Oracle® Communications Unified Inventory Management

Release Notes

Release 7.5 F46663-03 November 2022

Release Notes

This document provides information about Oracle Communications Unified Inventory Management (UIM) Release 7.5. The document includes information about the following topics:

- Software Compatibility
- UIM Software Development Kit
- UIM 7.5.0.2 New Features
- UIM 7.5.0.1 New Features
- UIM 7.5 New Features
- Fixed Issues in UIM 7.5
- Deprecated and Removed Features

Software Compatibility

See UIM Compatibility Matrix for a full list of software requirements.

UIM Software Development Kit

You must use the Software Development Kit (SDK) delivered with UIM 7.5.

UIM 7.5.0.2 New Features

This release includes the following features and enhancements:

- New Features Supported by UIM REST Services
- Support for Viewing Physical Device Details from the Physical Port Information
 Page
- Setting the Service Configuration Item Char Value to Blank
- Support for Displaying Physical Port Hierarchy in Physical Device Hierarchy



- Support for Viewing the Termination Point Details from Connectivity Schematic View
- Support for Enabling the Actions Menu for a Connectivity with Undefined Technology
- Enhancements in the Entity Purge
- Podman Support for Building UIM Cloud Native Images in Linux 8 or Later Environments

New Features Supported by UIM REST Services

The UIM REST services now support the following new features:

- TMF 639: Resource Inventory Management API REST:
 - The POST, GET, and DELETE endpoints are included for the following features of reconfiguring the network resources:
 - * Groom
 - * Rehome
 - Replace card

Support for Viewing Physical Device Details from the Physical Port Information Page

On the Physical Port Information page, you can view the corresponding physical device details under the **Physical Device** section of the **General Information** tab.

Setting the Service Configuration Item Char Value to Blank

The **uim.ui.charDefaultValue** property is updated. This property sets a default value for the **String** datatype characteristics that are created under the service configuration items. See *System Administrator's Guide* for more information.

Support for Displaying Physical Port Hierarchy in Physical Device Hierarchy

In the physical device hierarchy, you can now view all the child physical ports under the corresponding parent physical port.

Support for Viewing the Termination Point Details from Connectivity Schematic View

In the Connectivity Schematic view, you can see the corresponding termination point physical port or device interface details. Hover the mouse cursor over the device or location to view the label that shows device interface and physical port details.

See Online Help for more information.



Support for Enabling the Actions Menu for a Connectivity with Undefined Technology

The **Actions** menu is now available for a connectivity that is associated with the **Undefined** technology.

Enhancements in the Entity Purge

The entity purge types with **Report** operation are updated with the following arguments:

- The SERVICE purge type is updated with **-sspec** optional argument that enhances the performance for large volumes of data.
- The SCV purge type is updated with **-ed** and **-sd** optional arguments that enable the script to include the corresponding start date and end date.

Podman Support for Building UIM Cloud Native Images in Linux 8 or Later Environments

Podman is supported for building the UIM cloud native images in Linux 8 or later environments.

See UIM Cloud Native: Image Building encountering Issues With Installation Of Docker Over OL8.x. (Doc ID 2903637.1) knowledge article on My Oracle Support for more information.

UIM 7.5.0.1 New Features

This release includes the following features and enhancements:

- Support for Creating Multiple Configuration Versions in One Day
- Support for Viewing Disconnected Pipes and Connectivities
- Support for Multiple Input Parameters while Retrieving Data for JPQL Characteristics
- Support for Extending Life Cycles in UIM Cloud Native Environment
- Deprecating the Extension of Data Models from UIM 7.5.0.1
- Supporting More Rate Codes
- Using Elastic Stack to View UIM Cloud Native Deployment Logs
- Accessing Online Help
- New Features Supported by UIM REST Services
- UIM and Esri ArcGIS Integration
- Support to Map One Physical Port to Multiple Device Interfaces



Support for Creating Multiple Configuration Versions in One Day

You can create multiple configuration versions with the same **Start Date** value. **Start Date** is now associated with the timestamp value during the creation of configuration versions. You can view the Start Date value along with the timestamp on the **Service Configuration Information** page.

Support for Viewing Disconnected Pipes and Connectivities

You can now view the information on disconnected pipes and connectivities from the following pages:

- The corresponding pipe or connectivity summary page.
- The corresponding pipe or connectivity search results.
- The Business Interactions context pages.

Support for Multiple Input Parameters while Retrieving Data for JPQL Characteristics

You can retrieve the data for JPQL characteristics based on multiple input parameters. These input parameters are interdependent, meaning selecting one parameter can populate the available parameter options for another. However, you can enter any other parameter, other than the populated values, in the corresponding field.

Support for Extending Life Cycles in UIM Cloud Native Environment

You can now use static extensions for extending life cycles in UIM cloud native environment along with the traditional UIM environment.

See "*UIM Cloud Native Deployment Guide*" for more information on extending life cycles in cloud native environment.

See "*UIM Developer's Guide*" for understanding static extensions and extending life cycles.

Deprecating the Extension of Data Models from UIM 7.5.0.1

Extending the data models is being deprecated from UIM 7.5.0.1 release.

Supporting More Rate Codes

An additional list of rate codes are now available that provides you with a flexibility in vertical concatenation. You can select any combination of these rate codes depending on your capacity requirement.

Using Elastic Stack to View UIM Cloud Native Deployment Logs



You can now view and analyze the UIM cloud native text logs using the Elastic stack.

The Elastic stack includes:

- Elasticsearch, which is a distributed, free and open search, and analytics engine for all types of data, including textual, numerical, geospatial, structured, and unstructured.
- Fluentd, which is an open source data collector, which allows you to unify the data collection and consumption for a better use and understanding of the data.
- Kibana, which is a free and open user interface that lets you visualize your Elasticsearch data and navigate the Elastic stack.

See "UIM Cloud Native Deployment Guide" for more information.

Accessing Online Help

You can now access Online Help along with other UIM documentation from Oracle Help Center and search for the topics you are interested in. You can also access the book from the UIM landing page.

New Features Supported by UIM REST Services

The UIM REST services now support the following new features:

- TMF 638: Service Inventory Management API REST:
 - The POST, PATCH, and DELETE endpoints are included and the GET endpoint is updated in compliance with TMF638 V4 Open API specification.
 - The Model Schema changes, including new attributes, are added on the UIM ServiceSpecification model and the ServiceSpecification table.
- TMF 639: Resource Inventory Management API REST:
 - The POST, PATCH, and DELETE endpoints are included for the Pipe and Connectivity entities.

See "UIM REST API Guide" for more information.

UIM and Esri ArcGIS Integration

Oracle Communications Unified Inventory Management and Esri can now be integrated to provide a comprehensive, integrated solution to support Fiber optic networks' (FTTx) lifecycle management.

A sample cartridge and a technical brief are available in the **GIS Integration/ESRI** folder of **OracleComms_UIM_CartridgePacks.zip**.

Although FTTx is used as the technology for this reference implementation, an unlimited number of services and infrastructures such as HFC, copper, LTE, 5G, SD-WAN underlays and overlays, fiber backbone, dark fiber, and others can be supported by the flexible SID Model in UIM and the flexible Data Communications Management Model in Esri.



See Oracle Communications Unified Inventory Management and Esri Integration Technical Brief for more information.

Support to Map One Physical Port to Multiple Device Interfaces

You can map one physical port to multiple device interfaces that enables you to terminate a connectivity using the corresponding device interface.

If you want to terminate a physical port that has multiple device interfaces mapped to it, you can select only the required device interfaces that you want to terminate along with the physical port.

See UIM Online Help for more information.

UIM 7.5 New Features

This release includes the following features and enhancements:

- UIM Cloud Native Deployment
- View UIM Metrics Using Prometheus and Grafana
- Ehcache is Replaced with Coherence
- Support for Dynamic Server Cluster
- Support for Oracle Analytics Server for Generating Reports

UIM Cloud Native Deployment

UIM 7.5 introduces the ability to deploy, manage, and monitor UIM in a cloud native environment using container images, Kubernetes clusters, CI/CD tools, Prometheus, Grafana and other components.

You can now deploy UIM in a Kubernetes-based shared cloud (cluster). This enables you to implement modern DevOps "Configuration as Code" principles to manage system configuration in a consistent manner.

With UIM deployed in a cloud native environment, you can achieve several benefits. The following are some benefits:

- Choice of deployment on private cloud or public cloud infrastructure.
- Reduced installation time and environment replication time.
- Robust, repeatable, and auditable installation and configuration process.
- Reduced total cost of ownership with reduced hardware utilization.
- Reduced downtime during maintenance processes.
- Automated recovery in case of node and pod failures to avoid outages.
- Reduced lead time for scaling, from several weeks to a few minutes.
- Automated system lifecycle management.
- Faster time-to-market for new services.



UIM cloud native supports the following deployment models:

- **On Private Kubernetes Cluster**: UIM cloud native is certified for a general deployment of Kubernetes.
- On Oracle Cloud Infrastructure (OCI) Container Engine for Kubernetes (OKE): UIM cloud native is certified to run on Oracle's hosted Kubernetes OKE service.

UIM cloud native provides a toolkit that includes utility scripts, Helm charts, default configuration files, and samples required to deploy UIM in a Kubernetes environment, following standard practices such as versioned Helm releases, configuration as code, and pipeline-based automation. With UIM cloud native, managing the domain configuration as code (CaC) is paramount. UIM cloud native provides guidance on effective management of this configuration to ensure that instances can be created in a standardized and repeatable fashion.

For instructions on planning and setting up your cloud native environment, see *UIM Cloud Native Deployment Guide*.

Also, for information about the supported versions of required and third-party software, see *UIM Compatibility Matrix*.

View UIM Metrics Using Prometheus and Grafana

You can configure Prometheus to view UIM metrics. To view UIM metrics using Prometheus, you configure a scrape job in Prometheus. UIM metrics scraped by Prometheus can be made available for further processing and visualization using Grafana. UIM exposes metrics via Prometheus APIs. For details about configuring Prometheus for UIM metrics and viewing metrics in Grafana, see "Managing UIM Metrics" in *UIM System Administrator's Guide*.

Ehcache is Replaced with Coherence

All releases prior to UIM 7.5 use Ehcache as a caching mechanism. Starting with UIM 7.5, Ehcache is replaced with Coherence NamedCache.

Support for Dynamic Server Cluster

You can now create a WebLogic domain for a dynamic server cluster. This helps in dynamically scaling up or scaling down based on the resource needs of your application.

UIM now supports elastic horizontal scaling as follows:

- To scale up, add the required UIM managed servers.
- To scale down, terminate the required UIM managed servers.
- During the termination, all ongoing activities are automatically distributed among the running managed servers.
- Scaling maintains data integrity and consistency.



See *UIM Installation Guide* for more information on creating a WebLogic domain for a dynamic server cluster installation.

Support for Oracle Analytics Server for Generating Reports

UIM 7.5 uses Oracle Analytics Server for generating reports. See *UIM Installation Guide* and *UIM Compatibility Matrix* for more information.

Fixed Issues in UIM 7.5

Table 1-1 lists and describes the fixed issue in UIM 7.5.

For fixed issues in UIM 7.5.0.1 patch (34041267), see the corresponding patch Readme.

Table 1-1 Fixed Issues in 7.5

Bug Number	Issue	Resolution
32903102	Associating configVersion to BI. BigDecimal cannot be cast to [Ljava.lang.Object.	Fixed the code to prevent exception while associating Configuration version to Business Interaction.

Deprecated and Removed Features

No features were deprecated or removed in UIM 7.5.

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at http://www.oracle.com/pls/topic/lookup? ctx=acc&id=docacc.

Access to Oracle Support

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