OpenIDM 2.1.0 Release Notes

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Abstract

Notes covering OpenIDM software requirements, fixes, known issues. The OpenIDM project offers flexible, open source services for automating management of the identity life cycle.

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Chapter 1. What's New in OpenIDM 2.1.0

Important

OpenIDM 2.1.0 is a milestone release from the main development branch of the product. This release contains selected key features and all current fixed issues. The release has undergone important functional testing but not the complete testing cycle that is done for a full enterprise release.

This release is supported through a ForgeRock subscription. Its goal is to enable you to start build phases earlier, with the most recent features, instead of having to wait for the full release date. Fixes to issues that are discovered in this release will be delivered as patches to ForgeRock customers, and are guaranteed to be delivered in the full release that follows. This release will be supported for a grace period after the full version has been released.

With the exception of these Release Notes, the official documentation for this release is still in progress, and is accessible at http://openidm.forgerock.org/docs.html. The complete, validated documentation set will be available with the full release.

OpenIDM 2.1.0 provides many new features, including the following:

- Browser-based user interface

  Includes self service capabilities, a generic platform to expose and invoke workflows, and a notification service for tasks.

  For more information, see *OpenIDM User Interface* in the *Integrator's Guide*.

- BPMN 2.0 workflow engine, embedded as an OSGi bundle and accessible over REST.

  For more information, see *Integrating Business Processes and Workflows* in the *Integrator's Guide*.

- Configurable task scheduling service, including support for clustered schedules and scanning tasks.

  For more information, see *Scheduling Tasks and Events* in the *Integrator's Guide*.

- Configurable policy service.

  For more information, see *Using Policies to Validate Data* in the *Integrator's Guide*.

- Ability to perform batch scans to execute tasks

  For more information, see *Scanning Data to Trigger Tasks* in the *Integrator's Guide*.

- Ability to create custom RESTful endpoints.

  For more information, see *Adding Custom Endpoints* in the *Integrator's Guide*.

- Support for MS SQL JDBC as an internal repository.

  For more information, see *To Set Up OpenIDM With MS SQL* in the *Installation Guide*.

- Enhanced, multi-threaded reconciliation service, accessible over REST.

  For more information, see *Configuring Synchronization* in the *Integrator's Guide*.

- Support for Powershell scripts on the Active Directory connector.

  For more information, see *Using PowerShell Scripts With the Active Directory Connector* in the *Integrator's Guide*.

- Reusable server configuration and property value substitution in the configuration.

  For more information, see *Using Property Value Substitution in the Configuration* in the *Integrator's Guide*.

- Support for calling LiveSync operations over REST, or using the resource API.

  For more information, see *Triggering LiveSync Over REST* in the *Integrator's Guide*.

For installation instructions and several samples to familiarize you with the features, see the *Installation Guide*.

For an architectural overview and high-level presentation of OpenIDM, see the *Architectural Overview* chapter in the *Integrator's Guide*.

Chapter 2. Before You Install OpenIDM Software

This chapter covers prerequisites for installing and running OpenIDM software.

For OpenIDM 2.1.0, the following configurations are supported for use in production.

Repository

The following JDBC repositories are supported for use in production:

- MySQL 5.1 or 5.5 with Connector/J 5.1.18 or later
- Microsoft SQL Server 2008 Express

OrientDB is provided for evaluation only.

Stand-alone installation
: You must install OpenIDM as a stand-alone service, using Apache Felix and Jetty as provided. Alternate containers are not supported.

Connectors
: OpenIDM 2.1.0 comes packaged with these OpenICF connectors:

  - CSV File
  - LDAP
  - Scripted SQL
  - XML File

  ForgeRock provides additional connectors, as listed on the OpenICF project connectors site.

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

OpenIDM requires Java SE JDK 6 update 24 or later. When using the Oracle JDK, you also need Java Cryptography Extension (JCE) policy files.

On Windows systems, use Java SE JDK 7 update 6 or later, to take advantage of a recent JVM fix relating to non-blocking sockets with the default Jetty configuration.

You need 130 MB disk space and 256 MB memory for a minimal evaluation installation. For a production installation, disk space and memory

requirements will depend on the size of the repository, and on size of the audit and service log files that OpenIDM writes.

Chapter 3. OpenIDM Fixes, Limitations, & Known Issues

Note

The current list of fixes and issues reflects OpenIDM 2.1.0 in progress as of February 13, 2013.

OpenIDM issues are tracked at https://bugster.forgerock.org/jira/browse/OPENIDM.

3.1. Fixes & Improvements

OpenIDM 2.1.0 includes the following major fixes and improvements.

- OPENIDM-1132: Enhanced handling of systems where we can't read the password or where we may not always have the password (yet)
- OPENIDM-1092: Calls to openidm.update from within Workflow scripts trigger an exception
- OPENIDM-1087: ObjectMapping's call-back action does not support sync-based use-cases
- OPENIDM-1060: JSON Resource should decode URI (normalize)
- OPENIDM-1055: Add base type check to OpenIDMELResolver to resolve only openidm router operations
- OPENIDM-1030: IDM assessed the SOURCE_MISSING situation as the UNQUALIFIED situation in target recon
- OPENIDM-1011: Patch on managed/user failing with reauth required policy even when not changing a property requiring it
- OPENIDM-1008: Add not null check to openidm calls in ScopeFactoryService to avoid NPE when handling the result
- OPENIDM-1006: Users can modify any of their own attributes, potentially causing major security issues for syncing
- OPENIDM-998: openidm.create() and openidm.update() should return the UID and not NULL
- OPENIDM-990: Re-Auth-Required Policy not applying to PATCH
- OPENIDM-988: OpenDJ Password Synchronization Plugin raising error on password change in OpenDJ

- OPENIDM-987: Remove old startprocessinstance syntax from workflow integration
- OPENIDM-984: Custom Policies are executing multiple times per request
- OPENIDM-965: Encrypted password in boot.properties example does not authenticate
- OPENIDM-940: onValidate not triggering during recon via rest
- OPENIDM-936: Authorization access declarations need to be able to easily exclude access to specific actions on specifc resource
- OPENIDM-921: Provisioner fail coerce from String to some primitive types
- OPENIDM-914: CLI.SH configimport not working when using --replaceAll option
- OPENIDM-913: CLI.SH configimport not working when importing all set of files
- OPENIDM-911: OpenIDM LiveSync failed to sync user changes from OpenDJ source.
- OPENIDM-904: It must be possible to add policies without changing the defaults policy.js
- OPENIDM-884: Policy violations on PUT call are not getting properly propagated to callers
- OPENIDM-883: Align API with CREST 2.0 for compatibility
- OPENIDM-856: Re-authentication policy gets falsely applied during functions such as recon, and stops admin from resetting passwords
- OPENIDM-850: Policy service can not have required dependency on built in authentication module
- OPENIDM-845: NullPointer in command line encrypt
- OPENIDM-844: Policy Service support for sub-objects when policies are configured in managed.json
- OPENIDM-825: Running opeidm on Java7, getting startup error the system bundle exports the javax.transaction.xa package
- OPENIDM-818: Customizable OpenIDM info service
- OPENIDM-811: Client side execution of scripted policy validation functions

- OPENIDM-808: cli.sh/configimport is skipping some files in default mode and the --replaceAll option raises an error
- OPENIDM-805: Bug in router-authz.js script when evaluating customAuthz functions
- OPENIDM-802: Recon: Source reconciliation gives NP exception in certain UNQUALIFIED situation and default DELETE action.
- OPENIDM-797: Sample 3 - MySQL script is not correct on Windows + workaround
- OPENIDM-790: Add ability to set businessKey when starting process
- OPENIDM-778: Add the ability to filter the worklfow tasks based on candidate and candidategroup attributes
- OPENIDM-777: Separate task instance and definiton methods ot the workflow API
- OPENIDM-776: Add some missing attributes to the GET /workflow/taskinstance response object
- OPENIDM-775: Return HTTP 404 when the requested workflow resource is not found
- OPENIDM-774: Add superProcessInstanceId to the /workflow/processinstance/{id} response object
- OPENIDM-771: Change HTTP 400 return code to 403 where there is no operation implemented on the requested resource in workflow API
- OPENIDM-769: Change /workflow path to /workflow/processdefinition to be consistent with the other API operations
- OPENIDM-768: Remove processDefinitionId and/or key from workflow process variables when starting a workflow
- OPENIDM-741: Back-end pasword policy support
- OPENIDM-729: Remote Shell script password and username parameters requires special care
- OPENIDM-715: OpenIDM freezes on reconciliation
- OPENIDM-684: Scheduler - Trigger Acquisition Management in a Clustered Persistent Scheduler
- OPENIDM-682: REST API: Failed to delete a system object w/ condition in openDJ

- OPENIDM-679: Productize script execution on system objects
- OPENIDM-674: Lazy loading of source or target objects during reconciliation
- OPENIDM-661: Special characters are not saved properly in MySQL Database with the default sample configuration.
- OPENIDM-629: Repository needs to ensure selects do not start implicit transactions
- OPENIDM-612: Support authentication query with user roles
- OPENIDM-602: Authentication bug in backend which makes impossible authentication with encrypted password
- OPENIDM-598: nullpointer exception when reading from activedirectory group, crash when writing to active drirectory group
- OPENIDM-593: The Json Resource Restlet 1.2.2 fails with the http://localhost:8080/openidm/managed/user?_action=create request
- OPENIDM-564: OpenIDM and the Connector Server, under some conditions, fails to esatablish a connection with each other
- OPENIDM-527: All connectors must distinguish between successful empty results, and failures to obtain results

3.2. Limitations

A conditional GET request, with the `If-None-Match` request header, is not currently supported.

3.3. Known Issues

OpenIDM 2.1.0 has the following known issues.

- OPENIDM-1176: Disabled schedules via dynamic scheduler API disappear
- OPENIDM-1170: Linux startup script generator is not working correctly
- OPENIDM-1162: With OrientDB, for a MISSING/CREATE situation/action, reconciliation creates a new link instead of using an existing link
- OPENIDM-1133: Certain sample files contain unnecessary, unused entries
- OPENIDM-1129: OpenIDM freezes when the connection to the repository is interrupted

- OPENIDM-1117: Malformed content-type request header produces 500 error
- OPENIDM-1115: When an LDAP user is created through the REST API, the _id that is returned is not normalized
- OPENIDM-1098: onDelete script generates exception
- OPENIDM-1096: A PUT command on a configuration object may return an incorrect value
- OPENIDM-1094: Starting a second OpenIDM instance with a conflicting port causes the instance to freeze
- OPENIDM-1093: A user's accountStatus (active or inactive) has no effect on the UI or the REST API
- OPENIDM-964: An incorrect password in boot.properties causes OpenIDM to hang on startup
- OPENIDM-848: Conflicting behavior might be observed between the default fields set by the onCreate script and policy enforcement
- OPENIDM-803: For reconciliation, the default DELETE action does not delete target objects when targets are ambiguous, including UNQUALIFIED situations, if there is more than one target

Chapter 4. OpenIDM Compatibility

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

4.1. Major Changes to Existing Functionality

The following changes will have an impact on existing deployments. Read these changes carefully and adjust existing scripts and clients accordingly.

Changes to the scheduler configuration
: The way in which scheduled tasks is configured has changed, as described in *Scheduling Tasks and Events*.

  Schedules are now defined in files named `openidm/conf/schedule-*.json`. If you use the previous naming convention (scheduler-*.json), the schedules will not be launched.

Reconciliation now on `recon` service
: In previous releases, reconciliation was called on the `sync` service. This API has been deprecated and reconciliation is now called on the `recon` service. For example, a reconciliation operation that previously targeted the following URL:

```
"http://localhost:8080/openidm/recon?_action=sync&mapping=systemLdapAccounts_managedUser"
```

  would now use the following URL:

```
"http://localhost:8080/openidm/recon?_action=recon&mapping=systemLdapAccounts_managedUser"
```

Audit log changes
: Timestamps now have milliseconds and are in UTC timezone.

  The access log now has an additional field, `userid`, which is the OpenIDM ID for a managed or internal user who is logged in. For authentication via SSL mutual auth only, the `userid` is currently `null` because there is no direct associated user in OpenIDM.

Database schema changes
: The `reconID` column has been removed from the `links` table.

  The size of the `linkType` column in the `links` table has been reduced to 255 characters. This is because MySQL can only create unique indexes on that size for UTF-8 encoding.

The `links` table indexes have been changed to unique indexes to prevent duplication.

The `auditactivity` table contains two new columns - `changedfields` and `passwordchanged`, for additional auditing functionality.

Tables have been added for the scheduler configuration and for User Interface notifications.

The `openidm` user is created with all the required privileges to update the `openidm` database by default.

Changes to token definitions in OrientDB query definitions
: Existing `repo.orientdb.json` query definitions with tokens like `${mytoken}` must be reviewed and adjusted to match the new definition which aligns declarations for regular and prepared statement uses.

  Existing `${token}` tokens are now suitable for quoted strings by default. Prefixes such as `unquoted:` and `dotnotation:` allow you to use queries in contexts where the unquoted value or the JSON pointer converted to OrientDB dot notation should be inserted.

New queries in `repo.*.json` definitions
: query-by-linkType

Security context changes
: The request context now includes the security context of the user that is associated with the call.

  The `"user"` property has been renamed `"username"`, the name used to log in (for example, to authenticate against an access manager).

4.2. Minor Changes to Existing Functionality

The following changes should not have an impact on existing deployment configurations.

Connection pooling is on by default
: For existing configurations, keep this setting off unless you explicitly require it to be changed.

Explicit definition of username, password, and role
: The authentication configuration now explicitly defines which properties from the query represent the username, password, and role. Existing configurations rely on the logic of the query order to determine which property is which.

Prefetching of links during reconciliation operations
: All links are now queried at the start of a correlation and the results of that query are used.

For more information, see *Prefetching Links* in the *Integrator's Guide*.

4.3. Deprecated Functionality

The following functionality is deprecated in OpenIDM 2.1.0.

- Reconciliation is no longer called on the `sync` service. For more information, see the list of changes to existing functionality.

No additional functionality is planned to be deprecated at this time.

4.4. Removed Functionality

No functionality has been removed in OpenIDM 2.1.0.

No functionality is planned to be removed at this time.

4.5. Functionality That Will Change in the Future

These capabilities are expected to change in upcoming releases:

- The way you generate connector configurations for access to external resources, described in *Creating Default Connector Configurations*.

Chapter 5. How to Report Problems & Provide Feedback

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

If you have found issues or reproducible bugs within OpenIDM 2.1.0, report them in https://bugster.forgerock.org.

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

- Description of the problem, including when the problem occurs and its impact on your operation
- Machine type, operating system version, Java version, and OpenIDM release version, including 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

Chapter 6. Support

You can purchase OpenIDM 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. To find a partner in your area, see http://forgerock.com/partners/find-a-partner/.