Oracle Communications Policy Management

Release Notes

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E89544-03
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Oracle Communications Policy Management Release Notes, Release 12.4

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1 Introduction

These release notes identify the functions and features of Oracle Communications Policy Management which include:

- Feature descriptions
- Supported hardware baseline
- Software and documentation
- Supported upgrade paths
- Compatibility
- Resolved bugs
- Customer-known bugs

Directions for accessing key Oracle sites and services are also identified in the Oracle References and Services.

Release notes are available on Oracle Help Center and are made available for every software release.

Disclaimer

Before installing third-party software on the same server with Oracle products (for example, DSR, PCRF, UDR, PIC, EAGLE and so on), please be aware of the following information:

- Oracle is not responsible for installation, operation, maintenance, etc. of any non-Oracle distributed software with Oracle products (for example, DSR, PCRF, UDR, PIC, EAGLE and so on).
- Additional due diligence including testing is recommended to be performed in the lab before deploying non-Oracle software on production sites to avoid potential issues.
- Oracle is not responsible for validating or integrating non-Oracle software with Oracle products (for example, DSR, PCRF, UDR, PIC, EAGLE and so on). Additionally, persistence of the non-Oracle software over upgrade of the Oracle product may or may not occur, and Oracle does not guarantee the non-Oracle software will persist.
- Oracle Support may require that the customer uninstall the non-Oracle software and reinstall Oracle products (for example, DSR, PCRF, UDR, PIC, EAGLE and so on) to recover the system to address a field issue.

2
Enhancements Descriptions

This release of Oracle Communications Policy Management adds the enhancements described in this chapter.

Measurement Counters Per APN—ER 25405538

This enhancement adds APN based counters measurement in Gx interface.

TheMPE collects the APN based counters when the configured APN prefixes match the APN of diameter message. The counters are merged to the CMP and displayed in the GUI. The counters can also be queried using the OSSI interface.

The CMCC Policy Management interface can also be used to query the APN based counters.

Delivery SMS to two destinations based on policy—ER 25902148

This enhancement adds the capability to send SMS notifications to different SMS destination hosts based on different use cases. The existing policy actions of sending SMS messages are appended with a new parameter that enables you to select an SMS Gateway. This enhancement is available when the system is configured to use either SMPP or CMPP protocols.

Variable to access Max-Requested-Bandwidth—ER 25455923

This enhancement supports VOLTE use cases wherein customer wants to override the adjusted bandwidth values calculated by PCRF, with the requested value provided by AF through the Rx interface, and this bandwidth information will be made available to be utilized for the co-related Gx session.

There are two newly introduced variables can be used to access the stored original Max-Min Requested Bandwidth value:

- Flow.MaxRequestedBandwidth
- Flow.MinRequestedBandwidth

Extending OCPM Session and Binding Information to External Systems—ER 22935518

CMP provides a new OSSI interface for external systems to query subscriber-session information by NAI, E164, IMSI, IPv4, IPv6, IPD or SESSID (only for Gx session id), without need to know in advance which MRA and MPE supports the target sessions.

APN-Based Data Source Lookup—ER 25943867

The data source (SH, SY, LDAP) could be selected by APN name combined with existed subscription ID filters. A new APN filter is added in to the data source filter.

Send SMS Notification frequency based on policy per use case—ER 25902163

This enhancement extends the existing sending SMS notification procedure to be able to reset the last delivery time of specific use cases in the user state field of LastDeliveryTime.

This enhancement adds a new policy condition and a new policy action.

- Policy Condition:
  where the last delivery time of specific use case exists in the user state variable of LastDeliveryTime
- Policy Action:
  reset the last delivery time of specific use cases in the user state variable of LastDeliveryTime

> **Note:**
>
> All servers in the MPE clusters, including active, standby, and spare servers, establish a connection with the SMSC. In previous releases, only the active MPE establishes a connection. This change enables easier switching of the SMS traffic if the MPE undercover fails over.

VNF Management support for OSM (PoC)—ER 25983941

This enhancement add support for the PCRF VNFD and NSD packages for OSM release 2 and release 3. Using these packages, PCRF can be instantiated in OSM.

VNF Management support for OSM (PoC)—ER 25983941

This enhancement add support for the PCRF VNFD and NSD packages for OSM release 2 and release 3. Using these packages, PCRF can be instantiated in OSM.

3
Software and Documentation

Oracle Communications Policy Management software is available for download on the Oracle software delivery website. Documentation is delivered electronically on Oracle Help Center. Both the software and the documentation are listed in this section.

Software

All components are available for download from the software delivery website (http://www.oracle.com/us/support/software/premier/my-oracle-support-068523.html).

> **Note:**
>
> These files are available in one or more of the following formats:
>
> - *.iso: for bare metal deployments
> - *.ova: for VMware and OVM/OVS deployments
> - *.qcow2: for KVM/Openstack deployments

Software:

- Oracle Communications Policy Management Configuration Management Platform 12.4.0.0.0_51.1.0
- Oracle Communications Policy Management Multimedia Policy Engine 12.4.0.0.0_51.1.0
- Oracle Communications Policy Management Policy Front End 12.4.0.0.0_51.1.0
- Oracle Communications Policy Management Mediation Server 12.4.0.0.0_51.1.0
- Oracle Communications Tekelec Virtual Operating Environment (TVOE) 3.5.0.0.0_88.46.0
- Oracle Communications Tekelec Platform Distribution (TPD) 7.5.0.0.0_88.46.0
- Oracle Communications Tekelec Platform Management and Configuration (PM&C) 6.5.0.0.0-65.11.0

> **Note:**
>
> This list is accurate at the time of release, but is subject to change. View the Oracle Software Delivery Cloud site for the latest information.

Documentation

All documents available for download from Oracle Help Center (http://docs.oracle.com/en/industries/communications).

> **Note:**
>
> This list is accurate at the time of release but is subject to change. See Oracle Help Center for all available documents.

- Platform Configuration User's Guide
- Configuration Management Platform Wireless User's Guide
- Policy Wizard Reference
- SNMP User's Guide
- OSSI XML Interface Definitions Reference
- Policy Front End User's Guide
- Mediation Server User's Guide
- Troubleshooting Reference
- Analytics Data Stream Reference
- Policy Variables Reference
- Network Impact Report
- Virtual Network Function Overview and Direction
- Cloud Installation Guide
- Software Installation Guide
- 12.2.x/12.3.x to 12.4 Upgrade Procedures
- Disaster Recovery Guide
- Concepts for Wireless Networks
- Licensing Information User Manual

4
Supported Hardware Baseline

The hardware identified in Supported Hardware Baseline comprises the hardware and server versions that have been verified with this release.

Supported Hardware Baseline

Table 4-1 Supported Hardware Baseline

Hardware	Description
HP Gen 8/8+	Rackmount and C-Class servers configured as defined in the configuration workbook.
HP Gen 9	Rackmount and C-Class servers configured as defined in the configuration workbook.

The firmware components are software that is installed on the hardware. These components are listed in the Firmware Release Notice:http://docs.oracle.com/cd/E57832_01/index.htm.

5
Firmware Components

The firmware components are software that is installed on the hardware. These components are listed in the Firmware Release Notice:http://docs.oracle.com/cd/E57832_01/index.htm.

Firmware Component List

The firmware documents are available from Oracle Help Center (OHC): http://docs.oracle.com/cd/E57832_01/index.htm.

Table 5-1 shows the firmware components used in this release.

Table 5-1 Supported Firmware Components

Hardware	Release	Description
HP Firmware FUP	2.2.11 (minimum)*	FC
Oracle X5-2 Firmware	3.1.5 (minimum)	FC

FC
Fully Compatible

PC
Partially Compatible (Compatible but not fully functional [feature dependent])

NC
Not Compatible

N/A
Not Applicable

> **Note:**
>
> There are no general restrictions on the use of newer firmware. Oracle provides guidance in the HP Solutions Firmware Upgrade Pack Release Notes on the maximum firmware version for a component. Only when there is a known compatibility issue with a newer firmware version is a maximum version specified. Oracle recommends that the latest firmware release always be used unless there is a known compatibility issue.

6
Compatibility and Software Upgrade Paths

This chapter provides a Policy Management compatibility matrix and a table of upgrade paths.

UDR and Policy Management Compatibility Matrix

The firmware documents are available from Oracle Help Center: http://docs.oracle.com/cd/E57832_01/index.htm.

UDR and Policy Management Compatibility Matrix lists which releases of Policy Management are compatible with each release of UDR.

Table 6-1 UDR and Policy Management Compatibility Matrix

UDR Software Release	Compatible Policy Management Software Releases
10.0	10.5, 11.5, 12.1
10.2	11.5, 12.1 , 12.2
12.1	11.5, 12.1*, 12.2 , 12.3, 12.4
12.2	12.1, 12.2, 12.3, 12.4
12.4	12.1, 12.2, 12.3, 12.4

* If you decide to use the UDR enterprise pools feature in UDR release 12.2, then Policy Management release 12.2 is required. A special upgrade sequence order is required:

1. Upgrade toPolicy Management 12.2.
2. Upgrade to UDR 12.2.
3. Upgrade to Policy Management 12.2.2.

After this is complete, the UDR enterprise pools feature can be enabled.

7 Supported Upgrade Paths

This release has been tested for upgrades from specific prior releases. This chapter contains the exact paths for upgrade for wireless mode. Verify that your current installed release is listed on a valid upgrade path. The possible upgrade paths to Policy Management 12.4 are listed in Table 7-1.

Table 7-1 Upgrade Paths

From	To	Mechanism
12.2.x	12.4	ISO upgrade
12.3.x	12.4	ISO upgrade

8
Resolved and Known Bugs

This chapter lists the resolved and known bugs for this release of Oracle Communications Policy Management.

These bug lists are distributed to customers with a new software release at the time of general availability (GA) and are updated for each maintenance release.

Severity Definitions

The resolved and known bug tables in this document refer to bug severity levels listed in this section. Definitions of these levels can be found in the publication *TL 9000 Quality Management System Measurement Handbook*.

> **Note:**
>
> A problem report is a report from a customer or on behalf of the customer concerning a product or process defect requesting an investigation of the issue and a resolution to remove the cause. The report may be issued via any medium. Problem reports are systemic deficiencies with hardware, software, documentation, delivery, billing, invoicing, servicing, or any other process involved with the acquisition, operation, or performance of a product. An incident reported simply to request help to bring back the service or functionality to normal without the intent to investigate and provide a resolution to the cause of the incident is not a problem report.

- Critical: Conditions that severely affect the primary functionality of the product and, because of the business impact to the customer, requires non-stop immediate corrective action, regardless of time of day or day of the week as viewed by a customer on discussion with the organization such as the following:
  1. Product inoperability (total or partial outage)
  2. A reduction in the traffic/data handling capability, such that expected loads cannot be handled
  3. Any loss of emergency capability (for example, emergency 911 calls)
  4. Safety hazard or risk of security breach
- Major: Product is usable, but a condition exists that seriously degrades the product operation, maintenance, or administration, etc., and requires attention during pre-defined standard hours to resolve the situation. The urgency is less than in critical situations because of a lesser immediate or impending effect on product performance, customers, and the customer's operation and revenue such as the following:
  1. Reduction in the product's capacity (but still able to handle the expected load)
  2. Any loss of administrative or maintenance visibility of the product and/or diagnostic capability

3. Repeated degradation of an essential component or function
4. Degradation of the product's ability to provide any required notification of malfunction

- Minor: Other problems of a lesser severity than Critical or Major such as conditions that have little or no impairment on the function of the system.
- Minor: No Loss of Service. Oracle severity is outside what is defined by TL 9000.

The numbered severity levels in the tables below correspond to these definitions:

- 1 - Critical
- 2 - Major
- 3 - Minor
- 4 - Minor: No Loss of Service.
  Oracle severity is outside what is defined by TL 9000.

Resolved Bug Listing

There are no resolved bugs in this release.

> **Note:**
>
> These files are available in one or more of the following formats:
>
> - *.iso: for bare metal deployments
> - *.ova: for VMware and OVM/OVS deployments
> - *.qcow2: for KVM/Openstack deployments

Software

- Oracle Communications Policy Management Configuration Management Platform 12.4.0.1.0_22.2.0
- Oracle Communications Policy Management Multimedia Policy Engine 12.4.0.1.0_22.2.0
- Oracle Communications Policy Management Policy Front End 12.4.0.1.0_22.2.0
- Oracle Communications Policy Management Mediation Server 12.4.01.0_22.2.0
- Oracle Communications Tekelec Virtual Operating Environment (TVOE) 3.5.0.0.0_88.46.0
- Oracle Communications Tekelec Platform Distribution (TPD) 7.5.0.0.0_88.46.0
- Oracle Communications Tekelec Platform Management and Configuration (PM&C) 6.5.0.0.0-65.11.0

Customer-Known Bugs

There are no customer- known bugs in this release.

9
Oracle References and Services

This chapter describes how to obtain help, where to find related documentation, and provides other general information.

My Oracle Support

My Oracle Support is your initial point of contact for all product support and training needs. A representative at Customer Care Center can assist you with My Oracle Support registration.

Call the My Oracle Support main number at 1-800-223-1711 (toll-free in the US), or call the Oracle Support hotline for your local country from the list at http://www.oracle.com/us/support/contact/index.html. When calling, make the selections in the sequence shown below on the Support telephone menu:

1. Select 2 for New Service Request
2. Select 3 for Hardware, Networking and Solaris Operating System Support
3. Select one of the following options:
    - For Technical issues such as creating a new Service Request (SR), Select 1
    - For Non-technical issues such as registration or assistance with MOS, Select 2

You are connected to a live agent who can assist you with My Oracle Support registration and opening a support ticket.

My Oracle Support is available 24 hours a day, 7 days a week, 365 days a year.

Emergency Response

In the event of a critical service situation, emergency response is offered by the Customer Access Support main number at 1-800-223-1711 (toll-free in the US), or by calling the Oracle Support hotline for your local country from the list at http://www.oracle.com/us/support/contact/index.html. The emergency response provides immediate coverage, automatic escalation, and other features to ensure that the critical situation is resolved as rapidly as possible.

A critical situation is defined as a problem with the installed equipment that severely affects service, traffic, or maintenance capabilities, and requires immediate corrective action. Critical situations affect service and/or system operation resulting in one or several of these situations:

- A total system failure that results in loss of all transaction processing capability
- Significant reduction in system capacity or traffic handling capability
- Loss of the system's ability to perform automatic system reconfiguration
- Inability to restart a processor or the system

- Corruption of system databases that requires service affecting corrective actions
- Loss of access for maintenance or recovery operations
- Loss of the system ability to provide any required critical or major trouble notification

Any other problem severely affecting service, capacity/traffic, billing, and maintenance capabilities may be defined as critical by prior discussion and agreement with Oracle.

Customer Training

Oracle University offers training for service providers and enterprises. Visit our web site to view, and register for, Oracle Communications training:

http://education.oracle.com/communication

To obtain contact phone numbers for countries or regions, visit the Oracle University Education web site:

www.oracle.com/education/contacts

Locate Product Documentation on the Oracle Help Center Site

Oracle Communications customer documentation is available on the web at the Oracle Help Center site, http://docs.oracle.com/. You do not have to register to access these documents. Viewing these files requires Adobe Acrobat Reader, which can be downloaded at http://www.adobe.com.

1. Access the Oracle Help Center site at http://docs.oracle.com/.
2. Click `Industries`.
3. Under the Oracle Communications subheading, click the `Oracle Communications documentation` link.

   The Communications Documentation page opens. Policy Management is listed in the Network Session Delivery and Control Infrastructure section.
4. Click **Policy Management** and then the release number.

   A list of the documentation set for the release displays.
5. To download a document, click (download icon) and then click **PDF**.

Locate Product Release Software on the Oracle Software Delivery Cloud Site

Oracle Communications software is available for electronic download at the Oracle Software Delivery Cloud site, https://edelivery.oracle.com. Only authorized customers with a valid password may download software from the site.

For directions on downloading the software and other information about using this site, click **FAQ** in the top right corner.