Oracle® Communications Offline Mediation Controller Release Notes



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Oracle Communications Offline Mediation Controller Release Notes, Release 15.1

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Contents

Audience

1 Summary of Customer-Reported Fixes

Customer-Reported Fixes in Offline Mediation Controller 15.1	1-1
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2 New Features in Offline Mediation Controller

Support and Certification for 15.1	2-1
New Offline Mediation Controller Web-Based UI	2-1
StatefulSet Implementation for Node Manager Pods	2-2
Automated Scaling of Node Manager Pods Using HPA	2-2
Changes to Offline Mediation Controller REST Services Manager	2-2
OAuth 2.0 Authentication Support for Offline Mediation Controller REST Services Manager	2-2
Automating RSM Request Workflows	2-3
Grafana Dashboard Support for Offline Mediation Controller REST Services Manager	2-3
Testing Node Chains Using Offline Mediation Designer UI	2-4
Enhancement to the Remote Data Manager (RDM)	2-4

3 Known Problems



iv iv iv

Preface

This guide includes information about the Oracle Communications Offline Mediation Controller 15.0 release.

Audience

This guide is intended for all Oracle Communications Offline Mediation Controller users.

Documentation Accessibility

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1 Summary of Customer-Reported Fixes

Learn about the customer-reported issues that were fixed in Oracle Communications Offline Mediation Controller.

Topics in this document:

Customer-Reported Fixes in Offline Mediation Controller 15.1

Customer-Reported Fixes in Offline Mediation Controller 15.1

 Table 1-1 lists the customer-reported issues that were resolved in Offline Mediation Controller

 15.1.

Bug Number	Description
37099897	Offline Mediation Controller was sending duplicate requests to Elastic Charging Engine (ECE) from the ECE Distribution Cartridge (DC) in some cases.
	This has been fixed.
36977065	In previous releases, Admin-server-app and Node-manager did not start during a fresh installation of Offline Mediation Controller 12.0 patch set 8 in OpenShift 4.10 and 4.12. The codebase was using the system variable user.home to create and update files, which does not exist for a random user since the value is retrieved from /etc/passwd . user.home was being returned as "?". This issue has been fixed. The solution provided to the customer was to add an additional JAVA_TOOL_OPTIONS parameter.
36923870	The Collection Cartridge (CC) node stopped processing files after an FTP timeout. When the CC node encountered an FTP timeout or lost connectivity, it continued retrieving files but stopped processing them. This has been fixed.
36348862	The Offline Mediation Controller Grafana Dashboard was generating an import error. Grafana is known to have an issue with library panels in recent updates, which has not been resolved. Prometheus, as a data source, had been hardcoded (name and UID) in the JSON files instead of accepting user input for the Prometheus data source.
	This has been fixed by removing library panels from the JSON files. The Prometheus data source (name and UID) is now added as an input form field from the end user.

Table 1-1 Customer-Reported Fixes in Offline Mediation Controller 15.1



2 New Features in Offline Mediation Controller

Learn about the new features in Oracle Communications Offline Mediation Controller 15.1.

Topics in this chapter include:

- Support and Certification for 15.1
- New Offline Mediation Controller Web-Based UI
- StatefulSet Implementation for Node Manager Pods
- Automated Scaling of Node Manager Pods Using HPA
- Changes to Offline Mediation Controller REST Services Manager
- OAuth 2.0 Authentication Support for Offline Mediation Controller REST Services Manager
- Automating RSM Request Workflows
- Grafana Dashboard Support for Offline Mediation Controller REST Services Manager
- Testing Node Chains Using Offline Mediation Designer UI
- Enhancement to the Remote Data Manager (RDM)

Support and Certification for 15.1

Offline Mediation Controller now supports the following software:

- Oracle Linux, x86-64 (64-bit) 8.10, 9.4
- Red Hat Enterprise Linux, x86-64 (64-bit) 8.10
- Oracle Database Server Enterprise Edition 19.25
- Oracle Java Platform Standard Edition (Java SE) 21.0.6

See Offline Mediation Controller Compatibility Matrix for more information.

New Offline Mediation Controller Web-Based UI

The new Offline Mediation Controller web-based UI runs on top of Offline Mediation Controller. You can use it to create, design, and manage nodes, node chains, and Node Managers within the mediation processes.

See "Installing the Offline Mediation Controller Web-Based UI" in the Offline Mediation ControllerCloud Native Installation and Administration Guide for information about installing Offline Mediation Designer.

See Offline Mediation Designer Help for more information on how to use Offline Mediation Designer.



StatefulSet Implementation for Node Manager Pods

StatefulSets are a Kubernetes workload API designed to manage stateful applications that require persistent storage and stable, unique network identities. Unlike traditional deployments, StatefulSets ensure that each pod retains a consistent identity, including a unique hostname and persistent storage volume.

In the Offline Mediation Controller cloud native environment, Node Managers are now deployed using StatefulSets to take advantage of these capabilities. With StatefulSets, each pod is assigned a stable network identity and is bound to its own persistent volume.

The integration of StatefulSets with Kubernetes' Horizontal Pod Autoscaler (HPA) simplifies dynamic scaling. Pods can be added or removed seamlessly while maintaining their unique identities and associated resources.

See "About StatefulSet Implementation" in the Offline Mediation ControllerCloud Native Installation and Administration Guide for more information.

Automated Scaling of Node Manager Pods Using HPA

Offline Mediation Controller cloud native now supports the Kubernetes Horizontal Pod Autoscaler (HPA), enabling dynamic scaling of Node Manager pods to handle varying workloads. With this feature, the Node Manager pods are replicated as the application scales up, distributing the load evenly and ensuring optimal resource utilization during processing.

See "Enabling Scaling Replication" in *Offline Mediation Controller Cloud Native Installation and Administration Guide* for information.

Changes to Offline Mediation Controller REST Services Manager

The following endpoint has been added to the Offline Mediation Controller REST API:

POST /v1/actions/nodes/state - Start or Stop a Node by ID

This endpoint lets you start or stop nodes in a specified Node Manager.

See REST API Reference for Offline Mediation Controller for more information.

OAuth 2.0 Authentication Support for Offline Mediation Controller REST Services Manager

Offline Mediation Controller REST Services Manager now supports OAuth 2.0 authentication. You can use it to authenticate a client application's identity and to authorize the client application to access its REST API. It does this by validating an OAuth access token that is passed in the header of the client's HTTP/HTTPS request to the Offline Mediation Controller REST Services Manager.

You can use either Oracle Identity Cloud Service (IDCS) or Oracle Access Management (OAM), to set up authentication and authorization for your client.

See "Offline Mediation Controller REST Services Manager Security" to see how to set up authentication for your client.



Automating RSM Request Workflows

You can now automate REST Services Manager (RSM) workflows in Offline Mediation Controller cloud native by using the RSM Request Automation feature. This feature uses a Kubernetes job to run workflows dynamically based on a structured JSON payload file, this file defines the sequence of API requests, response handling, and conditional logic that governs the execution flow. You can use this feature to run any API exposed by the RSM.

With this feature, you can:

- Automatically define and execute a sequence of steps based on predefined rules and conditions.
- Use data from API responses to set environment variables for subsequent requests.
- Leverage predefined flows for error handling and retries.
- Support multipart file uploads as part of API requests.
- Use response data to apply conditions that control the execution of the process flow.
- Chain requests based on the output of previous ones.

For information, see "Automating Workflows Using RSM Request Automation" in Offline Mediation Controller Cloud Native Installation and Administration Guide.

Grafana Dashboard Support for Offline Mediation Controller REST Services Manager

Offline Mediation Controller cloud native now tracks and exposes the following RSM metric data in Prometheus format:

- JVM metrics
- Service status
- Total uptime
- Garbage collection events
- Memory usage statistics
- Thread count
- Class loader statistics

RSM metrics are exposed through the Helidon framework's **http://***RSM_hostname:RSM_portl* **metrics** endpoint, where *RSM_hostname* and *RSM_port* are the host name and port of the machine on which RSM is installed. The endpoint exposes metrics information in both JSON format (according to the MicroProfile Metrics specification) and plain text format suitable for Prometheus.

You can use the **OCOMC_RSM_JVM_Dashboard.json** sample dashboard provided in the *OMC_home*/sampleData/dashboards directory to view JVM-related metrics for Offline Mediation Controller RSM.

See "Using Prometheus to Monitor Offline Mediation Controller Cloud Native" in the Offline *Mediation Controller Cloud Native Installation and Administration Guide* for more information.



Testing Node Chains Using Offline Mediation Designer UI

Using the Test Node Chain page in the Offline Mediation Designer UI, you can simulate the flow of data through a node chain to ensure that each node processes data as expected. This allows for thorough validation of your mediation logic. You can test an entire node chain, or you can isolate individual cartridges by disconnecting them from other nodes in the Node Manager for focused debugging. This helps confirm that each component is working correctly in isolation and as part of the larger system.

See "About Testing Node Chains" in the Offline Mediation Designer Help for more information.

Enhancement to the Remote Data Manager (RDM)

You can now enable multi-threading for Remote Data Manager (RDM) to efficiently move Network Accounting Records (NAR) files between different Node Managers in Offline Mediation Controller. When multiple remote routes are configured, the RDM ensures reliable file transfers while maintaining the correct processing order.

See "Using the Remote Data Manager (RDM)" in the Offline Mediation Controller System Administrator's Guide for more information.



3 Known Problems

Learn about known problems in Oracle Communications Offline Mediation Controller and the appropriate workarounds.

Offline Mediation Controller 15.1 contains no known problems to report.

