FORGEROCK®

Release Notes
/ Amster 7.0.2

Latest update: 7.0.2

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Abstract

Notes covering new features, fixes and known issues for the ForgeRock® Access Management command-line interface, Amster.

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Overview

Amster is a lightweight command-line interface, ideal for use in DevOps processes, such as continuous integration and deployment.

Read these release notes before you install Amster. The information contained in these release notes cover prerequisites for installation, known issues and improvements to the software, changes and deprecated functionality, and other important information.

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
What's New

This chapter covers new features and improvements in Amster.

Patch Releases

ForgeRock periodically issues patch releases with important fixes to bugs. Patch releases focus solely on fixing existing bugs, and improve the functionality, performance, and security of your deployment.

- **Amster 7.0.2** is the latest release targeted for AM 7.0.2 deployments and can be downloaded from the *ForgeRock Backstage* website.

Improvements

Improvements in Amster 7.0.2

- No improvements were made to existing functionality in Amster 7.0.2.

  Use this Amster version with AM 7.0.2 or later only.

Improvements in Amster 7.0.1

- No improvements were made to existing functionality in Amster 7.0.1.

  Use this Amster version with AM 7.0.1 or later only.

Improvements in Amster 7

- Improved Error Messages for the `install-openam` Command

  Amster 7 improves the error messages showing when installing AM is unsuccessful.

  For more information, see "Troubleshoot AM Installations" in the *User Guide*

  Use this Amster version with AM 7 or later only.

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Chapter 2
Before You Install

This section covers software and hardware prerequisites for installing and running Amster.

> **Important**
>
> ForgeRock supports customers using the versions specified here. Other versions and alternative environments might work as well. When opening a support ticket for an issue, however, make sure you can also reproduce the problem on a combination covered here.

Supported Host Operating Systems

Operating System	Versions
Red Hat Enterprise Linux, Centos	7, 8
Amazon Linux	Amazon Linux 2018.03
SuSE	12, 15
Ubuntu	16.04 LTS 18.04 LTS
Windows Server	2016, 2019

Supported Java Versions

Vendor	Versions
OpenJDK, including OpenJDK-based distributions: • AdoptOpenJDK/Eclipse Adoptium • Amazon Corretto • Azul Zulu • Red Hat OpenJDK ForgeRock tests most extensively with AdoptOpenJDK/Eclipse Adoptium.	11
Oracle Java	11

Special Requests

If you have a special request regarding support for a combination not listed here, contact ForgeRock at info@forgerock.com.

Chapter 3
Changes to Existing Functionality

This chapter covers critical and important changes to existing functionality.

Important Changes

This section lists changes made to existing functionality in Amster.

Important Changes in Amster 7.0.2

• No changes have been made to existing functionality in Amster 7.0.2.

Important Changes in Amster 7.0.1

• No changes have been made to existing functionality in Amster 7.0.1.

Important Changes in Amster 7

• Installing Sites with Embedded DS Is Not Supported

The embedded DS server is *not supported for production* in AM 7.

As part of this change, the embedded DS does not support replication, and cannot be configured as part of a site. The relevant replication options for Amster have been removed.

if you have a site configured with embedded DS, you must migrate it to an external DS store before upgrading to AM 7.

See the KB article How do I migrate from an embedded to external DS/OpenDJ in AM/OpenAM (All versions)?.

• Private Key Connections Not Restricted to the Loopback Network

During the configuration of the Amster authentication module, AM appends the contents of the `/path/to/openam/security/keys/amster/amster_rsa.pub` file to the `/path/to/openam/security/keys/amster/authorized_keys` file to ensure Amster can communicate with AM using private keys.

Earlier versions of Access Management restricted the communication between AM and Amster to the loopback network (127.0.0.1/24) by including the `from="127.0.0.0/24,::1"` parameter in front

of the SSH-RSA key of the Amster client. This caused Amster connections to fail unless AM was configured in the loopback interface.

AM 7 does not add the `from` attribute to Amster's SSH-RSA key and, therefore, does not restrict private key connections.

- The Value of the `com.iplanet.am.lbcookie.value` Property Can Be Overridden

By default, Amster configures the value of the `com.iplanet.am.lbcookie.value` property as the value of the server ID. This could not be changed in earlier versions of Amster.

To override the default during import in Amster 7, prefix the new value with `override-server-id:` in the configuration files. For example:

```
"com.iplanet.am.lbcookie.value" : "override-server-id:myLBCookieValue"
```

Chapter 4

Fixes, Limitations, and Known Issues

Key Fixes

This section covers the status of key issues and limitations at release.

Key Fixes in Amster 7.0.2

- OPENAM-17020: Amster import fails after removing identity store and setting User Profile to ignore
- OPENAM-17072: eval(String) function in amster shell results in MissingMethodException

Key Fixes in Amster 7.0.1

- OPENAM-16591: Amster version information is @build.number@
- OPENAM-11160: Amster does not work on non-https fqdn when secure cookie is set.

Key Fixes in Amster 7

- OPENAM-10958: Amster cannot import configuration with containing sub realms with --clean if the instance already contains sub realms
- OPENAM-11159: OpenAM Amster export/import for Site have import errors
- OPENAM-11783: amupgrade requires the output directory to exist
- OPENAM-13896: Comparison method violates its general contract! seen during amster import
- OPENAM-14049: Amster export failure
- OPENAM-14172: Amster Export - Persistent cookie Keystore Mapping inconsistency after upgrade to 6.5.0
- OPENAM-14222: Amster fails exporting Secret Store Mappings in sub-realms
- OPENAM-14265: Amster Import with --clean doesn't delete the secrets store and mappings
- OPENAM-14818: Amster clean import removes current server when AM is deployed to root context
- OPENAM-15510: Generic amster error message "No Base Entity dc=config,dc=forgerock,dc=com found" needs to detail the actual ldap error - during install-openam

- OPENAM-15574: Amster Import - updating com.iplanet.am.lbcookie.value to a different value to server ID

- OPENAM-15687: Session endpoint is searching for a long value in CTS that is stored as a string

Limitations

The following limitations and workarounds apply to this release:

- **No Support for Load Balanced Deployments**

  Amster cannot connect to a load balancer URL. You must connect Amster directly to a single AM instance. Using a load balancer could send sequential commands to different AM instances, and could result in concurrency issues when writing to the underlying configuration store.

- **Importing Resources Containing Slash Characters Can Fail**

  Some Access Management resources have names that can contain slash characters (/), for example policy names, application names, and SAML v2.0 entities. These slash characters can cause unexpected behavior and failures in Amster when importing into Access Management instances running on Apache Tomcat.

  To workaround this issue, configure Apache Tomcat to allow encoded slash characters by updating the `CATALINA_OPTS` environment variable. For example:

  On Unix/Linux systems:

  ```
  $ export CATALINA_OPTS= \
    "-Dorg.apache.tomcat.util.buf.UDecoder.ALLOW_ENCODED_SLASH=true"
  $ startup.sh
  ```

  On Windows systems:

  ```
  C:\> set CATALINA_OPTS= ^
    "-Dorg.apache.tomcat.util.buf.UDecoder.ALLOW_ENCODED_SLASH=true"
  C:\> startup.bat
  ```

  > **Warning**
  >
  > It is strongly recommended that you do *not* enable `org.apache.tomcat.util.buf.UDecoder.ALLOW_ENCODED_SLASH` when running AM in production as it introduces a security risk on Apache Tomcat.
  >
  > For more information, see How do I safely enable the org.apache.tomcat.util.buf.UDecoder.ALLOW_ENCODED_SLASH setting in AM/OpenAM (All Versions)? in the *ForgeRock Knowledge Base*.

- **[INFO] Messages Showing On SuSE On Amster Start Up**

  Running Amster on SuSE may produce `[INFO]` messages, for example:

```
# ./amster
[INFO] Unable to bind key for unsupported operation: up-history
[INFO] Unable to bind key for unsupported operation: down-history
[INFO] Unable to bind key for unsupported operation: up-history
[INFO] Unable to bind key for unsupported operation: down-history
OpenAM Shell (7.0.2 build c9ca9450a9, JVM: 1.8.0_65)
Type ':help' or ':h' for help.
----------------------------------------------------
am>
```

These messages are caused by the keyboard mappings configured in the `/etc/inputrc` file and can safely be ignored, as they do not affect functionality.

Known Issues

Known Issues in Amster 7.0.2

- No issues remained open when Amster 7.0.2 became available, other than those identified in Amster 7.

Known Issues in Amster 7.0.2

- No issues remained open when Amster 7.0.1 became available, other than those identified in Amster 7.

Known Issues in Amster 7

- OPENAM-14526: Non SAML metadata schema-compliant SP EntityDescriptors can be imported.

Chapter 5
Documentation Updates

The following table tracks changes to the documentation set following the release of Amster 7.0.2:

Documentation Change Log

Date	Description
2022-01-20	Highlighted the limitation regarding load balanced deployments.
2021-05-27	Initial release of Amster 7.0.2.
2020-11-04	Initial release of Amster 7.0.1. The following changes were made to the documentation: • Updated the examples about installing AM to include secure connection options in "*Install AM with Amster*" in the *User Guide*. • Added post-install steps for site deployments in "*Install AM with Amster*" in the *User Guide*.
2020-08-30	Initial release of Amster 7.

Appendix A. Getting Support

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.

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.