Qlik Enterprise Manager 6.5 Release Notes - November 2019

Qlik Enterprise Manager 6.5 introduces several improvements including support for retrieiving tables and table statuses using the SDK, extended SDK support for Qlik Compose for Data Lakes, and UI changes to support Qlik Replicate 6.5 security hardening.

Notes

» **License(s):** From AEM 6.1, in order to use AEM, new and existing customers will need to install a valid "Replication Management" license.

Customers (new and existing) who wish to use the optional Replication Analytics module will also need to install a "Replication Analytics" license to enable the module's features.

» **Beta features:** The Metadata module is currently in beta.

» **Skipping versions:** Customers who are skipping versions (i.e. not upgrading from the last released version) are strongly encouraged to review the release notes for all versions higher than their currently installed version.

In these release notes:

» Migration and Upgrade
» Replicate and Compose for Data Lakes Compatibility
» New Features and Enhancements
» AEM 6.3 End-of-Life
» Resolved Issues and Customer Requested Enhancements
» Known Issues

For more information about a particular feature, please refer to the *Attunity Enterprise Manager Setup and User Guide*.

Migration and Upgrade

This section describes various upgrade scenarios and considerations.

Upgrading from an Unsupported Version

If your current AEM version is no longer supported, you need to perform two upgrades. First, upgrade to any supported version (excluding this version), and then upgrade to this version. If you are unsure what version you need to upgrade to first, contact Attunity Support.

Using the Metadata Module after Upgrade

The following procedure must be performed should you wish to use the Metadata module after upgrading to AEM 6.5.

Upgrading from AEM 6.2 or AEM 6.3 to AEM 6.5:

Perform the following procedure after upgrading to AEM 6.5:

1. Open the **AEM Settings** window.
2. If Analytics is running then select the **Analytics** tab and click **Stop Collector**.
3. Select the **Repository Connection** tab.
4. Re-enter the password.
5. Click **Test Connection** and then click **Save**.
6. Click **Initialize Metadata Repository**.
7. If you stopped Analytics before, then select the **Analytics** tab and click **Start Collector**.

Note that this will delete any existing Metadata data from the repository.

Replicate and Compose for Data Lakes Compatibility

» **Replicate Compatibility**

   » AEM 6.5 is compatible with Replicate 6.5, 6.4, 6.3, and 5.5.

   > **Note**
   >
   > » The **Metadata** feature is supported from Replicate 6.2 only.
   >
   > » Replicate 6.3 will only be supported for the six-month grace period
   > following the release of Replicate 6.5 GA.

» **Compose for Data Lakes Compatibility** - AEM 6.5 is compatible with Compose for
Data Lakes 6.5 only.

New Features and Enhancements

AEM SDK Improvements

Support for Multiple Endpoint Configurations

Using the SDK, it is now possible to switch the source endpoint settings in a Replicate task with settings from another endpoint of the same type. Such functionality may be useful in the event of database failover or when migrating from a testing to a production environment, for example.

The name of the new method differs according to the SDK type:

» **REST SDK:** AemReconfigureEndpointNoWait

» **.NET SDK:** ReconfigureEndpointNoWait

» **Python SDK:** reconfigure_endpoint_no_wait

For usage instructions, please refer to the *Attunity Enterprise Manager Developer's Guide*.

Retrieving a Task's Table List and Table Statuses

The following table-related methods are now supported:

» **AemGetTableList** - Retrieves the list of tables of a specific Replicate task that match the specified state(s), table schema(s), and table name(s).

   The name of the new method in the .NET and Python SDKs is as follows:

   » **.NET SDK:** GetTableList

   » **Python SDK:** get_table_list

» **AemGetTableStatuses** - Retrieves the tables statuses of a specific Replicate task for all tables that match the specified state(s), table schema(s), and table name(s).

   The name of the new method in the .NET and Python SDKs is as follows:

   » **.NET SDK:** GetTableStatuses

   » **Python SDK:** get_table_statuses

These methods are especially useful for automation processes, for example, as they allows you to retrieve tables in a certain state (e.g. suspended) and then peform an operation on them (e.g. AemReloadTable).

Extended Support for Attunity Compose for Data Lakes

The following methods are now supported with Attunity Compose for Data Lakes:

» Get task list

» Get task details

» Run task

» Stop task

Security Hardening

Due to Replicate security enhancements, the following changes were made to the AEM Console UI:

» A **Use SSL** option was added to the mail server settings (which are used to send notifications)

    » When **Use SSL** is enabled, user can also select the new **Verify peer** and/or **Verify host** fields to validate the server certificate.

» User-defined commands in endpoint settings:

    » A new **Operating System-Level Credentials** tab was added to the server settings. Several endpoints support running user-defined commands for pre/post-processing files. In the new **Operating System-Level Credentials** tab, you can provide alternate user credentials for any user-defined command that needs to be executed at operating system level.

    By default, such commands are executed under the Replicate service account on the Replicate Server machine. This may constitute a security risk, as it allows any Replicate user with Admin or Designer permissions to specify user-defined commands that could lead to a full compromise of the server.

    » With new installations, the execution of user-defined commands is blocked by default. To allow the execution of such commands, follows the procedure described in the **"Allowing Execution of User-Defined Commands"** topic in the Replicate Help.

AEM 6.3 End-of-Life

Attunity's Support and Maintenance Agreement guarantees support for three AEM versions, as follows:

» When the current Version Release *does not* have a minor release (i.e. x.0), then ATTUNITY shall support:

   » The current Version Release (1)

   » The last two (2) Minor Releases of the previous Major Release

» When the current Version Release *does* have a minor release - for example x.1 - then ATTUNITY shall support:

   » The last two (2) Minor Releases of the current Major Release

   » The last one (1) Minor Release of the previous Major Release

Based on the policy outlined above, Attunity announces the end of life of AEM 6.3. Customers who need additional time to upgrade, can do so during the six-month period following the GA release of AEM 6.5. Nevertheless, customers are encouraged to upgrade to AEM 6.5 well before the end of the six-month period. No additional maintenance charges will be introduced during this period.

Attunity understands that in certain circumstances a customer may need an additional support extension to ensure business continuity. If this is the case, please contact Attunity Support to discuss the available options.

Resolved Issues and Customer Requested Enhancements

The table below lists the resolved issues and customer requested enhancements/features for this release.

Component/Process	Type	Description	Ref #
AEM Analytics	Issue	On all dashboards, the following changes have been made: » Full Load throughput metrics have been adjusted to only include tasks running in Full Load mode. » Change Processing throughput and latency metrics have been adjusted to only include tasks running in Change Processing mode.	N/A
AEM Analytics	Issue	Filtering out (or including) a target endpoint, would result in the following error (excerpt): `ERROR: missing FROM-clause entry for table "aem_source_database" Position: 354".`	192547 194405

Component/Process	Type	Description	Ref #
Notifications	Issue	If a task with the same name was running on two Replicate Servers and AEM was only configured to notify about errors on one of the servers, but the task failed on the other server a notification would wrongly be sent.	191840
Notifications	Issue	Repeated notifications would be sent for a task that failed with a non-recoverable error.	188483
Notifications	Issue	When selecting specific tasks for notifications, notifications would be sent for all tasks instead of just the selected tasks.	189344 188579
Security/Help	Enhancement	The Help did not include instructions for replacing the Attunity self-signed certificate. Added the topic "Replacing the Self-Signed Certificate on Windows" to the Help.	189144
AEM SDK (REST, .NET, and Python)	Enhancement	See Extended Support for Attunity Compose for Data Lakes.	191406
AEM SDK (REST, .NET, and Python)	Enhancement	See Support for Multiple Endpoint Configurations.	189608

Component/Process	Type	Description	Ref #
AEM SDK (REST, .NET, and Python)	Enhancement	See AEM SDK Improvements.	186158 186014 189340 190615
Import	Issue	When trying to import a task with a SAP Application source into AEM, the following error would be encountered (excerpt): `Failed to import task... as the JSON file contains unsupported objects.`	188229 187928

Known Issues

The table below lists the known issues for this release.

Component/Process	Description	Reference
KNOWN ISSUES FOR THE OPERATIONS MODULE		
User Preferences	Sometimes, when closing and then reopening the AEM Console, the last opened tabs will not be reopened.	AEM-4823
Task Metrics	Some of the task list values that are not applicable to Compose tasks may appear as "0" while they should actually be N/A (not applicable). The same is true of task list values that are not applicable to Replicate tasks.	AEM-4821
Log Stream Staging	Two Log Stream Staging tasks with the same name but on different servers will be represented by the same Log Stream Staging tag even though they do not write/read to/from the same Log Stream.	AEM-5225
Internet Explorer	Performance (such as scrolling and switching between tabs/views) is impacted when over 2000 tasks are being monitored.	AEM-4819
KNOWN ISSUES FOR THE METADATA MODULE		
Repository Initialization	After editing the Repository Connection properties for PostgreSQL and clicking the **Test Connection** button, the **Initialize Metadata Repository** button is enabled. However, before clicking the **Initialize Metadata Repository** button, you must also click **Save** or you will get an error on the Initialize action.	MM-590
Rename Transformations	If a transformation is being done within Replicate or Compose to rename a table or column, the lineage and impact analysis will not be correct. The relationship between the source and target objects will not be reflected in the Metadata perspective in this case.	MM-561

Component/Process	Description	Reference
Replicate CDC Staging Tasks	Replicate Log Stream Staging tasks are not reflected as such in Metadata. Each task associated with a CDC Staging endpoint will be shown in Metadata and you can register collections for each task, but the connection and relationship between tasks is not reflected.	MM-505
Lineage for Compose tasks	Only the first data storage Compose task is shown in the lineage.	MM-433
Performance	To ensure acceptable performance, a maximum of 40,000 data sets is currently supported.	MM-343
Lineage	The current data set lineage may show unrelated tasks if they write to the same collection but to different data sets.	MM-156
Compose	Compose data storage tasks that move data from a Landing Zone that is not associated with a Replicate task are not supported.	MM-148
Replicate Compatibility	Replicate 6.2 and above is required	MM-117
Collections	When two tasks are reading from same source, two collections are created instead of a single merged collection.	MM-100

Component/Process	Description	Reference
KNOWN ISSUES RELEVANT TO BOTH OPERATIONS AND METADATA		
Upgrade - PostgreSQL Repository Credentials	If the Analytics module was configured in a previous AEM version, you will need to re-enter the credentials for the PostgreSQL repository in order to initialize the Metadata module. Otherwise, clicking on the **Initialize Metadata Repository** button under Settings|Repository Connection will generate an error.	MM-598
PostgreSQL Repository	If the PostgreSQL Repository is unavailable, updates sent from Replicate and Compose to the Metadata module and updates sent from Replicate to the Analytics module may be lost. Therefore, it is recommended to only bring the PostgreSQL Repository down during maintenance windows when there are no changes being applied to Replicate and/or Compose projects.	MM-599