

**Oracle® Communications
Policy Management**

Release Notes

Release 9.7.4

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Chapter 1

Introduction

Oracle Communications Policy Management release 9.7.4 is a maintenance release for the 9.7.x code stream [see E59933_01 9.7.2 Release Notice].

These Release Notes identify the functions and features of release 9.7.4 that includes:

- Feature descriptions
- Supported hardware baseline
- Media and Documentation Pack contents
- Supported upgrade paths
- Resolved bugs
- Customer-known bugs

Directions for accessing key Oracle sites and services are also identified in the [Oracle References and Services](#) chapter.

Release notes are included in the Documentation Pack made available with every software release.

Chapter 2

Feature Descriptions

Topics:

- *Upgrade from Release 9.7.3 to Release 9.7.4 (Feature 20607208)8*
- *MDF support for Pools Spanning OCUDRs (Feature 20643480).....8*
- *Support NetLoc-RAN-NAS-Cause Feature (Feature 20391630).....8*
- *Integration between OCUDR Release 12.2/10.2 and OCPM Release 9.7.4 (Feature 21669589).....8*
- *Merging OCPM Release 12.1 S9 Functionality to OCPM Release 9.7.4 (Feature 22293269).....9*
- *User Documentation for Policy Release 9.7.4 (Feature 22237891).....9*

The Oracle Communications Policy Management 9.7.4 maintenance release contains the following new features, enhancements, and bug fixes. For features in release 9.7.3, refer to http://docs.oracle.com/cd/E52589_01/docs.97/E53122-02.pdf.

Upgrade from Release 9.7.3 to Release 9.7.4 (Feature 20607208)

- Release 9.7.4 can be directly upgraded from release 9.7.3 without interruption to service.

MDF support for Pools Spanning OCUDRs (Feature 20643480)

- This feature enables the customer to use multiple user data repositories for greater subscriber storage. The increased subscriber base is distributed into multiple user data repositories by International Mobile Subscriber Identity (IMSI) range. Then the members within one pool can be separately saved into multiple user data repositories, the 9.7.4 Message Distribution Function, as a provisioning gateway between the MediaGateway and UDR has some minor interface changes with user data repositories to support this pool span feature.

Support NetLoc-RAN-NAS-Cause Feature (Feature 20391630)

- The PCRF release 9.7.4 picks up network location related features and includes the requirements listed below from the existing mainline PCRF releases.

This feature also includes the following requirements:

- Support for Network Location 3GPP procedure. (Bug 236676)
- [VoLTE] PCRF needs support for Required-Access-Info AVP on Rx and Gx interfaces. (Bug 235943)
- 3GPP Rel1.14 and Rel 2 NetLoc Changes: The current 3GPP Specification includes updates to the NetLoc behavior not included in previous releases. The implementation should be brought into compliance with current 3GPP specification regarding NetLoc-Access-Support and NetLoc-RAN-NAS-Cause capabilities.
- Trusted WLAN Access: Support Trusted-WLAN Supported Feature indication, TWAN-Identifier AVP, and related Gx and Sd functions defined in 3GPP TS 29.212 and 23.402
- New NetLoc Procedures for Trusted WLAN: Support NetLoc-Trusted-WLAN Supported Feature indication from PCEF and related handling of TWAN-Identifier etc as described in 3GPP TS 29.212 subclause 4.5.2 and Annex D.3.

Integration between OCUDR Release 12.2/10.2 and OCPM Release 9.7.4 (Feature 21669589)

- In this release, PCRF 9.7.4 is able to conduct an integration test with User Data Repository releases 10.2. and 12.2 to make sure that both Sh and provision traffic are working correctly.

Merging OCPM Release 12.1 S9 Functionality to OCPM Release 9.7.4 (Feature 22293269)

- In this release, the S9 interface is supported to support the establishment, modification, and termination of Diameter S9 sessions. This feature allows for both inbound roaming and outbound roaming.

User Documentation for Policy Release 9.7.4 (Feature 22237891)

This feature requires:

- A full set of online help and documentation in PDF format will be provided for this release.

Chapter 3

Media and Documentation

Topics:

- [Media Pack.....11](#)
- [Documentation Pack.....11](#)

Oracle Communications software is available for download on Oracle software delivery website. Documentation is delivered electronically on the Oracle Help Center. Both the software Media Pack and the Documentation Pack are listed in this chapter.

Media Pack

All components available for download from Oracle Software Delivery Cloud (<http://edelivery.oracle.com>).

Note: This list is accurate at the time of release but is subject to change. See the Oracle software delivery website for the latest information.

The Media Pack contains the following:

- Oracle Communications Policy Management 9.7.4.0.0_22.1.0 Configuration Management Platform
- Oracle Communications Policy Management 9.7.4.0.0_22.1.0 Multimedia Policy Engine
- Oracle Communications Policy Management 9.7.4.0.0_22.1.0 Policy Front End
- Oracle Communications Policy 9.7.4.0.0_22.1.0 Mediation

Documentation Pack

All documents are 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 the latest information.

This Documentation Pack contains the following:

- 9.7.4 Software Configuration Guide PDF
- Software Upgrade Procedure 9.7.x to 9.7.4 PDF
- Configuration Management Platform Wireless User Guide PDF
- Platform Configuration User Guide PDF
- SNMP User Guide PDF
- OSSI XML Interface Definitions Reference Guide PDF
- Policy Front End User's Guide
- Troubleshooting Reference Guide
- Message Distribution Function Reference
- Related Publications Reference

Chapter 4

Supported Hardware

Topics:

- [Supported Hardware.....13](#)

The hardware identified in [Table 1: Release 9.7.4 Supported Hardware](#) comprises the hardware and server versions that have been verified with this release.

Supported Hardware

Table 1: Release 9.7.4 Supported Hardware

Hardware	Description
HP BL460c Gen 8	C-Class server 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.

Chapter 5

Supported Upgrade Paths

Topics:

- [Supported Upgrade Paths.....15](#)

This release has been tested for upgrades from specific prior releases; this chapter contains the exact paths for upgrade. Verify that your current installed release is listed on a valid upgrade path.

Supported Upgrade Paths

Table 2: Release 9.7.4 Upgrade Paths

Server Type	From	To
CMP	9.7.3.1.0	9.7.4.0.0
MRA	9.7.3.1.0_33.1.1	9.7.4.0.0
MPE	9.7.3.1.0_33.1.2	9.7.4.0.0
Mediation	9.7.3.1.0_33.1.3	9.7.4.0.0

Note: Any upgrade other than those listed here is not recommended or supported.

Note: 9.9.2 is supported as a new/fresh installation.

Note: It is recommended to upgrade the servers in the following order:

1. CMP
2. MRA
3. MPE

Chapter 6

Resolved and Known Bugs

Topics:

- *Severity Definitions.....17*
- *Resolved Bugs.....17*
- *Customer Known Bugs.....19*

This chapter lists the resolved and known bugs for Oracle Communications Policy Management release 9.7.4

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 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

Resolved Bugs

Table 3: Release 9.7.4 Resolved Bugs lists bugs that are resolved in the following builds:

Application Lineup

- Oracle Communications Policy Configuration Management Platform 9.7. 4_22.1.0
- Oracle Communications Policy Multimedia Policy Engine 9.7. 4_22.1.0
- Oracle Communications Policy Front End 9.7. 4_22.1.0
- Oracle Communications Policy Mediation 9.7. 4_22.1.0

Platform Lineup

- Oracle Communications Tekelec Platform Distribution (TPD) 7.0.3.0.0-86.43.0
- Oracle Communications Tekelec Platform Management and Configuration (COMCOL) 6.4-p360.12197

The load lineup provides a view of the GA milestone release. The Firmware release FUP 2.2.7 is used with this release. The firmware is addressed by an independent manufacturer and has additional release guidance and requirements. Oracle recommends that you review the lineup prior to a system and/or a node upgrade.

Note: Resolved bugs are sorted in ascending order by severity and then by bug number.

Table 3: Release 9.7.4 Resolved Bugs

Severity	Bug Number	SR#	Title
2	22074118	3-11571546101	Backing out of upgrade produced errors on MRA
2	22084752	3-11581219211	When set "undefined" mode on PCRF, MPE sends a duplicate SMS
2	22447453	3-11897827081	TOD service failure. The CRN rule not getting installed in RAR on one MPE
2	22482147	n/a	[S9] The V-PCRF should not notify the event that is not subscribed by the H-PCRF
2	22482203	n/a	[S9] Rx session is rejected by the H-PCRF while using KT9.7 policy set
2	22766088	3-12208253751	HA heartbeat error and Qp_procmgr failed
3	21930582	3-11463147451	S9 roam case failed -- CCA-I sent to wrong destination.
3	21806959	n/a	The dictionary of S9 for Sub-session-Decision-Info" code is "2204" but needs to be "2200"
3	21807072	n/a	VMPE should send S9 CCR-U for the second gx session of the same roaming user with the same imsi but with different APN and different IP address
3	21893111	3-11414364711	Server Upgrade snapshot(s) warning logs
3	21968798	3-11499474131	Policy change with double quotation marks resulted in an error

Customer Known Bugs

Table 4: Release 9.7.4 Customer Known Bugs lists known bugs in this release:

Note: Resolved bugs are sorted in ascending order by severity and then by bug number.

Table 4: Release 9.7.4 Customer Known Bugs

Severity	Bug Number	Title	Impact Statement	Work Around
3	22571977	QuotaResetTotal is not accurate when opmd main/sub and normal user mixed	Only the statics of total actual quota reset and RAR message are not exactly correct, when there are OPMD main/sub users involved with normal users. But each quota plan's reset statics is still correct.	KT EMS can get each quota plan's reset statics data via OSSl and calculate the total quota reset counter by itself.
3	22661847	[S9] Configuration item S9.ResponseTimeOut does not work as expected	The timeout configuration "S9.ResponseTimeOut" in V-MPE for S9 requests doesn't take effect, but it doesn't have any impact on business case.	Use: "DIAMETERResponse Timeout" in V-MPE to control the response time out threshold.
4	22501231	[S9] MPE will reply 2 AAA to AF	In a condition that H-MPE is not reachable from network, when AF send AAR msg to V-MPE, there will be an extra AAA msg from V-MPE to V-MRA. But V-MRA will not forward this extra AAA to PGW, it doesn't have any functional impact.	N/A
4	22501243	[S9] S9 session not consistent between V-MPE and H-MPE	In a condition when V-MPE reject a S9 new session request but H-MPE accept this S9 new session request, which is very special corner case. There will	This stale S9 session in H-MPE will be finally cleaned by automation.

Resolved and Known Bugs

Severity	Bug Number	Title	Impact Statement	Work Around
			be a stale S9 session in H-MPE. This stale S9session in H-MPE will be finally cleaned.	

Oracle References and Services

Topics:

- *My Oracle Support (MOS).....22*
- *Emergency Response.....22*
- *Customer Training.....23*
- *Locate Product Documentation on the Oracle Help Center Site.....23*
- *Locate Product Release Software on the Oracle Software Delivery Cloud Site.....23*

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

My Oracle Support (MOS)

MOS (<https://support.oracle.com>) is your initial point of contact for all product support and training needs. A representative at Customer Access Support (CAS) can assist you with MOS registration.

Call the CAS 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 will be connected to a live agent who can assist you with MOS registration and opening a support ticket.

MOS 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 (CAS) 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 expert training on Oracle Communications solutions for service providers and enterprises. Make sure your staff has the skills to configure, customize, administer, and operate your communications solutions, so that your business can realize all of the benefits that these rich solutions offer. Visit the Oracle University web site to view and register for Oracle Communications training: education.oracle.com/communication. To reach Oracle University:

- In the US, please dial 800-529-0165.
- In Canada, please dial 866-825-9790.
- In Germany, please dial 0180 2000 526 (toll free) or +49 8914301200 (International).
- In Spain, please dial +34 91 6267 792.
- In the United Kingdom, please dial 0845 777 7 711 (toll free) or +44 11 89 726 500 (International).

For the appropriate country or region contact phone number for the rest of the world, please visit Oracle University's web site at <http://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 (OHC) 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 appears. Most products covered by these documentation sets will appear under the headings "Network Session Delivery and Control Infrastructure" or "Platforms."
4. Click on your Product and then the Release Number.
A list of the entire documentation set for the selected product and release appears.
5. To download a file to your location, right-click the **PDF** link, select **Save target as** (or similar command based on your browser), and save to a local folder.

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 (OSDC) 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 the FAQ button on the top right corner.