Oracle® Communications Policy Management

Release Notes

Release 12.1.1.2

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ORACLE®

Oracle Communications Policy Management Release Notes, Release 12.1.1.2

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Chapter 1

Introduction

The Oracle Communications Policy Management 12.1.1.2 release is a maintenance release for the 12.1.x code stream [see 12.1 Release Notice].

These Release Notes identify the functions and enhancements of release 12.1.1.2 that includes:

- Enhancement descriptions
- Supported hardware baseline
- Media Pack 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

Enhancement Descriptions

This patch set has no new enhancements.

Chapter 3

Media Pack and Documentation Pack

Topics:

- *Media Pack.....8*
- *Documentation Pack.....8*

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

Media Pack

All components are available for download from the Oracle software delivery website (*http://edelivery.oracle.com/*).

The Media Pack contains the following:

- md5sum.out
- patch: 12.1.1.2.0_3.1.0.iso

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:

- 12.1.2 Software Configuration Guide PDF
- Software Upgrade Procedure 12.1.x to 12.1.2 PDF
- Related Publications Reference
- Configuration Management Platform Wireless User Guide PDF
- Policy Wizard Reference PDF
- Platform Configuration User Guide PDF
- SNMP User Guide PDF
- OSSI XML Interface Definitions Reference Guide PDF
- Policy Front End User's Guide PDF
- Troubleshooting Reference Guide PDF
- Analytics Data Stream Wireless Reference PDF

Chapter 4

Supported Hardware

Topics:

- *Supported Hardware Baseline.....10*

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

Supported Hardware Baseline

Table 1: Supported Hardware Baseline

Hardware	Description
Wireless HP Gen 6 C-Class BL460 Blades	C-Class Blade Servers configured as defined in configuration workbook.
Wireless HP Gen 8 C-Class BL460 Blades	C-Class Blade Servers configured as defined in configuration workbook.
Wireless HP Gen 9 C-Class BL460 Blades	C-Class Blade Servers configured as defined in configuration workbook.
DL360 RMS	Rackmount Servers configured as defined in the configuration workbook.
DL380 RMS	Rackmount Servers configured as defined in the configuration workbook.
X5-2 Sun non-Netra servers	Rackmount Servers configured as defined in the configuration workbook.

The firmware components are software that is installed on the hardware. See *Firmware Component List* for listing of Firmware components for this release.

Chapter 5

Firmware Components

Topics:

- *Firmware Component List.....12*

The firmware components are software that is installed on the hardware. These components are listed in the Firmware Release Notice.

Firmware Component List

The firmware document is available on the Oracle Help Center (OHC) site at: *http://docs.oracle.com*

Table shows the Firmware components used in this release.

Table 2: Supported Firmware Components

Hardware	Release	Description
H HP Firmware FUP	2.2.8 (Minimum*)	FC
Oracle X3-2 Firmware	3.1.2 (Minimum)	FC
Oracle X5-2 Firmware	Latest X5-2 firmware	FC

FC - Fully Compatible

PC - Partially Compatible (Compatible but not fully functional (feature dependent))

NC - Not Compatible

N/A - Not Applicable

* HP Gen 9 HW HP FUP 2.2.9 is the minimum required.

Chapter 6

Supported Upgrade Paths

Topics:

- *Supported Upgrade Paths.....14*

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

Supported Upgrade Paths

This release has been tested for upgrades from specific prior releases. This chapter contains the exact paths for upgrade. Please verify that your current installed release is listed on a valid upgrade path. The possible upgrade paths to Policy 12.1.1.2 are listed in *Table 3: Release 12.1.1.2.0 Upgrade Paths*.

Table 3: Release 12.1.1.2.0 Upgrade Paths

From	To
12.1.1	12.1.1.2.0 (Apply patch set on top of 12.1.1, using upgrade manager)
12.1.1.1.0	12.1.1.2.0 (Apply patch set on top of 12.1.1, using upgrade manager)

Chapter 7

Resolved and Known Bugs

Topics:

- *Severity Definitions.....16*
- *Resolved Bug Listing.....17*
- *Customer-Known Bug Listing.....18*

This chapter lists the Resolved and Known Bugs for Oracle Communications Policy Management 12.1.1.2.0.

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 Bug Listing

This load line-up provides a view of our GA milestone release. Firmware release 2.2.8 was used with this release. The Firmware is addressed by an independent manufacturer (e.g., HP) and will have additional release guidance and requirements. We recommend review of the line-up prior to system and/or node upgrade.*Table 4: Release 12.1.1.2.0. Resolved Bugs* lists bugs that are resolved in this patch set.

- patch-12.1.1.2.0_3.1.0.iso

The load line-up listed above provides a view of our GA milestone release.

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

Table 4: Release 12.1.1.2.0. Resolved Bugs

Severity	Bug number	SR #	Title	Customer Impact
1	23284811	3-12596751871	SpaceTimeLimitedCache does not function correctly in high TPS environment	The time based expiry of tis cache implementation does not work reliable. If objects get stuck due to a bug, they are not expired as expected and end up staying for days causing issues when they get "unstuck."
1	23269046	3-12596751871	MRA went diameter busy due to user getting stuck.	When a user gets unstuck, messages for that subscriber ID or IP are all now forwarded to the MPE causing us to process very old messages. This can cause the MRA to go into DIAMETER_BUSY when there is contention within the MRA to process messages for the same user/IP.
2	23184544	3-12254510501	Diameter_Pending_transaction feature issue.	The Diameter Pending Transaction feature does not work in 12.0 due to its interaction with the Duplicate Message detection enhancement.
2	23306331	3-12571813971	MRA sending IP-CAN_SESSION_ NOT_AVAILABLE (5065) errors.	When more than one CCR-I for the same subscriber arrives at the same time in a backup

Severity	Bug number	SR #	Title	Customer Impact
				MRA configuration, it can eventually lead to Rx AARs being rejected with IP-CAN_SESSION_ NOT_AVAILABLE
3	23191739		Multiple UDs after CCR-I for unknown user.	Multiple UDRs are sent for subscribers that need quota/state for policy processing.
3	23184539	3-12060153791	MPE drops CCR-U when it receives CCRU and CCRI for same subscriber within millisec.	MPE drops the CCR-U when it receives a CCR-U and CCR-I for the same subscriber around the same time.
4	23184524		Modify M-bit in DiameterAVP "MS-TimeZone-3GPP."	This fix will ensure the PCRF sends this AVP with M-bit clear on the Rx interface.

Customer-Known Bug Listing

There are no customer- known bugs in this release.

Chapter 8

Oracle References and Services

Topics:

- *My Oracle Support (MOS).....20*
- *Emergency Response.....20*
- *Customer Training.....21*
- *Locate Product Documentation on the Oracle Help Center Site.....21*
- *Locate Product Release Software on the Oracle Software Delivery Cloud Site.....21*

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.