

Attunity Enterprise Manager 6.4 Release Notes - May 2019

Attunity Enterprise Manager 6.4 introduces a new Validation module (beta), as well as several enhancements to the Operations and Analytics modules.

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 and the new Validation module are 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](#)
- » [Supported PostgreSQL Version](#)
- » [AEM 6.2 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 6.4.

Upgrading from AEM 6.2 or AEM 6.3 to AEM 6.4:

Perform the following procedure after upgrading to AEM 6.4:

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 6.4 is now compatible with Replicate 6.4, 6.3, 6.2, and 5.5.

Note

- » The **Metadata** feature is supported from Replicate 6.2 only.
- » Replicate 6.2 will only be supported for the six-month grace period following the release of Replicate 6.4 GA.

- » **Compose for Data Lakes Compatibility** - AEM 6.4 is compatible with Compose 6.3 only.

New Features and Enhancements

This section provides an overview of the new features and enhancements in AEM 6.4.

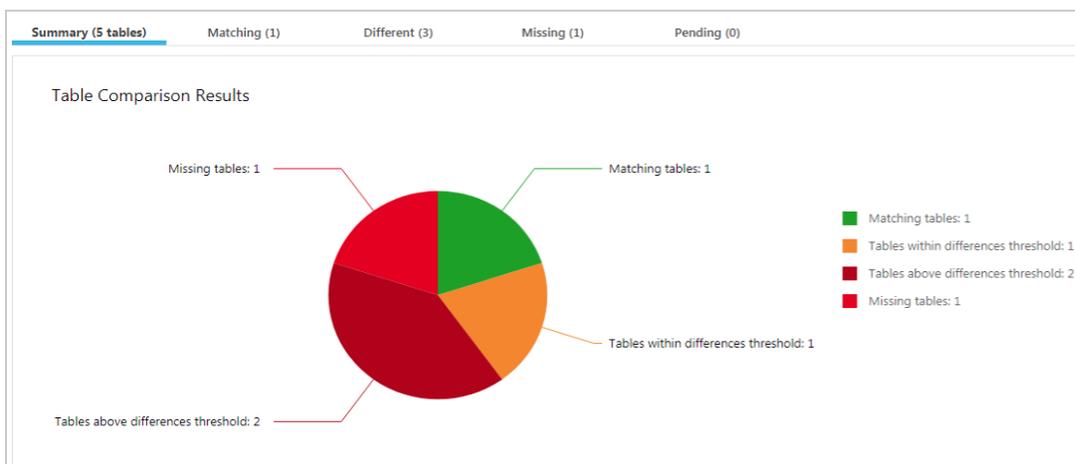
Validation

The new Validation module compares user-selected tables and identifies discrepancies between the source tables and the corresponding target tables, such as mismatched data, missing records, or missing tables. The comparison results allow customers to resolve issues *before* the problematic data is used for decision-making, analytics, and other business-critical processes.

Validation can be performed on tasks replicating between relational source and target endpoints, either after Full Load completes or during CDC. Although differences between the source and target are to be expected during CDC, running a validation could still provide a good indication of any sync issues between the source and target (depending of course on when the validation was run).

A summary of the validation results is displayed in an intuitive pie graph while more detailed information (such as which tables match, which tables are different, etc.) is available in dedicated tabs. The validation results can also be downloaded as reports in CSV format.

Validation results:



Note The **Validation** module is currently in beta. Before using this feature, please contact Attunity Support for assistance and for details of supported endpoints.

Security

A **Verify server certificate** option has been added to the server Connection Properties window. The new option greatly reduces the possibility of a "man-in-the-middle" attack by allowing the AEM machine to verify that the Compose/Replicate Server certificate is trusted.

AEM SDKs

The AemGetTaskDetails (REST SDK), GetTaskDetails (.Net SDK), and get_task_details (Python SDK) methods now returns the task description.

In addition, support for the **Verify server certificate** option described above has been added to the AemPutServer/AemGetServer (REST SDK), PutServer/GetServer (.Net SDK), and put_server/get_server (Python SDK) methods.

Compose Spark History Logs

When selecting a task associated with a Compose for Spark project, you can now view the Compose job files on the Spark History Server. To facilitate this new functionality, a **View Spark History Server** link has been added to the bottom of the **Log Viewer** window.

Analytics Enhancements

- » **Export Charts** - Users can now export all dashboards to a TSV file, including dashboards with charts, using the new **Export to TSV** button. On dashboards with charts, including *Trends*, *Trends by Server*, *Trends by Task* and *Capacity Planning*, users can also set the resolution and select the desired charts and metrics to export.
- » **Minute resolution** - A Minute resolution option has been added to the existing Hourly, Daily, Weekly and Monthly trend data resolution options.
- » **"Rank By" Sorting** - A new option has been added to the bubble charts on the *Top Servers* and *Top Tasks* dashboards, allowing you to sort data in either ascending or descending order for the specified "Rank By" metric.

Supported PostgreSQL Version

Starting from AEM 6.3, only PostgreSQL 10.1 and above will be supported for the Analytics and Metadata repository.

AEM 6.2 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 6.2. Customers who need additional time to upgrade, can do so during the six-month period following the GA release of AEM 6.4. Nevertheless, customers are encouraged to upgrade to AEM 6.3 or above 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 #
Java	Enhancement	OpenJDK JRE version 8.0.202.8 is now included in the AEM installation.	187662

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	<p>After editing the Repository Connection properties for PostgreSQL and clicking the Test Connection button, the Initialize Metadata Repository button is enabled.</p> <p>However, before clicking the Initialize Metadata Repository button, you must also click Save or you will get an error on the Initialize action.</p>	MM-590
Rename Transformations	<p>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.</p> <p>The relationship between the source and target objects will not be reflected in the Metadata perspective in this case.</p>	MM-561

Component/Process	Description	Reference
Replicate CDC Staging Tasks	<p>Replicate Log Stream Staging tasks are not reflected as such in Metadata.</p> <p>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.</p>	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