this option is enabled, the attributes configured in the attribute
 mapper will be saved into the OpenAM session",
          "propertyOrder" : 2400,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "mapToAnonymousUser" : {
          "title" : "Map to anonymous user",
          "description" : "Enabled anonymous user access to OpenAM for OAuth authenticated
 users<br><br>If selected, the authenticated users in the OAuth 2.0 Provider will be mapped to the
 anonymous user configured in the next parameter.<br/>If not selected the users authenticated will be
 mapped by the parameters configured in the account mapper.<br/><br/><i>NB </i>If <i>Create account if
 it does not exist</i> is enabled, that parameter takes precedence.",
          "propertyOrder" : 2000,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "tokenEndpoint" : {
          "title" : "Access Token Endpoint URL",
          "description" : "OAuth access token endpoint URL<br><br>This is the URL endpoint for
 access token retrieval provided by the OAuth Identity Provider. Refer to the <a href=\"http://
tools.ietf.org/html/rfc6749#section-3.2\" target=\"_blank\">RFC 6749</a>, section 3.2",
          "propertyOrder" : 700,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "logoutBehaviour" : {
          "title" : "Logout Options",
          "description" : "Specify logout behavior.<br><br>The following options are available
 for logging out of the OAuth 2.0 Provider when the user logs out of AM:<br/><ul><li>prompt:
 Ask the user whether to log out from the OAuth 2.0 Provider</li><li>logout: Log out from
```


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```
 the OAuth 2.0 Provider without asking the user</li><li>donotlogout: Do not log out the
 user from the OAuth 2.0 Provider</li></ul><br/>To enable IdP logout, you must also add
 <code>org.forgerock.openam.authentication.modules.oauth2.OAuth2PostAuthnPlugin</code> to the
 <em>Authentication Post Processing Classes</em> setting. Navigate to Authentication > Settings > Post
 Authentication Processing.",
          "propertyOrder" : 2155,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "accountMapperConfiguration" : {
          "title" : "Account Mapper Configuration",
          "description" : "Mapping of OAuth account to local OpenAM account<br><br>Attribute
 configuration that will be used to map the account of the user authenticated in the OAuth 2.0
 Provider to the local data store in the OpenAM. Example: <code>OAuth2.0_attribute=local_attribute</
code>",
          "propertyOrder" : 1600,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "userInfoEndpoint" : {
          "title" : "User Profile Service URL",
          "description" : "User profile information URL<br><br>This URL endpoint provides user profile
 information and is provided by the OAuth Identity Provider<br/><br/><i>NB </i>This URL should return
 JSON objects in response",
          "propertyOrder" : 800,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "enableRegistrationService" : {
          "title" : "Use IDM as Registration Service",
          "description" : "Whether to use IDM as an external Registration Service to complete
 registration for new users.<br><br>IDM is called and passed these parameters:<br/><br/
><ul><li><code>clientToken</code>: Signed, encrypted JWT of the OAuth 2.0 authentication state.</
li><li><code>returnParams</code>: Encoded URL parameters, required to be returned to AM to resume
 authentication after registration in IDM is complete.</li></ul>",
          "propertyOrder" : 1350,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "accountProviderClass" : {
          "title" : "Account Provider",
          "description" : "Name of the class implementing the account provider.<br><br>This
 class is used by the module to find the account from the attributes mapped by the Account
 Mapper <code>org.forgerock.openam.authentication.modules.common.mapping.AccountProvider</code>
 interface.<br/>String constructor parameters can be provided by appending <code>|</code> separated
 values.",
          "propertyOrder" : 1400,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "attributeMapperConfiguration" : {
```


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```
          "title" : "Attribute Mapper Configuration",
          "description" : "Mapping of OAuth attributes to local OpenAM attributes<br><br>Attribute
 configuration that will be used to map the user info obtained from the OAuth 2.0 Provider to the
 local user data store in the OpenAM.<br/><br/>Example: <code>OAuth2.0_attribute=local_attribute</
code>",
          "propertyOrder" : 1800,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "subjectProperty" : {
          "title" : "Subject Property",
          "description" : "Property used to identify which attribute an auth server identifies a user
 by.",
          "propertyOrder" : 1100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "attributeMappingClasses" : {
          "title" : "Attribute Mapper",
          "description" : "Name of the class that implements the attribute
 mapping<br><br>This class maps the OAuth properties into OpenAM properties. A custom
 attribute mapper can be provided.<br/><br/>A custom attribute mapper must implement the
 <code>org.forgerock.openam.authentication.modules.common.mapping.AttributeMapper</code>
 interface.<br/>Provided implementations
 are:<ul><li>org.forgerock.openam.authentication.modules.common.mapping.JsonAttributeMapper</
li><li>org.forgerock.openam.authentication.modules.oidc.JwtAttributeMapper (can only be used when
 using the openid scope)</li></ul>String constructor parameters can be provided by appending <code>|</
code> separated values.",
          "propertyOrder" : 1700,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "scope" : {
          "title" : "Scope",
          "description" : "OAuth scope; list of user profile properties<br><br>According to the OAuth
 2.0 Authorization Framework, scope is a space-separated list of user profile attributes that the
 client application requires. The list depends on the permissions that the resource owner grants to
 the client application.<br/><br/> Some authorization servers use non-standard separators for scopes.
 For example, Facebook takes a comma-separated list.<br/><br/>",
          "propertyOrder" : 900,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "anonymousUserName" : {
          "title" : "Anonymous User",
```


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```
          "description" : "Username of the OpenAM anonymous user<br><br>The username of the user that
 will represent the anonymous user. This user account must already exist in the realm.",
          "propertyOrder" : 2100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "authenticationLevel" : {
          "title" : "Authentication Level",
          "description" : "The authentication level associated with this module.<br><br>Each
 authentication module has an authentication level that can be used to indicate the level of security
 associated with the module; 0 is the lowest (and the default).",
          "propertyOrder" : 100,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "accountMapperClass" : {
          "title" : "Account Mapper",
          "description" : "Name of the class implementing the attribute mapping for the
 account search.<br><br>This class is used by the module to map from the account information
 received from the OAuth Identity Provider into OpenAM.<br/><br/>The class must implement
 the <code>org.forgerock.openam.authentication.modules.common.mapping.AttributeMapper</code>
 interface.<br/>Provided implementations
 are:<ul><li>org.forgerock.openam.authentication.modules.common.mapping.JsonAttributeMapper</
li><li>org.forgerock.openam.authentication.modules.oidc.JwtAttributeMapper (can only be used when
 using the openid scope)</li></ul>String constructor parameters can be provided by appending <code>|</
code> separated values.",
          "propertyOrder" : 1500,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "logoutServiceUrl" : {
          "title" : "OAuth 2.0 Provider Logout Service",
          "description" : "The URL of the Identity Provider's
 logout service.<br><br>To enable IdP logout, you must also add
 <code>org.forgerock.openam.authentication.modules.oauth2.OAuth2PostAuthnPlugin</code> to the
 <em>Authentication Post Processing Classes</em> setting. Navigate to Authentication > Settings > Post
 Authentication Processing.",
          "propertyOrder" : 2150,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      },
      "type" : "object",
      "title" : "Realm Defaults"
    }
  }
}
```


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1.152. SocialAuthOAuth2Module

1.152.1. Realm Operations

Resource path: `/realm-config/authentication/modules/authSocialOAuth2`

Resource version: `1.0`

1.152.1.1. create

Usage:

```
am> create SocialAuthOAuth2Module --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "emailSettings" : {
      "type" : "object",
      "title" : "Email",
      "propertyOrder" : 2,
      "properties" : {
        "smtpUsername" : {
          "title" : "SMTP User Name",
          "description" : "If the SMTP Service requires authentication, configure the user name here",
          "propertyOrder" : 1930,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "smtpPort" : {
          "title" : "SMTP port",
          "description" : "The TCP port that will be used by the SMTP gateway",
          "propertyOrder" : 1925,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "emailGateway" : {
          "title" : "Mail Server Gateway implementation class",
          "description" : "The class used by the module to send email.<br><br>This class is used by
 the module to send email. A custom implementation can be provided.<br/><br/>The custom implementation
 must implement the <code>org.forgerock.openam.authentication.modules.oauth2.EmailGateway</code>",
```


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```
          "propertyOrder" : 1915,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "smtpFromAddress" : {
          "title" : "SMTP From address",
          "description" : "The email address on behalf of whom the messages will be sent",
          "propertyOrder" : 1945,
          "required" : true,
          "type" : "string",
          "exampleValue" : "info@forgerock.com"
        },
        "emailAttribute" : {
          "title" : "Email attribute in the Response",
          "description" : "Attribute from the response used to send activation code emails.<br><br>The
attribute in the response from the profile service of the Provider that contains the email address of
the authenticated user. This address will be used to send an email with an activation code when the
accounts are allowed to be created dynamically.",
          "propertyOrder" : 1910,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "smtpSslEnabled" : {
          "title" : "SMTP SSL Enabled",
          "description" : "Tick this option if the SMTP Server provides SSL",
          "propertyOrder" : 1940,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "smtpHost" : {
          "title" : "SMTP host",
          "description" : "The mail host that will be used by the Email Gateway implementation",
          "propertyOrder" : 1920,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "smtpPassword" : {
          "title" : "SMTP User Password",
          "description" : "The Password of the SMTP User Name",
          "propertyOrder" : 1935,
          "required" : true,
          "type" : "string",
          "format" : "password",
          "exampleValue" : ""
        }
      }
    },
    "core" : {
      "type" : "object",
      "title" : "Core",
      "propertyOrder" : 0,
      "properties" : {
        "tokenEndpoint" : {
          "title" : "Access Token Endpoint URL",
```


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```
          "description" : "OAuth access token endpoint URL<br><br>This is the URL endpoint for
 access token retrieval provided by the OAuth Identity Provider. Refer to the <a href=\"http://
tools.ietf.org/html/rfc6749#section-3.2\" target=\"_blank\">RFC 6749</a>, section 3.2",
          "propertyOrder" : 700,
          "required" : true,
          "type" : "string",
          "exampleValue" : "https://www.googleapis.com/oauth2/v4/token"
        },
        "logoutBehaviour" : {
          "title" : "Logout Options",
          "description" : "Specify logout behavior.<br><br>The following options are available
 for logging out of the OAuth 2.0 Provider when the user logs out of AM:<br/><ul><li>prompt:
 Ask the user whether to log out from the OAuth 2.0 Provider</li><li>logout: Log out from
 the OAuth 2.0 Provider without asking the user</li><li>donotlogout: Do not log out the
 user from the OAuth 2.0 Provider</li></ul><br/>To enable IdP logout, you must also add
 <code>org.forgerock.openam.authentication.modules.oauth2.OAuth2PostAuthnPlugin</code> to the
 <em>Authentication Post Processing Classes</em> setting. Navigate to Authentication > Settings > Post
 Authentication Processing.",
          "propertyOrder" : 2155,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "userInfoEndpoint" : {
          "title" : "User Profile Service URL",
          "description" : "User profile information URL<br><br>This URL endpoint provides user profile
 information and is provided by the OAuth Identity Provider<br/><br/><i>NB </i>This URL should return
 JSON objects in response",
          "propertyOrder" : 800,
          "required" : true,
          "type" : "string",
          "exampleValue" : "https://www.googleapis.com/oauth2/v3/userinfo"
        },
        "ssoProxyUrl" : {
          "title" : "Proxy URL",
          "description" : "The URL to the OpenAM OAuth proxy JSP<br><br>This URL should only be
 changed from the default, if an external server is performing the GET to POST proxying. The default
 is <code>/openam/oauth2c/OAuthProxy.jsp</code>",
          "propertyOrder" : 1300,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "logoutServiceUrl" : {
          "title" : "OAuth 2.0 Provider Logout Service",
          "description" : "The URL of the Identity Provider's
 logout service.<br><br>To enable IdP logout, you must also add
 <code>org.forgerock.openam.authentication.modules.oauth2.OAuth2PostAuthnPlugin</code> to the
 <em>Authentication Post Processing Classes</em> setting. Navigate to Authentication > Settings > Post
 Authentication Processing.",
          "propertyOrder" : 2150,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "scopeDelimiter" : {
          "title" : "Scope Delimiter",
          "description" : "Delimiter used to separate scope values. Default value is space.",
          "propertyOrder" : 1000,
```


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```
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "issuerName" : {
          "title" : "Token Issuer",
          "description" : "Required when the 'openid' scope is included. Value must match the iss
 field in issued ID Token<br/>e.g. accounts.google.com<br><br>The issuer value MUST be provided when
 OAuth 2.0 Mix-Up Mitigation is enabled.",
          "propertyOrder" : 2500,
          "required" : true,
          "type" : "string",
          "exampleValue" : "https://accounts.google.com"
        },
        "clientId" : {
          "title" : "Client Id",
          "description" : "OAuth client_id parameter<br><br>For more information on the OAuth
 client_id parameter refer to the <a href=\"http://tools.ietf.org/html/rfc6749#section-2.3.1\" target=
\"_blank\">RFC 6749</a>, section 2.3.1",
          "propertyOrder" : 400,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "authorizeEndpoint" : {
          "title" : "Authentication Endpoint URL",
          "description" : "OAuth authentication endpoint URL<br><br>This is the URL endpoint for OAuth
 authentication provided by the OAuth Identity Provider",
          "propertyOrder" : 600,
          "required" : true,
          "type" : "string",
          "exampleValue" : "https://accounts.google.com/o/oauth2/v2/auth"
        },
        "scope" : {
          "title" : "Scope",
          "description" : "OAuth scope; list of user profile properties<br><br>According to the OAuth
 2.0 Authorization Framework, scope is a space-separated list of user profile attributes that the
 client application requires. The list depends on the permissions that the resource owner grants to
 the client application.<br/><br/> Some authorization servers use non-standard separators for scopes.
 For example, Facebook takes a comma-separated list.<br/><br/>",
          "propertyOrder" : 900,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : "profile email"
        },
        "clientSecret" : {
          "title" : "Client Secret",
          "description" : "OAuth client_secret parameter<br><br>For more information on the OAuth
 client_secret parameter refer to the <a href=\"http://tools.ietf.org/html/rfc6749#section-2.3.1\"
 target=\"_blank\">RFC 6749</a>, section 2.3.1",
          "propertyOrder" : 500,
          "required" : true,
          "type" : "string",
          "format" : "password",
          "exampleValue" : ""
        },
```


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```
        "usesBasicAuth" : {
          "title" : "Use Basic Auth",
          "description" : "When enabled, the client will use basic auth for authenticating with  the
 social auth provider. Enabled by default.",
          "propertyOrder" : 1200,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "authenticationLevel" : {
          "title" : "Authentication Level",
          "description" : "The authentication level associated with this module.<br><br>Each
 authentication module has an authentication level that can be used to indicate the level of security
 associated with the module; 0 is the lowest (and the default).",
          "propertyOrder" : 100,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "provider" : {
          "title" : "Social Provider",
          "description" : "Social Provider for which this module is being setup.",
          "propertyOrder" : 200,
          "required" : true,
          "type" : "string",
          "exampleValue" : "Google"
        },
        "mixUpMitigation" : {
          "title" : "OAuth 2.0 Mix-Up Mitigation enabled",
          "description" : "Enables OAuth 2.0 mix-up mitigation<br><br>The authorization
 server must support the <a href=\"https://tools.ietf.org/html/draft-ietf-oauth-mix-up-
mitigation-01#section-3.1\">OAuth 2.0 Mix-Up Mitigation draft</a>, otherwise OpenAM will fail to
 validate responses from the authorization server. If only the OAuth 2.0 protocol is utilized, make
 sure that the accepted issuer value is set in the \"Token Issuer\" setting.",
          "propertyOrder" : 2600,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "subjectProperty" : {
          "title" : "Subject Property",
          "description" : "Property used to identify which attribute an auth server identifies a user
 by.",
          "propertyOrder" : 1100,
          "required" : true,
          "type" : "string",
          "exampleValue" : "sub"
        }
      }
    },
    "accountProvisioning" : {
      "type" : "object",
      "title" : "Account Provisioning",
      "propertyOrder" : 1,
      "properties" : {
        "accountMapperConfiguration" : {
          "title" : "Account Mapper Configuration",
          "description" : "Mapping of OAuth account to local OpenAM account<br><br>Attribute
 configuration that will be used to map the account of the user authenticated in the OAuth 2.0
```


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```
 Provider to the local data store in the OpenAM. Example: <code>OAuth2.0_attribute=local_attribute</
code>",
          "propertyOrder" : 1600,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : "sub=uid"
        },
        "saveAttributesInSession" : {
          "title" : "Save attributes in the session",
          "description" : "If this option is enabled, the attributes configured in the attribute
 mapper will be saved into the OpenAM session",
          "propertyOrder" : 2400,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "createAccount" : {
          "title" : "Create account if it does not exist",
          "description" : "If the OAuth2 account does not exist in the local OpenAM data store, an
 account will be created dynamically.<br><br>If this is enabled, the account mapper could create
 the account dynamically if there is no account mapped. Before creating the account, a dialog
 prompting for a password and asking for an activation code can be shown if the parameter \"Prompt
 for password setting and activation code\" is enabled.<br /><br />If this flag is not enabled, 3
 alternative options exist:<br/><br/><ol><li>The accounts need to have a user profile in the OpenAM
 User Data Store</li><li>The user does not have a user profile and the \"Ignore Profile\" is set in
 the Authentication Service of the realm.</li><li>The account is mapped to an anonymous account (see
 parameter \"Map to anonymous user\" and \"Anonymous User\")</li></ol>",
          "propertyOrder" : 1360,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "accountProviderClass" : {
          "title" : "Account Provider",
          "description" : "Name of the class implementing the account provider.<br><br>This
 class is used by the module to find the account from the attributes mapped by the Account
 Mapper <code>org.forgerock.openam.authentication.modules.common.mapping.AccountProvider</code>
 interface.<br/>String constructor parameters can be provided by appending <code>|</code> separated
 values.",
          "propertyOrder" : 1400,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "mapToAnonymousUser" : {
          "title" : "Map to anonymous user",
          "description" : "Enabled anonymous user access to OpenAM for OAuth authenticated
 users<br><br>If selected, the authenticated users in the OAuth 2.0 Provider will be mapped to the
 anonymous user configured in the next parameter.<br/>If not selected the users authenticated will be
 mapped by the parameters configured in the account mapper.<br/><br/><i>NB </i>If <i>Create account if
 it does not exist</i> is enabled, that parameter takes precedence.",
          "propertyOrder" : 2000,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
```


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```
        "accountMapperClass" : {
          "title" : "Account Mapper",
          "description" : "Name of the class implementing the attribute mapping for the
 account search.<br><br>This class is used by the module to map from the account information
 received from the OAuth Identity Provider into OpenAM.<br/><br/>The class must implement
 the <code>org.forgerock.openam.authentication.modules.common.mapping.AttributeMapper</code>
 interface.<br/>Provided implementations
 are:<ul><li>org.forgerock.openam.authentication.modules.common.mapping.JsonAttributeMapper</
li><li>org.forgerock.openam.authentication.modules.oidc.JwtAttributeMapper (can only be used when
 using the openid scope)</li></ul>String constructor parameters can be provided by appending <code>|</
code> separated values.",
          "propertyOrder" : 1500,
          "required" : true,
          "type" : "string",
          "exampleValue" :
 "org.forgerock.openam.authentication.modules.common.mapping.JsonAttributeMapper|*|google-"
        },
        "attributeMapperConfiguration" : {
          "title" : "Attribute Mapper Configuration",
          "description" : "Mapping of OAuth attributes to local OpenAM attributes<br><br>Attribute
 configuration that will be used to map the user info obtained from the OAuth 2.0 Provider to the
 local user data store in the OpenAM.<br/><br/>Example: <code>OAuth2.0_attribute=local_attribute</
code>",
          "propertyOrder" : 1800,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : "given_name=givenName family_name=sn name=cn email=mail sub=uid"
        },
        "attributeMappingClasses" : {
          "title" : "Attribute Mapper",
          "description" : "Name of the class that implements the attribute
 mapping<br><br>This class maps the OAuth properties into OpenAM properties. A custom
 attribute mapper can be provided.<br/><br/>A custom attribute mapper must implement the
 <code>org.forgerock.openam.authentication.modules.common.mapping.AttributeMapper</code>
 interface.<br/>Provided implementations
 are:<ul><li>org.forgerock.openam.authentication.modules.common.mapping.JsonAttributeMapper</
li><li>org.forgerock.openam.authentication.modules.oidc.JwtAttributeMapper (can only be used when
 using the openid scope)</li></ul>String constructor parameters can be provided by appending <code>|</
code> separated values.",
          "propertyOrder" : 1700,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" :
 "org.forgerock.openam.authentication.modules.common.mapping.JsonAttributeMapper|uid|google-"
        },
        "promptPasswordFlag" : {
          "title" : "Prompt for password setting and activation code",
          "description" : "Users must set a password and complete the activation flow during dynamic
 profile creation.<br><br>If this is enabled, the user must set a password before the system creates
 an account dynamically and an activation code will be sent to the user's email address. The account
 will be created only if the password and activation code are properly set. <br />If this is disabled,
 the account will be created transparently without prompting the user.",
          "propertyOrder" : 1905,
```


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```
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "anonymousUserName" : {
          "title" : "Anonymous User",
          "description" : "Username of the OpenAM anonymous user<br><br>The username of the user that
 will represent the anonymous user. This user account must already exist in the realm.",
          "propertyOrder" : 2100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "enableRegistrationService" : {
          "title" : "Use IDM as Registration Service",
          "description" : "Whether to use IDM as an external Registration Service to complete
 registration for new users.<br><br>IDM is called and passed these parameters:<br/><br/
><ul><li><code>clientToken</code>: Signed, encrypted JWT of the OAuth 2.0 authentication state.</
li><li><code>returnParams</code>: Encoded URL parameters, required to be returned to AM to resume
 authentication after registration in IDM is complete.</li></ul>",
          "propertyOrder" : 1350,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        }
      }
    }
  }
}
```

1.152.1.2. delete

Usage:

```
am> delete SocialAuthOAuth2Module --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.152.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action SocialAuthOAuth2Module --realm Realm --actionName getAllTypes
```

1.152.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

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Usage:

```
am> action SocialAuthOAuth2Module --realm Realm --actionName getCreatableTypes
```

1.152.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action SocialAuthOAuth2Module --realm Realm --actionName nextdescendents
```

1.152.1.6. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

```
am> query SocialAuthOAuth2Module --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.152.1.7. read

Usage:

```
am> read SocialAuthOAuth2Module --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.152.1.8. update

Usage:

```
am> update SocialAuthOAuth2Module --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

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--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "emailSettings" : {
      "type" : "object",
      "title" : "Email",
      "propertyOrder" : 2,
      "properties" : {
        "smtpUsername" : {
          "title" : "SMTP User Name",
          "description" : "If the SMTP Service requires authentication, configure the user name here",
          "propertyOrder" : 1930,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "smtpPort" : {
          "title" : "SMTP port",
          "description" : "The TCP port that will be used by the SMTP gateway",
          "propertyOrder" : 1925,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "emailGateway" : {
          "title" : "Mail Server Gateway implementation class",
          "description" : "The class used by the module to send email.<br><br>This class is used by
the module to send email. A custom implementation can be provided.<br/><br/>The custom implementation
must implement the <code>org.forgerock.openam.authentication.modules.oauth2.EmailGateway</code>",
          "propertyOrder" : 1915,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "smtpFromAddress" : {
          "title" : "SMTP From address",
          "description" : "The email address on behalf of whom the messages will be sent",
          "propertyOrder" : 1945,
          "required" : true,
          "type" : "string",
          "exampleValue" : "info@forgerock.com"
        },
        "emailAttribute" : {
          "title" : "Email attribute in the Response",
          "description" : "Attribute from the response used to send activation code emails.<br><br>The
attribute in the response from the profile service of the Provider that contains the email address of
the authenticated user. This address will be used to send an email with an activation code when the
accounts are allowed to be created dynamically.",
          "propertyOrder" : 1910,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "smtpSslEnabled" : {
          "title" : "SMTP SSL Enabled",
```


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```
          "description" : "Tick this option if the SMTP Server provides SSL",
          "propertyOrder" : 1940,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "smtpHost" : {
          "title" : "SMTP host",
          "description" : "The mail host that will be used by the Email Gateway implementation",
          "propertyOrder" : 1920,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "smtpPassword" : {
          "title" : "SMTP User Password",
          "description" : "The Password of the SMTP User Name",
          "propertyOrder" : 1935,
          "required" : true,
          "type" : "string",
          "format" : "password",
          "exampleValue" : ""
        }
      }
    },
    "core" : {
      "type" : "object",
      "title" : "Core",
      "propertyOrder" : 0,
      "properties" : {
        "tokenEndpoint" : {
          "title" : "Access Token Endpoint URL",
          "description" : "OAuth access token endpoint URL<br><br>This is the URL endpoint for
 access token retrieval provided by the OAuth Identity Provider. Refer to the <a href=\"http://
tools.ietf.org/html/rfc6749#section-3.2\" target=\"_blank\">RFC 6749</a>, section 3.2",
          "propertyOrder" : 700,
          "required" : true,
          "type" : "string",
          "exampleValue" : "https://www.googleapis.com/oauth2/v4/token"
        },
        "logoutBehaviour" : {
          "title" : "Logout Options",
          "description" : "Specify logout behavior.<br><br>The following options are available
 for logging out of the OAuth 2.0 Provider when the user logs out of AM:<br/><ul><li>prompt:
 Ask the user whether to log out from the OAuth 2.0 Provider</li><li>logout: Log out from
 the OAuth 2.0 Provider without asking the user</li><li>donotlogout: Do not log out the
 user from the OAuth 2.0 Provider</li></ul><br/>To enable IdP logout, you must also add
 <code>org.forgerock.openam.authentication.modules.oauth2.OAuth2PostAuthnPlugin</code> to the
 <em>Authentication Post Processing Classes</em> setting. Navigate to Authentication > Settings > Post
 Authentication Processing.",
          "propertyOrder" : 2155,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "userInfoEndpoint" : {
          "title" : "User Profile Service URL",
```


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```
          "description" : "User profile information URL<br><br>This URL endpoint provides user profile
 information and is provided by the OAuth Identity Provider<br/><br/><i>NB </i>This URL should return
 JSON objects in response",
          "propertyOrder" : 800,
          "required" : true,
          "type" : "string",
          "exampleValue" : "https://www.googleapis.com/oauth2/v3/userinfo"
        },
        "ssoProxyUrl" : {
          "title" : "Proxy URL",
          "description" : "The URL to the OpenAM OAuth proxy JSP<br><br>This URL should only be
 changed from the default, if an external server is performing the GET to POST proxying. The default
 is <code>/openam/oauth2c/OAuthProxy.jsp</code>",
          "propertyOrder" : 1300,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "logoutServiceUrl" : {
          "title" : "OAuth 2.0 Provider Logout Service",
          "description" : "The URL of the Identity Provider's
 logout service.<br><br>To enable IdP logout, you must also add
 <code>org.forgerock.openam.authentication.modules.oauth2.OAuth2PostAuthnPlugin</code> to the
 <em>Authentication Post Processing Classes</em> setting. Navigate to Authentication > Settings > Post
 Authentication Processing.",
          "propertyOrder" : 2150,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "scopeDelimiter" : {
          "title" : "Scope Delimiter",
          "description" : "Delimiter used to separate scope values. Default value is space.",
          "propertyOrder" : 1000,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "issuerName" : {
          "title" : "Token Issuer",
          "description" : "Required when the 'openid' scope is included. Value must match the iss
 field in issued ID Token<br/>e.g. accounts.google.com<br><br>The issuer value MUST be provided when
 OAuth 2.0 Mix-Up Mitigation is enabled.",
          "propertyOrder" : 2500,
          "required" : true,
          "type" : "string",
          "exampleValue" : "https://accounts.google.com"
        },
        "clientId" : {
          "title" : "Client Id",
          "description" : "OAuth client_id parameter<br><br>For more information on the OAuth
 client_id parameter refer to the <a href=\"http://tools.ietf.org/html/rfc6749#section-2.3.1\" target=
\"_blank\">RFC 6749</a>, section 2.3.1",
          "propertyOrder" : 400,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "authorizeEndpoint" : {
```


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```
          "title" : "Authentication Endpoint URL",
          "description" : "OAuth authentication endpoint URL<br><br>This is the URL endpoint for OAuth
authentication provided by the OAuth Identity Provider",
          "propertyOrder" : 600,
          "required" : true,
          "type" : "string",
          "exampleValue" : "https://accounts.google.com/o/oauth2/v2/auth"
        },
        "scope" : {
          "title" : "Scope",
          "description" : "OAuth scope; list of user profile properties<br><br>According to the OAuth
2.0 Authorization Framework, scope is a space-separated list of user profile attributes that the
client application requires. The list depends on the permissions that the resource owner grants to
the client application.<br/><br/> Some authorization servers use non-standard separators for scopes.
For example, Facebook takes a comma-separated list.<br/><br/>",
          "propertyOrder" : 900,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : "profile email"
        },
        "clientSecret" : {
          "title" : "Client Secret",
          "description" : "OAuth client_secret parameter<br><br>For more information on the OAuth
client_secret parameter refer to the <a href=\"http://tools.ietf.org/html/rfc6749#section-2.3.1\"
target=\"_blank\">RFC 6749</a>, section 2.3.1",
          "propertyOrder" : 500,
          "required" : true,
          "type" : "string",
          "format" : "password",
          "exampleValue" : ""
        },
        "usesBasicAuth" : {
          "title" : "Use Basic Auth",
          "description" : "When enabled, the client will use basic auth for authenticating with  the
social auth provider. Enabled by default.",
          "propertyOrder" : 1200,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "authenticationLevel" : {
          "title" : "Authentication Level",
          "description" : "The authentication level associated with this module.<br><br>Each
authentication module has an authentication level that can be used to indicate the level of security
associated with the module; 0 is the lowest (and the default).",
          "propertyOrder" : 100,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "provider" : {
          "title" : "Social Provider",
          "description" : "Social Provider for which this module is being setup.",
          "propertyOrder" : 200,
          "required" : true,
          "type" : "string",
```


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```
          "exampleValue" : "Google"
        },
        "mixUpMitigation" : {
          "title" : "OAuth 2.0 Mix-Up Mitigation enabled",
          "description" : "Enables OAuth 2.0 mix-up mitigation<br><br>The authorization
 server must support the <a href=\"https://tools.ietf.org/html/draft-ietf-oauth-mix-up-
mitigation-01#section-3.1\">OAuth 2.0 Mix-Up Mitigation draft</a>, otherwise OpenAM will fail to
 validate responses from the authorization server. If only the OAuth 2.0 protocol is utilized, make
 sure that the accepted issuer value is set in the \"Token Issuer\" setting.",
          "propertyOrder" : 2600,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "subjectProperty" : {
          "title" : "Subject Property",
          "description" : "Property used to identify which attribute an auth server identifies a user
 by.",
          "propertyOrder" : 1100,
          "required" : true,
          "type" : "string",
          "exampleValue" : "sub"
        }
      }
    },
    "accountProvisioning" : {
      "type" : "object",
      "title" : "Account Provisioning",
      "propertyOrder" : 1,
      "properties" : {
        "accountMapperConfiguration" : {
          "title" : "Account Mapper Configuration",
          "description" : "Mapping of OAuth account to local OpenAM account<br><br>Attribute
 configuration that will be used to map the account of the user authenticated in the OAuth 2.0
 Provider to the local data store in the OpenAM. Example: <code>OAuth2.0_attribute=local_attribute</
code>",
          "propertyOrder" : 1600,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : "sub=uid"
        },
        "saveAttributesInSession" : {
          "title" : "Save attributes in the session",
          "description" : "If this option is enabled, the attributes configured in the attribute
 mapper will be saved into the OpenAM session",
          "propertyOrder" : 2400,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "createAccount" : {
          "title" : "Create account if it does not exist",
          "description" : "If the OAuth2 account does not exist in the local OpenAM data store, an
 account will be created dynamically.<br><br>If this is enabled, the account mapper could create
 the account dynamically if there is no account mapped. Before creating the account, a dialog
 prompting for a password and asking for an activation code can be shown if the parameter \"Prompt
```


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```
 for password setting and activation code\" is enabled.<br /><br />If this flag is not enabled, 3
 alternative options exist:<br/><br/><ol><li>The accounts need to have a user profile in the OpenAM
 User Data Store</li><li>The user does not have a user profile and the \"Ignore Profile\" is set in
 the Authentication Service of the realm.</li><li>The account is mapped to an anonymous account (see
 parameter \"Map to anonymous user\" and \"Anonymous User\")</li></ol>",
          "propertyOrder" : 1360,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "accountProviderClass" : {
          "title" : "Account Provider",
          "description" : "Name of the class implementing the account provider.<br><br>This
 class is used by the module to find the account from the attributes mapped by the Account
 Mapper <code>org.forgerock.openam.authentication.modules.common.mapping.AccountProvider</code>
 interface.<br/>String constructor parameters can be provided by appending <code>|</code> separated
 values.",
          "propertyOrder" : 1400,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "mapToAnonymousUser" : {
          "title" : "Map to anonymous user",
          "description" : "Enabled anonymous user access to OpenAM for OAuth authenticated
 users<br><br>If selected, the authenticated users in the OAuth 2.0 Provider will be mapped to the
 anonymous user configured in the next parameter.<br/>If not selected the users authenticated will be
 mapped by the parameters configured in the account mapper.<br/><br/><i>NB </i>If <i>Create account if
 it does not exist</i> is enabled, that parameter takes precedence.",
          "propertyOrder" : 2000,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "accountMapperClass" : {
          "title" : "Account Mapper",
          "description" : "Name of the class implementing the attribute mapping for the
 account search.<br><br>This class is used by the module to map from the account information
 received from the OAuth Identity Provider into OpenAM.<br/><br/>The class must implement
 the <code>org.forgerock.openam.authentication.modules.common.mapping.AttributeMapper</code>
 interface.<br/>Provided implementations
 are:<ul><li>org.forgerock.openam.authentication.modules.common.mapping.JsonAttributeMapper</
li><li>org.forgerock.openam.authentication.modules.oidc.JwtAttributeMapper (can only be used when
 using the openid scope)</li></ul>String constructor parameters can be provided by appending <code>|</
code> separated values.",
          "propertyOrder" : 1500,
          "required" : true,
          "type" : "string",
          "exampleValue" :
 "org.forgerock.openam.authentication.modules.common.mapping.JsonAttributeMapper|*|google-"
        },
        "attributeMapperConfiguration" : {
          "title" : "Attribute Mapper Configuration",
          "description" : "Mapping of OAuth attributes to local OpenAM attributes<br><br>Attribute
 configuration that will be used to map the user info obtained from the OAuth 2.0 Provider to the
 local user data store in the OpenAM.<br/><br/>Example: <code>OAuth2.0_attribute=local_attribute</
code>",
          "propertyOrder" : 1800,
          "required" : true,
```


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```
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : "given_name=givenName family_name=sn name=cn email=mail sub=uid"
        },
        "attributeMappingClasses" : {
          "title" : "Attribute Mapper",
          "description" : "Name of the class that implements the attribute
 mapping<br><br>This class maps the OAuth properties into OpenAM properties. A custom
 attribute mapper can be provided.<br/><br/>A custom attribute mapper must implement the
 <code>org.forgerock.openam.authentication.modules.common.mapping.AttributeMapper</code>
 interface.<br/>Provided implementations
 are:<ul><li>org.forgerock.openam.authentication.modules.common.mapping.JsonAttributeMapper</
li><li>org.forgerock.openam.authentication.modules.oidc.JwtAttributeMapper (can only be used when
 using the openid scope)</li></ul>String constructor parameters can be provided by appending <code>|</
code> separated values.",
          "propertyOrder" : 1700,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" :
 "org.forgerock.openam.authentication.modules.common.mapping.JsonAttributeMapper|uid|google-"
        },
        "promptPasswordFlag" : {
          "title" : "Prompt for password setting and activation code",
          "description" : "Users must set a password and complete the activation flow during dynamic
 profile creation.<br><br>If this is enabled, the user must set a password before the system creates
 an account dynamically and an activation code will be sent to the user's email address. The account
 will be created only if the password and activation code are properly set. <br />If this is disabled,
 the account will be created transparently without prompting the user.",
          "propertyOrder" : 1905,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "anonymousUserName" : {
          "title" : "Anonymous User",
          "description" : "Username of the OpenAM anonymous user<br><br>The username of the user that
 will represent the anonymous user. This user account must already exist in the realm.",
          "propertyOrder" : 2100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "enableRegistrationService" : {
          "title" : "Use IDM as Registration Service",
          "description" : "Whether to use IDM as an external Registration Service to complete
 registration for new users.<br><br>IDM is called and passed these parameters:<br/><br/
><ul><li><code>clientToken</code>: Signed, encrypted JWT of the OAuth 2.0 authentication state.</
li><li><code>returnParams</code>: Encoded URL parameters, required to be returned to AM to resume
 authentication after registration in IDM is complete.</li></ul>",
          "propertyOrder" : 1350,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        }
```


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```
      }
    }
  }
}
```

1.152.2. Global Operations

Resource path: `/global-config/authentication/modules/authSocialOAuth2`

Resource version: `1.0`

1.152.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action SocialAuthOAuth2Module --global --actionName getAllTypes
```

1.152.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action SocialAuthOAuth2Module --global --actionName getCreatableTypes
```

1.152.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action SocialAuthOAuth2Module --global --actionName nextdescendents
```

1.152.2.4. read

Usage:

```
am> read SocialAuthOAuth2Module --global
```

1.152.2.5. update

Usage:

```
am> update SocialAuthOAuth2Module --global --body body
```


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Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "defaults" : {
      "properties" : {
        "accountMapperConfiguration" : {
          "title" : "Account Mapper Configuration",
          "description" : "Mapping of OAuth account to local OpenAM account<br><br>Attribute
 configuration that will be used to map the account of the user authenticated in the OAuth 2.0
 Provider to the local data store in the OpenAM. Example: <code>OAuth2.0_attribute=local_attribute</
code>",
          "propertyOrder" : 1600,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : "sub=uid"
        },
        "smtpHost" : {
          "title" : "SMTP host",
          "description" : "The mail host that will be used by the Email Gateway implementation",
          "propertyOrder" : 1920,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "authorizeEndpoint" : {
          "title" : "Authentication Endpoint URL",
          "description" : "OAuth authentication endpoint URL<br><br>This is the URL endpoint for OAuth
 authentication provided by the OAuth Identity Provider",
          "propertyOrder" : 600,
          "required" : true,
          "type" : "string",
          "exampleValue" : "https://accounts.google.com/o/oauth2/v2/auth"
        },
        "attributeMapperConfiguration" : {
          "title" : "Attribute Mapper Configuration",
          "description" : "Mapping of OAuth attributes to local OpenAM attributes<br><br>Attribute
 configuration that will be used to map the user info obtained from the OAuth 2.0 Provider to the
 local user data store in the OpenAM.<br/><br/>Example: <code>OAuth2.0_attribute=local_attribute</
code>",
          "propertyOrder" : 1800,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : "given_name=givenName family_name=sn name=cn email=mail sub=uid"
        },
        "emailAttribute" : {
          "title" : "Email attribute in the Response",
```


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```
          "description" : "Attribute from the response used to send activation code emails.<br><br>The
attribute in the response from the profile service of the Provider that contains the email address of
the authenticated user. This address will be used to send an email with an activation code when the
accounts are allowed to be created dynamically.",
          "propertyOrder" : 1910,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "clientSecret" : {
          "title" : "Client Secret",
          "description" : "OAuth client_secret parameter<br><br>For more information on the OAuth
client_secret parameter refer to the <a href=\"http://tools.ietf.org/html/rfc6749#section-2.3.1\"
target=\"_blank\">RFC 6749</a>, section 2.3.1",
          "propertyOrder" : 500,
          "required" : true,
          "type" : "string",
          "format" : "password",
          "exampleValue" : ""
        },
        "saveAttributesInSession" : {
          "title" : "Save attributes in the session",
          "description" : "If this option is enabled, the attributes configured in the attribute
mapper will be saved into the OpenAM session",
          "propertyOrder" : 2400,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "createAccount" : {
          "title" : "Create account if it does not exist",
          "description" : "If the OAuth2 account does not exist in the local OpenAM data store, an
account will be created dynamically.<br><br>If this is enabled, the account mapper could create
the account dynamically if there is no account mapped. Before creating the account, a dialog
prompting for a password and asking for an activation code can be shown if the parameter \"Prompt
for password setting and activation code\" is enabled.<br /><br />If this flag is not enabled, 3
alternative options exist:<br/><br/><ol><li>The accounts need to have a user profile in the OpenAM
User Data Store</li><li>The user does not have a user profile and the \"Ignore Profile\" is set in
the Authentication Service of the realm.</li><li>The account is mapped to an anonymous account (see
parameter \"Map to anonymous user\" and \"Anonymous User\")</li></ol>",
          "propertyOrder" : 1360,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "smtpPassword" : {
          "title" : "SMTP User Password",
          "description" : "The Password of the SMTP User Name",
          "propertyOrder" : 1935,
          "required" : true,
          "type" : "string",
          "format" : "password",
          "exampleValue" : ""
        },
        "provider" : {
          "title" : "Social Provider",
          "description" : "Social Provider for which this module is being setup.",
          "propertyOrder" : 200,
          "required" : true,
```


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```
          "type" : "string",
          "exampleValue" : "Google"
        },
        "ssoProxyUrl" : {
          "title" : "Proxy URL",
          "description" : "The URL to the OpenAM OAuth proxy JSP<br><br>This URL should only be
 changed from the default, if an external server is performing the GET to POST proxying. The default
 is <code>/openam/oauth2c/OAuthProxy.jsp</code>",
          "propertyOrder" : 1300,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "smtpUsername" : {
          "title" : "SMTP User Name",
          "description" : "If the SMTP Service requires authentication, configure the user name here",
          "propertyOrder" : 1930,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "authenticationLevel" : {
          "title" : "Authentication Level",
          "description" : "The authentication level associated with this module.<br><br>Each
 authentication module has an authentication level that can be used to indicate the level of security
 associated with the module; 0 is the lowest (and the default).",
          "propertyOrder" : 100,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "issuerName" : {
          "title" : "Token Issuer",
          "description" : "Required when the 'openid' scope is included. Value must match the iss
 field in issued ID Token<br/>e.g. accounts.google.com<br><br>The issuer value MUST be provided when
 OAuth 2.0 Mix-Up Mitigation is enabled.",
          "propertyOrder" : 2500,
          "required" : true,
          "type" : "string",
          "exampleValue" : "https://accounts.google.com"
        },
        "enableRegistrationService" : {
          "title" : "Use IDM as Registration Service",
          "description" : "Whether to use IDM as an external Registration Service to complete
 registration for new users.<br><br>IDM is called and passed these parameters:<br/><br/
><ul><li><code>clientToken</code>: Signed, encrypted JWT of the OAuth 2.0 authentication state.</
li><li><code>returnParams</code>: Encoded URL parameters, required to be returned to AM to resume
 authentication after registration in IDM is complete.</li></ul>",
          "propertyOrder" : 1350,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "usesBasicAuth" : {
          "title" : "Use Basic Auth",
          "description" : "When enabled, the client will use basic auth for authenticating with  the
 social auth provider. Enabled by default.",
          "propertyOrder" : 1200,
          "required" : true,
```


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```
          "type" : "boolean",
          "exampleValue" : ""
        },
        "smtpSslEnabled" : {
          "title" : "SMTP SSL Enabled",
          "description" : "Tick this option if the SMTP Server provides SSL",
          "propertyOrder" : 1940,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "accountProviderClass" : {
          "title" : "Account Provider",
          "description" : "Name of the class implementing the account provider.<br><br>This
 class is used by the module to find the account from the attributes mapped by the Account
 Mapper <code>org.forgerock.openam.authentication.modules.common.mapping.AccountProvider</code>
 interface.<br/>String constructor parameters can be provided by appending <code>|</code> separated
 values.",
          "propertyOrder" : 1400,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "clientId" : {
          "title" : "Client Id",
          "description" : "OAuth client_id parameter<br><br>For more information on the OAuth
 client_id parameter refer to the <a href=\"http://tools.ietf.org/html/rfc6749#section-2.3.1\" target=
\"_blank\">RFC 6749</a>, section 2.3.1",
          "propertyOrder" : 400,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "mixUpMitigation" : {
          "title" : "OAuth 2.0 Mix-Up Mitigation enabled",
          "description" : "Enables OAuth 2.0 mix-up mitigation<br><br>The authorization
 server must support the <a href=\"https://tools.ietf.org/html/draft-ietf-oauth-mix-up-
mitigation-01#section-3.1\">OAuth 2.0 Mix-Up Mitigation draft</a>, otherwise OpenAM will fail to
 validate responses from the authorization server. If only the OAuth 2.0 protocol is utilized, make
 sure that the accepted issuer value is set in the \"Token Issuer\" setting.",
          "propertyOrder" : 2600,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "tokenEndpoint" : {
          "title" : "Access Token Endpoint URL",
          "description" : "OAuth access token endpoint URL<br><br>This is the URL endpoint for
 access token retrieval provided by the OAuth Identity Provider. Refer to the <a href=\"http://
tools.ietf.org/html/rfc6749#section-3.2\" target=\"_blank\">RFC 6749</a>, section 3.2",
          "propertyOrder" : 700,
          "required" : true,
          "type" : "string",
          "exampleValue" : "https://www.googleapis.com/oauth2/v4/token"
        },
        "scopeDelimiter" : {
          "title" : "Scope Delimiter",
          "description" : "Delimiter used to separate scope values. Default value is space.",
          "propertyOrder" : 1000,
```


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```
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "anonymousUserName" : {
          "title" : "Anonymous User",
          "description" : "Username of the OpenAM anonymous user<br><br>The username of the user that
 will represent the anonymous user. This user account must already exist in the realm.",
          "propertyOrder" : 2100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "logoutBehaviour" : {
          "title" : "Logout Options",
          "description" : "Specify logout behavior.<br><br>The following options are available
 for logging out of the OAuth 2.0 Provider when the user logs out of AM:<br/><ul><li>prompt:
 Ask the user whether to log out from the OAuth 2.0 Provider</li><li>logout: Log out from
 the OAuth 2.0 Provider without asking the user</li><li>donotlogout: Do not log out the
 user from the OAuth 2.0 Provider</li></ul><br/>To enable IdP logout, you must also add
 <code>org.forgerock.openam.authentication.modules.oauth2.OAuth2PostAuthnPlugin</code> to the
 <em>Authentication Post Processing Classes</em> setting. Navigate to Authentication > Settings > Post
 Authentication Processing.",
          "propertyOrder" : 2155,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "userInfoEndpoint" : {
          "title" : "User Profile Service URL",
          "description" : "User profile information URL<br><br>This URL endpoint provides user profile
 information and is provided by the OAuth Identity Provider<br/><br/><i>NB </i>This URL should return
 JSON objects in response",
          "propertyOrder" : 800,
          "required" : true,
          "type" : "string",
          "exampleValue" : "https://www.googleapis.com/oauth2/v3/userinfo"
        },
        "emailGateway" : {
          "title" : "Mail Server Gateway implementation class",
          "description" : "The class used by the module to send email.<br><br>This class is used by
 the module to send email. A custom implementation can be provided.<br/><br/>The custom implementation
 must implement the <code>org.forgerock.openam.authentication.modules.oauth2.EmailGateway</code>",
          "propertyOrder" : 1915,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "attributeMappingClasses" : {
          "title" : "Attribute Mapper",
          "description" : "Name of the class that implements the attribute
 mapping<br><br>This class maps the OAuth properties into OpenAM properties. A custom
 attribute mapper can be provided.<br/><br/>A custom attribute mapper must implement the
 <code>org.forgerock.openam.authentication.modules.common.mapping.AttributeMapper</code>
 interface.<br/>Provided implementations
 are:<ul><li>org.forgerock.openam.authentication.modules.common.mapping.JsonAttributeMapper</
li><li>org.forgerock.openam.authentication.modules.oidc.JwtAttributeMapper (can only be used when
 using the openid scope)</li></ul>String constructor parameters can be provided by appending <code>|</
code> separated values.",
```


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```
          "propertyOrder" : 1700,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" :
"org.forgerock.openam.authentication.modules.common.mapping.JsonAttributeMapper|uid|google-"
        },
        "logoutServiceUrl" : {
          "title" : "OAuth 2.0 Provider Logout Service",
          "description" : "The URL of the Identity Provider's
logout service.<br><br>To enable IdP logout, you must also add
<code>org.forgerock.openam.authentication.modules.oauth2.OAuth2PostAuthnPlugin</code> to the
<em>Authentication Post Processing Classes</em> setting. Navigate to Authentication > Settings > Post
Authentication Processing.",
          "propertyOrder" : 2150,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "smtpFromAddress" : {
          "title" : "SMTP From address",
          "description" : "The email address on behalf of whom the messages will be sent",
          "propertyOrder" : 1945,
          "required" : true,
          "type" : "string",
          "exampleValue" : "info@forgerock.com"
        },
        "promptPasswordFlag" : {
          "title" : "Prompt for password setting and activation code",
          "description" : "Users must set a password and complete the activation flow during dynamic
profile creation.<br><br>If this is enabled, the user must set a password before the system creates
an account dynamically and an activation code will be sent to the user's email address. The account
will be created only if the password and activation code are properly set. <br />If this is disabled,
the account will be created transparently without prompting the user.",
          "propertyOrder" : 1905,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "scope" : {
          "title" : "Scope",
          "description" : "OAuth scope; list of user profile properties<br><br>According to the OAuth
2.0 Authorization Framework, scope is a space-separated list of user profile attributes that the
client application requires. The list depends on the permissions that the resource owner grants to
the client application.<br/><br/> Some authorization servers use non-standard separators for scopes.
For example, Facebook takes a comma-separated list.<br/><br/>",
          "propertyOrder" : 900,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : "profile email"
        },
        "mapToAnonymousUser" : {
          "title" : "Map to anonymous user",
```


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```
          "description" : "Enabled anonymous user access to OpenAM for OAuth authenticated
 users<br><br>If selected, the authenticated users in the OAuth 2.0 Provider will be mapped to the
 anonymous user configured in the next parameter.<br/>If not selected the users authenticated will be
 mapped by the parameters configured in the account mapper.<br/><br/><i>NB </i>If <i>Create account if
 it does not exist</i> is enabled, that parameter takes precedence.",
          "propertyOrder" : 2000,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "smtpPort" : {
          "title" : "SMTP port",
          "description" : "The TCP port that will be used by the SMTP gateway",
          "propertyOrder" : 1925,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "subjectProperty" : {
          "title" : "Subject Property",
          "description" : "Property used to identify which attribute an auth server identifies a user
 by.",
          "propertyOrder" : 1100,
          "required" : true,
          "type" : "string",
          "exampleValue" : "sub"
        },
        "accountMapperClass" : {
          "title" : "Account Mapper",
          "description" : "Name of the class implementing the attribute mapping for the
 account search.<br><br>This class is used by the module to map from the account information
 received from the OAuth Identity Provider into OpenAM.<br/><br/>The class must implement
 the <code>org.forgerock.openam.authentication.modules.common.mapping.AttributeMapper</code>
 interface.<br/>Provided implementations
 are:<ul><li>org.forgerock.openam.authentication.modules.common.mapping.JsonAttributeMapper</
li><li>org.forgerock.openam.authentication.modules.oidc.JwtAttributeMapper (can only be used when
 using the openid scope)</li></ul>String constructor parameters can be provided by appending <code>|</
code> separated values.",
          "propertyOrder" : 1500,
          "required" : true,
          "type" : "string",
          "exampleValue" :
 "org.forgerock.openam.authentication.modules.common.mapping.JsonAttributeMapper|*|google-"
        }
      },
      "type" : "object",
      "title" : "Realm Defaults"
    }
  }
}
```


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1.153. SocialAuthOpenIDModule

1.153.1. Realm Operations

Resource path: `/realm-config/authentication/modules/authSocialOpenID`

Resource version: `1.0`

1.153.1.1. create

Usage:

```
am> create SocialAuthOpenIDModule --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "core" : {
      "type" : "object",
      "title" : "Core",
      "propertyOrder" : 0,
      "properties" : {
        "userInfoEndpoint" : {
          "title" : "User Profile Service URL",
          "description" : "User profile information URL<br><br>This URL endpoint provides user profile
 information and is provided by the OAuth Identity Provider<br/><br/><i>NB </i>This URL should return
 JSON objects in response",
          "propertyOrder" : 800,
          "required" : true,
          "type" : "string",
          "exampleValue" : "https://www.googleapis.com/oauth2/v3/userinfo"
        },
        "logoutServiceUrl" : {
          "title" : "OAuth 2.0 Provider Logout Service",
          "description" : "The URL of the Identity Provider's
 logout service.<br><br>To enable IdP logout, you must also add
 <code>org.forgerock.openam.authentication.modules.oauth2.OAuth2PostAuthnPlugin</code> to the
 <em>Authentication Post Processing Classes</em> setting. Navigate to Authentication > Settings > Post
 Authentication Processing.",
          "propertyOrder" : 2150,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
```


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```
        },
        "tokenEndpoint" : {
          "title" : "Access Token Endpoint URL",
          "description" : "OAuth access token endpoint URL<br><br>This is the URL endpoint for
 access token retrieval provided by the OAuth Identity Provider. Refer to the <a href=\"http://
tools.ietf.org/html/rfc6749#section-3.2\" target=\"_blank\">RFC 6749</a>, section 3.2",
          "propertyOrder" : 700,
          "required" : true,
          "type" : "string",
          "exampleValue" : "https://www.googleapis.com/oauth2/v4/token"
        },
        "logoutBehaviour" : {
          "title" : "Logout Options",
          "description" : "Specify logout behavior.<br><br>The following options are available
 for logging out of the OAuth 2.0 Provider when the user logs out of AM:<br/><ul><li>prompt:
 Ask the user whether to log out from the OAuth 2.0 Provider</li><li>logout: Log out from
 the OAuth 2.0 Provider without asking the user</li><li>donotlogout: Do not log out the
 user from the OAuth 2.0 Provider</li></ul><br/>To enable IdP logout, you must also add
 <code>org.forgerock.openam.authentication.modules.oauth2.OAuth2PostAuthnPlugin</code> to the
 <em>Authentication Post Processing Classes</em> setting. Navigate to Authentication > Settings > Post
 Authentication Processing.",
          "propertyOrder" : 2155,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "provider" : {
          "title" : "Social Provider",
          "description" : "Social Provider for which this module is being setup.",
          "propertyOrder" : 100,
          "required" : true,
          "type" : "string",
          "exampleValue" : "Google"
        },
        "authorizeEndpoint" : {
          "title" : "Authentication Endpoint URL",
          "description" : "OAuth authentication endpoint URL<br><br>This is the URL endpoint for OAuth
 authentication provided by the OAuth Identity Provider",
          "propertyOrder" : 600,
          "required" : true,
          "type" : "string",
          "exampleValue" : "https://accounts.google.com/o/oauth2/v2/auth"
        },
        "subjectProperty" : {
          "title" : "Subject Property",
          "description" : "Property used to identify which attribute an auth server identifies a user
 by.",
          "propertyOrder" : 1100,
          "required" : true,
          "type" : "string",
          "exampleValue" : "sub"
        },
        "authenticationLevel" : {
          "title" : "Authentication Level",
          "description" : "The authentication level associated with this module.<br><br>Each
 authentication module has an authentication level that can be used to indicate the level of security
 associated with the module; 0 is the lowest (and the default).",
          "propertyOrder" : 400,
          "required" : true,
```


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```
          "type" : "integer",
          "exampleValue" : ""
        },
        "usesBasicAuth" : {
          "title" : "Use Basic Auth",
          "description" : "When enabled, the client will use basic auth for authenticating with  the
 social auth provider. Enabled by default.",
          "propertyOrder" : 1200,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "issuerName" : {
          "title" : "Token Issuer",
          "description" : "Required when the 'openid' scope is included. Value must match the iss
 field in issued ID Token<br/>e.g. accounts.google.com<br><br>The issuer value MUST be provided when
 OAuth 2.0 Mix-Up Mitigation is enabled.",
          "propertyOrder" : 2700,
          "required" : true,
          "type" : "string",
          "exampleValue" : "https://accounts.google.com"
        },
        "clientId" : {
          "title" : "Client Id",
          "description" : "OAuth client_id parameter<br><br>For more information on the OAuth
 client_id parameter refer to the <a href=\"http://tools.ietf.org/html/rfc6749#section-2.3.1\" target=
\"_blank\">RFC 6749</a>, section 2.3.1",
          "propertyOrder" : 200,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "scope" : {
          "title" : "Scope",
          "description" : "OAuth scope; list of user profile properties<br><br>According to the OAuth
 2.0 Authorization Framework, scope is a space-separated list of user profile attributes that the
 client application requires. The list depends on the permissions that the resource owner grants to
 the client application.<br/><br/> Some authorization servers use non-standard separators for scopes.
 For example, Facebook takes a comma-separated list.<br/><br/>",
          "propertyOrder" : 900,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : "profile email openid"
        },
        "ssoProxyUrl" : {
          "title" : "Proxy URL",
          "description" : "The URL to the OpenAM OAuth proxy JSP<br><br>This URL should only be
 changed from the default, if an external server is performing the GET to POST proxying. The default
 is <code>/openam/oauth2c/OAuthProxy.jsp</code>",
          "propertyOrder" : 1300,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "mixUpMitigation" : {
          "title" : "OAuth 2.0 Mix-Up Mitigation enabled",
```


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```
          "description" : "Enables OAuth 2.0 mix-up mitigation<br><br>The authorization
 server must support the <a href=\"https://tools.ietf.org/html/draft-ietf-oauth-mix-up-
mitigation-01#section-3.1\">OAuth 2.0 Mix-Up Mitigation draft</a>, otherwise OpenAM will fail to
 validate responses from the authorization server. If only the OAuth 2.0 protocol is utilized, make
 sure that the accepted issuer value is set in the \"Token Issuer\" setting.",
          "propertyOrder" : 2800,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "clientSecret" : {
          "title" : "Client Secret",
          "description" : "OAuth client_secret parameter<br><br>For more information on the OAuth
 client_secret parameter refer to the <a href=\"http://tools.ietf.org/html/rfc6749#section-2.3.1\"
 target=\"_blank\">RFC 6749</a>, section 2.3.1",
          "propertyOrder" : 300,
          "required" : true,
          "type" : "string",
          "format" : "password",
          "exampleValue" : ""
        },
        "scopeDelimiter" : {
          "title" : "Scope Delimiter",
          "description" : "Delimiter used to separate scope values. Default value is space.",
          "propertyOrder" : 1000,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    },
    "emailSettings" : {
      "type" : "object",
      "title" : "Email",
      "propertyOrder" : 3,
      "properties" : {
        "smtpSslEnabled" : {
          "title" : "SMTP SSL Enabled",
          "description" : "Tick this option if the SMTP Server provides SSL",
          "propertyOrder" : 1940,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "smtpFromAddress" : {
          "title" : "SMTP From address",
          "description" : "The email address on behalf of whom the messages will be sent",
          "propertyOrder" : 1945,
          "required" : true,
          "type" : "string",
          "exampleValue" : "info@forgerock.com"
        },
        "emailAttribute" : {
          "title" : "Email attribute in the Response",
          "description" : "Attribute from the response used to send activation code emails.<br><br>The
 attribute in the response from the profile service of the Provider that contains the email address of
 the authenticated user. This address will be used to send an email with an activation code when the
 accounts are allowed to be created dynamically.",
          "propertyOrder" : 1910,
```


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```
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "smtpUsername" : {
          "title" : "SMTP User Name",
          "description" : "If the SMTP Service requires authentication, configure the user name here",
          "propertyOrder" : 1930,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "smtpPassword" : {
          "title" : "SMTP User Password",
          "description" : "The Password of the SMTP User Name",
          "propertyOrder" : 1935,
          "required" : true,
          "type" : "string",
          "format" : "password",
          "exampleValue" : ""
        },
        "smtpHost" : {
          "title" : "SMTP host",
          "description" : "The mail host that will be used by the Email Gateway implementation",
          "propertyOrder" : 1920,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "emailGateway" : {
          "title" : "Mail Server Gateway implementation class",
          "description" : "The class used by the module to send email.<br><br>This class is used by
the module to send email. A custom implementation can be provided.<br/><br/>The custom implementation
must implement the <code>org.forgerock.openam.authentication.modules.oauth2.EmailGateway</code>",
          "propertyOrder" : 1915,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "smtpPort" : {
          "title" : "SMTP port",
          "description" : "The TCP port that will be used by the SMTP gateway",
          "propertyOrder" : 1925,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    },
    "accountProvisioning" : {
      "type" : "object",
      "title" : "Account Provisioning",
      "propertyOrder" : 2,
      "properties" : {
        "attributeMapperConfiguration" : {
          "title" : "Attribute Mapper Configuration",
          "description" : "Mapping of OAuth attributes to local OpenAM attributes<br><br>Attribute
configuration that will be used to map the user info obtained from the OAuth 2.0 Provider to the
```


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```
 local user data store in the OpenAM.<br/><br/>Example: <code>OAuth2.0_attribute=local_attribute</
code>",
          "propertyOrder" : 1800,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : "given_name=givenName family_name=sn name=cn email=mail sub=uid"
        },
        "accountMapperConfiguration" : {
          "title" : "Account Mapper Configuration",
          "description" : "Mapping of OAuth account to local OpenAM account<br><br>Attribute
 configuration that will be used to map the account of the user authenticated in the OAuth 2.0
 Provider to the local data store in the OpenAM. Example: <code>OAuth2.0_attribute=local_attribute</
code>",
          "propertyOrder" : 1600,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : "sub=uid"
        },
        "accountProviderClass" : {
          "title" : "Account Provider",
          "description" : "Name of the class implementing the account provider.<br><br>This
 class is used by the module to find the account from the attributes mapped by the Account
 Mapper <code>org.forgerock.openam.authentication.modules.common.mapping.AccountProvider</code>
 interface.<br/>String constructor parameters can be provided by appending <code>|</code> separated
 values.",
          "propertyOrder" : 1400,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "accountMapperClass" : {
          "title" : "Account Mapper",
          "description" : "Name of the class implementing the attribute mapping for the
 account search.<br><br>This class is used by the module to map from the account information
 received from the OAuth Identity Provider into OpenAM.<br/><br/>The class must implement
 the <code>org.forgerock.openam.authentication.modules.common.mapping.AttributeMapper</code>
 interface.<br/>Provided implementations
 are:<ul><li>org.forgerock.openam.authentication.modules.common.mapping.JsonAttributeMapper</
li><li>org.forgerock.openam.authentication.modules.oidc.JwtAttributeMapper (can only be used when
 using the openid scope)</li></ul>String constructor parameters can be provided by appending <code>|</
code> separated values.",
          "propertyOrder" : 1500,
          "required" : true,
          "type" : "string",
          "exampleValue" :
 "org.forgerock.openam.authentication.modules.common.mapping.JsonAttributeMapper|*|google-"
        },
        "enableRegistrationService" : {
          "title" : "Use IDM as Registration Service",
          "description" : "Whether to use IDM as an external Registration Service to complete
 registration for new users.<br><br>IDM is called and passed these parameters:<br/><br/
><ul><li><code>clientToken</code>: Signed, encrypted JWT of the OAuth 2.0 authentication state.</
```


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```
li><li><code>returnParams</code>: Encoded URL parameters, required to be returned to AM to resume
 authentication after registration in IDM is complete.</li></ul>",
          "propertyOrder" : 1350,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "anonymousUserName" : {
          "title" : "Anonymous User",
          "description" : "Username of the OpenAM anonymous user<br><br>The username of the user that
 will represent the anonymous user. This user account must already exist in the realm.",
          "propertyOrder" : 2100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "createAccount" : {
          "title" : "Create account if it does not exist",
          "description" : "If the OAuth2 account does not exist in the local OpenAM data store, an
 account will be created dynamically.<br><br>If this is enabled, the account mapper could create
 the account dynamically if there is no account mapped. Before creating the account, a dialog
 prompting for a password and asking for an activation code can be shown if the parameter \"Prompt
 for password setting and activation code\" is enabled.<br /><br />If this flag is not enabled, 3
 alternative options exist:<br/><br/><ol><li>The accounts need to have a user profile in the OpenAM
 User Data Store</li><li>The user does not have a user profile and the \"Ignore Profile\" is set in
 the Authentication Service of the realm.</li><li>The account is mapped to an anonymous account (see
 parameter \"Map to anonymous user\" and \"Anonymous User\")</li></ol>",
          "propertyOrder" : 1360,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "saveAttributesInSession" : {
          "title" : "Save attributes in the session",
          "description" : "If this option is enabled, the attributes configured in the attribute
 mapper will be saved into the OpenAM session",
          "propertyOrder" : 2400,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "attributeMappingClasses" : {
          "title" : "Attribute Mapper",
          "description" : "Name of the class that implements the attribute
 mapping<br><br>This class maps the OAuth properties into OpenAM properties. A custom
 attribute mapper can be provided.<br/><br/>A custom attribute mapper must implement the
 <code>org.forgerock.openam.authentication.modules.common.mapping.AttributeMapper</code>
 interface.<br/>Provided implementations
 are:<ul><li>org.forgerock.openam.authentication.modules.common.mapping.JsonAttributeMapper</
li><li>org.forgerock.openam.authentication.modules.oidc.JwtAttributeMapper (can only be used when
 using the openid scope)</li></ul>String constructor parameters can be provided by appending <code>|</
code> separated values.",
          "propertyOrder" : 1700,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
```


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```
          "exampleValue" :
 "org.forgerock.openam.authentication.modules.common.mapping.JsonAttributeMapper|uid|google-"
        },
        "promptPasswordFlag" : {
          "title" : "Prompt for password setting and activation code",
          "description" : "Users must set a password and complete the activation flow during dynamic
 profile creation.<br><br>If this is enabled, the user must set a password before the system creates
 an account dynamically and an activation code will be sent to the user's email address. The account
 will be created only if the password and activation code are properly set. <br />If this is disabled,
 the account will be created transparently without prompting the user.",
          "propertyOrder" : 1905,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "mapToAnonymousUser" : {
          "title" : "Map to anonymous user",
          "description" : "Enabled anonymous user access to OpenAM for OAuth authenticated
 users<br><br>If selected, the authenticated users in the OAuth 2.0 Provider will be mapped to the
 anonymous user configured in the next parameter.<br/>If not selected the users authenticated will be
 mapped by the parameters configured in the account mapper.<br/><br/><i>NB </i>If <i>Create account if
 it does not exist</i> is enabled, that parameter takes precedence.",
          "propertyOrder" : 2000,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        }
      }
    },
    "openId" : {
      "type" : "object",
      "title" : "OpenID Connect",
      "propertyOrder" : 1,
      "properties" : {
        "cryptoContextValue" : {
          "title" : "OpenID Connect validation configuration value",
          "description" : "Required when the 'openid' scope is included. The discovery url, or jwk
 url, or the client_secret, corresponding to the selection above.<br><br>If discovery or jwk url
 entered, entry must be in valid url format, <br/>e.g. https://accounts.google.com/.well-known/openid-
configuration<br/><i>NB </i>If client_secret entered, entry is ignored and the value of the Client
 Secret is used.",
          "propertyOrder" : 2600,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "cryptoContextType" : {
          "title" : "OpenID Connect validation configuration type",
          "description" : "Required when the 'openid' scope is included. Please select either 1. the
 issuer discovery url, 2. the issuer jwk url, or 3. the client_secret.",
          "propertyOrder" : 2500,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    }
  }
```


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```
}
```

1.153.1.2. delete

Usage:

```
am> delete SocialAuthOpenIDModule --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.153.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action SocialAuthOpenIDModule --realm Realm --actionName getAllTypes
```

1.153.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action SocialAuthOpenIDModule --realm Realm --actionName getCreatableTypes
```

1.153.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action SocialAuthOpenIDModule --realm Realm --actionName nextdescendents
```

1.153.1.6. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

```
am> query SocialAuthOpenIDModule --realm Realm --filter filter
```

Parameters:

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--filter

A CREST formatted query filter, where "true" will query all.

1.153.1.7. read

Usage:

```
am> read SocialAuthOpenIDModule --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.153.1.8. update

Usage:

```
am> update SocialAuthOpenIDModule --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "core" : {
      "type" : "object",
      "title" : "Core",
      "propertyOrder" : 0,
      "properties" : {
        "userInfoEndpoint" : {
          "title" : "User Profile Service URL",
          "description" : "User profile information URL<br><br>This URL endpoint provides user profile
 information and is provided by the OAuth Identity Provider<br/><br/><i>NB </i>This URL should return
 JSON objects in response",
          "propertyOrder" : 800,
          "required" : true,
          "type" : "string",
          "exampleValue" : "https://www.googleapis.com/oauth2/v3/userinfo"
        },
        "logoutServiceUrl" : {
          "title" : "OAuth 2.0 Provider Logout Service",
          "description" : "The URL of the Identity Provider's
 logout service.<br><br>To enable IdP logout, you must also add
```


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```
 <code>org.forgerock.openam.authentication.modules.oauth2.OAuth2PostAuthnPlugin</code> to the
 <em>Authentication Post Processing Classes</em> setting. Navigate to Authentication > Settings > Post
 Authentication Processing.",
          "propertyOrder" : 2150,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "tokenEndpoint" : {
          "title" : "Access Token Endpoint URL",
          "description" : "OAuth access token endpoint URL<br><br>This is the URL endpoint for
 access token retrieval provided by the OAuth Identity Provider. Refer to the <a href=\"http://
tools.ietf.org/html/rfc6749#section-3.2\" target=\"_blank\">RFC 6749</a>, section 3.2",
          "propertyOrder" : 700,
          "required" : true,
          "type" : "string",
          "exampleValue" : "https://www.googleapis.com/oauth2/v4/token"
        },
        "logoutBehaviour" : {
          "title" : "Logout Options",
          "description" : "Specify logout behavior.<br><br>The following options are available
 for logging out of the OAuth 2.0 Provider when the user logs out of AM:<br/><ul><li>prompt:
 Ask the user whether to log out from the OAuth 2.0 Provider</li><li>logout: Log out from
 the OAuth 2.0 Provider without asking the user</li><li>donotlogout: Do not log out the
 user from the OAuth 2.0 Provider</li></ul><br/>To enable IdP logout, you must also add
 <code>org.forgerock.openam.authentication.modules.oauth2.OAuth2PostAuthnPlugin</code> to the
 <em>Authentication Post Processing Classes</em> setting. Navigate to Authentication > Settings > Post
 Authentication Processing.",
          "propertyOrder" : 2155,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "provider" : {
          "title" : "Social Provider",
          "description" : "Social Provider for which this module is being setup.",
          "propertyOrder" : 100,
          "required" : true,
          "type" : "string",
          "exampleValue" : "Google"
        },
        "authorizeEndpoint" : {
          "title" : "Authentication Endpoint URL",
          "description" : "OAuth authentication endpoint URL<br><br>This is the URL endpoint for OAuth
 authentication provided by the OAuth Identity Provider",
          "propertyOrder" : 600,
          "required" : true,
          "type" : "string",
          "exampleValue" : "https://accounts.google.com/o/oauth2/v2/auth"
        },
        "subjectProperty" : {
          "title" : "Subject Property",
          "description" : "Property used to identify which attribute an auth server identifies a user
 by.",
          "propertyOrder" : 1100,
          "required" : true,
          "type" : "string",
          "exampleValue" : "sub"
        },
```


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```
       "authenticationLevel" : {
         "title" : "Authentication Level",
         "description" : "The authentication level associated with this module.<br><br>Each
 authentication module has an authentication level that can be used to indicate the level of security
 associated with the module; 0 is the lowest (and the default).",
         "propertyOrder" : 400,
         "required" : true,
         "type" : "integer",
         "exampleValue" : ""
       },
       "usesBasicAuth" : {
         "title" : "Use Basic Auth",
         "description" : "When enabled, the client will use basic auth for authenticating with  the
 social auth provider. Enabled by default.",
         "propertyOrder" : 1200,
         "required" : true,
         "type" : "boolean",
         "exampleValue" : ""
       },
       "issuerName" : {
         "title" : "Token Issuer",
         "description" : "Required when the 'openid' scope is included. Value must match the iss
 field in issued ID Token<br/>e.g. accounts.google.com<br><br>The issuer value MUST be provided when
 OAuth 2.0 Mix-Up Mitigation is enabled.",
         "propertyOrder" : 2700,
         "required" : true,
         "type" : "string",
         "exampleValue" : "https://accounts.google.com"
       },
       "clientId" : {
         "title" : "Client Id",
         "description" : "OAuth client_id parameter<br><br>For more information on the OAuth
 client_id parameter refer to the <a href=\"http://tools.ietf.org/html/rfc6749#section-2.3.1\" target=
\"_blank\">RFC 6749</a>, section 2.3.1",
         "propertyOrder" : 200,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       },
       "scope" : {
         "title" : "Scope",
         "description" : "OAuth scope; list of user profile properties<br><br>According to the OAuth
 2.0 Authorization Framework, scope is a space-separated list of user profile attributes that the
 client application requires. The list depends on the permissions that the resource owner grants to
 the client application.<br/><br/> Some authorization servers use non-standard separators for scopes.
 For example, Facebook takes a comma-separated list.<br/><br/>",
         "propertyOrder" : 900,
         "required" : true,
         "items" : {
           "type" : "string"
         },
         "type" : "array",
         "exampleValue" : "profile email openid"
       },
       "ssoProxyUrl" : {
         "title" : "Proxy URL",
         "description" : "The URL to the OpenAM OAuth proxy JSP<br><br>This URL should only be
 changed from the default, if an external server is performing the GET to POST proxying. The default
 is <code>/openam/oauth2c/OAuthProxy.jsp</code>",
```


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```
          "propertyOrder" : 1300,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "mixUpMitigation" : {
          "title" : "OAuth 2.0 Mix-Up Mitigation enabled",
          "description" : "Enables OAuth 2.0 mix-up mitigation<br><br>The authorization
 server must support the <a href=\"https://tools.ietf.org/html/draft-ietf-oauth-mix-up-
mitigation-01#section-3.1\">OAuth 2.0 Mix-Up Mitigation draft</a>, otherwise OpenAM will fail to
 validate responses from the authorization server. If only the OAuth 2.0 protocol is utilized, make
 sure that the accepted issuer value is set in the \"Token Issuer\" setting.",
          "propertyOrder" : 2800,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "clientSecret" : {
          "title" : "Client Secret",
          "description" : "OAuth client_secret parameter<br><br>For more information on the OAuth
 client_secret parameter refer to the <a href=\"http://tools.ietf.org/html/rfc6749#section-2.3.1\"
 target=\"_blank\">RFC 6749</a>, section 2.3.1",
          "propertyOrder" : 300,
          "required" : true,
          "type" : "string",
          "format" : "password",
          "exampleValue" : ""
        },
        "scopeDelimiter" : {
          "title" : "Scope Delimiter",
          "description" : "Delimiter used to separate scope values. Default value is space.",
          "propertyOrder" : 1000,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    },
    "emailSettings" : {
      "type" : "object",
      "title" : "Email",
      "propertyOrder" : 3,
      "properties" : {
        "smtpSslEnabled" : {
          "title" : "SMTP SSL Enabled",
          "description" : "Tick this option if the SMTP Server provides SSL",
          "propertyOrder" : 1940,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "smtpFromAddress" : {
          "title" : "SMTP From address",
          "description" : "The email address on behalf of whom the messages will be sent",
          "propertyOrder" : 1945,
          "required" : true,
          "type" : "string",
          "exampleValue" : "info@forgerock.com"
        },
```


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```
       "emailAttribute" : {
         "title" : "Email attribute in the Response",
         "description" : "Attribute from the response used to send activation code emails.<br><br>The
attribute in the response from the profile service of the Provider that contains the email address of
the authenticated user. This address will be used to send an email with an activation code when the
accounts are allowed to be created dynamically.",
         "propertyOrder" : 1910,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       },
       "smtpUsername" : {
         "title" : "SMTP User Name",
         "description" : "If the SMTP Service requires authentication, configure the user name here",
         "propertyOrder" : 1930,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       },
       "smtpPassword" : {
         "title" : "SMTP User Password",
         "description" : "The Password of the SMTP User Name",
         "propertyOrder" : 1935,
         "required" : true,
         "type" : "string",
         "format" : "password",
         "exampleValue" : ""
       },
       "smtpHost" : {
         "title" : "SMTP host",
         "description" : "The mail host that will be used by the Email Gateway implementation",
         "propertyOrder" : 1920,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       },
       "emailGateway" : {
         "title" : "Mail Server Gateway implementation class",
         "description" : "The class used by the module to send email.<br><br>This class is used by
the module to send email. A custom implementation can be provided.<br/><br/>The custom implementation
must implement the <code>org.forgerock.openam.authentication.modules.oauth2.EmailGateway</code>",
         "propertyOrder" : 1915,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       },
       "smtpPort" : {
         "title" : "SMTP port",
         "description" : "The TCP port that will be used by the SMTP gateway",
         "propertyOrder" : 1925,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       }
     }
   },
   "accountProvisioning" : {
     "type" : "object",
     "title" : "Account Provisioning",
```


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```
      "propertyOrder" : 2,
      "properties" : {
        "attributeMapperConfiguration" : {
          "title" : "Attribute Mapper Configuration",
          "description" : "Mapping of OAuth attributes to local OpenAM attributes<br><br>Attribute
 configuration that will be used to map the user info obtained from the OAuth 2.0 Provider to the
 local user data store in the OpenAM.<br/><br/>Example: <code>OAuth2.0_attribute=local_attribute</
code>",
          "propertyOrder" : 1800,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : "given_name=givenName family_name=sn name=cn email=mail sub=uid"
        },
        "accountMapperConfiguration" : {
          "title" : "Account Mapper Configuration",
          "description" : "Mapping of OAuth account to local OpenAM account<br><br>Attribute
 configuration that will be used to map the account of the user authenticated in the OAuth 2.0
 Provider to the local data store in the OpenAM. Example: <code>OAuth2.0_attribute=local_attribute</
code>",
          "propertyOrder" : 1600,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : "sub=uid"
        },
        "accountProviderClass" : {
          "title" : "Account Provider",
          "description" : "Name of the class implementing the account provider.<br><br>This
 class is used by the module to find the account from the attributes mapped by the Account
 Mapper <code>org.forgerock.openam.authentication.modules.common.mapping.AccountProvider</code>
 interface.<br/>String constructor parameters can be provided by appending <code>|</code> separated
 values.",
          "propertyOrder" : 1400,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "accountMapperClass" : {
          "title" : "Account Mapper",
          "description" : "Name of the class implementing the attribute mapping for the
 account search.<br><br>This class is used by the module to map from the account information
 received from the OAuth Identity Provider into OpenAM.<br/><br/>The class must implement
 the <code>org.forgerock.openam.authentication.modules.common.mapping.AttributeMapper</code>
 interface.<br/>Provided implementations
 are:<ul><li>org.forgerock.openam.authentication.modules.common.mapping.JsonAttributeMapper</
li><li>org.forgerock.openam.authentication.modules.oidc.JwtAttributeMapper (can only be used when
 using the openid scope)</li></ul>String constructor parameters can be provided by appending <code>|</
code> separated values.",
          "propertyOrder" : 1500,
          "required" : true,
          "type" : "string",
          "exampleValue" :
 "org.forgerock.openam.authentication.modules.common.mapping.JsonAttributeMapper|*|google-"
        },
```


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```
        "enableRegistrationService" : {
          "title" : "Use IDM as Registration Service",
          "description" : "Whether to use IDM as an external Registration Service to complete
 registration for new users.<br><br>IDM is called and passed these parameters:<br/><br/
><ul><li><code>clientToken</code>: Signed, encrypted JWT of the OAuth 2.0 authentication state.</
li><li><code>returnParams</code>: Encoded URL parameters, required to be returned to AM to resume
 authentication after registration in IDM is complete.</li></ul>",
          "propertyOrder" : 1350,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "anonymousUserName" : {
          "title" : "Anonymous User",
          "description" : "Username of the OpenAM anonymous user<br><br>The username of the user that
 will represent the anonymous user. This user account must already exist in the realm.",
          "propertyOrder" : 2100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "createAccount" : {
          "title" : "Create account if it does not exist",
          "description" : "If the OAuth2 account does not exist in the local OpenAM data store, an
 account will be created dynamically.<br><br>If this is enabled, the account mapper could create
 the account dynamically if there is no account mapped. Before creating the account, a dialog
 prompting for a password and asking for an activation code can be shown if the parameter \"Prompt
 for password setting and activation code\" is enabled.<br /><br />If this flag is not enabled, 3
 alternative options exist:<br/><br/><ol><li>The accounts need to have a user profile in the OpenAM
 User Data Store</li><li>The user does not have a user profile and the \"Ignore Profile\" is set in
 the Authentication Service of the realm.</li><li>The account is mapped to an anonymous account (see
 parameter \"Map to anonymous user\" and \"Anonymous User\")</li></ol>",
          "propertyOrder" : 1360,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "saveAttributesInSession" : {
          "title" : "Save attributes in the session",
          "description" : "If this option is enabled, the attributes configured in the attribute
 mapper will be saved into the OpenAM session",
          "propertyOrder" : 2400,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "attributeMappingClasses" : {
          "title" : "Attribute Mapper",
          "description" : "Name of the class that implements the attribute
 mapping<br><br>This class maps the OAuth properties into OpenAM properties. A custom
 attribute mapper can be provided.<br/><br/>A custom attribute mapper must implement the
 <code>org.forgerock.openam.authentication.modules.common.mapping.AttributeMapper</code>
 interface.<br/>Provided implementations
 are:<ul><li>org.forgerock.openam.authentication.modules.common.mapping.JsonAttributeMapper</
li><li>org.forgerock.openam.authentication.modules.oidc.JwtAttributeMapper (can only be used when
 using the openid scope)</li></ul>String constructor parameters can be provided by appending <code>|</
code> separated values.",
          "propertyOrder" : 1700,
          "required" : true,
```


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```
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" :
 "org.forgerock.openam.authentication.modules.common.mapping.JsonAttributeMapper|uid|google-"
        },
        "promptPasswordFlag" : {
          "title" : "Prompt for password setting and activation code",
          "description" : "Users must set a password and complete the activation flow during dynamic
 profile creation.<br><br>If this is enabled, the user must set a password before the system creates
 an account dynamically and an activation code will be sent to the user's email address. The account
 will be created only if the password and activation code are properly set. <br />If this is disabled,
 the account will be created transparently without prompting the user.",
          "propertyOrder" : 1905,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "mapToAnonymousUser" : {
          "title" : "Map to anonymous user",
          "description" : "Enabled anonymous user access to OpenAM for OAuth authenticated
 users<br><br>If selected, the authenticated users in the OAuth 2.0 Provider will be mapped to the
 anonymous user configured in the next parameter.<br/>If not selected the users authenticated will be
 mapped by the parameters configured in the account mapper.<br/><br/><i>NB </i>If <i>Create account if
 it does not exist</i> is enabled, that parameter takes precedence.",
          "propertyOrder" : 2000,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        }
      }
    },
    "openId" : {
      "type" : "object",
      "title" : "OpenID Connect",
      "propertyOrder" : 1,
      "properties" : {
        "cryptoContextValue" : {
          "title" : "OpenID Connect validation configuration value",
          "description" : "Required when the 'openid' scope is included. The discovery url, or jwk
 url, or the client_secret, corresponding to the selection above.<br><br>If discovery or jwk url
 entered, entry must be in valid url format, <br/>e.g. https://accounts.google.com/.well-known/openid-
configuration<br/><i>NB </i>If client_secret entered, entry is ignored and the value of the Client
 Secret is used.",
          "propertyOrder" : 2600,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "cryptoContextType" : {
          "title" : "OpenID Connect validation configuration type",
          "description" : "Required when the 'openid' scope is included. Please select either 1. the
 issuer discovery url, 2. the issuer jwk url, or 3. the client_secret.",
          "propertyOrder" : 2500,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
```


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```
      }
    }
  }
}
```

1.153.2. Global Operations

Resource path: `/global-config/authentication/modules/authSocialOpenID`

Resource version: `1.0`

1.153.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action SocialAuthOpenIDModule --global --actionName getAllTypes
```

1.153.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action SocialAuthOpenIDModule --global --actionName getCreatableTypes
```

1.153.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action SocialAuthOpenIDModule --global --actionName nextdescendents
```

1.153.2.4. read

Usage:

```
am> read SocialAuthOpenIDModule --global
```

1.153.2.5. update

Usage:

```
am> update SocialAuthOpenIDModule --global --body body
```


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Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "defaults" : {
      "properties" : {
        "tokenEndpoint" : {
          "title" : "Access Token Endpoint URL",
          "description" : "OAuth access token endpoint URL<br><br>This is the URL endpoint for
 access token retrieval provided by the OAuth Identity Provider. Refer to the <a href=\"http://
tools.ietf.org/html/rfc6749#section-3.2\" target=\"_blank\">RFC 6749</a>, section 3.2",
          "propertyOrder" : 700,
          "required" : true,
          "type" : "string",
          "exampleValue" : "https://www.googleapis.com/oauth2/v4/token"
        },
        "authenticationLevel" : {
          "title" : "Authentication Level",
          "description" : "The authentication level associated with this module.<br><br>Each
 authentication module has an authentication level that can be used to indicate the level of security
 associated with the module; 0 is the lowest (and the default).",
          "propertyOrder" : 400,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "attributeMapperConfiguration" : {
          "title" : "Attribute Mapper Configuration",
          "description" : "Mapping of OAuth attributes to local OpenAM attributes<br><br>Attribute
 configuration that will be used to map the user info obtained from the OAuth 2.0 Provider to the
 local user data store in the OpenAM.<br/><br/>Example: <code>OAuth2.0_attribute=local_attribute</
code>",
          "propertyOrder" : 1800,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : "given_name=givenName family_name=sn name=cn email=mail sub=uid"
        },
        "issuerName" : {
          "title" : "Token Issuer",
          "description" : "Required when the 'openid' scope is included. Value must match the iss
 field in issued ID Token<br/>e.g. accounts.google.com<br><br>The issuer value MUST be provided when
 OAuth 2.0 Mix-Up Mitigation is enabled.",
          "propertyOrder" : 2700,
          "required" : true,
          "type" : "string",
          "exampleValue" : "https://accounts.google.com"
        },
        "promptPasswordFlag" : {
          "title" : "Prompt for password setting and activation code",
          "description" : "Users must set a password and complete the activation flow during dynamic
 profile creation.<br><br>If this is enabled, the user must set a password before the system creates
```


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```
 an account dynamically and an activation code will be sent to the user's email address. The account
 will be created only if the password and activation code are properly set. <br />If this is disabled,
 the account will be created transparently without prompting the user.",
          "propertyOrder" : 1905,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "smtpPassword" : {
          "title" : "SMTP User Password",
          "description" : "The Password of the SMTP User Name",
          "propertyOrder" : 1935,
          "required" : true,
          "type" : "string",
          "format" : "password",
          "exampleValue" : ""
        },
        "accountProviderClass" : {
          "title" : "Account Provider",
          "description" : "Name of the class implementing the account provider.<br><br>This
 class is used by the module to find the account from the attributes mapped by the Account
 Mapper <code>org.forgerock.openam.authentication.modules.common.mapping.AccountProvider</code>
 interface.<br/>String constructor parameters can be provided by appending <code>|</code> separated
 values.",
          "propertyOrder" : 1400,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "smtpUsername" : {
          "title" : "SMTP User Name",
          "description" : "If the SMTP Service requires authentication, configure the user name here",
          "propertyOrder" : 1930,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "mixUpMitigation" : {
          "title" : "OAuth 2.0 Mix-Up Mitigation enabled",
          "description" : "Enables OAuth 2.0 mix-up mitigation<br><br>The authorization
 server must support the <a href=\"https://tools.ietf.org/html/draft-ietf-oauth-mix-up-
mitigation-01#section-3.1\">OAuth 2.0 Mix-Up Mitigation draft</a>, otherwise OpenAM will fail to
 validate responses from the authorization server. If only the OAuth 2.0 protocol is utilized, make
 sure that the accepted issuer value is set in the \"Token Issuer\" setting.",
          "propertyOrder" : 2800,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "smtpPort" : {
          "title" : "SMTP port",
          "description" : "The TCP port that will be used by the SMTP gateway",
          "propertyOrder" : 1925,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "subjectProperty" : {
          "title" : "Subject Property",
```


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```
          "description" : "Property used to identify which attribute an auth server identifies a user
 by.",
          "propertyOrder" : 1100,
          "required" : true,
          "type" : "string",
          "exampleValue" : "sub"
        },
        "createAccount" : {
          "title" : "Create account if it does not exist",
          "description" : "If the OAuth2 account does not exist in the local OpenAM data store, an
 account will be created dynamically.<br><br>If this is enabled, the account mapper could create
 the account dynamically if there is no account mapped. Before creating the account, a dialog
 prompting for a password and asking for an activation code can be shown if the parameter \"Prompt
 for password setting and activation code\" is enabled.<br /><br />If this flag is not enabled, 3
 alternative options exist:<br/><br/><ol><li>The accounts need to have a user profile in the OpenAM
 User Data Store</li><li>The user does not have a user profile and the \"Ignore Profile\" is set in
 the Authentication Service of the realm.</li><li>The account is mapped to an anonymous account (see
 parameter \"Map to anonymous user\" and \"Anonymous User\")</li></ol>",
          "propertyOrder" : 1360,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "accountMapperConfiguration" : {
          "title" : "Account Mapper Configuration",
          "description" : "Mapping of OAuth account to local OpenAM account<br><br>Attribute
 configuration that will be used to map the account of the user authenticated in the OAuth 2.0
 Provider to the local data store in the OpenAM. Example: <code>OAuth2.0_attribute=local_attribute</
code>",
          "propertyOrder" : 1600,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : "sub=uid"
        },
        "scopeDelimiter" : {
          "title" : "Scope Delimiter",
          "description" : "Delimiter used to separate scope values. Default value is space.",
          "propertyOrder" : 1000,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "cryptoContextType" : {
          "title" : "OpenID Connect validation configuration type",
          "description" : "Required when the 'openid' scope is included. Please select either 1. the
 issuer discovery url, 2. the issuer jwk url, or 3. the client_secret.",
          "propertyOrder" : 2500,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "emailAttribute" : {
          "title" : "Email attribute in the Response",
          "description" : "Attribute from the response used to send activation code emails.<br><br>The
 attribute in the response from the profile service of the Provider that contains the email address of
```


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```
 the authenticated user. This address will be used to send an email with an activation code when the
 accounts are allowed to be created dynamically.",
          "propertyOrder" : 1910,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "smtpSslEnabled" : {
          "title" : "SMTP SSL Enabled",
          "description" : "Tick this option if the SMTP Server provides SSL",
          "propertyOrder" : 1940,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "authorizeEndpoint" : {
          "title" : "Authentication Endpoint URL",
          "description" : "OAuth authentication endpoint URL<br><br>This is the URL endpoint for OAuth
 authentication provided by the OAuth Identity Provider",
          "propertyOrder" : 600,
          "required" : true,
          "type" : "string",
          "exampleValue" : "https://accounts.google.com/o/oauth2/v2/auth"
        },
        "scope" : {
          "title" : "Scope",
          "description" : "OAuth scope; list of user profile properties<br><br>According to the OAuth
 2.0 Authorization Framework, scope is a space-separated list of user profile attributes that the
 client application requires. The list depends on the permissions that the resource owner grants to
 the client application.<br/><br/> Some authorization servers use non-standard separators for scopes.
 For example, Facebook takes a comma-separated list.<br/><br/>",
          "propertyOrder" : 900,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : "profile email openid"
        },
        "enableRegistrationService" : {
          "title" : "Use IDM as Registration Service",
          "description" : "Whether to use IDM as an external Registration Service to complete
 registration for new users.<br><br>IDM is called and passed these parameters:<br/><br/
><ul><li><code>clientToken</code>: Signed, encrypted JWT of the OAuth 2.0 authentication state.</
li><li><code>returnParams</code>: Encoded URL parameters, required to be returned to AM to resume
 authentication after registration in IDM is complete.</li></ul>",
          "propertyOrder" : 1350,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "clientSecret" : {
          "title" : "Client Secret",
          "description" : "OAuth client_secret parameter<br><br>For more information on the OAuth
 client_secret parameter refer to the <a href=\"http://tools.ietf.org/html/rfc6749#section-2.3.1\"
 target=\"_blank\">RFC 6749</a>, section 2.3.1",
          "propertyOrder" : 300,
          "required" : true,
          "type" : "string",
```


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```
          "format" : "password",
          "exampleValue" : ""
        },
        "accountMapperClass" : {
          "title" : "Account Mapper",
          "description" : "Name of the class implementing the attribute mapping for the
 account search.<br><br>This class is used by the module to map from the account information
 received from the OAuth Identity Provider into OpenAM.<br/><br/>The class must implement
 the <code>org.forgerock.openam.authentication.modules.common.mapping.AttributeMapper</code>
 interface.<br/>Provided implementations
 are:<ul><li>org.forgerock.openam.authentication.modules.common.mapping.JsonAttributeMapper</
li><li>org.forgerock.openam.authentication.modules.oidc.JwtAttributeMapper (can only be used when
 using the openid scope)</li></ul>String constructor parameters can be provided by appending <code>|</
code> separated values.",
          "propertyOrder" : 1500,
          "required" : true,
          "type" : "string",
          "exampleValue" :
 "org.forgerock.openam.authentication.modules.common.mapping.JsonAttributeMapper|*|google-"
        },
        "anonymousUserName" : {
          "title" : "Anonymous User",
          "description" : "Username of the OpenAM anonymous user<br><br>The username of the user that
 will represent the anonymous user. This user account must already exist in the realm.",
          "propertyOrder" : 2100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "emailGateway" : {
          "title" : "Mail Server Gateway implementation class",
          "description" : "The class used by the module to send email.<br><br>This class is used by
 the module to send email. A custom implementation can be provided.<br/><br/>The custom implementation
 must implement the <code>org.forgerock.openam.authentication.modules.oauth2.EmailGateway</code>",
          "propertyOrder" : 1915,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "logoutBehaviour" : {
          "title" : "Logout Options",
          "description" : "Specify logout behavior.<br><br>The following options are available
 for logging out of the OAuth 2.0 Provider when the user logs out of AM:<br/><ul><li>prompt:
 Ask the user whether to log out from the OAuth 2.0 Provider</li><li>logout: Log out from
 the OAuth 2.0 Provider without asking the user</li><li>donotlogout: Do not log out the
 user from the OAuth 2.0 Provider</li></ul><br/>To enable IdP logout, you must also add
 <code>org.forgerock.openam.authentication.modules.oauth2.OAuth2PostAuthnPlugin</code> to the
 <em>Authentication Post Processing Classes</em> setting. Navigate to Authentication > Settings > Post
 Authentication Processing.",
          "propertyOrder" : 2155,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "attributeMappingClasses" : {
          "title" : "Attribute Mapper",
          "description" : "Name of the class that implements the attribute
 mapping<br><br>This class maps the OAuth properties into OpenAM properties. A custom
 attribute mapper can be provided.<br/><br/>A custom attribute mapper must implement the
```


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```
 <code>org.forgerock.openam.authentication.modules.common.mapping.AttributeMapper</code>
 interface.<br/>Provided implementations
 are:<ul><li>org.forgerock.openam.authentication.modules.common.mapping.JsonAttributeMapper</
li><li>org.forgerock.openam.authentication.modules.oidc.JwtAttributeMapper (can only be used when
 using the openid scope)</li></ul>String constructor parameters can be provided by appending <code>|</
code> separated values.",
          "propertyOrder" : 1700,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" :
 "org.forgerock.openam.authentication.modules.common.mapping.JsonAttributeMapper|uid|google-"
        },
        "cryptoContextValue" : {
          "title" : "OpenID Connect validation configuration value",
          "description" : "Required when the 'openid' scope is included. The discovery url, or jwk
 url, or the client_secret, corresponding to the selection above.<br><br>If discovery or jwk url
 entered, entry must be in valid url format, <br/>e.g. https://accounts.google.com/.well-known/openid-
configuration<br/><i>NB </i>If client_secret entered, entry is ignored and the value of the Client
 Secret is used.",
          "propertyOrder" : 2600,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "provider" : {
          "title" : "Social Provider",
          "description" : "Social Provider for which this module is being setup.",
          "propertyOrder" : 100,
          "required" : true,
          "type" : "string",
          "exampleValue" : "Google"
        },
        "saveAttributesInSession" : {
          "title" : "Save attributes in the session",
          "description" : "If this option is enabled, the attributes configured in the attribute
 mapper will be saved into the OpenAM session",
          "propertyOrder" : 2400,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "smtpFromAddress" : {
          "title" : "SMTP From address",
          "description" : "The email address on behalf of whom the messages will be sent",
          "propertyOrder" : 1945,
          "required" : true,
          "type" : "string",
          "exampleValue" : "info@forgerock.com"
        },
        "mapToAnonymousUser" : {
          "title" : "Map to anonymous user",
          "description" : "Enabled anonymous user access to OpenAM for OAuth authenticated
 users<br><br>If selected, the authenticated users in the OAuth 2.0 Provider will be mapped to the
 anonymous user configured in the next parameter.<br/>If not selected the users authenticated will be
 mapped by the parameters configured in the account mapper.<br/><br/><i>NB </i>If <i>Create account if
 it does not exist</i> is enabled, that parameter takes precedence.",
```


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```
          "propertyOrder" : 2000,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "userInfoEndpoint" : {
          "title" : "User Profile Service URL",
          "description" : "User profile information URL<br><br>This URL endpoint provides user profile
 information and is provided by the OAuth Identity Provider<br/><br/><i>NB </i>This URL should return
 JSON objects in response",
          "propertyOrder" : 800,
          "required" : true,
          "type" : "string",
          "exampleValue" : "https://www.googleapis.com/oauth2/v3/userinfo"
        },
        "usesBasicAuth" : {
          "title" : "Use Basic Auth",
          "description" : "When enabled, the client will use basic auth for authenticating with  the
 social auth provider. Enabled by default.",
          "propertyOrder" : 1200,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "ssoProxyUrl" : {
          "title" : "Proxy URL",
          "description" : "The URL to the OpenAM OAuth proxy JSP<br><br>This URL should only be
 changed from the default, if an external server is performing the GET to POST proxying. The default
 is <code>/openam/oauth2c/OAuthProxy.jsp</code>",
          "propertyOrder" : 1300,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "clientId" : {
          "title" : "Client Id",
          "description" : "OAuth client_id parameter<br><br>For more information on the OAuth
 client_id parameter refer to the <a href=\"http://tools.ietf.org/html/rfc6749#section-2.3.1\" target=
\"_blank\">RFC 6749</a>, section 2.3.1",
          "propertyOrder" : 200,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "logoutServiceUrl" : {
          "title" : "OAuth 2.0 Provider Logout Service",
          "description" : "The URL of the Identity Provider's
 logout service.<br><br>To enable IdP logout, you must also add
 <code>org.forgerock.openam.authentication.modules.oauth2.OAuth2PostAuthnPlugin</code> to the
 <em>Authentication Post Processing Classes</em> setting. Navigate to Authentication > Settings > Post
 Authentication Processing.",
          "propertyOrder" : 2150,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "smtpHost" : {
          "title" : "SMTP host",
          "description" : "The mail host that will be used by the Email Gateway implementation",
```


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```
          "propertyOrder" : 1920,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      },
      "type" : "object",
      "title" : "Realm Defaults"
    }
  }
}
```

1.154. SocialAuthVKontakteModule

1.154.1. Realm Operations

Resource path: `/realm-config/authentication/modules/authSocialVk`

Resource version: `1.0`

1.154.1.1. create

Usage:

```
am> create SocialAuthVKontakteModule --realm Realm --id id --body body
```

Parameters:

`--id`

The unique identifier for the resource.

`--body`

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "accountProvisioning" : {
      "type" : "object",
      "title" : "Account Provisioning",
      "propertyOrder" : 1,
      "properties" : {
        "anonymousUserName" : {
          "title" : "Anonymous User",
          "description" : "Username of the OpenAM anonymous user<br><br>The username of the user that
 will represent the anonymous user. This user account must already exist in the realm.",
          "propertyOrder" : 1800,
          "required" : true,
          "type" : "string",
```


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```
          "exampleValue" : ""
        },
        "accountMapperClass" : {
          "title" : "Account Mapper",
          "description" : "Name of the class implementing the attribute mapping for the
 account search.<br><br>This class is used by the module to map from the account information
 received from the OAuth Identity Provider into OpenAM.<br/><br/>The class must implement
 the <code>org.forgerock.openam.authentication.modules.common.mapping.AttributeMapper</code>
 interface.<br/>Provided implementations
 are:<ul><li>org.forgerock.openam.authentication.modules.common.mapping.JsonAttributeMapper</
li><li>org.forgerock.openam.authentication.modules.oidc.JwtAttributeMapper (can only be used when
 using the openid scope)</li></ul>String constructor parameters can be provided by appending <code>|</
code> separated values.",
          "propertyOrder" : 1200,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "accountMapperConfiguration" : {
          "title" : "Account Mapper Configuration",
          "description" : "Mapping of OAuth account to local OpenAM account<br><br>Attribute
 configuration that will be used to map the account of the user authenticated in the OAuth 2.0
 Provider to the local data store in the OpenAM. Example: <code>OAuth2.0_attribute=local_attribute</
code>",
          "propertyOrder" : 1300,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "mapToAnonymousUser" : {
          "title" : "Map to anonymous user",
          "description" : "Enabled anonymous user access to OpenAM for OAuth authenticated
 users<br><br>If selected, the authenticated users in the OAuth 2.0 Provider will be mapped to the
 anonymous user configured in the next parameter.<br/>If not selected the users authenticated will be
 mapped by the parameters configured in the account mapper.<br/><br/><i>NB </i>If <i>Create account if
 it does not exist</i> is enabled, that parameter takes precedence.",
          "propertyOrder" : 1700,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "attributeMapperConfiguration" : {
          "title" : "Attribute Mapper Configuration",
          "description" : "Mapping of OAuth attributes to local OpenAM attributes<br><br>Attribute
 configuration that will be used to map the user info obtained from the OAuth 2.0 Provider to the
 local user data store in the OpenAM.<br/><br/>Example: <code>OAuth2.0_attribute=local_attribute</
code>",
          "propertyOrder" : 1500,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "enableRegistrationService" : {
```


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```
          "title" : "Use IDM as Registration Service",
          "description" : "Whether to use IDM as an external Registration Service to complete
 registration for new users.<br><br>IDM is called and passed these parameters:<br/><br/
><ul><li><code>clientToken</code>: Signed, encrypted JWT of the OAuth 2.0 authentication state.</
li><li><code>returnParams</code>: Encoded URL parameters, required to be returned to AM to resume
 authentication after registration in IDM is complete.</li></ul>",
          "propertyOrder" : 1150,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "promptPasswordFlag" : {
          "title" : "Prompt for password setting and activation code",
          "description" : "Users must set a password and complete the activation flow during dynamic
 profile creation.<br><br>If this is enabled, the user must set a password before the system creates
 an account dynamically and an activation code will be sent to the user's email address. The account
 will be created only if the password and activation code are properly set. <br />If this is disabled,
 the account will be created transparently without prompting the user.",
          "propertyOrder" : 1605,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "saveAttributesInSession" : {
          "title" : "Save attributes in the session",
          "description" : "If this option is enabled, the attributes configured in the attribute
 mapper will be saved into the OpenAM session",
          "propertyOrder" : 2000,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "createAccount" : {
          "title" : "Create account if it does not exist",
          "description" : "If the OAuth2 account does not exist in the local OpenAM data store, an
 account will be created dynamically.<br><br>If this is enabled, the account mapper could create
 the account dynamically if there is no account mapped. Before creating the account, a dialog
 prompting for a password and asking for an activation code can be shown if the parameter \"Prompt
 for password setting and activation code\" is enabled.<br /><br />If this flag is not enabled, 3
 alternative options exist:<br/><br/><ol><li>The accounts need to have a user profile in the OpenAM
 User Data Store</li><li>The user does not have a user profile and the \"Ignore Profile\" is set in
 the Authentication Service of the realm.</li><li>The account is mapped to an anonymous account (see
 parameter \"Map to anonymous user\" and \"Anonymous User\")</li></ol>",
          "propertyOrder" : 1160,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "accountProviderClass" : {
          "title" : "Account Provider",
          "description" : "Name of the class implementing the account provider.<br><br>This
 class is used by the module to find the account from the attributes mapped by the Account
 Mapper <code>org.forgerock.openam.authentication.modules.common.mapping.AccountProvider</code>
 interface.<br/>String constructor parameters can be provided by appending <code>|</code> separated
 values.",
          "propertyOrder" : 1100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
```


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```
        },
        "attributeMappingClasses" : {
          "title" : "Attribute Mapper",
          "description" : "Name of the class that implements the attribute
 mapping<br><br>This class maps the OAuth properties into OpenAM properties. A custom
 attribute mapper can be provided.<br/><br/>A custom attribute mapper must implement the
 <code>org.forgerock.openam.authentication.modules.common.mapping.AttributeMapper</code>
 interface.<br/>Provided implementations
 are:<ul><li>org.forgerock.openam.authentication.modules.common.mapping.JsonAttributeMapper</
li><li>org.forgerock.openam.authentication.modules.oidc.JwtAttributeMapper (can only be used when
 using the openid scope)</li></ul>String constructor parameters can be provided by appending <code>|</
code> separated values.",
          "propertyOrder" : 1400,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        }
      }
    },
    "emailSettings" : {
      "type" : "object",
      "title" : "Email",
      "propertyOrder" : 2,
      "properties" : {
        "smtpFromAddress" : {
          "title" : "SMTP From address",
          "description" : "The email address on behalf of whom the messages will be sent",
          "propertyOrder" : 1645,
          "required" : true,
          "type" : "string",
          "exampleValue" : "info@forgerock.com"
        },
        "emailAttribute" : {
          "title" : "Email attribute in the Response",
          "description" : "Attribute from the response used to send activation code emails.<br><br>The
 attribute in the response from the profile service of the Provider that contains the email address of
 the authenticated user. This address will be used to send an email with an activation code when the
 accounts are allowed to be created dynamically.",
          "propertyOrder" : 1610,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "smtpPassword" : {
          "title" : "SMTP User Password",
          "description" : "The Password of the SMTP User Name",
          "propertyOrder" : 1635,
          "required" : true,
          "type" : "string",
          "format" : "password",
          "exampleValue" : ""
        },
        "smtpPort" : {
          "title" : "SMTP port",
          "description" : "The TCP port that will be used by the SMTP gateway",
          "propertyOrder" : 1625,
```


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```
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "emailGateway" : {
          "title" : "Mail Server Gateway implementation class",
          "description" : "The class used by the module to send email.<br><br>This class is used by
the module to send email. A custom implementation can be provided.<br/><br/>The custom implementation
must implement the <code>org.forgerock.openam.authentication.modules.oauth2.EmailGateway</code>",
          "propertyOrder" : 1615,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "smtpUsername" : {
          "title" : "SMTP User Name",
          "description" : "If the SMTP Service requires authentication, configure the user name here",
          "propertyOrder" : 1630,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "smtpHost" : {
          "title" : "SMTP host",
          "description" : "The mail host that will be used by the Email Gateway implementation",
          "propertyOrder" : 1620,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "smtpSslEnabled" : {
          "title" : "SMTP SSL Enabled",
          "description" : "Tick this option if the SMTP Server provides SSL",
          "propertyOrder" : 1640,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        }
      }
    },
    "core" : {
      "type" : "object",
      "title" : "Core",
      "propertyOrder" : 0,
      "properties" : {
        "scope" : {
          "title" : "Scope",
          "description" : "OAuth scope; list of user profile properties<br><br>According to the OAuth
2.0 Authorization Framework, scope is a space-separated list of user profile attributes that the
client application requires. The list depends on the permissions that the resource owner grants to
the client application.<br/><br/> Some authorization servers use non-standard separators for scopes.
For example, Facebook takes a comma-separated list.<br/><br/>",
          "propertyOrder" : 800,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
```


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```
        },
        "ssoProxyUrl" : {
          "title" : "Proxy URL",
          "description" : "The URL to the OpenAM OAuth proxy JSP<br><br>This URL should only be
 changed from the default, if an external server is performing the GET to POST proxying. The default
 is <code>/openam/oauth2c/OAuthProxy.jsp</code>",
          "propertyOrder" : 900,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "tokenEndpoint" : {
          "title" : "Access Token Endpoint URL",
          "description" : "OAuth access token endpoint URL<br><br>This is the URL endpoint for
 access token retrieval provided by the OAuth Identity Provider. Refer to the <a href=\"http://
tools.ietf.org/html/rfc6749#section-3.2\" target=\"_blank\">RFC 6749</a>, section 3.2",
          "propertyOrder" : 600,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "authorizeEndpoint" : {
          "title" : "Authentication Endpoint URL",
          "description" : "OAuth authentication endpoint URL<br><br>This is the URL endpoint for OAuth
 authentication provided by the OAuth Identity Provider",
          "propertyOrder" : 500,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "forgerock-am-auth-socialauthvk-auth-level" : {
          "title" : "Authentication Level",
          "description" : "The authentication level associated with this module.<br><br>Each
 authentication module has an authentication level that can be used to indicate the level of security
 associated with the module; 0 is the lowest (and the default).",
          "propertyOrder" : 400,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "clientId" : {
          "title" : "Client Id",
          "description" : "OAuth client_id parameter<br><br>For more information on the OAuth
 client_id parameter refer to the <a href=\"http://tools.ietf.org/html/rfc6749#section-2.3.1\" target=
\"_blank\">RFC 6749</a>, section 2.3.1",
          "propertyOrder" : 200,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "clientSecret" : {
          "title" : "Client Secret",
          "description" : "OAuth client_secret parameter<br><br>For more information on the OAuth
 client_secret parameter refer to the <a href=\"http://tools.ietf.org/html/rfc6749#section-2.3.1\"
 target=\"_blank\">RFC 6749</a>, section 2.3.1",
          "propertyOrder" : 300,
          "required" : true,
          "type" : "string",
          "format" : "password",
```


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```
          "exampleValue" : ""
        },
        "provider" : {
          "title" : "Social Provider",
          "description" : "Social Provider for which this module is being setup.",
          "propertyOrder" : 100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "userInfoEndpoint" : {
          "title" : "User Profile Service URL",
          "description" : "User profile information URL<br><br>This URL endpoint provides user profile
 information and is provided by the OAuth Identity Provider<br/><br/><i>NB </i>This URL should return
 JSON objects in response",
          "propertyOrder" : 700,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "subjectProperty" : {
          "title" : "Subject Property",
          "description" : "Property used to identify which attribute an auth server identifies a user
 by.",
          "propertyOrder" : 1000,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    }
  }
}
```

1.154.1.2. delete

Usage:

```
am> delete SocialAuthVKontakteModule --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.154.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action SocialAuthVKontakteModule --realm Realm --actionName getAllTypes
```


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1.154.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action SocialAuthVKontakteModule --realm Realm --actionName getCreatableTypes
```

1.154.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action SocialAuthVKontakteModule --realm Realm --actionName nextdescendents
```

1.154.1.6. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

```
am> query SocialAuthVKontakteModule --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.154.1.7. read

Usage:

```
am> read SocialAuthVKontakteModule --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.154.1.8. update

Usage:

```
am> update SocialAuthVKontakteModule --realm Realm --id id --body body
```

Parameters:

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--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "accountProvisioning" : {
      "type" : "object",
      "title" : "Account Provisioning",
      "propertyOrder" : 1,
      "properties" : {
        "anonymousUserName" : {
          "title" : "Anonymous User",
          "description" : "Username of the OpenAM anonymous user<br><br>The username of the user that
 will represent the anonymous user. This user account must already exist in the realm.",
          "propertyOrder" : 1800,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "accountMapperClass" : {
          "title" : "Account Mapper",
          "description" : "Name of the class implementing the attribute mapping for the
 account search.<br><br>This class is used by the module to map from the account information
 received from the OAuth Identity Provider into OpenAM.<br/><br/>The class must implement
 the <code>org.forgerock.openam.authentication.modules.common.mapping.AttributeMapper</code>
 interface.<br/>Provided implementations
 are:<ul><li>org.forgerock.openam.authentication.modules.common.mapping.JsonAttributeMapper</
li><li>org.forgerock.openam.authentication.modules.oidc.JwtAttributeMapper (can only be used when
 using the openid scope)</li></ul>String constructor parameters can be provided by appending <code>|</
code> separated values.",
          "propertyOrder" : 1200,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "accountMapperConfiguration" : {
          "title" : "Account Mapper Configuration",
          "description" : "Mapping of OAuth account to local OpenAM account<br><br>Attribute
 configuration that will be used to map the account of the user authenticated in the OAuth 2.0
 Provider to the local data store in the OpenAM. Example: <code>OAuth2.0_attribute=local_attribute</
code>",
          "propertyOrder" : 1300,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "mapToAnonymousUser" : {
          "title" : "Map to anonymous user",
          "description" : "Enabled anonymous user access to OpenAM for OAuth authenticated
 users<br><br>If selected, the authenticated users in the OAuth 2.0 Provider will be mapped to the
```


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```
 anonymous user configured in the next parameter.<br/>If not selected the users authenticated will be
 mapped by the parameters configured in the account mapper.<br/><br/><i>NB </i>If <i>Create account if
 it does not exist</i> is enabled, that parameter takes precedence.",
          "propertyOrder" : 1700,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "attributeMapperConfiguration" : {
          "title" : "Attribute Mapper Configuration",
          "description" : "Mapping of OAuth attributes to local OpenAM attributes<br><br>Attribute
 configuration that will be used to map the user info obtained from the OAuth 2.0 Provider to the
 local user data store in the OpenAM.<br/><br/>Example: <code>OAuth2.0_attribute=local_attribute</
code>",
          "propertyOrder" : 1500,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "enableRegistrationService" : {
          "title" : "Use IDM as Registration Service",
          "description" : "Whether to use IDM as an external Registration Service to complete
 registration for new users.<br><br>IDM is called and passed these parameters:<br/><br/
><ul><li><code>clientToken</code>: Signed, encrypted JWT of the OAuth 2.0 authentication state.</
li><li><code>returnParams</code>: Encoded URL parameters, required to be returned to AM to resume
 authentication after registration in IDM is complete.</li></ul>",
          "propertyOrder" : 1150,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "promptPasswordFlag" : {
          "title" : "Prompt for password setting and activation code",
          "description" : "Users must set a password and complete the activation flow during dynamic
 profile creation.<br><br>If this is enabled, the user must set a password before the system creates
 an account dynamically and an activation code will be sent to the user's email address. The account
 will be created only if the password and activation code are properly set. <br />If this is disabled,
 the account will be created transparently without prompting the user.",
          "propertyOrder" : 1605,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "saveAttributesInSession" : {
          "title" : "Save attributes in the session",
          "description" : "If this option is enabled, the attributes configured in the attribute
 mapper will be saved into the OpenAM session",
          "propertyOrder" : 2000,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "createAccount" : {
          "title" : "Create account if it does not exist",
          "description" : "If the OAuth2 account does not exist in the local OpenAM data store, an
 account will be created dynamically.<br><br>If this is enabled, the account mapper could create
```


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```
 the account dynamically if there is no account mapped. Before creating the account, a dialog
 prompting for a password and asking for an activation code can be shown if the parameter \"Prompt
 for password setting and activation code\" is enabled.<br /><br />If this flag is not enabled, 3
 alternative options exist:<br/><br/><ol><li>The accounts need to have a user profile in the OpenAM
 User Data Store</li><li>The user does not have a user profile and the \"Ignore Profile\" is set in
 the Authentication Service of the realm.</li><li>The account is mapped to an anonymous account (see
 parameter \"Map to anonymous user\" and \"Anonymous User\")</li></ol>",
          "propertyOrder" : 1160,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "accountProviderClass" : {
          "title" : "Account Provider",
          "description" : "Name of the class implementing the account provider.<br><br>This
 class is used by the module to find the account from the attributes mapped by the Account
 Mapper <code>org.forgerock.openam.authentication.modules.common.mapping.AccountProvider</code>
 interface.<br/>String constructor parameters can be provided by appending <code>|</code> separated
 values.",
          "propertyOrder" : 1100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "attributeMappingClasses" : {
          "title" : "Attribute Mapper",
          "description" : "Name of the class that implements the attribute
 mapping<br><br>This class maps the OAuth properties into OpenAM properties. A custom
 attribute mapper can be provided.<br/><br/>A custom attribute mapper must implement the
 <code>org.forgerock.openam.authentication.modules.common.mapping.AttributeMapper</code>
 interface.<br/>Provided implementations
 are:<ul><li>org.forgerock.openam.authentication.modules.common.mapping.JsonAttributeMapper</
li><li>org.forgerock.openam.authentication.modules.oidc.JwtAttributeMapper (can only be used when
 using the openid scope)</li></ul>String constructor parameters can be provided by appending <code>|</
code> separated values.",
          "propertyOrder" : 1400,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        }
      }
    },
    "emailSettings" : {
      "type" : "object",
      "title" : "Email",
      "propertyOrder" : 2,
      "properties" : {
        "smtpFromAddress" : {
          "title" : "SMTP From address",
          "description" : "The email address on behalf of whom the messages will be sent",
          "propertyOrder" : 1645,
          "required" : true,
          "type" : "string",
          "exampleValue" : "info@forgerock.com"
        },
        "emailAttribute" : {
```


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```
          "title" : "Email attribute in the Response",
          "description" : "Attribute from the response used to send activation code emails.<br><br>The
attribute in the response from the profile service of the Provider that contains the email address of
the authenticated user. This address will be used to send an email with an activation code when the
accounts are allowed to be created dynamically.",
          "propertyOrder" : 1610,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "smtpPassword" : {
          "title" : "SMTP User Password",
          "description" : "The Password of the SMTP User Name",
          "propertyOrder" : 1635,
          "required" : true,
          "type" : "string",
          "format" : "password",
          "exampleValue" : ""
        },
        "smtpPort" : {
          "title" : "SMTP port",
          "description" : "The TCP port that will be used by the SMTP gateway",
          "propertyOrder" : 1625,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "emailGateway" : {
          "title" : "Mail Server Gateway implementation class",
          "description" : "The class used by the module to send email.<br><br>This class is used by
the module to send email. A custom implementation can be provided.<br/><br/>The custom implementation
must implement the <code>org.forgerock.openam.authentication.modules.oauth2.EmailGateway</code>",
          "propertyOrder" : 1615,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "smtpUsername" : {
          "title" : "SMTP User Name",
          "description" : "If the SMTP Service requires authentication, configure the user name here",
          "propertyOrder" : 1630,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "smtpHost" : {
          "title" : "SMTP host",
          "description" : "The mail host that will be used by the Email Gateway implementation",
          "propertyOrder" : 1620,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "smtpSslEnabled" : {
          "title" : "SMTP SSL Enabled",
          "description" : "Tick this option if the SMTP Server provides SSL",
          "propertyOrder" : 1640,
          "required" : true,
          "type" : "boolean",
```


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```
          "exampleValue" : ""
        }
      }
    },
    "core" : {
      "type" : "object",
      "title" : "Core",
      "propertyOrder" : 0,
      "properties" : {
        "scope" : {
          "title" : "Scope",
          "description" : "OAuth scope; list of user profile properties<br><br>According to the OAuth
 2.0 Authorization Framework, scope is a space-separated list of user profile attributes that the
 client application requires. The list depends on the permissions that the resource owner grants to
 the client application.<br/><br/> Some authorization servers use non-standard separators for scopes.
 For example, Facebook takes a comma-separated list.<br/><br/>",
          "propertyOrder" : 800,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "ssoProxyUrl" : {
          "title" : "Proxy URL",
          "description" : "The URL to the OpenAM OAuth proxy JSP<br><br>This URL should only be
 changed from the default, if an external server is performing the GET to POST proxying. The default
 is <code>/openam/oauth2c/OAuthProxy.jsp</code>",
          "propertyOrder" : 900,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "tokenEndpoint" : {
          "title" : "Access Token Endpoint URL",
          "description" : "OAuth access token endpoint URL<br><br>This is the URL endpoint for
 access token retrieval provided by the OAuth Identity Provider. Refer to the <a href=\"http://
tools.ietf.org/html/rfc6749#section-3.2\" target=\"_blank\">RFC 6749</a>, section 3.2",
          "propertyOrder" : 600,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "authorizeEndpoint" : {
          "title" : "Authentication Endpoint URL",
          "description" : "OAuth authentication endpoint URL<br><br>This is the URL endpoint for OAuth
 authentication provided by the OAuth Identity Provider",
          "propertyOrder" : 500,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "forgerock-am-auth-socialauthvk-auth-level" : {
          "title" : "Authentication Level",
          "description" : "The authentication level associated with this module.<br><br>Each
 authentication module has an authentication level that can be used to indicate the level of security
 associated with the module; 0 is the lowest (and the default).",
          "propertyOrder" : 400,
```


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```
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "clientId" : {
          "title" : "Client Id",
          "description" : "OAuth client_id parameter<br><br>For more information on the OAuth
 client_id parameter refer to the <a href=\"http://tools.ietf.org/html/rfc6749#section-2.3.1\" target=
\"_blank\">RFC 6749</a>, section 2.3.1",
          "propertyOrder" : 200,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "clientSecret" : {
          "title" : "Client Secret",
          "description" : "OAuth client_secret parameter<br><br>For more information on the OAuth
 client_secret parameter refer to the <a href=\"http://tools.ietf.org/html/rfc6749#section-2.3.1\"
 target=\"_blank\">RFC 6749</a>, section 2.3.1",
          "propertyOrder" : 300,
          "required" : true,
          "type" : "string",
          "format" : "password",
          "exampleValue" : ""
        },
        "provider" : {
          "title" : "Social Provider",
          "description" : "Social Provider for which this module is being setup.",
          "propertyOrder" : 100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "userInfoEndpoint" : {
          "title" : "User Profile Service URL",
          "description" : "User profile information URL<br><br>This URL endpoint provides user profile
 information and is provided by the OAuth Identity Provider<br/><br/><i>NB </i>This URL should return
 JSON objects in response",
          "propertyOrder" : 700,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "subjectProperty" : {
          "title" : "Subject Property",
          "description" : "Property used to identify which attribute an auth server identifies a user
 by.",
          "propertyOrder" : 1000,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    }
  }
}
```


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1.154.2. Global Operations

Resource path: `/global-config/authentication/modules/authSocialVk`

Resource version: `1.0`

1.154.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action SocialAuthVKontakteModule --global --actionName getAllTypes
```

1.154.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action SocialAuthVKontakteModule --global --actionName getCreatableTypes
```

1.154.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action SocialAuthVKontakteModule --global --actionName nextdescendents
```

1.154.2.4. read

Usage:

```
am> read SocialAuthVKontakteModule --global
```

1.154.2.5. update

Usage:

```
am> update SocialAuthVKontakteModule --global --body body
```

Parameters:

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--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "defaults" : {
      "properties" : {
        "smtpSslEnabled" : {
          "title" : "SMTP SSL Enabled",
          "description" : "Tick this option if the SMTP Server provides SSL",
          "propertyOrder" : 1640,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "provider" : {
          "title" : "Social Provider",
          "description" : "Social Provider for which this module is being setup.",
          "propertyOrder" : 100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "anonymousUserName" : {
          "title" : "Anonymous User",
          "description" : "Username of the OpenAM anonymous user<br><br>The username of the user that
 will represent the anonymous user. This user account must already exist in the realm.",
          "propertyOrder" : 1800,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "clientId" : {
          "title" : "Client Id",
          "description" : "OAuth client_id parameter<br><br>For more information on the OAuth
 client_id parameter refer to the <a href=\"http://tools.ietf.org/html/rfc6749#section-2.3.1\" target=
\"_blank\">RFC 6749</a>, section 2.3.1",
          "propertyOrder" : 200,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "authorizeEndpoint" : {
          "title" : "Authentication Endpoint URL",
          "description" : "OAuth authentication endpoint URL<br><br>This is the URL endpoint for OAuth
 authentication provided by the OAuth Identity Provider",
          "propertyOrder" : 500,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "createAccount" : {
          "title" : "Create account if it does not exist",
          "description" : "If the OAuth2 account does not exist in the local OpenAM data store, an
 account will be created dynamically.<br><br>If this is enabled, the account mapper could create
 the account dynamically if there is no account mapped. Before creating the account, a dialog
 prompting for a password and asking for an activation code can be shown if the parameter \"Prompt
```


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```
 for password setting and activation code\" is enabled.<br /><br />If this flag is not enabled, 3
 alternative options exist:<br/><br/><ol><li>The accounts need to have a user profile in the OpenAM
 User Data Store</li><li>The user does not have a user profile and the \"Ignore Profile\" is set in
 the Authentication Service of the realm.</li><li>The account is mapped to an anonymous account (see
 parameter \"Map to anonymous user\" and \"Anonymous User\")</li></ol>",
          "propertyOrder" : 1160,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "emailAttribute" : {
          "title" : "Email attribute in the Response",
          "description" : "Attribute from the response used to send activation code emails.<br><br>The
 attribute in the response from the profile service of the Provider that contains the email address of
 the authenticated user. This address will be used to send an email with an activation code when the
 accounts are allowed to be created dynamically.",
          "propertyOrder" : 1610,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "smtpPassword" : {
          "title" : "SMTP User Password",
          "description" : "The Password of the SMTP User Name",
          "propertyOrder" : 1635,
          "required" : true,
          "type" : "string",
          "format" : "password",
          "exampleValue" : ""
        },
        "smtpUsername" : {
          "title" : "SMTP User Name",
          "description" : "If the SMTP Service requires authentication, configure the user name here",
          "propertyOrder" : 1630,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "enableRegistrationService" : {
          "title" : "Use IDM as Registration Service",
          "description" : "Whether to use IDM as an external Registration Service to complete
 registration for new users.<br><br>IDM is called and passed these parameters:<br/><br/
><ul><li><code>clientToken</code>: Signed, encrypted JWT of the OAuth 2.0 authentication state.</
li><li><code>returnParams</code>: Encoded URL parameters, required to be returned to AM to resume
 authentication after registration in IDM is complete.</li></ul>",
          "propertyOrder" : 1150,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "attributeMapperConfiguration" : {
          "title" : "Attribute Mapper Configuration",
          "description" : "Mapping of OAuth attributes to local OpenAM attributes<br><br>Attribute
 configuration that will be used to map the user info obtained from the OAuth 2.0 Provider to the
 local user data store in the OpenAM.<br/><br/>Example: <code>OAuth2.0_attribute=local_attribute</
code>",
          "propertyOrder" : 1500,
          "required" : true,
          "items" : {
```


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```
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "accountProviderClass" : {
          "title" : "Account Provider",
          "description" : "Name of the class implementing the account provider.<br><br>This
 class is used by the module to find the account from the attributes mapped by the Account
 Mapper <code>org.forgerock.openam.authentication.modules.common.mapping.AccountProvider</code>
 interface.<br/>String constructor parameters can be provided by appending <code>|</code> separated
 values.",
          "propertyOrder" : 1100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "attributeMappingClasses" : {
          "title" : "Attribute Mapper",
          "description" : "Name of the class that implements the attribute
 mapping<br><br>This class maps the OAuth properties into OpenAM properties. A custom
 attribute mapper can be provided.<br/><br/>A custom attribute mapper must implement the
 <code>org.forgerock.openam.authentication.modules.common.mapping.AttributeMapper</code>
 interface.<br/>Provided implementations
 are:<ul><li>org.forgerock.openam.authentication.modules.common.mapping.JsonAttributeMapper</
li><li>org.forgerock.openam.authentication.modules.oidc.JwtAttributeMapper (can only be used when
 using the openid scope)</li></ul>String constructor parameters can be provided by appending <code>|</
code> separated values.",
          "propertyOrder" : 1400,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "smtpHost" : {
          "title" : "SMTP host",
          "description" : "The mail host that will be used by the Email Gateway implementation",
          "propertyOrder" : 1620,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "scope" : {
          "title" : "Scope",
          "description" : "OAuth scope; list of user profile properties<br><br>According to the OAuth
 2.0 Authorization Framework, scope is a space-separated list of user profile attributes that the
 client application requires. The list depends on the permissions that the resource owner grants to
 the client application.<br/><br/> Some authorization servers use non-standard separators for scopes.
 For example, Facebook takes a comma-separated list.<br/><br/>",
          "propertyOrder" : 800,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
```


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```
        "forgerock-am-auth-socialauthvk-auth-level" : {
          "title" : "Authentication Level",
          "description" : "The authentication level associated with this module.<br><br>Each
 authentication module has an authentication level that can be used to indicate the level of security
 associated with the module; 0 is the lowest (and the default).",
          "propertyOrder" : 400,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "mapToAnonymousUser" : {
          "title" : "Map to anonymous user",
          "description" : "Enabled anonymous user access to OpenAM for OAuth authenticated
 users<br><br>If selected, the authenticated users in the OAuth 2.0 Provider will be mapped to the
 anonymous user configured in the next parameter.<br/>If not selected the users authenticated will be
 mapped by the parameters configured in the account mapper.<br/><br/><i>NB </i>If <i>Create account if
 it does not exist</i> is enabled, that parameter takes precedence.",
          "propertyOrder" : 1700,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "smtpFromAddress" : {
          "title" : "SMTP From address",
          "description" : "The email address on behalf of whom the messages will be sent",
          "propertyOrder" : 1645,
          "required" : true,
          "type" : "string",
          "exampleValue" : "info@forgerock.com"
        },
        "accountMapperConfiguration" : {
          "title" : "Account Mapper Configuration",
          "description" : "Mapping of OAuth account to local OpenAM account<br><br>Attribute
 configuration that will be used to map the account of the user authenticated in the OAuth 2.0
 Provider to the local data store in the OpenAM. Example: <code>OAuth2.0_attribute=local_attribute</
code>",
          "propertyOrder" : 1300,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "smtpPort" : {
          "title" : "SMTP port",
          "description" : "The TCP port that will be used by the SMTP gateway",
          "propertyOrder" : 1625,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "tokenEndpoint" : {
          "title" : "Access Token Endpoint URL",
          "description" : "OAuth access token endpoint URL<br><br>This is the URL endpoint for
 access token retrieval provided by the OAuth Identity Provider. Refer to the <a href=\"http://
tools.ietf.org/html/rfc6749#section-3.2\" target=\"_blank\">RFC 6749</a>, section 3.2",
          "propertyOrder" : 600,
          "required" : true,
```


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```
          "type" : "string",
          "exampleValue" : ""
        },
        "ssoProxyUrl" : {
          "title" : "Proxy URL",
          "description" : "The URL to the OpenAM OAuth proxy JSP<br><br>This URL should only be
 changed from the default, if an external server is performing the GET to POST proxying. The default
 is <code>/openam/oauth2c/OAuthProxy.jsp</code>",
          "propertyOrder" : 900,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "accountMapperClass" : {
          "title" : "Account Mapper",
          "description" : "Name of the class implementing the attribute mapping for the
 account search.<br><br>This class is used by the module to map from the account information
 received from the OAuth Identity Provider into OpenAM.<br/><br/>The class must implement
 the <code>org.forgerock.openam.authentication.modules.common.mapping.AttributeMapper</code>
 interface.<br/>Provided implementations
 are:<ul><li>org.forgerock.openam.authentication.modules.common.mapping.JsonAttributeMapper</
li><li>org.forgerock.openam.authentication.modules.oidc.JwtAttributeMapper (can only be used when
 using the openid scope)</li></ul>String constructor parameters can be provided by appending <code>|</
code> separated values.",
          "propertyOrder" : 1200,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "emailGateway" : {
          "title" : "Mail Server Gateway implementation class",
          "description" : "The class used by the module to send email.<br><br>This class is used by
 the module to send email. A custom implementation can be provided.<br/><br/>The custom implementation
 must implement the <code>org.forgerock.openam.authentication.modules.oauth2.EmailGateway</code>",
          "propertyOrder" : 1615,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "userInfoEndpoint" : {
          "title" : "User Profile Service URL",
          "description" : "User profile information URL<br><br>This URL endpoint provides user profile
 information and is provided by the OAuth Identity Provider<br/><br/><i>NB </i>This URL should return
 JSON objects in response",
          "propertyOrder" : 700,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "subjectProperty" : {
          "title" : "Subject Property",
          "description" : "Property used to identify which attribute an auth server identifies a user
 by.",
          "propertyOrder" : 1000,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "promptPasswordFlag" : {
```


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```
          "title" : "Prompt for password setting and activation code",
          "description" : "Users must set a password and complete the activation flow during dynamic
 profile creation.<br><br>If this is enabled, the user must set a password before the system creates
 an account dynamically and an activation code will be sent to the user's email address. The account
 will be created only if the password and activation code are properly set. <br />If this is disabled,
 the account will be created transparently without prompting the user.",
          "propertyOrder" : 1605,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "clientSecret" : {
          "title" : "Client Secret",
          "description" : "OAuth client_secret parameter<br><br>For more information on the OAuth
 client_secret parameter refer to the <a href=\"http://tools.ietf.org/html/rfc6749#section-2.3.1\"
 target=\"_blank\">RFC 6749</a>, section 2.3.1",
          "propertyOrder" : 300,
          "required" : true,
          "type" : "string",
          "format" : "password",
          "exampleValue" : ""
        },
        "saveAttributesInSession" : {
          "title" : "Save attributes in the session",
          "description" : "If this option is enabled, the attributes configured in the attribute
 mapper will be saved into the OpenAM session",
          "propertyOrder" : 2000,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        }
      },
      "type" : "object",
      "title" : "Realm Defaults"
    }
  }
}
```

1.155. SocialAuthWeChatMobileModule

1.155.1. Realm Operations

Resource path: `/realm-config/authentication/modules/authSocialWeChatMobile`

Resource version: `1.0`

1.155.1.1. create

Usage:

```
am> create SocialAuthWeChatMobileModule --realm Realm --id id --body body
```


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Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "accountProvisioning" : {
      "type" : "object",
      "title" : "Account Provisioning",
      "propertyOrder" : 1,
      "properties" : {
        "accountMapperConfiguration" : {
          "title" : "Account Mapper Configuration",
          "description" : "Mapping of OAuth account to local OpenAM account<br><br>Attribute
 configuration that will be used to map the account of the user authenticated in the OAuth 2.0
 Provider to the local data store in the OpenAM. Example: <code>OAuth2.0_attribute=local_attribute</
code>",
          "propertyOrder" : 1600,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "saveAttributesInSession" : {
          "title" : "Save attributes in the session",
          "description" : "If this option is enabled, the attributes configured in the attribute
 mapper will be saved into the OpenAM session",
          "propertyOrder" : 2400,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "mapToAnonymousUser" : {
          "title" : "Map to anonymous user",
          "description" : "Enabled anonymous user access to OpenAM for OAuth authenticated
 users<br><br>If selected, the authenticated users in the OAuth 2.0 Provider will be mapped to the
 anonymous user configured in the next parameter.<br/>If not selected the users authenticated will be
 mapped by the parameters configured in the account mapper.<br/><br/><i>NB </i>If <i>Create account if
 it does not exist</i> is enabled, that parameter takes precedence.",
          "propertyOrder" : 2000,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "anonymousUserName" : {
          "title" : "Anonymous User",
          "description" : "Username of the OpenAM anonymous user<br><br>The username of the user that
 will represent the anonymous user. This user account must already exist in the realm.",
          "propertyOrder" : 2100,
          "required" : true,
```


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```
          "type" : "string",
          "exampleValue" : ""
        },
        "accountMapperClass" : {
          "title" : "Account Mapper",
          "description" : "Name of the class implementing the attribute mapping for the
 account search.<br><br>This class is used by the module to map from the account information
 received from the OAuth Identity Provider into OpenAM.<br/><br/>The class must implement
 the <code>org.forgerock.openam.authentication.modules.common.mapping.AttributeMapper</code>
 interface.<br/>Provided implementations
 are:<ul><li>org.forgerock.openam.authentication.modules.common.mapping.JsonAttributeMapper</
li><li>org.forgerock.openam.authentication.modules.oidc.JwtAttributeMapper (can only be used when
 using the openid scope)</li></ul>String constructor parameters can be provided by appending <code>|</
code> separated values.",
          "propertyOrder" : 1500,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "attributeMapperConfiguration" : {
          "title" : "Attribute Mapper Configuration",
          "description" : "Mapping of OAuth attributes to local OpenAM attributes<br><br>Attribute
 configuration that will be used to map the user info obtained from the OAuth 2.0 Provider to the
 local user data store in the OpenAM.<br/><br/>Example: <code>OAuth2.0_attribute=local_attribute</
code>",
          "propertyOrder" : 1800,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "accountProviderClass" : {
          "title" : "Account Provider",
          "description" : "Name of the class implementing the account provider.<br><br>This
 class is used by the module to find the account from the attributes mapped by the Account
 Mapper <code>org.forgerock.openam.authentication.modules.common.mapping.AccountProvider</code>
 interface.<br/>String constructor parameters can be provided by appending <code>|</code> separated
 values.",
          "propertyOrder" : 1400,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "createAccount" : {
          "title" : "Create account if it does not exist",
          "description" : "If the OAuth2 account does not exist in the local OpenAM data store, an
 account will be created dynamically.<br><br>If this is enabled, the account mapper could create
 the account dynamically if there is no account mapped. Before creating the account, a dialog
 prompting for a password and asking for an activation code can be shown if the parameter \"Prompt
 for password setting and activation code\" is enabled.<br /><br />If this flag is not enabled, 3
 alternative options exist:<br/><br/><ol><li>The accounts need to have a user profile in the OpenAM
 User Data Store</li><li>The user does not have a user profile and the \"Ignore Profile\" is set in
 the Authentication Service of the realm.</li><li>The account is mapped to an anonymous account (see
 parameter \"Map to anonymous user\" and \"Anonymous User\")</li></ol>",
          "propertyOrder" : 1360,
          "required" : true,
          "type" : "boolean",
```


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```
          "exampleValue" : ""
        },
        "enableRegistrationService" : {
          "title" : "Use IDM as Registration Service",
          "description" : "Whether to use IDM as an external Registration Service to complete
 registration for new users.<br><br>IDM is called and passed these parameters:<br/><br/
><ul><li><code>clientToken</code>: Signed, encrypted JWT of the OAuth 2.0 authentication state.</
li><li><code>returnParams</code>: Encoded URL parameters, required to be returned to AM to resume
 authentication after registration in IDM is complete.</li></ul>",
          "propertyOrder" : 1350,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "promptPasswordFlag" : {
          "title" : "Prompt for password setting and activation code",
          "description" : "Users must set a password and complete the activation flow during dynamic
 profile creation.<br><br>If this is enabled, the user must set a password before the system creates
 an account dynamically and an activation code will be sent to the user's email address. The account
 will be created only if the password and activation code are properly set. <br />If this is disabled,
 the account will be created transparently without prompting the user.",
          "propertyOrder" : 1905,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "attributeMappingClasses" : {
          "title" : "Attribute Mapper",
          "description" : "Name of the class that implements the attribute
 mapping<br><br>This class maps the OAuth properties into OpenAM properties. A custom
 attribute mapper can be provided.<br/><br/>A custom attribute mapper must implement the
 <code>org.forgerock.openam.authentication.modules.common.mapping.AttributeMapper</code>
 interface.<br/>Provided implementations
 are:<ul><li>org.forgerock.openam.authentication.modules.common.mapping.JsonAttributeMapper</
li><li>org.forgerock.openam.authentication.modules.oidc.JwtAttributeMapper (can only be used when
 using the openid scope)</li></ul>String constructor parameters can be provided by appending <code>|</
code> separated values.",
          "propertyOrder" : 1700,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        }
      }
    },
    "emailSettings" : {
      "type" : "object",
      "title" : "Email",
      "propertyOrder" : 2,
      "properties" : {
        "smtpPassword" : {
          "title" : "SMTP User Password",
          "description" : "The Password of the SMTP User Name",
          "propertyOrder" : 1935,
          "required" : true,
          "type" : "string",
          "format" : "password",
```


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```
          "exampleValue" : ""
        },
        "smtpHost" : {
          "title" : "SMTP host",
          "description" : "The mail host that will be used by the Email Gateway implementation",
          "propertyOrder" : 1920,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "smtpUsername" : {
          "title" : "SMTP User Name",
          "description" : "If the SMTP Service requires authentication, configure the user name here",
          "propertyOrder" : 1930,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "emailAttribute" : {
          "title" : "Email attribute in the Response",
          "description" : "Attribute from the response used to send activation code emails.<br><br>The
attribute in the response from the profile service of the Provider that contains the email address of
the authenticated user. This address will be used to send an email with an activation code when the
accounts are allowed to be created dynamically.",
          "propertyOrder" : 1910,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "smtpFromAddress" : {
          "title" : "SMTP From address",
          "description" : "The email address on behalf of whom the messages will be sent",
          "propertyOrder" : 1945,
          "required" : true,
          "type" : "string",
          "exampleValue" : "info@forgerock.com"
        },
        "smtpPort" : {
          "title" : "SMTP port",
          "description" : "The TCP port that will be used by the SMTP gateway",
          "propertyOrder" : 1925,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "smtpSslEnabled" : {
          "title" : "SMTP SSL Enabled",
          "description" : "Tick this option if the SMTP Server provides SSL",
          "propertyOrder" : 1940,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "emailGateway" : {
          "title" : "Mail Server Gateway implementation class",
          "description" : "The class used by the module to send email.<br><br>This class is used by
the module to send email. A custom implementation can be provided.<br/><br/>The custom implementation
must implement the <code>org.forgerock.openam.authentication.modules.oauth2.EmailGateway</code>",
          "propertyOrder" : 1915,
```


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```
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    },
    "core" : {
      "type" : "object",
      "title" : "Core",
      "propertyOrder" : 0,
      "properties" : {
        "authenticationLevel" : {
          "title" : "Authentication Level",
          "description" : "The authentication level associated with this module.<br><br>Each
authentication module has an authentication level that can be used to indicate the level of security
associated with the module; 0 is the lowest (and the default).",
          "propertyOrder" : 100,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "provider" : {
          "title" : "Social Provider",
          "description" : "Social Provider for which this module is being setup.",
          "propertyOrder" : 200,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "scope" : {
          "title" : "Scope",
          "description" : "OAuth scope; list of user profile properties<br><br>According to the OAuth
2.0 Authorization Framework, scope is a space-separated list of user profile attributes that the
client application requires. The list depends on the permissions that the resource owner grants to
the client application.<br/><br/> Some authorization servers use non-standard separators for scopes.
For example, Facebook takes a comma-separated list.<br/><br/>",
          "propertyOrder" : 900,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "ssoProxyUrl" : {
          "title" : "Proxy URL",
          "description" : "The URL to the OpenAM OAuth proxy JSP<br><br>This URL should only be
changed from the default, if an external server is performing the GET to POST proxying. The default
is <code>/openam/oauth2c/OAuthProxy.jsp</code>",
          "propertyOrder" : 1300,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "subjectProperty" : {
          "title" : "Subject Property",
          "description" : "Property used to identify which attribute an auth server identifies a user
by.",
          "propertyOrder" : 1100,
```


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```
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "userInfoEndpoint" : {
          "title" : "User Profile Service URL",
          "description" : "User profile information URL<br><br>This URL endpoint provides user profile
 information and is provided by the OAuth Identity Provider<br/><br/><i>NB </i>This URL should return
 JSON objects in response",
          "propertyOrder" : 800,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    }
  }
}
```

1.155.1.2. delete

Usage:

```
am> delete SocialAuthWeChatMobileModule --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.155.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action SocialAuthWeChatMobileModule --realm Realm --actionName getAllTypes
```

1.155.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action SocialAuthWeChatMobileModule --realm Realm --actionName getCreatableTypes
```

1.155.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

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```
am> action SocialAuthWeChatMobileModule --realm Realm --actionName nextdescendents
```

1.155.1.6. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

```
am> query SocialAuthWeChatMobileModule --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.155.1.7. read

Usage:

```
am> read SocialAuthWeChatMobileModule --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.155.1.8. update

Usage:

```
am> update SocialAuthWeChatMobileModule --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "accountProvisioning" : {
      "type" : "object",
      "title" : "Account Provisioning",
      "propertyOrder" : 1,
      "properties" : {
```


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```
        "accountMapperConfiguration" : {
          "title" : "Account Mapper Configuration",
          "description" : "Mapping of OAuth account to local OpenAM account<br><br>Attribute
 configuration that will be used to map the account of the user authenticated in the OAuth 2.0
 Provider to the local data store in the OpenAM. Example: <code>OAuth2.0_attribute=local_attribute</
code>",
          "propertyOrder" : 1600,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "saveAttributesInSession" : {
          "title" : "Save attributes in the session",
          "description" : "If this option is enabled, the attributes configured in the attribute
 mapper will be saved into the OpenAM session",
          "propertyOrder" : 2400,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "mapToAnonymousUser" : {
          "title" : "Map to anonymous user",
          "description" : "Enabled anonymous user access to OpenAM for OAuth authenticated
 users<br><br>If selected, the authenticated users in the OAuth 2.0 Provider will be mapped to the
 anonymous user configured in the next parameter.<br/>If not selected the users authenticated will be
 mapped by the parameters configured in the account mapper.<br/><br/><i>NB </i>If <i>Create account if
 it does not exist</i> is enabled, that parameter takes precedence.",
          "propertyOrder" : 2000,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "anonymousUserName" : {
          "title" : "Anonymous User",
          "description" : "Username of the OpenAM anonymous user<br><br>The username of the user that
 will represent the anonymous user. This user account must already exist in the realm.",
          "propertyOrder" : 2100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "accountMapperClass" : {
          "title" : "Account Mapper",
          "description" : "Name of the class implementing the attribute mapping for the
 account search.<br><br>This class is used by the module to map from the account information
 received from the OAuth Identity Provider into OpenAM.<br/><br/>The class must implement
 the <code>org.forgerock.openam.authentication.modules.common.mapping.AttributeMapper</code>
 interface.<br/>Provided implementations
 are:<ul><li>org.forgerock.openam.authentication.modules.common.mapping.JsonAttributeMapper</
li><li>org.forgerock.openam.authentication.modules.oidc.JwtAttributeMapper (can only be used when
 using the openid scope)</li></ul>String constructor parameters can be provided by appending <code>|</
code> separated values.",
          "propertyOrder" : 1500,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
```


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```
        },
        "attributeMapperConfiguration" : {
          "title" : "Attribute Mapper Configuration",
          "description" : "Mapping of OAuth attributes to local OpenAM attributes<br><br>Attribute
 configuration that will be used to map the user info obtained from the OAuth 2.0 Provider to the
 local user data store in the OpenAM.<br/><br/>Example: <code>OAuth2.0_attribute=local_attribute</
code>",
          "propertyOrder" : 1800,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "accountProviderClass" : {
          "title" : "Account Provider",
          "description" : "Name of the class implementing the account provider.<br><br>This
 class is used by the module to find the account from the attributes mapped by the Account
 Mapper <code>org.forgerock.openam.authentication.modules.common.mapping.AccountProvider</code>
 interface.<br/>String constructor parameters can be provided by appending <code>|</code> separated
 values.",
          "propertyOrder" : 1400,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "createAccount" : {
          "title" : "Create account if it does not exist",
          "description" : "If the OAuth2 account does not exist in the local OpenAM data store, an
 account will be created dynamically.<br><br>If this is enabled, the account mapper could create
 the account dynamically if there is no account mapped. Before creating the account, a dialog
 prompting for a password and asking for an activation code can be shown if the parameter \"Prompt
 for password setting and activation code\" is enabled.<br /><br />If this flag is not enabled, 3
 alternative options exist:<br/><br/><ol><li>The accounts need to have a user profile in the OpenAM
 User Data Store</li><li>The user does not have a user profile and the \"Ignore Profile\" is set in
 the Authentication Service of the realm.</li><li>The account is mapped to an anonymous account (see
 parameter \"Map to anonymous user\" and \"Anonymous User\")</li></ol>",
          "propertyOrder" : 1360,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "enableRegistrationService" : {
          "title" : "Use IDM as Registration Service",
          "description" : "Whether to use IDM as an external Registration Service to complete
 registration for new users.<br><br>IDM is called and passed these parameters:<br/><br/
><ul><li><code>clientToken</code>: Signed, encrypted JWT of the OAuth 2.0 authentication state.</
li><li><code>returnParams</code>: Encoded URL parameters, required to be returned to AM to resume
 authentication after registration in IDM is complete.</li></ul>",
          "propertyOrder" : 1350,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "promptPasswordFlag" : {
          "title" : "Prompt for password setting and activation code",
          "description" : "Users must set a password and complete the activation flow during dynamic
 profile creation.<br><br>If this is enabled, the user must set a password before the system creates
```


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```
 an account dynamically and an activation code will be sent to the user's email address. The account
 will be created only if the password and activation code are properly set. <br />If this is disabled,
 the account will be created transparently without prompting the user.",
          "propertyOrder" : 1905,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "attributeMappingClasses" : {
          "title" : "Attribute Mapper",
          "description" : "Name of the class that implements the attribute
 mapping<br><br>This class maps the OAuth properties into OpenAM properties. A custom
 attribute mapper can be provided.<br/><br/>A custom attribute mapper must implement the
 <code>org.forgerock.openam.authentication.modules.common.mapping.AttributeMapper</code>
 interface.<br/>Provided implementations
 are:<ul><li>org.forgerock.openam.authentication.modules.common.mapping.JsonAttributeMapper</
li><li>org.forgerock.openam.authentication.modules.oidc.JwtAttributeMapper (can only be used when
 using the openid scope)</li></ul>String constructor parameters can be provided by appending <code>|</
code> separated values.",
          "propertyOrder" : 1700,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        }
      }
    },
    "emailSettings" : {
      "type" : "object",
      "title" : "Email",
      "propertyOrder" : 2,
      "properties" : {
        "smtpPassword" : {
          "title" : "SMTP User Password",
          "description" : "The Password of the SMTP User Name",
          "propertyOrder" : 1935,
          "required" : true,
          "type" : "string",
          "format" : "password",
          "exampleValue" : ""
        },
        "smtpHost" : {
          "title" : "SMTP host",
          "description" : "The mail host that will be used by the Email Gateway implementation",
          "propertyOrder" : 1920,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "smtpUsername" : {
          "title" : "SMTP User Name",
          "description" : "If the SMTP Service requires authentication, configure the user name here",
          "propertyOrder" : 1930,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
```


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```
       "emailAttribute" : {
         "title" : "Email attribute in the Response",
         "description" : "Attribute from the response used to send activation code emails.<br><br>The
attribute in the response from the profile service of the Provider that contains the email address of
the authenticated user. This address will be used to send an email with an activation code when the
accounts are allowed to be created dynamically.",
         "propertyOrder" : 1910,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       },
       "smtpFromAddress" : {
         "title" : "SMTP From address",
         "description" : "The email address on behalf of whom the messages will be sent",
         "propertyOrder" : 1945,
         "required" : true,
         "type" : "string",
         "exampleValue" : "info@forgerock.com"
       },
       "smtpPort" : {
         "title" : "SMTP port",
         "description" : "The TCP port that will be used by the SMTP gateway",
         "propertyOrder" : 1925,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       },
       "smtpSslEnabled" : {
         "title" : "SMTP SSL Enabled",
         "description" : "Tick this option if the SMTP Server provides SSL",
         "propertyOrder" : 1940,
         "required" : true,
         "type" : "boolean",
         "exampleValue" : ""
       },
       "emailGateway" : {
         "title" : "Mail Server Gateway implementation class",
         "description" : "The class used by the module to send email.<br><br>This class is used by
the module to send email. A custom implementation can be provided.<br/><br/>The custom implementation
must implement the <code>org.forgerock.openam.authentication.modules.oauth2.EmailGateway</code>",
         "propertyOrder" : 1915,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       }
     }
   },
   "core" : {
     "type" : "object",
     "title" : "Core",
     "propertyOrder" : 0,
     "properties" : {
       "authenticationLevel" : {
         "title" : "Authentication Level",
         "description" : "The authentication level associated with this module.<br><br>Each
authentication module has an authentication level that can be used to indicate the level of security
associated with the module; 0 is the lowest (and the default).",
         "propertyOrder" : 100,
         "required" : true,
```


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```
          "type" : "integer",
          "exampleValue" : ""
        },
        "provider" : {
          "title" : "Social Provider",
          "description" : "Social Provider for which this module is being setup.",
          "propertyOrder" : 200,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "scope" : {
          "title" : "Scope",
          "description" : "OAuth scope; list of user profile properties<br><br>According to the OAuth
2.0 Authorization Framework, scope is a space-separated list of user profile attributes that the
client application requires. The list depends on the permissions that the resource owner grants to
the client application.<br/><br/> Some authorization servers use non-standard separators for scopes.
For example, Facebook takes a comma-separated list.<br/><br/>",
          "propertyOrder" : 900,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "ssoProxyUrl" : {
          "title" : "Proxy URL",
          "description" : "The URL to the OpenAM OAuth proxy JSP<br><br>This URL should only be
changed from the default, if an external server is performing the GET to POST proxying. The default
is <code>/openam/oauth2c/OAuthProxy.jsp</code>",
          "propertyOrder" : 1300,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "subjectProperty" : {
          "title" : "Subject Property",
          "description" : "Property used to identify which attribute an auth server identifies a user
by.",
          "propertyOrder" : 1100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "userInfoEndpoint" : {
          "title" : "User Profile Service URL",
          "description" : "User profile information URL<br><br>This URL endpoint provides user profile
information and is provided by the OAuth Identity Provider<br/><br/><i>NB </i>This URL should return
JSON objects in response",
          "propertyOrder" : 800,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    }
  }
```


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```
}
```

1.155.2. Global Operations

Resource path: `/global-config/authentication/modules/authSocialWeChatMobile`

Resource version: `1.0`

1.155.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action SocialAuthWeChatMobileModule --global --actionName getAllTypes
```

1.155.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action SocialAuthWeChatMobileModule --global --actionName getCreatableTypes
```

1.155.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action SocialAuthWeChatMobileModule --global --actionName nextdescendents
```

1.155.2.4. read

Usage:

```
am> read SocialAuthWeChatMobileModule --global
```

1.155.2.5. update

Usage:

```
am> update SocialAuthWeChatMobileModule --global --body body
```

Parameters:

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--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "defaults" : {
      "properties" : {
        "ssoProxyUrl" : {
          "title" : "Proxy URL",
          "description" : "The URL to the OpenAM OAuth proxy JSP<br><br>This URL should only be
 changed from the default, if an external server is performing the GET to POST proxying. The default
 is <code>/openam/oauth2c/OAuthProxy.jsp</code>",
          "propertyOrder" : 1300,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "smtpHost" : {
          "title" : "SMTP host",
          "description" : "The mail host that will be used by the Email Gateway implementation",
          "propertyOrder" : 1920,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "smtpPort" : {
          "title" : "SMTP port",
          "description" : "The TCP port that will be used by the SMTP gateway",
          "propertyOrder" : 1925,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "attributeMapperConfiguration" : {
          "title" : "Attribute Mapper Configuration",
          "description" : "Mapping of OAuth attributes to local OpenAM attributes<br><br>Attribute
 configuration that will be used to map the user info obtained from the OAuth 2.0 Provider to the
 local user data store in the OpenAM.<br/><br/>Example: <code>OAuth2.0_attribute=local_attribute</
code>",
          "propertyOrder" : 1800,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "enableRegistrationService" : {
          "title" : "Use IDM as Registration Service",
          "description" : "Whether to use IDM as an external Registration Service to complete
 registration for new users.<br><br>IDM is called and passed these parameters:<br/><br/
><ul><li><code>clientToken</code>: Signed, encrypted JWT of the OAuth 2.0 authentication state.</
li><li><code>returnParams</code>: Encoded URL parameters, required to be returned to AM to resume
 authentication after registration in IDM is complete.</li></ul>",
          "propertyOrder" : 1350,
          "required" : true,
          "type" : "boolean",
```


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```
          "exampleValue" : ""
        },
        "subjectProperty" : {
          "title" : "Subject Property",
          "description" : "Property used to identify which attribute an auth server identifies a user
by.",
          "propertyOrder" : 1100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "emailGateway" : {
          "title" : "Mail Server Gateway implementation class",
          "description" : "The class used by the module to send email.<br><br>This class is used by
the module to send email. A custom implementation can be provided.<br/><br/>The custom implementation
must implement the <code>org.forgerock.openam.authentication.modules.oauth2.EmailGateway</code>",
          "propertyOrder" : 1915,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "smtpPassword" : {
          "title" : "SMTP User Password",
          "description" : "The Password of the SMTP User Name",
          "propertyOrder" : 1935,
          "required" : true,
          "type" : "string",
          "format" : "password",
          "exampleValue" : ""
        },
        "provider" : {
          "title" : "Social Provider",
          "description" : "Social Provider for which this module is being setup.",
          "propertyOrder" : 200,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "smtpFromAddress" : {
          "title" : "SMTP From address",
          "description" : "The email address on behalf of whom the messages will be sent",
          "propertyOrder" : 1945,
          "required" : true,
          "type" : "string",
          "exampleValue" : "info@forgerock.com"
        },
        "authenticationLevel" : {
          "title" : "Authentication Level",
          "description" : "The authentication level associated with this module.<br><br>Each
authentication module has an authentication level that can be used to indicate the level of security
associated with the module; 0 is the lowest (and the default).",
          "propertyOrder" : 100,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "emailAttribute" : {
          "title" : "Email attribute in the Response",
```


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```
          "description" : "Attribute from the response used to send activation code emails.<br><br>The
 attribute in the response from the profile service of the Provider that contains the email address of
 the authenticated user. This address will be used to send an email with an activation code when the
 accounts are allowed to be created dynamically.",
          "propertyOrder" : 1910,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "smtpSslEnabled" : {
          "title" : "SMTP SSL Enabled",
          "description" : "Tick this option if the SMTP Server provides SSL",
          "propertyOrder" : 1940,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "scope" : {
          "title" : "Scope",
          "description" : "OAuth scope; list of user profile properties<br><br>According to the OAuth
 2.0 Authorization Framework, scope is a space-separated list of user profile attributes that the
 client application requires. The list depends on the permissions that the resource owner grants to
 the client application.<br/><br/> Some authorization servers use non-standard separators for scopes.
 For example, Facebook takes a comma-separated list.<br/><br/>",
          "propertyOrder" : 900,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "accountMapperClass" : {
          "title" : "Account Mapper",
          "description" : "Name of the class implementing the attribute mapping for the
 account search.<br><br>This class is used by the module to map from the account information
 received from the OAuth Identity Provider into OpenAM.<br/><br/>The class must implement
 the <code>org.forgerock.openam.authentication.modules.common.mapping.AttributeMapper</code>
 interface.<br/>Provided implementations
 are:<ul><li>org.forgerock.openam.authentication.modules.common.mapping.JsonAttributeMapper</
li><li>org.forgerock.openam.authentication.modules.oidc.JwtAttributeMapper (can only be used when
 using the openid scope)</li></ul>String constructor parameters can be provided by appending <code>|</
code> separated values.",
          "propertyOrder" : 1500,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "accountProviderClass" : {
          "title" : "Account Provider",
          "description" : "Name of the class implementing the account provider.<br><br>This
 class is used by the module to find the account from the attributes mapped by the Account
 Mapper <code>org.forgerock.openam.authentication.modules.common.mapping.AccountProvider</code>
 interface.<br/>String constructor parameters can be provided by appending <code>|</code> separated
 values.",
          "propertyOrder" : 1400,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
```


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```
        },
        "accountMapperConfiguration" : {
          "title" : "Account Mapper Configuration",
          "description" : "Mapping of OAuth account to local OpenAM account<br><br>Attribute
 configuration that will be used to map the account of the user authenticated in the OAuth 2.0
 Provider to the local data store in the OpenAM. Example: <code>OAuth2.0_attribute=local_attribute</
code>",
          "propertyOrder" : 1600,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "promptPasswordFlag" : {
          "title" : "Prompt for password setting and activation code",
          "description" : "Users must set a password and complete the activation flow during dynamic
 profile creation.<br><br>If this is enabled, the user must set a password before the system creates
 an account dynamically and an activation code will be sent to the user's email address. The account
 will be created only if the password and activation code are properly set. <br />If this is disabled,
 the account will be created transparently without prompting the user.",
          "propertyOrder" : 1905,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "mapToAnonymousUser" : {
          "title" : "Map to anonymous user",
          "description" : "Enabled anonymous user access to OpenAM for OAuth authenticated
 users<br><br>If selected, the authenticated users in the OAuth 2.0 Provider will be mapped to the
 anonymous user configured in the next parameter.<br/>If not selected the users authenticated will be
 mapped by the parameters configured in the account mapper.<br/><br/><i>NB </i>If <i>Create account if
 it does not exist</i> is enabled, that parameter takes precedence.",
          "propertyOrder" : 2000,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "userInfoEndpoint" : {
          "title" : "User Profile Service URL",
          "description" : "User profile information URL<br><br>This URL endpoint provides user profile
 information and is provided by the OAuth Identity Provider<br/><br/><i>NB </i>This URL should return
 JSON objects in response",
          "propertyOrder" : 800,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "attributeMappingClasses" : {
          "title" : "Attribute Mapper",
          "description" : "Name of the class that implements the attribute
 mapping<br><br>This class maps the OAuth properties into OpenAM properties. A custom
 attribute mapper can be provided.<br/><br/>A custom attribute mapper must implement the
 <code>org.forgerock.openam.authentication.modules.common.mapping.AttributeMapper</code>
 interface.<br/>Provided implementations
 are:<ul><li>org.forgerock.openam.authentication.modules.common.mapping.JsonAttributeMapper</
li><li>org.forgerock.openam.authentication.modules.oidc.JwtAttributeMapper (can only be used when
```


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```
 using the openid scope)</li></ul>String constructor parameters can be provided by appending <code>|</
code> separated values.",
          "propertyOrder" : 1700,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "saveAttributesInSession" : {
          "title" : "Save attributes in the session",
          "description" : "If this option is enabled, the attributes configured in the attribute
 mapper will be saved into the OpenAM session",
          "propertyOrder" : 2400,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "smtpUsername" : {
          "title" : "SMTP User Name",
          "description" : "If the SMTP Service requires authentication, configure the user name here",
          "propertyOrder" : 1930,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "anonymousUserName" : {
          "title" : "Anonymous User",
          "description" : "Username of the OpenAM anonymous user<br><br>The username of the user that
 will represent the anonymous user. This user account must already exist in the realm.",
          "propertyOrder" : 2100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "createAccount" : {
          "title" : "Create account if it does not exist",
          "description" : "If the OAuth2 account does not exist in the local OpenAM data store, an
 account will be created dynamically.<br><br>If this is enabled, the account mapper could create
 the account dynamically if there is no account mapped. Before creating the account, a dialog
 prompting for a password and asking for an activation code can be shown if the parameter \"Prompt
 for password setting and activation code\" is enabled.<br /><br />If this flag is not enabled, 3
 alternative options exist:<br/><br/><ol><li>The accounts need to have a user profile in the OpenAM
 User Data Store</li><li>The user does not have a user profile and the \"Ignore Profile\" is set in
 the Authentication Service of the realm.</li><li>The account is mapped to an anonymous account (see
 parameter \"Map to anonymous user\" and \"Anonymous User\")</li></ol>",
          "propertyOrder" : 1360,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        }
      },
      "type" : "object",
      "title" : "Realm Defaults"
    }
  }
}
```


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1.156. SocialAuthWeChatModule

1.156.1. Realm Operations

Resource path: `/realm-config/authentication/modules/authSocialWeChat`

Resource version: `1.0`

1.156.1.1. create

Usage:

```
am> create SocialAuthWeChatModule --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "core" : {
      "type" : "object",
      "title" : "Core",
      "propertyOrder" : 0,
      "properties" : {
        "clientSecret" : {
          "title" : "Client Secret",
          "description" : "OAuth client_secret parameter<br><br>For more information on the OAuth
 client_secret parameter refer to the <a href=\"http://tools.ietf.org/html/rfc6749#section-2.3.1\"
 target=\"_blank\">RFC 6749</a>, section 2.3.1",
          "propertyOrder" : 500,
          "required" : true,
          "type" : "string",
          "format" : "password",
          "exampleValue" : ""
        },
        "provider" : {
          "title" : "Social Provider",
          "description" : "Social Provider for which this module is being setup.",
          "propertyOrder" : 200,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "userInfoEndpoint" : {
          "title" : "User Profile Service URL",
```


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```
          "description" : "User profile information URL<br><br>This URL endpoint provides user profile
 information and is provided by the OAuth Identity Provider<br/><br/><i>NB </i>This URL should return
 JSON objects in response",
          "propertyOrder" : 800,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "scopeDelimiter" : {
          "title" : "Scope Delimiter",
          "description" : "Delimiter used to separate scope values. Default value is space.",
          "propertyOrder" : 1000,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "subjectProperty" : {
          "title" : "Subject Property",
          "description" : "Property used to identify which attribute an auth server identifies a user
 by.",
          "propertyOrder" : 1100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "usesBasicAuth" : {
          "title" : "Use Basic Auth",
          "description" : "When enabled, the client will use basic auth for authenticating with  the
 social auth provider. Enabled by default.",
          "propertyOrder" : 1200,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "clientId" : {
          "title" : "Client Id",
          "description" : "OAuth client_id parameter<br><br>For more information on the OAuth
 client_id parameter refer to the <a href=\"http://tools.ietf.org/html/rfc6749#section-2.3.1\" target=
\"_blank\">RFC 6749</a>, section 2.3.1",
          "propertyOrder" : 400,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "authorizeEndpoint" : {
          "title" : "Authentication Endpoint URL",
          "description" : "OAuth authentication endpoint URL<br><br>This is the URL endpoint for OAuth
 authentication provided by the OAuth Identity Provider",
          "propertyOrder" : 600,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "scope" : {
          "title" : "Scope",
          "description" : "OAuth scope; list of user profile properties<br><br>According to the OAuth
 2.0 Authorization Framework, scope is a space-separated list of user profile attributes that the
 client application requires. The list depends on the permissions that the resource owner grants to
```


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```
 the client application.<br/><br/> Some authorization servers use non-standard separators for scopes.
 For example, Facebook takes a comma-separated list.<br/><br/>",
          "propertyOrder" : 900,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "ssoProxyUrl" : {
          "title" : "Proxy URL",
          "description" : "The URL to the OpenAM OAuth proxy JSP<br><br>This URL should only be
 changed from the default, if an external server is performing the GET to POST proxying. The default
 is <code>/openam/oauth2c/OAuthProxy.jsp</code>",
          "propertyOrder" : 1300,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "tokenEndpoint" : {
          "title" : "Access Token Endpoint URL",
          "description" : "OAuth access token endpoint URL<br><br>This is the URL endpoint for
 access token retrieval provided by the OAuth Identity Provider. Refer to the <a href=\"http://
tools.ietf.org/html/rfc6749#section-3.2\" target=\"_blank\">RFC 6749</a>, section 3.2",
          "propertyOrder" : 700,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "authenticationLevel" : {
          "title" : "Authentication Level",
          "description" : "The authentication level associated with this module.<br><br>Each
 authentication module has an authentication level that can be used to indicate the level of security
 associated with the module; 0 is the lowest (and the default).",
          "propertyOrder" : 100,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        }
      }
    },
    "accountProvisioning" : {
      "type" : "object",
      "title" : "Account Provisioning",
      "propertyOrder" : 1,
      "properties" : {
        "enableRegistrationService" : {
          "title" : "Use IDM as Registration Service",
          "description" : "Whether to use IDM as an external Registration Service to complete
 registration for new users.<br><br>IDM is called and passed these parameters:<br/><br/
><ul><li><code>clientToken</code>: Signed, encrypted JWT of the OAuth 2.0 authentication state.</
li><li><code>returnParams</code>: Encoded URL parameters, required to be returned to AM to resume
 authentication after registration in IDM is complete.</li></ul>",
          "propertyOrder" : 1350,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
```


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```
        "attributeMappingClasses" : {
          "title" : "Attribute Mapper",
          "description" : "Name of the class that implements the attribute
 mapping<br><br>This class maps the OAuth properties into OpenAM properties. A custom
 attribute mapper can be provided.<br/><br/>A custom attribute mapper must implement the
 <code>org.forgerock.openam.authentication.modules.common.mapping.AttributeMapper</code>
 interface.<br/>Provided implementations
 are:<ul><li>org.forgerock.openam.authentication.modules.common.mapping.JsonAttributeMapper</
li><li>org.forgerock.openam.authentication.modules.oidc.JwtAttributeMapper (can only be used when
 using the openid scope)</li></ul>String constructor parameters can be provided by appending <code>|</
code> separated values.",
          "propertyOrder" : 1700,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "accountMapperConfiguration" : {
          "title" : "Account Mapper Configuration",
          "description" : "Mapping of OAuth account to local OpenAM account<br><br>Attribute
 configuration that will be used to map the account of the user authenticated in the OAuth 2.0
 Provider to the local data store in the OpenAM. Example: <code>OAuth2.0_attribute=local_attribute</
code>",
          "propertyOrder" : 1600,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "accountProviderClass" : {
          "title" : "Account Provider",
          "description" : "Name of the class implementing the account provider.<br><br>This
 class is used by the module to find the account from the attributes mapped by the Account
 Mapper <code>org.forgerock.openam.authentication.modules.common.mapping.AccountProvider</code>
 interface.<br/>String constructor parameters can be provided by appending <code>|</code> separated
 values.",
          "propertyOrder" : 1400,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "promptPasswordFlag" : {
          "title" : "Prompt for password setting and activation code",
          "description" : "Users must set a password and complete the activation flow during dynamic
 profile creation.<br><br>If this is enabled, the user must set a password before the system creates
 an account dynamically and an activation code will be sent to the user's email address. The account
 will be created only if the password and activation code are properly set. <br />If this is disabled,
 the account will be created transparently without prompting the user.",
          "propertyOrder" : 1905,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "saveAttributesInSession" : {
          "title" : "Save attributes in the session",
```


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```
          "description" : "If this option is enabled, the attributes configured in the attribute
 mapper will be saved into the OpenAM session",
          "propertyOrder" : 2400,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "attributeMapperConfiguration" : {
          "title" : "Attribute Mapper Configuration",
          "description" : "Mapping of OAuth attributes to local OpenAM attributes<br><br>Attribute
 configuration that will be used to map the user info obtained from the OAuth 2.0 Provider to the
 local user data store in the OpenAM.<br/><br/>Example: <code>OAuth2.0_attribute=local_attribute</
code>",
          "propertyOrder" : 1800,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "mapToAnonymousUser" : {
          "title" : "Map to anonymous user",
          "description" : "Enabled anonymous user access to OpenAM for OAuth authenticated
 users<br><br>If selected, the authenticated users in the OAuth 2.0 Provider will be mapped to the
 anonymous user configured in the next parameter.<br/>If not selected the users authenticated will be
 mapped by the parameters configured in the account mapper.<br/><br/><i>NB </i>If <i>Create account if
 it does not exist</i> is enabled, that parameter takes precedence.",
          "propertyOrder" : 2000,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "anonymousUserName" : {
          "title" : "Anonymous User",
          "description" : "Username of the OpenAM anonymous user<br><br>The username of the user that
 will represent the anonymous user. This user account must already exist in the realm.",
          "propertyOrder" : 2100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "createAccount" : {
          "title" : "Create account if it does not exist",
          "description" : "If the OAuth2 account does not exist in the local OpenAM data store, an
 account will be created dynamically.<br><br>If this is enabled, the account mapper could create
 the account dynamically if there is no account mapped. Before creating the account, a dialog
 prompting for a password and asking for an activation code can be shown if the parameter \"Prompt
 for password setting and activation code\" is enabled.<br /><br />If this flag is not enabled, 3
 alternative options exist:<br/><br/><ol><li>The accounts need to have a user profile in the OpenAM
 User Data Store</li><li>The user does not have a user profile and the \"Ignore Profile\" is set in
 the Authentication Service of the realm.</li><li>The account is mapped to an anonymous account (see
 parameter \"Map to anonymous user\" and \"Anonymous User\")</li></ol>",
          "propertyOrder" : 1360,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "accountMapperClass" : {
```


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```
          "title" : "Account Mapper",
          "description" : "Name of the class implementing the attribute mapping for the
 account search.<br><br>This class is used by the module to map from the account information
 received from the OAuth Identity Provider into OpenAM.<br/><br/>The class must implement
 the <code>org.forgerock.openam.authentication.modules.common.mapping.AttributeMapper</code>
 interface.<br/>Provided implementations
 are:<ul><li>org.forgerock.openam.authentication.modules.common.mapping.JsonAttributeMapper</
li><li>org.forgerock.openam.authentication.modules.oidc.JwtAttributeMapper (can only be used when
 using the openid scope)</li></ul>String constructor parameters can be provided by appending <code>|</
code> separated values.",
          "propertyOrder" : 1500,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    },
    "emailSettings" : {
      "type" : "object",
      "title" : "Email",
      "propertyOrder" : 2,
      "properties" : {
        "emailGateway" : {
          "title" : "Mail Server Gateway implementation class",
          "description" : "The class used by the module to send email.<br><br>This class is used by
 the module to send email. A custom implementation can be provided.<br/><br/>The custom implementation
 must implement the <code>org.forgerock.openam.authentication.modules.oauth2.EmailGateway</code>",
          "propertyOrder" : 1915,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "smtpUsername" : {
          "title" : "SMTP User Name",
          "description" : "If the SMTP Service requires authentication, configure the user name here",
          "propertyOrder" : 1930,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "emailAttribute" : {
          "title" : "Email attribute in the Response",
          "description" : "Attribute from the response used to send activation code emails.<br><br>The
 attribute in the response from the profile service of the Provider that contains the email address of
 the authenticated user. This address will be used to send an email with an activation code when the
 accounts are allowed to be created dynamically.",
          "propertyOrder" : 1910,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "smtpFromAddress" : {
          "title" : "SMTP From address",
          "description" : "The email address on behalf of whom the messages will be sent",
          "propertyOrder" : 1945,
          "required" : true,
          "type" : "string",
          "exampleValue" : "info@forgerock.com"
        },
```


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```
        "smtpPassword" : {
          "title" : "SMTP User Password",
          "description" : "The Password of the SMTP User Name",
          "propertyOrder" : 1935,
          "required" : true,
          "type" : "string",
          "format" : "password",
          "exampleValue" : ""
        },
        "smtpHost" : {
          "title" : "SMTP host",
          "description" : "The mail host that will be used by the Email Gateway implementation",
          "propertyOrder" : 1920,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "smtpPort" : {
          "title" : "SMTP port",
          "description" : "The TCP port that will be used by the SMTP gateway",
          "propertyOrder" : 1925,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "smtpSslEnabled" : {
          "title" : "SMTP SSL Enabled",
          "description" : "Tick this option if the SMTP Server provides SSL",
          "propertyOrder" : 1940,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        }
      }
    }
  }
}
```

1.156.1.2. delete

Usage:

```
am> delete SocialAuthWeChatModule --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.156.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

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Usage:

```
am> action SocialAuthWeChatModule --realm Realm --actionName getAllTypes
```

1.156.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action SocialAuthWeChatModule --realm Realm --actionName getCreatableTypes
```

1.156.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action SocialAuthWeChatModule --realm Realm --actionName nextdescendents
```

1.156.1.6. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

```
am> query SocialAuthWeChatModule --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.156.1.7. read

Usage:

```
am> read SocialAuthWeChatModule --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.156.1.8. update

Usage:

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```
am> update SocialAuthWeChatModule --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "core" : {
      "type" : "object",
      "title" : "Core",
      "propertyOrder" : 0,
      "properties" : {
        "clientSecret" : {
          "title" : "Client Secret",
          "description" : "OAuth client_secret parameter<br><br>For more information on the OAuth
 client_secret parameter refer to the <a href=\"http://tools.ietf.org/html/rfc6749#section-2.3.1\"
 target=\"_blank\">RFC 6749</a>, section 2.3.1",
          "propertyOrder" : 500,
          "required" : true,
          "type" : "string",
          "format" : "password",
          "exampleValue" : ""
        },
        "provider" : {
          "title" : "Social Provider",
          "description" : "Social Provider for which this module is being setup.",
          "propertyOrder" : 200,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "userInfoEndpoint" : {
          "title" : "User Profile Service URL",
          "description" : "User profile information URL<br><br>This URL endpoint provides user profile
 information and is provided by the OAuth Identity Provider<br/><br/><i>NB </i>This URL should return
 JSON objects in response",
          "propertyOrder" : 800,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "scopeDelimiter" : {
          "title" : "Scope Delimiter",
          "description" : "Delimiter used to separate scope values. Default value is space.",
          "propertyOrder" : 1000,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "subjectProperty" : {
```


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```
          "title" : "Subject Property",
          "description" : "Property used to identify which attribute an auth server identifies a user
 by.",
          "propertyOrder" : 1100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "usesBasicAuth" : {
          "title" : "Use Basic Auth",
          "description" : "When enabled, the client will use basic auth for authenticating with  the
 social auth provider. Enabled by default.",
          "propertyOrder" : 1200,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "clientId" : {
          "title" : "Client Id",
          "description" : "OAuth client_id parameter<br><br>For more information on the OAuth
 client_id parameter refer to the <a href=\"http://tools.ietf.org/html/rfc6749#section-2.3.1\" target=
\"_blank\">RFC 6749</a>, section 2.3.1",
          "propertyOrder" : 400,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "authorizeEndpoint" : {
          "title" : "Authentication Endpoint URL",
          "description" : "OAuth authentication endpoint URL<br><br>This is the URL endpoint for OAuth
 authentication provided by the OAuth Identity Provider",
          "propertyOrder" : 600,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "scope" : {
          "title" : "Scope",
          "description" : "OAuth scope; list of user profile properties<br><br>According to the OAuth
 2.0 Authorization Framework, scope is a space-separated list of user profile attributes that the
 client application requires. The list depends on the permissions that the resource owner grants to
 the client application.<br/><br/> Some authorization servers use non-standard separators for scopes.
 For example, Facebook takes a comma-separated list.<br/><br/>",
          "propertyOrder" : 900,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "ssoProxyUrl" : {
          "title" : "Proxy URL",
          "description" : "The URL to the OpenAM OAuth proxy JSP<br><br>This URL should only be
 changed from the default, if an external server is performing the GET to POST proxying. The default
 is <code>/openam/oauth2c/OAuthProxy.jsp</code>",
          "propertyOrder" : 1300,
          "required" : true,
          "type" : "string",
```


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```
          "exampleValue" : ""
        },
        "tokenEndpoint" : {
          "title" : "Access Token Endpoint URL",
          "description" : "OAuth access token endpoint URL<br><br>This is the URL endpoint for
 access token retrieval provided by the OAuth Identity Provider. Refer to the <a href=\"http://
tools.ietf.org/html/rfc6749#section-3.2\" target=\"_blank\">RFC 6749</a>, section 3.2",
          "propertyOrder" : 700,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "authenticationLevel" : {
          "title" : "Authentication Level",
          "description" : "The authentication level associated with this module.<br><br>Each
 authentication module has an authentication level that can be used to indicate the level of security
 associated with the module; 0 is the lowest (and the default).",
          "propertyOrder" : 100,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        }
      }
    },
    "accountProvisioning" : {
      "type" : "object",
      "title" : "Account Provisioning",
      "propertyOrder" : 1,
      "properties" : {
        "enableRegistrationService" : {
          "title" : "Use IDM as Registration Service",
          "description" : "Whether to use IDM as an external Registration Service to complete
 registration for new users.<br><br>IDM is called and passed these parameters:<br/><br/
><ul><li><code>clientToken</code>: Signed, encrypted JWT of the OAuth 2.0 authentication state.</
li><li><code>returnParams</code>: Encoded URL parameters, required to be returned to AM to resume
 authentication after registration in IDM is complete.</li></ul>",
          "propertyOrder" : 1350,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "attributeMappingClasses" : {
          "title" : "Attribute Mapper",
          "description" : "Name of the class that implements the attribute
 mapping<br><br>This class maps the OAuth properties into OpenAM properties. A custom
 attribute mapper can be provided.<br/><br/>A custom attribute mapper must implement the
 <code>org.forgerock.openam.authentication.modules.common.mapping.AttributeMapper</code>
 interface.<br/>Provided implementations
 are:<ul><li>org.forgerock.openam.authentication.modules.common.mapping.JsonAttributeMapper</
li><li>org.forgerock.openam.authentication.modules.oidc.JwtAttributeMapper (can only be used when
 using the openid scope)</li></ul>String constructor parameters can be provided by appending <code>|</
code> separated values.",
          "propertyOrder" : 1700,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
```


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```
        },
        "accountMapperConfiguration" : {
          "title" : "Account Mapper Configuration",
          "description" : "Mapping of OAuth account to local OpenAM account<br><br>Attribute
 configuration that will be used to map the account of the user authenticated in the OAuth 2.0
 Provider to the local data store in the OpenAM. Example: <code>OAuth2.0_attribute=local_attribute</
code>",
          "propertyOrder" : 1600,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "accountProviderClass" : {
          "title" : "Account Provider",
          "description" : "Name of the class implementing the account provider.<br><br>This
 class is used by the module to find the account from the attributes mapped by the Account
 Mapper <code>org.forgerock.openam.authentication.modules.common.mapping.AccountProvider</code>
 interface.<br/>String constructor parameters can be provided by appending <code>|</code> separated
 values.",
          "propertyOrder" : 1400,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "promptPasswordFlag" : {
          "title" : "Prompt for password setting and activation code",
          "description" : "Users must set a password and complete the activation flow during dynamic
 profile creation.<br><br>If this is enabled, the user must set a password before the system creates
 an account dynamically and an activation code will be sent to the user's email address. The account
 will be created only if the password and activation code are properly set. <br />If this is disabled,
 the account will be created transparently without prompting the user.",
          "propertyOrder" : 1905,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "saveAttributesInSession" : {
          "title" : "Save attributes in the session",
          "description" : "If this option is enabled, the attributes configured in the attribute
 mapper will be saved into the OpenAM session",
          "propertyOrder" : 2400,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "attributeMapperConfiguration" : {
          "title" : "Attribute Mapper Configuration",
          "description" : "Mapping of OAuth attributes to local OpenAM attributes<br><br>Attribute
 configuration that will be used to map the user info obtained from the OAuth 2.0 Provider to the
 local user data store in the OpenAM.<br/><br/>Example: <code>OAuth2.0_attribute=local_attribute</
code>",
          "propertyOrder" : 1800,
          "required" : true,
          "items" : {
            "type" : "string"
          },
```


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```
          "type" : "array",
          "exampleValue" : ""
        },
        "mapToAnonymousUser" : {
          "title" : "Map to anonymous user",
          "description" : "Enabled anonymous user access to OpenAM for OAuth authenticated
 users<br><br>If selected, the authenticated users in the OAuth 2.0 Provider will be mapped to the
 anonymous user configured in the next parameter.<br/>If not selected the users authenticated will be
 mapped by the parameters configured in the account mapper.<br/><br/><i>NB </i>If <i>Create account if
 it does not exist</i> is enabled, that parameter takes precedence.",
          "propertyOrder" : 2000,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "anonymousUserName" : {
          "title" : "Anonymous User",
          "description" : "Username of the OpenAM anonymous user<br><br>The username of the user that
 will represent the anonymous user. This user account must already exist in the realm.",
          "propertyOrder" : 2100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "createAccount" : {
          "title" : "Create account if it does not exist",
          "description" : "If the OAuth2 account does not exist in the local OpenAM data store, an
 account will be created dynamically.<br><br>If this is enabled, the account mapper could create
 the account dynamically if there is no account mapped. Before creating the account, a dialog
 prompting for a password and asking for an activation code can be shown if the parameter \"Prompt
 for password setting and activation code\" is enabled.<br /><br />If this flag is not enabled, 3
 alternative options exist:<br/><br/><ol><li>The accounts need to have a user profile in the OpenAM
 User Data Store</li><li>The user does not have a user profile and the \"Ignore Profile\" is set in
 the Authentication Service of the realm.</li><li>The account is mapped to an anonymous account (see
 parameter \"Map to anonymous user\" and \"Anonymous User\")</li></ol>",
          "propertyOrder" : 1360,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "accountMapperClass" : {
          "title" : "Account Mapper",
          "description" : "Name of the class implementing the attribute mapping for the
 account search.<br><br>This class is used by the module to map from the account information
 received from the OAuth Identity Provider into OpenAM.<br/><br/>The class must implement
 the <code>org.forgerock.openam.authentication.modules.common.mapping.AttributeMapper</code>
 interface.<br/>Provided implementations
 are:<ul><li>org.forgerock.openam.authentication.modules.common.mapping.JsonAttributeMapper</
li><li>org.forgerock.openam.authentication.modules.oidc.JwtAttributeMapper (can only be used when
 using the openid scope)</li></ul>String constructor parameters can be provided by appending <code>|</
code> separated values.",
          "propertyOrder" : 1500,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    },
    "emailSettings" : {
```


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```
     "type" : "object",
     "title" : "Email",
     "propertyOrder" : 2,
     "properties" : {
       "emailGateway" : {
         "title" : "Mail Server Gateway implementation class",
         "description" : "The class used by the module to send email.<br><br>This class is used by
the module to send email. A custom implementation can be provided.<br/><br/>The custom implementation
must implement the <code>org.forgerock.openam.authentication.modules.oauth2.EmailGateway</code>",
         "propertyOrder" : 1915,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       },
       "smtpUsername" : {
         "title" : "SMTP User Name",
         "description" : "If the SMTP Service requires authentication, configure the user name here",
         "propertyOrder" : 1930,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       },
       "emailAttribute" : {
         "title" : "Email attribute in the Response",
         "description" : "Attribute from the response used to send activation code emails.<br><br>The
attribute in the response from the profile service of the Provider that contains the email address of
the authenticated user. This address will be used to send an email with an activation code when the
accounts are allowed to be created dynamically.",
         "propertyOrder" : 1910,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       },
       "smtpFromAddress" : {
         "title" : "SMTP From address",
         "description" : "The email address on behalf of whom the messages will be sent",
         "propertyOrder" : 1945,
         "required" : true,
         "type" : "string",
         "exampleValue" : "info@forgerock.com"
       },
       "smtpPassword" : {
         "title" : "SMTP User Password",
         "description" : "The Password of the SMTP User Name",
         "propertyOrder" : 1935,
         "required" : true,
         "type" : "string",
         "format" : "password",
         "exampleValue" : ""
       },
       "smtpHost" : {
         "title" : "SMTP host",
         "description" : "The mail host that will be used by the Email Gateway implementation",
         "propertyOrder" : 1920,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       },
       "smtpPort" : {
```


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```
          "title" : "SMTP port",
          "description" : "The TCP port that will be used by the SMTP gateway",
          "propertyOrder" : 1925,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "smtpSslEnabled" : {
          "title" : "SMTP SSL Enabled",
          "description" : "Tick this option if the SMTP Server provides SSL",
          "propertyOrder" : 1940,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        }
      }
    }
  }
}
```

1.156.2. Global Operations

Resource path: `/global-config/authentication/modules/authSocialWeChat`

Resource version: `1.0`

1.156.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action SocialAuthWeChatModule --global --actionName getAllTypes
```

1.156.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action SocialAuthWeChatModule --global --actionName getCreatableTypes
```

1.156.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action SocialAuthWeChatModule --global --actionName nextdescendents
```


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1.156.2.4. read

Usage:

```
am> read SocialAuthWeChatModule --global
```

1.156.2.5. update

Usage:

```
am> update SocialAuthWeChatModule --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "defaults" : {
      "properties" : {
        "authenticationLevel" : {
          "title" : "Authentication Level",
          "description" : "The authentication level associated with this module.<br><br>Each
 authentication module has an authentication level that can be used to indicate the level of security
 associated with the module; 0 is the lowest (and the default).",
          "propertyOrder" : 100,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "smtpPassword" : {
          "title" : "SMTP User Password",
          "description" : "The Password of the SMTP User Name",
          "propertyOrder" : 1935,
          "required" : true,
          "type" : "string",
          "format" : "password",
          "exampleValue" : ""
        },
        "accountMapperClass" : {
          "title" : "Account Mapper",
          "description" : "Name of the class implementing the attribute mapping for the
 account search.<br><br>This class is used by the module to map from the account information
 received from the OAuth Identity Provider into OpenAM.<br/><br/>The class must implement
 the <code>org.forgerock.openam.authentication.modules.common.mapping.AttributeMapper</code>
 interface.<br/>Provided implementations
 are:<ul><li>org.forgerock.openam.authentication.modules.common.mapping.JsonAttributeMapper</
li><li>org.forgerock.openam.authentication.modules.oidc.JwtAttributeMapper (can only be used when
 using the openid scope)</li></ul>String constructor parameters can be provided by appending <code>|</
code> separated values.",
          "propertyOrder" : 1500,
          "required" : true,
          "type" : "string",
```


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```
          "exampleValue" : ""
        },
        "emailGateway" : {
          "title" : "Mail Server Gateway implementation class",
          "description" : "The class used by the module to send email.<br><br>This class is used by
 the module to send email. A custom implementation can be provided.<br/><br/>The custom implementation
 must implement the <code>org.forgerock.openam.authentication.modules.oauth2.EmailGateway</code>",
          "propertyOrder" : 1915,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "provider" : {
          "title" : "Social Provider",
          "description" : "Social Provider for which this module is being setup.",
          "propertyOrder" : 200,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "tokenEndpoint" : {
          "title" : "Access Token Endpoint URL",
          "description" : "OAuth access token endpoint URL<br><br>This is the URL endpoint for
 access token retrieval provided by the OAuth Identity Provider. Refer to the <a href=\"http://
tools.ietf.org/html/rfc6749#section-3.2\" target=\"_blank\">RFC 6749</a>, section 3.2",
          "propertyOrder" : 700,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "saveAttributesInSession" : {
          "title" : "Save attributes in the session",
          "description" : "If this option is enabled, the attributes configured in the attribute
 mapper will be saved into the OpenAM session",
          "propertyOrder" : 2400,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "usesBasicAuth" : {
          "title" : "Use Basic Auth",
          "description" : "When enabled, the client will use basic auth for authenticating with  the
 social auth provider. Enabled by default.",
          "propertyOrder" : 1200,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "smtpUsername" : {
          "title" : "SMTP User Name",
          "description" : "If the SMTP Service requires authentication, configure the user name here",
          "propertyOrder" : 1930,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "authorizeEndpoint" : {
          "title" : "Authentication Endpoint URL",
```


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```
          "description" : "OAuth authentication endpoint URL<br><br>This is the URL endpoint for OAuth
 authentication provided by the OAuth Identity Provider",
          "propertyOrder" : 600,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "userInfoEndpoint" : {
          "title" : "User Profile Service URL",
          "description" : "User profile information URL<br><br>This URL endpoint provides user profile
 information and is provided by the OAuth Identity Provider<br/><br/><i>NB </i>This URL should return
 JSON objects in response",
          "propertyOrder" : 800,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "enableRegistrationService" : {
          "title" : "Use IDM as Registration Service",
          "description" : "Whether to use IDM as an external Registration Service to complete
 registration for new users.<br><br>IDM is called and passed these parameters:<br/><br/
><ul><li><code>clientToken</code>: Signed, encrypted JWT of the OAuth 2.0 authentication state.</
li><li><code>returnParams</code>: Encoded URL parameters, required to be returned to AM to resume
 authentication after registration in IDM is complete.</li></ul>",
          "propertyOrder" : 1350,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "attributeMappingClasses" : {
          "title" : "Attribute Mapper",
          "description" : "Name of the class that implements the attribute
 mapping<br><br>This class maps the OAuth properties into OpenAM properties. A custom
 attribute mapper can be provided.<br/><br/>A custom attribute mapper must implement the
 <code>org.forgerock.openam.authentication.modules.common.mapping.AttributeMapper</code>
 interface.<br/>Provided implementations
 are:<ul><li>org.forgerock.openam.authentication.modules.common.mapping.JsonAttributeMapper</
li><li>org.forgerock.openam.authentication.modules.oidc.JwtAttributeMapper (can only be used when
 using the openid scope)</li></ul>String constructor parameters can be provided by appending <code>|</
code> separated values.",
          "propertyOrder" : 1700,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "createAccount" : {
          "title" : "Create account if it does not exist",
          "description" : "If the OAuth2 account does not exist in the local OpenAM data store, an
 account will be created dynamically.<br><br>If this is enabled, the account mapper could create
 the account dynamically if there is no account mapped. Before creating the account, a dialog
 prompting for a password and asking for an activation code can be shown if the parameter \"Prompt
 for password setting and activation code\" is enabled.<br /><br />If this flag is not enabled, 3
 alternative options exist:<br/><br/><ol><li>The accounts need to have a user profile in the OpenAM
 User Data Store</li><li>The user does not have a user profile and the \"Ignore Profile\" is set in
 the Authentication Service of the realm.</li><li>The account is mapped to an anonymous account (see
 parameter \"Map to anonymous user\" and \"Anonymous User\")</li></ol>",
```


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```
          "propertyOrder" : 1360,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "accountMapperConfiguration" : {
          "title" : "Account Mapper Configuration",
          "description" : "Mapping of OAuth account to local OpenAM account<br><br>Attribute
 configuration that will be used to map the account of the user authenticated in the OAuth 2.0
 Provider to the local data store in the OpenAM. Example: <code>OAuth2.0_attribute=local_attribute</
code>",
          "propertyOrder" : 1600,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "smtpHost" : {
          "title" : "SMTP host",
          "description" : "The mail host that will be used by the Email Gateway implementation",
          "propertyOrder" : 1920,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "scopeDelimiter" : {
          "title" : "Scope Delimiter",
          "description" : "Delimiter used to separate scope values. Default value is space.",
          "propertyOrder" : 1000,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "anonymousUserName" : {
          "title" : "Anonymous User",
          "description" : "Username of the OpenAM anonymous user<br><br>The username of the user that
 will represent the anonymous user. This user account must already exist in the realm.",
          "propertyOrder" : 2100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "emailAttribute" : {
          "title" : "Email attribute in the Response",
          "description" : "Attribute from the response used to send activation code emails.<br><br>The
 attribute in the response from the profile service of the Provider that contains the email address of
 the authenticated user. This address will be used to send an email with an activation code when the
 accounts are allowed to be created dynamically.",
          "propertyOrder" : 1910,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "clientSecret" : {
          "title" : "Client Secret",
```


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```
          "description" : "OAuth client_secret parameter<br><br>For more information on the OAuth
 client_secret parameter refer to the <a href=\"http://tools.ietf.org/html/rfc6749#section-2.3.1\"
 target=\"_blank\">RFC 6749</a>, section 2.3.1",
          "propertyOrder" : 500,
          "required" : true,
          "type" : "string",
          "format" : "password",
          "exampleValue" : ""
        },
        "smtpSslEnabled" : {
          "title" : "SMTP SSL Enabled",
          "description" : "Tick this option if the SMTP Server provides SSL",
          "propertyOrder" : 1940,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "mapToAnonymousUser" : {
          "title" : "Map to anonymous user",
          "description" : "Enabled anonymous user access to OpenAM for OAuth authenticated
 users<br><br>If selected, the authenticated users in the OAuth 2.0 Provider will be mapped to the
 anonymous user configured in the next parameter.<br/>If not selected the users authenticated will be
 mapped by the parameters configured in the account mapper.<br/><br/><i>NB </i>If <i>Create account if
 it does not exist</i> is enabled, that parameter takes precedence.",
          "propertyOrder" : 2000,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "subjectProperty" : {
          "title" : "Subject Property",
          "description" : "Property used to identify which attribute an auth server identifies a user
 by.",
          "propertyOrder" : 1100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "scope" : {
          "title" : "Scope",
          "description" : "OAuth scope; list of user profile properties<br><br>According to the OAuth
 2.0 Authorization Framework, scope is a space-separated list of user profile attributes that the
 client application requires. The list depends on the permissions that the resource owner grants to
 the client application.<br/><br/> Some authorization servers use non-standard separators for scopes.
 For example, Facebook takes a comma-separated list.<br/><br/>",
          "propertyOrder" : 900,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "attributeMapperConfiguration" : {
          "title" : "Attribute Mapper Configuration",
          "description" : "Mapping of OAuth attributes to local OpenAM attributes<br><br>Attribute
 configuration that will be used to map the user info obtained from the OAuth 2.0 Provider to the
 local user data store in the OpenAM.<br/><br/>Example: <code>OAuth2.0_attribute=local_attribute</
code>",
```


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```
          "propertyOrder" : 1800,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "smtpPort" : {
          "title" : "SMTP port",
          "description" : "The TCP port that will be used by the SMTP gateway",
          "propertyOrder" : 1925,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "promptPasswordFlag" : {
          "title" : "Prompt for password setting and activation code",
          "description" : "Users must set a password and complete the activation flow during dynamic
 profile creation.<br><br>If this is enabled, the user must set a password before the system creates
 an account dynamically and an activation code will be sent to the user's email address. The account
 will be created only if the password and activation code are properly set. <br />If this is disabled,
 the account will be created transparently without prompting the user.",
          "propertyOrder" : 1905,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "smtpFromAddress" : {
          "title" : "SMTP From address",
          "description" : "The email address on behalf of whom the messages will be sent",
          "propertyOrder" : 1945,
          "required" : true,
          "type" : "string",
          "exampleValue" : "info@forgerock.com"
        },
        "ssoProxyUrl" : {
          "title" : "Proxy URL",
          "description" : "The URL to the OpenAM OAuth proxy JSP<br><br>This URL should only be
 changed from the default, if an external server is performing the GET to POST proxying. The default
 is <code>/openam/oauth2c/OAuthProxy.jsp</code>",
          "propertyOrder" : 1300,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "clientId" : {
          "title" : "Client Id",
          "description" : "OAuth client_id parameter<br><br>For more information on the OAuth
 client_id parameter refer to the <a href=\"http://tools.ietf.org/html/rfc6749#section-2.3.1\" target=
\"_blank\">RFC 6749</a>, section 2.3.1",
          "propertyOrder" : 400,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "accountProviderClass" : {
          "title" : "Account Provider",
```


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```
          "description" : "Name of the class implementing the account provider.<br><br>This
 class is used by the module to find the account from the attributes mapped by the Account
 Mapper <code>org.forgerock.openam.authentication.modules.common.mapping.AccountProvider</code>
 interface.<br/>String constructor parameters can be provided by appending <code>|</code> separated
 values.",
          "propertyOrder" : 1400,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      },
      "type" : "object",
      "title" : "Realm Defaults"
    }
  }
}
```

1.157. SocialAuthentication

1.157.1. Realm Operations

Resource path: `/realm-config/services/socialauthentication`

Resource version: `1.0`

1.157.1.1. create

Usage:

```
am> create SocialAuthentication --realm Realm --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "enabledKeys" : {
      "title" : "Enabled Implementations",
      "description" : "Provide a key that has been used to define the settings above to enable that
 set of settings.<br><br>For example: google",
      "propertyOrder" : 400,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
```


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```
    },
    "authenticationChains" : {
      "title" : "Authentication Chains",
      "description" : "The name of the authentication chains that are the entry points to being
 authenticated by each respective social authentication provider. The key should correspond to a
 key used to define a Display Name above.<br><br>For example:<table><tr><th>Key</th><th>Value</th></
tr><tr><td>google</td><td>socialAuthChainGoogle</td></tr></table>",
      "propertyOrder" : 200,
      "required" : true,
      "patternProperties" : {
        ".*" : { }
      },
      "type" : "object",
      "exampleValue" : ""
    },
    "displayNames" : {
      "title" : "Display Names",
      "description" : "The display names for the implementations - this will be used to provide a name
 for the icon displayed on the login page. The key should be used across all the settings on this page
 to join them together.<br><br>For example:<table><tr><th>Key</th><th>Value</th></tr><tr><td>google</
td><td>Google</td></tr></table>",
      "propertyOrder" : 100,
      "required" : true,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : ""
    },
    "icons" : {
      "title" : "Icons",
      "description" : "Either a full URL or a path relative to the base of the site/server where the
 image can be found. The image will be used on the login page to link to the authentication chain
 defined above. The key should correspond to a key used to define a Display Name above.<br><br>For
 example:<table><tr><th>Key</th><th>Value</th></tr><tr><td>google</td><td>/images/google-sign-in.png</
td></tr></table>",
      "propertyOrder" : 300,
      "required" : true,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : ""
    }
  }
}
```

1.157.1.2. delete

Usage:

```
am> delete SocialAuthentication --realm Realm
```


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1.157.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action SocialAuthentication --realm Realm --actionName getAllTypes
```

1.157.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action SocialAuthentication --realm Realm --actionName getCreatableTypes
```

1.157.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action SocialAuthentication --realm Realm --actionName nextdescendents
```

1.157.1.6. read

Usage:

```
am> read SocialAuthentication --realm Realm
```

1.157.1.7. update

Usage:

```
am> update SocialAuthentication --realm Realm --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "enabledKeys" : {
      "title" : "Enabled Implementations",
      "description" : "Provide a key that has been used to define the settings above to enable that
 set of settings.<br><br>For example: google",
      "propertyOrder" : 400,
      "required" : true,
      "items" : {
```


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```
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "authenticationChains" : {
      "title" : "Authentication Chains",
      "description" : "The name of the authentication chains that are the entry points to being
 authenticated by each respective social authentication provider. The key should correspond to a
 key used to define a Display Name above.<br><br>For example:<table><tr><th>Key</th><th>Value</th></
tr><tr><td>google</td><td>socialAuthChainGoogle</td></tr></table>",
      "propertyOrder" : 200,
      "required" : true,
      "patternProperties" : {
        ".*" : { }
      },
      "type" : "object",
      "exampleValue" : ""
    },
    "displayNames" : {
      "title" : "Display Names",
      "description" : "The display names for the implementations - this will be used to provide a name
 for the icon displayed on the login page. The key should be used across all the settings on this page
 to join them together.<br><br>For example:<table><tr><th>Key</th><th>Value</th></tr><tr><td>google</
td><td>Google</td></tr></table>",
      "propertyOrder" : 100,
      "required" : true,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : ""
    },
    "icons" : {
      "title" : "Icons",
      "description" : "Either a full URL or a path relative to the base of the site/server where the
 image can be found. The image will be used on the login page to link to the authentication chain
 defined above. The key should correspond to a key used to define a Display Name above.<br><br>For
 example:<table><tr><th>Key</th><th>Value</th></tr><tr><td>google</td><td>/images/google-sign-in.png</
td></tr></table>",
      "propertyOrder" : 300,
      "required" : true,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : ""
    }
  }
}
```


1.157.2. Global Operations

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Resource path: `/global-config/services/socialauthentication`

Resource version: `1.0`

1.157.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action SocialAuthentication --global --actionName getAllTypes
```

1.157.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action SocialAuthentication --global --actionName getCreatableTypes
```

1.157.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action SocialAuthentication --global --actionName nextdescendents
```

1.157.2.4. read

Usage:

```
am> read SocialAuthentication --global
```

1.157.2.5. update

Usage:

```
am> update SocialAuthentication --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "defaults" : {
```


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```
      "properties" : {
        "icons" : {
          "title" : "Icons",
          "description" : "Either a full URL or a path relative to the base of the site/server where
 the image can be found. The image will be used on the login page to link to the authentication chain
 defined above. The key should correspond to a key used to define a Display Name above.<br><br>For
 example:<table><tr><th>Key</th><th>Value</th></tr><tr><td>google</td><td>/images/google-sign-in.png</
td></tr></table>",
          "propertyOrder" : 300,
          "required" : true,
          "patternProperties" : {
            ".*" : {
              "type" : "string"
            }
          },
          "type" : "object",
          "exampleValue" : ""
        },
        "authenticationChains" : {
          "title" : "Authentication Chains",
          "description" : "The name of the authentication chains that are the entry points to being
 authenticated by each respective social authentication provider. The key should correspond to a
 key used to define a Display Name above.<br><br>For example:<table><tr><th>Key</th><th>Value</th></
tr><tr><td>google</td><td>socialAuthChainGoogle</td></tr></table>",
          "propertyOrder" : 200,
          "required" : true,
          "patternProperties" : {
            ".*" : { }
          },
          "type" : "object",
          "exampleValue" : ""
        },
        "enabledKeys" : {
          "title" : "Enabled Implementations",
          "description" : "Provide a key that has been used to define the settings above to enable
 that set of settings.<br><br>For example: google",
          "propertyOrder" : 400,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "displayNames" : {
          "title" : "Display Names",
          "description" : "The display names for the implementations - this will be used to provide
 a name for the icon displayed on the login page. The key should be used across all the settings
 on this page to join them together.<br><br>For example:<table><tr><th>Key</th><th>Value</th></
tr><tr><td>google</td><td>Google</td></tr></table>",
          "propertyOrder" : 100,
          "required" : true,
          "patternProperties" : {
            ".*" : {
              "type" : "string"
            }
          },
          "type" : "object",
          "exampleValue" : ""
```


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```
        }
      },
      "type" : "object",
      "title" : "Realm Defaults"
    }
  }
}
```

1.158. SoftwarePublisher

1.158.1. Realm Operations

Agents handler that is responsible for managing agents

Resource path: `/realm-config/agents/SoftwarePublisher`

Resource version: `1.0`

1.158.1.1. create

Usage:

```
am> create SoftwarePublisher --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "jwksCacheTimeout" : {
      "title" : "JWKs URI content cache timeout in ms",
      "description" : "To avoid loading the JWKS URI content for every operation, the JWKS content is
 cached. This timeout defines the maximum amount of time the JWKS URI content can be cached before
 being refreshed.",
      "propertyOrder" : 34900,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "integer",
```


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```
          "required" : true
        }
      }
    },
    "softwareStatementSigningAlgorithm" : {
      "title" : "Software statement signing Algorithm",
      "description" : "Signing algorithm to be used when verifying software statement signatures.",
      "propertyOrder" : 34500,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "jwkStoreCacheMissCacheTime" : {
      "title" : "JWKs URI content cache miss cache time",
      "description" : "To avoid loading the JWKS URI content for every operation, especially when
the kid is not in the jwks content already cached, the JWKS content will be cached for a minimum
period of time. This cache miss cache time defines the minimum amount of time the JWKS URI content is
cached.",
      "propertyOrder" : 35000,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "integer",
          "required" : true
        }
      }
    },
    "issuer" : {
      "title" : "Software publisher issuer.",
      "description" : "Identifier for the software publisher, generally represented as a URL.",
      "propertyOrder" : 33001,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "jwkSet" : {
```


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```
      "title" : "Json Web Key",
      "description" : "Raw JSON Web Key value containing the Software Publisher's public keys.",
      "propertyOrder" : 35100,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : false
        }
      }
    },
    "jwksUri" : {
      "title" : "Json Web Key URI",
      "description" : "The URI that contains the Software Publisher's public keys in Json Web Key
format.",
      "propertyOrder" : 34800,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "userpassword" : {
      "title" : "Software publisher secret",
      "description" : "Software publisher secret. Used when software statement signatures are HMAC
based.",
      "propertyOrder" : 33000,
      "required" : true,
      "type" : "string",
      "format" : "password",
      "exampleValue" : ""
    },
    "publicKeyLocation" : {
      "title" : "Public key selector",
      "description" : "Select how the Software Publisher's public keys should be retrieved by the
provider when validating software statement signatures.",
      "propertyOrder" : 34700,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
```


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```
        }
      }
    }
  }
}
```

1.158.1.2. delete

Usage:

```
am> delete SoftwarePublisher --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.158.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action SoftwarePublisher --realm Realm --actionName getAllTypes
```

1.158.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action SoftwarePublisher --realm Realm --actionName getCreatableTypes
```

1.158.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action SoftwarePublisher --realm Realm --actionName nextdescendents
```

1.158.1.6. query

Querying the agents of a specific type

Usage:

```
am> query SoftwarePublisher --realm Realm --filter filter
```


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Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.158.1.7. read

Usage:

```
am> read SoftwarePublisher --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.158.1.8. update

Usage:

```
am> update SoftwarePublisher --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "jwksCacheTimeout" : {
      "title" : "JWKs URI content cache timeout in ms",
      "description" : "To avoid loading the JWKS URI content for every operation, the JWKS content is
 cached. This timeout defines the maximum amount of time the JWKS URI content can be cached before
 being refreshed.",
      "propertyOrder" : 34900,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "integer",
          "required" : true
        }
```


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```
      }
    },
    "softwareStatementSigningAlgorithm" : {
      "title" : "Software statement signing Algorithm",
      "description" : "Signing algorithm to be used when verifying software statement signatures.",
      "propertyOrder" : 34500,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "jwkStoreCacheMissCacheTime" : {
      "title" : "JWKs URI content cache miss cache time",
      "description" : "To avoid loading the JWKS URI content for every operation, especially when
the kid is not in the jwks content already cached, the JWKS content will be cached for a minimum
period of time. This cache miss cache time defines the minimum amount of time the JWKS URI content is
cached.",
      "propertyOrder" : 35000,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "integer",
          "required" : true
        }
      }
    },
    "issuer" : {
      "title" : "Software publisher issuer.",
      "description" : "Identifier for the software publisher, generally represented as a URL.",
      "propertyOrder" : 33001,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "jwkSet" : {
      "title" : "Json Web Key",
      "description" : "Raw JSON Web Key value containing the Software Publisher's public keys.",
```


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```
      "propertyOrder" : 35100,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : false
        }
      }
    },
    "jwksUri" : {
      "title" : "Json Web Key URI",
      "description" : "The URI that contains the Software Publisher's public keys in Json Web Key
format.",
      "propertyOrder" : 34800,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "userpassword" : {
      "title" : "Software publisher secret",
      "description" : "Software publisher secret. Used when software statement signatures are HMAC
based.",
      "propertyOrder" : 33000,
      "required" : true,
      "type" : "string",
      "format" : "password",
      "exampleValue" : ""
    },
    "publicKeyLocation" : {
      "title" : "Public key selector",
      "description" : "Select how the Software Publisher's public keys should be retrieved by the
provider when validating software statement signatures.",
      "propertyOrder" : 34700,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
```


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```
    }
  }
}
```

1.159. Splunk

1.159.1. Realm Operations

Resource path: `/realm-config/services/audit/Splunk`

Resource version: `1.0`

1.159.1.1. create

Usage:

```
am> create Splunk --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "commonHandler" : {
      "type" : "object",
      "title" : "General Handler Configuration",
      "propertyOrder" : 0,
      "properties" : {
        "enabled" : {
          "title" : "Enabled",
          "description" : "Enables or disables an audit event handler.",
          "propertyOrder" : 100,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "topics" : {
          "title" : "Topics",
          "description" : "List of topics handled by an audit event handler.",
          "propertyOrder" : 200,
          "required" : true,
          "items" : {
            "type" : "string"
```


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```
          },
          "type" : "array",
          "exampleValue" : ""
        }
      }
    },
    "splunkConfig" : {
      "type" : "object",
      "title" : "Splunk Configuration",
      "propertyOrder" : 2,
      "properties" : {
        "port" : {
          "title" : "Server Port",
          "description" : "Port number of Splunk server.",
          "propertyOrder" : 400,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "authzToken" : {
          "title" : "Authorization Token",
          "description" : "Authorization token used to connect to Splunk HTTP Event Collector
endpoint.",
          "propertyOrder" : null,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "sslEnabled" : {
          "title" : "SSL Enabled",
          "description" : "Use HTTPS protocol for communication with Splunk.",
          "propertyOrder" : 500,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "host" : {
          "title" : "Server Hostname",
          "description" : "Host name or IP address of Splunk server.",
          "propertyOrder" : 300,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    },
    "commonHandlerPlugin" : {
      "type" : "object",
      "title" : "Audit Event Handler Factory",
      "propertyOrder" : 1,
      "properties" : {
        "handlerFactory" : {
          "title" : "Factory Class Name",
          "description" : "The fully qualified class name of the factory
responsible for creating the Audit Event Handler. The class must implement
<code>org.forgerock.openam.audit.AuditEventHandlerFactory</code>.",
          "propertyOrder" : null,
          "required" : true,
          "type" : "string",
```


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```
          "exampleValue" : ""
        }
      }
    },
    "splunkBuffering" : {
      "type" : "object",
      "title" : "Buffering",
      "propertyOrder" : 3,
      "properties" : {
        "maxEvents" : {
          "title" : "Queue Capacity",
          "description" : "Maximum number of audit evens in the batch queue; additional events are
 dropped.",
          "propertyOrder" : 700,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "batchSize" : {
          "title" : "Batch Size",
          "description" : "Maximum number of events that can be buffered (default: 10000).",
          "propertyOrder" : 600,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "writeInterval" : {
          "title" : "Write interval (in milliseconds)",
          "description" : "Interval at which buffered events are written to Splunk.",
          "propertyOrder" : 800,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        }
      }
    }
  }
}
```

1.159.1.2. delete

Usage:

```
am> delete Splunk --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.159.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

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Usage:

```
am> action Splunk --realm Realm --actionName getAllTypes
```

1.159.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action Splunk --realm Realm --actionName getCreatableTypes
```

1.159.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action Splunk --realm Realm --actionName nextdescendents
```

1.159.1.6. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

```
am> query Splunk --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.159.1.7. read

Usage:

```
am> read Splunk --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.159.1.8. update

Usage:

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```
am> update Splunk --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "commonHandler" : {
      "type" : "object",
      "title" : "General Handler Configuration",
      "propertyOrder" : 0,
      "properties" : {
        "enabled" : {
          "title" : "Enabled",
          "description" : "Enables or disables an audit event handler.",
          "propertyOrder" : 100,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "topics" : {
          "title" : "Topics",
          "description" : "List of topics handled by an audit event handler.",
          "propertyOrder" : 200,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        }
      }
    },
    "splunkConfig" : {
      "type" : "object",
      "title" : "Splunk Configuration",
      "propertyOrder" : 2,
      "properties" : {
        "port" : {
          "title" : "Server Port",
          "description" : "Port number of Splunk server.",
          "propertyOrder" : 400,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "authzToken" : {
          "title" : "Authorization Token",
          "description" : "Authorization token used to connect to Splunk HTTP Event Collector
 endpoint.",
```


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```
          "propertyOrder" : null,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "sslEnabled" : {
          "title" : "SSL Enabled",
          "description" : "Use HTTPS protocol for communication with Splunk.",
          "propertyOrder" : 500,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "host" : {
          "title" : "Server Hostname",
          "description" : "Host name or IP address of Splunk server.",
          "propertyOrder" : 300,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    },
    "commonHandlerPlugin" : {
      "type" : "object",
      "title" : "Audit Event Handler Factory",
      "propertyOrder" : 1,
      "properties" : {
        "handlerFactory" : {
          "title" : "Factory Class Name",
          "description" : "The fully qualified class name of the factory
responsible for creating the Audit Event Handler. The class must implement
<code>org.forgerock.openam.audit.AuditEventHandlerFactory</code>.",
          "propertyOrder" : null,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    },
    "splunkBuffering" : {
      "type" : "object",
      "title" : "Buffering",
      "propertyOrder" : 3,
      "properties" : {
        "maxEvents" : {
          "title" : "Queue Capacity",
          "description" : "Maximum number of audit evens in the batch queue; additional events are
dropped.",
          "propertyOrder" : 700,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "batchSize" : {
          "title" : "Batch Size",
          "description" : "Maximum number of events that can be buffered (default: 10000).",
          "propertyOrder" : 600,
          "required" : true,
```


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```
          "type" : "integer",
          "exampleValue" : ""
        },
        "writeInterval" : {
          "title" : "Write interval (in milliseconds)",
          "description" : "Interval at which buffered events are written to Splunk.",
          "propertyOrder" : 800,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        }
      }
    }
  }
}
```

1.159.2. Global Operations

Resource path: `/global-config/services/audit/Splunk`

Resource version: `1.0`

1.159.2.1. create

Usage:

```
am> create Splunk --global --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "splunkConfig" : {
      "type" : "object",
      "title" : "Splunk Configuration",
      "propertyOrder" : 2,
      "properties" : {
        "sslEnabled" : {
          "title" : "SSL Enabled",
          "description" : "Use HTTPS protocol for communication with Splunk.",
          "propertyOrder" : 500,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
```


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```
       "host" : {
         "title" : "Server Hostname",
         "description" : "Host name or IP address of Splunk server.",
         "propertyOrder" : 300,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       },
       "port" : {
         "title" : "Server Port",
         "description" : "Port number of Splunk server.",
         "propertyOrder" : 400,
         "required" : true,
         "type" : "integer",
         "exampleValue" : ""
       },
       "authzToken" : {
         "title" : "Authorization Token",
         "description" : "Authorization token used to connect to Splunk HTTP Event Collector
endpoint.",
         "propertyOrder" : null,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       }
     }
   },
   "splunkBuffering" : {
     "type" : "object",
     "title" : "Buffering",
     "propertyOrder" : 3,
     "properties" : {
       "maxEvents" : {
         "title" : "Queue Capacity",
         "description" : "Maximum number of audit evens in the batch queue; additional events are
dropped.",
         "propertyOrder" : 700,
         "required" : true,
         "type" : "integer",
         "exampleValue" : ""
       },
       "writeInterval" : {
         "title" : "Write interval (in milliseconds)",
         "description" : "Interval at which buffered events are written to Splunk.",
         "propertyOrder" : 800,
         "required" : true,
         "type" : "integer",
         "exampleValue" : ""
       },
       "batchSize" : {
         "title" : "Batch Size",
         "description" : "Maximum number of events that can be buffered (default: 10000).",
         "propertyOrder" : 600,
         "required" : true,
         "type" : "integer",
         "exampleValue" : ""
       }
     }
   },
```


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```
    "commonHandlerPlugin" : {
      "type" : "object",
      "title" : "Audit Event Handler Factory",
      "propertyOrder" : 1,
      "properties" : {
        "handlerFactory" : {
          "title" : "Factory Class Name",
          "description" : "The fully qualified class name of the factory
 responsible for creating the Audit Event Handler. The class must implement
 <code>org.forgerock.openam.audit.AuditEventHandlerFactory</code>.",
          "propertyOrder" : null,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    },
    "commonHandler" : {
      "type" : "object",
      "title" : "General Handler Configuration",
      "propertyOrder" : 0,
      "properties" : {
        "topics" : {
          "title" : "Topics",
          "description" : "List of topics handled by an audit event handler.",
          "propertyOrder" : 200,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "enabled" : {
          "title" : "Enabled",
          "description" : "Enables or disables an audit event handler.",
          "propertyOrder" : 100,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        }
      }
    }
  }
}
```

1.159.2.2. delete

Usage:

```
am> delete Splunk --global --id id
```

Parameters:

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--id

The unique identifier for the resource.

1.159.2.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action Splunk --global --actionName getAllTypes
```

1.159.2.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action Splunk --global --actionName getCreatableTypes
```

1.159.2.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action Splunk --global --actionName nextdescendents
```

1.159.2.6. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

```
am> query Splunk --global --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.159.2.7. read

Usage:

```
am> read Splunk --global --id id
```

Parameters:

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--id

The unique identifier for the resource.

1.159.2.8. update

Usage:

```
am> update Splunk --global --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "splunkConfig" : {
      "type" : "object",
      "title" : "Splunk Configuration",
      "propertyOrder" : 2,
      "properties" : {
        "sslEnabled" : {
          "title" : "SSL Enabled",
          "description" : "Use HTTPS protocol for communication with Splunk.",
          "propertyOrder" : 500,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "host" : {
          "title" : "Server Hostname",
          "description" : "Host name or IP address of Splunk server.",
          "propertyOrder" : 300,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "port" : {
          "title" : "Server Port",
          "description" : "Port number of Splunk server.",
          "propertyOrder" : 400,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "authzToken" : {
          "title" : "Authorization Token",
          "description" : "Authorization token used to connect to Splunk HTTP Event Collector
 endpoint.",
```


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```
          "propertyOrder" : null,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    },
    "splunkBuffering" : {
      "type" : "object",
      "title" : "Buffering",
      "propertyOrder" : 3,
      "properties" : {
        "maxEvents" : {
          "title" : "Queue Capacity",
          "description" : "Maximum number of audit evens in the batch queue; additional events are
dropped.",
          "propertyOrder" : 700,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "writeInterval" : {
          "title" : "Write interval (in milliseconds)",
          "description" : "Interval at which buffered events are written to Splunk.",
          "propertyOrder" : 800,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "batchSize" : {
          "title" : "Batch Size",
          "description" : "Maximum number of events that can be buffered (default: 10000).",
          "propertyOrder" : 600,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        }
      }
    },
    "commonHandlerPlugin" : {
      "type" : "object",
      "title" : "Audit Event Handler Factory",
      "propertyOrder" : 1,
      "properties" : {
        "handlerFactory" : {
          "title" : "Factory Class Name",
          "description" : "The fully qualified class name of the factory
responsible for creating the Audit Event Handler. The class must implement
<code>org.forgerock.openam.audit.AuditEventHandlerFactory</code>.",
          "propertyOrder" : null,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    },
    "commonHandler" : {
      "type" : "object",
      "title" : "General Handler Configuration",
```


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```
      "propertyOrder" : 0,
      "properties" : {
        "topics" : {
          "title" : "Topics",
          "description" : "List of topics handled by an audit event handler.",
          "propertyOrder" : 200,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "enabled" : {
          "title" : "Enabled",
          "description" : "Enables or disables an audit event handler.",
          "propertyOrder" : 100,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        }
      }
    }
  }
}
```

1.160. SubjectAttributes

1.160.1. Realm Operations

Service for querying subject attributes stored in OpenAM. When you define a policy subject condition, the condition can depend on values of subject attributes stored in a user's profile. The list of possible subject attributes that you can use depends on the LDAP User Attributes configured for the Identity data store where OpenAM looks up the user's profile

Resource path: `/subjectattributes`

Resource version: `1.0`

1.160.1.1. query

Query the list of subject attributes stored in OpenAM

Usage:

```
am> query SubjectAttributes --realm Realm --filter filter
```

Parameters:

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--filter

A CREST formatted query filter, where "true" will query all. Fields that can be queried: [*]

1.161. SubjectTypes

1.161.1. Realm Operations

Service for querying and reading the subject types stored in OpenAM. Subject condition types describe the JSON representation of subject conditions that you can use in policy definitions

Resource path: `/subjecttypes`

Resource version: `1.0`

1.161.1.1. query

Query the list of subject condition types

Usage:

```
am> query SubjectTypes --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all. Fields that can be queried: [*]

1.161.1.2. read

Read an individual subject condition type by providing the unique identifier title

Usage:

```
am> read SubjectTypes --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

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1.162. SunDSWithOpenAMSchema

1.162.1. Realm Operations

Resource path: `/realm-config/services/id-repositories/LDAPv3ForAMDS`

Resource version: `1.0`

1.162.1.1. create

Usage:

```
am> create SunDSWithOpenAMSchema --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "sun-idrepo-ldapv3-config-psearch-scope" : {
      "title" : "Persistent Search Scope",
      "description" : "",
      "propertyOrder" : 5700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-group-objectclass" : {
      "title" : "LDAP Groups Object Class",
      "description" : "",
      "propertyOrder" : 3300,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-user-objectclass" : {
      "title" : "LDAP User Object Class",
      "description" : "",
      "propertyOrder" : 2300,
      "required" : true,
      "items" : {
        "type" : "string"
```


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```
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-filterrole-objectclass" : {
      "title" : "LDAP Filter Roles Object Class",
      "description" : "",
      "propertyOrder" : 4500,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-role-attributes" : {
      "title" : "LDAP Roles Attributes",
      "description" : "",
      "propertyOrder" : 4200,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-people-container-name" : {
      "title" : "LDAP People Container Naming Attribute",
      "description" : "",
      "propertyOrder" : 5000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-uniquemember" : {
      "title" : "Attribute Name of Unique Member",
      "description" : "",
      "propertyOrder" : 3600,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-organization_name" : {
      "title" : "LDAP Organization DN",
      "description" : "",
      "propertyOrder" : 900,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "com.iplanet.am.ldap.connection.delay.between.retries" : {
      "title" : "The Delay Time Between Retries",
      "description" : "In milliseconds.",
      "propertyOrder" : 5800,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-connection-mode" : {
```


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```
      "title" : "LDAP Connection Mode",
      "description" : "Defines which protocol/operation is used to establish the connection to the
LDAP Directory Server.<br><br>If 'LDAP' is selected, the connection <b>won't be secured</b> and
passwords are transferred in <b>cleartext</b> over the network.<br/> If 'LDAPS' is selected, the
connection is secured via SSL or TLS. <br/> If 'StartTLS' is selected, the connection is secured by
using StartTLS extended operation.",
      "propertyOrder" : 1000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-group-container-name" : {
      "title" : "LDAP Groups Container Naming Attribute",
      "description" : "",
      "propertyOrder" : 3100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-group-container-value" : {
      "title" : "LDAP Groups Container Value",
      "description" : "",
      "propertyOrder" : 3200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-connection_pool_min_size" : {
      "title" : "LDAP Connection Pool Minimum Size",
      "description" : "",
      "propertyOrder" : 1100,
      "required" : false,
      "type" : "integer",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-filterroles-search-attribute" : {
      "title" : "LDAP Filter Roles Search Attribute",
      "description" : "",
      "propertyOrder" : 4300,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-nsrole" : {
      "title" : "Attribute Name for Filtered Role Membership",
      "description" : "",
      "propertyOrder" : 4700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-filterrole-attributes" : {
      "title" : "LDAP Filter Roles Attributes",
      "description" : "",
      "propertyOrder" : 4600,
      "required" : true,
      "items" : {
        "type" : "string"
      },
```


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```
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-nsrolefilter" : {
      "title" : "Attribute Name of Filtered Role Filter",
      "description" : "",
      "propertyOrder" : 4900,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sunIdRepoClass" : {
      "title" : "LDAPv3 Repository Plug-in Class Name",
      "description" : "",
      "propertyOrder" : 1700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-isactive" : {
      "title" : "Attribute Name of User Status",
      "description" : "",
      "propertyOrder" : 2600,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-ldap-server" : {
      "title" : "LDAP Server",
      "description" : "Format: LDAP server host name:port | server_ID | site_ID",
      "propertyOrder" : 600,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-group-attributes" : {
      "title" : "LDAP Groups Attributes",
      "description" : "",
      "propertyOrder" : 3400,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-groups-search-attribute" : {
      "title" : "LDAP Groups Search Attribute",
      "description" : "",
      "propertyOrder" : 2900,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-roles-search-attribute" : {
      "title" : "LDAP Roles Search Attribute",
```


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```
      "description" : "",
      "propertyOrder" : 3900,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-time-limit" : {
      "title" : "Search Timeout",
      "description" : "In seconds.",
      "propertyOrder" : 1600,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-auth-kba-attr" : {
      "title" : "Knowledge Based Authentication Attribute Name",
      "description" : "",
      "propertyOrder" : 5300,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-authpw" : {
      "title" : "LDAP Bind Password",
      "description" : "",
      "propertyOrder" : 800,
      "required" : true,
      "type" : "string",
      "format" : "password",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-user-attributes" : {
      "title" : "LDAP User Attributes",
      "description" : "",
      "propertyOrder" : 2400,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-auth-kba-index-attr" : {
      "title" : "Knowledge Based Authentication Active Index",
      "description" : "",
      "propertyOrder" : 5400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-groups-search-filter" : {
      "title" : "LDAP Groups Search Filter",
      "description" : "",
      "propertyOrder" : 3000,
      "required" : true,
      "type" : "string",
```


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```
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-search-scope" : {
      "title" : "LDAPv3 Plug-in Search Scope",
      "description" : "",
      "propertyOrder" : 2000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-memberurl" : {
      "title" : "Attribute Name of Group Member URL",
      "description" : "",
      "propertyOrder" : 3700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-dncache-size" : {
      "title" : "DN Cache Size",
      "description" : "In DN items, only used when DN Cache is enabled.",
      "propertyOrder" : 6000,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-max-result" : {
      "title" : "Maximum Results Returned from Search",
      "description" : "",
      "propertyOrder" : 1500,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-roles-search-filter" : {
      "title" : "LDAP Roles Search Filter",
      "description" : "",
      "propertyOrder" : 4000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-people-container-value" : {
      "title" : "LDAP People Container Value",
      "description" : "",
      "propertyOrder" : 5100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "openam-idrepo-ldapv3-heartbeat-interval" : {
      "title" : "LDAP Connection Heartbeat Interval",
      "description" : "Specifies how often should OpenAM send a heartbeat request to the
directory.<br><br>This setting controls how often OpenAM <b>should</b> send a heartbeat search
request to the configured directory. If a connection becomes unresponsive (e.g. due to a network
error) then it may take up to the interval period before the problem is detected. Use along with the
Heartbeat Time Unit parameter to define the exact interval. Zero or negative value will result in
disabling heartbeat requests.",
      "propertyOrder" : 1300,
```


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```
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-psearchbase" : {
      "title" : "Persistent Search Base DN",
      "description" : "",
      "propertyOrder" : 5500,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-auth-naming-attr" : {
      "title" : "Authentication Naming Attribute",
      "description" : "",
      "propertyOrder" : 5200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-inactive" : {
      "title" : "User Status Inactive Value",
      "description" : "",
      "propertyOrder" : 2800,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-createuser-attr-mapping" : {
      "title" : "Create User Attribute Mapping",
      "description" : "Format: attribute name or TargetAttributeName=SourceAttributeName",
      "propertyOrder" : 2500,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-users-search-filter" : {
      "title" : "LDAP Users  Search Filter",
      "description" : "",
      "propertyOrder" : 2200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-memberof" : {
      "title" : "Attribute Name for Group Membership",
      "description" : "",
      "propertyOrder" : 3500,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "openam-idrepo-ldapv3-affinity-enabled" : {
      "title" : "Affinity Enabled",
```


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```
     "description" : "Enables affinity based request load balancing when accessing the user store
servers (based on DN). It is imperative that the connection string setting is set to the same value
for all OpenAM servers in the deployment when this feature is enabled.",
     "propertyOrder" : 6200,
     "required" : true,
     "type" : "boolean",
     "exampleValue" : ""
   },
   "sunIdRepoSupportedOperations" : {
     "title" : "LDAPv3 Plug-in Supported Types and Operations",
     "description" : "",
     "propertyOrder" : 1900,
     "required" : true,
     "items" : {
       "type" : "string"
     },
     "type" : "array",
     "exampleValue" : ""
   },
   "sunIdRepoAttributeMapping" : {
     "title" : "Attribute Name Mapping",
     "description" : "",
     "propertyOrder" : 1800,
     "required" : true,
     "items" : {
       "type" : "string"
     },
     "type" : "array",
     "exampleValue" : ""
   },
   "sun-idrepo-ldapv3-dncache-enabled" : {
     "title" : "DN Cache",
     "description" : "Used to enable/disable the DN Cache within the OpenAM repository
implementation.<br><br>The DN Cache is used to cache DN lookups which tend to happen in bursts during
authentication. The DN Cache can become out of date when a user is moved or renamed in the underlying
LDAP store and this is not reflected in a persistent search result. Enable when the underlying LDAP
store supports persistent search and move/rename (mod_dn) results are available.",
     "propertyOrder" : 5900,
     "required" : true,
     "type" : "boolean",
     "exampleValue" : ""
   },
   "sun-idrepo-ldapv3-config-active" : {
     "title" : "User Status Active Value",
     "description" : "",
     "propertyOrder" : 2700,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "sun-idrepo-ldapv3-config-filterroles-search-filter" : {
     "title" : "LDAP Filter Roles Search Filter",
     "description" : "",
     "propertyOrder" : 4400,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "sun-idrepo-ldapv3-config-nsroledn" : {
```


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```
      "title" : "Attribute Name of Role Membership.",
      "description" : "",
      "propertyOrder" : 4800,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-role-objectclass" : {
      "title" : "LDAP Roles Object Class",
      "description" : "",
      "propertyOrder" : 4100,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-users-search-attribute" : {
      "title" : "LDAP Users  Search Attribute",
      "description" : "",
      "propertyOrder" : 2100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "openam-idrepo-ldapv3-behera-support-enabled" : {
      "title" : "Behera Support Enabled",
      "description" : "When enabled, Behera draft control will be used in the outgoing requests for
operations that may modify password value. This will allow OpenAM to display password policy related
error messages when password policies are not met.",
      "propertyOrder" : 6100,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-authid" : {
      "title" : "LDAP Bind DN",
      "description" : "A user or admin with sufficient access rights to perform the supported
operations.",
      "propertyOrder" : 700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "openam-idrepo-ldapv3-heartbeat-timeunit" : {
      "title" : "LDAP Connection Heartbeat Time Unit",
      "description" : "Defines the time unit corresponding to the Heartbeat Interval
setting.<br><br>This setting controls how often OpenAM <b>should</b> send a heartbeat search request
to the configured directory. If a connection becomes unresponsive (e.g. due to a network error) then
it may take up to the interval period before the problem is detected. Use along with the Heartbeat
Interval parameter to define the exact interval.",
      "propertyOrder" : 1400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-connection_pool_max_size" : {
      "title" : "LDAP Connection Pool Maximum Size",
```


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```
      "description" : "",
      "propertyOrder" : 1200,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-psearch-filter" : {
      "title" : "Persistent Search Filter",
      "description" : "",
      "propertyOrder" : 5600,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```

1.162.1.2. delete

Usage:

```
am> delete SunDSWithOpenAMSchema --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.162.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action SunDSWithOpenAMSchema --realm Realm --actionName getAllTypes
```

1.162.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action SunDSWithOpenAMSchema --realm Realm --actionName getCreatableTypes
```

1.162.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action SunDSWithOpenAMSchema --realm Realm --actionName nextdescendents
```


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1.162.1.6. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

```
am> query SunDSWithOpenAMSchema --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.162.1.7. read

Usage:

```
am> read SunDSWithOpenAMSchema --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.162.1.8. update

Usage:

```
am> update SunDSWithOpenAMSchema --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "sun-idrepo-ldapv3-config-psearch-scope" : {
      "title" : "Persistent Search Scope",
      "description" : "",
      "propertyOrder" : 5700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-group-objectclass" : {
```


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```
      "title" : "LDAP Groups Object Class",
      "description" : "",
      "propertyOrder" : 3300,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-user-objectclass" : {
      "title" : "LDAP User Object Class",
      "description" : "",
      "propertyOrder" : 2300,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-filterrole-objectclass" : {
      "title" : "LDAP Filter Roles Object Class",
      "description" : "",
      "propertyOrder" : 4500,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-role-attributes" : {
      "title" : "LDAP Roles Attributes",
      "description" : "",
      "propertyOrder" : 4200,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-people-container-name" : {
      "title" : "LDAP People Container Naming Attribute",
      "description" : "",
      "propertyOrder" : 5000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-uniquemember" : {
      "title" : "Attribute Name of Unique Member",
      "description" : "",
      "propertyOrder" : 3600,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
```


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```
    "sun-idrepo-ldapv3-config-organization_name" : {
      "title" : "LDAP Organization DN",
      "description" : "",
      "propertyOrder" : 900,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "com.iplanet.am.ldap.connection.delay.between.retries" : {
      "title" : "The Delay Time Between Retries",
      "description" : "In milliseconds.",
      "propertyOrder" : 5800,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-connection-mode" : {
      "title" : "LDAP Connection Mode",
      "description" : "Defines which protocol/operation is used to establish the connection to the
LDAP Directory Server.<br><br>If 'LDAP' is selected, the connection <b>won't be secured</b> and
passwords are transferred in <b>cleartext</b> over the network.<br/> If 'LDAPS' is selected, the
connection is secured via SSL or TLS. <br/> If 'StartTLS' is selected, the connection is secured by
using StartTLS extended operation.",
      "propertyOrder" : 1000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-group-container-name" : {
      "title" : "LDAP Groups Container Naming Attribute",
      "description" : "",
      "propertyOrder" : 3100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-group-container-value" : {
      "title" : "LDAP Groups Container Value",
      "description" : "",
      "propertyOrder" : 3200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-connection_pool_min_size" : {
      "title" : "LDAP Connection Pool Minimum Size",
      "description" : "",
      "propertyOrder" : 1100,
      "required" : false,
      "type" : "integer",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-filterroles-search-attribute" : {
      "title" : "LDAP Filter Roles Search Attribute",
      "description" : "",
      "propertyOrder" : 4300,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
```


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```
    },
    "sun-idrepo-ldapv3-config-nsrole" : {
      "title" : "Attribute Name for Filtered Role Membership",
      "description" : "",
      "propertyOrder" : 4700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-filterrole-attributes" : {
      "title" : "LDAP Filter Roles Attributes",
      "description" : "",
      "propertyOrder" : 4600,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-nsrolefilter" : {
      "title" : "Attribute Name of Filtered Role Filter",
      "description" : "",
      "propertyOrder" : 4900,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sunIdRepoClass" : {
      "title" : "LDAPv3 Repository Plug-in Class Name",
      "description" : "",
      "propertyOrder" : 1700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-isactive" : {
      "title" : "Attribute Name of User Status",
      "description" : "",
      "propertyOrder" : 2600,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-ldap-server" : {
      "title" : "LDAP Server",
      "description" : "Format: LDAP server host name:port | server_ID | site_ID",
      "propertyOrder" : 600,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-group-attributes" : {
      "title" : "LDAP Groups Attributes",
      "description" : "",
      "propertyOrder" : 3400,
```


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```
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-groups-search-attribute" : {
      "title" : "LDAP Groups Search Attribute",
      "description" : "",
      "propertyOrder" : 2900,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-roles-search-attribute" : {
      "title" : "LDAP Roles Search Attribute",
      "description" : "",
      "propertyOrder" : 3900,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-time-limit" : {
      "title" : "Search Timeout",
      "description" : "In seconds.",
      "propertyOrder" : 1600,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-auth-kba-attr" : {
      "title" : "Knowledge Based Authentication Attribute Name",
      "description" : "",
      "propertyOrder" : 5300,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-authpw" : {
      "title" : "LDAP Bind Password",
      "description" : "",
      "propertyOrder" : 800,
      "required" : true,
      "type" : "string",
      "format" : "password",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-user-attributes" : {
      "title" : "LDAP User Attributes",
      "description" : "",
      "propertyOrder" : 2400,
      "required" : true,
      "items" : {
        "type" : "string"
      },
```


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```
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-auth-kba-index-attr" : {
      "title" : "Knowledge Based Authentication Active Index",
      "description" : "",
      "propertyOrder" : 5400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-groups-search-filter" : {
      "title" : "LDAP Groups Search Filter",
      "description" : "",
      "propertyOrder" : 3000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-search-scope" : {
      "title" : "LDAPv3 Plug-in Search Scope",
      "description" : "",
      "propertyOrder" : 2000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-memberurl" : {
      "title" : "Attribute Name of Group Member URL",
      "description" : "",
      "propertyOrder" : 3700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-dncache-size" : {
      "title" : "DN Cache Size",
      "description" : "In DN items, only used when DN Cache is enabled.",
      "propertyOrder" : 6000,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-max-result" : {
      "title" : "Maximum Results Returned from Search",
      "description" : "",
      "propertyOrder" : 1500,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-roles-search-filter" : {
      "title" : "LDAP Roles Search Filter",
      "description" : "",
      "propertyOrder" : 4000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
```


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```
    "sun-idrepo-ldapv3-config-people-container-value" : {
      "title" : "LDAP People Container Value",
      "description" : "",
      "propertyOrder" : 5100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "openam-idrepo-ldapv3-heartbeat-interval" : {
      "title" : "LDAP Connection Heartbeat Interval",
      "description" : "Specifies how often should OpenAM send a heartbeat request to the
directory.<br><br>This setting controls how often OpenAM <b>should</b> send a heartbeat search
request to the configured directory. If a connection becomes unresponsive (e.g. due to a network
error) then it may take up to the interval period before the problem is detected. Use along with the
Heartbeat Time Unit parameter to define the exact interval. Zero or negative value will result in
disabling heartbeat requests.",
      "propertyOrder" : 1300,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-psearchbase" : {
      "title" : "Persistent Search Base DN",
      "description" : "",
      "propertyOrder" : 5500,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-auth-naming-attr" : {
      "title" : "Authentication Naming Attribute",
      "description" : "",
      "propertyOrder" : 5200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-inactive" : {
      "title" : "User Status Inactive Value",
      "description" : "",
      "propertyOrder" : 2800,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-createuser-attr-mapping" : {
      "title" : "Create User Attribute Mapping",
      "description" : "Format: attribute name or TargetAttributeName=SourceAttributeName",
      "propertyOrder" : 2500,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-users-search-filter" : {
      "title" : "LDAP Users  Search Filter",
      "description" : "",
```


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```
      "propertyOrder" : 2200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-memberof" : {
      "title" : "Attribute Name for Group Membership",
      "description" : "",
      "propertyOrder" : 3500,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "openam-idrepo-ldapv3-affinity-enabled" : {
      "title" : "Affinity Enabled",
      "description" : "Enables affinity based request load balancing when accessing the user store
servers (based on DN). It is imperative that the connection string setting is set to the same value
for all OpenAM servers in the deployment when this feature is enabled.",
      "propertyOrder" : 6200,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "sunIdRepoSupportedOperations" : {
      "title" : "LDAPv3 Plug-in Supported Types and Operations",
      "description" : "",
      "propertyOrder" : 1900,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sunIdRepoAttributeMapping" : {
      "title" : "Attribute Name Mapping",
      "description" : "",
      "propertyOrder" : 1800,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-dncache-enabled" : {
      "title" : "DN Cache",
      "description" : "Used to enable/disable the DN Cache within the OpenAM repository
implementation.<br><br>The DN Cache is used to cache DN lookups which tend to happen in bursts during
authentication. The DN Cache can become out of date when a user is moved or renamed in the underlying
LDAP store and this is not reflected in a persistent search result. Enable when the underlying LDAP
store supports persistent search and move/rename (mod_dn) results are available.",
      "propertyOrder" : 5900,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-active" : {
      "title" : "User Status Active Value",
```


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```
      "description" : "",
      "propertyOrder" : 2700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-filterroles-search-filter" : {
      "title" : "LDAP Filter Roles Search Filter",
      "description" : "",
      "propertyOrder" : 4400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-nsroledn" : {
      "title" : "Attribute Name of Role Membership.",
      "description" : "",
      "propertyOrder" : 4800,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-role-objectclass" : {
      "title" : "LDAP Roles Object Class",
      "description" : "",
      "propertyOrder" : 4100,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-users-search-attribute" : {
      "title" : "LDAP Users  Search Attribute",
      "description" : "",
      "propertyOrder" : 2100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "openam-idrepo-ldapv3-behera-support-enabled" : {
      "title" : "Behera Support Enabled",
      "description" : "When enabled, Behera draft control will be used in the outgoing requests for
operations that may modify password value. This will allow OpenAM to display password policy related
error messages when password policies are not met.",
      "propertyOrder" : 6100,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-authid" : {
      "title" : "LDAP Bind DN",
      "description" : "A user or admin with sufficient access rights to perform the supported
operations.",
      "propertyOrder" : 700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
```


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```
    },
    "openam-idrepo-ldapv3-heartbeat-timeunit" : {
      "title" : "LDAP Connection Heartbeat Time Unit",
      "description" : "Defines the time unit corresponding to the Heartbeat Interval
 setting.<br><br>This setting controls how often OpenAM <b>should</b> send a heartbeat search request
 to the configured directory. If a connection becomes unresponsive (e.g. due to a network error) then
 it may take up to the interval period before the problem is detected. Use along with the Heartbeat
 Interval parameter to define the exact interval.",
      "propertyOrder" : 1400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-connection_pool_max_size" : {
      "title" : "LDAP Connection Pool Maximum Size",
      "description" : "",
      "propertyOrder" : 1200,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-psearch-filter" : {
      "title" : "Persistent Search Filter",
      "description" : "",
      "propertyOrder" : 5600,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```

1.163. SupportedIds

1.163.1. Global Operations

Resource path: `/global-config/services/id-repositories/SupportedIdentities`

Resource version: `1.0`

1.163.1.1. create

Usage:

```
am> create SupportedIds --global --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

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--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object"
}
```

1.163.1.2. delete

Usage:

```
am> delete SupportedIds --global --id id
```

Parameters:

--id

The unique identifier for the resource.

1.163.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action SupportedIds --global --actionName getAllTypes
```

1.163.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action SupportedIds --global --actionName getCreatableTypes
```

1.163.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action SupportedIds --global --actionName nextdescendents
```

1.163.1.6. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

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```
am> query SupportedIds --global --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.163.1.7. read

Usage:

```
am> read SupportedIds --global --id id
```

Parameters:

--id

The unique identifier for the resource.

1.163.1.8. update

Usage:

```
am> update SupportedIds --global --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object"
}
```

1.164. Syslog

1.164.1. Realm Operations

Resource path: `/realm-config/services/audit/Syslog`

Resource version: `1.0`

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1.164.1.1. create

Usage:

```
am> create Syslog --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "sysLogConfig" : {
      "type" : "object",
      "title" : "Syslog Configuration",
      "propertyOrder" : 2,
      "properties" : {
        "host" : {
          "title" : "Server hostname",
          "description" : "Host name or IP address of receiving syslog server.",
          "propertyOrder" : 2400,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "transportProtocol" : {
          "title" : "Transport Protocol",
          "description" : "",
          "propertyOrder" : 2600,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "facility" : {
          "title" : "Facility",
          "description" : "Syslog facility value to apply to all events.",
          "propertyOrder" : 2800,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "connectTimeout" : {
          "title" : "Connection timeout",
          "description" : "Timeout for connecting to syslog server, in seconds.",
          "propertyOrder" : 2700,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "port" : {
          "title" : "Server port",
```


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```
        "description" : "Port number of receiving syslog server.",
        "propertyOrder" : 2500,
        "required" : true,
        "type" : "string",
        "exampleValue" : ""
      }
    }
  },
  "commonHandler" : {
    "type" : "object",
    "title" : "General Handler Configuration",
    "propertyOrder" : 0,
    "properties" : {
      "topics" : {
        "title" : "Topics",
        "description" : "List of topics handled by an audit event handler.",
        "propertyOrder" : 2300,
        "required" : true,
        "items" : {
          "type" : "string"
        },
        "type" : "array",
        "exampleValue" : ""
      },
      "enabled" : {
        "title" : "Enabled",
        "description" : "Enables or disables an audit event handler.",
        "propertyOrder" : 2200,
        "required" : true,
        "type" : "boolean",
        "exampleValue" : ""
      }
    }
  },
  "sysLogBuffering" : {
    "type" : "object",
    "title" : "Buffering",
    "propertyOrder" : 3,
    "properties" : {
      "bufferingEnabled" : {
        "title" : "Buffering Enabled",
        "description" : "Enables or disables audit event buffering.",
        "propertyOrder" : 2900,
        "required" : true,
        "type" : "boolean",
        "exampleValue" : ""
      },
      "bufferingMaxSize" : {
        "title" : "Buffer Size",
        "description" : "Maximum number of events that can be buffered (default/minimum: 5000)",
        "propertyOrder" : 2950,
        "required" : true,
        "type" : "string",
        "exampleValue" : ""
      }
    }
  },
  "commonHandlerPlugin" : {
    "type" : "object",
```


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```
      "title" : "Audit Event Handler Factory",
      "propertyOrder" : 1,
      "properties" : {
        "handlerFactory" : {
          "title" : "Factory Class Name",
          "description" : "The fully qualified class name of the factory
 responsible for creating the Audit Event Handler. The class must implement
 <code>org.forgerock.openam.audit.AuditEventHandlerFactory</code>.",
          "propertyOrder" : 3000,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    }
  }
}
```

1.164.1.2. delete

Usage:

```
am> delete Syslog --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.164.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action Syslog --realm Realm --actionName getAllTypes
```

1.164.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action Syslog --realm Realm --actionName getCreatableTypes
```

1.164.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

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```
am> action Syslog --realm Realm --actionName nextdescendents
```

1.164.1.6. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

```
am> query Syslog --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.164.1.7. read

Usage:

```
am> read Syslog --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.164.1.8. update

Usage:

```
am> update Syslog --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "sysLogConfig" : {
      "type" : "object",
      "title" : "Syslog Configuration",
      "propertyOrder" : 2,
      "properties" : {
```


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```
        "host" : {
          "title" : "Server hostname",
          "description" : "Host name or IP address of receiving syslog server.",
          "propertyOrder" : 2400,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "transportProtocol" : {
          "title" : "Transport Protocol",
          "description" : "",
          "propertyOrder" : 2600,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "facility" : {
          "title" : "Facility",
          "description" : "Syslog facility value to apply to all events.",
          "propertyOrder" : 2800,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "connectTimeout" : {
          "title" : "Connection timeout",
          "description" : "Timeout for connecting to syslog server, in seconds.",
          "propertyOrder" : 2700,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "port" : {
          "title" : "Server port",
          "description" : "Port number of receiving syslog server.",
          "propertyOrder" : 2500,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    },
    "commonHandler" : {
      "type" : "object",
      "title" : "General Handler Configuration",
      "propertyOrder" : 0,
      "properties" : {
        "topics" : {
          "title" : "Topics",
          "description" : "List of topics handled by an audit event handler.",
          "propertyOrder" : 2300,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "enabled" : {
```


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```
          "title" : "Enabled",
          "description" : "Enables or disables an audit event handler.",
          "propertyOrder" : 2200,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        }
      }
    },
    "sysLogBuffering" : {
      "type" : "object",
      "title" : "Buffering",
      "propertyOrder" : 3,
      "properties" : {
        "bufferingEnabled" : {
          "title" : "Buffering Enabled",
          "description" : "Enables or disables audit event buffering.",
          "propertyOrder" : 2900,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "bufferingMaxSize" : {
          "title" : "Buffer Size",
          "description" : "Maximum number of events that can be buffered (default/minimum: 5000)",
          "propertyOrder" : 2950,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    },
    "commonHandlerPlugin" : {
      "type" : "object",
      "title" : "Audit Event Handler Factory",
      "propertyOrder" : 1,
      "properties" : {
        "handlerFactory" : {
          "title" : "Factory Class Name",
          "description" : "The fully qualified class name of the factory
 responsible for creating the Audit Event Handler. The class must implement
 <code>org.forgerock.openam.audit.AuditEventHandlerFactory</code>.",
          "propertyOrder" : 3000,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    }
  }
}
```

1.164.2. Global Operations

Resource path: `/global-config/services/audit/Syslog`

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Resource version: `1.0`

1.164.2.1. create

Usage:

```
am> create Syslog --global --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "sysLogConfig" : {
      "type" : "object",
      "title" : "Syslog Configuration",
      "propertyOrder" : 2,
      "properties" : {
        "host" : {
          "title" : "Server hostname",
          "description" : "Host name or IP address of receiving syslog server.",
          "propertyOrder" : 2400,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "port" : {
          "title" : "Server port",
          "description" : "Port number of receiving syslog server.",
          "propertyOrder" : 2500,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "connectTimeout" : {
          "title" : "Connection timeout",
          "description" : "Timeout for connecting to syslog server, in seconds.",
          "propertyOrder" : 2700,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "facility" : {
          "title" : "Facility",
          "description" : "Syslog facility value to apply to all events.",
          "propertyOrder" : 2800,
          "required" : true,
          "type" : "string",
```


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```
          "exampleValue" : ""
        },
        "transportProtocol" : {
          "title" : "Transport Protocol",
          "description" : "",
          "propertyOrder" : 2600,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    },
    "sysLogBuffering" : {
      "type" : "object",
      "title" : "Buffering",
      "propertyOrder" : 3,
      "properties" : {
        "bufferingMaxSize" : {
          "title" : "Buffer Size",
          "description" : "Maximum number of events that can be buffered (default/minimum: 5000)",
          "propertyOrder" : 2950,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "bufferingEnabled" : {
          "title" : "Buffering Enabled",
          "description" : "Enables or disables audit event buffering.",
          "propertyOrder" : 2900,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        }
      }
    },
    "commonHandlerPlugin" : {
      "type" : "object",
      "title" : "Audit Event Handler Factory",
      "propertyOrder" : 1,
      "properties" : {
        "handlerFactory" : {
          "title" : "Factory Class Name",
          "description" : "The fully qualified class name of the factory
responsible for creating the Audit Event Handler. The class must implement
<code>org.forgerock.openam.audit.AuditEventHandlerFactory</code>.",
          "propertyOrder" : 3000,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    },
    "commonHandler" : {
      "type" : "object",
      "title" : "General Handler Configuration",
      "propertyOrder" : 0,
      "properties" : {
        "topics" : {
          "title" : "Topics",
```


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```
          "description" : "List of topics handled by an audit event handler.",
          "propertyOrder" : 2300,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "enabled" : {
          "title" : "Enabled",
          "description" : "Enables or disables an audit event handler.",
          "propertyOrder" : 2200,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        }
      }
    }
  }
}
```

1.164.2.2. delete

Usage:

```
am> delete Syslog --global --id id
```

Parameters:

--id

The unique identifier for the resource.

1.164.2.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action Syslog --global --actionName getAllTypes
```

1.164.2.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action Syslog --global --actionName getCreatableTypes
```


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1.164.2.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action Syslog --global --actionName nextdescendents
```

1.164.2.6. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

```
am> query Syslog --global --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.164.2.7. read

Usage:

```
am> read Syslog --global --id id
```

Parameters:

--id

The unique identifier for the resource.

1.164.2.8. update

Usage:

```
am> update Syslog --global --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

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--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "sysLogConfig" : {
      "type" : "object",
      "title" : "Syslog Configuration",
      "propertyOrder" : 2,
      "properties" : {
        "host" : {
          "title" : "Server hostname",
          "description" : "Host name or IP address of receiving syslog server.",
          "propertyOrder" : 2400,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "port" : {
          "title" : "Server port",
          "description" : "Port number of receiving syslog server.",
          "propertyOrder" : 2500,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "connectTimeout" : {
          "title" : "Connection timeout",
          "description" : "Timeout for connecting to syslog server, in seconds.",
          "propertyOrder" : 2700,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "facility" : {
          "title" : "Facility",
          "description" : "Syslog facility value to apply to all events.",
          "propertyOrder" : 2800,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "transportProtocol" : {
          "title" : "Transport Protocol",
          "description" : "",
          "propertyOrder" : 2600,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    },
    "sysLogBuffering" : {
      "type" : "object",
      "title" : "Buffering",
      "propertyOrder" : 3,
      "properties" : {
```


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```
       "bufferingMaxSize" : {
         "title" : "Buffer Size",
         "description" : "Maximum number of events that can be buffered (default/minimum: 5000)",
         "propertyOrder" : 2950,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       },
       "bufferingEnabled" : {
         "title" : "Buffering Enabled",
         "description" : "Enables or disables audit event buffering.",
         "propertyOrder" : 2900,
         "required" : true,
         "type" : "boolean",
         "exampleValue" : ""
       }
     }
   },
   "commonHandlerPlugin" : {
     "type" : "object",
     "title" : "Audit Event Handler Factory",
     "propertyOrder" : 1,
     "properties" : {
       "handlerFactory" : {
         "title" : "Factory Class Name",
         "description" : "The fully qualified class name of the factory
responsible for creating the Audit Event Handler. The class must implement
<code>org.forgerock.openam.audit.AuditEventHandlerFactory</code>.",
         "propertyOrder" : 3000,
         "required" : true,
         "type" : "string",
         "exampleValue" : ""
       }
     }
   },
   "commonHandler" : {
     "type" : "object",
     "title" : "General Handler Configuration",
     "propertyOrder" : 0,
     "properties" : {
       "topics" : {
         "title" : "Topics",
         "description" : "List of topics handled by an audit event handler.",
         "propertyOrder" : 2300,
         "required" : true,
         "items" : {
           "type" : "string"
         },
         "type" : "array",
         "exampleValue" : ""
       },
       "enabled" : {
         "title" : "Enabled",
         "description" : "Enables or disables an audit event handler.",
         "propertyOrder" : 2200,
         "required" : true,
         "type" : "boolean",
         "exampleValue" : ""
       }
```


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```
      }
    }
  }
}
```

1.165. TivoliDirectoryServer

1.165.1. Realm Operations

Resource path: `/realm-config/services/id-repositories/LDAPv3ForTivoli`

Resource version: `1.0`

1.165.1.1. create

Usage:

```
am> create TivoliDirectoryServer --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "sun-idrepo-ldapv3-config-organization_name" : {
      "title" : "LDAP Organization DN",
      "description" : "",
      "propertyOrder" : 900,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-auth-kba-index-attr" : {
      "title" : "Knowledge Based Authentication Active Index",
      "description" : "",
      "propertyOrder" : 5400,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
```


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```
   "sun-idrepo-ldapv3-config-connection-mode" : {
     "title" : "LDAP Connection Mode",
     "description" : "Defines which protocol/operation is used to establish the connection to the
LDAP Directory Server.<br><br>If 'LDAP' is selected, the connection <b>won't be secured</b> and
passwords are transferred in <b>cleartext</b> over the network.<br/> If 'LDAPS' is selected, the
connection is secured via SSL or TLS. <br/> If 'StartTLS' is selected, the connection is secured by
using StartTLS extended operation.",
     "propertyOrder" : 1000,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "sun-idrepo-ldapv3-config-people-container-value" : {
     "title" : "LDAP People Container Value",
     "description" : "",
     "propertyOrder" : 5100,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "sun-idrepo-ldapv3-config-ldap-server" : {
     "title" : "LDAP Server",
     "description" : "Format: LDAP server host name:port | server_ID | site_ID",
     "propertyOrder" : 600,
     "required" : true,
     "items" : {
       "type" : "string"
     },
     "type" : "array",
     "exampleValue" : ""
   },
   "sun-idrepo-ldapv3-config-authpw" : {
     "title" : "LDAP Bind Password",
     "description" : "",
     "propertyOrder" : 800,
     "required" : true,
     "type" : "string",
     "format" : "password",
     "exampleValue" : ""
   },
   "sun-idrepo-ldapv3-config-auth-naming-attr" : {
     "title" : "Authentication Naming Attribute",
     "description" : "",
     "propertyOrder" : 5200,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "sun-idrepo-ldapv3-config-uniquemember" : {
     "title" : "Attribute Name of Unique Member",
     "description" : "",
     "propertyOrder" : 3600,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "sun-idrepo-ldapv3-config-group-container-value" : {
     "title" : "LDAP Groups Container Value",
     "description" : "",
```


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```
      "propertyOrder" : 3200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "openam-idrepo-ldapv3-affinity-enabled" : {
      "title" : "Affinity Enabled",
      "description" : "Enables affinity based request load balancing when accessing the user store
servers (based on DN). It is imperative that the connection string setting is set to the same value
for all OpenAM servers in the deployment when this feature is enabled.",
      "propertyOrder" : 6200,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-psearch-filter" : {
      "title" : "Persistent Search Filter",
      "description" : "",
      "propertyOrder" : 5600,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "openam-idrepo-ldapv3-behera-support-enabled" : {
      "title" : "Behera Support Enabled",
      "description" : "When enabled, Behera draft control will be used in the outgoing requests for
operations that may modify password value. This will allow OpenAM to display password policy related
error messages when password policies are not met.",
      "propertyOrder" : 6100,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "openam-idrepo-ldapv3-heartbeat-interval" : {
      "title" : "LDAP Connection Heartbeat Interval",
      "description" : "Specifies how often should OpenAM send a heartbeat request to the
directory.<br><br>This setting controls how often OpenAM <b>should</b> send a heartbeat search
request to the configured directory. If a connection becomes unresponsive (e.g. due to a network
error) then it may take up to the interval period before the problem is detected. Use along with the
Heartbeat Time Unit parameter to define the exact interval. Zero or negative value will result in
disabling heartbeat requests.",
      "propertyOrder" : 1300,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-search-scope" : {
      "title" : "LDAPv3 Plug-in Search Scope",
      "description" : "",
      "propertyOrder" : 2000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "com.iplanet.am.ldap.connection.delay.between.retries" : {
      "title" : "The Delay Time Between Retries",
      "description" : "In milliseconds.",
      "propertyOrder" : 5800,
      "required" : true,
```


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```
      "type" : "integer",
      "exampleValue" : ""
    },
    "sunIdRepoAttributeMapping" : {
      "title" : "Attribute Name Mapping",
      "description" : "",
      "propertyOrder" : 1800,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-dftgroupmember" : {
      "title" : "Default Group Member's User DN",
      "description" : "User automatically added when group is created.",
      "propertyOrder" : 3800,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-authid" : {
      "title" : "LDAP Bind DN",
      "description" : "A user or admin with sufficient access rights to perform the supported
operations.",
      "propertyOrder" : 700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-dncache-enabled" : {
      "title" : "DN Cache",
      "description" : "Used to enable/disable the DN Cache within the OpenAM repository
implementation.<br><br>The DN Cache is used to cache DN lookups which tend to happen in bursts during
authentication. The DN Cache can become out of date when a user is moved or renamed in the underlying
LDAP store and this is not reflected in a persistent search result. Enable when the underlying LDAP
store supports persistent search and move/rename (mod_dn) results are available.",
      "propertyOrder" : 5900,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-connection_pool_max_size" : {
      "title" : "LDAP Connection Pool Maximum Size",
      "description" : "",
      "propertyOrder" : 1200,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-group-attributes" : {
      "title" : "LDAP Groups Attributes",
      "description" : "",
      "propertyOrder" : 3400,
      "required" : true,
      "items" : {
        "type" : "string"
      },
```


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```
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-max-result" : {
      "title" : "Maximum Results Returned from Search",
      "description" : "",
      "propertyOrder" : 1500,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-user-objectclass" : {
      "title" : "LDAP User Object Class",
      "description" : "",
      "propertyOrder" : 2300,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "openam-idrepo-ldapv3-heartbeat-timeunit" : {
      "title" : "LDAP Connection Heartbeat Time Unit",
      "description" : "Defines the time unit corresponding to the Heartbeat Interval
setting.<br><br>This setting controls how often OpenAM <b>should</b> send a heartbeat search request
to the configured directory. If a connection becomes unresponsive (e.g. due to a network error) then
it may take up to the interval period before the problem is detected. Use along with the Heartbeat
Interval parameter to define the exact interval.",
      "propertyOrder" : 1400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-people-container-name" : {
      "title" : "LDAP People Container Naming Attribute",
      "description" : "",
      "propertyOrder" : 5000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-isactive" : {
      "title" : "Attribute Name of User Status",
      "description" : "",
      "propertyOrder" : 2600,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-group-objectclass" : {
      "title" : "LDAP Groups Object Class",
      "description" : "",
      "propertyOrder" : 3300,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
```


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```
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-psearchbase" : {
      "title" : "Persistent Search Base DN",
      "description" : "",
      "propertyOrder" : 5500,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sunIdRepoClass" : {
      "title" : "LDAPv3 Repository Plug-in Class Name",
      "description" : "",
      "propertyOrder" : 1700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-users-search-attribute" : {
      "title" : "LDAP Users  Search Attribute",
      "description" : "",
      "propertyOrder" : 2100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-psearch-scope" : {
      "title" : "Persistent Search Scope",
      "description" : "",
      "propertyOrder" : 5700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-users-search-filter" : {
      "title" : "LDAP Users  Search Filter",
      "description" : "",
      "propertyOrder" : 2200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-group-container-name" : {
      "title" : "LDAP Groups Container Naming Attribute",
      "description" : "",
      "propertyOrder" : 3100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-groups-search-attribute" : {
      "title" : "LDAP Groups Search Attribute",
      "description" : "",
      "propertyOrder" : 2900,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-inactive" : {
```


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```
      "title" : "User Status Inactive Value",
      "description" : "",
      "propertyOrder" : 2800,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-groups-search-filter" : {
      "title" : "LDAP Groups Search Filter",
      "description" : "",
      "propertyOrder" : 3000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-memberof" : {
      "title" : "Attribute Name for Group Membership",
      "description" : "",
      "propertyOrder" : 3500,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-dncache-size" : {
      "title" : "DN Cache Size",
      "description" : "In DN items, only used when DN Cache is enabled.",
      "propertyOrder" : 6000,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "sunIdRepoSupportedOperations" : {
      "title" : "LDAPv3 Plug-in Supported Types and Operations",
      "description" : "",
      "propertyOrder" : 1900,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-connection_pool_min_size" : {
      "title" : "LDAP Connection Pool Minimum Size",
      "description" : "",
      "propertyOrder" : 1100,
      "required" : false,
      "type" : "integer",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-createuser-attr-mapping" : {
      "title" : "Create User Attribute Mapping",
      "description" : "Format: attribute name or TargetAttributeName=SourceAttributeName",
      "propertyOrder" : 2500,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
```


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```
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-auth-kba-attr" : {
      "title" : "Knowledge Based Authentication Attribute Name",
      "description" : "",
      "propertyOrder" : 5300,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-active" : {
      "title" : "User Status Active Value",
      "description" : "",
      "propertyOrder" : 2700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-user-attributes" : {
      "title" : "LDAP User Attributes",
      "description" : "",
      "propertyOrder" : 2400,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-time-limit" : {
      "title" : "Search Timeout",
      "description" : "In seconds.",
      "propertyOrder" : 1600,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    }
  }
}
```

1.165.1.2. delete

Usage:

```
am> delete TivoliDirectoryServer --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

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1.165.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action TivoliDirectoryServer --realm Realm --actionName getAllTypes
```

1.165.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action TivoliDirectoryServer --realm Realm --actionName getCreatableTypes
```

1.165.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action TivoliDirectoryServer --realm Realm --actionName nextdescendents
```

1.165.1.6. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

```
am> query TivoliDirectoryServer --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.165.1.7. read

Usage:

```
am> read TivoliDirectoryServer --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

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1.165.1.8. update

Usage:

```
am> update TivoliDirectoryServer --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "sun-idrepo-ldapv3-config-organization_name" : {
      "title" : "LDAP Organization DN",
      "description" : "",
      "propertyOrder" : 900,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-auth-kba-index-attr" : {
      "title" : "Knowledge Based Authentication Active Index",
      "description" : "",
      "propertyOrder" : 5400,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-connection-mode" : {
      "title" : "LDAP Connection Mode",
      "description" : "Defines which protocol/operation is used to establish the connection to the
LDAP Directory Server.<br><br>If 'LDAP' is selected, the connection <b>won't be secured</b> and
passwords are transferred in <b>cleartext</b> over the network.<br/> If 'LDAPS' is selected, the
connection is secured via SSL or TLS. <br/> If 'StartTLS' is selected, the connection is secured by
using StartTLS extended operation.",
      "propertyOrder" : 1000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-people-container-value" : {
      "title" : "LDAP People Container Value",
      "description" : "",
      "propertyOrder" : 5100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
```


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```
    "sun-idrepo-ldapv3-config-ldap-server" : {
      "title" : "LDAP Server",
      "description" : "Format: LDAP server host name:port | server_ID | site_ID",
      "propertyOrder" : 600,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-authpw" : {
      "title" : "LDAP Bind Password",
      "description" : "",
      "propertyOrder" : 800,
      "required" : true,
      "type" : "string",
      "format" : "password",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-auth-naming-attr" : {
      "title" : "Authentication Naming Attribute",
      "description" : "",
      "propertyOrder" : 5200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-uniquemember" : {
      "title" : "Attribute Name of Unique Member",
      "description" : "",
      "propertyOrder" : 3600,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-group-container-value" : {
      "title" : "LDAP Groups Container Value",
      "description" : "",
      "propertyOrder" : 3200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "openam-idrepo-ldapv3-affinity-enabled" : {
      "title" : "Affinity Enabled",
      "description" : "Enables affinity based request load balancing when accessing the user store
servers (based on DN). It is imperative that the connection string setting is set to the same value
for all OpenAM servers in the deployment when this feature is enabled.",
      "propertyOrder" : 6200,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-psearch-filter" : {
      "title" : "Persistent Search Filter",
      "description" : "",
      "propertyOrder" : 5600,
      "required" : true,
```


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```
      "type" : "string",
      "exampleValue" : ""
    },
    "openam-idrepo-ldapv3-behera-support-enabled" : {
      "title" : "Behera Support Enabled",
      "description" : "When enabled, Behera draft control will be used in the outgoing requests for
operations that may modify password value. This will allow OpenAM to display password policy related
error messages when password policies are not met.",
      "propertyOrder" : 6100,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "openam-idrepo-ldapv3-heartbeat-interval" : {
      "title" : "LDAP Connection Heartbeat Interval",
      "description" : "Specifies how often should OpenAM send a heartbeat request to the
directory.<br><br>This setting controls how often OpenAM <b>should</b> send a heartbeat search
request to the configured directory. If a connection becomes unresponsive (e.g. due to a network
error) then it may take up to the interval period before the problem is detected. Use along with the
Heartbeat Time Unit parameter to define the exact interval. Zero or negative value will result in
disabling heartbeat requests.",
      "propertyOrder" : 1300,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-search-scope" : {
      "title" : "LDAPv3 Plug-in Search Scope",
      "description" : "",
      "propertyOrder" : 2000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "com.iplanet.am.ldap.connection.delay.between.retries" : {
      "title" : "The Delay Time Between Retries",
      "description" : "In milliseconds.",
      "propertyOrder" : 5800,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "sunIdRepoAttributeMapping" : {
      "title" : "Attribute Name Mapping",
      "description" : "",
      "propertyOrder" : 1800,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-dftgroupmember" : {
      "title" : "Default Group Member's User DN",
      "description" : "User automatically added when group is created.",
      "propertyOrder" : 3800,
      "required" : true,
      "type" : "string",
```


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```
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-authid" : {
      "title" : "LDAP Bind DN",
      "description" : "A user or admin with sufficient access rights to perform the supported
operations.",
      "propertyOrder" : 700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-dncache-enabled" : {
      "title" : "DN Cache",
      "description" : "Used to enable/disable the DN Cache within the OpenAM repository
implementation.<br><br>The DN Cache is used to cache DN lookups which tend to happen in bursts during
authentication. The DN Cache can become out of date when a user is moved or renamed in the underlying
LDAP store and this is not reflected in a persistent search result. Enable when the underlying LDAP
store supports persistent search and move/rename (mod_dn) results are available.",
      "propertyOrder" : 5900,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-connection_pool_max_size" : {
      "title" : "LDAP Connection Pool Maximum Size",
      "description" : "",
      "propertyOrder" : 1200,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-group-attributes" : {
      "title" : "LDAP Groups Attributes",
      "description" : "",
      "propertyOrder" : 3400,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-max-result" : {
      "title" : "Maximum Results Returned from Search",
      "description" : "",
      "propertyOrder" : 1500,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-user-objectclass" : {
      "title" : "LDAP User Object Class",
      "description" : "",
      "propertyOrder" : 2300,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
```


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```
      "exampleValue" : ""
    },
    "openam-idrepo-ldapv3-heartbeat-timeunit" : {
      "title" : "LDAP Connection Heartbeat Time Unit",
      "description" : "Defines the time unit corresponding to the Heartbeat Interval
setting.<br><br>This setting controls how often OpenAM <b>should</b> send a heartbeat search request
to the configured directory. If a connection becomes unresponsive (e.g. due to a network error) then
it may take up to the interval period before the problem is detected. Use along with the Heartbeat
Interval parameter to define the exact interval.",
      "propertyOrder" : 1400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-people-container-name" : {
      "title" : "LDAP People Container Naming Attribute",
      "description" : "",
      "propertyOrder" : 5000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-isactive" : {
      "title" : "Attribute Name of User Status",
      "description" : "",
      "propertyOrder" : 2600,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-group-objectclass" : {
      "title" : "LDAP Groups Object Class",
      "description" : "",
      "propertyOrder" : 3300,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-psearchbase" : {
      "title" : "Persistent Search Base DN",
      "description" : "",
      "propertyOrder" : 5500,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sunIdRepoClass" : {
      "title" : "LDAPv3 Repository Plug-in Class Name",
      "description" : "",
      "propertyOrder" : 1700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-users-search-attribute" : {
      "title" : "LDAP Users  Search Attribute",
```


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```
      "description" : "",
      "propertyOrder" : 2100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-psearch-scope" : {
      "title" : "Persistent Search Scope",
      "description" : "",
      "propertyOrder" : 5700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-users-search-filter" : {
      "title" : "LDAP Users  Search Filter",
      "description" : "",
      "propertyOrder" : 2200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-group-container-name" : {
      "title" : "LDAP Groups Container Naming Attribute",
      "description" : "",
      "propertyOrder" : 3100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-groups-search-attribute" : {
      "title" : "LDAP Groups Search Attribute",
      "description" : "",
      "propertyOrder" : 2900,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-inactive" : {
      "title" : "User Status Inactive Value",
      "description" : "",
      "propertyOrder" : 2800,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-groups-search-filter" : {
      "title" : "LDAP Groups Search Filter",
      "description" : "",
      "propertyOrder" : 3000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-memberof" : {
      "title" : "Attribute Name for Group Membership",
      "description" : "",
      "propertyOrder" : 3500,
      "required" : true,
```


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```
      "type" : "string",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-dncache-size" : {
      "title" : "DN Cache Size",
      "description" : "In DN items, only used when DN Cache is enabled.",
      "propertyOrder" : 6000,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "sunIdRepoSupportedOperations" : {
      "title" : "LDAPv3 Plug-in Supported Types and Operations",
      "description" : "",
      "propertyOrder" : 1900,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-connection_pool_min_size" : {
      "title" : "LDAP Connection Pool Minimum Size",
      "description" : "",
      "propertyOrder" : 1100,
      "required" : false,
      "type" : "integer",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-createuser-attr-mapping" : {
      "title" : "Create User Attribute Mapping",
      "description" : "Format: attribute name or TargetAttributeName=SourceAttributeName",
      "propertyOrder" : 2500,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-auth-kba-attr" : {
      "title" : "Knowledge Based Authentication Attribute Name",
      "description" : "",
      "propertyOrder" : 5300,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-active" : {
      "title" : "User Status Active Value",
      "description" : "",
      "propertyOrder" : 2700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
```


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```
    },
    "sun-idrepo-ldapv3-config-user-attributes" : {
      "title" : "LDAP User Attributes",
      "description" : "",
      "propertyOrder" : 2400,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sun-idrepo-ldapv3-config-time-limit" : {
      "title" : "Search Timeout",
      "description" : "In seconds.",
      "propertyOrder" : 1600,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    }
  }
}
```

1.166. TransactionAuthentication

1.166.1. Realm Operations

Resource path: `/realm-config/services/transaction`

Resource version: `1.0`

1.166.1.1. create

Usage:

```
am> create TransactionAuthentication --realm Realm --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

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```
{
  "type" : "object",
  "properties" : {
    "timeToLive" : {
      "title" : "Time to Live",
      "description" : "The number of seconds within which the transaction must be completed.",
      "propertyOrder" : 0,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```

1.166.1.2. delete

Usage:

```
am> delete TransactionAuthentication --realm Realm
```

1.166.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action TransactionAuthentication --realm Realm --actionName getAllTypes
```

1.166.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action TransactionAuthentication --realm Realm --actionName getCreatableTypes
```

1.166.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action TransactionAuthentication --realm Realm --actionName nextdescendents
```

1.166.1.6. read

Usage:

```
am> read TransactionAuthentication --realm Realm
```


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1.166.1.7. update

Usage:

```
am> update TransactionAuthentication --realm Realm --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "timeToLive" : {
      "title" : "Time to Live",
      "description" : "The number of seconds within which the transaction must be completed.",
      "propertyOrder" : 0,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```

1.166.2. Global Operations

Resource path: `/global-config/services/transaction`

Resource version: `1.0`

1.166.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action TransactionAuthentication --global --actionName getAllTypes
```

1.166.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action TransactionAuthentication --global --actionName getCreatableTypes
```

1.166.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

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Usage:

```
am> action TransactionAuthentication --global --actionName nextdescendents
```

1.166.2.4. read

Usage:

```
am> read TransactionAuthentication --global
```

1.166.2.5. update

Usage:

```
am> update TransactionAuthentication --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "defaults" : {
      "properties" : {
        "timeToLive" : {
          "title" : "Time to Live",
          "description" : "The number of seconds within which the transaction must be completed.",
          "propertyOrder" : 0,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      },
      "type" : "object",
      "title" : "Realm Defaults"
    }
  }
}
```

1.167. TrustedUserDevices

1.167.1. Realm Operations

Trusted devices service is responsible for querying and deleting trusted devices.

Resource path: `/users/{user}/devices/trusted`

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Resource version: `1.0`

1.167.1.1. delete

Delete trusted user device

Usage:

```
am> delete TrustedUserDevices --realm Realm --id id --user user
```

Parameters:

`--id`

The unique identifier for the resource.

`--user`

Trusted devices service is responsible for querying and deleting trusted devices.

1.167.1.2. query

Query trusted user devices

Usage:

```
am> query TrustedUserDevices --realm Realm --filter filter --user user
```

Parameters:

`--filter`

A CREST formatted query filter, where "true" will query all. Fields that can be queried: [*]

`--user`

Trusted devices service is responsible for querying and deleting trusted devices.

1.168. UmaDataStoreProperties

1.168.1. Global Operations

An object of property key-value pairs

Resource path: `/global-config/servers/{serverName}/properties/uma`

Resource version: `1.0`

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1.168.1.1. read

Usage:

```
am> read UmaDataStoreProperties --global --serverName serverName
```

Parameters:

--serverName

An object of property key-value pairs

1.168.1.2. update

Usage:

```
am> update UmaDataStoreProperties --global --serverName serverName --body body
```

Parameters:

--serverName

An object of property key-value pairs

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "amconfig.org.forgerock.services.resourcesets.store.common.section" : {
      "title" : "Resource Sets Store",
      "type" : "object",
      "propertyOrder" : 0,
      "properties" : {
        "org.forgerock.services.resourcesets.store.location" : {
          "title" : "Store Mode",
          "type" : "object",
          "propertyOrder" : 0,
          "description" : "",
          "properties" : {
            "value" : {
              "enum" : [ "default", "external" ],
              "options" : {
                "enum_titles" : [ "Default Token Store", "External Token Store" ]
              },
              "type" : "string",
              "required" : false
            },
            "inherited" : {
              "type" : "boolean",
              "required" : true
            }
          }
```


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```
        },
        "org.forgerock.services.resourcesets.store.root.suffix" : {
          "title" : "Root Suffix",
          "type" : "object",
          "propertyOrder" : 1,
          "description" : "",
          "properties" : {
            "value" : {
              "type" : "string",
              "required" : false
            },
            "inherited" : {
              "type" : "boolean",
              "required" : true
            }
          }
        },
        "org.forgerock.services.resourcesets.store.max.connections" : {
          "title" : "Max Connections",
          "type" : "object",
          "propertyOrder" : 2,
          "description" : "",
          "properties" : {
            "value" : {
              "type" : "string",
              "required" : false
            },
            "inherited" : {
              "type" : "boolean",
              "required" : true
            }
          }
        }
      }
    },
    "amconfig.org.forgerock.services.resourcesets.store.external.section" : {
      "title" : "External Resource Sets Store Configuration",
      "type" : "object",
      "propertyOrder" : 1,
      "properties" : {
        "org.forgerock.services.resourcesets.store.ssl.enabled" : {
          "title" : "SSL/TLS Enabled",
          "type" : "object",
          "propertyOrder" : 0,
          "description" : "",
          "properties" : {
            "value" : {
              "type" : "boolean",
              "required" : false
            },
            "inherited" : {
              "type" : "boolean",
              "required" : true
            }
          }
        },
        "org.forgerock.services.resourcesets.store.directory.name" : {
          "title" : "Connection String(s)",
          "type" : "object",
```


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```
          "propertyOrder" : 1,
          "description" : "An ordered list of connection strings for LDAP directories. Each connection
 string is composed as follows: <code>HOST:PORT[|SERVERID[|SITEID]]</code>, where server and site
 IDs are optional parameters that will prioritize that connection to use from the specified nodes.
 Multiple connection strings should be comma-separated, e.g. <code>host1:389,host2:50389|server1|
site1,host3:50389</code>.",
          "properties" : {
            "value" : {
              "type" : "string",
              "required" : false
            },
            "inherited" : {
              "type" : "boolean",
              "required" : true
            }
          }
        },
        "org.forgerock.services.resourcesets.store.loginid" : {
          "title" : "Login Id",
          "type" : "object",
          "propertyOrder" : 2,
          "description" : "",
          "properties" : {
            "value" : {
              "type" : "string",
              "required" : false
            },
            "inherited" : {
              "type" : "boolean",
              "required" : true
            }
          }
        },
        "org.forgerock.services.resourcesets.store.password" : {
          "title" : "Password",
          "type" : "object",
          "propertyOrder" : 3,
          "description" : "",
          "properties" : {
            "value" : {
              "type" : "string",
              "required" : false,
              "format" : "password"
            },
            "inherited" : {
              "type" : "boolean",
              "required" : true
            }
          }
        },
        "org.forgerock.services.resourcesets.store.heartbeat" : {
          "title" : "Heartbeat",
          "type" : "object",
          "propertyOrder" : 4,
          "description" : "",
          "properties" : {
            "value" : {
              "type" : "integer",
              "required" : false
```


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```
          },
          "inherited" : {
            "type" : "boolean",
            "required" : true
          }
        }
      }
    }
  },
  "amconfig.org.forgerock.services.umaaudit.store.common.section" : {
    "title" : "UMA Audit Store",
    "type" : "object",
    "propertyOrder" : 2,
    "properties" : {
      "org.forgerock.services.umaaudit.store.location" : {
        "title" : "Store Mode",
        "type" : "object",
        "propertyOrder" : 0,
        "description" : "",
        "properties" : {
          "value" : {
            "enum" : [ "default", "external" ],
            "options" : {
              "enum_titles" : [ "Default Token Store", "External Token Store" ]
            },
            "type" : "string",
            "required" : false
          },
          "inherited" : {
            "type" : "boolean",
            "required" : true
          }
        }
      },
      "org.forgerock.services.umaaudit.store.root.suffix" : {
        "title" : "Root Suffix",
        "type" : "object",
        "propertyOrder" : 1,
        "description" : "",
        "properties" : {
          "value" : {
            "type" : "string",
            "required" : false
          },
          "inherited" : {
            "type" : "boolean",
            "required" : true
          }
        }
      },
      "org.forgerock.services.umaaudit.store.max.connections" : {
        "title" : "Max Connections",
        "type" : "object",
        "propertyOrder" : 2,
        "description" : "",
        "properties" : {
          "value" : {
            "type" : "string",
            "required" : false
```


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```
            },
            "inherited" : {
              "type" : "boolean",
              "required" : true
            }
          }
        }
      }
    },
    "amconfig.org.forgerock.services.umaaudit.store.external.section" : {
      "title" : "External UMA Audit Store Configuration",
      "type" : "object",
      "propertyOrder" : 3,
      "properties" : {
        "org.forgerock.services.umaaudit.store.ssl.enabled" : {
          "title" : "SSL/TLS Enabled",
          "type" : "object",
          "propertyOrder" : 0,
          "description" : "",
          "properties" : {
            "value" : {
              "type" : "boolean",
              "required" : false
            },
            "inherited" : {
              "type" : "boolean",
              "required" : true
            }
          }
        },
        "org.forgerock.services.umaaudit.store.directory.name" : {
          "title" : "Connection String(s)",
          "type" : "object",
          "propertyOrder" : 1,
          "description" : "An ordered list of connection strings for LDAP directories. Each connection
 string is composed as follows: <code>HOST:PORT[|SERVERID[|SITEID]]</code>, where server and site
 IDs are optional parameters that will prioritize that connection to use from the specified nodes.
 Multiple connection strings should be comma-separated, e.g. <code>host1:389,host2:50389|server1|
site1,host3:50389</code>.",
          "properties" : {
            "value" : {
              "type" : "string",
              "required" : false
            },
            "inherited" : {
              "type" : "boolean",
              "required" : true
            }
          }
        },
        "org.forgerock.services.umaaudit.store.loginid" : {
          "title" : "Login Id",
          "type" : "object",
          "propertyOrder" : 2,
          "description" : "",
          "properties" : {
            "value" : {
              "type" : "string",
              "required" : false
```


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```
            },
            "inherited" : {
              "type" : "boolean",
              "required" : true
            }
          }
        },
        "org.forgerock.services.umaaudit.store.password" : {
          "title" : "Password",
          "type" : "object",
          "propertyOrder" : 3,
          "description" : "",
          "properties" : {
            "value" : {
              "type" : "string",
              "required" : false,
              "format" : "password"
            },
            "inherited" : {
              "type" : "boolean",
              "required" : true
            }
          }
        },
        "org.forgerock.services.umaaudit.store.heartbeat" : {
          "title" : "Heartbeat",
          "type" : "object",
          "propertyOrder" : 4,
          "description" : "",
          "properties" : {
            "value" : {
              "type" : "integer",
              "required" : false
            },
            "inherited" : {
              "type" : "boolean",
              "required" : true
            }
          }
        }
      }
    },
    "amconfig.org.forgerock.services.uma.pendingrequests.store.common.section" : {
      "title" : "Pending Requests Store",
      "type" : "object",
      "propertyOrder" : 4,
      "properties" : {
        "org.forgerock.services.uma.pendingrequests.store.location" : {
          "title" : "Store Mode",
          "type" : "object",
          "propertyOrder" : 0,
          "description" : "",
          "properties" : {
            "value" : {
              "enum" : [ "default", "external" ],
              "options" : {
                "enum_titles" : [ "Default Token Store", "External Token Store" ]
              },
              "type" : "string",
```


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```
            "required" : false
          },
          "inherited" : {
            "type" : "boolean",
            "required" : true
          }
        }
      },
      "org.forgerock.services.uma.pendingrequests.store.root.suffix" : {
        "title" : "Root Suffix",
        "type" : "object",
        "propertyOrder" : 1,
        "description" : "",
        "properties" : {
          "value" : {
            "type" : "string",
            "required" : false
          },
          "inherited" : {
            "type" : "boolean",
            "required" : true
          }
        }
      },
      "org.forgerock.services.uma.pendingrequests.store.max.connections" : {
        "title" : "Max Connections",
        "type" : "object",
        "propertyOrder" : 2,
        "description" : "",
        "properties" : {
          "value" : {
            "type" : "string",
            "required" : false
          },
          "inherited" : {
            "type" : "boolean",
            "required" : true
          }
        }
      }
    }
  },
  "amconfig.org.forgerock.services.uma.pendingrequests.store.external.section" : {
    "title" : "External Pending Requests Store Configuration",
    "type" : "object",
    "propertyOrder" : 5,
    "properties" : {
      "org.forgerock.services.uma.pendingrequests.store.ssl.enabled" : {
        "title" : "SSL/TLS Enabled",
        "type" : "object",
        "propertyOrder" : 0,
        "description" : "",
        "properties" : {
          "value" : {
            "type" : "boolean",
            "required" : false
          },
          "inherited" : {
            "type" : "boolean",
```


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```
              "required" : true
            }
          }
        },
        "org.forgerock.services.uma.pendingrequests.store.directory.name" : {
          "title" : "Connection String(s)",
          "type" : "object",
          "propertyOrder" : 1,
          "description" : "An ordered list of connection strings for LDAP directories. Each connection
 string is composed as follows: <code>HOST:PORT[|SERVERID[|SITEID]]</code>, where server and site
 IDs are optional parameters that will prioritize that connection to use from the specified nodes.
 Multiple connection strings should be comma-separated, e.g. <code>host1:389,host2:50389|server1|
site1,host3:50389</code>.",
          "properties" : {
            "value" : {
              "type" : "string",
              "required" : false
            },
            "inherited" : {
              "type" : "boolean",
              "required" : true
            }
          }
        },
        "org.forgerock.services.uma.pendingrequests.store.loginid" : {
          "title" : "Login Id",
          "type" : "object",
          "propertyOrder" : 2,
          "description" : "",
          "properties" : {
            "value" : {
              "type" : "string",
              "required" : false
            },
            "inherited" : {
              "type" : "boolean",
              "required" : true
            }
          }
        },
        "org.forgerock.services.uma.pendingrequests.store.password" : {
          "title" : "Password",
          "type" : "object",
          "propertyOrder" : 3,
          "description" : "",
          "properties" : {
            "value" : {
              "type" : "string",
              "required" : false,
              "format" : "password"
            },
            "inherited" : {
              "type" : "boolean",
              "required" : true
            }
          }
        },
        "org.forgerock.services.uma.pendingrequests.store.heartbeat" : {
          "title" : "Heartbeat",
```


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```
        "type" : "object",
        "propertyOrder" : 4,
        "description" : "",
        "properties" : {
          "value" : {
            "type" : "integer",
            "required" : false
          },
          "inherited" : {
            "type" : "boolean",
            "required" : true
          }
        }
      }
    }
  },
  "amconfig.org.forgerock.services.uma.labels.store.common.section" : {
    "title" : "UMA Resource Set Labels Store",
    "type" : "object",
    "propertyOrder" : 6,
    "properties" : {
      "org.forgerock.services.uma.labels.store.location" : {
        "title" : "Store Mode",
        "type" : "object",
        "propertyOrder" : 0,
        "description" : "",
        "properties" : {
          "value" : {
            "enum" : [ "default", "external" ],
            "options" : {
              "enum_titles" : [ "Default Token Store", "External Token Store" ]
            },
            "type" : "string",
            "required" : false
          },
          "inherited" : {
            "type" : "boolean",
            "required" : true
          }
        }
      },
      "org.forgerock.services.uma.labels.store.root.suffix" : {
        "title" : "Root Suffix",
        "type" : "object",
        "propertyOrder" : 1,
        "description" : "",
        "properties" : {
          "value" : {
            "type" : "string",
            "required" : false
          },
          "inherited" : {
            "type" : "boolean",
            "required" : true
          }
        }
      },
      "org.forgerock.services.uma.labels.store.max.connections" : {
        "title" : "Max Connections",
```


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```
          "type" : "object",
          "propertyOrder" : 2,
          "description" : "",
          "properties" : {
            "value" : {
              "type" : "string",
              "required" : false
            },
            "inherited" : {
              "type" : "boolean",
              "required" : true
            }
          }
        }
      }
    },
    "amconfig.org.forgerock.services.uma.labels.store.external.section" : {
      "title" : "External Resource Set Labels Store Configuration",
      "type" : "object",
      "propertyOrder" : 7,
      "properties" : {
        "org.forgerock.services.uma.labels.store.ssl.enabled" : {
          "title" : "SSL/TLS Enabled",
          "type" : "object",
          "propertyOrder" : 0,
          "description" : "",
          "properties" : {
            "value" : {
              "type" : "boolean",
              "required" : false
            },
            "inherited" : {
              "type" : "boolean",
              "required" : true
            }
          }
        },
        "org.forgerock.services.uma.labels.store.directory.name" : {
          "title" : "Connection String(s)",
          "type" : "object",
          "propertyOrder" : 1,
          "description" : "An ordered list of connection strings for LDAP directories. Each connection
 string is composed as follows: <code>HOST:PORT[|SERVERID[|SITEID]]</code>, where server and site
 IDs are optional parameters that will prioritize that connection to use from the specified nodes.
 Multiple connection strings should be comma-separated, e.g. <code>host1:389,host2:50389|server1|
site1,host3:50389</code>.",
          "properties" : {
            "value" : {
              "type" : "string",
              "required" : false
            },
            "inherited" : {
              "type" : "boolean",
              "required" : true
            }
          }
        },
        "org.forgerock.services.uma.labels.store.loginid" : {
          "title" : "Login Id",
```


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```
          "type" : "object",
          "propertyOrder" : 2,
          "description" : "",
          "properties" : {
            "value" : {
              "type" : "string",
              "required" : false
            },
            "inherited" : {
              "type" : "boolean",
              "required" : true
            }
          }
        },
        "org.forgerock.services.uma.labels.store.password" : {
          "title" : "Password",
          "type" : "object",
          "propertyOrder" : 3,
          "description" : "",
          "properties" : {
            "value" : {
              "type" : "string",
              "required" : false,
              "format" : "password"
            },
            "inherited" : {
              "type" : "boolean",
              "required" : true
            }
          }
        },
        "org.forgerock.services.uma.labels.store.heartbeat" : {
          "title" : "Heartbeat",
          "type" : "object",
          "propertyOrder" : 4,
          "description" : "",
          "properties" : {
            "value" : {
              "type" : "integer",
              "required" : false
            },
            "inherited" : {
              "type" : "boolean",
              "required" : true
            }
          }
        }
      }
    }
  }
}
```


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1.169. UmaPolicies

1.169.1. Realm Operations

Provides create, delete and query operations for UMA Policies

Resource path: `/users/{user}/uma/policies`

Resource version: `1.0`

1.169.1.1. create

Creates an UMA Policy

Usage:

```
am> create UmaPolicies --realm Realm --id id --body body --user user
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "$schema" : "http://json-schema.org/draft-04/schema#",
  "description" : "A policy defining who can access a particular resource set",
  "type" : "object",
  "title" : "UMA Policy",
  "properties" : {
    "policyId" : {
      "type" : "string",
      "title" : "Policy ID",
      "description" : "The ID must correspond with an existing resource set ID"
    },
    "permissions" : {
      "type" : "array",
      "title" : "Permissions",
      "description" : "A list of subjects and the scopes they are allowed access to",
      "items" : {
        "type" : "object",
        "properties" : {
          "subject" : {
            "type" : "string",
            "title" : "Subject",
            "description" : "The username of the subject"
          },
          "scopes" : {
            "type" : "array",
            "title" : "Scopes",
            "description" : "The scopes that the user is allowed access to",
```


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```
            "items" : {
              "type" : "string"
            }
          }
        }
      }
    }
  }
}
```

--user

Provides create, delete and query operations for UMA Policies

1.169.1.2. delete

Deletes an UMA Policy

Usage:

```
am> delete UmaPolicies --realm Realm --id id --user user
```

Parameters:

--id

The unique identifier for the resource.

--user

Provides create, delete and query operations for UMA Policies

1.169.1.3. query

Queries an UMA Policy

Usage:

```
am> query UmaPolicies --realm Realm --filter filter --user user
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all. Fields that can be queried: [*]

--user

Provides create, delete and query operations for UMA Policies

1.169.1.4. read

Reads an UMA Policy

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Usage:

```
am> read UmaPolicies --realm Realm --id id --user user
```

Parameters:

--id

The unique identifier for the resource.

--user

Provides create, delete and query operations for UMA Policies

1.169.1.5. update

Updates an UMA Policy

Usage:

```
am> update UmaPolicies --realm Realm --id id --body body --user user
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "$schema" : "http://json-schema.org/draft-04/schema#",
  "description" : "A policy defining who can access a particular resource set",
  "type" : "object",
  "title" : "UMA Policy",
  "properties" : {
    "policyId" : {
      "type" : "string",
      "title" : "Policy ID",
      "description" : "The ID must correspond with an existing resource set ID"
    },
    "permissions" : {
      "type" : "array",
      "title" : "Permissions",
      "description" : "A list of subjects and the scopes they are allowed access to",
      "items" : {
        "type" : "object",
        "properties" : {
          "subject" : {
            "type" : "string",
            "title" : "Subject",
            "description" : "The username of the subject"
          },
          "scopes" : {
            "type" : "array",
```


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```
            "title" : "Scopes",
            "description" : "The scopes that the user is allowed access to",
            "items" : {
              "type" : "string"
            }
          }
        }
      }
    }
  }
}
```

--user

Provides create, delete and query operations for UMA Policies

1.170. UmaProvider

1.170.1. Realm Operations

Resource path: `/realm-config/services/uma`

Resource version: `1.0`

1.170.1.1. create

Usage:

```
am> create UmaProvider --realm Realm --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "grantRptConditions" : {
      "title" : "Grant RPTs...",
      "description" : "In UMA, scope comes from both the permission ticket and from the token request.
 An RPT is always granted when all scope matches, and is never granted when no scope matches. You can
 configure when RPTs are granted for partial match conditions here. For more information, see the UMA
 Grant Type specification section onAuthorization Assessment and Results Determination.",
      "propertyOrder" : 900,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
```


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```
      "exampleValue" : ""
    },
    "deleteResourceSetsOnDeleteRS" : {
      "title" : "Delete resource sets when Resource Server is removed",
      "description" : "Delete all resource sets that relate to a Resource Server when removing the
OAuth2 agent entry or removing the <code>uma_protection</code> scope from the OAuth2 agent.",
      "propertyOrder" : 400,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "emailRequestingPartyOnPendingRequestApproval" : {
      "title" : "Email Requesting Party on Pending Request approval",
      "description" : "Specifies whether to send an email to the Requesting Party when a Pending
Request is approved by the Resource Owner.",
      "propertyOrder" : 600,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "pendingRequestsEnabled" : {
      "title" : "Pending Requests Enabled",
      "description" : "Specifies whether to use the Pending Requests subsystem that notifies the
resource owner that an attempt to access a resource was made.",
      "propertyOrder" : 450,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "permissionTicketLifetime" : {
      "title" : "Permission Ticket Lifetime (seconds)",
      "description" : "The maximum life of a permission ticket before it expires, in seconds.",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "userProfileLocaleAttribute" : {
      "title" : "User profile preferred Locale attribute",
      "description" : "User profile attribute storing the user's preferred locale.",
      "propertyOrder" : 700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "deletePoliciesOnDeleteRS" : {
      "title" : "Delete user policies when Resource Server is removed",
      "description" : "Delete all user policies that relate to a Resource Server when removing the
OAuth2 agent entry or removing the <code>uma_protection</code> scope from the OAuth2 agent.",
      "propertyOrder" : 300,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "resharingMode" : {
      "title" : "Re-Sharing Mode",
      "description" : "Specifies whether re-sharing is off or on implicitly for all users, allowing
all users to re-share resource sets that have been shared with them.",
      "propertyOrder" : 800,
```


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```
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "emailResourceOwnerOnPendingRequestCreation" : {
      "title" : "Email Resource Owner on Pending Request creation",
      "description" : "Specifies whether to send an email to the Resource Owner when a Pending Request
 is created when a Requesting Party requests authorization to a resource.",
      "propertyOrder" : 500,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    }
  }
}
```

1.170.1.2. delete

Usage:

```
am> delete UmaProvider --realm Realm
```

1.170.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action UmaProvider --realm Realm --actionName getAllTypes
```

1.170.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action UmaProvider --realm Realm --actionName getCreatableTypes
```

1.170.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action UmaProvider --realm Realm --actionName nextdescendents
```

1.170.1.6. read

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Usage:

```
am> read UmaProvider --realm Realm
```

1.170.1.7. update

Usage:

```
am> update UmaProvider --realm Realm --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "grantRptConditions" : {
      "title" : "Grant RPTs...",
      "description" : "In UMA, scope comes from both the permission ticket and from the token request.
 An RPT is always granted when all scope matches, and is never granted when no scope matches. You can
 configure when RPTs are granted for partial match conditions here. For more information, see the UMA
 Grant Type specification section onAuthorization Assessment and Results Determination.",
      "propertyOrder" : 900,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "deleteResourceSetsOnDeleteRS" : {
      "title" : "Delete resource sets when Resource Server is removed",
      "description" : "Delete all resource sets that relate to a Resource Server when removing the
 OAuth2 agent entry or removing the <code>uma_protection</code> scope from the OAuth2 agent.",
      "propertyOrder" : 400,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "emailRequestingPartyOnPendingRequestApproval" : {
      "title" : "Email Requesting Party on Pending Request approval",
      "description" : "Specifies whether to send an email to the Requesting Party when a Pending
 Request is approved by the Resource Owner.",
      "propertyOrder" : 600,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "pendingRequestsEnabled" : {
      "title" : "Pending Requests Enabled",
      "description" : "Specifies whether to use the Pending Requests subsystem that notifies the
 resource owner that an attempt to access a resource was made.",
```


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```
      "propertyOrder" : 450,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "permissionTicketLifetime" : {
      "title" : "Permission Ticket Lifetime (seconds)",
      "description" : "The maximum life of a permission ticket before it expires, in seconds.",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "userProfileLocaleAttribute" : {
      "title" : "User profile preferred Locale attribute",
      "description" : "User profile attribute storing the user's preferred locale.",
      "propertyOrder" : 700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "deletePoliciesOnDeleteRS" : {
      "title" : "Delete user policies when Resource Server is removed",
      "description" : "Delete all user policies that relate to a Resource Server when removing the
 OAuth2 agent entry or removing the <code>uma_protection</code> scope from the OAuth2 agent.",
      "propertyOrder" : 300,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "resharingMode" : {
      "title" : "Re-Sharing Mode",
      "description" : "Specifies whether re-sharing is off or on implicitly for all users, allowing
 all users to re-share resource sets that have been shared with them.",
      "propertyOrder" : 800,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "emailResourceOwnerOnPendingRequestCreation" : {
      "title" : "Email Resource Owner on Pending Request creation",
      "description" : "Specifies whether to send an email to the Resource Owner when a Pending Request
 is created when a Requesting Party requests authorization to a resource.",
      "propertyOrder" : 500,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    }
  }
}
```

1.170.2. Global Operations

Resource path: `/global-config/services/uma`

Resource version: `1.0`

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1.170.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action UmaProvider --global --actionName getAllTypes
```

1.170.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action UmaProvider --global --actionName getCreatableTypes
```

1.170.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action UmaProvider --global --actionName nextdescendents
```

1.170.2.4. read

Usage:

```
am> read UmaProvider --global
```

1.170.2.5. update

Usage:

```
am> update UmaProvider --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "defaults" : {
      "properties" : {
        "deleteResourceSetsOnDeleteRS" : {
          "title" : "Delete resource sets when Resource Server is removed",
          "description" : "Delete all resource sets that relate to a Resource Server when removing the
 OAuth2 agent entry or removing the <code>uma_protection</code> scope from the OAuth2 agent.",
          "propertyOrder" : 400,
```


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```
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "emailResourceOwnerOnPendingRequestCreation" : {
          "title" : "Email Resource Owner on Pending Request creation",
          "description" : "Specifies whether to send an email to the Resource Owner when a Pending
Request is created when a Requesting Party requests authorization to a resource.",
          "propertyOrder" : 500,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "emailRequestingPartyOnPendingRequestApproval" : {
          "title" : "Email Requesting Party on Pending Request approval",
          "description" : "Specifies whether to send an email to the Requesting Party when a Pending
Request is approved by the Resource Owner.",
          "propertyOrder" : 600,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "grantRptConditions" : {
          "title" : "Grant RPTs...",
          "description" : "In UMA, scope comes from both the permission ticket and from the token
request. An RPT is always granted when all scope matches, and is never granted when no scope matches.
You can configure when RPTs are granted for partial match conditions here. For more information, see
the UMA Grant Type specification section onAuthorization Assessment and Results Determination.",
          "propertyOrder" : 900,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "deletePoliciesOnDeleteRS" : {
          "title" : "Delete user policies when Resource Server is removed",
          "description" : "Delete all user policies that relate to a Resource Server when removing the
OAuth2 agent entry or removing the <code>uma_protection</code> scope from the OAuth2 agent.",
          "propertyOrder" : 300,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "pendingRequestsEnabled" : {
          "title" : "Pending Requests Enabled",
          "description" : "Specifies whether to use the Pending Requests subsystem that notifies the
resource owner that an attempt to access a resource was made.",
          "propertyOrder" : 450,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "permissionTicketLifetime" : {
          "title" : "Permission Ticket Lifetime (seconds)",
          "description" : "The maximum life of a permission ticket before it expires, in seconds.",
          "propertyOrder" : 200,
          "required" : true,
```


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```
          "type" : "integer",
          "exampleValue" : ""
        },
        "resharingMode" : {
          "title" : "Re-Sharing Mode",
          "description" : "Specifies whether re-sharing is off or on implicitly for all users,
 allowing all users to re-share resource sets that have been shared with them.",
          "propertyOrder" : 800,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "userProfileLocaleAttribute" : {
          "title" : "User profile preferred Locale attribute",
          "description" : "User profile attribute storing the user's preferred locale.",
          "propertyOrder" : 700,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      },
      "type" : "object",
      "title" : "Realm Defaults"
    }
  }
}
```

1.171. UmaResourceSetLabels

1.171.1. Realm Operations

Provides create, delete and query operations for UMA resource set labels

Resource path: `/users/{user}/oauth2/resources/labels`

Resource version: `1.0`

1.171.1.1. create

Creates a UMA Resource Set Label

Usage:

```
am> create UmaResourceSetLabels --realm Realm --id id --body body --user user
```

Parameters:

--id

The unique identifier for the resource.

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--body

The resource in JSON format, described by the following JSON schema:

```
{
  "description" : "Represents a UMA Resource Set Label",
  "id" : "urn:jsonschema:org:forgerock:openam:oauth2:resources:labels:ResourceSetLabel",
  "type" : "object",
  "title" : "UMA Resource Set Label",
  "properties" : {
    "id" : {
      "type" : "string",
      "description" : "The unique identifier of the resource set label",
      "title" : "Id"
    },
    "name" : {
      "type" : "string",
      "description" : "The displayed text of the label",
      "title" : "Name"
    },
    "type" : {
      "type" : "string",
      "description" : "The type of the label e.g. 'System'",
      "title" : "Type",
      "enum" : [ "STAR", "USER", "SYSTEM" ]
    },
    "resourceSetIds" : {
      "type" : "array",
      "items" : {
        "type" : "string"
      }
    }
  }
}
```

--user

Provides create, delete and query operations for UMA resource set labels

1.171.1.2. delete

Deletes a UMA Resource Set Label

Usage:

```
am> delete UmaResourceSetLabels --realm Realm --id id --user user
```

Parameters:

--id

The unique identifier for the resource.

--user

Provides create, delete and query operations for UMA resource set labels

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1.171.1.3. query

Queries the collection of UMA labels

Usage:

```
am> query UmaResourceSetLabels --realm Realm --filter filter --user user
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all. Fields that can be queried: [*]

--user

Provides create, delete and query operations for UMA resource set labels

1.172. UmaUserAuditHistory

1.172.1. Realm Operations

Provides access to UMA auditing history for a user

Resource path: `/users/{user}/uma/auditHistory`

Resource version: `1.0`

1.172.1.1. getHistory

Returns the audit history of a user

Usage:

```
am> action UmaUserAuditHistory --realm Realm --user user --actionName getHistory
```

Parameters:

--user

Provides access to UMA auditing history for a user

1.172.1.2. query

Queries the collection of auditing history

Usage:

```
am> query UmaUserAuditHistory --realm Realm --filter filter --user user
```


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Parameters:

--filter

A CREST formatted query filter, where "true" will query all. Fields that can be queried: [*]

--user

Provides access to UMA auditing history for a user

1.173. User

1.173.1. Realm Operations

Resource path: `/realm-config/services/user`

Resource version: `1.0`

1.173.1.1. create

Usage:

```
am> create User --realm Realm --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "dynamic" : {
      "properties" : {
        "preferredTimezone" : {
          "title" : "User Preferred Timezone",
          "description" : "Time zone for accessing OpenAM console.",
          "propertyOrder" : 100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "defaultUserStatus" : {
          "title" : "Default User Status",
          "description" : "Inactive users cannot authenticate, though OpenAM stores their profiles.",
          "propertyOrder" : 300,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
```


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```
        },
        "adminDNStartingView" : {
          "title" : "Administrator DN Starting View",
          "description" : "Specifies the DN for the initial screen when the OpenAM administrator
 successfully logs in to the OpenAM console.",
          "propertyOrder" : 200,
          "required" : false,
          "type" : "string",
          "exampleValue" : ""
        }
      },
      "type" : "object",
      "title" : "Dynamic Attributes"
    }
  }
}
```

1.173.1.2. delete

Usage:

```
am> delete User --realm Realm
```

1.173.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action User --realm Realm --actionName getAllTypes
```

1.173.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action User --realm Realm --actionName getCreatableTypes
```

1.173.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action User --realm Realm --actionName nextdescendents
```

1.173.1.6. read

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Usage:

```
am> read User --realm Realm
```

1.173.1.7. update

Usage:

```
am> update User --realm Realm --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "dynamic" : {
      "properties" : {
        "preferredTimezone" : {
          "title" : "User Preferred Timezone",
          "description" : "Time zone for accessing OpenAM console.",
          "propertyOrder" : 100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "defaultUserStatus" : {
          "title" : "Default User Status",
          "description" : "Inactive users cannot authenticate, though OpenAM stores their profiles.",
          "propertyOrder" : 300,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "adminDNStartingView" : {
          "title" : "Administrator DN Starting View",
          "description" : "Specifies the DN for the initial screen when the OpenAM administrator
 successfully logs in to the OpenAM console.",
          "propertyOrder" : 200,
          "required" : false,
          "type" : "string",
          "exampleValue" : ""
        }
      },
      "type" : "object",
      "title" : "Dynamic Attributes"
    }
  }
}
```

1.173.2. Global Operations

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Resource path: `/global-config/services/user`

Resource version: `1.0`

1.173.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action User --global --actionName getAllTypes
```

1.173.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action User --global --actionName getCreatableTypes
```

1.173.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action User --global --actionName nextdescendents
```

1.173.2.4. read

Usage:

```
am> read User --global
```

1.173.2.5. update

Usage:

```
am> update User --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "dynamic" : {
```


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```
      "properties" : {
        "defaultUserStatus" : {
          "title" : "Default User Status",
          "description" : "Inactive users cannot authenticate, though OpenAM stores their profiles.",
          "propertyOrder" : 300,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "preferredTimezone" : {
          "title" : "User Preferred Timezone",
          "description" : "Time zone for accessing OpenAM console.",
          "propertyOrder" : 100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "adminDNStartingView" : {
          "title" : "Administrator DN Starting View",
          "description" : "Specifies the DN for the initial screen when the OpenAM administrator
 successfully logs in to the OpenAM console.",
          "propertyOrder" : 200,
          "required" : false,
          "type" : "string",
          "exampleValue" : ""
        }
      },
      "type" : "object",
      "title" : "Dynamic Attributes"
    }
  }
}
```

1.174. UserPolicies

1.174.1. Realm Operations

The User Policy resource endpoint is responsible for managing a user's policies. The available operations are create, read, update, delete, query. Policies are realm specific, hence the URI for the policies API can contain a realm component. If the realm is not specified in the URI, the top level realm is used.

Resource path: `/users/{user}/policies`

Resource version: `1.0`

1.174.1.1. create

Create new policy

Usage:

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```
am> create UserPolicies --realm Realm --id id --body body --user user
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "$schema" : "http://json-schema.org/draft-04/schema#",
  "description" : "Json schema for the policy resource",
  "title" : "Policy Resource Schema",
  "type" : "object",
  "properties" : {
    "name" : {
      "title" : "Name",
      "description" : "String matching the name of the application",
      "type" : "string"
    },
    "active" : {
      "title" : "Active flag",
      "description" : "Boolean indicating whether OpenAM considers the policy active for evaluation
 purposes, defaults to false",
      "type" : "boolean"
    },
    "description" : {
      "title" : "Description",
      "description" : "String describing the policy",
      "type" : "string"
    },
    "applicationName" : {
      "title" : "Application name",
      "description" : "String containing the application name, such as \"iPlanetAMWebAgentService\",
 or \"mypolicyset\"",
      "type" : "string"
    },
    "actionValues" : {
      "title" : "Action values",
      "description" : "Set of string action names, each set to a boolean indicating whether the action
 is allowed. Chosen from the available actions provided by the associated Managing Resource Types
 resource type",
      "type" : "object",
      "additionalProperties" : {
        "type" : "boolean"
      }
    },
    "resources" : {
      "title" : "Resources",
      "description" : "List of the resource name pattern strings to which the policy applies. Must
 conform to the pattern templates provided by the associated Managing Resource Types resource type",
      "type" : "array",
      "items" : {
        "type" : "string"
      }
```


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```
   },
   "subject" : {
     "title" : "Subject",
     "description" : "Specifies the subject conditions to which the policy applies, where subjects
can be combined by using the built-in types \"AND\", \"OR\", and \"NOT\", and where subject
implementations are pluggable",
     "type" : "object"
   },
   "condition" : {
     "title" : "Condition",
     "description" : "Specifies environment conditions, where conditions can be combined by using the
built-in types \"AND\", \"OR\", and \"NOT\", and where condition implementations are pluggable",
     "type" : "object",
     "properties" : {
       "type" : {
         "type" : "string"
       },
       "conditions" : {
         "type" : "array",
         "title" : "Condition",
         "description" : "Specifies environment conditions, where conditions can be combined by using
the built-in types \"AND\", \"OR\", and \"NOT\", and where condition implementations are pluggable",
         "items" : {
           "type" : "object"
         }
       }
     }
   },
   "resourceTypeUuid" : {
     "title" : "Resource Type UUID",
     "description" : "The UUIDs of the resource type associated with the policy",
     "type" : "string"
   },
   "resourceAttributes" : {
     "title" : "Resource Attributes",
     "description" : "List of attributes to return with decisions. These attributes are known as
response attributes",
     "type" : "array",
     "items" : {
       "type" : "object"
     }
   },
   "lastModifiedBy" : {
     "title" : "Last Modified By",
     "description" : "A string containing the universal identifier DN of the subject that most
recently updated the policy",
     "type" : "string"
   },
   "lastModifiedDate" : {
     "title" : "Last Modified date",
     "description" : "An integer containing the last modified date and time, in number of seconds",
     "type" : "string"
   },
   "createdBy" : {
     "title" : "Created By",
     "description" : "A string containing the universal identifier DN of the subject that created the
policy",
     "type" : "string"
   },
```


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```
    "creationDate" : {
      "title" : "Creation Date",
      "description" : "An integer containing the creation date and time, in number of seconds",
      "type" : "string"
    }
  }
}
```

--user

The User Policy resource endpoint is responsible for managing a user's policies. The available operations are create, read, update, delete, query. Policies are realm specific, hence the URI for the policies API can contain a realm component. If the realm is not specified in the URI, the top level realm is used.

1.174.1.2. delete

Delete policy

Usage:

```
am> delete UserPolicies --realm Realm --id id --user user
```

Parameters:

--id

The unique identifier for the resource.

--user

The User Policy resource endpoint is responsible for managing a user's policies. The available operations are create, read, update, delete, query. Policies are realm specific, hence the URI for the policies API can contain a realm component. If the realm is not specified in the URI, the top level realm is used.

1.174.1.3. query

Query the stored policies

Usage:

```
am> query UserPolicies --realm Realm --filter filter --user user
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all. Fields that can be queried: [*]

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--user

The User Policy resource endpoint is responsible for managing a user's policies. The available operations are create, read, update, delete, query. Policies are realm specific, hence the URI for the policies API can contain a realm component. If the realm is not specified in the URI, the top level realm is used.

1.174.1.4. read

Read policy

Usage:

```
am> read UserPolicies --realm Realm --id id --user user
```

Parameters:

--id

The unique identifier for the resource.

--user

The User Policy resource endpoint is responsible for managing a user's policies. The available operations are create, read, update, delete, query. Policies are realm specific, hence the URI for the policies API can contain a realm component. If the realm is not specified in the URI, the top level realm is used.

1.174.1.5. update

Update an existing policy

Usage:

```
am> update UserPolicies --realm Realm --id id --body body --user user
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "$schema" : "http://json-schema.org/draft-04/schema#",
  "description" : "Json schema for the policy resource",
  "title" : "Policy Resource Schema",
  "type" : "object",
  "properties" : {
    "name" : {
      "title" : "Name",
```


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```
      "description" : "String matching the name of the application",
      "type" : "string"
    },
    "active" : {
      "title" : "Active flag",
      "description" : "Boolean indicating whether OpenAM considers the policy active for evaluation
purposes, defaults to false",
      "type" : "boolean"
    },
    "description" : {
      "title" : "Description",
      "description" : "String describing the policy",
      "type" : "string"
    },
    "applicationName" : {
      "title" : "Application name",
      "description" : "String containing the application name, such as \"iPlanetAMWebAgentService\",
or \"mypolicyset\"",
      "type" : "string"
    },
    "actionValues" : {
      "title" : "Action values",
      "description" : "Set of string action names, each set to a boolean indicating whether the action
is allowed. Chosen from the available actions provided by the associated Managing Resource Types
resource type",
      "type" : "object",
      "additionalProperties" : {
        "type" : "boolean"
      }
    },
    "resources" : {
      "title" : "Resources",
      "description" : "List of the resource name pattern strings to which the policy applies. Must
conform to the pattern templates provided by the associated Managing Resource Types resource type",
      "type" : "array",
      "items" : {
        "type" : "string"
      }
    },
    "subject" : {
      "title" : "Subject",
      "description" : "Specifies the subject conditions to which the policy applies, where subjects
can be combined by using the built-in types \"AND\", \"OR\", and \"NOT\", and where subject
implementations are pluggable",
      "type" : "object"
    },
    "condition" : {
      "title" : "Condition",
      "description" : "Specifies environment conditions, where conditions can be combined by using the
built-in types \"AND\", \"OR\", and \"NOT\", and where condition implementations are pluggable",
      "type" : "object",
      "properties" : {
        "type" : {
          "type" : "string"
        },
        "conditions" : {
          "type" : "array",
          "title" : "Condition",
```


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```
          "description" : "Specifies environment conditions, where conditions can be combined by using
 the built-in types \"AND\", \"OR\", and \"NOT\", and where condition implementations are pluggable",
          "items" : {
            "type" : "object"
          }
        }
      }
    },
    "resourceTypeUuid" : {
      "title" : "Resource Type UUID",
      "description" : "The UUIDs of the resource type associated with the policy",
      "type" : "string"
    },
    "resourceAttributes" : {
      "title" : "Resource Attributes",
      "description" : "List of attributes to return with decisions. These attributes are known as
 response attributes",
      "type" : "array",
      "items" : {
        "type" : "object"
      }
    },
    "lastModifiedBy" : {
      "title" : "Last Modified By",
      "description" : "A string containing the universal identifier DN of the subject that most
 recently updated the policy",
      "type" : "string"
    },
    "lastModifiedDate" : {
      "title" : "Last Modified date",
      "description" : "An integer containing the last modified date and time, in number of seconds",
      "type" : "string"
    },
    "createdBy" : {
      "title" : "Created By",
      "description" : "A string containing the universal identifier DN of the subject that created the
 policy",
      "type" : "string"
    },
    "creationDate" : {
      "title" : "Creation Date",
      "description" : "An integer containing the creation date and time, in number of seconds",
      "type" : "string"
    }
  }
}
```

--user

The User Policy resource endpoint is responsible for managing a user's policies. The available operations are create, read, update, delete, query. Policies are realm specific, hence the URI for the policies API can contain a realm component. If the realm is not specified in the URI, the top level realm is used.

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1.175. UserRegistration

1.175.1. Realm Operations

Self Service endpoint for registering a new user

Resource path: `/selfservice/userRegistration`

Resource version: `1.0`

1.175.1.1. read

Initialise the user registration process.A set of requirements will be returned that will need to be fulfilled and sent to the submitRequirements action.

Usage:

```
am> read UserRegistration --realm Realm
```

1.175.1.2. submitRequirements

Submit some fulfilled requirements. Returns either a completion status, or a token along with some more requirements. If requirements are returned, they should be submitted with the token as a fresh request to this action.

Usage:

```
am> action UserRegistration --realm Realm --body body --actionName submitRequirements
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

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```
{
  "$schema" : "http://json-schema.org/draft-04/schema#",
  "description" : "The structure of a request to the submitRequirements action.",
  "type" : "object",
  "title" : "Submit requirements structure",
  "properties" : {
    "token" : {
      "type" : "string",
      "title" : "Token",
      "description" : "The token returned from the previous submitRequirements request."
    },
    "input" : {
      "type" : "object",
      "title" : "Input",
      "description" : "The input as collected from the new user. This object must conform to the JSON
 Schema of the requirements property from the last response.",
      "patternProperties" : {
        ".*" : {
          "type" : "any",
          "title" : "Input Property",
          "description" : "Valid content according to the received JSON Schema."
        }
      }
    }
  },
  "required" : [ "input" ]
}
```

1.176. UserSelfService

1.176.1. Realm Operations

Resource path: `/realm-config/services/selfService`

Resource version: `1.0`

1.176.1.1. create

Usage:

```
am> create UserSelfService --realm Realm --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
```


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```
    "forgottenUsername" : {
      "type" : "object",
      "title" : "Forgotten Username",
      "propertyOrder" : 3,
      "properties" : {
        "forgottenUsernameKbaEnabled" : {
          "title" : "Security Questions",
          "description" : "If enabled, users must answer their security questions during the forgotten
 username process.",
          "propertyOrder" : 260,
          "required" : false,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "forgottenUsernameCaptchaEnabled" : {
          "title" : "Captcha",
          "description" : "If enabled, users must pass a Google reCAPTCHA challenge during the
 forgotten username retrieval process to mitigate against software bots.",
          "propertyOrder" : 250,
          "required" : false,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "forgottenUsernameEmailBody" : {
          "title" : "Outgoing Email Body",
          "description" : "Customizes the forgotten username email body text. Format is <code>locale|
body text</code>.",
          "propertyOrder" : 310,
          "required" : false,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "forgottenUsernameTokenTTL" : {
          "title" : "Token LifeTime (seconds)",
          "description" : "Maximum lifetime for the token allowing forgotten username, in seconds.",
          "propertyOrder" : 290,
          "required" : false,
          "type" : "integer",
          "exampleValue" : ""
        },
        "forgottenUsernameEmailUsernameEnabled" : {
          "title" : "Email Username",
          "description" : "If enabled, users receive their forgotten username by email.",
          "propertyOrder" : 270,
          "required" : false,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "forgottenUsernameEnabled" : {
          "title" : "Forgotten Username",
          "description" : "If enabled, users can retrieve their forgotten username.",
          "propertyOrder" : 240,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
```


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```
       "forgottenUsernameShowUsernameEnabled" : {
         "title" : "Show Username",
         "description" : "If enabled, users see their forgotten username on the browser page.",
         "propertyOrder" : 280,
         "required" : false,
         "type" : "boolean",
         "exampleValue" : ""
       },
       "forgottenUsernameEmailSubject" : {
         "title" : "Outgoing Email Subject",
         "description" : "Customizes the forgotten username email subject text. Format is
<code>locale|subject text</code>.",
         "propertyOrder" : 300,
         "required" : false,
         "items" : {
           "type" : "string"
         },
         "type" : "array",
         "exampleValue" : ""
       }
     }
   },
   "forgottenPassword" : {
     "type" : "object",
     "title" : "Forgotten Password",
     "propertyOrder" : 2,
     "properties" : {
       "forgottenPasswordEnabled" : {
         "title" : "Forgotten Password",
         "description" : "If enabled, users can reset their forgotten password.",
         "propertyOrder" : 170,
         "required" : true,
         "type" : "boolean",
         "exampleValue" : ""
       },
       "forgottenPasswordTokenTTL" : {
         "title" : "Token Lifetime (seconds)",
         "description" : "Maximum lifetime for the token allowing forgotten password reset, in
seconds.<p><p>Specify a value from <code>0</code> to <code>2147483647</code>.",
         "propertyOrder" : 210,
         "required" : false,
         "type" : "integer",
         "exampleValue" : ""
       },
       "forgottenPasswordCaptchaEnabled" : {
         "title" : "Captcha",
         "description" : "If enabled, users must pass a Google reCAPTCHA challenge during password
reset to mitigate against software bots.",
         "propertyOrder" : 180,
         "required" : false,
         "type" : "boolean",
         "exampleValue" : ""
       },
       "forgottenPasswordEmailSubject" : {
         "title" : "Outgoing Email Subject",
         "description" : "Customize the forgotten password email subject text. Format is
<code>locale|subject text</code>.",
         "propertyOrder" : 220,
         "required" : false,
```


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```
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "forgottenPasswordKbaEnabled" : {
          "title" : "Security Questions",
          "description" : "If enabled, users must answer their security questions during the forgotten
 password process.",
          "propertyOrder" : 200,
          "required" : false,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "forgottenPasswordEmailBody" : {
          "title" : "Outgoing Email Body",
          "description" : "Customize the forgotten password email body text. Format is <code>locale|
body text</code>.",
          "propertyOrder" : 230,
          "required" : false,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "forgottenPasswordEmailVerificationEnabled" : {
          "title" : "Email Verification",
          "description" : "If enabled, users who reset passwords must perform email address
 verification.",
          "propertyOrder" : 190,
          "required" : false,
          "type" : "boolean",
          "exampleValue" : ""
        }
      }
    },
    "advancedConfig" : {
      "type" : "object",
      "title" : "Advanced Configuration",
      "propertyOrder" : 5,
      "properties" : {
        "forgottenPasswordConfirmationUrl" : {
          "title" : "Forgotten Password Confirmation Email URL",
          "description" : "Specifies the confirmation URL that the user receives after confirming
 their identity during the forgotten password process. The <code>${realm}</code> string is replaced
 with the current realm.",
          "propertyOrder" : 340,
          "required" : false,
          "type" : "string",
          "exampleValue" : ""
        },
        "forgottenUsernameServiceConfigClass" : {
          "title" : "Forgotten Username Service Config Provider Class",
          "description" : "Specifies the provider class to configure any custom plugins.",
          "propertyOrder" : 370,
          "required" : false,
          "type" : "string",
```


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```
          "exampleValue" : ""
        },
        "userRegistrationServiceConfigClass" : {
          "title" : "User Registration Service Config Provider Class",
          "description" : "Specifies the provider class to configure any custom plugins.",
          "propertyOrder" : 350,
          "required" : false,
          "type" : "string",
          "exampleValue" : ""
        },
        "forgottenPasswordServiceConfigClass" : {
          "title" : "Forgotten Password Service Config Provider Class",
          "description" : "Specifies the provider class to configure any custom plugins.",
          "propertyOrder" : 360,
          "required" : false,
          "type" : "string",
          "exampleValue" : ""
        },
        "userRegistrationConfirmationUrl" : {
          "title" : "User Registration Confirmation Email URL",
          "description" : "Specifies the confirmation URL that the user receives during the self-
registration process. The <code>${realm}</code> string is replaced with the current realm.",
          "propertyOrder" : 330,
          "required" : false,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    },
    "generalConfig" : {
      "type" : "object",
      "title" : "General Configuration",
      "propertyOrder" : 0,
      "properties" : {
        "minimumAnswersToDefine" : {
          "title" : "Minimum Answers to Define",
          "description" : "Specifies the minimum number of KBA answers that users must define.",
          "propertyOrder" : 60,
          "required" : false,
          "type" : "integer",
          "exampleValue" : ""
        },
        "validQueryAttributes" : {
          "title" : "Valid Query Attributes",
          "description" : "Specifies the valid query attributes used to search for the user. This is a
 list of attributes used to identify your account for forgotten password and forgotten username.",
          "propertyOrder" : 80,
          "required" : false,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "captchaVerificationUrl" : {
          "title" : "Google Re-captcha Verification URL",
          "description" : "Google reCAPTCHA plugin verification URL.",
          "propertyOrder" : 40,
          "required" : false,
```


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```
          "type" : "string",
          "exampleValue" : ""
        },
        "captchaSiteKey" : {
          "title" : "Google reCAPTCHA Site Key",
          "description" : "Google reCAPTCHA plugin site key.",
          "propertyOrder" : 20,
          "required" : false,
          "type" : "string",
          "exampleValue" : ""
        },
        "kbaQuestions" : {
          "title" : "Security Questions",
          "description" : "Specifies the default set of knowledge-based authentication (KBA) security
 questions. The security questions can be set for the User Self-Registration, forgotten password
 reset, and forgotten username services, respectively.<p><p>Format is <code>unique key|locale|
question</code>.",
          "propertyOrder" : 50,
          "required" : false,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "encryptionKeyPairAlias" : {
          "title" : "Encryption Key Pair Alias",
          "description" : "An encryption key alias in the OpenAM server's JCEKS keystore. Used to
 encrypt the JWT token that OpenAM uses to track end users during User Self-Service operations.",
          "propertyOrder" : 0,
          "required" : true,
          "type" : "string",
          "exampleValue" : "selfserviceenctest"
        },
        "signingSecretKeyAlias" : {
          "title" : "Signing Secret Key Alias",
          "description" : "A signing secret key alias in the OpenAM server's JCEKS keystore. Used to
 sign the JWT token that OpenAM uses to track end users during User Self-Service operations.",
          "propertyOrder" : 10,
          "required" : true,
          "type" : "string",
          "exampleValue" : "selfservicesigntest"
        },
        "captchaSecretKey" : {
          "title" : "Google reCAPTCHA Secret Key",
          "description" : "Google reCAPTCHA plugin secret key.",
          "propertyOrder" : 30,
          "required" : false,
          "type" : "string",
          "exampleValue" : ""
        },
        "minimumAnswersToVerify" : {
          "title" : "Minimum Answers to Verify",
          "description" : "Specifies the minimum number of KBA questions that users need to answer
 to be granted the privilege to carry out an action, such as registering for an account, resetting a
 password, or retrieving a username. Specify a value from <code>0</code> to <code>50</code>.",
          "propertyOrder" : 70,
          "required" : false,
          "type" : "integer",
```


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```
          "exampleValue" : ""
        }
      }
    },
    "userRegistration" : {
      "type" : "object",
      "title" : "User Registration",
      "propertyOrder" : 1,
      "properties" : {
        "userRegistrationTokenTTL" : {
          "title" : "Token Lifetime (seconds)",
          "description" : "Maximum lifetime of the token allowing User Self-Registration, in
 seconds.",
          "propertyOrder" : 130,
          "required" : false,
          "type" : "integer",
          "exampleValue" : ""
        },
        "userRegistrationEmailVerificationFirstEnabled" : {
          "title" : "Verify Email before User Detail",
          "description" : "If enabled, email address verification will be performed first before user
 details screen is displayed. This will take effect only if Verify Email is enabled.",
          "propertyOrder" : 110,
          "required" : false,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "userRegistrationCaptchaEnabled" : {
          "title" : "Captcha",
          "description" : "If enabled, users must pass a Google reCAPTCHA challenge during user self-
registration to mitigate against software bots.",
          "propertyOrder" : 100,
          "required" : false,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "userRegistrationEmailBody" : {
          "title" : "Outgoing Email Body",
          "description" : "Customize the User Self-Registration verification email body text. Format
 is: <code>locale|body text</code>.",
          "propertyOrder" : 150,
          "required" : false,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "userRegistrationValidUserAttributes" : {
          "title" : "Valid Creation Attributes",
          "description" : "Specifies a whitelist of user attributes that can be set during user
 creation.",
          "propertyOrder" : 160,
          "required" : false,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
```


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```
        },
        "userRegistrationKbaEnabled" : {
          "title" : "Security Questions",
          "description" : "If enabled, users must set up their security questions during the self-
registration process.",
          "propertyOrder" : 120,
          "required" : false,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "userRegistrationEmailSubject" : {
          "title" : "Outgoing Email Subject",
          "description" : "Customize the User Self-Registration verification email subject text.
 Format is <code>locale|subject text</code>.",
          "propertyOrder" : 140,
          "required" : false,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "userRegistrationEmailVerificationEnabled" : {
          "title" : "Email Verification",
          "description" : "If enabled, users who self-register must perform email address
 verification.",
          "propertyOrder" : 110,
          "required" : false,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "userRegisteredDestination" : {
          "title" : "Destination After Successful Self-Registration",
          "description" : "Specifies the action to be taken after a user successfully registers
 a new account. Choose from:<ul><li><code>default</code>. User is sent to a success page without
 being logged in.</li><li><code>login</code>. User is sent to the login page to authenticate.</
li><li><code>autologin</code>. User is automatically logged in and sent to the appropriate page.</
li></ul>",
          "propertyOrder" : 161,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "userRegistrationEnabled" : {
          "title" : "User Registration",
          "description" : "If enabled, new users can sign up for an account.",
          "propertyOrder" : 90,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        }
      }
    },
    "profileManagement" : {
      "type" : "object",
      "title" : "Profile Management",
      "propertyOrder" : 4,
      "properties" : {
        "profileProtectedUserAttributes" : {
```


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```
          "title" : "Protected Update Attributes",
          "description" : "Specifies a profile's protected user attributes, which causes re-
authentication when the user attempts to modify these attributes.",
          "propertyOrder" : 320,
          "required" : false,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        }
      }
    }
  }
}
```

1.176.1.2. delete

Usage:

```
am> delete UserSelfService --realm Realm
```

1.176.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action UserSelfService --realm Realm --actionName getAllTypes
```

1.176.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action UserSelfService --realm Realm --actionName getCreatableTypes
```

1.176.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action UserSelfService --realm Realm --actionName nextdescendents
```

1.176.1.6. read

Usage:

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```
am> read UserSelfService --realm Realm
```

1.176.1.7. update

Usage:

```
am> update UserSelfService --realm Realm --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "forgottenUsername" : {
      "type" : "object",
      "title" : "Forgotten Username",
      "propertyOrder" : 3,
      "properties" : {
        "forgottenUsernameKbaEnabled" : {
          "title" : "Security Questions",
          "description" : "If enabled, users must answer their security questions during the forgotten
 username process.",
          "propertyOrder" : 260,
          "required" : false,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "forgottenUsernameCaptchaEnabled" : {
          "title" : "Captcha",
          "description" : "If enabled, users must pass a Google reCAPTCHA challenge during the
 forgotten username retrieval process to mitigate against software bots.",
          "propertyOrder" : 250,
          "required" : false,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "forgottenUsernameEmailBody" : {
          "title" : "Outgoing Email Body",
          "description" : "Customizes the forgotten username email body text. Format is <code>locale|
body text</code>.",
          "propertyOrder" : 310,
          "required" : false,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "forgottenUsernameTokenTTL" : {
          "title" : "Token LifeTime (seconds)",
          "description" : "Maximum lifetime for the token allowing forgotten username, in seconds.",
          "propertyOrder" : 290,
```


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```
          "required" : false,
          "type" : "integer",
          "exampleValue" : ""
        },
        "forgottenUsernameEmailUsernameEnabled" : {
          "title" : "Email Username",
          "description" : "If enabled, users receive their forgotten username by email.",
          "propertyOrder" : 270,
          "required" : false,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "forgottenUsernameEnabled" : {
          "title" : "Forgotten Username",
          "description" : "If enabled, users can retrieve their forgotten username.",
          "propertyOrder" : 240,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "forgottenUsernameShowUsernameEnabled" : {
          "title" : "Show Username",
          "description" : "If enabled, users see their forgotten username on the browser page.",
          "propertyOrder" : 280,
          "required" : false,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "forgottenUsernameEmailSubject" : {
          "title" : "Outgoing Email Subject",
          "description" : "Customizes the forgotten username email subject text. Format is
<code>locale|subject text</code>.",
          "propertyOrder" : 300,
          "required" : false,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        }
      }
    },
    "forgottenPassword" : {
      "type" : "object",
      "title" : "Forgotten Password",
      "propertyOrder" : 2,
      "properties" : {
        "forgottenPasswordEnabled" : {
          "title" : "Forgotten Password",
          "description" : "If enabled, users can reset their forgotten password.",
          "propertyOrder" : 170,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "forgottenPasswordTokenTTL" : {
          "title" : "Token Lifetime (seconds)",
          "description" : "Maximum lifetime for the token allowing forgotten password reset, in
seconds.<p><p>Specify a value from <code>0</code> to <code>2147483647</code>.",
```


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```
          "propertyOrder" : 210,
          "required" : false,
          "type" : "integer",
          "exampleValue" : ""
        },
        "forgottenPasswordCaptchaEnabled" : {
          "title" : "Captcha",
          "description" : "If enabled, users must pass a Google reCAPTCHA challenge during password
 reset to mitigate against software bots.",
          "propertyOrder" : 180,
          "required" : false,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "forgottenPasswordEmailSubject" : {
          "title" : "Outgoing Email Subject",
          "description" : "Customize the forgotten password email subject text. Format is
 <code>locale|subject text</code>.",
          "propertyOrder" : 220,
          "required" : false,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "forgottenPasswordKbaEnabled" : {
          "title" : "Security Questions",
          "description" : "If enabled, users must answer their security questions during the forgotten
 password process.",
          "propertyOrder" : 200,
          "required" : false,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "forgottenPasswordEmailBody" : {
          "title" : "Outgoing Email Body",
          "description" : "Customize the forgotten password email body text. Format is <code>locale|
body text</code>.",
          "propertyOrder" : 230,
          "required" : false,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "forgottenPasswordEmailVerificationEnabled" : {
          "title" : "Email Verification",
          "description" : "If enabled, users who reset passwords must perform email address
 verification.",
          "propertyOrder" : 190,
          "required" : false,
          "type" : "boolean",
          "exampleValue" : ""
        }
      }
    },
    "advancedConfig" : {
```


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```
      "type" : "object",
      "title" : "Advanced Configuration",
      "propertyOrder" : 5,
      "properties" : {
        "forgottenPasswordConfirmationUrl" : {
          "title" : "Forgotten Password Confirmation Email URL",
          "description" : "Specifies the confirmation URL that the user receives after confirming
 their identity during the forgotten password process. The <code>${realm}</code> string is replaced
 with the current realm.",
          "propertyOrder" : 340,
          "required" : false,
          "type" : "string",
          "exampleValue" : ""
        },
        "forgottenUsernameServiceConfigClass" : {
          "title" : "Forgotten Username Service Config Provider Class",
          "description" : "Specifies the provider class to configure any custom plugins.",
          "propertyOrder" : 370,
          "required" : false,
          "type" : "string",
          "exampleValue" : ""
        },
        "userRegistrationServiceConfigClass" : {
          "title" : "User Registration Service Config Provider Class",
          "description" : "Specifies the provider class to configure any custom plugins.",
          "propertyOrder" : 350,
          "required" : false,
          "type" : "string",
          "exampleValue" : ""
        },
        "forgottenPasswordServiceConfigClass" : {
          "title" : "Forgotten Password Service Config Provider Class",
          "description" : "Specifies the provider class to configure any custom plugins.",
          "propertyOrder" : 360,
          "required" : false,
          "type" : "string",
          "exampleValue" : ""
        },
        "userRegistrationConfirmationUrl" : {
          "title" : "User Registration Confirmation Email URL",
          "description" : "Specifies the confirmation URL that the user receives during the self-
registration process. The <code>${realm}</code> string is replaced with the current realm.",
          "propertyOrder" : 330,
          "required" : false,
          "type" : "string",
          "exampleValue" : ""
        }
      }
    },
    "generalConfig" : {
      "type" : "object",
      "title" : "General Configuration",
      "propertyOrder" : 0,
      "properties" : {
        "minimumAnswersToDefine" : {
          "title" : "Minimum Answers to Define",
          "description" : "Specifies the minimum number of KBA answers that users must define.",
          "propertyOrder" : 60,
          "required" : false,
```


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```
          "type" : "integer",
          "exampleValue" : ""
        },
        "validQueryAttributes" : {
          "title" : "Valid Query Attributes",
          "description" : "Specifies the valid query attributes used to search for the user. This is a
 list of attributes used to identify your account for forgotten password and forgotten username.",
          "propertyOrder" : 80,
          "required" : false,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "captchaVerificationUrl" : {
          "title" : "Google Re-captcha Verification URL",
          "description" : "Google reCAPTCHA plugin verification URL.",
          "propertyOrder" : 40,
          "required" : false,
          "type" : "string",
          "exampleValue" : ""
        },
        "captchaSiteKey" : {
          "title" : "Google reCAPTCHA Site Key",
          "description" : "Google reCAPTCHA plugin site key.",
          "propertyOrder" : 20,
          "required" : false,
          "type" : "string",
          "exampleValue" : ""
        },
        "kbaQuestions" : {
          "title" : "Security Questions",
          "description" : "Specifies the default set of knowledge-based authentication (KBA) security
 questions. The security questions can be set for the User Self-Registration, forgotten password
 reset, and forgotten username services, respectively.<p><p>Format is <code>unique key|locale|
question</code>.",
          "propertyOrder" : 50,
          "required" : false,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "encryptionKeyPairAlias" : {
          "title" : "Encryption Key Pair Alias",
          "description" : "An encryption key alias in the OpenAM server's JCEKS keystore. Used to
 encrypt the JWT token that OpenAM uses to track end users during User Self-Service operations.",
          "propertyOrder" : 0,
          "required" : true,
          "type" : "string",
          "exampleValue" : "selfserviceenctest"
        },
        "signingSecretKeyAlias" : {
          "title" : "Signing Secret Key Alias",
          "description" : "A signing secret key alias in the OpenAM server's JCEKS keystore. Used to
 sign the JWT token that OpenAM uses to track end users during User Self-Service operations.",
          "propertyOrder" : 10,
```


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```
          "required" : true,
          "type" : "string",
          "exampleValue" : "selfservicesigntest"
        },
        "captchaSecretKey" : {
          "title" : "Google reCAPTCHA Secret Key",
          "description" : "Google reCAPTCHA plugin secret key.",
          "propertyOrder" : 30,
          "required" : false,
          "type" : "string",
          "exampleValue" : ""
        },
        "minimumAnswersToVerify" : {
          "title" : "Minimum Answers to Verify",
          "description" : "Specifies the minimum number of KBA questions that users need to answer
 to be granted the privilege to carry out an action, such as registering for an account, resetting a
 password, or retrieving a username. Specify a value from <code>0</code> to <code>50</code>.",
          "propertyOrder" : 70,
          "required" : false,
          "type" : "integer",
          "exampleValue" : ""
        }
      }
    },
    "userRegistration" : {
      "type" : "object",
      "title" : "User Registration",
      "propertyOrder" : 1,
      "properties" : {
        "userRegistrationTokenTTL" : {
          "title" : "Token Lifetime (seconds)",
          "description" : "Maximum lifetime of the token allowing User Self-Registration, in
 seconds.",
          "propertyOrder" : 130,
          "required" : false,
          "type" : "integer",
          "exampleValue" : ""
        },
        "userRegistrationEmailVerificationFirstEnabled" : {
          "title" : "Verify Email before User Detail",
          "description" : "If enabled, email address verification will be performed first before user
 details screen is displayed. This will take effect only if Verify Email is enabled.",
          "propertyOrder" : 110,
          "required" : false,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "userRegistrationCaptchaEnabled" : {
          "title" : "Captcha",
          "description" : "If enabled, users must pass a Google reCAPTCHA challenge during user self-
registration to mitigate against software bots.",
          "propertyOrder" : 100,
          "required" : false,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "userRegistrationEmailBody" : {
          "title" : "Outgoing Email Body",
```


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```
          "description" : "Customize the User Self-Registration verification email body text. Format
 is: <code>locale|body text</code>.",
          "propertyOrder" : 150,
          "required" : false,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "userRegistrationValidUserAttributes" : {
          "title" : "Valid Creation Attributes",
          "description" : "Specifies a whitelist of user attributes that can be set during user
 creation.",
          "propertyOrder" : 160,
          "required" : false,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "userRegistrationKbaEnabled" : {
          "title" : "Security Questions",
          "description" : "If enabled, users must set up their security questions during the self-
registration process.",
          "propertyOrder" : 120,
          "required" : false,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "userRegistrationEmailSubject" : {
          "title" : "Outgoing Email Subject",
          "description" : "Customize the User Self-Registration verification email subject text.
 Format is <code>locale|subject text</code>.",
          "propertyOrder" : 140,
          "required" : false,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "userRegistrationEmailVerificationEnabled" : {
          "title" : "Email Verification",
          "description" : "If enabled, users who self-register must perform email address
 verification.",
          "propertyOrder" : 110,
          "required" : false,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "userRegisteredDestination" : {
          "title" : "Destination After Successful Self-Registration",
          "description" : "Specifies the action to be taken after a user successfully registers
 a new account. Choose from:<ul><li><code>default</code>. User is sent to a success page without
 being logged in.</li><li><code>login</code>. User is sent to the login page to authenticate.</
li><li><code>autologin</code>. User is automatically logged in and sent to the appropriate page.</
li></ul>",
```


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```
          "propertyOrder" : 161,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "userRegistrationEnabled" : {
          "title" : "User Registration",
          "description" : "If enabled, new users can sign up for an account.",
          "propertyOrder" : 90,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        }
      }
    },
    "profileManagement" : {
      "type" : "object",
      "title" : "Profile Management",
      "propertyOrder" : 4,
      "properties" : {
        "profileProtectedUserAttributes" : {
          "title" : "Protected Update Attributes",
          "description" : "Specifies a profile's protected user attributes, which causes re-
authentication when the user attempts to modify these attributes.",
          "propertyOrder" : 320,
          "required" : false,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        }
      }
    }
  }
}
```

1.176.2. Global Operations

Resource path: `/global-config/services/selfService`

Resource version: `1.0`

1.176.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action UserSelfService --global --actionName getAllTypes
```


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1.176.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action UserSelfService --global --actionName getCreatableTypes
```

1.176.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action UserSelfService --global --actionName nextdescendents
```

1.176.2.4. read

Usage:

```
am> read UserSelfService --global
```

1.176.2.5. update

Usage:

```
am> update UserSelfService --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "defaults" : {
      "properties" : {
        "generalConfig" : {
          "type" : "object",
          "title" : "General Configuration",
          "propertyOrder" : 0,
          "properties" : {
            "captchaVerificationUrl" : {
              "title" : "Google Re-captcha Verification URL",
              "description" : "Google reCAPTCHA plugin verification URL.",
              "propertyOrder" : 40,
              "required" : false,
              "type" : "string",
              "exampleValue" : ""
            },
            "kbaQuestions" : {
```


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```
              "title" : "Security Questions",
              "description" : "Specifies the default set of knowledge-based authentication (KBA)
 security questions. The security questions can be set for the User Self-Registration, forgotten
 password reset, and forgotten username services, respectively.<p><p>Format is <code>unique key|
locale|question</code>.",
              "propertyOrder" : 50,
              "required" : false,
              "items" : {
                "type" : "string"
              },
              "type" : "array",
              "exampleValue" : ""
            },
            "captchaSiteKey" : {
              "title" : "Google reCAPTCHA Site Key",
              "description" : "Google reCAPTCHA plugin site key.",
              "propertyOrder" : 20,
              "required" : false,
              "type" : "string",
              "exampleValue" : ""
            },
            "minimumAnswersToDefine" : {
              "title" : "Minimum Answers to Define",
              "description" : "Specifies the minimum number of KBA answers that users must define.",
              "propertyOrder" : 60,
              "required" : false,
              "type" : "integer",
              "exampleValue" : ""
            },
            "signingSecretKeyAlias" : {
              "title" : "Signing Secret Key Alias",
              "description" : "A signing secret key alias in the OpenAM server's JCEKS keystore. Used
 to sign the JWT token that OpenAM uses to track end users during User Self-Service operations.",
              "propertyOrder" : 10,
              "required" : true,
              "type" : "string",
              "exampleValue" : "selfservicesigntest"
            },
            "minimumAnswersToVerify" : {
              "title" : "Minimum Answers to Verify",
              "description" : "Specifies the minimum number of KBA questions that users need to answer
 to be granted the privilege to carry out an action, such as registering for an account, resetting a
 password, or retrieving a username. Specify a value from <code>0</code> to <code>50</code>.",
              "propertyOrder" : 70,
              "required" : false,
              "type" : "integer",
              "exampleValue" : ""
            },
            "encryptionKeyPairAlias" : {
              "title" : "Encryption Key Pair Alias",
              "description" : "An encryption key alias in the OpenAM server's JCEKS keystore. Used to
 encrypt the JWT token that OpenAM uses to track end users during User Self-Service operations.",
              "propertyOrder" : 0,
              "required" : true,
              "type" : "string",
              "exampleValue" : "selfserviceenctest"
            },
            "validQueryAttributes" : {
              "title" : "Valid Query Attributes",
```


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```
              "description" : "Specifies the valid query attributes used to search for the user.
This is a list of attributes used to identify your account for forgotten password and forgotten
username.",
              "propertyOrder" : 80,
              "required" : false,
              "items" : {
                "type" : "string"
              },
              "type" : "array",
              "exampleValue" : ""
            },
            "captchaSecretKey" : {
              "title" : "Google reCAPTCHA Secret Key",
              "description" : "Google reCAPTCHA plugin secret key.",
              "propertyOrder" : 30,
              "required" : false,
              "type" : "string",
              "exampleValue" : ""
            }
          }
        },
        "forgottenPassword" : {
          "type" : "object",
          "title" : "Forgotten Password",
          "propertyOrder" : 2,
          "properties" : {
            "forgottenPasswordEmailVerificationEnabled" : {
              "title" : "Email Verification",
              "description" : "If enabled, users who reset passwords must perform email address
verification.",
              "propertyOrder" : 190,
              "required" : false,
              "type" : "boolean",
              "exampleValue" : ""
            },
            "forgottenPasswordEmailSubject" : {
              "title" : "Outgoing Email Subject",
              "description" : "Customize the forgotten password email subject text. Format is
<code>locale|subject text</code>.",
              "propertyOrder" : 220,
              "required" : false,
              "items" : {
                "type" : "string"
              },
              "type" : "array",
              "exampleValue" : ""
            },
            "forgottenPasswordEmailBody" : {
              "title" : "Outgoing Email Body",
              "description" : "Customize the forgotten password email body text. Format is
<code>locale|body text</code>.",
              "propertyOrder" : 230,
              "required" : false,
              "items" : {
                "type" : "string"
              },
              "type" : "array",
              "exampleValue" : ""
            },
```


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```
            "forgottenPasswordEnabled" : {
              "title" : "Forgotten Password",
              "description" : "If enabled, users can reset their forgotten password.",
              "propertyOrder" : 170,
              "required" : true,
              "type" : "boolean",
              "exampleValue" : ""
            },
            "forgottenPasswordKbaEnabled" : {
              "title" : "Security Questions",
              "description" : "If enabled, users must answer their security questions during the
forgotten password process.",
              "propertyOrder" : 200,
              "required" : false,
              "type" : "boolean",
              "exampleValue" : ""
            },
            "forgottenPasswordTokenTTL" : {
              "title" : "Token Lifetime (seconds)",
              "description" : "Maximum lifetime for the token allowing forgotten password reset, in
seconds.<p><p>Specify a value from <code>0</code> to <code>2147483647</code>.",
              "propertyOrder" : 210,
              "required" : false,
              "type" : "integer",
              "exampleValue" : ""
            },
            "forgottenPasswordCaptchaEnabled" : {
              "title" : "Captcha",
              "description" : "If enabled, users must pass a Google reCAPTCHA challenge during
password reset to mitigate against software bots.",
              "propertyOrder" : 180,
              "required" : false,
              "type" : "boolean",
              "exampleValue" : ""
            }
          }
        },
        "userRegistration" : {
          "type" : "object",
          "title" : "User Registration",
          "propertyOrder" : 1,
          "properties" : {
            "userRegistrationEmailSubject" : {
              "title" : "Outgoing Email Subject",
              "description" : "Customize the User Self-Registration verification email subject text.
Format is <code>locale|subject text</code>.",
              "propertyOrder" : 140,
              "required" : false,
              "items" : {
                "type" : "string"
              },
              "type" : "array",
              "exampleValue" : ""
            },
            "userRegistrationEnabled" : {
              "title" : "User Registration",
              "description" : "If enabled, new users can sign up for an account.",
              "propertyOrder" : 90,
              "required" : true,
```


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```
              "type" : "boolean",
              "exampleValue" : ""
            },
            "userRegistrationKbaEnabled" : {
              "title" : "Security Questions",
              "description" : "If enabled, users must set up their security questions during the self-
registration process.",
              "propertyOrder" : 120,
              "required" : false,
              "type" : "boolean",
              "exampleValue" : ""
            },
            "userRegistrationEmailBody" : {
              "title" : "Outgoing Email Body",
              "description" : "Customize the User Self-Registration verification email body text.
 Format is: <code>locale|body text</code>.",
              "propertyOrder" : 150,
              "required" : false,
              "items" : {
                "type" : "string"
              },
              "type" : "array",
              "exampleValue" : ""
            },
            "userRegistrationCaptchaEnabled" : {
              "title" : "Captcha",
              "description" : "If enabled, users must pass a Google reCAPTCHA challenge during user
 self-registration to mitigate against software bots.",
              "propertyOrder" : 100,
              "required" : false,
              "type" : "boolean",
              "exampleValue" : ""
            },
            "userRegistrationTokenTTL" : {
              "title" : "Token Lifetime (seconds)",
              "description" : "Maximum lifetime of the token allowing User Self-Registration, in
 seconds.",
              "propertyOrder" : 130,
              "required" : false,
              "type" : "integer",
              "exampleValue" : ""
            },
            "userRegistrationValidUserAttributes" : {
              "title" : "Valid Creation Attributes",
              "description" : "Specifies a whitelist of user attributes that can be set during user
 creation.",
              "propertyOrder" : 160,
              "required" : false,
              "items" : {
                "type" : "string"
              },
              "type" : "array",
              "exampleValue" : ""
            },
            "userRegistrationEmailVerificationFirstEnabled" : {
              "title" : "Verify Email before User Detail",
              "description" : "If enabled, email address verification will be performed first before
 user details screen is displayed. This will take effect only if Verify Email is enabled.",
              "propertyOrder" : 110,
```


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```
              "required" : false,
              "type" : "boolean",
              "exampleValue" : ""
            },
            "userRegistrationEmailVerificationEnabled" : {
              "title" : "Email Verification",
              "description" : "If enabled, users who self-register must perform email address
 verification.",
              "propertyOrder" : 110,
              "required" : false,
              "type" : "boolean",
              "exampleValue" : ""
            },
            "userRegisteredDestination" : {
              "title" : "Destination After Successful Self-Registration",
              "description" : "Specifies the action to be taken after a user successfully registers
 a new account. Choose from:<ul><li><code>default</code>. User is sent to a success page without
 being logged in.</li><li><code>login</code>. User is sent to the login page to authenticate.</
li><li><code>autologin</code>. User is automatically logged in and sent to the appropriate page.</
li></ul>",
              "propertyOrder" : 161,
              "required" : true,
              "type" : "string",
              "exampleValue" : ""
            }
          }
        },
        "advancedConfig" : {
          "type" : "object",
          "title" : "Advanced Configuration",
          "propertyOrder" : 5,
          "properties" : {
            "forgottenPasswordServiceConfigClass" : {
              "title" : "Forgotten Password Service Config Provider Class",
              "description" : "Specifies the provider class to configure any custom plugins.",
              "propertyOrder" : 360,
              "required" : false,
              "type" : "string",
              "exampleValue" : ""
            },
            "forgottenPasswordConfirmationUrl" : {
              "title" : "Forgotten Password Confirmation Email URL",
              "description" : "Specifies the confirmation URL that the user receives after confirming
 their identity during the forgotten password process. The <code>${realm}</code> string is replaced
 with the current realm.",
              "propertyOrder" : 340,
              "required" : false,
              "type" : "string",
              "exampleValue" : ""
            },
            "userRegistrationConfirmationUrl" : {
              "title" : "User Registration Confirmation Email URL",
              "description" : "Specifies the confirmation URL that the user receives during the self-
registration process. The <code>${realm}</code> string is replaced with the current realm.",
              "propertyOrder" : 330,
              "required" : false,
              "type" : "string",
              "exampleValue" : ""
            },
```


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```
            "userRegistrationServiceConfigClass" : {
              "title" : "User Registration Service Config Provider Class",
              "description" : "Specifies the provider class to configure any custom plugins.",
              "propertyOrder" : 350,
              "required" : false,
              "type" : "string",
              "exampleValue" : ""
            },
            "forgottenUsernameServiceConfigClass" : {
              "title" : "Forgotten Username Service Config Provider Class",
              "description" : "Specifies the provider class to configure any custom plugins.",
              "propertyOrder" : 370,
              "required" : false,
              "type" : "string",
              "exampleValue" : ""
            }
          }
        },
        "forgottenUsername" : {
          "type" : "object",
          "title" : "Forgotten Username",
          "propertyOrder" : 3,
          "properties" : {
            "forgottenUsernameTokenTTL" : {
              "title" : "Token LifeTime (seconds)",
              "description" : "Maximum lifetime for the token allowing forgotten username, in
seconds.",
              "propertyOrder" : 290,
              "required" : false,
              "type" : "integer",
              "exampleValue" : ""
            },
            "forgottenUsernameEmailBody" : {
              "title" : "Outgoing Email Body",
              "description" : "Customizes the forgotten username email body text. Format is
<code>locale|body text</code>.",
              "propertyOrder" : 310,
              "required" : false,
              "items" : {
                "type" : "string"
              },
              "type" : "array",
              "exampleValue" : ""
            },
            "forgottenUsernameEmailSubject" : {
              "title" : "Outgoing Email Subject",
              "description" : "Customizes the forgotten username email subject text. Format is
<code>locale|subject text</code>.",
              "propertyOrder" : 300,
              "required" : false,
              "items" : {
                "type" : "string"
              },
              "type" : "array",
              "exampleValue" : ""
            },
            "forgottenUsernameEnabled" : {
              "title" : "Forgotten Username",
              "description" : "If enabled, users can retrieve their forgotten username.",
```


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```
              "propertyOrder" : 240,
              "required" : true,
              "type" : "boolean",
              "exampleValue" : ""
            },
            "forgottenUsernameCaptchaEnabled" : {
              "title" : "Captcha",
              "description" : "If enabled, users must pass a Google reCAPTCHA challenge during the
 forgotten username retrieval process to mitigate against software bots.",
              "propertyOrder" : 250,
              "required" : false,
              "type" : "boolean",
              "exampleValue" : ""
            },
            "forgottenUsernameKbaEnabled" : {
              "title" : "Security Questions",
              "description" : "If enabled, users must answer their security questions during the
 forgotten username process.",
              "propertyOrder" : 260,
              "required" : false,
              "type" : "boolean",
              "exampleValue" : ""
            },
            "forgottenUsernameShowUsernameEnabled" : {
              "title" : "Show Username",
              "description" : "If enabled, users see their forgotten username on the browser page.",
              "propertyOrder" : 280,
              "required" : false,
              "type" : "boolean",
              "exampleValue" : ""
            },
            "forgottenUsernameEmailUsernameEnabled" : {
              "title" : "Email Username",
              "description" : "If enabled, users receive their forgotten username by email.",
              "propertyOrder" : 270,
              "required" : false,
              "type" : "boolean",
              "exampleValue" : ""
            }
          }
        },
        "profileManagement" : {
          "type" : "object",
          "title" : "Profile Management",
          "propertyOrder" : 4,
          "properties" : {
            "profileProtectedUserAttributes" : {
              "title" : "Protected Update Attributes",
              "description" : "Specifies a profile's protected user attributes, which causes re-
authentication when the user attempts to modify these attributes.",
              "propertyOrder" : 320,
              "required" : false,
              "items" : {
                "type" : "string"
              },
              "type" : "array",
              "exampleValue" : ""
            }
          }
```


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```
        }
      },
      "type" : "object",
      "title" : "Realm Defaults"
    }
  }
}
```

1.177. UsernameCollector

1.177.1. Realm Operations

Resource path: `/realm-config/authentication/authenticationtrees/nodes/UsernameCollectorNode`

Resource version: `1.0`

1.177.1.1. create

Usage:

```
am> create UsernameCollector --realm Realm --id id --body body
```

Parameters:

`--id`

The unique identifier for the resource.

`--body`

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object"
}
```

1.177.1.2. delete

Usage:

```
am> delete UsernameCollector --realm Realm --id id
```

Parameters:

`--id`

The unique identifier for the resource.

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1.177.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action UsernameCollector --realm Realm --actionName getAllTypes
```

1.177.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action UsernameCollector --realm Realm --actionName getCreatableTypes
```

1.177.1.5. listOutcomes

List the available outcomes for the node type.

Usage:

```
am> action UsernameCollector --realm Realm --body body --actionName listOutcomes
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "title" : "Some configuration of the node. This does not need to be complete against the
 configuration schema."
}
```

1.177.1.6. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action UsernameCollector --realm Realm --actionName nextdescendents
```

1.177.1.7. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

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```
am> query UsernameCollector --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.177.1.8. read

Usage:

```
am> read UsernameCollector --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.177.1.9. update

Usage:

```
am> update UsernameCollector --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object"
}
```

1.177.2. Global Operations

Resource path: `/global-config/authentication/authenticationtrees/nodes/UsernameCollectorNode`

Resource version: `1.0`

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1.177.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action UsernameCollector --global --actionName getAllTypes
```

1.177.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action UsernameCollector --global --actionName getCreatableTypes
```

1.177.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action UsernameCollector --global --actionName nextdescendents
```

1.177.2.4. read

Usage:

```
am> read UsernameCollector --global
```

1.177.2.5. update

Usage:

```
am> update UsernameCollector --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object"
}
```


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1.178. ValidationService

1.178.1. Realm Operations

Resource path: `/realm-config/services/validation`

Resource version: `1.0`

1.178.1.1. create

Usage:

```
am> create ValidationService --realm Realm --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "validGotoDestinations" : {
      "title" : "Valid goto URL Resources",
      "description" : "List of valid goto URL resources.<br><br>OpenAM's default behavior after login
 or logout is to redirect the user to the URL specified in the <code>goto</code> or <code>gotoOnFail</
code> query string parameters supplied to the authentication interface during login or logout.
 <p><p>To enhance security, a list of valid URL resources can be specified here so OpenAM can validate
 the <code>goto</code> and <code>gotoOnFail</code> URL against them. <p><p>OpenAM will only redirect
 a user after login or logout if the URL matches any of the resources specified in this property.
 If the URL does not match, the user is redirected to either the user profile page or administration
 console after login, or the logged out page after logout. If this property is not set, it is assumed
 that all redirect URLs are valid.<p><p>The resources defined here can have the <code>*</code>
 wildcard defined, which matches all characters except <code>?</code>. Example values for this
 setting:<ul><li><code>http://app.example.com:80/*</code></li><li><code>http://app.example.com:80/*?
*</code></li></ul>",
      "propertyOrder" : 100,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    }
  }
}
```

1.178.1.2. delete

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Usage:

```
am> delete ValidationService --realm Realm
```

1.178.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action ValidationService --realm Realm --actionName getAllTypes
```

1.178.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action ValidationService --realm Realm --actionName getCreatableTypes
```

1.178.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action ValidationService --realm Realm --actionName nextdescendents
```

1.178.1.6. read

Usage:

```
am> read ValidationService --realm Realm
```

1.178.1.7. update

Usage:

```
am> update ValidationService --realm Realm --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

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```
{
  "type" : "object",
  "properties" : {
    "validGotoDestinations" : {
      "title" : "Valid goto URL Resources",
      "description" : "List of valid goto URL resources.<br><br>OpenAM's default behavior after login
 or logout is to redirect the user to the URL specified in the <code>goto</code> or <code>gotoOnFail</
code> query string parameters supplied to the authentication interface during login or logout.
 <p><p>To enhance security, a list of valid URL resources can be specified here so OpenAM can validate
 the <code>goto</code> and <code>gotoOnFail</code> URL against them. <p><p>OpenAM will only redirect
 a user after login or logout if the URL matches any of the resources specified in this property.
 If the URL does not match, the user is redirected to either the user profile page or administration
 console after login, or the logged out page after logout. If this property is not set, it is assumed
 that all redirect URLs are valid.<p><p>The resources defined here can have the <code>*</code>
 wildcard defined, which matches all characters except <code>?</code>. Example values for this
 setting:<ul><li><code>http://app.example.com:80/*</code></li><li><code>http://app.example.com:80/*?
*</code></li></ul>",
      "propertyOrder" : 100,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    }
  }
}
```

1.178.2. Global Operations

Resource path: `/global-config/services/validation`

Resource version: `1.0`

1.178.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action ValidationService --global --actionName getAllTypes
```

1.178.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action ValidationService --global --actionName getCreatableTypes
```


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1.178.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action ValidationService --global --actionName nextdescendents
```

1.178.2.4. read

Usage:

```
am> read ValidationService --global
```

1.178.2.5. update

Usage:

```
am> update ValidationService --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

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```
{
  "type" : "object",
  "properties" : {
    "defaults" : {
      "properties" : {
        "validGotoDestinations" : {
          "title" : "Valid goto URL Resources",
          "description" : "List of valid goto URL resources.<br><br>OpenAM's default behavior
 after login or logout is to redirect the user to the URL specified in the <code>goto</code> or
 <code>gotoOnFail</code> query string parameters supplied to the authentication interface during
 login or logout. <p><p>To enhance security, a list of valid URL resources can be specified here so
 OpenAM can validate the <code>goto</code> and <code>gotoOnFail</code> URL against them. <p><p>OpenAM
 will only redirect a user after login or logout if the URL matches any of the resources specified
 in this property. If the URL does not match, the user is redirected to either the user profile page
 or administration console after login, or the logged out page after logout. If this property is
 not set, it is assumed that all redirect URLs are valid.<p><p>The resources defined here can have
 the <code>*</code> wildcard defined, which matches all characters except <code>?</code>. Example
 values for this setting:<ul><li><code>http://app.example.com:80/*</code></li><li><code>http://
app.example.com:80/*?*</code></li></ul>",
          "propertyOrder" : 100,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        }
      },
      "type" : "object",
      "title" : "Realm Defaults"
    }
  }
}
```

1.179. WebAgentGroups

1.179.1. Realm Operations

Agent Groups handler that is responsible for managing agent groups

Resource path: `/realm-config/agents/groups/WebAgent`

Resource version: `1.0`

1.179.1.1. create

Usage:

```
am> create WebAgentGroups --realm Realm --id id --body body
```

Parameters:

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--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "encodeProfileAttributes" : {
      "title" : "Native Encoding of Profile Attributes",
      "description" : "Agent encodes the ldap header values in the default encoding of OS locale. If
 false, UTF-8 gets used. (property name: com.sun.identity.agents.config.convert.mbyte.enable) <br>Hot-
swap: Yes",
      "propertyOrder" : 18400,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "configurationPollingInterval" : {
      "title" : "Configuration Reload Interval",
      "description" : "Interval in minutes to fetch agent configuration from OpenAM. (property name:
 com.sun.identity.agents.config.polling.interval) <br>Hot-swap: No",
      "propertyOrder" : 19500,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "status" : {
      "title" : "Status",
      "description" : "Status of the agent configuration.",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "checkUserInDomino" : {
      "title" : "Check User in Domino Database",
      "description" : "If true, agent checks user existence in Domino name database. (property name:
 com.sun.identity.agents.config.domino.check.name.database)",
      "propertyOrder" : 20500,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "filterPriority" : {
      "title" : "Filter Priority",
      "description" : "The loading priority of filter. (property name:
 com.sun.identity.agents.config.iis.filter.priority)",
      "propertyOrder" : 20100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "caseInsensitiveUrlComparison" : {
      "title" : "URL Comparison Case Sensitivity Check",
```


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```
     "description" : "Enforces case insensitivity in both policy and not enforced url evaluation.
(property name: com.sun.identity.agents.config.url.comparison.case.ignore) <br>Hot-swap: Yes",
     "propertyOrder" : 14300,
     "required" : true,
     "type" : "boolean",
     "exampleValue" : ""
   },
   "agentLocale" : {
     "title" : "Agent Locale",
     "description" : "The default locale for the product. (property name:
com.sun.identity.agents.config.locale) <br>Hot-swap: No",
     "propertyOrder" : 19300,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "sessionAttributeMap" : {
     "title" : "Session Attribute Map",
     "description" : "Maps the session attributes to be populated under
specific names for the currently authenticated user. (property name:
com.sun.identity.agents.config.session.attribute.mapping) <br>Hot-swap: Yes  <br> Example: <br>  To
populate the value of session attribute UserToken under name CUSTOM-userid: enter UserToken in Map
Key field, and enter CUSTOM-userid in Corresponding Map Value field.",
     "propertyOrder" : 15100,
     "required" : true,
     "patternProperties" : {
       ".*" : {
         "type" : "string"
       }
     },
     "type" : "object",
     "exampleValue" : ""
   },
   "policyEvaluationRealm" : {
     "title" : "Realm",
     "description" : "Which realm to start evaluating from (property name:
org.forgerock.openam.agents.config.policy.evaluation.realm) <br>Hot-swap: Yes",
     "propertyOrder" : 21100,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "fetchAttributesForNotEnforcedUrls" : {
     "title" : "Fetch Attributes for Not Enforced URLs",
     "description" : "Agent fetches profile attributes for not enforced urls by doing policy
evaluation. (property name: com.sun.identity.agents.config.notenforced.url.attributes.enable)
<br>Hot-swap: Yes",
     "propertyOrder" : 19800,
     "required" : true,
     "type" : "boolean",
     "exampleValue" : ""
   },
   "replayPasswordKey" : {
     "title" : "Replay Password Key",
     "description" : "DES key for decrypting the basic authentication password in the session.
(property name: com.sun.identity.agents.config.replaypasswd.key)",
     "propertyOrder" : 20000,
     "required" : true,
     "type" : "string",
```


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```
      "exampleValue" : ""
    },
    "clientHostnameHeader" : {
      "title" : "Client Hostname Header",
      "description" : "HTTP header name that holds the Hostname of the client. (property name:
com.sun.identity.agents.config.client.hostname.header) <br>Hot-swap: Yes",
      "propertyOrder" : 1100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "authenticationType" : {
      "title" : "Authentication Type",
      "description" : "(property name: com.sun.identity.agents.config.iis.auth.type)",
      "propertyOrder" : 19900,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "ignorePreferredNamingUrl" : {
      "title" : "Ignore Preferred Naming URL in Naming Request",
      "description" : "Agent uses this value to send preferred naming url in the naming request.
(property name: com.sun.identity.agents.config.ignore.preferred.naming.url) <br>Hot-swap: Yes",
      "propertyOrder" : 15600,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "overrideNotificationUrl" : {
      "title" : "Override Notification URL",
      "description" : "Set to true if the agent is sitting behind a ssl/tls
off-loader, load balancer, or proxy to override the URL with the value from
the property com.sun.identity.agents.config.agenturi.prefix. (property name:
com.sun.identity.agents.config.override.notification.url) <br>Hot-swap: Yes",
      "propertyOrder" : 19000,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "remoteLogFilename" : {
      "title" : "Remote Log Filename",
      "description" : "(Not used in Agent 5 onwards) <br>Name of file stored on OpenAM server that
contains agent audit messages. (property name: com.sun.identity.agents.config.remote.logfile)
<br>Hot-swap: No",
      "propertyOrder" : 21500,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "anonymousUserEnabled" : {
      "title" : "Anonymous User",
      "description" : "Enable/Disable REMOTE_USER processing for anonymous users. (property name:
com.sun.identity.agents.config.anonymous.user.enable) <br>Hot-swap: Yes",
      "propertyOrder" : 16900,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "useLtpaToken" : {
```


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```
      "title" : "Use LTPA token",
      "description" : "Set to true if agent needs to use LTPA Token. (property name:
 com.sun.identity.agents.config.domino.ltpa.enable)",
      "propertyOrder" : 20600,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "notificationsEnabled" : {
      "title" : "Enable Notifications",
      "description" : "The notifications help in maintaining agent's sso, policy and configuration
 caches. (property name: com.sun.identity.agents.config.notification.enable) <br>Hot-swap: No",
      "propertyOrder" : 14100,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "jwtName" : {
      "title" : "JWT Cookie Name",
      "description" : "The name used by the agent to set the OIDC JWT on the user's browser. (Agent 5
 only).",
      "propertyOrder" : 12106,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "remoteLogSendInterval" : {
      "title" : "Remote Audit Log Interval",
      "description" : "Periodic interval in minutes in which audit log messages are sent to remote log
 file. (property name: com.sun.identity.agents.config.remote.log.interval) <br>Hot-swap: No",
      "propertyOrder" : 21600,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "notEnforcedUrls" : {
      "title" : "Not Enforced URLs",
      "description" : "List of urls for which no authentication required. (property name:
 com.sun.identity.agents.config.notenforced.url) <br>Hot-swap: Yes <br> Example: <br> http://
myagent.mydomain.com/*.gif",
      "propertyOrder" : 17000,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "amLoginUrl" : {
      "title" : "OpenAM Login URL",
      "description" : "OpenAM login page URL. (property name:
 com.sun.identity.agents.config.login.url) <br>Hot-swap: Yes <br> Example: <br> http://host:port/
opensso/UI/Login",
      "propertyOrder" : 15700,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
```


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```
      "exampleValue" : ""
    },
    "sessionAttributeFetchMode" : {
      "title" : "Session Attribute Fetch Mode",
      "description" : "(property name: com.sun.identity.agents.config.session.attribute.fetch.mode)
 <br>Hot-swap: Yes",
      "propertyOrder" : 15000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "overrideRequestProtocol" : {
      "title" : "Override Request URL Protocol",
      "description" : "Set to true if the agent is sitting behind a ssl/tls off-
loader, load balancer, or proxy to override the protocol with the value from
 the property com.sun.identity.agents.config.agenturi.prefix. (property name:
 com.sun.identity.agents.config.override.protocol) <br>Hot-swap: Yes",
      "propertyOrder" : 18700,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "applicationLogoutUrls" : {
      "title" : "Logout URL List",
      "description" : "List of application logout URLs. User gets logged out from OpenAM session
 when these urls accessed. (property name: com.sun.identity.agents.config.agent.logout.url). If this
 property is used, user should specify a value for the below Logout Redirect URL property.<br>Hot-
swap: Yes <br> Example: <br> http://myagent.mydomain.com/logout.html",
      "propertyOrder" : 18000,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "continuousSecurityCookies" : {
      "title" : "Continuous Security Cookies",
      "description" : "The name of the cookies to be sent as part of the payload during policy
 evaluation, which can be accessed via the 'environment' variable in a policy script. The 'key' is
 the name of the cookie to be sent, and the 'value' is the name which it will appear as in the policy
 evaluation script. It is possible to map multiple cookies to the same name (they will simply appear
 as an array in the evaluation script). If the cookie doesn't exist, then the empty string will be
 sent.",
      "propertyOrder" : 3210,
      "required" : true,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : ""
    },
    "showPasswordInHeader" : {
      "title" : "Show Password in HTTP Header",
      "description" : "Set to true if encrypted password should be set in HTTP header AUTH_PASSWORD.
 (property name: com.sun.identity.agents.config.iis.password.header)",
      "propertyOrder" : 22800,
```


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```
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "ltpaTokenConfigurationname" : {
      "title" : "LTPA Token Configuration Name",
      "description" : "The configuration name that the agent uses in order to employ the LTPA token
 mechanism. (property name: com.sun.identity.agents.config.domino.ltpa.config.name)",
      "propertyOrder" : 20800,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "customProperties" : {
      "title" : "Custom Properties",
      "description" : "Additional properties that allow users to augment the set of properties
 supported by agent. (property name: com.sun.identity.agents.config.freeformproperties) <br>Hot-
swap: Yes <br> Examples: <br> customproperty=custom-value1 <br> customlist[0]=customlist-
value-0 <br> customlist[1]=customlist-value-1 <br> custommap[key1]=custommap-value-1 <br>
 custommap[key2]=custommap-value-2",
      "propertyOrder" : 19700,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "encodeUrlSpecialCharacters" : {
      "title" : "Encode URL's Special Characters",
      "description" : "Encodes the url which has special characters before doing policy evaluation.
 (property name: com.sun.identity.agents.config.encode.url.special.chars.enable) <br>Hot-swap: Yes",
      "propertyOrder" : 18500,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "agentDebugLevel" : {
      "title" : "Agent Debug Level",
      "description" : "Agent debug level. (property name: com.sun.identity.agents.config.debug.level)
 <br>Hot-swap: Yes",
      "propertyOrder" : 21900,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "postDataCachePeriod" : {
      "title" : "POST Data Entries Cache Period",
      "description" : "POST cache entry lifetime in minutes. (property name:
 com.sun.identity.agents.config.postcache.entry.lifetime) <br>Hot-swap: Yes",
      "propertyOrder" : 17400,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "agentConfigChangeNotificationsEnabled" : {
      "title" : "Agent Configuration Change Notification",
```


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      "description" : "Enable agent to receive notification messages from OpenAM server for
 configuration changes. (property name: com.sun.identity.agents.config.change.notification.enable)
 <br>Hot-swap: Yes",
      "propertyOrder" : 12100,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "debugLogRotation" : {
      "title" : "Agent Debug File Rotation",
      "description" : "Debug file gets rotated based on the size specified. (property name:
 com.sun.identity.agents.config.debug.file.rotate) <br>Hot-swap: Yes",
      "propertyOrder" : 22000,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "notEnforcedIps" : {
      "title" : "Not Enforced Client IP List",
      "description" : "No authentication and authorization are required for the requests coming from
 these client IP addresses. (property name: com.sun.identity.agents.config.notenforced.ip) <br>Hot-
swap: Yes <br> Examples: <br> 192.18.145.* <br> 192.18.146.123",
      "propertyOrder" : 17200,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "secureCookies" : {
      "title" : "Cookie Security",
      "description" : "Agent sends secure cookies if communication is secure. (property name:
 com.sun.identity.agents.config.cookie.secure) <br>Hot-swap: No",
      "propertyOrder" : 13800,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "cookieResetEnabled" : {
      "title" : "Cookie Reset",
      "description" : "Agent reset cookies in the response before redirecting to authentication.
 (property name: com.sun.identity.agents.config.cookie.reset.enable) <br>Hot-swap: Yes",
      "propertyOrder" : 16500,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "logoutResetCookies" : {
      "title" : "Logout Cookies List for Reset",
      "description" : "Any cookies to be reset upon logout in the same format as cookie reset list.
 (property name: com.sun.identity.agents.config.logout.cookie.reset) <br>Hot-swap: Yes <br> Cookie1
 <br> Cookie2=value;Domain=subdomain.domain.com",
      "propertyOrder" : 18100,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
```


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```
      "exampleValue" : ""
    },
    "profileAttributeMap" : {
      "title" : "Profile Attribute Map",
      "description" : "Maps the profile attributes to be populated under
 specific names for the currently authenticated user. (property name:
 com.sun.identity.agents.config.profile.attribute.mapping) <br>Hot-swap: Yes <br> Example: <br> To
 populate the value of profile attribute cn under name CUSTOM-Common-Name: enter cn in Map Key field,
 and enter CUSTOM-Common-Name in Corresponding Map Value field. <br> To populate the value of profile
 attribute mail under name CUSTOM-Email: enter mail in Map Key field, and enter CUSTOM-Email in
 Corresponding Map Value field.",
      "propertyOrder" : 14900,
      "required" : true,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : ""
    },
    "policyEvaluationApplication" : {
      "title" : "Application",
      "description" : "Which application contains the policies to evaluate with (property name:
 org.forgerock.openam.agents.config.policy.evaluation.application) <br>Hot-swap: Yes",
      "propertyOrder" : 21200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "cdssoUrls" : {
      "title" : "CDSSO Servlet URL",
      "description" : "List of URLs of the available CDSSO controllers that may be used by the Agent
 for CDSSO processing. (property name: com.sun.identity.agents.config.cdsso.cdcservlet.url) <br>Hot-
swap: Yes  <br> Example: <br> http://host:port/opensso/cdcservlet",
      "propertyOrder" : 17500,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "encodeSpecialCharsInCookies" : {
      "title" : "Encode special chars in Cookies",
      "description" : "Encode special chars in cookie by URL encoding. Useful when profile, session
 and response attributes contain special chars and attributes fetch mode is set to HTTP_COOKIE.
 (property name: com.sun.identity.agents.config.encode.cookie.special.chars.enable)  <br>Hot-swap:
 Yes",
      "propertyOrder" : 14000,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "policyClockSkew" : {
      "title" : "Policy Clock Skew",
      "description" : "Time in seconds used adjust time difference between Agent machine
 and OpenAM. Clock skew in seconds = AgentTime - OpenAMServerTime. (property name:
 com.sun.identity.agents.config.policy.clock.skew) <br>Hot-swap: No",
```


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```
     "propertyOrder" : 21000,
     "required" : true,
     "type" : "integer",
     "exampleValue" : ""
   },
   "repositoryLocation" : {
     "title" : "Location of Agent Configuration Repository",
     "description" : "Indicates agent's configuration located either on agent's host or centrally on
OpenAM server.",
     "propertyOrder" : 400,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "ssoCachePollingInterval" : {
     "title" : "SSO Cache Polling Period",
     "description" : "Polling interval in minutes to refresh agent's sso cache. (property name:
com.sun.identity.agents.config.sso.cache.polling.interval) <br>Hot-swap: No",
     "propertyOrder" : 14500,
     "required" : true,
     "type" : "integer",
     "exampleValue" : ""
   },
   "overrideRequestPort" : {
     "title" : "Override Request URL Port",
     "description" : "Set to true if the agent is sitting behind a ssl/tls
off-loader, load balancer, or proxy to override the port with the value from
the property com.sun.identity.agents.config.agenturi.prefix. (property name:
com.sun.identity.agents.config.override.port) <br>Hot-swap: Yes",
     "propertyOrder" : 18900,
     "required" : true,
     "type" : "boolean",
     "exampleValue" : ""
   },
   "debugRotationSize" : {
     "title" : "Agent Debug File Size",
     "description" : "Agent debug file size in bytes. (property name:
com.sun.identity.agents.config.debug.file.size) <br>Hot-swap: Yes",
     "propertyOrder" : 22100,
     "required" : true,
     "type" : "integer",
     "exampleValue" : ""
   },
   "webSocketConnectionIntervalInMinutes" : {
     "title" : "Web Socket Connection Interval",
     "description" : "Interval in minutes by which agents reopen their web socket connection to
ensure a fair distribution of connections across OpenAM servers. (Agent 5 only).",
     "propertyOrder" : 12105,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "cookieName" : {
     "title" : "Cookie Name",
     "description" : "Name of the SSO Token cookie used between the OpenAM server and the Agent.
(property name: com.sun.identity.agents.config.cookie.name)<br>Hot-swap: No",
     "propertyOrder" : 13700,
     "required" : true,
     "type" : "string",
```


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```
      "exampleValue" : ""
    },
    "overrideRequestHost" : {
      "title" : "Override Request URL Host",
      "description" : "Set to true if the agent is sitting behind a ssl/tls
off-loader, load balancer, or proxy to override the host with the value from
the property com.sun.identity.agents.config.agenturi.prefix. (property name:
com.sun.identity.agents.config.override.host) <br>Hot-swap: Yes",
      "propertyOrder" : 18800,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "agentUriPrefix" : {
      "title" : "Agent Deployment URI Prefix",
      "description" : "(property name: com.sun.identity.agents.config.agenturi.prefix)<br>Hot-swap:
Yes",
      "propertyOrder" : 15800,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "ignorePathInfo" : {
      "title" : "Ignore Path Info in Request URL",
      "description" : "The path info will be stripped from the request URL while doing Not
Enforced List check and url policy evaluation if the value is set to true. (property name:
com.sun.identity.agents.config.ignore.path.info) <br>Hot-swap: Yes",
      "propertyOrder" : 18600,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "auditAccessType" : {
      "title" : "Audit Access Types",
      "description" : "Types of messages to log based on user URL access attempts. (property name:
com.sun.identity.agents.config.audit.accesstype) <br>Hot-swap: Yes",
      "propertyOrder" : 21300,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "auditLogLocation" : {
      "title" : "Audit Log Location",
      "description" : "Specifies where audit messages should be logged. (property name:
com.sun.identity.agents.config.log.disposition) <br>Hot-swap: Yes",
      "propertyOrder" : 21400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "retrieveClientHostname" : {
      "title" : "Retrieve Client Hostname",
      "description" : "Gets the client's hostname through DNS reverse lookup for use in policy
evaluation. (property name: com.sun.identity.agents.config.get.client.host.name) <br>Hot-swap: Yes",
      "propertyOrder" : 18300,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
```


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```
   "postDataPreservation" : {
     "title" : "POST Data Preservation",
     "description" : "Enables POST data preservation. (property name:
com.sun.identity.agents.config.postdata.preserve.enable) <br> Note that this feature is not supported
in all the web agents. Please refer individual agents documentation for more details. <br>Hot-swap:
Yes",
     "propertyOrder" : 17300,
     "required" : true,
     "type" : "boolean",
     "exampleValue" : ""
   },
   "profileAttributesCookiePrefix" : {
     "title" : "Profile Attributes Cookie Prefix",
     "description" : "Sets cookie prefix in the attributes headers. (property name:
com.sun.identity.agents.config.profile.attribute.cookie.prefix) <br>Hot-swap: Yes",
     "propertyOrder" : 17800,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "changeProtocolToHttps" : {
     "title" : "Change URL Protocol to https",
     "description" : "If true, avoids IE6 security pop-ups. (property name:
com.sun.identity.agents.config.iis.owa.enable.change.protocol)",
     "propertyOrder" : 20300,
     "required" : true,
     "type" : "boolean",
     "exampleValue" : ""
   },
   "cdssoRootUrl" : {
     "title" : "Agent Root URL for CDSSO",
     "description" : "The agent root URL for CDSSO. The valid value is in the following format:
<br>protocol://hostname:port/<br> The protocol represents the protocol used, such as http or https.
The hostname represents the host name of the machine on which the agent resides. The port represents
the port number on which the agent is installed. The slash following the port number is required.",
     "propertyOrder" : 22700,
     "required" : true,
     "items" : {
       "type" : "string"
     },
     "type" : "array",
     "exampleValue" : ""
   },
   "logonAndImpersonation" : {
     "title" : "Logon and Impersonation",
     "description" : "Set to true if agent should do Windows Logon and User Impersonation. (property
name: com.sun.identity.agents.config.iis.logonuser)",
     "propertyOrder" : 22900,
     "required" : true,
     "type" : "boolean",
     "exampleValue" : ""
   },
   "filterConfiguredWithOwa" : {
     "title" : "Filter configured with OWA",
     "description" : "Set to true if the IIS agent filter is configured for OWA. (property name:
com.sun.identity.agents.config.iis.owa.enable)",
     "propertyOrder" : 20200,
     "required" : true,
     "type" : "boolean",
```


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```
      "exampleValue" : ""
    },
    "logoutRedirectUrl" : {
      "title" : "Logout Redirect URL",
      "description" : "User gets redirected to this url after logout. (property name:
 com.sun.identity.agents.config.logout.redirect.url). This property should be specified along with the
 above Logout URL List.<br>Hot-swap: Yes",
      "propertyOrder" : 22300,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "responseAttributeFetchMode" : {
      "title" : "Response Attribute Fetch Mode",
      "description" : "(property name: com.sun.identity.agents.config.response.attribute.fetch.mode)
 <br>Hot-swap: Yes",
      "propertyOrder" : 15200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "localAuditRotationSize" : {
      "title" : "Local Audit Log Rotation Size",
      "description" : "Size limit in bytes when a local audit log file is rotated to a new file.
 (property name: com.sun.identity.agents.config.local.log.size) <br>Hot-swap: Yes",
      "propertyOrder" : 21800,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "responseAttributeMap" : {
      "title" : "Response Attribute Map",
      "description" : "Maps the policy response attributes to be populated
 under specific names for the currently authenticated user. (property name:
 com.sun.identity.agents.config.response.attribute.mapping) <br>Hot-swap: Yes <br> Example: <br> To
 populate the value of response attribute uid under name CUSTOM-USER-NAME: enter uid in Map Key field,
 and enter CUSTOM-USER-NAME in Corresponding Map Value field.",
      "propertyOrder" : 15300,
      "required" : true,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : ""
    },
    "fqdnMapping" : {
      "title" : "FQDN Virtual Host Map",
      "description" : "Maps virtual, invalid, or partial hostnames, and IP addresses to the FQDN to
 access protected resources. (property name: com.sun.identity.agents.config.fqdn.mapping) <br>Hot-
swap: Yes <br> Examples: <br>  To map the partial hostname myserver to myserver.mydomain.com: enter
 myserver in the Map Key field and myserver.mydomain.com in the Corresponding Map Value field. To map
 a virtual server rst.hostname.com that points to the actual server abc.hostname.com: enter valid1 in
 the Map Key field and rst.hostname.com in the Corresponding Map Value field.",
      "propertyOrder" : 16400,
      "required" : true,
      "patternProperties" : {
        ".*" : {
```


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```
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : ""
    },
    "ltpaTokenOrganizationName" : {
      "title" : "LTPA Token Organization Name",
      "description" : "The organization name to which the LTPA token belongs. (property name:
com.sun.identity.agents.config.domino.ltpa.org.name)",
      "propertyOrder" : 20900,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "userIdParameter" : {
      "title" : "User ID Parameter",
      "description" : "Agent sets value of User Id to REMOTE_USER server variable. (property name:
com.sun.identity.agents.config.userid.param) <br>Hot-swap: Yes",
      "propertyOrder" : 14600,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "invertNotEnforcedUrls" : {
      "title" : "Invert Not Enforced URLs",
      "description" : "Only not enforced list of urls will be enforced. (property name:
com.sun.identity.agents.config.notenforced.url.invert) <br>Hot-swap: Yes",
      "propertyOrder" : 17100,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "cookieResetList" : {
      "title" : "Cookies Reset Name List",
      "description" : "List of cookies in the format: name[=value][;Domain=value]. (property name:
com.sun.identity.agents.config.cookie.reset) <br>Hot-swap: Yes <br> Examples: <br> Cookie1 <br>
Cookie2=value;Domain=subdomain.domain.com",
      "propertyOrder" : 16600,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "policyCachePollingInterval" : {
      "title" : "Policy Cache Polling Period",
      "description" : "Polling interval in minutes to refresh agent's policy cache. (property name:
com.sun.identity.agents.config.policy.cache.polling.interval) <br>Hot-swap: No",
      "propertyOrder" : 14400,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "clientIpValidation" : {
      "title" : "Client IP Validation",
```


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     "description" : "This validates if the subsequent browser requests come from
the same ip address that the SSO token is initially issued against. (property name:
com.sun.identity.agents.config.client.ip.validation.enable) <br>Hot-swap: Yes",
     "propertyOrder" : 17700,
     "required" : true,
     "type" : "boolean",
     "exampleValue" : ""
   },
   "profileAttributeFetchMode" : {
     "title" : "Profile Attribute Fetch Mode",
     "description" : "(property name: com.sun.identity.agents.config.profile.attribute.fetch.mode)
<br>Hot-swap: Yes",
     "propertyOrder" : 14800,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "userIdParameterType" : {
     "title" : "User ID Parameter Type",
     "description" : "User ID can be fetched from either SESSION and LDAP attributes. (property name:
com.sun.identity.agents.config.userid.param.type) <br>Hot-swap: Yes",
     "propertyOrder" : 14700,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "agentNotificationUrl" : {
     "title" : "Agent Notification URL",
     "description" : "(Not used in Agent 5 onwards) <br>URL used by agent to register notification
listeners. (property name: com.sun.identity.client.notification.url) <br>Hot-swap: No",
     "propertyOrder" : 14200,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "anonymousUserId" : {
     "title" : "Anonymous User Default Value",
     "description" : "User id of unauthenticated users. (property name:
com.sun.identity.agents.config.anonymous.user.id) <br>Hot-swap: Yes",
     "propertyOrder" : 16800,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "ignorePathInfoForNotEnforcedUrls" : {
     "title" : "Ignore Path Info for Not Enforced URLs",
     "description" : "Indicate whether the path info and query should be stripped from the request
URL before being compared with the URLs of the not enforced list when those URLs have a wildcard '*'
character.  (property name: com.sun.identity.agents.config.ignore.path.info.for.not.enforced.list)
<br>Hot-swap: Yes",
     "propertyOrder" : 13900,
     "required" : true,
     "type" : "boolean",
     "exampleValue" : ""
   },
   "ssoOnlyMode" : {
     "title" : "SSO Only Mode",
     "description" : "Agent will just enforce authentication (SSO), but no authorization for
policies. (property name: com.sun.identity.agents.config.sso.only) <br>Hot-swap: Yes",
```


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```
      "propertyOrder" : 16000,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "primaryServerPollingPeriod" : {
      "title" : "Polling Period for Primary Server",
      "description" : "Interval in minutes, agent polls to check the primary server is up and running.
 (property name: com.sun.identity.agents.config.poll.primary.server) <br>Hot-swap: No",
      "propertyOrder" : 19200,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "fetchPoliciesFromRootResource" : {
      "title" : "Fetch Policies from Root Resource",
      "description" : "Agent caches policy decision of the resource and all resources from the root of
 the resource down. (property name: com.sun.identity.agents.config.fetch.from.root.resource) <br>Hot-
swap: No",
      "propertyOrder" : 18200,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "agentConnectionTimeout" : {
      "title" : "Agent Connection Timeout",
      "description" : "Timeout period in seconds for an agent connection with OpenAM auth server.
 (property name: com.sun.identity.agents.config.auth.connection.timeout) <br>Hot-swap: Yes",
      "propertyOrder" : 19100,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "fqdnCheck" : {
      "title" : "FQDN Check",
      "description" : "Enables checking of fqdn default value and fqdn map values. (property name:
 com.sun.identity.agents.config.fqdn.check.enable) <br>Hot-swap: Yes",
      "propertyOrder" : 16200,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "fqdnDefault" : {
      "title" : "FQDN Default",
      "description" : "Fully qualified hostname that the users should use in order to access
 resources. (property name: com.sun.identity.agents.config.fqdn.default) <br>Hot-swap: Yes",
      "propertyOrder" : 16300,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "userpassword" : {
      "title" : "Password",
      "description" : "",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "string",
      "format" : "password",
      "exampleValue" : ""
```


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```
   },
   "ltpaTokenCookieName" : {
     "title" : "LTPA Token Cookie Name",
     "description" : "The name of the cookie that contains the LTPA token. (property name:
com.sun.identity.agents.config.domino.ltpa.cookie.name)",
     "propertyOrder" : 20700,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "cdssoRedirectUri" : {
     "title" : "CDSSO Redirect URI",
     "description" : "An intermediate URI that is used by the Agent for processing CDSSO requests.
(property name: com.sun.identity.agents.config.cdsso.redirect.uri) <br>Hot-swap: Yes",
     "propertyOrder" : 17550,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "attributeMultiValueSeparator" : {
     "title" : "Attribute Multi Value Separator",
     "description" : "Specifies separator for multiple values. Applies to all
types of attributes i.e. profile, session and response attributes. (property name:
com.sun.identity.agents.config.attribute.multi.value.separator) <br>Hot-swap: Yes",
     "propertyOrder" : 22200,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "cdssoCookieDomain" : {
     "title" : "Cookies Domain List",
     "description" : "List of domains in which cookies have to be set in CDSSO. (property name:
com.sun.identity.agents.config.cdsso.cookie.domain) <br>Hot-swap: Yes <br> Example: <br> .sun.com",
     "propertyOrder" : 17600,
     "required" : true,
     "items" : {
       "type" : "string"
     },
     "type" : "array",
     "exampleValue" : ""
   },
   "accessDeniedUrl" : {
     "title" : "Resources Access Denied URL",
     "description" : "The URL of the customized access denied page. (property name:
com.sun.identity.agents.config.access.denied.url) <br>Hot-swap: Yes",
     "propertyOrder" : 16100,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "clientIpHeader" : {
     "title" : "Client IP Address Header",
     "description" : "HTTP header name that holds the IP address of the client. (property name:
com.sun.identity.agents.config.client.ip.header) <br>Hot-swap: Yes",
     "propertyOrder" : 1000,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
```


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```
    "amLogoutUrl" : {
      "title" : "OpenAM Logout URL",
      "description" : "OpenAM logout page URL. (property name:
 com.sun.identity.agents.config.logout.url) <br>Hot-swap: Yes <br> Example: <br> http://host:port/
opensso/UI/Logout",
      "propertyOrder" : 12400,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "idleSessionTimeoutUrl" : {
      "title" : "Idle Session Timeout Page URL",
      "description" : "URL of the local idle session timeout page. (property name:
 com.sun.identity.agents.config.iis.owa.enable.session.timeout.url)",
      "propertyOrder" : 20400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "continuousSecurityHeaders" : {
      "title" : "Continuous Security Headers",
      "description" : "The name of the headers in the user's original request, that will be sent
 as part of the payload during policy evaluation, which can then be accessed via the 'environment'
 variable in a policy script. The 'key' is the name of the header to be sent, and the 'value' is the
 name which it will appear as in the policy evaluation script.It is possible to map multiple headers
 to the same name (they will simply appear as an array in the evaluation script). If the header
 doesn't exist, then the empty string will be sent.",
      "propertyOrder" : 3211,
      "required" : true,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : ""
    },
    "gotoParameterName" : {
      "title" : "Goto Parameter Name",
      "description" : "Property used only when CDSSO is enabled. Default value should
 be changed only when the login URL has a landing page specified <br> Example :
 com.sun.identity.agents.config.cdsso.cdcservlet.url = http://host:port/opensso/cdcservlet?
goto=http://agent:port/landing.jsp <br> The parameter is used by the Agent to append the original
 request URL to this cdcserlet URL. This parameter is consumed by the landing page to redirect to
 the original URL. (property name: com.sun.identity.agents.config.redirect.param) <br>Hot-swap: Yes
 <br> Example: com.sun.identity.agents.config.redirect.param = goto2<br> The complete URL sent for
 authentication will be <br> http://host:port/opensso/cdcservlet?goto=http://agent:port/landing.jsp?
goto2=http://agent.port/original.jsp",
      "propertyOrder" : 3600,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "ignoreServerCheck" : {
      "title" : "Ignore Server Check",
```


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```
     "description" : "Agent uses this value to check OpenAM is up before doing a 302 redirect.
(property name: com.sun.identity.agents.config.ignore.server.check) <br>Hot-swap: Yes",
     "propertyOrder" : 15500,
     "required" : true,
     "type" : "boolean",
     "exampleValue" : ""
   },
   "overrideProxyHostAndPort" : {
     "title" : "Override Proxy Server's Host and Port",
     "description" : "(property name: com.sun.identity.agents.config.proxy.override.host.port)
<br>Hot-swap: No",
     "propertyOrder" : 19400,
     "required" : true,
     "type" : "boolean",
     "exampleValue" : ""
   },
   "profileAttributesCookieMaxAge" : {
     "title" : "Profile Attributes Cookie Maxage",
     "description" : "Maxage of attributes cookie headers. (property name:
com.sun.identity.agents.config.profile.attribute.cookie.maxage) <br>Hot-swap: Yes",
     "propertyOrder" : 17900,
     "required" : true,
     "type" : "integer",
     "exampleValue" : ""
   },
   "configurationCleanupInterval" : {
     "title" : "Configuration Cleanup Interval",
     "description" : "Interval in minutes to cleanup old agent configuration entries. (property name:
com.sun.identity.agents.config.cleanup.interval) <br>Hot-swap: No",
     "propertyOrder" : 19600,
     "required" : true,
     "type" : "integer",
     "exampleValue" : ""
   },
   "localAuditLogRotation" : {
     "title" : "Rotate Local Audit Log",
     "description" : "Flag to indicate that audit log files should be rotated when reaching a certain
size. (property name: com.sun.identity.agents.config.local.log.rotate) <br>Hot-swap: Yes",
     "propertyOrder" : 21700,
     "required" : true,
     "type" : "boolean",
     "exampleValue" : ""
   },
   "cdsso" : {
     "title" : "Cross Domain SSO",
     "description" : "Enables Cross-Domain Single Sign On. (property name:
com.sun.identity.agents.config.cdsso.enable) <br>Hot-swap: Yes",
     "propertyOrder" : 16700,
     "required" : true,
     "type" : "boolean",
     "exampleValue" : ""
   },
   "loadBalanced" : {
     "title" : "Load Balancer Setup",
     "description" : "Set to true if a load balancer is used for OpenAM services. (property name:
com.sun.identity.agents.config.load.balancer.enable) <br>Hot-swap: No",
     "propertyOrder" : 15400,
     "required" : true,
     "type" : "boolean",
```


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```
      "exampleValue" : ""
    }
  }
}
```

1.179.1.2. delete

Usage:

```
am> delete WebAgentGroups --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.179.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action WebAgentGroups --realm Realm --actionName getAllTypes
```

1.179.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action WebAgentGroups --realm Realm --actionName getCreatableTypes
```

1.179.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action WebAgentGroups --realm Realm --actionName nextdescendents
```

1.179.1.6. query

Querying the agent groups of a specific type

Usage:

```
am> query WebAgentGroups --realm Realm --filter filter
```

Parameters:

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--filter

A CREST formatted query filter, where "true" will query all.

1.179.1.7. read

Usage:

```
am> read WebAgentGroups --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.179.1.8. update

Usage:

```
am> update WebAgentGroups --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "encodeProfileAttributes" : {
      "title" : "Native Encoding of Profile Attributes",
      "description" : "Agent encodes the ldap header values in the default encoding of OS locale. If
 false, UTF-8 gets used. (property name: com.sun.identity.agents.config.convert.mbyte.enable) <br>Hot-
swap: Yes",
      "propertyOrder" : 18400,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "configurationPollingInterval" : {
      "title" : "Configuration Reload Interval",
      "description" : "Interval in minutes to fetch agent configuration from OpenAM. (property name:
 com.sun.identity.agents.config.polling.interval) <br>Hot-swap: No",
      "propertyOrder" : 19500,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
```


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```
   "status" : {
     "title" : "Status",
     "description" : "Status of the agent configuration.",
     "propertyOrder" : 200,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "checkUserInDomino" : {
     "title" : "Check User in Domino Database",
     "description" : "If true, agent checks user existence in Domino name database. (property name:
com.sun.identity.agents.config.domino.check.name.database)",
     "propertyOrder" : 20500,
     "required" : true,
     "type" : "boolean",
     "exampleValue" : ""
   },
   "filterPriority" : {
     "title" : "Filter Priority",
     "description" : "The loading priority of filter. (property name:
com.sun.identity.agents.config.iis.filter.priority)",
     "propertyOrder" : 20100,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "caseInsensitiveUrlComparison" : {
     "title" : "URL Comparison Case Sensitivity Check",
     "description" : "Enforces case insensitivity in both policy and not enforced url evaluation.
(property name: com.sun.identity.agents.config.url.comparison.case.ignore) <br>Hot-swap: Yes",
     "propertyOrder" : 14300,
     "required" : true,
     "type" : "boolean",
     "exampleValue" : ""
   },
   "agentLocale" : {
     "title" : "Agent Locale",
     "description" : "The default locale for the product. (property name:
com.sun.identity.agents.config.locale) <br>Hot-swap: No",
     "propertyOrder" : 19300,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "sessionAttributeMap" : {
     "title" : "Session Attribute Map",
     "description" : "Maps the session attributes to be populated under
specific names for the currently authenticated user. (property name:
com.sun.identity.agents.config.session.attribute.mapping) <br>Hot-swap: Yes  <br> Example: <br>  To
populate the value of session attribute UserToken under name CUSTOM-userid: enter UserToken in Map
Key field, and enter CUSTOM-userid in Corresponding Map Value field.",
     "propertyOrder" : 15100,
     "required" : true,
     "patternProperties" : {
       ".*" : {
         "type" : "string"
       }
     },
     "type" : "object",
```


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```
      "exampleValue" : ""
    },
    "policyEvaluationRealm" : {
      "title" : "Realm",
      "description" : "Which realm to start evaluating from (property name:
org.forgerock.openam.agents.config.policy.evaluation.realm) <br>Hot-swap: Yes",
      "propertyOrder" : 21100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "fetchAttributesForNotEnforcedUrls" : {
      "title" : "Fetch Attributes for Not Enforced URLs",
      "description" : "Agent fetches profile attributes for not enforced urls by doing policy
evaluation. (property name: com.sun.identity.agents.config.notenforced.url.attributes.enable)
<br>Hot-swap: Yes",
      "propertyOrder" : 19800,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "replayPasswordKey" : {
      "title" : "Replay Password Key",
      "description" : "DES key for decrypting the basic authentication password in the session.
(property name: com.sun.identity.agents.config.replaypasswd.key)",
      "propertyOrder" : 20000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "clientHostnameHeader" : {
      "title" : "Client Hostname Header",
      "description" : "HTTP header name that holds the Hostname of the client. (property name:
com.sun.identity.agents.config.client.hostname.header) <br>Hot-swap: Yes",
      "propertyOrder" : 1100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "authenticationType" : {
      "title" : "Authentication Type",
      "description" : "(property name: com.sun.identity.agents.config.iis.auth.type)",
      "propertyOrder" : 19900,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "ignorePreferredNamingUrl" : {
      "title" : "Ignore Preferred Naming URL in Naming Request",
      "description" : "Agent uses this value to send preferred naming url in the naming request.
(property name: com.sun.identity.agents.config.ignore.preferred.naming.url) <br>Hot-swap: Yes",
      "propertyOrder" : 15600,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "overrideNotificationUrl" : {
      "title" : "Override Notification URL",
```


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```
     "description" : "Set to true if the agent is sitting behind a ssl/tls
off-loader, load balancer, or proxy to override the URL with the value from
the property com.sun.identity.agents.config.agenturi.prefix. (property name:
com.sun.identity.agents.config.override.notification.url) <br>Hot-swap: Yes",
     "propertyOrder" : 19000,
     "required" : true,
     "type" : "boolean",
     "exampleValue" : ""
   },
   "remoteLogFilename" : {
     "title" : "Remote Log Filename",
     "description" : "(Not used in Agent 5 onwards) <br>Name of file stored on OpenAM server that
contains agent audit messages. (property name: com.sun.identity.agents.config.remote.logfile)
<br>Hot-swap: No",
     "propertyOrder" : 21500,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "anonymousUserEnabled" : {
     "title" : "Anonymous User",
     "description" : "Enable/Disable REMOTE_USER processing for anonymous users. (property name:
com.sun.identity.agents.config.anonymous.user.enable) <br>Hot-swap: Yes",
     "propertyOrder" : 16900,
     "required" : true,
     "type" : "boolean",
     "exampleValue" : ""
   },
   "useLtpaToken" : {
     "title" : "Use LTPA token",
     "description" : "Set to true if agent needs to use LTPA Token. (property name:
com.sun.identity.agents.config.domino.ltpa.enable)",
     "propertyOrder" : 20600,
     "required" : true,
     "type" : "boolean",
     "exampleValue" : ""
   },
   "notificationsEnabled" : {
     "title" : "Enable Notifications",
     "description" : "The notifications help in maintaining agent's sso, policy and configuration
caches. (property name: com.sun.identity.agents.config.notification.enable) <br>Hot-swap: No",
     "propertyOrder" : 14100,
     "required" : true,
     "type" : "boolean",
     "exampleValue" : ""
   },
   "jwtName" : {
     "title" : "JWT Cookie Name",
     "description" : "The name used by the agent to set the OIDC JWT on the user's browser. (Agent 5
only).",
     "propertyOrder" : 12106,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "remoteLogSendInterval" : {
     "title" : "Remote Audit Log Interval",
     "description" : "Periodic interval in minutes in which audit log messages are sent to remote log
file. (property name: com.sun.identity.agents.config.remote.log.interval) <br>Hot-swap: No",
```


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```
      "propertyOrder" : 21600,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "notEnforcedUrls" : {
      "title" : "Not Enforced URLs",
      "description" : "List of urls for which no authentication required. (property name:
 com.sun.identity.agents.config.notenforced.url) <br>Hot-swap: Yes <br> Example: <br> http://
myagent.mydomain.com/*.gif",
      "propertyOrder" : 17000,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "amLoginUrl" : {
      "title" : "OpenAM Login URL",
      "description" : "OpenAM login page URL. (property name:
 com.sun.identity.agents.config.login.url) <br>Hot-swap: Yes <br> Example: <br> http://host:port/
opensso/UI/Login",
      "propertyOrder" : 15700,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "sessionAttributeFetchMode" : {
      "title" : "Session Attribute Fetch Mode",
      "description" : "(property name: com.sun.identity.agents.config.session.attribute.fetch.mode)
 <br>Hot-swap: Yes",
      "propertyOrder" : 15000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "overrideRequestProtocol" : {
      "title" : "Override Request URL Protocol",
      "description" : "Set to true if the agent is sitting behind a ssl/tls off-
loader, load balancer, or proxy to override the protocol with the value from
 the property com.sun.identity.agents.config.agenturi.prefix. (property name:
 com.sun.identity.agents.config.override.protocol) <br>Hot-swap: Yes",
      "propertyOrder" : 18700,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "applicationLogoutUrls" : {
      "title" : "Logout URL List",
      "description" : "List of application logout URLs. User gets logged out from OpenAM session
 when these urls accessed. (property name: com.sun.identity.agents.config.agent.logout.url). If this
 property is used, user should specify a value for the below Logout Redirect URL property.<br>Hot-
swap: Yes <br> Example: <br> http://myagent.mydomain.com/logout.html",
      "propertyOrder" : 18000,
      "required" : true,
```


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```
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "continuousSecurityCookies" : {
      "title" : "Continuous Security Cookies",
      "description" : "The name of the cookies to be sent as part of the payload during policy
 evaluation, which can be accessed via the 'environment' variable in a policy script. The 'key' is
 the name of the cookie to be sent, and the 'value' is the name which it will appear as in the policy
 evaluation script. It is possible to map multiple cookies to the same name (they will simply appear
 as an array in the evaluation script). If the cookie doesn't exist, then the empty string will be
 sent.",
      "propertyOrder" : 3210,
      "required" : true,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : ""
    },
    "showPasswordInHeader" : {
      "title" : "Show Password in HTTP Header",
      "description" : "Set to true if encrypted password should be set in HTTP header AUTH_PASSWORD.
 (property name: com.sun.identity.agents.config.iis.password.header)",
      "propertyOrder" : 22800,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "ltpaTokenConfigurationname" : {
      "title" : "LTPA Token Configuration Name",
      "description" : "The configuration name that the agent uses in order to employ the LTPA token
 mechanism. (property name: com.sun.identity.agents.config.domino.ltpa.config.name)",
      "propertyOrder" : 20800,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "customProperties" : {
      "title" : "Custom Properties",
      "description" : "Additional properties that allow users to augment the set of properties
 supported by agent. (property name: com.sun.identity.agents.config.freeformproperties) <br>Hot-
swap: Yes <br> Examples: <br> customproperty=custom-value1 <br> customlist[0]=customlist-
value-0 <br> customlist[1]=customlist-value-1 <br> custommap[key1]=custommap-value-1 <br>
 custommap[key2]=custommap-value-2",
      "propertyOrder" : 19700,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "encodeUrlSpecialCharacters" : {
      "title" : "Encode URL's Special Characters",
```


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```
      "description" : "Encodes the url which has special characters before doing policy evaluation.
 (property name: com.sun.identity.agents.config.encode.url.special.chars.enable) <br>Hot-swap: Yes",
      "propertyOrder" : 18500,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "agentDebugLevel" : {
      "title" : "Agent Debug Level",
      "description" : "Agent debug level. (property name: com.sun.identity.agents.config.debug.level)
 <br>Hot-swap: Yes",
      "propertyOrder" : 21900,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "postDataCachePeriod" : {
      "title" : "POST Data Entries Cache Period",
      "description" : "POST cache entry lifetime in minutes. (property name:
 com.sun.identity.agents.config.postcache.entry.lifetime) <br>Hot-swap: Yes",
      "propertyOrder" : 17400,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "agentConfigChangeNotificationsEnabled" : {
      "title" : "Agent Configuration Change Notification",
      "description" : "Enable agent to receive notification messages from OpenAM server for
 configuration changes. (property name: com.sun.identity.agents.config.change.notification.enable)
 <br>Hot-swap: Yes",
      "propertyOrder" : 12100,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "debugLogRotation" : {
      "title" : "Agent Debug File Rotation",
      "description" : "Debug file gets rotated based on the size specified. (property name:
 com.sun.identity.agents.config.debug.file.rotate) <br>Hot-swap: Yes",
      "propertyOrder" : 22000,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "notEnforcedIps" : {
      "title" : "Not Enforced Client IP List",
      "description" : "No authentication and authorization are required for the requests coming from
 these client IP addresses. (property name: com.sun.identity.agents.config.notenforced.ip) <br>Hot-
swap: Yes <br> Examples: <br> 192.18.145.* <br> 192.18.146.123",
      "propertyOrder" : 17200,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "secureCookies" : {
      "title" : "Cookie Security",
```


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```
      "description" : "Agent sends secure cookies if communication is secure. (property name:
com.sun.identity.agents.config.cookie.secure) <br>Hot-swap: No",
      "propertyOrder" : 13800,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "cookieResetEnabled" : {
      "title" : "Cookie Reset",
      "description" : "Agent reset cookies in the response before redirecting to authentication.
(property name: com.sun.identity.agents.config.cookie.reset.enable) <br>Hot-swap: Yes",
      "propertyOrder" : 16500,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "logoutResetCookies" : {
      "title" : "Logout Cookies List for Reset",
      "description" : "Any cookies to be reset upon logout in the same format as cookie reset list.
(property name: com.sun.identity.agents.config.logout.cookie.reset) <br>Hot-swap: Yes <br> Cookie1
<br> Cookie2=value;Domain=subdomain.domain.com",
      "propertyOrder" : 18100,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "profileAttributeMap" : {
      "title" : "Profile Attribute Map",
      "description" : "Maps the profile attributes to be populated under
specific names for the currently authenticated user. (property name:
com.sun.identity.agents.config.profile.attribute.mapping) <br>Hot-swap: Yes <br> Example: <br> To
populate the value of profile attribute cn under name CUSTOM-Common-Name: enter cn in Map Key field,
and enter CUSTOM-Common-Name in Corresponding Map Value field. <br> To populate the value of profile
attribute mail under name CUSTOM-Email: enter mail in Map Key field, and enter CUSTOM-Email in
Corresponding Map Value field.",
      "propertyOrder" : 14900,
      "required" : true,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : ""
    },
    "policyEvaluationApplication" : {
      "title" : "Application",
      "description" : "Which application contains the policies to evaluate with (property name:
org.forgerock.openam.agents.config.policy.evaluation.application) <br>Hot-swap: Yes",
      "propertyOrder" : 21200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "cdssoUrls" : {
      "title" : "CDSSO Servlet URL",
```


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```
      "description" : "List of URLs of the available CDSSO controllers that may be used by the Agent
 for CDSSO processing. (property name: com.sun.identity.agents.config.cdsso.cdcservlet.url) <br>Hot-
swap: Yes  <br> Example: <br> http://host:port/opensso/cdcservlet",
      "propertyOrder" : 17500,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "encodeSpecialCharsInCookies" : {
      "title" : "Encode special chars in Cookies",
      "description" : "Encode special chars in cookie by URL encoding. Useful when profile, session
 and response attributes contain special chars and attributes fetch mode is set to HTTP_COOKIE.
 (property name: com.sun.identity.agents.config.encode.cookie.special.chars.enable)  <br>Hot-swap:
 Yes",
      "propertyOrder" : 14000,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "policyClockSkew" : {
      "title" : "Policy Clock Skew",
      "description" : "Time in seconds used adjust time difference between Agent machine
 and OpenAM. Clock skew in seconds = AgentTime - OpenAMServerTime. (property name:
 com.sun.identity.agents.config.policy.clock.skew) <br>Hot-swap: No",
      "propertyOrder" : 21000,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "repositoryLocation" : {
      "title" : "Location of Agent Configuration Repository",
      "description" : "Indicates agent's configuration located either on agent's host or centrally on
 OpenAM server.",
      "propertyOrder" : 400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "ssoCachePollingInterval" : {
      "title" : "SSO Cache Polling Period",
      "description" : "Polling interval in minutes to refresh agent's sso cache. (property name:
 com.sun.identity.agents.config.sso.cache.polling.interval) <br>Hot-swap: No",
      "propertyOrder" : 14500,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "overrideRequestPort" : {
      "title" : "Override Request URL Port",
      "description" : "Set to true if the agent is sitting behind a ssl/tls
 off-loader, load balancer, or proxy to override the port with the value from
 the property com.sun.identity.agents.config.agenturi.prefix. (property name:
 com.sun.identity.agents.config.override.port) <br>Hot-swap: Yes",
      "propertyOrder" : 18900,
      "required" : true,
      "type" : "boolean",
```


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```
      "exampleValue" : ""
    },
    "debugRotationSize" : {
      "title" : "Agent Debug File Size",
      "description" : "Agent debug file size in bytes. (property name:
com.sun.identity.agents.config.debug.file.size) <br>Hot-swap: Yes",
      "propertyOrder" : 22100,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "webSocketConnectionIntervalInMinutes" : {
      "title" : "Web Socket Connection Interval",
      "description" : "Interval in minutes by which agents reopen their web socket connection to
ensure a fair distribution of connections across OpenAM servers. (Agent 5 only).",
      "propertyOrder" : 12105,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "cookieName" : {
      "title" : "Cookie Name",
      "description" : "Name of the SSO Token cookie used between the OpenAM server and the Agent.
(property name: com.sun.identity.agents.config.cookie.name)<br>Hot-swap: No",
      "propertyOrder" : 13700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "overrideRequestHost" : {
      "title" : "Override Request URL Host",
      "description" : "Set to true if the agent is sitting behind a ssl/tls
off-loader, load balancer, or proxy to override the host with the value from
the property com.sun.identity.agents.config.agenturi.prefix. (property name:
com.sun.identity.agents.config.override.host) <br>Hot-swap: Yes",
      "propertyOrder" : 18800,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "agentUriPrefix" : {
      "title" : "Agent Deployment URI Prefix",
      "description" : "(property name: com.sun.identity.agents.config.agenturi.prefix)<br>Hot-swap:
Yes",
      "propertyOrder" : 15800,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "ignorePathInfo" : {
      "title" : "Ignore Path Info in Request URL",
      "description" : "The path info will be stripped from the request URL while doing Not
Enforced List check and url policy evaluation if the value is set to true. (property name:
com.sun.identity.agents.config.ignore.path.info) <br>Hot-swap: Yes",
      "propertyOrder" : 18600,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
```


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```
   "auditAccessType" : {
     "title" : "Audit Access Types",
     "description" : "Types of messages to log based on user URL access attempts. (property name:
com.sun.identity.agents.config.audit.accesstype) <br>Hot-swap: Yes",
     "propertyOrder" : 21300,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "auditLogLocation" : {
     "title" : "Audit Log Location",
     "description" : "Specifies where audit messages should be logged. (property name:
com.sun.identity.agents.config.log.disposition) <br>Hot-swap: Yes",
     "propertyOrder" : 21400,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "retrieveClientHostname" : {
     "title" : "Retrieve Client Hostname",
     "description" : "Gets the client's hostname through DNS reverse lookup for use in policy
evaluation. (property name: com.sun.identity.agents.config.get.client.host.name) <br>Hot-swap: Yes",
     "propertyOrder" : 18300,
     "required" : true,
     "type" : "boolean",
     "exampleValue" : ""
   },
   "postDataPreservation" : {
     "title" : "POST Data Preservation",
     "description" : "Enables POST data preservation. (property name:
com.sun.identity.agents.config.postdata.preserve.enable) <br> Note that this feature is not supported
in all the web agents. Please refer individual agents documentation for more details. <br>Hot-swap:
Yes",
     "propertyOrder" : 17300,
     "required" : true,
     "type" : "boolean",
     "exampleValue" : ""
   },
   "profileAttributesCookiePrefix" : {
     "title" : "Profile Attributes Cookie Prefix",
     "description" : "Sets cookie prefix in the attributes headers. (property name:
com.sun.identity.agents.config.profile.attribute.cookie.prefix) <br>Hot-swap: Yes",
     "propertyOrder" : 17800,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "changeProtocolToHttps" : {
     "title" : "Change URL Protocol to https",
     "description" : "If true, avoids IE6 security pop-ups. (property name:
com.sun.identity.agents.config.iis.owa.enable.change.protocol)",
     "propertyOrder" : 20300,
     "required" : true,
     "type" : "boolean",
     "exampleValue" : ""
   },
   "cdssoRootUrl" : {
     "title" : "Agent Root URL for CDSSO",
```


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     "description" : "The agent root URL for CDSSO. The valid value is in the following format:
<br>protocol://hostname:port/<br> The protocol represents the protocol used, such as http or https.
The hostname represents the host name of the machine on which the agent resides. The port represents
the port number on which the agent is installed. The slash following the port number is required.",
     "propertyOrder" : 22700,
     "required" : true,
     "items" : {
       "type" : "string"
     },
     "type" : "array",
     "exampleValue" : ""
   },
   "logonAndImpersonation" : {
     "title" : "Logon and Impersonation",
     "description" : "Set to true if agent should do Windows Logon and User Impersonation. (property
name: com.sun.identity.agents.config.iis.logonuser)",
     "propertyOrder" : 22900,
     "required" : true,
     "type" : "boolean",
     "exampleValue" : ""
   },
   "filterConfiguredWithOwa" : {
     "title" : "Filter configured with OWA",
     "description" : "Set to true if the IIS agent filter is configured for OWA. (property name:
com.sun.identity.agents.config.iis.owa.enable)",
     "propertyOrder" : 20200,
     "required" : true,
     "type" : "boolean",
     "exampleValue" : ""
   },
   "logoutRedirectUrl" : {
     "title" : "Logout Redirect URL",
     "description" : "User gets redirected to this url after logout. (property name:
com.sun.identity.agents.config.logout.redirect.url). This property should be specified along with the
above Logout URL List.<br>Hot-swap: Yes",
     "propertyOrder" : 22300,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "responseAttributeFetchMode" : {
     "title" : "Response Attribute Fetch Mode",
     "description" : "(property name: com.sun.identity.agents.config.response.attribute.fetch.mode)
<br>Hot-swap: Yes",
     "propertyOrder" : 15200,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "localAuditRotationSize" : {
     "title" : "Local Audit Log Rotation Size",
     "description" : "Size limit in bytes when a local audit log file is rotated to a new file.
(property name: com.sun.identity.agents.config.local.log.size) <br>Hot-swap: Yes",
     "propertyOrder" : 21800,
     "required" : true,
     "type" : "integer",
     "exampleValue" : ""
   },
   "responseAttributeMap" : {
```


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```
      "title" : "Response Attribute Map",
      "description" : "Maps the policy response attributes to be populated
 under specific names for the currently authenticated user. (property name:
 com.sun.identity.agents.config.response.attribute.mapping) <br>Hot-swap: Yes <br> Example: <br> To
 populate the value of response attribute uid under name CUSTOM-USER-NAME: enter uid in Map Key field,
 and enter CUSTOM-USER-NAME in Corresponding Map Value field.",
      "propertyOrder" : 15300,
      "required" : true,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : ""
    },
    "fqdnMapping" : {
      "title" : "FQDN Virtual Host Map",
      "description" : "Maps virtual, invalid, or partial hostnames, and IP addresses to the FQDN to
 access protected resources. (property name: com.sun.identity.agents.config.fqdn.mapping) <br>Hot-
swap: Yes <br> Examples: <br>  To map the partial hostname myserver to myserver.mydomain.com: enter
 myserver in the Map Key field and myserver.mydomain.com in the Corresponding Map Value field. To map
 a virtual server rst.hostname.com that points to the actual server abc.hostname.com: enter valid1 in
 the Map Key field and rst.hostname.com in the Corresponding Map Value field.",
      "propertyOrder" : 16400,
      "required" : true,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : ""
    },
    "ltpaTokenOrganizationName" : {
      "title" : "LTPA Token Organization Name",
      "description" : "The organization name to which the LTPA token belongs. (property name:
 com.sun.identity.agents.config.domino.ltpa.org.name)",
      "propertyOrder" : 20900,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "userIdParameter" : {
      "title" : "User ID Parameter",
      "description" : "Agent sets value of User Id to REMOTE_USER server variable. (property name:
 com.sun.identity.agents.config.userid.param) <br>Hot-swap: Yes",
      "propertyOrder" : 14600,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "invertNotEnforcedUrls" : {
      "title" : "Invert Not Enforced URLs",
      "description" : "Only not enforced list of urls will be enforced. (property name:
 com.sun.identity.agents.config.notenforced.url.invert) <br>Hot-swap: Yes",
      "propertyOrder" : 17100,
      "required" : true,
      "type" : "boolean",
```


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```
      "exampleValue" : ""
    },
    "cookieResetList" : {
      "title" : "Cookies Reset Name List",
      "description" : "List of cookies in the format: name[=value][;Domain=value]. (property name:
com.sun.identity.agents.config.cookie.reset) <br>Hot-swap: Yes <br> Examples: <br> Cookie1 <br>
Cookie2=value;Domain=subdomain.domain.com",
      "propertyOrder" : 16600,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "policyCachePollingInterval" : {
      "title" : "Policy Cache Polling Period",
      "description" : "Polling interval in minutes to refresh agent's policy cache. (property name:
com.sun.identity.agents.config.policy.cache.polling.interval) <br>Hot-swap: No",
      "propertyOrder" : 14400,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "clientIpValidation" : {
      "title" : "Client IP Validation",
      "description" : "This validates if the subsequent browser requests come from
the same ip address that the SSO token is initially issued against. (property name:
com.sun.identity.agents.config.client.ip.validation.enable) <br>Hot-swap: Yes",
      "propertyOrder" : 17700,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "profileAttributeFetchMode" : {
      "title" : "Profile Attribute Fetch Mode",
      "description" : "(property name: com.sun.identity.agents.config.profile.attribute.fetch.mode)
<br>Hot-swap: Yes",
      "propertyOrder" : 14800,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "userIdParameterType" : {
      "title" : "User ID Parameter Type",
      "description" : "User ID can be fetched from either SESSION and LDAP attributes. (property name:
com.sun.identity.agents.config.userid.param.type) <br>Hot-swap: Yes",
      "propertyOrder" : 14700,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "agentNotificationUrl" : {
      "title" : "Agent Notification URL",
      "description" : "(Not used in Agent 5 onwards) <br>URL used by agent to register notification
listeners. (property name: com.sun.identity.client.notification.url) <br>Hot-swap: No",
      "propertyOrder" : 14200,
      "required" : true,
      "type" : "string",
```


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```
      "exampleValue" : ""
    },
    "anonymousUserId" : {
      "title" : "Anonymous User Default Value",
      "description" : "User id of unauthenticated users. (property name:
 com.sun.identity.agents.config.anonymous.user.id) <br>Hot-swap: Yes",
      "propertyOrder" : 16800,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "ignorePathInfoForNotEnforcedUrls" : {
      "title" : "Ignore Path Info for Not Enforced URLs",
      "description" : "Indicate whether the path info and query should be stripped from the request
 URL before being compared with the URLs of the not enforced list when those URLs have a wildcard '*'
 character.  (property name: com.sun.identity.agents.config.ignore.path.info.for.not.enforced.list)
 <br>Hot-swap: Yes",
      "propertyOrder" : 13900,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "ssoOnlyMode" : {
      "title" : "SSO Only Mode",
      "description" : "Agent will just enforce authentication (SSO), but no authorization for
 policies. (property name: com.sun.identity.agents.config.sso.only) <br>Hot-swap: Yes",
      "propertyOrder" : 16000,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "primaryServerPollingPeriod" : {
      "title" : "Polling Period for Primary Server",
      "description" : "Interval in minutes, agent polls to check the primary server is up and running.
 (property name: com.sun.identity.agents.config.poll.primary.server) <br>Hot-swap: No",
      "propertyOrder" : 19200,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "fetchPoliciesFromRootResource" : {
      "title" : "Fetch Policies from Root Resource",
      "description" : "Agent caches policy decision of the resource and all resources from the root of
 the resource down. (property name: com.sun.identity.agents.config.fetch.from.root.resource) <br>Hot-
swap: No",
      "propertyOrder" : 18200,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "agentConnectionTimeout" : {
      "title" : "Agent Connection Timeout",
      "description" : "Timeout period in seconds for an agent connection with OpenAM auth server.
 (property name: com.sun.identity.agents.config.auth.connection.timeout) <br>Hot-swap: Yes",
      "propertyOrder" : 19100,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
```


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```
   "fqdnCheck" : {
     "title" : "FQDN Check",
     "description" : "Enables checking of fqdn default value and fqdn map values. (property name:
com.sun.identity.agents.config.fqdn.check.enable) <br>Hot-swap: Yes",
     "propertyOrder" : 16200,
     "required" : true,
     "type" : "boolean",
     "exampleValue" : ""
   },
   "fqdnDefault" : {
     "title" : "FQDN Default",
     "description" : "Fully qualified hostname that the users should use in order to access
resources. (property name: com.sun.identity.agents.config.fqdn.default) <br>Hot-swap: Yes",
     "propertyOrder" : 16300,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "userpassword" : {
     "title" : "Password",
     "description" : "",
     "propertyOrder" : 100,
     "required" : true,
     "type" : "string",
     "format" : "password",
     "exampleValue" : ""
   },
   "ltpaTokenCookieName" : {
     "title" : "LTPA Token Cookie Name",
     "description" : "The name of the cookie that contains the LTPA token. (property name:
com.sun.identity.agents.config.domino.ltpa.cookie.name)",
     "propertyOrder" : 20700,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "cdssoRedirectUri" : {
     "title" : "CDSSO Redirect URI",
     "description" : "An intermediate URI that is used by the Agent for processing CDSSO requests.
(property name: com.sun.identity.agents.config.cdsso.redirect.uri) <br>Hot-swap: Yes",
     "propertyOrder" : 17550,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "attributeMultiValueSeparator" : {
     "title" : "Attribute Multi Value Separator",
     "description" : "Specifies separator for multiple values. Applies to all
types of attributes i.e. profile, session and response attributes. (property name:
com.sun.identity.agents.config.attribute.multi.value.separator) <br>Hot-swap: Yes",
     "propertyOrder" : 22200,
     "required" : true,
     "type" : "string",
     "exampleValue" : ""
   },
   "cdssoCookieDomain" : {
     "title" : "Cookies Domain List",
     "description" : "List of domains in which cookies have to be set in CDSSO. (property name:
com.sun.identity.agents.config.cdsso.cookie.domain) <br>Hot-swap: Yes <br> Example: <br> .sun.com",
```


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```
      "propertyOrder" : 17600,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "accessDeniedUrl" : {
      "title" : "Resources Access Denied URL",
      "description" : "The URL of the customized access denied page. (property name:
 com.sun.identity.agents.config.access.denied.url) <br>Hot-swap: Yes",
      "propertyOrder" : 16100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "clientIpHeader" : {
      "title" : "Client IP Address Header",
      "description" : "HTTP header name that holds the IP address of the client. (property name:
 com.sun.identity.agents.config.client.ip.header) <br>Hot-swap: Yes",
      "propertyOrder" : 1000,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "amLogoutUrl" : {
      "title" : "OpenAM Logout URL",
      "description" : "OpenAM logout page URL. (property name:
 com.sun.identity.agents.config.logout.url) <br>Hot-swap: Yes <br> Example: <br> http://host:port/
opensso/UI/Logout",
      "propertyOrder" : 12400,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    },
    "idleSessionTimeoutUrl" : {
      "title" : "Idle Session Timeout Page URL",
      "description" : "URL of the local idle session timeout page. (property name:
 com.sun.identity.agents.config.iis.owa.enable.session.timeout.url)",
      "propertyOrder" : 20400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "continuousSecurityHeaders" : {
      "title" : "Continuous Security Headers",
      "description" : "The name of the headers in the user's original request, that will be sent
 as part of the payload during policy evaluation, which can then be accessed via the 'environment'
 variable in a policy script. The 'key' is the name of the header to be sent, and the 'value' is the
 name which it will appear as in the policy evaluation script.It is possible to map multiple headers
 to the same name (they will simply appear as an array in the evaluation script). If the header
 doesn't exist, then the empty string will be sent.",
      "propertyOrder" : 3211,
      "required" : true,
      "patternProperties" : {
```


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```
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : ""
    },
    "gotoParameterName" : {
      "title" : "Goto Parameter Name",
      "description" : "Property used only when CDSSO is enabled. Default value should
 be changed only when the login URL has a landing page specified <br> Example :
 com.sun.identity.agents.config.cdsso.cdcservlet.url = http://host:port/opensso/cdcservlet?
goto=http://agent:port/landing.jsp <br> The parameter is used by the Agent to append the original
 request URL to this cdcserlet URL. This parameter is consumed by the landing page to redirect to
 the original URL. (property name: com.sun.identity.agents.config.redirect.param) <br>Hot-swap: Yes
 <br> Example: com.sun.identity.agents.config.redirect.param = goto2<br> The complete URL sent for
 authentication will be <br> http://host:port/opensso/cdcservlet?goto=http://agent:port/landing.jsp?
goto2=http://agent.port/original.jsp",
      "propertyOrder" : 3600,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "ignoreServerCheck" : {
      "title" : "Ignore Server Check",
      "description" : "Agent uses this value to check OpenAM is up before doing a 302 redirect.
 (property name: com.sun.identity.agents.config.ignore.server.check) <br>Hot-swap: Yes",
      "propertyOrder" : 15500,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "overrideProxyHostAndPort" : {
      "title" : "Override Proxy Server's Host and Port",
      "description" : "(property name: com.sun.identity.agents.config.proxy.override.host.port)
 <br>Hot-swap: No",
      "propertyOrder" : 19400,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "profileAttributesCookieMaxAge" : {
      "title" : "Profile Attributes Cookie Maxage",
      "description" : "Maxage of attributes cookie headers. (property name:
 com.sun.identity.agents.config.profile.attribute.cookie.maxage) <br>Hot-swap: Yes",
      "propertyOrder" : 17900,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "configurationCleanupInterval" : {
      "title" : "Configuration Cleanup Interval",
      "description" : "Interval in minutes to cleanup old agent configuration entries. (property name:
 com.sun.identity.agents.config.cleanup.interval) <br>Hot-swap: No",
      "propertyOrder" : 19600,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
```


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```
    "localAuditLogRotation" : {
      "title" : "Rotate Local Audit Log",
      "description" : "Flag to indicate that audit log files should be rotated when reaching a certain
 size. (property name: com.sun.identity.agents.config.local.log.rotate) <br>Hot-swap: Yes",
      "propertyOrder" : 21700,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "cdsso" : {
      "title" : "Cross Domain SSO",
      "description" : "Enables Cross-Domain Single Sign On. (property name:
 com.sun.identity.agents.config.cdsso.enable) <br>Hot-swap: Yes",
      "propertyOrder" : 16700,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "loadBalanced" : {
      "title" : "Load Balancer Setup",
      "description" : "Set to true if a load balancer is used for OpenAM services. (property name:
 com.sun.identity.agents.config.load.balancer.enable) <br>Hot-swap: No",
      "propertyOrder" : 15400,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    }
  }
}
```

1.180. WebAgents

1.180.1. Realm Operations

Agents handler that is responsible for managing agents

Resource path: `/realm-config/agents/WebAgent`

Resource version: `1.0`

1.180.1.1. create

Usage:

```
am> create WebAgents --realm Realm --id id --body body
```

Parameters:

`--id`

The unique identifier for the resource.

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--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "filterPriority" : {
      "title" : "Filter Priority",
      "description" : "The loading priority of filter. (property name:
 com.sun.identity.agents.config.iis.filter.priority)",
      "propertyOrder" : 20100,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "clientIpHeader" : {
      "title" : "Client IP Address Header",
      "description" : "HTTP header name that holds the IP address of the client. (property name:
 com.sun.identity.agents.config.client.ip.header) <br>Hot-swap: Yes",
      "propertyOrder" : 1000,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "overrideNotificationUrl" : {
      "title" : "Override Notification URL",
      "description" : "Set to true if the agent is sitting behind a ssl/tls
 off-loader, load balancer, or proxy to override the URL with the value from
 the property com.sun.identity.agents.config.agenturi.prefix. (property name:
 com.sun.identity.agents.config.override.notification.url) <br>Hot-swap: Yes",
      "propertyOrder" : 19000,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
```


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```
          "required" : true
        }
      }
    },
    "overrideRequestPort" : {
      "title" : "Override Request URL Port",
      "description" : "Set to true if the agent is sitting behind a ssl/tls
 off-loader, load balancer, or proxy to override the port with the value from
 the property com.sun.identity.agents.config.agenturi.prefix. (property name:
 com.sun.identity.agents.config.override.port) <br>Hot-swap: Yes",
      "propertyOrder" : 18900,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "ignoreServerCheck" : {
      "title" : "Ignore Server Check",
      "description" : "Agent uses this value to check OpenAM is up before doing a 302 redirect.
 (property name: com.sun.identity.agents.config.ignore.server.check) <br>Hot-swap: Yes",
      "propertyOrder" : 15500,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "customProperties" : {
      "title" : "Custom Properties",
      "description" : "Additional properties that allow users to augment the set of properties
 supported by agent. (property name: com.sun.identity.agents.config.freeformproperties) <br>Hot-
swap: Yes <br> Examples: <br> customproperty=custom-value1 <br> customlist[0]=customlist-
value-0 <br> customlist[1]=customlist-value-1 <br> custommap[key1]=custommap-value-1 <br>
 custommap[key2]=custommap-value-2",
      "propertyOrder" : 19700,
      "items" : {
        "type" : "string"
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
```


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```
        },
        "value" : {
          "type" : "array",
          "required" : true
        }
      }
    },
    "overrideRequestHost" : {
      "title" : "Override Request URL Host",
      "description" : "Set to true if the agent is sitting behind a ssl/tls
off-loader, load balancer, or proxy to override the host with the value from
the property com.sun.identity.agents.config.agenturi.prefix. (property name:
com.sun.identity.agents.config.override.host) <br>Hot-swap: Yes",
      "propertyOrder" : 18800,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "cookieName" : {
      "title" : "Cookie Name",
      "description" : "Name of the SSO Token cookie used between the OpenAM server and the Agent.
(property name: com.sun.identity.agents.config.cookie.name)<br>Hot-swap: No",
      "propertyOrder" : 13700,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "logonAndImpersonation" : {
      "title" : "Logon and Impersonation",
      "description" : "Set to true if agent should do Windows Logon and User Impersonation. (property
name: com.sun.identity.agents.config.iis.logonuser)",
      "propertyOrder" : 22900,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
```


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```
          "required" : true
        }
      }
    },
    "caseInsensitiveUrlComparison" : {
      "title" : "URL Comparison Case Sensitivity Check",
      "description" : "Enforces case insensitivity in both policy and not enforced url evaluation.
(property name: com.sun.identity.agents.config.url.comparison.case.ignore) <br>Hot-swap: Yes",
      "propertyOrder" : 14300,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "attributeMultiValueSeparator" : {
      "title" : "Attribute Multi Value Separator",
      "description" : "Specifies separator for multiple values. Applies to all
types of attributes i.e. profile, session and response attributes. (property name:
com.sun.identity.agents.config.attribute.multi.value.separator) <br>Hot-swap: Yes",
      "propertyOrder" : 22200,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "postDataPreservation" : {
      "title" : "POST Data Preservation",
      "description" : "Enables POST data preservation. (property name:
com.sun.identity.agents.config.postdata.preserve.enable) <br> Note that this feature is not supported
in all the web agents. Please refer individual agents documentation for more details. <br>Hot-swap:
Yes",
      "propertyOrder" : 17300,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
```


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```
      }
    },
    "accessDeniedUrl" : {
      "title" : "Resources Access Denied URL",
      "description" : "The URL of the customized access denied page. (property name:
com.sun.identity.agents.config.access.denied.url) <br>Hot-swap: Yes",
      "propertyOrder" : 16100,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "localAuditLogRotation" : {
      "title" : "Rotate Local Audit Log",
      "description" : "Flag to indicate that audit log files should be rotated when reaching a certain
size. (property name: com.sun.identity.agents.config.local.log.rotate) <br>Hot-swap: Yes",
      "propertyOrder" : 21700,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "agentUriPrefix" : {
      "title" : "Agent Deployment URI Prefix",
      "description" : "(property name: com.sun.identity.agents.config.agenturi.prefix)<br>Hot-swap:
Yes",
      "propertyOrder" : 15800,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "ltpaTokenCookieName" : {
      "title" : "LTPA Token Cookie Name",
```


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```
      "description" : "The name of the cookie that contains the LTPA token. (property name:
com.sun.identity.agents.config.domino.ltpa.cookie.name)",
      "propertyOrder" : 20700,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "encodeSpecialCharsInCookies" : {
      "title" : "Encode special chars in Cookies",
      "description" : "Encode special chars in cookie by URL encoding. Useful when profile, session
and response attributes contain special chars and attributes fetch mode is set to HTTP_COOKIE.
(property name: com.sun.identity.agents.config.encode.cookie.special.chars.enable)  <br>Hot-swap:
Yes",
      "propertyOrder" : 14000,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "cdsso" : {
      "title" : "Cross Domain SSO",
      "description" : "Enables Cross-Domain Single Sign On. (property name:
com.sun.identity.agents.config.cdsso.enable) <br>Hot-swap: Yes",
      "propertyOrder" : 16700,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "debugLogRotation" : {
      "title" : "Agent Debug File Rotation",
      "description" : "Debug file gets rotated based on the size specified. (property name:
com.sun.identity.agents.config.debug.file.rotate) <br>Hot-swap: Yes",
      "propertyOrder" : 22000,
```


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```
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "cookieResetList" : {
      "title" : "Cookies Reset Name List",
      "description" : "List of cookies in the format: name[=value][;Domain=value]. (property name:
com.sun.identity.agents.config.cookie.reset) <br>Hot-swap: Yes <br> Examples: <br> Cookie1 <br>
Cookie2=value;Domain=subdomain.domain.com",
      "propertyOrder" : 16600,
      "items" : {
        "type" : "string"
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "array",
          "required" : true
        }
      }
    },
    "continuousSecurityCookies" : {
      "title" : "Continuous Security Cookies",
      "description" : "The name of the cookies to be sent as part of the payload during policy
evaluation, which can be accessed via the 'environment' variable in a policy script. The 'key' is
the name of the cookie to be sent, and the 'value' is the name which it will appear as in the policy
evaluation script. It is possible to map multiple cookies to the same name (they will simply appear
as an array in the evaluation script). If the cookie doesn't exist, then the empty string will be
sent.",
      "propertyOrder" : 3210,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "object",
          "required" : true
```


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```
        }
      }
    },
    "status" : {
      "title" : "Status",
      "description" : "Status of the agent configuration.",
      "propertyOrder" : 200,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "jwtName" : {
      "title" : "JWT Cookie Name",
      "description" : "The name used by the agent to set the OIDC JWT on the user's browser. (Agent 5
only).",
      "propertyOrder" : 12106,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "debugRotationSize" : {
      "title" : "Agent Debug File Size",
      "description" : "Agent debug file size in bytes. (property name:
com.sun.identity.agents.config.debug.file.size) <br>Hot-swap: Yes",
      "propertyOrder" : 22100,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "integer",
          "required" : true
        }
      }
    },
    "agentNotificationUrl" : {
      "title" : "Agent Notification URL",
```


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```
      "description" : "(Not used in Agent 5 onwards) <br>URL used by agent to register notification
listeners. (property name: com.sun.identity.client.notification.url) <br>Hot-swap: No",
      "propertyOrder" : 14200,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "userpassword" : {
      "title" : "Password",
      "description" : "",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "string",
      "format" : "password",
      "exampleValue" : ""
    },
    "cdssoRedirectUri" : {
      "title" : "CDSSO Redirect URI",
      "description" : "An intermediate URI that is used by the Agent for processing CDSSO requests.
(property name: com.sun.identity.agents.config.cdsso.redirect.uri) <br>Hot-swap: Yes",
      "propertyOrder" : 17550,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "retrieveClientHostname" : {
      "title" : "Retrieve Client Hostname",
      "description" : "Gets the client's hostname through DNS reverse lookup for use in policy
evaluation. (property name: com.sun.identity.agents.config.get.client.host.name) <br>Hot-swap: Yes",
      "propertyOrder" : 18300,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
```


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```
      }
    },
    "sessionAttributeFetchMode" : {
      "title" : "Session Attribute Fetch Mode",
      "description" : "(property name: com.sun.identity.agents.config.session.attribute.fetch.mode)
 <br>Hot-swap: Yes",
      "propertyOrder" : 15000,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "idleSessionTimeoutUrl" : {
      "title" : "Idle Session Timeout Page URL",
      "description" : "URL of the local idle session timeout page. (property name:
 com.sun.identity.agents.config.iis.owa.enable.session.timeout.url)",
      "propertyOrder" : 20400,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "gotoParameterName" : {
      "title" : "Goto Parameter Name",
      "description" : "Property used only when CDSSO is enabled. Default value should
 be changed only when the login URL has a landing page specified <br> Example :
 com.sun.identity.agents.config.cdsso.cdcservlet.url = http://host:port/opensso/cdcservlet?
goto=http://agent:port/landing.jsp <br> The parameter is used by the Agent to append the original
 request URL to this cdcserlet URL. This parameter is consumed by the landing page to redirect to
 the original URL. (property name: com.sun.identity.agents.config.redirect.param) <br>Hot-swap: Yes
 <br> Example: com.sun.identity.agents.config.redirect.param = goto2<br> The complete URL sent for
 authentication will be <br> http://host:port/opensso/cdcservlet?goto=http://agent:port/landing.jsp?
goto2=http://agent.port/original.jsp",
      "propertyOrder" : 3600,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
```


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```
          "required" : true
        }
      }
    },
    "policyEvaluationApplication" : {
      "title" : "Application",
      "description" : "Which application contains the policies to evaluate with (property name:
org.forgerock.openam.agents.config.policy.evaluation.application) <br>Hot-swap: Yes",
      "propertyOrder" : 21200,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "cookieResetEnabled" : {
      "title" : "Cookie Reset",
      "description" : "Agent reset cookies in the response before redirecting to authentication.
(property name: com.sun.identity.agents.config.cookie.reset.enable) <br>Hot-swap: Yes",
      "propertyOrder" : 16500,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "filterConfiguredWithOwa" : {
      "title" : "Filter configured with OWA",
      "description" : "Set to true if the IIS agent filter is configured for OWA. (property name:
com.sun.identity.agents.config.iis.owa.enable)",
      "propertyOrder" : 20200,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "replayPasswordKey" : {
```


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```
      "title" : "Replay Password Key",
      "description" : "DES key for decrypting the basic authentication password in the session.
(property name: com.sun.identity.agents.config.replaypasswd.key)",
      "propertyOrder" : 20000,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "responseAttributeMap" : {
      "title" : "Response Attribute Map",
      "description" : "Maps the policy response attributes to be populated
under specific names for the currently authenticated user. (property name:
com.sun.identity.agents.config.response.attribute.mapping) <br>Hot-swap: Yes <br> Example: <br> To
populate the value of response attribute uid under name CUSTOM-USER-NAME: enter uid in Map Key field,
and enter CUSTOM-USER-NAME in Corresponding Map Value field.",
      "propertyOrder" : 15300,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "object",
          "required" : true
        }
      }
    },
    "userIdParameterType" : {
      "title" : "User ID Parameter Type",
      "description" : "User ID can be fetched from either SESSION and LDAP attributes. (property name:
com.sun.identity.agents.config.userid.param.type) <br>Hot-swap: Yes",
      "propertyOrder" : 14700,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
```


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```
      }
    },
    "primaryServerPollingPeriod" : {
      "title" : "Polling Period for Primary Server",
      "description" : "Interval in minutes, agent polls to check the primary server is up and running.
(property name: com.sun.identity.agents.config.poll.primary.server) <br>Hot-swap: No",
      "propertyOrder" : 19200,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "integer",
          "required" : true
        }
      }
    },
    "ssoOnlyMode" : {
      "title" : "SSO Only Mode",
      "description" : "Agent will just enforce authentication (SSO), but no authorization for
policies. (property name: com.sun.identity.agents.config.sso.only) <br>Hot-swap: Yes",
      "propertyOrder" : 16000,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "useLtpaToken" : {
      "title" : "Use LTPA token",
      "description" : "Set to true if agent needs to use LTPA Token. (property name:
com.sun.identity.agents.config.domino.ltpa.enable)",
      "propertyOrder" : 20600,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "amLoginUrl" : {
      "title" : "OpenAM Login URL",
```


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```
      "description" : "OpenAM login page URL. (property name:
 com.sun.identity.agents.config.login.url) <br>Hot-swap: Yes <br> Example: <br> http://host:port/
opensso/UI/Login",
      "propertyOrder" : 15700,
      "items" : {
        "type" : "string"
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "array",
          "required" : true
        }
      }
    },
    "localAuditRotationSize" : {
      "title" : "Local Audit Log Rotation Size",
      "description" : "Size limit in bytes when a local audit log file is rotated to a new file.
 (property name: com.sun.identity.agents.config.local.log.size) <br>Hot-swap: Yes",
      "propertyOrder" : 21800,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "integer",
          "required" : true
        }
      }
    },
    "fqdnMapping" : {
      "title" : "FQDN Virtual Host Map",
      "description" : "Maps virtual, invalid, or partial hostnames, and IP addresses to the FQDN to
 access protected resources. (property name: com.sun.identity.agents.config.fqdn.mapping) <br>Hot-
swap: Yes <br> Examples: <br>  To map the partial hostname myserver to myserver.mydomain.com: enter
 myserver in the Map Key field and myserver.mydomain.com in the Corresponding Map Value field. To map
 a virtual server rst.hostname.com that points to the actual server abc.hostname.com: enter valid1 in
 the Map Key field and rst.hostname.com in the Corresponding Map Value field.",
      "propertyOrder" : 16400,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
```


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```
        "value" : {
          "type" : "object",
          "required" : true
        }
      }
    },
    "loadBalanced" : {
      "title" : "Load Balancer Setup",
      "description" : "Set to true if a load balancer is used for OpenAM services. (property name:
com.sun.identity.agents.config.load.balancer.enable) <br>Hot-swap: No",
      "propertyOrder" : 15400,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "clientHostnameHeader" : {
      "title" : "Client Hostname Header",
      "description" : "HTTP header name that holds the Hostname of the client. (property name:
com.sun.identity.agents.config.client.hostname.header) <br>Hot-swap: Yes",
      "propertyOrder" : 1100,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "ssoCachePollingInterval" : {
      "title" : "SSO Cache Polling Period",
      "description" : "Polling interval in minutes to refresh agent's sso cache. (property name:
com.sun.identity.agents.config.sso.cache.polling.interval) <br>Hot-swap: No",
      "propertyOrder" : 14500,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "integer",
          "required" : true
        }
      }
```


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```
    },
    "profileAttributesCookieMaxAge" : {
      "title" : "Profile Attributes Cookie Maxage",
      "description" : "Maxage of attributes cookie headers. (property name:
com.sun.identity.agents.config.profile.attribute.cookie.maxage) <br>Hot-swap: Yes",
      "propertyOrder" : 17900,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "integer",
          "required" : true
        }
      }
    },
    "secureCookies" : {
      "title" : "Cookie Security",
      "description" : "Agent sends secure cookies if communication is secure. (property name:
com.sun.identity.agents.config.cookie.secure) <br>Hot-swap: No",
      "propertyOrder" : 13800,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "cdssoRootUrl" : {
      "title" : "Agent Root URL for CDSSO",
      "description" : "The agent root URL for CDSSO. The valid value is in the following format:
<br>protocol://hostname:port/<br> The protocol represents the protocol used, such as http or https.
The hostname represents the host name of the machine on which the agent resides. The port represents
the port number on which the agent is installed. The slash following the port number is required.",
      "propertyOrder" : 22700,
      "items" : {
        "type" : "string"
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "array",
          "required" : true
        }
      }
```


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```
    },
    "checkUserInDomino" : {
      "title" : "Check User in Domino Database",
      "description" : "If true, agent checks user existence in Domino name database. (property name:
 com.sun.identity.agents.config.domino.check.name.database)",
      "propertyOrder" : 20500,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "logoutRedirectUrl" : {
      "title" : "Logout Redirect URL",
      "description" : "User gets redirected to this url after logout. (property name:
 com.sun.identity.agents.config.logout.redirect.url). This property should be specified along with the
 above Logout URL List.<br>Hot-swap: Yes",
      "propertyOrder" : 22300,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "notEnforcedIps" : {
      "title" : "Not Enforced Client IP List",
      "description" : "No authentication and authorization are required for the requests coming from
 these client IP addresses. (property name: com.sun.identity.agents.config.notenforced.ip) <br>Hot-
swap: Yes <br> Examples: <br> 192.18.145.* <br> 192.18.146.123",
      "propertyOrder" : 17200,
      "items" : {
        "type" : "string"
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "array",
          "required" : true
        }
      }
```


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```
    },
    "anonymousUserEnabled" : {
      "title" : "Anonymous User",
      "description" : "Enable/Disable REMOTE_USER processing for anonymous users. (property name:
com.sun.identity.agents.config.anonymous.user.enable) <br>Hot-swap: Yes",
      "propertyOrder" : 16900,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "agentDebugLevel" : {
      "title" : "Agent Debug Level",
      "description" : "Agent debug level. (property name: com.sun.identity.agents.config.debug.level)
<br>Hot-swap: Yes",
      "propertyOrder" : 21900,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "remoteLogFilename" : {
      "title" : "Remote Log Filename",
      "description" : "(Not used in Agent 5 onwards) <br>Name of file stored on OpenAM server that
contains agent audit messages. (property name: com.sun.identity.agents.config.remote.logfile)
<br>Hot-swap: No",
      "propertyOrder" : 21500,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "auditLogLocation" : {
      "title" : "Audit Log Location",
```


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```
      "description" : "Specifies where audit messages should be logged. (property name:
com.sun.identity.agents.config.log.disposition) <br>Hot-swap: Yes",
      "propertyOrder" : 21400,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "cdssoCookieDomain" : {
      "title" : "Cookies Domain List",
      "description" : "List of domains in which cookies have to be set in CDSSO. (property name:
com.sun.identity.agents.config.cdsso.cookie.domain) <br>Hot-swap: Yes <br> Example: <br> .sun.com",
      "propertyOrder" : 17600,
      "items" : {
        "type" : "string"
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "array",
          "required" : true
        }
      }
    },
    "remoteLogSendInterval" : {
      "title" : "Remote Audit Log Interval",
      "description" : "Periodic interval in minutes in which audit log messages are sent to remote log
file. (property name: com.sun.identity.agents.config.remote.log.interval) <br>Hot-swap: No",
      "propertyOrder" : 21600,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "integer",
          "required" : true
        }
      }
    },
    "fqdnCheck" : {
      "title" : "FQDN Check",
      "description" : "Enables checking of fqdn default value and fqdn map values. (property name:
com.sun.identity.agents.config.fqdn.check.enable) <br>Hot-swap: Yes",
```


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```
      "propertyOrder" : 16200,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "policyCachePollingInterval" : {
      "title" : "Policy Cache Polling Period",
      "description" : "Polling interval in minutes to refresh agent's policy cache. (property name:
 com.sun.identity.agents.config.policy.cache.polling.interval) <br>Hot-swap: No",
      "propertyOrder" : 14400,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "integer",
          "required" : true
        }
      }
    },
    "fetchPoliciesFromRootResource" : {
      "title" : "Fetch Policies from Root Resource",
      "description" : "Agent caches policy decision of the resource and all resources from the root of
 the resource down. (property name: com.sun.identity.agents.config.fetch.from.root.resource) <br>Hot-
swap: No",
      "propertyOrder" : 18200,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "ltpaTokenConfigurationname" : {
      "title" : "LTPA Token Configuration Name",
      "description" : "The configuration name that the agent uses in order to employ the LTPA token
 mechanism. (property name: com.sun.identity.agents.config.domino.ltpa.config.name)",
      "propertyOrder" : 20800,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
```


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```
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "configurationPollingInterval" : {
      "title" : "Configuration Reload Interval",
      "description" : "Interval in minutes to fetch agent configuration from OpenAM. (property name:
com.sun.identity.agents.config.polling.interval) <br>Hot-swap: No",
      "propertyOrder" : 19500,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "integer",
          "required" : true
        }
      }
    },
    "userIdParameter" : {
      "title" : "User ID Parameter",
      "description" : "Agent sets value of User Id to REMOTE_USER server variable. (property name:
com.sun.identity.agents.config.userid.param) <br>Hot-swap: Yes",
      "propertyOrder" : 14600,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "auditAccessType" : {
      "title" : "Audit Access Types",
      "description" : "Types of messages to log based on user URL access attempts. (property name:
com.sun.identity.agents.config.audit.accesstype) <br>Hot-swap: Yes",
      "propertyOrder" : 21300,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
```


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```
          "type" : "string",
          "required" : true
        }
      }
    },
    "repositoryLocation" : {
      "title" : "Location of Agent Configuration Repository",
      "description" : "Indicates agent's configuration located either on agent's host or centrally on
OpenAM server.",
      "propertyOrder" : 400,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "profileAttributeFetchMode" : {
      "title" : "Profile Attribute Fetch Mode",
      "description" : "(property name: com.sun.identity.agents.config.profile.attribute.fetch.mode)
<br>Hot-swap: Yes",
      "propertyOrder" : 14800,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "anonymousUserId" : {
      "title" : "Anonymous User Default Value",
      "description" : "User id of unauthenticated users. (property name:
com.sun.identity.agents.config.anonymous.user.id) <br>Hot-swap: Yes",
      "propertyOrder" : 16800,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
```


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```
   "notificationsEnabled" : {
     "title" : "Enable Notifications",
     "description" : "The notifications help in maintaining agent's sso, policy and configuration
caches. (property name: com.sun.identity.agents.config.notification.enable) <br>Hot-swap: No",
     "propertyOrder" : 14100,
     "type" : "object",
     "exampleValue" : "",
     "properties" : {
       "inherited" : {
         "type" : "boolean",
         "required" : true
       },
       "value" : {
         "type" : "boolean",
         "required" : true
       }
     }
   },
   "profileAttributesCookiePrefix" : {
     "title" : "Profile Attributes Cookie Prefix",
     "description" : "Sets cookie prefix in the attributes headers. (property name:
com.sun.identity.agents.config.profile.attribute.cookie.prefix) <br>Hot-swap: Yes",
     "propertyOrder" : 17800,
     "type" : "object",
     "exampleValue" : "",
     "properties" : {
       "inherited" : {
         "type" : "boolean",
         "required" : true
       },
       "value" : {
         "type" : "string",
         "required" : true
       }
     }
   },
   "fqdnDefault" : {
     "title" : "FQDN Default",
     "description" : "Fully qualified hostname that the users should use in order to access
resources. (property name: com.sun.identity.agents.config.fqdn.default) <br>Hot-swap: Yes",
     "propertyOrder" : 16300,
     "type" : "object",
     "exampleValue" : "",
     "properties" : {
       "inherited" : {
         "type" : "boolean",
         "required" : true
       },
       "value" : {
         "type" : "string",
         "required" : true
       }
     }
   },
   "sessionAttributeMap" : {
     "title" : "Session Attribute Map",
     "description" : "Maps the session attributes to be populated under
specific names for the currently authenticated user. (property name:
com.sun.identity.agents.config.session.attribute.mapping) <br>Hot-swap: Yes  <br> Example: <br>  To
```


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```
populate the value of session attribute UserToken under name CUSTOM-userid: enter UserToken in Map
Key field, and enter CUSTOM-userid in Corresponding Map Value field.",
     "propertyOrder" : 15100,
     "patternProperties" : {
       ".*" : {
         "type" : "string"
       }
     },
     "type" : "object",
     "exampleValue" : "",
     "properties" : {
       "inherited" : {
         "type" : "boolean",
         "required" : true
       },
       "value" : {
         "type" : "object",
         "required" : true
       }
     }
   },
   "postDataCachePeriod" : {
     "title" : "POST Data Entries Cache Period",
     "description" : "POST cache entry lifetime in minutes. (property name:
com.sun.identity.agents.config.postcache.entry.lifetime) <br>Hot-swap: Yes",
     "propertyOrder" : 17400,
     "type" : "object",
     "exampleValue" : "",
     "properties" : {
       "inherited" : {
         "type" : "boolean",
         "required" : true
       },
       "value" : {
         "type" : "integer",
         "required" : true
       }
     }
   },
   "changeProtocolToHttps" : {
     "title" : "Change URL Protocol to https",
     "description" : "If true, avoids IE6 security pop-ups. (property name:
com.sun.identity.agents.config.iis.owa.enable.change.protocol)",
     "propertyOrder" : 20300,
     "type" : "object",
     "exampleValue" : "",
     "properties" : {
       "inherited" : {
         "type" : "boolean",
         "required" : true
       },
       "value" : {
         "type" : "boolean",
         "required" : true
       }
     }
   },
   "ignorePathInfoForNotEnforcedUrls" : {
     "title" : "Ignore Path Info for Not Enforced URLs",
```


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```
      "description" : "Indicate whether the path info and query should be stripped from the request
URL before being compared with the URLs of the not enforced list when those URLs have a wildcard '*'
character.  (property name: com.sun.identity.agents.config.ignore.path.info.for.not.enforced.list)
<br>Hot-swap: Yes",
      "propertyOrder" : 13900,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "webSocketConnectionIntervalInMinutes" : {
      "title" : "Web Socket Connection Interval",
      "description" : "Interval in minutes by which agents reopen their web socket connection to
ensure a fair distribution of connections across OpenAM servers. (Agent 5 only).",
      "propertyOrder" : 12105,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "configurationCleanupInterval" : {
      "title" : "Configuration Cleanup Interval",
      "description" : "Interval in minutes to cleanup old agent configuration entries. (property name:
com.sun.identity.agents.config.cleanup.interval) <br>Hot-swap: No",
      "propertyOrder" : 19600,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "integer",
          "required" : true
        }
      }
    },
    "profileAttributeMap" : {
      "title" : "Profile Attribute Map",
      "description" : "Maps the profile attributes to be populated under
specific names for the currently authenticated user. (property name:
com.sun.identity.agents.config.profile.attribute.mapping) <br>Hot-swap: Yes <br> Example: <br> To
```


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```
 populate the value of profile attribute cn under name CUSTOM-Common-Name: enter cn in Map Key field,
 and enter CUSTOM-Common-Name in Corresponding Map Value field. <br> To populate the value of profile
 attribute mail under name CUSTOM-Email: enter mail in Map Key field, and enter CUSTOM-Email in
 Corresponding Map Value field.",
      "propertyOrder" : 14900,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "object",
          "required" : true
        }
      }
    },
    "amLogoutUrl" : {
      "title" : "OpenAM Logout URL",
      "description" : "OpenAM logout page URL. (property name:
 com.sun.identity.agents.config.logout.url) <br>Hot-swap: Yes <br> Example: <br> http://host:port/
opensso/UI/Logout",
      "propertyOrder" : 12400,
      "items" : {
        "type" : "string"
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "array",
          "required" : true
        }
      }
    },
    "continuousSecurityHeaders" : {
      "title" : "Continuous Security Headers",
      "description" : "The name of the headers in the user's original request, that will be sent
 as part of the payload during policy evaluation, which can then be accessed via the 'environment'
 variable in a policy script. The 'key' is the name of the header to be sent, and the 'value' is the
 name which it will appear as in the policy evaluation script.It is possible to map multiple headers
 to the same name (they will simply appear as an array in the evaluation script). If the header
 doesn't exist, then the empty string will be sent.",
      "propertyOrder" : 3211,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
```


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```
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "object",
          "required" : true
        }
      }
    },
    "overrideRequestProtocol" : {
      "title" : "Override Request URL Protocol",
      "description" : "Set to true if the agent is sitting behind a ssl/tls off-
loader, load balancer, or proxy to override the protocol with the value from
 the property com.sun.identity.agents.config.agenturi.prefix. (property name:
 com.sun.identity.agents.config.override.protocol) <br>Hot-swap: Yes",
      "propertyOrder" : 18700,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "clientIpValidation" : {
      "title" : "Client IP Validation",
      "description" : "This validates if the subsequent browser requests come from
 the same ip address that the SSO token is initially issued against. (property name:
 com.sun.identity.agents.config.client.ip.validation.enable) <br>Hot-swap: Yes",
      "propertyOrder" : 17700,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "agentConfigChangeNotificationsEnabled" : {
      "title" : "Agent Configuration Change Notification",
      "description" : "Enable agent to receive notification messages from OpenAM server for
 configuration changes. (property name: com.sun.identity.agents.config.change.notification.enable)
 <br>Hot-swap: Yes",
      "propertyOrder" : 12100,
      "type" : "object",
```


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```
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "ltpaTokenOrganizationName" : {
      "title" : "LTPA Token Organization Name",
      "description" : "The organization name to which the LTPA token belongs. (property name:
com.sun.identity.agents.config.domino.ltpa.org.name)",
      "propertyOrder" : 20900,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "fetchAttributesForNotEnforcedUrls" : {
      "title" : "Fetch Attributes for Not Enforced URLs",
      "description" : "Agent fetches profile attributes for not enforced urls by doing policy
evaluation. (property name: com.sun.identity.agents.config.notenforced.url.attributes.enable)
<br>Hot-swap: Yes",
      "propertyOrder" : 19800,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "ignorePathInfo" : {
      "title" : "Ignore Path Info in Request URL",
      "description" : "The path info will be stripped from the request URL while doing Not
Enforced List check and url policy evaluation if the value is set to true. (property name:
com.sun.identity.agents.config.ignore.path.info) <br>Hot-swap: Yes",
      "propertyOrder" : 18600,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
```


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```
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "authenticationType" : {
      "title" : "Authentication Type",
      "description" : "(property name: com.sun.identity.agents.config.iis.auth.type)",
      "propertyOrder" : 19900,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "encodeUrlSpecialCharacters" : {
      "title" : "Encode URL's Special Characters",
      "description" : "Encodes the url which has special characters before doing policy evaluation.
 (property name: com.sun.identity.agents.config.encode.url.special.chars.enable) <br>Hot-swap: Yes",
      "propertyOrder" : 18500,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "encodeProfileAttributes" : {
      "title" : "Native Encoding of Profile Attributes",
      "description" : "Agent encodes the ldap header values in the default encoding of OS locale. If
 false, UTF-8 gets used. (property name: com.sun.identity.agents.config.convert.mbyte.enable) <br>Hot-
swap: Yes",
      "propertyOrder" : 18400,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
```


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```
          "required" : true
        }
      }
    },
    "cdssoUrls" : {
      "title" : "CDSSO Servlet URL",
      "description" : "List of URLs of the available CDSSO controllers that may be used by the Agent
 for CDSSO processing. (property name: com.sun.identity.agents.config.cdsso.cdcservlet.url) <br>Hot-
swap: Yes  <br> Example: <br> http://host:port/opensso/cdcservlet",
      "propertyOrder" : 17500,
      "items" : {
        "type" : "string"
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "array",
          "required" : true
        }
      }
    },
    "showPasswordInHeader" : {
      "title" : "Show Password in HTTP Header",
      "description" : "Set to true if encrypted password should be set in HTTP header AUTH_PASSWORD.
 (property name: com.sun.identity.agents.config.iis.password.header)",
      "propertyOrder" : 22800,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "ignorePreferredNamingUrl" : {
      "title" : "Ignore Preferred Naming URL in Naming Request",
      "description" : "Agent uses this value to send preferred naming url in the naming request.
 (property name: com.sun.identity.agents.config.ignore.preferred.naming.url) <br>Hot-swap: Yes",
      "propertyOrder" : 15600,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
```


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```
        }
      }
    },
    "invertNotEnforcedUrls" : {
      "title" : "Invert Not Enforced URLs",
      "description" : "Only not enforced list of urls will be enforced. (property name:
 com.sun.identity.agents.config.notenforced.url.invert) <br>Hot-swap: Yes",
      "propertyOrder" : 17100,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "notEnforcedUrls" : {
      "title" : "Not Enforced URLs",
      "description" : "List of urls for which no authentication required. (property name:
 com.sun.identity.agents.config.notenforced.url) <br>Hot-swap: Yes <br> Example: <br> http://
myagent.mydomain.com/*.gif",
      "propertyOrder" : 17000,
      "items" : {
        "type" : "string"
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "array",
          "required" : true
        }
      }
    },
    "agentLocale" : {
      "title" : "Agent Locale",
      "description" : "The default locale for the product. (property name:
 com.sun.identity.agents.config.locale) <br>Hot-swap: No",
      "propertyOrder" : 19300,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
```


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```
      }
    },
    "policyClockSkew" : {
      "title" : "Policy Clock Skew",
      "description" : "Time in seconds used adjust time difference between Agent machine
and OpenAM. Clock skew in seconds = AgentTime - OpenAMServerTime. (property name:
com.sun.identity.agents.config.policy.clock.skew) <br>Hot-swap: No",
      "propertyOrder" : 21000,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "integer",
          "required" : true
        }
      }
    },
    "overrideProxyHostAndPort" : {
      "title" : "Override Proxy Server's Host and Port",
      "description" : "(property name: com.sun.identity.agents.config.proxy.override.host.port)
<br>Hot-swap: No",
      "propertyOrder" : 19400,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "agentConnectionTimeout" : {
      "title" : "Agent Connection Timeout",
      "description" : "Timeout period in seconds for an agent connection with OpenAM auth server.
(property name: com.sun.identity.agents.config.auth.connection.timeout) <br>Hot-swap: Yes",
      "propertyOrder" : 19100,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "integer",
          "required" : true
        }
      }
    },
    "policyEvaluationRealm" : {
      "title" : "Realm",
```


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```
      "description" : "Which realm to start evaluating from (property name:
 org.forgerock.openam.agents.config.policy.evaluation.realm) <br>Hot-swap: Yes",
      "propertyOrder" : 21100,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "applicationLogoutUrls" : {
      "title" : "Logout URL List",
      "description" : "List of application logout URLs. User gets logged out from OpenAM session
 when these urls accessed. (property name: com.sun.identity.agents.config.agent.logout.url). If this
 property is used, user should specify a value for the below Logout Redirect URL property.<br>Hot-
swap: Yes <br> Example: <br> http://myagent.mydomain.com/logout.html",
      "propertyOrder" : 18000,
      "items" : {
        "type" : "string"
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "array",
          "required" : true
        }
      }
    },
    "responseAttributeFetchMode" : {
      "title" : "Response Attribute Fetch Mode",
      "description" : "(property name: com.sun.identity.agents.config.response.attribute.fetch.mode)
 <br>Hot-swap: Yes",
      "propertyOrder" : 15200,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "logoutResetCookies" : {
      "title" : "Logout Cookies List for Reset",
```


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```
      "description" : "Any cookies to be reset upon logout in the same format as cookie reset list.
 (property name: com.sun.identity.agents.config.logout.cookie.reset) <br>Hot-swap: Yes <br> Cookie1
 <br> Cookie2=value;Domain=subdomain.domain.com",
      "propertyOrder" : 18100,
      "items" : {
        "type" : "string"
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "array",
          "required" : true
        }
      }
    }
  }
}
```

1.180.1.2. delete

Usage:

```
am> delete WebAgents --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.180.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action WebAgents --realm Realm --actionName getAllTypes
```

1.180.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action WebAgents --realm Realm --actionName getCreatableTypes
```


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1.180.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action WebAgents --realm Realm --actionName nextdescendents
```

1.180.1.6. query

Querying the agents of a specific type

Usage:

```
am> query WebAgents --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.180.1.7. read

Usage:

```
am> read WebAgents --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.180.1.8. update

Usage:

```
am> update WebAgents --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

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--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "filterPriority" : {
      "title" : "Filter Priority",
      "description" : "The loading priority of filter. (property name:
 com.sun.identity.agents.config.iis.filter.priority)",
      "propertyOrder" : 20100,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "clientIpHeader" : {
      "title" : "Client IP Address Header",
      "description" : "HTTP header name that holds the IP address of the client. (property name:
 com.sun.identity.agents.config.client.ip.header) <br>Hot-swap: Yes",
      "propertyOrder" : 1000,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "overrideNotificationUrl" : {
      "title" : "Override Notification URL",
      "description" : "Set to true if the agent is sitting behind a ssl/tls
 off-loader, load balancer, or proxy to override the URL with the value from
 the property com.sun.identity.agents.config.agenturi.prefix. (property name:
 com.sun.identity.agents.config.override.notification.url) <br>Hot-swap: Yes",
      "propertyOrder" : 19000,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
```


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```
          "required" : true
        }
      }
    },
    "overrideRequestPort" : {
      "title" : "Override Request URL Port",
      "description" : "Set to true if the agent is sitting behind a ssl/tls
 off-loader, load balancer, or proxy to override the port with the value from
 the property com.sun.identity.agents.config.agenturi.prefix. (property name:
 com.sun.identity.agents.config.override.port) <br>Hot-swap: Yes",
      "propertyOrder" : 18900,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "ignoreServerCheck" : {
      "title" : "Ignore Server Check",
      "description" : "Agent uses this value to check OpenAM is up before doing a 302 redirect.
 (property name: com.sun.identity.agents.config.ignore.server.check) <br>Hot-swap: Yes",
      "propertyOrder" : 15500,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "customProperties" : {
      "title" : "Custom Properties",
      "description" : "Additional properties that allow users to augment the set of properties
 supported by agent. (property name: com.sun.identity.agents.config.freeformproperties) <br>Hot-
swap: Yes <br> Examples: <br> customproperty=custom-value1 <br> customlist[0]=customlist-
value-0 <br> customlist[1]=customlist-value-1 <br> custommap[key1]=custommap-value-1 <br>
 custommap[key2]=custommap-value-2",
      "propertyOrder" : 19700,
      "items" : {
        "type" : "string"
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
```


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```
        },
        "value" : {
          "type" : "array",
          "required" : true
        }
      }
    },
    "overrideRequestHost" : {
      "title" : "Override Request URL Host",
      "description" : "Set to true if the agent is sitting behind a ssl/tls
off-loader, load balancer, or proxy to override the host with the value from
the property com.sun.identity.agents.config.agenturi.prefix. (property name:
com.sun.identity.agents.config.override.host) <br>Hot-swap: Yes",
      "propertyOrder" : 18800,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "cookieName" : {
      "title" : "Cookie Name",
      "description" : "Name of the SSO Token cookie used between the OpenAM server and the Agent.
(property name: com.sun.identity.agents.config.cookie.name)<br>Hot-swap: No",
      "propertyOrder" : 13700,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "logonAndImpersonation" : {
      "title" : "Logon and Impersonation",
      "description" : "Set to true if agent should do Windows Logon and User Impersonation. (property
name: com.sun.identity.agents.config.iis.logonuser)",
      "propertyOrder" : 22900,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
```


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```
          "required" : true
        }
      }
    },
    "caseInsensitiveUrlComparison" : {
      "title" : "URL Comparison Case Sensitivity Check",
      "description" : "Enforces case insensitivity in both policy and not enforced url evaluation.
(property name: com.sun.identity.agents.config.url.comparison.case.ignore) <br>Hot-swap: Yes",
      "propertyOrder" : 14300,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "attributeMultiValueSeparator" : {
      "title" : "Attribute Multi Value Separator",
      "description" : "Specifies separator for multiple values. Applies to all
types of attributes i.e. profile, session and response attributes. (property name:
com.sun.identity.agents.config.attribute.multi.value.separator) <br>Hot-swap: Yes",
      "propertyOrder" : 22200,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "postDataPreservation" : {
      "title" : "POST Data Preservation",
      "description" : "Enables POST data preservation. (property name:
com.sun.identity.agents.config.postdata.preserve.enable) <br> Note that this feature is not supported
in all the web agents. Please refer individual agents documentation for more details. <br>Hot-swap:
Yes",
      "propertyOrder" : 17300,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
```


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```
      }
    },
    "accessDeniedUrl" : {
      "title" : "Resources Access Denied URL",
      "description" : "The URL of the customized access denied page. (property name:
com.sun.identity.agents.config.access.denied.url) <br>Hot-swap: Yes",
      "propertyOrder" : 16100,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "localAuditLogRotation" : {
      "title" : "Rotate Local Audit Log",
      "description" : "Flag to indicate that audit log files should be rotated when reaching a certain
size. (property name: com.sun.identity.agents.config.local.log.rotate) <br>Hot-swap: Yes",
      "propertyOrder" : 21700,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "agentUriPrefix" : {
      "title" : "Agent Deployment URI Prefix",
      "description" : "(property name: com.sun.identity.agents.config.agenturi.prefix)<br>Hot-swap:
Yes",
      "propertyOrder" : 15800,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "ltpaTokenCookieName" : {
      "title" : "LTPA Token Cookie Name",
```


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```
      "description" : "The name of the cookie that contains the LTPA token. (property name:
com.sun.identity.agents.config.domino.ltpa.cookie.name)",
      "propertyOrder" : 20700,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "encodeSpecialCharsInCookies" : {
      "title" : "Encode special chars in Cookies",
      "description" : "Encode special chars in cookie by URL encoding. Useful when profile, session
and response attributes contain special chars and attributes fetch mode is set to HTTP_COOKIE.
(property name: com.sun.identity.agents.config.encode.cookie.special.chars.enable)  <br>Hot-swap:
Yes",
      "propertyOrder" : 14000,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "cdsso" : {
      "title" : "Cross Domain SSO",
      "description" : "Enables Cross-Domain Single Sign On. (property name:
com.sun.identity.agents.config.cdsso.enable) <br>Hot-swap: Yes",
      "propertyOrder" : 16700,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "debugLogRotation" : {
      "title" : "Agent Debug File Rotation",
      "description" : "Debug file gets rotated based on the size specified. (property name:
com.sun.identity.agents.config.debug.file.rotate) <br>Hot-swap: Yes",
      "propertyOrder" : 22000,
```


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```
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "cookieResetList" : {
      "title" : "Cookies Reset Name List",
      "description" : "List of cookies in the format: name[=value][;Domain=value]. (property name:
com.sun.identity.agents.config.cookie.reset) <br>Hot-swap: Yes <br> Examples: <br> Cookie1 <br>
Cookie2=value;Domain=subdomain.domain.com",
      "propertyOrder" : 16600,
      "items" : {
        "type" : "string"
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "array",
          "required" : true
        }
      }
    },
    "continuousSecurityCookies" : {
      "title" : "Continuous Security Cookies",
      "description" : "The name of the cookies to be sent as part of the payload during policy
evaluation, which can be accessed via the 'environment' variable in a policy script. The 'key' is
the name of the cookie to be sent, and the 'value' is the name which it will appear as in the policy
evaluation script. It is possible to map multiple cookies to the same name (they will simply appear
as an array in the evaluation script). If the cookie doesn't exist, then the empty string will be
sent.",
      "propertyOrder" : 3210,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "object",
          "required" : true
```


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```
        }
      }
    },
    "status" : {
      "title" : "Status",
      "description" : "Status of the agent configuration.",
      "propertyOrder" : 200,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "jwtName" : {
      "title" : "JWT Cookie Name",
      "description" : "The name used by the agent to set the OIDC JWT on the user's browser. (Agent 5
only).",
      "propertyOrder" : 12106,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "debugRotationSize" : {
      "title" : "Agent Debug File Size",
      "description" : "Agent debug file size in bytes. (property name:
com.sun.identity.agents.config.debug.file.size) <br>Hot-swap: Yes",
      "propertyOrder" : 22100,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "integer",
          "required" : true
        }
      }
    },
    "agentNotificationUrl" : {
      "title" : "Agent Notification URL",
```


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```
      "description" : "(Not used in Agent 5 onwards) <br>URL used by agent to register notification
listeners. (property name: com.sun.identity.client.notification.url) <br>Hot-swap: No",
      "propertyOrder" : 14200,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "userpassword" : {
      "title" : "Password",
      "description" : "",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "string",
      "format" : "password",
      "exampleValue" : ""
    },
    "cdssoRedirectUri" : {
      "title" : "CDSSO Redirect URI",
      "description" : "An intermediate URI that is used by the Agent for processing CDSSO requests.
(property name: com.sun.identity.agents.config.cdsso.redirect.uri) <br>Hot-swap: Yes",
      "propertyOrder" : 17550,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "retrieveClientHostname" : {
      "title" : "Retrieve Client Hostname",
      "description" : "Gets the client's hostname through DNS reverse lookup for use in policy
evaluation. (property name: com.sun.identity.agents.config.get.client.host.name) <br>Hot-swap: Yes",
      "propertyOrder" : 18300,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
```


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```
      }
    },
    "sessionAttributeFetchMode" : {
      "title" : "Session Attribute Fetch Mode",
      "description" : "(property name: com.sun.identity.agents.config.session.attribute.fetch.mode)
 <br>Hot-swap: Yes",
      "propertyOrder" : 15000,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "idleSessionTimeoutUrl" : {
      "title" : "Idle Session Timeout Page URL",
      "description" : "URL of the local idle session timeout page. (property name:
 com.sun.identity.agents.config.iis.owa.enable.session.timeout.url)",
      "propertyOrder" : 20400,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "gotoParameterName" : {
      "title" : "Goto Parameter Name",
      "description" : "Property used only when CDSSO is enabled. Default value should
 be changed only when the login URL has a landing page specified <br> Example :
 com.sun.identity.agents.config.cdsso.cdcservlet.url = http://host:port/opensso/cdcservlet?
goto=http://agent:port/landing.jsp <br> The parameter is used by the Agent to append the original
 request URL to this cdcserlet URL. This parameter is consumed by the landing page to redirect to
 the original URL. (property name: com.sun.identity.agents.config.redirect.param) <br>Hot-swap: Yes
 <br> Example: com.sun.identity.agents.config.redirect.param = goto2<br> The complete URL sent for
 authentication will be <br> http://host:port/opensso/cdcservlet?goto=http://agent:port/landing.jsp?
goto2=http://agent.port/original.jsp",
      "propertyOrder" : 3600,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
```


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```
          "required" : true
        }
      }
    },
    "policyEvaluationApplication" : {
      "title" : "Application",
      "description" : "Which application contains the policies to evaluate with (property name:
org.forgerock.openam.agents.config.policy.evaluation.application) <br>Hot-swap: Yes",
      "propertyOrder" : 21200,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "cookieResetEnabled" : {
      "title" : "Cookie Reset",
      "description" : "Agent reset cookies in the response before redirecting to authentication.
(property name: com.sun.identity.agents.config.cookie.reset.enable) <br>Hot-swap: Yes",
      "propertyOrder" : 16500,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "filterConfiguredWithOwa" : {
      "title" : "Filter configured with OWA",
      "description" : "Set to true if the IIS agent filter is configured for OWA. (property name:
com.sun.identity.agents.config.iis.owa.enable)",
      "propertyOrder" : 20200,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "replayPasswordKey" : {
```


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```
      "title" : "Replay Password Key",
      "description" : "DES key for decrypting the basic authentication password in the session.
(property name: com.sun.identity.agents.config.replaypasswd.key)",
      "propertyOrder" : 20000,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "responseAttributeMap" : {
      "title" : "Response Attribute Map",
      "description" : "Maps the policy response attributes to be populated
under specific names for the currently authenticated user. (property name:
com.sun.identity.agents.config.response.attribute.mapping) <br>Hot-swap: Yes <br> Example: <br> To
populate the value of response attribute uid under name CUSTOM-USER-NAME: enter uid in Map Key field,
and enter CUSTOM-USER-NAME in Corresponding Map Value field.",
      "propertyOrder" : 15300,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "object",
          "required" : true
        }
      }
    },
    "userIdParameterType" : {
      "title" : "User ID Parameter Type",
      "description" : "User ID can be fetched from either SESSION and LDAP attributes. (property name:
com.sun.identity.agents.config.userid.param.type) <br>Hot-swap: Yes",
      "propertyOrder" : 14700,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
```


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```
      }
    },
    "primaryServerPollingPeriod" : {
      "title" : "Polling Period for Primary Server",
      "description" : "Interval in minutes, agent polls to check the primary server is up and running.
(property name: com.sun.identity.agents.config.poll.primary.server) <br>Hot-swap: No",
      "propertyOrder" : 19200,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "integer",
          "required" : true
        }
      }
    },
    "ssoOnlyMode" : {
      "title" : "SSO Only Mode",
      "description" : "Agent will just enforce authentication (SSO), but no authorization for
policies. (property name: com.sun.identity.agents.config.sso.only) <br>Hot-swap: Yes",
      "propertyOrder" : 16000,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "useLtpaToken" : {
      "title" : "Use LTPA token",
      "description" : "Set to true if agent needs to use LTPA Token. (property name:
com.sun.identity.agents.config.domino.ltpa.enable)",
      "propertyOrder" : 20600,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "amLoginUrl" : {
      "title" : "OpenAM Login URL",
```


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```
      "description" : "OpenAM login page URL. (property name:
 com.sun.identity.agents.config.login.url) <br>Hot-swap: Yes <br> Example: <br> http://host:port/
opensso/UI/Login",
      "propertyOrder" : 15700,
      "items" : {
        "type" : "string"
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "array",
          "required" : true
        }
      }
    },
    "localAuditRotationSize" : {
      "title" : "Local Audit Log Rotation Size",
      "description" : "Size limit in bytes when a local audit log file is rotated to a new file.
 (property name: com.sun.identity.agents.config.local.log.size) <br>Hot-swap: Yes",
      "propertyOrder" : 21800,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "integer",
          "required" : true
        }
      }
    },
    "fqdnMapping" : {
      "title" : "FQDN Virtual Host Map",
      "description" : "Maps virtual, invalid, or partial hostnames, and IP addresses to the FQDN to
 access protected resources. (property name: com.sun.identity.agents.config.fqdn.mapping) <br>Hot-
swap: Yes <br> Examples: <br>  To map the partial hostname myserver to myserver.mydomain.com: enter
 myserver in the Map Key field and myserver.mydomain.com in the Corresponding Map Value field. To map
 a virtual server rst.hostname.com that points to the actual server abc.hostname.com: enter valid1 in
 the Map Key field and rst.hostname.com in the Corresponding Map Value field.",
      "propertyOrder" : 16400,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
```


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```
        "value" : {
          "type" : "object",
          "required" : true
        }
      }
    },
    "loadBalanced" : {
      "title" : "Load Balancer Setup",
      "description" : "Set to true if a load balancer is used for OpenAM services. (property name:
com.sun.identity.agents.config.load.balancer.enable) <br>Hot-swap: No",
      "propertyOrder" : 15400,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "clientHostnameHeader" : {
      "title" : "Client Hostname Header",
      "description" : "HTTP header name that holds the Hostname of the client. (property name:
com.sun.identity.agents.config.client.hostname.header) <br>Hot-swap: Yes",
      "propertyOrder" : 1100,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "ssoCachePollingInterval" : {
      "title" : "SSO Cache Polling Period",
      "description" : "Polling interval in minutes to refresh agent's sso cache. (property name:
com.sun.identity.agents.config.sso.cache.polling.interval) <br>Hot-swap: No",
      "propertyOrder" : 14500,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "integer",
          "required" : true
        }
      }
```


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```
    },
    "profileAttributesCookieMaxAge" : {
      "title" : "Profile Attributes Cookie Maxage",
      "description" : "Maxage of attributes cookie headers. (property name:
com.sun.identity.agents.config.profile.attribute.cookie.maxage) <br>Hot-swap: Yes",
      "propertyOrder" : 17900,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "integer",
          "required" : true
        }
      }
    },
    "secureCookies" : {
      "title" : "Cookie Security",
      "description" : "Agent sends secure cookies if communication is secure. (property name:
com.sun.identity.agents.config.cookie.secure) <br>Hot-swap: No",
      "propertyOrder" : 13800,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "cdssoRootUrl" : {
      "title" : "Agent Root URL for CDSSO",
      "description" : "The agent root URL for CDSSO. The valid value is in the following format:
<br>protocol://hostname:port/<br> The protocol represents the protocol used, such as http or https.
The hostname represents the host name of the machine on which the agent resides. The port represents
the port number on which the agent is installed. The slash following the port number is required.",
      "propertyOrder" : 22700,
      "items" : {
        "type" : "string"
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "array",
          "required" : true
        }
      }
```


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```
    },
    "checkUserInDomino" : {
      "title" : "Check User in Domino Database",
      "description" : "If true, agent checks user existence in Domino name database. (property name:
 com.sun.identity.agents.config.domino.check.name.database)",
      "propertyOrder" : 20500,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "logoutRedirectUrl" : {
      "title" : "Logout Redirect URL",
      "description" : "User gets redirected to this url after logout. (property name:
 com.sun.identity.agents.config.logout.redirect.url). This property should be specified along with the
 above Logout URL List.<br>Hot-swap: Yes",
      "propertyOrder" : 22300,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "notEnforcedIps" : {
      "title" : "Not Enforced Client IP List",
      "description" : "No authentication and authorization are required for the requests coming from
 these client IP addresses. (property name: com.sun.identity.agents.config.notenforced.ip) <br>Hot-
swap: Yes <br> Examples: <br> 192.18.145.* <br> 192.18.146.123",
      "propertyOrder" : 17200,
      "items" : {
        "type" : "string"
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "array",
          "required" : true
        }
      }
```


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```
    },
    "anonymousUserEnabled" : {
      "title" : "Anonymous User",
      "description" : "Enable/Disable REMOTE_USER processing for anonymous users. (property name:
com.sun.identity.agents.config.anonymous.user.enable) <br>Hot-swap: Yes",
      "propertyOrder" : 16900,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "agentDebugLevel" : {
      "title" : "Agent Debug Level",
      "description" : "Agent debug level. (property name: com.sun.identity.agents.config.debug.level)
<br>Hot-swap: Yes",
      "propertyOrder" : 21900,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "remoteLogFilename" : {
      "title" : "Remote Log Filename",
      "description" : "(Not used in Agent 5 onwards) <br>Name of file stored on OpenAM server that
contains agent audit messages. (property name: com.sun.identity.agents.config.remote.logfile)
<br>Hot-swap: No",
      "propertyOrder" : 21500,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "auditLogLocation" : {
      "title" : "Audit Log Location",
```


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```
      "description" : "Specifies where audit messages should be logged. (property name:
com.sun.identity.agents.config.log.disposition) <br>Hot-swap: Yes",
      "propertyOrder" : 21400,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "cdssoCookieDomain" : {
      "title" : "Cookies Domain List",
      "description" : "List of domains in which cookies have to be set in CDSSO. (property name:
com.sun.identity.agents.config.cdsso.cookie.domain) <br>Hot-swap: Yes <br> Example: <br> .sun.com",
      "propertyOrder" : 17600,
      "items" : {
        "type" : "string"
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "array",
          "required" : true
        }
      }
    },
    "remoteLogSendInterval" : {
      "title" : "Remote Audit Log Interval",
      "description" : "Periodic interval in minutes in which audit log messages are sent to remote log
file. (property name: com.sun.identity.agents.config.remote.log.interval) <br>Hot-swap: No",
      "propertyOrder" : 21600,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "integer",
          "required" : true
        }
      }
    },
    "fqdnCheck" : {
      "title" : "FQDN Check",
      "description" : "Enables checking of fqdn default value and fqdn map values. (property name:
com.sun.identity.agents.config.fqdn.check.enable) <br>Hot-swap: Yes",
```


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```
      "propertyOrder" : 16200,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "policyCachePollingInterval" : {
      "title" : "Policy Cache Polling Period",
      "description" : "Polling interval in minutes to refresh agent's policy cache. (property name:
 com.sun.identity.agents.config.policy.cache.polling.interval) <br>Hot-swap: No",
      "propertyOrder" : 14400,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "integer",
          "required" : true
        }
      }
    },
    "fetchPoliciesFromRootResource" : {
      "title" : "Fetch Policies from Root Resource",
      "description" : "Agent caches policy decision of the resource and all resources from the root of
 the resource down. (property name: com.sun.identity.agents.config.fetch.from.root.resource) <br>Hot-
swap: No",
      "propertyOrder" : 18200,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "ltpaTokenConfigurationname" : {
      "title" : "LTPA Token Configuration Name",
      "description" : "The configuration name that the agent uses in order to employ the LTPA token
 mechanism. (property name: com.sun.identity.agents.config.domino.ltpa.config.name)",
      "propertyOrder" : 20800,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
```


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```
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "configurationPollingInterval" : {
      "title" : "Configuration Reload Interval",
      "description" : "Interval in minutes to fetch agent configuration from OpenAM. (property name:
com.sun.identity.agents.config.polling.interval) <br>Hot-swap: No",
      "propertyOrder" : 19500,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "integer",
          "required" : true
        }
      }
    },
    "userIdParameter" : {
      "title" : "User ID Parameter",
      "description" : "Agent sets value of User Id to REMOTE_USER server variable. (property name:
com.sun.identity.agents.config.userid.param) <br>Hot-swap: Yes",
      "propertyOrder" : 14600,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "auditAccessType" : {
      "title" : "Audit Access Types",
      "description" : "Types of messages to log based on user URL access attempts. (property name:
com.sun.identity.agents.config.audit.accesstype) <br>Hot-swap: Yes",
      "propertyOrder" : 21300,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
```


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```
          "type" : "string",
          "required" : true
        }
      }
    },
    "repositoryLocation" : {
      "title" : "Location of Agent Configuration Repository",
      "description" : "Indicates agent's configuration located either on agent's host or centrally on
OpenAM server.",
      "propertyOrder" : 400,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "profileAttributeFetchMode" : {
      "title" : "Profile Attribute Fetch Mode",
      "description" : "(property name: com.sun.identity.agents.config.profile.attribute.fetch.mode)
<br>Hot-swap: Yes",
      "propertyOrder" : 14800,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "anonymousUserId" : {
      "title" : "Anonymous User Default Value",
      "description" : "User id of unauthenticated users. (property name:
com.sun.identity.agents.config.anonymous.user.id) <br>Hot-swap: Yes",
      "propertyOrder" : 16800,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
```


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```
   "notificationsEnabled" : {
     "title" : "Enable Notifications",
     "description" : "The notifications help in maintaining agent's sso, policy and configuration
caches. (property name: com.sun.identity.agents.config.notification.enable) <br>Hot-swap: No",
     "propertyOrder" : 14100,
     "type" : "object",
     "exampleValue" : "",
     "properties" : {
       "inherited" : {
         "type" : "boolean",
         "required" : true
       },
       "value" : {
         "type" : "boolean",
         "required" : true
       }
     }
   },
   "profileAttributesCookiePrefix" : {
     "title" : "Profile Attributes Cookie Prefix",
     "description" : "Sets cookie prefix in the attributes headers. (property name:
com.sun.identity.agents.config.profile.attribute.cookie.prefix) <br>Hot-swap: Yes",
     "propertyOrder" : 17800,
     "type" : "object",
     "exampleValue" : "",
     "properties" : {
       "inherited" : {
         "type" : "boolean",
         "required" : true
       },
       "value" : {
         "type" : "string",
         "required" : true
       }
     }
   },
   "fqdnDefault" : {
     "title" : "FQDN Default",
     "description" : "Fully qualified hostname that the users should use in order to access
resources. (property name: com.sun.identity.agents.config.fqdn.default) <br>Hot-swap: Yes",
     "propertyOrder" : 16300,
     "type" : "object",
     "exampleValue" : "",
     "properties" : {
       "inherited" : {
         "type" : "boolean",
         "required" : true
       },
       "value" : {
         "type" : "string",
         "required" : true
       }
     }
   },
   "sessionAttributeMap" : {
     "title" : "Session Attribute Map",
     "description" : "Maps the session attributes to be populated under
specific names for the currently authenticated user. (property name:
com.sun.identity.agents.config.session.attribute.mapping) <br>Hot-swap: Yes  <br> Example: <br>  To
```


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```
populate the value of session attribute UserToken under name CUSTOM-userid: enter UserToken in Map
Key field, and enter CUSTOM-userid in Corresponding Map Value field.",
     "propertyOrder" : 15100,
     "patternProperties" : {
       ".*" : {
         "type" : "string"
       }
     },
     "type" : "object",
     "exampleValue" : "",
     "properties" : {
       "inherited" : {
         "type" : "boolean",
         "required" : true
       },
       "value" : {
         "type" : "object",
         "required" : true
       }
     }
   },
   "postDataCachePeriod" : {
     "title" : "POST Data Entries Cache Period",
     "description" : "POST cache entry lifetime in minutes. (property name:
com.sun.identity.agents.config.postcache.entry.lifetime) <br>Hot-swap: Yes",
     "propertyOrder" : 17400,
     "type" : "object",
     "exampleValue" : "",
     "properties" : {
       "inherited" : {
         "type" : "boolean",
         "required" : true
       },
       "value" : {
         "type" : "integer",
         "required" : true
       }
     }
   },
   "changeProtocolToHttps" : {
     "title" : "Change URL Protocol to https",
     "description" : "If true, avoids IE6 security pop-ups. (property name:
com.sun.identity.agents.config.iis.owa.enable.change.protocol)",
     "propertyOrder" : 20300,
     "type" : "object",
     "exampleValue" : "",
     "properties" : {
       "inherited" : {
         "type" : "boolean",
         "required" : true
       },
       "value" : {
         "type" : "boolean",
         "required" : true
       }
     }
   },
   "ignorePathInfoForNotEnforcedUrls" : {
     "title" : "Ignore Path Info for Not Enforced URLs",
```


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```
      "description" : "Indicate whether the path info and query should be stripped from the request
URL before being compared with the URLs of the not enforced list when those URLs have a wildcard '*'
character.  (property name: com.sun.identity.agents.config.ignore.path.info.for.not.enforced.list)
<br>Hot-swap: Yes",
      "propertyOrder" : 13900,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "webSocketConnectionIntervalInMinutes" : {
      "title" : "Web Socket Connection Interval",
      "description" : "Interval in minutes by which agents reopen their web socket connection to
ensure a fair distribution of connections across OpenAM servers. (Agent 5 only).",
      "propertyOrder" : 12105,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "configurationCleanupInterval" : {
      "title" : "Configuration Cleanup Interval",
      "description" : "Interval in minutes to cleanup old agent configuration entries. (property name:
com.sun.identity.agents.config.cleanup.interval) <br>Hot-swap: No",
      "propertyOrder" : 19600,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "integer",
          "required" : true
        }
      }
    },
    "profileAttributeMap" : {
      "title" : "Profile Attribute Map",
      "description" : "Maps the profile attributes to be populated under
specific names for the currently authenticated user. (property name:
com.sun.identity.agents.config.profile.attribute.mapping) <br>Hot-swap: Yes <br> Example: <br> To
```


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```
 populate the value of profile attribute cn under name CUSTOM-Common-Name: enter cn in Map Key field,
 and enter CUSTOM-Common-Name in Corresponding Map Value field. <br> To populate the value of profile
 attribute mail under name CUSTOM-Email: enter mail in Map Key field, and enter CUSTOM-Email in
 Corresponding Map Value field.",
      "propertyOrder" : 14900,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "object",
          "required" : true
        }
      }
    },
    "amLogoutUrl" : {
      "title" : "OpenAM Logout URL",
      "description" : "OpenAM logout page URL. (property name:
 com.sun.identity.agents.config.logout.url) <br>Hot-swap: Yes <br> Example: <br> http://host:port/
opensso/UI/Logout",
      "propertyOrder" : 12400,
      "items" : {
        "type" : "string"
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "array",
          "required" : true
        }
      }
    },
    "continuousSecurityHeaders" : {
      "title" : "Continuous Security Headers",
      "description" : "The name of the headers in the user's original request, that will be sent
 as part of the payload during policy evaluation, which can then be accessed via the 'environment'
 variable in a policy script. The 'key' is the name of the header to be sent, and the 'value' is the
 name which it will appear as in the policy evaluation script.It is possible to map multiple headers
 to the same name (they will simply appear as an array in the evaluation script). If the header
 doesn't exist, then the empty string will be sent.",
      "propertyOrder" : 3211,
      "patternProperties" : {
        ".*" : {
          "type" : "string"
        }
      },
```


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```
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "object",
          "required" : true
        }
      }
    },
    "overrideRequestProtocol" : {
      "title" : "Override Request URL Protocol",
      "description" : "Set to true if the agent is sitting behind a ssl/tls off-
loader, load balancer, or proxy to override the protocol with the value from
 the property com.sun.identity.agents.config.agenturi.prefix. (property name:
 com.sun.identity.agents.config.override.protocol) <br>Hot-swap: Yes",
      "propertyOrder" : 18700,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "clientIpValidation" : {
      "title" : "Client IP Validation",
      "description" : "This validates if the subsequent browser requests come from
 the same ip address that the SSO token is initially issued against. (property name:
 com.sun.identity.agents.config.client.ip.validation.enable) <br>Hot-swap: Yes",
      "propertyOrder" : 17700,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "agentConfigChangeNotificationsEnabled" : {
      "title" : "Agent Configuration Change Notification",
      "description" : "Enable agent to receive notification messages from OpenAM server for
 configuration changes. (property name: com.sun.identity.agents.config.change.notification.enable)
 <br>Hot-swap: Yes",
      "propertyOrder" : 12100,
      "type" : "object",
```


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```
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "ltpaTokenOrganizationName" : {
      "title" : "LTPA Token Organization Name",
      "description" : "The organization name to which the LTPA token belongs. (property name:
com.sun.identity.agents.config.domino.ltpa.org.name)",
      "propertyOrder" : 20900,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "fetchAttributesForNotEnforcedUrls" : {
      "title" : "Fetch Attributes for Not Enforced URLs",
      "description" : "Agent fetches profile attributes for not enforced urls by doing policy
evaluation. (property name: com.sun.identity.agents.config.notenforced.url.attributes.enable)
<br>Hot-swap: Yes",
      "propertyOrder" : 19800,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "ignorePathInfo" : {
      "title" : "Ignore Path Info in Request URL",
      "description" : "The path info will be stripped from the request URL while doing Not
Enforced List check and url policy evaluation if the value is set to true. (property name:
com.sun.identity.agents.config.ignore.path.info) <br>Hot-swap: Yes",
      "propertyOrder" : 18600,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
```


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```
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "authenticationType" : {
      "title" : "Authentication Type",
      "description" : "(property name: com.sun.identity.agents.config.iis.auth.type)",
      "propertyOrder" : 19900,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "encodeUrlSpecialCharacters" : {
      "title" : "Encode URL's Special Characters",
      "description" : "Encodes the url which has special characters before doing policy evaluation.
 (property name: com.sun.identity.agents.config.encode.url.special.chars.enable) <br>Hot-swap: Yes",
      "propertyOrder" : 18500,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "encodeProfileAttributes" : {
      "title" : "Native Encoding of Profile Attributes",
      "description" : "Agent encodes the ldap header values in the default encoding of OS locale. If
 false, UTF-8 gets used. (property name: com.sun.identity.agents.config.convert.mbyte.enable) <br>Hot-
swap: Yes",
      "propertyOrder" : 18400,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
```


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```
          "required" : true
        }
      }
    },
    "cdssoUrls" : {
      "title" : "CDSSO Servlet URL",
      "description" : "List of URLs of the available CDSSO controllers that may be used by the Agent
 for CDSSO processing. (property name: com.sun.identity.agents.config.cdsso.cdcservlet.url) <br>Hot-
swap: Yes  <br> Example: <br> http://host:port/opensso/cdcservlet",
      "propertyOrder" : 17500,
      "items" : {
        "type" : "string"
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "array",
          "required" : true
        }
      }
    },
    "showPasswordInHeader" : {
      "title" : "Show Password in HTTP Header",
      "description" : "Set to true if encrypted password should be set in HTTP header AUTH_PASSWORD.
 (property name: com.sun.identity.agents.config.iis.password.header)",
      "propertyOrder" : 22800,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "ignorePreferredNamingUrl" : {
      "title" : "Ignore Preferred Naming URL in Naming Request",
      "description" : "Agent uses this value to send preferred naming url in the naming request.
 (property name: com.sun.identity.agents.config.ignore.preferred.naming.url) <br>Hot-swap: Yes",
      "propertyOrder" : 15600,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
```


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```
        }
      }
    },
    "invertNotEnforcedUrls" : {
      "title" : "Invert Not Enforced URLs",
      "description" : "Only not enforced list of urls will be enforced. (property name:
 com.sun.identity.agents.config.notenforced.url.invert) <br>Hot-swap: Yes",
      "propertyOrder" : 17100,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "notEnforcedUrls" : {
      "title" : "Not Enforced URLs",
      "description" : "List of urls for which no authentication required. (property name:
 com.sun.identity.agents.config.notenforced.url) <br>Hot-swap: Yes <br> Example: <br> http://
myagent.mydomain.com/*.gif",
      "propertyOrder" : 17000,
      "items" : {
        "type" : "string"
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "array",
          "required" : true
        }
      }
    },
    "agentLocale" : {
      "title" : "Agent Locale",
      "description" : "The default locale for the product. (property name:
 com.sun.identity.agents.config.locale) <br>Hot-swap: No",
      "propertyOrder" : 19300,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
```


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```
      }
    },
    "policyClockSkew" : {
      "title" : "Policy Clock Skew",
      "description" : "Time in seconds used adjust time difference between Agent machine
and OpenAM. Clock skew in seconds = AgentTime - OpenAMServerTime. (property name:
com.sun.identity.agents.config.policy.clock.skew) <br>Hot-swap: No",
      "propertyOrder" : 21000,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "integer",
          "required" : true
        }
      }
    },
    "overrideProxyHostAndPort" : {
      "title" : "Override Proxy Server's Host and Port",
      "description" : "(property name: com.sun.identity.agents.config.proxy.override.host.port)
<br>Hot-swap: No",
      "propertyOrder" : 19400,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "boolean",
          "required" : true
        }
      }
    },
    "agentConnectionTimeout" : {
      "title" : "Agent Connection Timeout",
      "description" : "Timeout period in seconds for an agent connection with OpenAM auth server.
(property name: com.sun.identity.agents.config.auth.connection.timeout) <br>Hot-swap: Yes",
      "propertyOrder" : 19100,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "integer",
          "required" : true
        }
      }
    },
    "policyEvaluationRealm" : {
      "title" : "Realm",
```


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```
      "description" : "Which realm to start evaluating from (property name:
 org.forgerock.openam.agents.config.policy.evaluation.realm) <br>Hot-swap: Yes",
      "propertyOrder" : 21100,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "applicationLogoutUrls" : {
      "title" : "Logout URL List",
      "description" : "List of application logout URLs. User gets logged out from OpenAM session
 when these urls accessed. (property name: com.sun.identity.agents.config.agent.logout.url). If this
 property is used, user should specify a value for the below Logout Redirect URL property.<br>Hot-
swap: Yes <br> Example: <br> http://myagent.mydomain.com/logout.html",
      "propertyOrder" : 18000,
      "items" : {
        "type" : "string"
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "array",
          "required" : true
        }
      }
    },
    "responseAttributeFetchMode" : {
      "title" : "Response Attribute Fetch Mode",
      "description" : "(property name: com.sun.identity.agents.config.response.attribute.fetch.mode)
 <br>Hot-swap: Yes",
      "propertyOrder" : 15200,
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "string",
          "required" : true
        }
      }
    },
    "logoutResetCookies" : {
      "title" : "Logout Cookies List for Reset",
```


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```
      "description" : "Any cookies to be reset upon logout in the same format as cookie reset list.
 (property name: com.sun.identity.agents.config.logout.cookie.reset) <br>Hot-swap: Yes <br> Cookie1
 <br> Cookie2=value;Domain=subdomain.domain.com",
      "propertyOrder" : 18100,
      "items" : {
        "type" : "string"
      },
      "type" : "object",
      "exampleValue" : "",
      "properties" : {
        "inherited" : {
          "type" : "boolean",
          "required" : true
        },
        "value" : {
          "type" : "array",
          "required" : true
        }
      }
    }
  }
}
```

1.181. WindowsDesktopSsoModule

1.181.1. Realm Operations

Resource path: `/realm-config/authentication/modules/windowsdesktopsso`

Resource version: `1.0`

1.181.1.1. create

Usage:

```
am> create WindowsDesktopSsoModule --realm Realm --id id --body body
```

Parameters:

`--id`

The unique identifier for the resource.

`--body`

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "principalName" : {
```


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```
      "title" : "Service Principal",
      "description" : "The name of the Kerberos principal used during authentication<br><br>This
 principal must match the name used in the keytab file created from the Active Directory server.<br/
>The format of the field is as follows:<br/><br/><code>HTTP/openam.forgerock.com@AD_DOMAIN.COM</
code>",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "returnPrincipalWithDomainName" : {
      "title" : "Return Principal with Domain Name",
      "description" : "Returns the fully qualified name of the authenticated user rather than just the
 username.",
      "propertyOrder" : 500,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "keytabFileName" : {
      "title" : "Keytab File Name",
      "description" : "The path of the AD keytab file<br><br>This is the absolute pathname of the AD
 keytab file. The keytab file is generated by the Active Directory server.",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "kerberosServerName" : {
      "title" : "Kerberos Server Name",
      "description" : "The hostname/IP address of the Kerberos (Active Directory) server.",
      "propertyOrder" : 400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "kerberosRealm" : {
      "title" : "Kerberos Realm",
      "description" : "The name of the Kerberos (Active Directory) realm used for authentication",
      "propertyOrder" : 300,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "lookupUserInRealm" : {
      "title" : "Search for the user in the realm",
      "description" : "Validate that the user has a matched user profile configured in the data
 store.<br><br>If this option is enabled, the module validates whether the account corresponds to a
 user profile in the Data Store for the realm. The attributes to perform the search are configured
 under <i>Access Control > Realm Name > Authentication > All Core settings > Alias Search Attribute
 Name</i>.",
      "propertyOrder" : 800,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "kerberosServiceIsinitiator" : {
      "title" : "isInitiator",
```


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```
      "description" : "Configuration used for JDK Kerbrose LoginModule. True, if initiator. False, if
 acceptor only. Default is true",
      "propertyOrder" : 900,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "authenticationLevel" : {
      "title" : "Authentication Level",
      "description" : "The authentication level associated with this module.<br><br>Each
 authentication module has an authentication level that can be used to indicate the level of security
 associated with the module; 0 is the lowest (and the default).",
      "propertyOrder" : 600,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "trustedKerberosRealms" : {
      "title" : "Trusted Kerberos realms",
      "description" : "List of trusted Kerberos realms for User Kerberos tickets.<br><br>If realms are
 configured, then Kerberos tickets are only accepted if the realm part of the UserPrincipalName of the
 Users Kerberos ticket matches a realm from the list.",
      "propertyOrder" : 700,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    }
  }
}
```


1.181.1.2. delete

Usage:

```
am> delete WindowsDesktopSsoModule --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.181.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action WindowsDesktopSsoModule --realm Realm --actionName getAllTypes
```


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1.181.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action WindowsDesktopSsoModule --realm Realm --actionName getCreatableTypes
```

1.181.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action WindowsDesktopSsoModule --realm Realm --actionName nextdescendents
```

1.181.1.6. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

```
am> query WindowsDesktopSsoModule --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.181.1.7. read

Usage:

```
am> read WindowsDesktopSsoModule --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.181.1.8. update

Usage:

```
am> update WindowsDesktopSsoModule --realm Realm --id id --body body
```

Parameters:

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--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "principalName" : {
      "title" : "Service Principal",
      "description" : "The name of the Kerberos principal used during authentication<br><br>This
 principal must match the name used in the keytab file created from the Active Directory server.<br/
>The format of the field is as follows:<br/><br/><code>HTTP/openam.forgerock.com@AD_DOMAIN.COM</
code>",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "returnPrincipalWithDomainName" : {
      "title" : "Return Principal with Domain Name",
      "description" : "Returns the fully qualified name of the authenticated user rather than just the
 username.",
      "propertyOrder" : 500,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "keytabFileName" : {
      "title" : "Keytab File Name",
      "description" : "The path of the AD keytab file<br><br>This is the absolute pathname of the AD
 keytab file. The keytab file is generated by the Active Directory server.",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "kerberosServerName" : {
      "title" : "Kerberos Server Name",
      "description" : "The hostname/IP address of the Kerberos (Active Directory) server.",
      "propertyOrder" : 400,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "kerberosRealm" : {
      "title" : "Kerberos Realm",
      "description" : "The name of the Kerberos (Active Directory) realm used for authentication",
      "propertyOrder" : 300,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "lookupUserInRealm" : {
      "title" : "Search for the user in the realm",
```


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```
      "description" : "Validate that the user has a matched user profile configured in the data
 store.<br><br>If this option is enabled, the module validates whether the account corresponds to a
 user profile in the Data Store for the realm. The attributes to perform the search are configured
 under <i>Access Control > Realm Name > Authentication > All Core settings > Alias Search Attribute
 Name</i>.",
      "propertyOrder" : 800,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "kerberosServiceIsinitiator" : {
      "title" : "isInitiator",
      "description" : "Configuration used for JDK Kerbrose LoginModule. True, if initiator. False, if
 acceptor only. Default is true",
      "propertyOrder" : 900,
      "required" : true,
      "type" : "boolean",
      "exampleValue" : ""
    },
    "authenticationLevel" : {
      "title" : "Authentication Level",
      "description" : "The authentication level associated with this module.<br><br>Each
 authentication module has an authentication level that can be used to indicate the level of security
 associated with the module; 0 is the lowest (and the default).",
      "propertyOrder" : 600,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "trustedKerberosRealms" : {
      "title" : "Trusted Kerberos realms",
      "description" : "List of trusted Kerberos realms for User Kerberos tickets.<br><br>If realms are
 configured, then Kerberos tickets are only accepted if the realm part of the UserPrincipalName of the
 Users Kerberos ticket matches a realm from the list.",
      "propertyOrder" : 700,
      "required" : true,
      "items" : {
        "type" : "string"
      },
      "type" : "array",
      "exampleValue" : ""
    }
  }
}
```


1.181.2. Global Operations

Resource path: `/global-config/authentication/modules/windowsdesktopsso`

Resource version: `1.0`

1.181.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

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Usage:

```
am> action WindowsDesktopSsoModule --global --actionName getAllTypes
```

1.181.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action WindowsDesktopSsoModule --global --actionName getCreatableTypes
```

1.181.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action WindowsDesktopSsoModule --global --actionName nextdescendents
```

1.181.2.4. read

Usage:

```
am> read WindowsDesktopSsoModule --global
```

1.181.2.5. update

Usage:

```
am> update WindowsDesktopSsoModule --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "defaults" : {
      "properties" : {
        "kerberosRealm" : {
          "title" : "Kerberos Realm",
          "description" : "The name of the Kerberos (Active Directory) realm used for authentication",
          "propertyOrder" : 300,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "returnPrincipalWithDomainName" : {
```


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```
          "title" : "Return Principal with Domain Name",
          "description" : "Returns the fully qualified name of the authenticated user rather than just
 the username.",
          "propertyOrder" : 500,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "principalName" : {
          "title" : "Service Principal",
          "description" : "The name of the Kerberos principal used during authentication<br><br>This
 principal must match the name used in the keytab file created from the Active Directory server.<br/
>The format of the field is as follows:<br/><br/><code>HTTP/openam.forgerock.com@AD_DOMAIN.COM</
code>",
          "propertyOrder" : 100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "kerberosServiceIsinitiator" : {
          "title" : "isInitiator",
          "description" : "Configuration used for JDK Kerbrose LoginModule. True, if initiator. False,
 if acceptor only. Default is true",
          "propertyOrder" : 900,
          "required" : true,
          "type" : "boolean",
          "exampleValue" : ""
        },
        "trustedKerberosRealms" : {
          "title" : "Trusted Kerberos realms",
          "description" : "List of trusted Kerberos realms for User Kerberos tickets.<br><br>If realms
 are configured, then Kerberos tickets are only accepted if the realm part of the UserPrincipalName of
 the Users Kerberos ticket matches a realm from the list.",
          "propertyOrder" : 700,
          "required" : true,
          "items" : {
            "type" : "string"
          },
          "type" : "array",
          "exampleValue" : ""
        },
        "kerberosServerName" : {
          "title" : "Kerberos Server Name",
          "description" : "The hostname/IP address of the Kerberos (Active Directory) server.",
          "propertyOrder" : 400,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "lookupUserInRealm" : {
          "title" : "Search for the user in the realm",
          "description" : "Validate that the user has a matched user profile configured in the data
 store.<br><br>If this option is enabled, the module validates whether the account corresponds to a
 user profile in the Data Store for the realm. The attributes to perform the search are configured
 under <i>Access Control > Realm Name > Authentication > All Core settings > Alias Search Attribute
 Name</i>.",
          "propertyOrder" : 800,
          "required" : true,
          "type" : "boolean",
```


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```
          "exampleValue" : ""
        },
        "keytabFileName" : {
          "title" : "Keytab File Name",
          "description" : "The path of the AD keytab file<br><br>This is the absolute pathname of the
 AD keytab file. The keytab file is generated by the Active Directory server.",
          "propertyOrder" : 200,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "authenticationLevel" : {
          "title" : "Authentication Level",
          "description" : "The authentication level associated with this module.<br><br>Each
 authentication module has an authentication level that can be used to indicate the level of security
 associated with the module; 0 is the lowest (and the default).",
          "propertyOrder" : 600,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        }
      },
      "type" : "object",
      "title" : "Realm Defaults"
    }
  }
}
```


1.182. WindowsNtModule

1.182.1. Realm Operations

Resource path: `/realm-config/authentication/modules/windowsnt`

Resource version: `1.0`

1.182.1.1. create

Usage:

```
am> create WindowsNtModule --realm Realm --id id --body body
```

Parameters:

`--id`

The unique identifier for the resource.

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--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "authenticationDomain" : {
      "title" : "Authentication Domain",
      "description" : "The name of the Windows Domain used for authentication",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "authenticationLevel" : {
      "title" : "Authentication Level",
      "description" : "The authentication level associated with this module.<br><br>Each
 authentication module has an authentication level that can be used to indicate the level of security
 associated with the module; 0 is the lowest (and the default). ",
      "propertyOrder" : 400,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "authenticationHost" : {
      "title" : "Authentication Host",
      "description" : "The name of the Windows NT Domain Controller.",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sambaConfigurationFileName" : {
      "title" : "Samba Configuration File Name",
      "description" : "The path to the Samba configuration file.<br><br>The Windows NT authentication
 module uses the <code>smbclient</code> command to validate the user credentials against the Windows
 domain controller. <br/><br/>For example: <code>/opt/openam/smb.conf</code><br/><br/><i>NB </i>The
 <code>smbclient</code> command must be available in the <code>PATH</code> environmental variable
 associated with OpenAM.",
      "propertyOrder" : 300,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```

1.182.1.2. delete

Usage:

```
am> delete WindowsNtModule --realm Realm --id id
```

Parameters:

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--id

The unique identifier for the resource.

1.182.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action WindowsNtModule --realm Realm --actionName getAllTypes
```

1.182.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action WindowsNtModule --realm Realm --actionName getCreatableTypes
```

1.182.1.5. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action WindowsNtModule --realm Realm --actionName nextdescendents
```

1.182.1.6. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

```
am> query WindowsNtModule --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.182.1.7. read

Usage:

```
am> read WindowsNtModule --realm Realm --id id
```


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Parameters:

--id

The unique identifier for the resource.

1.182.1.8. update

Usage:

```
am> update WindowsNtModule --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "authenticationDomain" : {
      "title" : "Authentication Domain",
      "description" : "The name of the Windows Domain used for authentication",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "authenticationLevel" : {
      "title" : "Authentication Level",
      "description" : "The authentication level associated with this module.<br><br>Each
 authentication module has an authentication level that can be used to indicate the level of security
 associated with the module; 0 is the lowest (and the default). ",
      "propertyOrder" : 400,
      "required" : true,
      "type" : "integer",
      "exampleValue" : ""
    },
    "authenticationHost" : {
      "title" : "Authentication Host",
      "description" : "The name of the Windows NT Domain Controller.",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "sambaConfigurationFileName" : {
      "title" : "Samba Configuration File Name",
      "description" : "The path to the Samba configuration file.<br><br>The Windows NT authentication
 module uses the <code>smbclient</code> command to validate the user credentials against the Windows
```


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```
 domain controller. <br/><br/>For example: <code>/opt/openam/smb.conf</code><br/><br/><i>NB </i>The
 <code>smbclient</code> command must be available in the <code>PATH</code> environmental variable
 associated with OpenAM.",
      "propertyOrder" : 300,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```

1.182.2. Global Operations

Resource path: `/global-config/authentication/modules/windowsnt`

Resource version: `1.0`

1.182.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action WindowsNtModule --global --actionName getAllTypes
```

1.182.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action WindowsNtModule --global --actionName getCreatableTypes
```

1.182.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action WindowsNtModule --global --actionName nextdescendents
```

1.182.2.4. read

Usage:

```
am> read WindowsNtModule --global
```


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1.182.2.5. update

Usage:

```
am> update WindowsNtModule --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "defaults" : {
      "properties" : {
        "authenticationLevel" : {
          "title" : "Authentication Level",
          "description" : "The authentication level associated with this module.<br><br>Each
 authentication module has an authentication level that can be used to indicate the level of security
 associated with the module; 0 is the lowest (and the default). ",
          "propertyOrder" : 400,
          "required" : true,
          "type" : "integer",
          "exampleValue" : ""
        },
        "authenticationDomain" : {
          "title" : "Authentication Domain",
          "description" : "The name of the Windows Domain used for authentication",
          "propertyOrder" : 100,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "sambaConfigurationFileName" : {
          "title" : "Samba Configuration File Name",
          "description" : "The path to the Samba configuration file.<br><br>The Windows NT
 authentication module uses the <code>smbclient</code> command to validate the user credentials
 against the Windows domain controller. <br/><br/>For example: <code>/opt/openam/smb.conf</code><br/
><br/><i>NB </i>The <code>smbclient</code> command must be available in the <code>PATH</code>
 environmental variable associated with OpenAM.",
          "propertyOrder" : 300,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        },
        "authenticationHost" : {
          "title" : "Authentication Host",
          "description" : "The name of the Windows NT Domain Controller.",
          "propertyOrder" : 200,
          "required" : true,
          "type" : "string",
          "exampleValue" : ""
        }
      },
      "type" : "object",
```


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```
      "title" : "Realm Defaults"
    }
  }
}
```

1.183. WsEntity

1.183.1. Realm Operations

Resource path: `/realm-config/federation/entityproviders/ws`

Resource version: `1.0`

1.183.1.1. create

Usage:

```
am> create WsEntity --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "metadata" : {
      "title" : "Metadata",
      "description" : "",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "entityConfig" : {
      "title" : "Entity Configuration",
      "description" : "",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```


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1.183.1.2. delete

Usage:

```
am> delete WsEntity --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.183.1.3. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

```
am> query WsEntity --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.183.1.4. read

Usage:

```
am> read WsEntity --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.183.1.5. update

Usage:

```
am> update WsEntity --realm Realm --id id --body body
```

Parameters:

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--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "metadata" : {
      "title" : "Metadata",
      "description" : "",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "entityConfig" : {
      "title" : "Entity Configuration",
      "description" : "",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```

1.184. ZeroPageLoginCollector

1.184.1. Realm Operations

Resource path: `/realm-config/authentication/authenticationtrees/nodes/ZeroPageLoginNode`

Resource version: `1.0`

1.184.1.1. create

Usage:

```
am> create ZeroPageLoginCollector --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

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--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "passwordHeader" : {
      "title" : "Password Header name",
      "description" : "",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "usernameHeader" : {
      "title" : "Username Header name",
      "description" : "",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```

1.184.1.2. delete

Usage:

```
am> delete ZeroPageLoginCollector --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.184.1.3. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action ZeroPageLoginCollector --realm Realm --actionName getAllTypes
```

1.184.1.4. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

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```
am> action ZeroPageLoginCollector --realm Realm --actionName getCreatableTypes
```

1.184.1.5. listOutcomes

List the available outcomes for the node type.

Usage:

```
am> action ZeroPageLoginCollector --realm Realm --body body --actionName listOutcomes
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "title" : "Some configuration of the node. This does not need to be complete against the
 configuration schema."
}
```

1.184.1.6. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action ZeroPageLoginCollector --realm Realm --actionName nextdescendents
```

1.184.1.7. query

Get the full list of instances of this collection. This query only supports `_queryFilter=true` filter.

Usage:

```
am> query ZeroPageLoginCollector --realm Realm --filter filter
```

Parameters:

--filter

A CREST formatted query filter, where "true" will query all.

1.184.1.8. read

Usage:

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```
am> read ZeroPageLoginCollector --realm Realm --id id
```

Parameters:

--id

The unique identifier for the resource.

1.184.1.9. update

Usage:

```
am> update ZeroPageLoginCollector --realm Realm --id id --body body
```

Parameters:

--id

The unique identifier for the resource.

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object",
  "properties" : {
    "passwordHeader" : {
      "title" : "Password Header name",
      "description" : "",
      "propertyOrder" : 200,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    },
    "usernameHeader" : {
      "title" : "Username Header name",
      "description" : "",
      "propertyOrder" : 100,
      "required" : true,
      "type" : "string",
      "exampleValue" : ""
    }
  }
}
```

1.184.2. Global Operations

Resource path: `/global-config/authentication/authenticationtrees/nodes/ZeroPageLoginNode`

Resource version: `1.0`

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1.184.2.1. getAllTypes

Obtain the collection of all secondary configuration types related to the resource.

Usage:

```
am> action ZeroPageLoginCollector --global --actionName getAllTypes
```

1.184.2.2. getCreatableTypes

Obtain the collection of secondary configuration types that have yet to be added to the resource.

Usage:

```
am> action ZeroPageLoginCollector --global --actionName getCreatableTypes
```

1.184.2.3. nextdescendents

Obtain the collection of secondary configuration instances that have been added to the resource.

Usage:

```
am> action ZeroPageLoginCollector --global --actionName nextdescendents
```

1.184.2.4. read

Usage:

```
am> read ZeroPageLoginCollector --global
```

1.184.2.5. update

Usage:

```
am> update ZeroPageLoginCollector --global --body body
```

Parameters:

--body

The resource in JSON format, described by the following JSON schema:

```
{
  "type" : "object"
}
```


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Appendix A. Getting Support

For more information or resources about OpenAM and ForgeRock Support, see the following sections:

A.1. Accessing Documentation Online

ForgeRock publishes comprehensive documentation online:

- The ForgeRock Knowledge Base offers a large and increasing number of up-to-date, practical articles that help you deploy and manage ForgeRock software.

  While many articles are visible to community members, ForgeRock customers have access to much more, including advanced information for customers using ForgeRock software in a mission-critical capacity.

- ForgeRock product documentation, such as this document, aims to be technically accurate and complete with respect to the software documented. It is visible to everyone and covers all product features and examples of how to use them.

A.2. Using the ForgeRock.org Site

The ForgeRock.org site has links to source code for ForgeRock open source software, as well as links to the ForgeRock forums and technical blogs.

If you are a *ForgeRock customer*, raise a support ticket instead of using the forums. ForgeRock support professionals will get in touch to help you.

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A.3. Getting Support and Contacting ForgeRock

ForgeRock provides support services, professional services, training through ForgeRock University, and partner services to assist you in setting up and maintaining your deployments. For a general overview of these services, see https://www.forgerock.com.

ForgeRock has staff members around the globe who support our international customers and partners. For details on ForgeRock's support offering, including support plans and service level agreements (SLAs), visit https://www.forgerock.com/support.

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