

# **OpenAM 11.0.2 Release Notes**

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## Abstract

Notes covering OpenAM prerequisites, fixes, known issues. OpenAM provides open source Authentication, Authorization, Entitlement and Federation software.



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# Chapter 1. What's New in OpenAM 11.0.2

## Important

OpenAM 11.0.2 is a maintenance release that resolves a number of issues, including security issues in OpenAM. It is strongly recommended that you update to this release to make your deployment more secure, and to take advantage of important functional fixes. ForgeRock customers can contact support for help and further information.

Before you install OpenAM or update your existing OpenAM installation, read these release notes. Then update or install OpenAM.

- If you have already installed OpenAM, see [To Update OpenAM From 11.0](#).

Do *not* perform an upgrade by deploying the new version and then importing an existing configuration by running the **ssoadm import-svc-config** command. Importing an outdated configuration can result in a corrupted installation.

- If you are installing OpenAM for the first time, see [To Install OpenAM](#).

## 1.1. Product Enhancements

In addition to fixes, this release includes the following limited product enhancements.

- **OAuth 2.0 Refresh Token Renewal.** OpenAM now issues a new refresh token when an access token is refreshed ( [OPENAM-3951](#)).
- **Quicker UI Customization.** While customizing the UI, you can set the advanced server property, `org.forgerock.openam.core.resource.-lookup.cache.enabled`, to `false` to allow OpenAM immediately to pick up changes to the files as you customize them ( [OPENAM-3989](#)). You can set advanced server properties in OpenAM Console under Configuration > Servers and Sites > *Server Name* > Advanced. For production servers, leave this set to the default, `true`.
- **Whitelist for Custom Login URIs.** OpenAM now includes a property that specifies a whitelist for custom login URIs so that the CDCServlet and the Distributed Authentication UI (DAS) can check login URI values against those in the whitelist.

The property name is `org.forgerock.openam.cdc.validLoginURIs`. If you use custom login URIs in your deployment, add them to the whitelist, separating URIs with commas, setting `org.forgerock.openam.cdc.-validLoginURIs` to `/UI/Login,-/customLoginURI` for example. You can set this property in OpenAM console under Configuration > Servers and Sites > Default Server Settings > Advanced. The default value is `/UI/-Login`.

The `CDCServlet` and `DAS` accept only `loginURI` values that match one of the values in the whitelist. OpenAM strips query strings from `loginURI` values before comparing them with the values in the whitelist, so only include the URIs, not query string parameters.

- **Configurable DN Cache for LDAP Data Stores.** OpenAM now has the capability to enable and disable DN caching. DN caching helps avoid DN lookups that can happen in bursts during authentication. ( [OPENAM-3822](#) ).

You can configure this feature as part of a Data Store profile. To configure DN caching in OpenAM console, browse to Access Control > *Realm Name* > Data Stores > *Data Store Name* > Cache Control.

- **CTS Connection Management Improvement** ( [OPENAM-3219](#)).
- **Debug Log Improvements.** `AMSetupServlet` now displays all configuration parameters in debug logs when the log level is set to ERROR ( [OPENAM-2089](#)).

Debug log improvements have also reduced spurious stack traces that were logged during authentication processing ( [OPENAM-371](#)).

- **Attributes Populated on Dynamic User Creation.** When creating users dynamically, OpenAM now populates all attributes that are provided and mapped for SAML 2.0 federation ( [OPENAM-474](#)).
- **Policies Support Additional HTTP Operations.** Policies now support all types of HTTP operations, not just GET and POST ( [OPENAM-336](#)).

## 1.2. OpenAM Documentation

You can read the following additional [product documentation](#) for OpenAM 11.0.0 online at <http://docs.forgerock.org/>.

- [OpenAM 11.0.0 Release Notes](#)
- [OpenAM 11.0.0 Installation Guide](#)

- [OpenAM 11.0.0 Upgrade Guide](#)
- [OpenAM 11.0.0 Administration Guide](#)
- [OpenAM 11.0.0 Developer's Guide](#)
- [OpenAM 11.0.0 Reference](#)
- [OpenAM 11.0.0 Javadoc](#)





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## Chapter 2. Before You Install OpenAM 11.0.2 Software

This chapter covers software and hardware prerequisites for installing and running OpenAM software.

### Note

The content of this chapter has not changed since OpenAM 11.0.0.

## 2.1. Java Requirements

This release of OpenAM requires Java Development Kit 6 or Java Development Kit 7. ForgeRock recommends the most recent update of Java 6 or 7 to ensure you have the latest security fixes.

ForgeRock has tested this release of OpenAM primarily with Oracle Java SE JDK, and also tested OpenAM on WebSphere with IBM JDK.

OpenAM Java SDK requires Java Development Kit 6 or 7.

## 2.2. Web Application Container Requirements

This release of OpenAM runs in the following web application containers.

- Apache Tomcat 6, 7 (ForgeRock's preferred web container for OpenAM)
- GlassFish v2, v3
- IBM WebSphere 8.0, 8.5
- JBoss Enterprise Application Platform 5, 6  
JBoss Application Server 7
- Jetty 7 (7.6.13 or later)  
Jetty 8 (8.1.13 or later)
- Oracle WebLogic Server 11g (10.3.5)  
Oracle WebLogic Server 12c (12.1.1)

If running as a non-root user, the web application container must be able to write to its own home directory, where OpenAM stores configuration files.

## 2.3. Data Store Requirements

This release of OpenAM works with the following CTS data stores.

- Embedded (using ForgeRock OpenDJ for the data store)
- External ForgeRock OpenDJ data store

The CTS is supported on OpenDJ versions 2.6.0 and later.

This release of OpenAM works with the following configuration data stores.

- Embedded (using ForgeRock OpenDJ for the data store)

When using the embedded configuration store for CTS or configuration, you must deploy OpenAM on a local file system and not on an NFS-mounted file system.

- External ForgeRock OpenDJ data store

ForgeRock recommends updating to the latest stable release.

- External Oracle Unified Directory 11g or later
- External Oracle Directory Server Enterprise Edition data store, version 6.3 or later

This release of OpenAM works with the following user profile data stores.

- ForgeRock OpenDJ
- Microsoft Active Directory (tested by ForgeRock on Windows Server 2008 R2 and 2012)
- IBM Tivoli Directory Server 6.3
- OpenDS, version 2 or later
- Oracle Directory Server Enterprise Edition, version 6.3 or later

OpenAM also works with other LDAPv3 compliant directory servers. Some features of OpenAM depend on features supported by your directory service, such as the following:

- Extensible LDAP schema, required to extend the schema for OpenAM. First, install OpenAM to use a fresh instance of OpenDJ, such as the embedded OpenDJ server. After installation, study the custom schema definitions from the OpenDJ file, `config/schema/99-user.ldif`, to see what schema definitions you must add to your directory. You might need to adapt the schema definition format before adding the definitions to your directory.
- The persistent search request control (OID: 2.16.840.1.113730.3.4.3).
- The Behera Internet-Draft [Password Policy for LDAP Directories](#) (in the context of the LDAP authentication module only)

If you plan to deploy with OpenLDAP or other LDAPv3 directory for user data, make sure you test your solution before you deploy to ensure all OpenAM features that you use work as expected.

## 2.4. Browsers Tested

ForgeRock has tested many browsers with OpenAM console and end user pages, including the following browsers.

- Chrome and Chromium 16 and later
- Firefox 3.6 and later
- Internet Explorer 7 and later
- Safari 5 and later

## 2.5. Platform Requirements

ForgeRock has tested this release of OpenAM on the following platforms.

- Linux 2.6, 3.0
- Microsoft Windows Server 2008 R2, 2012
- Oracle Solaris 10, 11

## 2.6. Hardware Requirements

You can deploy OpenAM on any hardware supported for the combination of software required. Deploying OpenAM requires a minimum of 1 GB free RAM over and above the RAM used by all other software on the system.

Minimum requirements are enough to start and to evaluate OpenAM. Recommended hardware resources depend on your specific deployment requirements. For more information, see the *Administration Guide* chapter on *Tuning OpenAM*.

ForgeRock has tested this release of OpenAM primarily on x86 and x64 based systems.

## 2.7. Special Requests

**If you have a special request regarding support for a component or combination not listed here, contact ForgeRock at [info@forgerock.com](mailto:info@forgerock.com).**

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## Chapter 3. Updating & Installing OpenAM

ForgeRock recommends that you update OpenAM 11.0 installations to this release. If you are installing OpenAM for the first time, you can use the same installation instructions as for 11.0.0.

### Procedure 3.1. To Update From OpenAM 11.0

If you have already installed OpenAM, follow these steps.

1. Download and unzip OpenAM 11.0.2.

Find a link to the OpenAM download page from <http://forgerock.com/-download-stack/>.

2. If you have made any customizations, apply them to the 11.0.2 .war file.
3. Redeploy the .war file to your web container, using the web container administration console or deployment command.
4. Start OpenAM, and run the upgrade process for the server.
5. If you have deployed other components, such as the Distributed Authentication UI (DAS), Core Server only (no console), or the **ssoadm** command, also update those components.

### Procedure 3.2. To Install OpenAM

If you have not yet installed OpenAM, install this release instead of OpenAM 11.0.0.

1. Download and unzip OpenAM 11.0.2.

Find a link to the OpenAM download page from <http://forgerock.com/-download-stack/>.

2. Follow the instructions in the *OpenAM 11.0.0 Installation Guide*.



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## Chapter 4. OpenAM Changes & Deprecated Functionality

This chapter covers both major changes to existing functionality, and also deprecated and removed functionality.

### 4.1. Important Changes to Existing Functionality

These changes are new in OpenAM 11.0.2.

- Valid loginURIs are now set using a property that specifies a whitelist for custom login URIs so that the CDCServlet and the Distributed Authentication UI (DAS) can check login URI values against those in the whitelist.

For details, see the explanation in [Product Enhancements](#).

- Attributes names in responses to REST API calls now preserve the original case used in the request ( [OPENAM-3159](#)). In other words, if the request asks for `userName`, the response includes `userName`. If the request asks for `username`, the response includes `username`.

If you prefer that responses always use lower case names, set the advanced server property, `org.forgerock.openam.idm.attribute.names.lower.case` to `true`.

- The `AttributeQueryUtil` class now uses the configured SP attribute mapper to map received attributes in the same way as they come as part of an assertion ( [OPENAM-1655](#)).

The following changes were listed for OpenAM 11.0.1.

- Consistency has been improved in how OpenAM policy rules match resources. Policy rules are now interpreted more consistently in line with the documentation, and more consistently across platforms and across self and subtree modes. Before you upgrade, consider how these changes affect policy rules.

Although the changes introduced by the improvements affect mainly edge cases, they do impact deployments relying on previous, inconsistent behaviors. The following points describe how OpenAM and policy agents behave following upgrade to OpenAM 11.0.1 or later and web policy agents 3.3.1 or later.

- Policy agents configured to use subtree mode behave as they did prior to 3.3.0.

- If you created your policies with OpenAM 11.0.0 and web policy agents 3.3.0, then note that trailing slashes are no longer stripped from resource names ([OPENAM-3509](#)).

In order to match a trailing slash, your rule must end in a slash, or a slash followed by a wildcard.

- When policy agents are configured to use self mode, trailing wildcards, except after ?, match zero or more characters.
- When policy agents are configured to use self mode, previously a trailing wildcard after a slash, /\*, matched one or more characters, whereas it now matches zero or more. This means that a resource ending in / previously would not match a rule ending in /\*, whereas it now does.

If you already have two rules to allow access, one ending in / and the other in /\*, then you have nothing to do. Only the latter rule is now required.

If however you have only rules ending in /\* and intend these to deny access to resources ending in /, then add rules ending in / specifically to deny access to resources ending in /.

- When web policy agents are configured to use self mode, trailing wildcards after ? match *one* or more characters. This means that a resource with a trailing ? no longer matches a rule of the form /\*?\*, whereas it would have matched with earlier versions.

To match the behavior of previous releases, when using self mode with resources having empty query strings, add additional rules without trailing wildcards as in /\*? before you upgrade OpenAM.

- OpenAM now handles SAML single logout (SLO) requests differently when the user presents an invalid session ([OPENAM-3437](#)).

In this scenario OpenAM no longer follows the RelayState without validation. To ensure that the RelayState validation succeeds, include the metaAlias request parameter when invoking the SLO JSPs.

- For LDAP and Active Directory data store configurations the settings for the Authentication Naming Attribute (sun-idrepo-ldapv3-config-auth-naming-attr) and the LDAP Users Search Attribute (sun-idrepo-ldapv3-config-users-search-attribute) now have the same effects as they did in versions prior to 11.0.0 ([OPENAM-3428](#)).



The Authentication Naming Attribute is now used only to find the user when performing authentication. The LDAP Users Search Attribute is used in other cases when searching for users. When upgrading from OpenAM 11.0.0, make sure these attributes are correctly set in data store configurations.

- The fix for [OPENAM-2327](#) adds a new `PrintWriter` argument to the `postSingleSignOnSuccess` method of the `SAML2ServiceProviderAdapter` class. If you use a custom Service Provider adapter, then you must update its implementation.

The new `PrintWriter` argument takes the `PrintWriter` for presenting output. It fits between the `HttpServletResponse` response argument and the `Object` session argument.

The following changes were listed for OpenAM 11.0.0.

- The advanced server property used to set the HTTP header name, `com.sun.identity.authentication.client.ipAddressHeader`, has replaced the legacy OpenSSO property `com.sun.identity.session.httpClientIPHeader` ([OPENAM-1879](#)).
- Legacy naming conventions have been changed to conform to the current product name, OpenAM.

`$HOME/.openamcfg/` is the new name for `$HOME/.openssocfg/`. If you upgrade, OpenAM still supports use of `$HOME/.openssocfg/`, and does not rename the folder. For new OpenAM installs, OpenAM creates the directory with the new name, `$HOME/.openamcfg/`, at configuration time.

Other files, such as the `openam.war` file, and paths have been modified to ensure consistency with the naming conventions.

- OpenAM now ships with multiple `.war` files. You no longer have to build custom `.war` files for core server-only or distributed authentication UI installations for example.
- In versions before OpenAM 10.1.0 the default root suffix DN for OpenAM configuration and profile data was `dc=opensso,dc=java,dc=net`. The default root suffix is now `dc=openam,dc=forgerock,dc=org`.
- The fix for [OPENAM-1630](#) changes SAML metadata signing in OpenAM to better conform with the SAML 2.0 standard.
- Metadata for hosted entities is signed using the `metadataSigningKey` configured for the realm, or inherited from the global configuration for the server.

- OpenAM now signs the EntityDescriptor element that contains child SPSS0Descriptor or IDPSS0Descriptor elements.
- When importing remote entity metadata with signatures, OpenAM does not modify the signatures, but instead returns them as they were when they were imported.
- When OpenAM imports remote entity metadata that has no signature and signed metadata is requested on export, OpenAM signs the metadata with the metadataSigningKey.
- The default policy evaluation mode for new policy agent profiles is now self rather than subtree, in order to better scale for large numbers of policy rules.

Upgrade does not change existing policy agent profile configurations, however. If you want to adopt the new default setting for existing policy agents, you must change the setting manually.

To do so for Java EE policy agents, set `com.sun.identity.policy.client.-cacheMode=self`.

For web policy agents, set `com.sun.identity.agents.config.fetch.from.-root.resource=false`.

- You now specify rules for referrals in the same way as rules for policies.

For example, with previous releases a referral rule for `http://example.-com/` matched everything underneath. Now you would need three rules, `http://example.com/`, `http://example.com/*`, and `http://example.com/*?*`. When used at the end of a rule `*` matches one or more characters, rather than zero or more characters.

When you upgrade OpenAM, the upgrade tool converts existing referral rules.

## 4.2. Deprecated Functionality

The following functionality is deprecated in OpenAM 11.0.0, and is likely to be removed in a future release.

- With the implementation of OAuth 2.0 in this release, OAuth 1.0 has been deprecated. OAuth 1.0 support was originally provided in OpenAM 9.
- The Netscape LDAP API is to be removed from OpenAM, with OpenAM using the OpenDJ LDAP SDK instead. This affects all classes in `com.sun.-identity.shared.ldap.*` packages.

- OpenAM currently uses Sun Java System Application Framework (JATO). JATO is deprecated and is likely to be replaced in a future release.
- With the implementation of the Persistent Cookie authentication module, the Core Authentication module persistent cookie options are deprecated and are likely to be removed in a future release.
- Older REST services relying on the following end points are deprecated.

/identity/attributes	/identity/logout
/identity/authenticate	/identity/read
/identity/create	/identity/search
/identity/delete	/identity/update

The following table shows how legacy and newer end points correspond.

**Table 4.1. REST End Points**

Deprecated URIs	Newer Evolving URIs
/identity/attributes	/json/users
/identity/authenticate	/json/authenticate
/identity/create, /identity/delete, /identity/read, /identity/search, /identity/update	/json/agents, /json/groups, /json/realms, /json/users
/identity/logout	/json/sessions/?_action=logout
N/A	/json/dashboard
N/A	/json/serverinfo

Find examples in the *Developer Guide* chapter on *Using RESTful Web Services* OpenAM.

Support for the older REST services is likely to be removed in a future release in favor of the newer REST services. Older REST services will be removed only after replacement REST services are introduced.

## 4.3. Removed Functionality

- OpenAM Java SDK no longer supports JDK 5.

- The `iplanet-am-auth-ldap-server-check` property for LDAP and Active Directory authentication modules has been removed and replaced with a heartbeat mechanism configurable through the LDAP Connection Heartbeat Interval (`openam-auth-ldap-heartbeat-interval`) and LDAP Connection Heartbeat Time Unit (`openam-auth-ldap-heartbeat-interval`) properties for the modules.

Set these new properties as necessary when you have firewalls or load balancers that drop connections that remain idle for too long.

- The advanced server property, `openam.session.destroy_all_sessions`, has been replaced by the built-in Global Session Service setting, `DESTROY_OLD_SESSIONS`.
- Javadoc for the client SDK is no longer delivered with the distribution, but instead is available online.

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## Chapter 5. OpenAM Fixes, Limitations, & Known Issues

### Important

OpenAM 11.0.1 and later together with OpenAM web policy agents 3.3.1 and later address backward compatibility for policy evaluation. For details, make sure that you read the release notes section on *Important Changes to Existing Functionality*.

OpenAM issues are tracked at <https://bugster.forgerock.org/jira/browse/-/OPENAM>. This chapter covers the status of key issues and limitations in this release.

### 5.1. Key Fixes

The following bugs were fixed in release 11.0.2. For details, see the [OpenAM issue tracker](#).

- [OPENAM-4235](#): RestAuthorizationDispatcherFilter is not thread-safe in its usage of the AuthZFilter
- [OPENAM-4176](#): Concurrent access of non-thread safe objects possible in DelegationPolicyImpl
- [OPENAM-4138](#): SMS\*Object implementations can cache entry presence incorrectly
- [OPENAM-4111](#): IdP Proxy should use supported binding when connecting to the remote IdP
- [OPENAM-4066](#): RedirectCallbackHandler should use AuthClientUtils instead of AuthUtils
- [OPENAM-4044](#): RestSecurity is instantiated every time user makes REST JSON request
- [OPENAM-4041](#): Session fails to recover deleted session gracefully if CTS compression enabled
- [OPENAM-4023](#): Configurator should not ping the configuration store
- [OPENAM-4005](#): REST logout session fails and does not produce a result message in 11.0.1

- [OPENAM-3999](#): Adaptive module doesn't honor encoded cookies in user requests
- [OPENAM-3995](#): Referral policies cannot be deactivated
- [OPENAM-3993](#): CachingEntitlementCondition should call getState only once
- [OPENAM-3989](#): ResourceLookup should cache results more aggressively
- [OPENAM-3987](#): DAS fails to add cookie header from CAS when cookie.httponly=true
- [OPENAM-3977](#): Review debug statements in IdServicesImpl and subclasses
- [OPENAM-3967](#): PerThreadCache: move initialValue() call outside of critical section
- [OPENAM-3965](#): Use char[] version of Base64 decoding
- [OPENAM-3964](#): SessionService#addInternalSessionListener should not persist the token if the notification URL was already registered
- [OPENAM-3959](#): auth chain miscalculates auth level
- [OPENAM-3947](#): Upgrade removes user-added Advanced Properties from Default Server Settings
- [OPENAM-3920](#): Remote IDP MetaData Import fails with Unable to verify signature under element "EntitiesDescriptor".
- [OPENAM-3871](#): Configurator fails if password contains '%'
- [OPENAM-3864](#): Policy evaluation results differs between clean and upgraded OpenAM instances
- [OPENAM-3841](#): Export metadata produces XML Parsing Error after upgrade to AM11.0.1
- [OPENAM-3830](#): LDAPUtils heartbeat timeout needs to be updated to keep in line with opendj-sdk timeout setting.
- [OPENAM-3826](#): WindowsDesktopSSO auth-module does not log details about GSSException
- [OPENAM-3811](#): Possible CME while serializing InternalSessions
- [OPENAM-3809](#): The final SLO response should be sent using appropriate binding

- [OPENAM-3790](#): Spurious authentication cookie can prevent logout
- [OPENAM-3739](#): configurator tool fails when AuthClientUtil is initialized before the tool
- [OPENAM-3731](#): Sun JDK 1.6.0\_43: some requests cause never-ending loop in SAML2Utils.decodeFromRedirect
- [OPENAM-3683](#): Version number on upgrade wizard is wrong if using a language other than English
- [OPENAM-3660](#): RedirectCallbackHandler uses `HttpServletRequest.getRequestURL` to construct `AM_REDIRECT_BACK_SERVER_URL`
- [OPENAM-3659](#): OAuth2 auth module uses `HttpServletRequest.getRequestURL()` to construct `ORIG_URL` cookie
- [OPENAM-3651](#): LoA based SAML2IDPFinder fails with NPE if the `AuthnRequest` did not contain `RequestedAuthnContext`
- [OPENAM-3646](#): REST endpoint `frrest/oauth2/token` reports `tokenName` `access_token` when given a `refresh_token`
- [OPENAM-3640](#): `StackOverflowError` in `WebtopNaming`
- [OPENAM-3633](#): `SystemConfigurationUtil` returning wrong information while config is reloaded in rare condition
- [OPENAM-3626](#): Changes to policy rules only take effect after restarting OpenAM
- [OPENAM-3447](#): CTS update fails due to attribute conflict
- [OPENAM-3239](#): OAuth 2 client properties randomly disappears after upgrade from OpenAM 10.1 to OpenAM 11
- [OPENAM-3207](#): `PLLRequestServlet` should log an error if the configured maximum request size is exceeded
- [OPENAM-3184](#): Insufficient error logging when 'agent profile' can not be found by `CDCServlet`
- [OPENAM-3159](#): Difference in case between results of `identity/json/attributes` REST API between first and subsequent calls
- [OPENAM-3065](#): Working with realms/sub-realms in site setup is not working properly.
- [OPENAM-2712](#): `Adaptive.getIdentity` prints 'More than one user found' when no user was found

- [OPENAM-2532](#): deleting ActiveDirectory DataStore from subrealm deleting parent's referrals too.
- [OPENAM-2460](#): Policy evaluation may hang with large number of matching referral privileges
- [OPENAM-1655](#): AttributeQueryUtil ignores configured SPAttributeMapper
- [OPENAM-1642](#): Chain based UI customization is not case insensitive
- [OPENAM-752](#): AgentsRepo#getAttributes fails to get agent information occasionally leading to server restart
- [OPENAM-294](#): ssoadm: create and update

## 5.2. Limitations

When session failover is configured to use external OpenDJ directory servers, OpenAM must access those directory servers through an LDAP load balancer that can fail over connections from OpenAM whenever a directory server goes offline. Otherwise, sessions could continue to persist after users logout of OpenAM.

Do not run different versions of OpenAM together in the same OpenAM site.

OpenAM allows you to delete a referral policy even if policies depending on the referral still exist in the target realm. Deleting a referral policy that other policies depend on can cause problems during policy evaluation. You must therefore make sure that no policies depend on any referrals that you delete.

When deploying OpenAM components on Microsoft Windows in an IPv6 environment, you must use the Java 7 Development Kit on Windows (due to [JDK-6230761](#), which is fixed only in Java 7).

The Database Repository type of data store is experimental and not supported for production use.

By default OpenAM does not enforce session quotas when running in Site mode without session failover. To work around this behavior, set the server configuration property `openam.session.-useLocalSessionsInMultiServerMode=true`. You can set this property in OpenAM console under Configuration > Servers and Sites > Servers > Server Name > Advanced.



The XUI is experimental and not supported for production use. The only language locale available for the XUI at this time is US English, in the /path/to/openam/webapps/XUI/locales directory.

On hosts with pure IPv6 networks, OpenAM configuration has been seen to fail while starting the embedded OpenDJ directory server ([OPENAM-3008](#)).

## 5.3. Known Issues

The following important known issues remained open at the time release 11.0.2 became available. For details and information on other issues, see the [OpenAM issue tracker](#).

- [OPENAM-4320](#): NotificationServlet does not check for null before closing writer in finally block
- [OPENAM-4262](#): IDP Proxy should set destination depending on the Binding
- [OPENAM-4252](#): StatusCode SAML response missing space
- [OPENAM-4225](#): Unable to modify some parts of policies in OpenAM console when not using amAdmin account. Unable to replace policy <policy\_name> in organization dc=<org>
- [OPENAM-4218](#): JAVA\_HOME is not set correctly when installing admin tools (ssoadm, ampassword, amverifyarchive)
- [OPENAM-4215](#): ScopingImpl#makeImmutable should perform null checks
- [OPENAM-4213](#): Root cause of MetaData import is lost when debug level is set to 'error'
- [OPENAM-3827](#): json/session endpoint not listing sessions
- [OPENAM-3783](#): Device print check of installed plugins and fonts does not work
- [OPENAM-3780](#): Max number and percentage of tolerated difference between installed fonts is replaced by each other
- [OPENAM-3548](#): Items on the device print authn page are disordered
- [OPENAM-3547](#): Typos and errors of 11.0 additional fields
- [OPENAM-3466](#): LDAP authentication module does not apply the change of the password for the bind DN user until restart

- [OPENAM-3390](#): Japanese translation for OpenAM 11.0
- [OPENAM-3243](#): The Core Auth Module persistent cookie options are different from the Persistent Cookie Module
- [OPENAM-3223](#): Policy Wildcard Matches doesn't work after OpenAM upgrade with an ODSEE
- [OPENAM-3205](#): Missing labels in OAuth2 "Register a Client" page
- [OPENAM-3152](#): CTS -- External Store Passwords configured in default server settings shown in clear text elsewhere
- [OPENAM-3109](#): Token conflicts can occur if OpenDJ servers are replicated
- [OPENAM-3056](#): Retrieving roles may fail when using more than one data store
- [OPENAM-3048](#): RESTful authentication using curl doesn't work on the WebLogic 12c (12.1.1.0)
- [OPENAM-2874](#): The OpenID Connect client registration endpoint does not set idTokenSignedResponseAlg to its default
- [OPENAM-2777](#): Default user profile name field in device print page is unused
- [OPENAM-2715](#): Mandatory OAuth2 Provider settings not enforced in the UI
- [OPENAM-2656](#): PrefixResourceName#compare() strips off trailing '/' in PathInfo
- [OPENAM-2608](#): Restricted Token validation does not work in legacy REST API
- [OPENAM-2564](#): resource-based authentication with DistAuth not working
- [OPENAM-2537](#): SAML AuthContext mapper auth level setting inconsistencies
- [OPENAM-2469](#): IdP initiated SSO endpoints should honor RelayState even when they're POSTed
- [OPENAM-2453](#): HTTP GET /ws/1/entitlement/privilege? HTTP 400 with message "Unable to search privileges."
- [OPENAM-2404](#): new\_org.jsp is displayed from the original realm in case of session upgrade

- [OPENAM-2262](#): Configure OAuth2 wizard always enables refresh tokens
- [OPENAM-2170](#): Configure OAuth2 wizard fails to create policy in sub-realm
- [OPENAM-2168](#): Authentication Success Rate and Authentication Failure Rate are always 0
- [OPENAM-2155](#): Non printable characters in some files. Looks like most should be copyright 0xA9
- [OPENAM-2137](#): DSConfigMgr can hide exception root causes
- [OPENAM-2085](#): Unreliable policy evaluation results with `com.sun.identity.agents.config.fetch.from.root.resource` enabled
- [OPENAM-2023](#): Federation Connectivity Test fails with Account termination is not working
- [OPENAM-1946](#): Password change with AD does not work when old password is provided
- [OPENAM-1945](#): Default Configuration create invalid domain cookie
- [OPENAM-1921](#): REST GET for user "\*" returning first user listed
- [OPENAM-1892](#): Only Accept certificate for authentication if KeyUsage is correct
- [OPENAM-1886](#): Session invalidated on OpenAM server is not deleted from SFO datastore
- [OPENAM-1852](#): Oauth2 auth-module can not be used with DistAuth
- [OPENAM-1839](#): LDAPConnectionPool is not recovered
- [OPENAM-1831](#): OpenAM 10.0 subrealm DNS alias doesn't work as expected unless setting `com.sun.identity.server.fqdnMap`
- [OPENAM-1811](#): DAS response serialization is not working as expected when using PAP
- [OPENAM-1660](#): Read-access to SubjectEvaluationCache is not synchronized
- [OPENAM-1659](#): Default Authentication Locale is not used as fallback
- [OPENAM-1563](#): Servers and Sites pages may display password in clear text

- [OPENAM-1505](#): LogoutViewBean does not use request information for finding the correct template
- [OPENAM-1456](#): Change of the agent group in the J2EE policy agent profile causes profile corruption
- [OPENAM-1323](#): Unable to create session service when no datastore is available
- [OPENAM-1317](#): With ssoadm create-agent, default values are handled differently for web agents and j2ee agents
- [OPENAM-1269](#): Entitlements are incorrectly converted to policies
- [OPENAM-1219](#): SAML 2 metadata parsing breaks in glassfish 3.1.2
- [OPENAM-1194](#): Unable to get AuthnRequest error in multiserver setup
- [OPENAM-1181](#): Improperly defined applications cause the policy framework to throw NPE
- [OPENAM-1137](#): Error message raised when adding a user to a group
- [OPENAM-1111](#): Persistent search in LDAPv3EventService should be turned off if caching is disabled
- [OPENAM-1105](#): Init properties sometimes don't honor final settings
- [OPENAM-774](#): Invalid characters check not performed.
- [OPENAM-291](#): SelfWrite permissions are denied to sub realms
- [OPENAM-71](#): SAML2 error handling in HTTP POST and Redirect bindings

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## Chapter 6. How to Report Problems & Provide Feedback

If you have questions regarding OpenAM which are not answered by the documentation, there is a mailing list which can be found at <https://lists.forgerock.org/mailman/listinfo/openam> where you are likely to find an answer.

If you have found issues or reproducible bugs within OpenAM 11.0.2, report them in <https://bugster.forgerock.org>.

When requesting help with a problem, include the following information:

- Description of the problem, including when the problem occurs and its impact on your operation
- Description of the environment, including the following information:
  - Machine type
  - Operating system and version
  - Web server or container and version
  - Java version
  - OpenAM version
  - Any patches or other software that might be affecting the problem
- Steps to reproduce the problem
- Any relevant access and error logs, stack traces, or core dumps



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## Chapter 7. Support

You can purchase OpenAM support subscriptions and training courses from ForgeRock and from consulting partners around the world and in your area. To contact ForgeRock, send mail to [info@forgerock.com](mailto:info@forgerock.com). To find a partner in your area, see <http://forgerock.com/partners/find-a-partner/>.

