

**Oracle® Communications
Policy Management**

Release Notes

Release 12.1.0.0

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Oracle® Communications Policy Management Release Notes, Release 12.1.0.0

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Chapter 1

Introduction

This Release Notice identifies the functions and features of Oracle Communications Policy Management (Oracle Communications Policy Management) Release 12.1.0.0.

This Release Notice includes Feature Descriptions, supported Hardware Baseline, Media and Documentation pack contents and identifies the Supported Upgrade Paths. This document also includes listings of both the Resolved and Known Bugs for this Release.

This document also includes listings of both the Resolved and Known Bugs for this Release.

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

Release Notices are included in the Documentation Pack made available with every Software Release.

Chapter 2

Feature Descriptions

Topics:

- *AN_GW FAILED Reporting to PCRF and P-CSCF (Bug 1941792).....9*
- *Prevent Message Storm Caused by DST (Bug 19867237).....9*
- *Binding Updates for Emergency APN (Bug 19720586).....9*
- *Binding on IP-Domain-Id (Bug 19117477).....9*
- *3GPP R11.14 and R12 NetLoc Changes (Bug 19720493).....9*
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- *Extended Retry Profile (Bug 19117734).....12*
- *Sh Retry after Sh Timeout (Synchronous) (Bug 19623928).....12*

This release has the following new features:

- RAN-NAS Cause Code
- Bulk Export/Import
- Configuration Package
- Checksum to Verify Import Operations
- Policy Table Validation Enhancement
- Traffic Profile Support for Variables
- Extended Retry Profile
- Sh Retry After Sh Timeout (Synchronous)
- Maintain Session Uniqueness and Avoid Stale Message Processing
- Re-evaluate Auto-Generated Rules on CCR-U
- Policy Action for Generic HTTP Notification
- Sy Reconciliation
- OCPM Entry Level PCRF Deployment
- Recapture of IPv4 Addresses
- HP Gen 9 Server Compatibility
- X5-2 Server Rack Mount Server
- Default passwords are not allowed

- *Maintain Session Uniqueness and Avoid Stale Message Processing (Bug 19481773).....12*
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- *X5-2 Server Rack Mount Server (Bug 19526151).....15*
- *Default Passwords are not Allowed (Bug 19108339).....15*

AN_GW FAILED Reporting to PCRF and P-CSCF (Bug 1941792)

This enhancement supports the SGW Gx Restoration Notification Procedure documented in 3GPP Release 12. This PCRF is notified by the PGW that there has been an SGW failure, and can take appropriate actions. In previous releases, PCRF may send the PGW new /updated policies when the SGW is not available to process them.

Prevent Message Storm Caused by DST (Bug 19867237)

This testing provides an alternative mechanism for notifying Oracle Communications Policy Management about changes in Daylight Savings Time. Oracle Communications Policy Management no longer subscribes to UE_TZ updates. Instead, the P-GW sends updated time zone information in an RAA message only when a new VoLTE session is established.

Binding Updates for Emergency APN (Bug 19720586)

Enables emergency calling (like E911 in North America) when using VoLTE, even if general service is not available. For Gx, incoming PDN is compared with configured list of emergency APNs.

Oracle Communications Policy Management will supports request for PCC/QoS rules even if an IMSI is not provided. For Rx, emergency traffic is identified by comparing the incoming Service-URN with a configured list of emergency service URIs.

Binding on IP-Domain-Id (Bug 19117477)

The IP-Domain-ID AVP (3GPP R11) is an Rx AVP which identifies the source network that supports VoLTE call establishment in a network with overlapping IP address spaces. This allows different users on different networks to have the same IP address.

3GPP R11.14 and R12 NetLoc Changes (Bug 19720493)

Oracle Communications Policy Management now supports NetLoc-Access-Support to tell an AF whether NetLoc procedures are supported. In addition, Oracle Communications Policy Management now supports NetLoc-RAN-NAS-CAUSE function which combines existing NetLoc procedure and RAN-NAS-CAUSE procedure.

Trusted WLAN Access (Bug 19720631)

Oracle Communications Policy Management sends the TWAN-Identifier AVP in Gx to a TDF using Sd TSR.

NetLoc Procedures for Trusted WLAN (Bug 19867434)

Oracle Communications Policy Management now sends the TWAN-Identifier AVP to the AF in an Rx RAR as part of the Network Location (NetLoc) Procedures.

EVENT Metering Method (Bug 20222796)

Oracle Communications Policy Management now supports the EVENT metering method in traffic profiles and charging rules.

Single Radio Video Call Continuity (vSRVCC) (Bug 20883677)

The Gx VIDEO-PS2CS_CONT_CANDIDATE AVP indicates that the video service data flow carriers provided and is a candidate for PS-to-CS Continuity.

3GPP P-CSCF Restoration Procedures (3GPP R12) (Bug 19867575)

These are improvements over the IMS Restoration procedures from previous 3GPP Releases. This is initiated when a P-CSCF is restored into service.

IMS Restoration Procedure (Bug 19725592)

Oracle Communications Policy Management now supports the latest enhancements to the IMS restoration procedure. This procedure requires a stateful Rx transaction.

RAN-NAS Cause Code (Bug 21322620)

Oracle Communications Policy Management forwards the RAN-NAS-Release-Cause AVP receives from the PCEF in a CCR-T message to the AF or P-CSCF in Rx STA message after the PCRF receives an STR to terminate the Rx session. This AVP provides the session termination cause code.

Bulk Export and Import (Bug 19153045)

The feature allows the operator to export and import multiple types of objects to the same file.

Note: In previous releases, a separate export/import was required for each type object (such as Policies, Traffic Profiles, Retry Profiles, Configuration Templates).

Configuration Package (Bug 19117516)

This enhancement allows the operator to easily export all policies and other objects which are referenced in a Configuration Template.

Checksum to Verify Import Operations (Bug 19117512)

This enhancement calculates a checksum upon export and optionally verifies the value when the file is imported.

Policy Table Validation Enhancement (Bug 19117508)

Oracle Communications Policy Management includes a button which validates the content in a Policy Table. This enhancement provided notification to the operator when there are no errors found in the Policy Table. In previous releases, a message was displayed only if an error was found. System (anything that doesn't fit into one of the other categories) Diameter Overload Control Enhancements (was: 6.102 Diameter Overload Indication Conveyance) This enhancement provides improved ability to handle overload conditions. The MRA can more intelligently select which MPE receives new session requests (CCR-I), direct new requests to MPEs on other MRAs, and can optionally send an experimental result code to notify the PGW that all MRAs/MPEs are fully loaded. In addition n, the MRA now performs load-shedding based on its own load, using similar techniques to the existing MPE load shedding mechanism.

Diameter Overload Control Enhancements (Bug 19481824)

This enhancement provides improved ability to handle overload conditions. The MRA can more intelligently select which MPE receives new session requests (CCR-I), direct new requests to MPEs on other MRAs, and can optionally send an experimental result code to notify the PGW that all MRAs/MPEs are fully loaded. In addition, the MRA now performs load-shedding based on its own load, using similar techniques to the existing MPE load shedding mechanism.

Traffic Profile_Support for Variables (Bug 19117519)

If previous releases Traffic Profile parameters could only be populated with a fixed value. This enhancement simplifies introducing new service variants by allowing variables to be used in Traffic Profiles. The variables can be created and initialized by policy action based on session context. If no variable value is defined via policy, a default value can be configured during Traffic Profile creation.

Extended Retry Profile (Bug 19117734)

This enhancement extends the time that Oracle Communications Policy Management can attempt to apply a rule to a PCEF, by adding parameters that allow Oracle Communications Policy Management to pause and then repeat the retry profile multiple times.

Sh Retry after Sh Timeout (Synchronous) (Bug 19623928)

This enhancement allows Oracle Communications Policy Management to resend an Sh message if no response was received to the initial message.

Note: P-GW timeout parameters may need to be adjusted to ensure that it does not timeout if Oracle Communications Policy Management takes a longer time to respond due to enabling this feature.

Maintain Session Uniqueness and Avoid Stale Message Processing (Bug 19481773)

In previous releases, Oracle Communications Policy Management did not have a way to differentiate which request was the most recent. Because of time-outs or network errors, multiple P-GWs can send a CCR-I for the same subscriber session. In this release, this feature supports proprietary timestamping and time-to-wait AVPs. The Oracle Communications Policy Management can then use these two processes to identify the latest CCR-I that was sent and honor only that request.

Note: This feature must also be supported by SGW and PGW.

Re-evaluate Auto-generated rules on CCR-U (Bug 19117544)

In previous releases, Oracle Communications Policy Management could apply an updated PCC Profile upon receipt of a CCR-U only if the Default-EPS-Bearer-QoS AVP is included in the message. With this release, the PCRF can now apply an updated PCC Profile based on any CCR-U.

Policy Action for Generic HTTP Notification (Bug 19982653)

In this release, this new policy action sends operator-defined notifications via HTTP. Oracle Communications Policy Management is capable of performing HTTP actions such as: Get, Post, Put, and Delete. This notification body includes HTTP URL, User, Session, quota, and state variables that can be sent to external systems. The success, (2XX), or failure, (4XX or 5XX), status is logged per notification.

Sy Reconciliation (Bug 19482447)

This feature allows the operator to audit all Sy sessions after recovering from the dual active (split brain) event, ensuring that Oracle Communications Policy Management has the latest quota information for each subscriber. In addition, this feature allows the operator to create policy conditions based on whether Oracle Communications Policy Management is able to communicate with the remote PCRF.

S9 Interface with Roaming Use Cases (Bug 20078837)

This enhancement provides the 3GPP S9 interface capability to the Oracle Communications Policy Management and provides policy conditions, actions, and profiles in support of these use cases.

Policy OVM/OVM-M support on Multiple HW Platforms (Bug 19112895)

Oracle Communications Policy Management supports system deployment in OV-S/OV-M virtual environment. Also, the Oracle Communications Policy Management system is compatible with KVM/Openstack and VMWare/vCloudDirector virtual environments. Oracle Communications Policy Management images are provided in virtual machine compatible OVA and qcow2 formats. MPE and PFE load factors incorporate component capacities when running in a virtual environment.

Policy VMWare/vCloud Director support on Multiple HW Platforms (Bug 19112897)

Oracle Communications Policy Management supports system deployment in OV-S/OV-M virtual environment. Also, the Oracle Communications Policy Management system is compatible with KVM/Openstack and VMWare/vCloudDirector virtual environments. Oracle Communications Policy Management images are provided in virtual machine compatible OVA and qcow2 formats. MPE and PFE load factors incorporate component capacities when running in a virtual environment.

Policy KVM/OpenStack Support on Multiple HW Platforms (Bug 19112898)

Oracle Communications Policy Management supports system deployment in OV-S/OV-M virtual environment. Also, the Oracle Communications Policy Management system is compatible with KVM/Openstack and VMWare/vCloudDirector virtual environments. Oracle Communications Policy Management images are provided in virtual machine compatible OVA and qcow2 formats. MPE and PFE load factors incorporate component capacities when running in a virtual environment.

Oracle Communications Policy Management Entry Level PCRf Deployment (Bug 21105915)

In this release, a complete Oracle Communications Policy Management implementation is now supported on a pair of Oracle X5-2 servers running Oracle Linux with KVM hypervisor. Each server supports one CMP, one MRA/PFE and two MPEs. This implementation supports the same features as a non-virtualized deployment. Additional virtualized or non-virtualized MPEs and MRAs can be added to increase overall system capacity.

Recapture of IPv4 Addresses (Bug 19229408)

Previous releases allowed provisioning of a new PCRf system using only IPv6 addresses, and also allowed adding IPv6 addressing into a system that was already deployed using IPv4. However, IPv4 addresses could not be removed from a system which was already deployed. This enhancement allows removing existing IPv4 addresses from an Oracle Communications Policy Management system.

HP Gen 9 Server Compatibility (Bug 19526129)

Oracle Communications Policy Management operation has been verified on selected HP Gen9 rack-mount and enclosure-based hardware.

X5-2 Server Rack Mount Server (Bug 19526151)

Oracle Communications Policy Management operation has been verified on Oracle X5-2 rack-mount servers.

Default Passwords are not Allowed (Bug 19108339)

This enhancement calculates a checksum upon export and optionally verifies the value when the file is imported.

Chapter 3

Oracle Communications Policy Management 12.1.0.0 Media and Documentation

Topics:

- [Media Pack.....17](#)
- [Documentation Pack.....17](#)

Oracle Communications software is available for electronic download on MY Oracle Support (MOS). Documentation is delivered electronically on the Oracle Help Center (OHC). Both the software Media Pack and the Documentation Pack are listed in this chapter.

Media Pack

All components available for download from My Oracle Support
(<http://www.oracle.com/us/support/software/premier/my-oracle-support-068523.html>).

Media pack:

- Oracle Communications Policy Configuration Management Platform 12.1.0.0_35.1.0
- Oracle Communications Policy Multimedia Policy Engine 12.1.0.0_35.1.0
- Oracle Communications Policy Front End 12.1.0.0_35.1.0 OVA
- Oracle Communications Policy Multimedia Policy Engine 12.1.0.0_35.1.0 OVA
- Oracle Communications Policy Front End 12.1.0.0_35.1.0 OVA
- Oracle Communications Tekelec Virtual Operating Environment 3.0.2.0.0_86.28.0
- Oracle Communications Tekelec Platform Distribution 7.0.2.0.0_86.28.0
- Oracle Communications Tekelec Platform Management and Configuration 6.0.1.0.0_60.21.0

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

Documentation Pack

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

Note: This list is accurate at the time of release, but is subject to change. Please view the Oracle Help Center site for the latest information.

- Related Publications Reference
- Hardware Documentation Roadmap Reference
- 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
- Troubleshooting Reference
- Analytics Data Stream Reference

Chapter 4

Supported Hardware Baseline

Topics:

- [Supported Hardware Baseline.....19](#)

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
HP Gen 9	Rackmount and C-Class Servers configured as defined in the configuration workbook.
HP Gen 6 & 8	Rackmount and C-Class 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. These components are listed in the Firmware Release Notice. Please refer to http://docs.oracle.com/cd/E57832_01/index.htm to view the latest Firmware Release Notice.

Chapter 5

Firmware Components

Topics:

- [Firmware Component List.....21](#)

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 Tekelec HP FUP 2.2.9 is the minimum required.

Chapter 6

Oracle Communications 12.1.0.0 Supported Upgrade Path

Topics:

- [Supported Upgrade Paths.....23](#)

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

The possible upgrade paths to Oracle Communications Policy Management 12.1.0.0 are listed in [Table 3: Oracle Communications Policy Management 12.1.0.0 Upgrade Paths](#).

Table 3: Oracle Communications Policy Management 12.1.0.0 Upgrade Paths

From	To
12.0.0	12.1.0.0
11.5.1	12.1.0.0

Oracle Communications Policy Management 12.1.0.0 Resolved and Known Bugs

Topics:

- [Severity Definitions.....25](#)
- [Resolved Bug Listing.....25](#)
- [Customer Known Bug Listing.....27](#)

This chapter lists the Resolved and Known Bugs for Oracle Communications Policy Management 12.1.0.0.

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 problem report sections in this document refer to Bug severity levels. Definitions of these levels can be found in the publication, *TL 9000 Quality Management System Measurement Handbook*.

Problem Report: 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
 1. Product inoperability (total or partial outage).
 2. A reduction in the capacity capability, that is, 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
 1. Reduction in 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.

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

- 1 - Critical
- 2 - Major
- 3 - Minor

Resolved Bug Listing

Table 4: Oracle Communications Policy Management Release 12.1.0.0 Resolved Bugs lists bugs that are resolved in the following builds:

Application Lineup

**Oracle Communications Policy Management 12.1.0.0
Resolved and Known Bugs**

- Oracle Communications Policy Configuration Management Platform 12.1.0.0_35.1.0
- Oracle Communications Policy Multimedia Policy Engine 12.1.0.0_35.1.0
- Oracle Communications Policy Front End 12.1.0.0_35.1.0
- Oracle Communications Policy Front End 12.1.0.0_35.1.0 OVA
- Oracle Communications Policy Multimedia Policy Engine 12.1.0.0_35.1.0 OVA
- Oracle Communications Policy Front End 12.1.0.0_35.1.0 OVA

Platform Lineup

- Oracle Communications Tekelec Virtual Operating Environment 3.0.2.0.0_86.28.0
- Oracle Communications Tekelec Platform Distribution 7.0.2.0.0_86.28.0
- Oracle Communications Tekelec Platform Management and Configuration 6.0.1.0.0_60.21.0

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

Note: Customer Knowns bugs are sorted in ascending order by Severity (Sev).

Table 4: Oracle Communications Policy Management Release 12.1.0.0 Resolved Bugs

Bug number	Severity	Title
21337302	3-Minor	MPE fails to send SNR
21437127	3-Minor	Two SNR's are being sent for same user
21263159	3-Minor	UDR is sent to SPR when using LDAP to get subscriber profile
21209613	3-Minor	Policy condition to test against pro-rated quota not available
21209568	3-Minor	PUR not sent if the policy has reject action in it
21209544	3-Minor	PNR right after UDR causes PUR to not to send correct service indications
21486558	3-Minor	Sy retries should be non-blocking
21363554	3-Minor	Capture the tomcat hs_err_pid file in the savelogs every time tomcat crashes
21248703	3-Minor	CCR-I timeouts on the gateway linked to Transport Issue
21684136	3-Minor	Combined PNR for user and state does not trigger RAR
21659415	3-Minor	Enabling MPE "Validate User" also changes other rcmgr settings
21577195	3-Minor	Policy with multiple Actions each containing "Policy Groups" issue dependent
21577173	3-Minor	PolicyGroup inside a Policy Group Fails
21423847	3-Minor	User Object not refreshed minutes after all sessions are deleted
21209168	3-Minor	Sy sessions not terminated when SLR-i was triggered by PNR
21209159	3-Minor	Sh: After initial Sh UDR lookup with "Tel:" then subsequent lookups use "sip:"
21209115	3-Minor	Subscriber remains subscribed to SPR after failure creating Gx Session (CCR-I)

Bug number	Severity	Title
21784346	3-Minor	LI Stats shows incorrect number of X2 Connections

Customer Known Bug Listing

Table 5: Oracle Communications Policy Management 12.1.0.0 Customer Known Bugs lists known bugs in this release:

Note: Customer Knowns bugs are sorted in ascending order by Severity (Sev).

Table 5: Oracle Communications Policy Management 12.1.0.0 Customer Known Bugs

Bug Number	Severity	Title	Impact Statement	Work Around
21386339	3-Minor	Failed HDD-1 prevents new software installation even after drive is replaced.	The console shows error message "Failed to configure disks for OS install." This is because some hardware does not clear the error. The error can be verified using the following command: >megacli -pdInfo -PhysDrv[252:1] -aal	The error state can be manually cleaned up using the following commands: > megacli -pdMakeGood -PhysDrv[252:1] -aal # changes to Unconfigured (good)> megacli -CfgForeign -Clear -aal # clears foreign state> megacli -PDHSP -Set -PhysDrv[252:1] -aal # Make the drive a Hot Spare and the controller will begin rebuild automatically
21155960	3-Minor	"Rollback" button not grayed out for new install servers.	When performing a new installation, hitting the rollback button will undo the installation of Oracle Communications Policy Management software.	Do not click the "rollback" button. If hit accidentally, then the Oracle Communications Policy Management software must be reinstalled.

**Oracle Communications Policy Management 12.1.0.0
Resolved and Known Bugs**

Bug Number	Severity	Title	Impact Statement	Work Around
21508986	3-Minor	[Upgrade] delete ISO does not work on IE11	Unable to use Explorer to delete iso.	Use Monzilla Firefox.
21424969	3-Minor	[Upgrade] Diameter route name not populated with realm after release upgrade	Display issue for Diameter Route in CMP GUI. No functional impact.	Add route name manually after upgrade.
21568474	3-Minor	"Last Update" date is displayed incorrectly on [Select ISOs] page.	The display shows that the update occurred one month earlier than the actual date.	n/a
21548028	3-Minor	Button says "Continue Upgrade" instead of "Start Upgrade" after initial cluster.	When upgrading multiple clusters (e.g., CMP, DR-CMP, MRAs, MPEs), the button is labeled "Start Upgrade" for the first cluster (CMP) but as "Continue Upgrade" for subsequent clusters (DR-CMP, MRAs, MPEs). When starting to upgrade a subsequent cluster, the button should revert to saying "Start Upgrade".	Click the "Continue Upgrade" button to install the next cluster.
21378878	3-Minor	Standby MRA in Geo-Cluster remains OOS after failover.	The reset failure counter not increased one if reset PUR meet Out of Sync and retry more than 3 times still meet out of sync error. This case rarely happens in reality.	Reboot Server C or disable replication on Server C
21760946	3-Minor	[Upgrade] Upgrade failed when stop qp application.	There is a race condition between "service mysql start" and "service mysql stop-if encountered upgrade will fail.	n/a
21163004	3-Minor	[Topology] Server-C briefly goes out-of-service when Server-B is deleted.	Deleting a server from the topology may cause its spare to go OOS for a few seconds.	n/a
21753855	3-Minor	[Firewall] Sctp connection is not established when Firewall enabled	In policy factory firewall settings, SCTP is not enabled on port 3868.	Users need to manually add a firewall rule to enable SCTP port 3868.
21136612	3-Minor	Configuration Template info not displayed in the Checkpoint Diff Link.	Oracle Communications Policy Management allows comparing saved checkpoints with the current operational configuration. Configuration	n/a

**Oracle Communications Policy Management 12.1.0.0
Resolved and Known Bugs**

Bug Number	Severity	Title	Impact Statement	Work Around
			templates are not included in this comparison.	
21699787	3-Minor	"Notification Server" specified in Configuration Template is not successfully restored after Checkpoint "Restore" or "Restore and Deploy." When a Notification Server is configured on a Configuration Template and that template is restored via a checkpoint restore, then the Notification Server field is blank	Oracle Communications Policy Management allows comparing saved checkpoints with the current operational configuration. Configuration templates are not included in this comparison.	Configure the Notification Server in MPE instead of using a Configuration Template.
21699828	3-Minor	"Policy Syslog Forwarding Configuration" specified in Configuration Template is not successfully restored after Checkpoint "Restore" or "Restore and Deploy."	When a Policy Syslog Forwarding Configuration is configured on a Configuration Template and that template is restored via a Checkpoint Restore, then the Policy Syslog Forwarding Configuration field is blank.	Configure the Policy Syslog Forwarding Configuration in MPE instead of using a Configuration Template.
21322918	3-Minor	[Checkpoint] All policies are deleted from Policy Server after 'Restore & Deploy.'	This is a correct behavior according to FD, so no system impact.	n/a
21314261	3-Minor	[Checkpoint] Application disassociates from Policy Server after 'Restore & Deploy'	Applications gets disassociated from Policy Server after Checkpoint 'Restore and Deploy' Operation no impact.	n/a
21306916	3-Minor	ConfigMismatch is displayed when Restore is done with no config changes.	n/a	Mismatch notification appears, click on the Reapply Configuration button.
20367800	3-Minor	Exception if four instances are monitoring KPI Dashboard.	n/a	Do not open more than three KPI Dashboards concurrently.

**Oracle Communications Policy Management 12.1.0.0
Resolved and Known Bugs**

Bug Number	Severity	Title	Impact Statement	Work Around
21563484	3-Minor	Sy Connection to MRA not shown in Diameter Sy Statistics of Policy Server.	When viewing MPE Diameter Sy Connection Statistics for OCS, no entry is included for the MRA. This is inconsistent with MPE Diameter Sy Connection Statistics for SPR, which includes a connection entry for the MRA.	Add MPEs to the MRA pool before defining the OCS
21756844	3-Minor	When initially implementing ML-OAM, CMP displays NE as Unknown in PCEF stats after conversion to S-CMP.	n/a	Disconnect and re-establish the Diameter connection to displays the correct PCEF identifier when viewing the MRA.
21357389	3-Minor	Alarm 70500 does not get cleared after removing cluster which triggered this alarm.	When a cluster is added which is running a different level of software than the currently operational clusters, Oracle Communications Policy Management generates Alarm 70500: The system is running different versions of software. After removing the cluster which triggered the alarm, the alarm does not get cleared automatically.	n/a
21539259	3-Minor	Duplicate entries in SGW Failure Report.	Duplicate entries exist in SGW Report for the same SGW IP at the same time.	
21532523	3-Minor	"Session cleanup: Removed for expiration" statistic is not incremented when Rx session expires.	n/a	n/a
21538459	3-Minor	[System]Unexpected Alarm Behavior Observed for WAN Replication Buffer Exhaustion.	Alarming for WAN replication UpSyncLog buffer exhaustion not as expected/advertised, with the exception of the 80% capacity threshold.	n/a
21418695	3-Minor	NW-CMP allows operator to delete Charging Server which has been associated with an MPE	The operator can delete a Charging Server (OCS) even if it is associated with an MPE.	n/a

**Oracle Communications Policy Management 12.1.0.0
Resolved and Known Bugs**

Bug Number	Severity	Title	Impact Statement	Work Around
21662033	3-Minor	"Delete all before importing" strategy cannot delete LIMF if it is associated with MPE.	When importing a configuration using the option "Delete All Before Importing", LIMF equipment is not deleted if it has been associated with an MPE.	Dis-associate the LIMF from all MPEs before performing the import.
21386394	3-Minor	Data Source information not shown after Modifying Data Sources using Internet Explorer.	After modifying a Data Source and hitting the "Save" button, the Data Source information should be displayed. Instead, this area is blank.	Click away and click back
21670406	3-Minor	[IPv6] Tool should add validation to IP preference of the CMP.	No system impact -adds additional pre-check.	n/a
21274866	3-Minor	[Config_Template] "T" marking missing for Data Sources in Policy Server.	No Impact: On no "T" mark if data source was merged from multiple configuration templates.	Only config Data Source in one configuration template.
21555103	3-Minor	[Config_Template] T marking missing for all the SMTP Configuration in Policy Server.	User cannot make it clear whether SMTP fields come from template or configured by policy server itself.	Manually determine the configuration status by reviewing the config templates associated with the MPE.
21313513	3-Minor	Data Sources table includes entries from multiple Configuration Templates.	If multiple templates are associated with the Policy Server then the highest priority template will be used when conflicting information exists. Data Sources should also come from the highest priority template. This is an issue because Data Sources from different Configuration Templates will have the same priority.	Only one Configuration Template applied to each MPE should contain Data Sources.
21418297	3-Minor	Oracle Communications Policy Management allows deleting Policies/Policy Groups which are deployed to a Policy Server.	NW-CMP does not validate that a Policy and Policy group is not deployed to a Policy Server before deleting it.	Use Configuration Templates.

**Oracle Communications Policy Management 12.1.0.0
Resolved and Known Bugs**

Bug Number	Severity	Title	Impact Statement	Work Around
21383771	3-Minor	Change of Network Element name not reflected in policies.	If a Network Element is configured in a policy condition via a drop-down selection menu (e.g., TDF name), and the NE name is changed under Network Element, then policy condition which references this NE are not updated to reflect the new name. Therefore, the policy points to a non-existent object.	n/a
21490142	3-Minor	Server names in HTTP Notification policy actions are not fully updated.	If multiple policy actions to send an HTTP message are configured within the same policy, and the Notification Server name is changed, then only the first policy action is updated to reflect the new name.	Do not send more than one HTTP notification message per policy.
20960780	3-Minor	SNR not sent after terminating a Gxx session.	Oracle Communications Policy Management does not send an SNR after a Gxx session terminates.	n/a
21386114	3-Minor	MRA binding only contains the first S9 sub-session IP address.	MRA does not take into account the S9 sub-session IP address when it does the binding. Rx over S9 can be impacted if it is associated with a sub-session other than the original one created in the CCR-I, since it will not have the IP address to find the binding. This is not an issue when using Oracle Communications Policy Management at both ends, since the Destination-Host is sent on the AAR-I. However if the V-PCRF is a third party device, the MRA might reject it when lookup will fails. In addition, this is an issue when using topology hiding since the AAR and STR would not include the Destination-Host.	n/a

**Oracle Communications Policy Management 12.1.0.0
Resolved and Known Bugs**

Bug Number	Severity	Title	Impact Statement	Work Around
21775061	3-Minor	Receiving RADIUS Accounting-Start triggers two subscriber lookups in some circumstances.	When the Subscriber Key type is set to NAI, Oracle Communications Policy Management will send the correct (UDR or SNR) message to the SPR to retrieve subscriber information. However, after a response is received, Oracle Communications Policy Management sends another query using E164 as the subscriber key.	n/a
21772052	3-Minor	Receiving RADIUS Accounting-Stop does not terminate Sd sessions at scale.	Upon receiving a RADIUS Accounting-Stop message, the MPE should generate an RAR to the TDF with SESSION_TERMINATION. In response, the TDF sends a CCR-T back to the MPE to terminate the Sd session. This expected message exchange does not occur at high volumes.	n/a
21554138	3-Minor	[DOC] Diameter Watchdog timeout NEW VALUE(6) to be updated in the customer facing docs	No Impact	n/a
21620769	3-Minor	List of MRAs should not be shown in Virtual Template in NW-CMP.	NW-CMP displays a list of MRAs as hyperlinks when configuring Virtual Configuration Templates. When the operator clicks on this name, then NW-CMP tries to navigate to that MRA. However, the screen remains blank because NW-CMP cannot access the MRA Configuration screen on the S-CMP.	n/a
21620509	3-Minor	Network Element Groups should not display MPE column in NW-CMP.	When viewing Network Elements on NW-CMP, a list of MPEs is displayed as hyperlinks. When then user clicks on an MPE name, then NW-CMP tries to navigate to	n/a

**Oracle Communications Policy Management 12.1.0.0
Resolved and Known Bugs**

Bug Number	Severity	Title	Impact Statement	Work Around
			that Policy Server Page. However, the screen remains blank because NW-CMP cannot access the MPE Configuration screen on the S-CMP.	
21666623	3-Minor	MRA should not query backup MRA when recovery CCR-U is received.	MRA queries a backup MRA for user when binding is lost on MRA and recovery CCR-U is received. If backup MRA2 finds an existing binding, CCR-U is sent to MRA2 which sends it to MPE1. A binding is not created on MRA1 and not updated on MRA2, so any new Rx session requests will fail.	n/a
21493159	3-Minor	Under certain conditions, Retry continues after Pre-defined PCC Rule is removed.	When a policy removes a pre-defined PCC rule and installs a new PCC rule, Oracle Communications Policy Management may continue to attempt the pre-defined rule which had already been remove. This result is observed only when a policy is used in which a PNR triggers sending an RAR.	n/a
20877204	3-Minor	When using topology hiding, requests sent via backup MRA not routed to MPE with connection down.	When topology hiding is enabled in an MRA association and the receiving MRA has no direct connection to an MPE in its pool, all requests destined to this MPE via the backup MRA will fail even if there is a path to the MPE via the backup MRA.	n/a
21656659	3-Minor	Deployed policies are not automatically updated when same single policy is imported using "overwrite with imported version" option.	n/a	Export/import policy as part of a bulk file, or manually reapply the imported policy.
21662042	3-Minor	MPE cannot show normally in CMP after import using "delete all before importing" option.	If the user imports a file with the "delete all before importing" option, selecting the MPE produces the message	Do not use "delete all before importing" option.

**Oracle Communications Policy Management 12.1.0.0
Resolved and Known Bugs**

Bug Number	Severity	Title	Impact Statement	Work Around
			"The item you selected cannot be found. It may have been deleted by another."	
21792979	3-Minor	MRA initiated session recovery fails if AAR does not contain Called-Station-Id.	This customer-specific protocol should be deployed only after consulting with Oracle.	n/a
21462804	3-Minor	[Topology] WAN Replication DSCP marking is also marking LAN replication.	No Impact	n/a
21628403	3-Minor	qpSSHKeyProv.pl script checks for known_hosts file with case sensitivity	Confuses user from the result shown when executing the command, but does not have functional impact.	n/a

Chapter 8

Oracle References and Services

Topics:

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- *Emergency Response.....37*
- *Customer Training.....38*
- *Locate Product Documentation on the Oracle Help Center Site.....38*
- *Locate Product Release Software on the Oracle Software Delivery Cloud Site.....38*

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.

1. Log into the Oracle Software Delivery Cloud site at <https://edelivery.oracle.com>.
The **Terms & Restrictions** page appears.
2. Read and accept both the Oracle Trial License Agreement and the Export Restrictions Agreement.
The **Media Pack Search** page appears.
3. Select **Oracle Communications** for Product Pack and **Tekelec** for Platform.
4. Click the **Go** button.
All media packs that meet the search criteria are displayed on the page.
5. Select the media pack for your Product and Release Number and click the **Continue** button.
The **Download** page appears.
6. Provide a valid password in the **Password** field and click the **Go** button.
7. To download a file to your location, click the **Download** button.