# Oracle® Communications Policy Management

Policy R11.5 Release Notice Data **E59931 Revision 2** 

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## Introduction

## **Topics:**

Introduction to Policy Management.....6

This Release Notice identifies the functions and features of Oracle Communications Policy Management (OCPM) Release 11.5

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. 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.

## **Introduction to Policy Management**

OCPM Release 11.5 combines Fixed/Wireless and Cable functionality in a single release, and introduces enhanced resilience and geo-redundancy, as well as Sun Netra hardware support for all modes. Features dependent on new functions in Platform 6.7, are introduced, and also compatibility with SDM SPR 9.3, and OCUDR 10.0.

The Fixed/Wireless mode introduces support for RADIUS interfaces, enabling fixed-line and fixed-mobile convergent use cases. Also in Fixed/Wireless mode Release 11.5 introduces 3GPP Rel11 and other VoLTE related protocol updates. Policy Management Release 11.5 inherits all Wireless functionality of Release 10.5 and Release 11.0 and includes updates to the CMP, MRA, and MPE components

The Cable mode of Release 11.5 includes updates to MPE and BoD use of PCMM protocol options, optimizes the discovery of CMTS/subnet resources over SNMP, and enhances manageability and redundancy controls in the system. Policy Management Release 11.5 inherits all Cable functionality of Release 9.4 software, and includes CMP, MA, MPE, and BoD-AM components

The Fixed/Wireless and Cable feature sets are available based on the mode configuration. Only Fixed/Wireless feature set is supported in "Fixed/Wireless" mode and only cable feature set is supported in "Cable" mode. The mode configuration must be done in the installation time and change of the mode at post-installation time is not supported.

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## **Feature Descriptions**

This Release delivers the following features:

- Cable
- Fixed Wireless
- Wireless

Cable Feature Descriptions

### Cable

#### **BoD Notification and Service Definition Enhancements**

This feature is derived from a customer Request for Feature submissions and the feature extends the capability and manageability of the BoD-AM component in the Cable Policy solution.

### BoD ECN support for IPv4 and IPv6 classifiers in same gate

BoD-AM shall support Service definitions including multiple PCMM classifiers in each direction (upstream, downstream). The classifiers in a single Gate may be either multiple IPv4 legacy Classifiers, or a mix of multiple Extended Classifiers and/or IPv6 Classifiers, as defined in the PCMM specification ([Ext-1]) and clarified in a recent Engineering Change Notice ([Ext-2]).

The BoD-AM CreateSession APIs shall support encoding of multiple IP/Port combinations in the input parameters, in order to provide details for Services defined with multiple classifiers. There shall be no change for this feature in the AddTrafficClassifier, or DeleteTrafficClassifier APIs. Each call of these APIs shall specify parameters for a single classifier, if needed.

The BoD-AM GUI in the CMP shall support the configuration of Services with multiple classifiers in each direction (upstream, downstream). The BoD-AM GUI in the CMP shall support a mechanism to add/remove classifier definitions dynamically from a Service definition which is being created or modified. All of the requirements for this PR shall apply to both the raw HTTP and the SOAP APIs of the BoD-AM.

#### **BoD Asynchronous Notification with GET or POST**

The BoD-AM shall support optional behavior to use HTTP GET or HTTP POST requests when sending BoD Asynchronous Notification messages. The BoD-AM GUI in the CMP shall support user configuration of the option to use GET or POST.

## Multiple destination IP addresses for BoD Notifications

When multiple destinations for Notifications are configured in the BoD-AM GUI in the CMP, each destination shall be defined with an independent IP address, destination port, and server path. The BoD-AM shall support delivery of Asynchronous Notification messages to multiple pre-configured destinations. When multiple Notification destinations are configured, Notifications shall be delivered to all of the configured destinations. The BoD-AM GUI in the CMP shall support configuration of multiple Notification destinations for Asynchronous destinations.

## Efficient Add/Delete of Classifiers in Rx-triggered MGPI Update

This feature is an enhancement to the existing Rx-to-PCMM MGPI functionality allowing usage with a higher number of sessions per endpoint.

### **Geo-Redundancy Enhancements**

Wireless Feature Descriptions

This feature improves the integration and functionality of existing Policy High Availability and Geo-Redundancy functions with customer networks.

## Allow MPE, BoD Geo-Redundancy Replication to be Configured on Interface Other than OAM

This feature supports reconfiguration of the GR traffic when the component is already in-service. That is, an existing GR MPE or BoD component which has GR traffic on e.g. the OAM interface, may be reconfigured to place the GR traffic on a SIG interface without causing solution down-time or a loss of functionality for the running component.

## Degrade Server HA Status When SIG interface(s) are Down

This feature provides customers the ability to demote a server based on observed logical signaling interface status.

#### **Subnet-Collection Enhancements**

These feature enhancements are drawn from customer Requests For Feature (RFFs), and are intended to improve the performance and manageability of the Cable Policy solution in the context of real-world deployments.

## Trigger CMTS Discovery by OSSI Command

This feature has an OSSI XML interfaces that supports triggering the subnet discovery process for one or more existing or new CMTS Network Element. The response to a request triggering a CMTS subnet discovery shall by default be held until the subnet discovery process is complete, and the updated subnet information shall be provided in the response if appropriate.

## **Detect Duplicate or Overlapping CMTS subnets or prefixes**

This feature provides a notification when duplicate or overlapping subnets are detected. The detection of duplicate or overlapping subnets shall apply to both IPv4 subnets and IPv6 prefixes. When duplicate or overlapping subnets are detected, a Trace Log event shall be created indicating the specific CMTS and subnet information. When duplicate or overlapping subnets are detected, an Alarm shall be created indicating the specific CMTS and subnet information.

#### **Enhance Subnet-Collection Performance**

This feature will allow for significant decreases in the Subnet Collection task duration in large regions. The typical run time of the Subnet Collection task of the CMP or MA shall be decreased by refactoring or re-architecting the handling of SNMP queries, for example by increasing parallelism in the detection of multiple CMTSs' subnets.

#### Wireless

Wireless Feature Descriptions

### Allow any AVP in the dictionary to be inserted in a message

This feature allows for interoperability with a P-GW feature, which requires 3GPP-Charging-Characteristics (a Gy AVP) which is included in Gx CCA messages from the PCRF. In this case, the AVP is defined in the diameter dictionary, but it is not part of Gx protocol standard. By allowing the AVPs defined in the Diameter dictionary to be used by 3 Party AVP feature conditions and actions, will allow the PCRF these customer's scenario.

### Charging Correlation Interchange Procedures On Gx and Rx

This feature allows the operator to trigger sending the CHARGING\_CRRELATION\_EXCHANGE to the PCEF, with or without receiving any message across the Rx interface.

### **Dynamic Quota for Pools**

This feature supports Dynamic Quota (Passes and Top-Ups) for Pooled Quotas. The functionality should be equivalent to existing Subscriber Dynamic Quota functions.

The CMP shall provide a global configuration to control whether Pool Dynamic Quota is enabled or disabled, and whether a subscription for updates is performed. By default this configuration shall be disabled.

## Extend Quota Pool to at least 20

The supported quota pool subscriber size shall be increased to no less than 20 subscribers and no less than 20 concurrent sessions.

**Note:** A configuration with the pool size of 25 subscribers should be tested.

## Flow-Description AVP Does Not Comply with 3GPP Release 9

Flow-Descriptions AVP defines service flow filter parameters for a PCC rule. Previously, the PCRF supported Flow-Description AVP in compliance with 3GPP Gx interface release 8. This feature introduces support for Flow-Description AVP in compliance with 3GPP Gx interface Release 9.

#### n-Site MRA Optimizations and Enhancements

The 4-site MRA functionality has been enhanced to allow the stateful MRA to scale to multiple sites/clusters in a linear fashion beyond the current 4-site limit. The MRA architecture and design has been modified to minimize the number of queries amongst MRAs to determine which instance is handling a subscriber's binding. Upto 10 MRA clusters could be associated.

## Option to Trigger to RAR on Quota Change by Provisioning Interface

This feature provides the ability to trigger policy evaluation when a PNR is received on the Sh interface.

Operator shall be able to configure the triggering of policy evaluation when a PNR is received due to changes in any of the following: user data (user data, pool data, dynamic quota, pool dynamic quota),

Wireless Feature Descriptions

quota, state, pool quota, pool state. This configuration shall be on per MPE basis. By default, no policy evaluation shall be triggered when a notification is received on the Sh interface.

The Policy Wizard shall support a new policy condition to evaluate notification messages received on the data source interface(i.e. Sh). The new condition shall allow evaluation based on the message type and the object type that was included in the notification.

### PCRF needs support Required-Access-Info AVP on Rx and Gx interface

#### Support for PS\_TO\_CS\_HANDOVER in the Rule-Failure-Code AVP

When an IP-CAN session is terminated due to (PS) Packet Switched to CS(Circuit Switched), PCEF reports related PCC rule for the IP-CAN session by including the Rule-Failure-Code AVP st to the value PS\_TO\_CS\_HANDOVER. Based on this Rule-Failure-Code PCRF informs AF of the IP-CAN session change and the associated AF session either modified or terminated.

### Release 11.5 updates to 3GPP Statement of Compliance internal documents

The statement of compliance for customer-visible Diameter interfaces (Gx, Rx, and etc.) shall be updated based on Release 11.5 feature content.

### **Subscriber Activity Log**

The feature allows operators to have better monitoring capability by adding a filter for subscriber IDs which, once activated, allows for every policy event, policy command, and policy action to be logged. This can be used for troubleshooting of specific subscriber related issues and can be used to generate specific reports once the log file is exported to a 3 party platform, or optionally could be viewed by the CMP trace log viewer.

## **Sponsored Data Connectivity**

This feature allows service providers to offer special handling for certain types of OTT traffic and associate these flows with a particular sponsor.

### Support for Charging Correlation 3GPP procedure

This feature introduces the support for the 3GPP standard procedure for charging correlation between bearer and subsystem layer. This allows service providers to correlate between content layer, service layer, and bearer layer. From PCRF stand point the procedure involves 3GPP Rx and Gx interfaces. The AF may request PCRF access network charging identifier information for each authorized flow and the PCRF requests access network charging information from PCEF via Gx interface, and reports access network charging identifier information to AF once it is received from the PCEF.

## **Support for Dynamic Granting Algorithm for Passes**

This feature supports dynamic granting for passes equivalent to the existing functionality already implemented for plans.

Fixed Wireless Feature Descriptions

### **Support for Network Location 3GPP Procedure**

The operator shall be able to create policy conditions based on the presence or absence of the ACCESS\_NETWORK\_INFO\_REPORT in the Specific-Action AVP received across the Rx interface.

The operator shall be able to create policy conditions based on the presence or absence of the Required-Access-Info AVP received across the Rx interface.

The operator shall be able to create policy conditions based on the value of of the Required-Access-Info AVP field received across the Rx interface.

The operator shall be able to create policy conditions based on the presence or absence of the ACCESS\_NETWORK\_INFO\_REPORT in the Event-Trigger AVP received across the Gx interface.

The operator shall be able to trigger sending the ACCESS\_NETWORK\_INFO\_REPORT to the PCEF, with or without receiving any message across the Rx interface.

The operator shall be able to set/override value in the Required-Access-Info AVP sent to the PCEF.

### Support for Pro-Ration on a Per Quota Basis

This feature supports for pro-ration on per quota basis add to the Policy Solution handling of scenarios where multiple quota plans associated with a subscriber are used.

### **Table Driven Policy for Multiple Entitlements**

This feature will allow Table Driven Policies to function when Policy Context data being compared to a Key Column may have multiple values encoded as a string.

#### **Fixed Wireless**

#### **Radius COA Phase 1**

This feature defines requirements for PCRF support for RADIUS CoA, which is used for installing policies in fixed broadband access networks.

This allows the PCRF to be used instead of a RADIUS server to push subscriber policy changes. Specifically, it allows Oracle PCRF to install services (policy rules) in order to allow or disallow services as well as to set QoS parameters for the broadband data session.

In these networks, Broadband Remote Access Servers (BRAS) and/or Broadband Network Gateways (BNG) are the demarcation point between the access network (e.g., xDSL or PON) and the backbone WAN, and also function as the PCEF. The target BRAS/BNG for this FRS includes Cisco, Juniper and Ericsson/Redback.

#### **RADIUS Correlation as Primary Session**

This feature defines the correlation of RADIUS sessions with Gx secondary sessions. Informally speaking, this could be used when a "TDF" function like a DPI (with Gx/Gx-Lite) is used behind a RADIUS-enabled PCEF.

Fixed Wireless Feature Descriptions

The MPE shall support exposing the attribute values from a correlated Gx session for use in policy in a RADIUS session.

## **RADIUS Routing in MRA**

This feature shall support routing of RADIUS messages as a standalone application (that is, not coordinated with existing Diameter routing functions or binding data). For scaled deployments of RADIUS, or potentially (as an objective) deployments requiring coordination of RADIUS and Diameter traffic, this requirement defines MRA and associated MPE functions.

## **Sd Triggering for RADIUS sessions**

This feature supports triggering RADIUS CoA messages to associated RADIUS sessions/services based on events reported on Sd, including usage monitoring events . For example, Sd Application ID values could be coordinated with RADIUS service IDs to provide application/service-specific controls.

## Sy Triggering for RADIUS sessions

This feature supports triggering the Sy session optionally via policy rules, rather than by Data Source configuration.

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## Policy Release 11.5 Media and Documentation

## **Topics:**

- Media Pack.....15
- Documentation Pack.....15

Oracle Communications software is available for electronic download on the Oracle Software Delivery Cloud (OSDC). Documentation is delivered electronically on the Oracle Technology Network (OTN). Both the software Media Pack and the Documentation Pack are listed in this chapter.

#### Media Pack

All components available for download from the Oracle Software Delivery Cloud (https://edelivery.oracle.com/) are in Table 1: Media Pack Contents.

**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.

#### **Table 1: Media Pack Contents**

Na	ime				
	1.0	 D 1:	<i>c</i> ·	 3.6	. D

Oracle Communications Policy Configuration Management Platform 11.5.0.0.0-39.1.0

Oracle Communications Policy Front End 11.5.0.0.0-39.1.0

Oracle Communications Policy Multimedia Policy Engine 11.5.0.0.0-39.1.0

Oracle Communications Tekelec Platform Distribution 6.7.0.0.1-84.18.0 (ISO and USB images)

Oracle Communications Tekelec Virtual Operating Environment 2.7.0.0.0-84.20.0 (ISO and USB images)

Oracle Communications Tekelec Platform Management and Configuration 5.7.0.0.1-57.17.1

Oracle Communications Policy Bandwidth On-Demand Application Manager 11.5.0.0.0-39.1.0

Oracle Communications Policy Management Agent 11.5.0.0.0.0-39.1.0

#### **Documentation Pack**

All documents available for download from the Oracle Technology Network (OTN) site (http://docs.oracle.com) are listed in Table 2: Documentation Pack Contents.

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

**Table 2: Documentation Pack Contents** 

#### Name

Related Publications Reference

Hardware Documentation Roadmap Reference

Configuration Management Platform Wireless User's Guide

Configuration Management Platform Cable User's Guide

Policy Wizard Reference

Platform Configuration User's Guide

SNMP User's Guide

OSSI XML Interface Definitions Reference

Name
Troubleshooting Reference
Analytics Data Stream Reference
Policy Front End User's Guide
Bandwidth on Demand Cable User's Guide

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## **Supported Hardware Baseline**

## Topics:

• Supported Hardware Baseline.....18

The Hardware identified in *Table 3: Supported Hardware Baseline* comprises the hardware and server versions that have been verified with this Release.

## **Supported Hardware Baseline**

**Table 3: Supported Hardware Baseline** 

Hardware	Description
Cable	HP DL360 G6, G7 & G8 RMS, HP DL380 G8 RMS, and Sun Netra X3-2 RMS
Wireless	HP G6 & G8 RMS, HP C Class G6 & G8, and Sun Netra X3-2 RMS

**Note:** PP-5160 servers will not be supported in Release 11.5

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## Policy Release 11.5 Supported Upgrade Paths

## **Topics:**

• Supported Upgrade Paths.....20

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 Policy Release 11.5 are listed below.

Table 4: Policy Release 11.5 Upgrade Paths

From	То
9.1.X (9.1.7, 9.1.9, 9.1.10)	11.5.0
9.3.0	11.5.0
9.4.X (9.4.0, 9.4,1)	11.5.0
10.5.X (10.5.0, 10.5.1, 10.5.3, 10.5.4, 10.5.5)	11.5.0

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## Policy Release 11.5 Resolved and Known Bugs

## **Topics:**

- Severity Definitions.....22
- Resolved Bug Listing.....22
- Customer Known Bug Listing.....25

This chapter lists the Resolved and Known Bugs for Policy Release 11.5

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), or
  - **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, or
  - **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 5: Policy Release 11.5 Resolved Bugs* lists bugs that are resolved in the following builds:

**Application Lineup** 

Oracle Communications Policy Configuration Management Platform 11.5.0.0.0-39.1.0

Platform Lineup

- Oracle Communications Policy Front End 11.5.0.0.0-39.1.0
- Oracle Communications Policy Multimedia Policy Engine 11.5.0.0.0-39.1.0
- Oracle Communications Tekelec Platform Distribution 6.7.0.0.1-84.18.0
- Oracle Communications Tekelec Virtual Operating Environment 2.7.0.0.0-84.20.0
- Oracle Communications Tekelec Platform Management and Configuration 5.7.0.0.1-57.17.1
- Oracle Communications Policy Bandwidth On-Demand Application Manager 11.5.0.0.0-39.1.0
- Oracle Communications Policy Management Agent 11.5.0.0.0.0-39.1.0

Above listed load line-up provides a view of our GA milestone release. Firmware release 9.4 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.

Note: Resolved bugs are sorted in ascending order by Severity (Sev), and then by Bug number.

**Table 5: Policy Release 11.5 Resolved Bugs** 

Bug number	Severity	Title
19117610	2	[239815]CMP Cluster A-side OOS
19108874	3	[232027]SNA with diameter Error: DIAMETER_UNABLE_TO_COMPLY(5012)
19112166	3	[232457]Connectivity issue during migration of PCRF to DRA for Sh interface
19112158	3	[232972]PCRF: RAA Error
19109202	3	[233141]Granting 0% of a zero byte quota - behaviour change from 7.5.4 to 9.1.5
19112531	3	[235543]MPE doesn't use the updates sent by SPR (PNR) for POOL profiles
19116015	3	[236977]APR Timeout
19113996	3	[237210]Default resource ID feature, causing failure for LTE calls, with error 514
19114620	3	[237559]SGSN IP getting erased when enabling rc logs at Trace Level
19114926	3	[238036]PCRF Pool Billing day Issue
19109423	3	[233586][Document Error]In "CMP Cable User Guide", some descriptions about lengt
19113043	3	[235789][Doc] There is some mistake for BoD HTTP interface definition
19116048	3	[238744]User.Pool fields are not documented
19117654	3	[240153]java NullPointer exception msc.quota.QuotaEngine.checkForImmediateBillin
19120492	3	[241444][BOD_User_Guide]The parameters of createSession Interface definition mis

Bug number	Severity	Title
19202224	3	Serialization JUnit Test Failures
19228463	3	[CMP_Active_Alarm] Alarm ID 70012 does not auto-clears after 600 seconds.
19228986	3	[CMP_Active_Alarm] Alarm ID 70013 does not auto-clears after 600 seconds.
19229508	3	Online Help : Description of install specified ADC rule(s) not linked
19359621	3	[Server Backup] the manifest is not as expectation
19429840	3	Online help menu in CMP needs some notes on Notification
19556773	3	Pool Custom fields cannot be used for the destination of email notifications
19583308	3	[CMP_User_Guide]Add description for Save Layout button
19584220	3	Classifier1.NextHeaderType setting to 0 during ipv6 testing
19606266	3	OM Statistics Scheduled Task is Slow and Inefficient
19627520	3	an exception occurs when enter configuration key and value more than 255
19685738	3	[240712]Isolate policy/policy group warning exists even though the policy
19687821	3	Found "more" Synchronous UDRs which should not be happening
19695717	3	SIP 503 error
19695740	3	IP index may be overwritten in MRA binding DB when a stale IP is re-used
19803624	3	[regression]Custom AVP name shall not allow inputing blank space in CMP GUI
19817177	3	IP-CAN session update will cause a new SLR-i to be sent when sy failed
19867470	3	Online help for dynamic grant on pass and quota plan
19882939	3	Email notification issue with carriage return when using policy tables for text
19883000	3	Send SMS no longer supporting "Use Policy Table" for SMS text
19883086	3	Can't turn off a specific stats from Persistent Interval stats framework
19887832	3	Sh UDR/UDA showing for PoolQuotaData and PoolStateData following SNR-SNA
19983967	3	[CMP User Guide]The range of Max Session Cleanup/Iteration Rate should be update

Bug number	Severity	Title
20003966	3	Stale quota usage is considered towards new grant
20088930	3	Policy Wizard Ref 11.5 Uses Incorrect Confirm Text
20360596	3	On quota revalidation, next revalidation time is missing

## **Customer Known Bug Listing**

*Table 6: Policy Release 11.5 Customer Known Bugs* lists known bugs in this release:

Table 6: Policy Release 11.5 Customer Known Bugs

Bug Number	Severity	Title
19111750	3	[235580][Merge][Cable][Feature] BoD Load Shedding doesn't work
19119412	3	[241610]Quota Enhancements: Notification for Sy condition is incorrect
19196286	3	Quota Enhancements : SPR not deleted state property after PUR from MPE
19293366	3	[BoD_Perf]Cant overlap requests for same session while other task is running
19385071	3	Timestamp needs to update as current time stamp each time OM stats enable
19523438	3	[platform]Isolate active DC will result Spare server to OOS
19629923	3	COMCOL Port 17402 is not moved when changing WAN HA paths
19640249	3	There should be no Config Mismatch when there is IPv6 subnet format difference
19644945	3	Pass expiration not extended when second pass becomes active within dbplugin
19682903	3	[Longevity] Progress bar cannot come to 100% in CMP GUI
19688940	3	[Dynamic quota] incorrect GrantedTime from dynamic grant for Gx ccr-u or ccr-t
19720186	3	Alarms not always cleared consistently
19846430	3	Add configuration calculation with appropriate numbers for RMS-G7
19858600	3	[stats] rcmgr is not logging DBPluginSchedular Search,Subscribe,Unsubscr,Update
19867530	3	Non-persistent rules are not removed on a firewall reconfigure
19880865	3	The regulation of generated PDF pagination is unreasonable for connection stats
19894788	3	[Radius_Phase2] No STR was sent to OCS during Radius cleanup task

Bug Number	Severity	Title
19900759	3	The filter for Diameter Identifier of NE doesn't work when update NE
19915486	3	[platform]alarm31109 popup after correct server's hostname
19943882	3	PUR with no service indication was generated when creating session for 2nd user
19982790	3	[Load shedding]Default load shedding busy level criteria need to be re-tunning
20004878	3	Support to add "src" option for static-IP/VIP on SIGA/SIGB in fixRoute.pl
20010824	3	number of top-up not updated on policy after receiving PNR notify to remove
20010969	3	number of pass not updated on policy after receiving PNR notify to remove
20011880	3	[KPI stats] LDAP transactions not being counted as part of the total MPE txns
20018575	3	inetrep connection instability after HA failover
20019982	3	[KPI]Current session count in KPI does match the current session count in rcmgr
20032655	3	[imysqld] process (Imysqld) unexpectedly terminated
20071570	3	Combined PNR from HSS through policy engine to cause single re-auth
20071899	3	[policy table] policy variable in SMS text in policy table not displaying correc
20088859	3	Timeout when MIB walk from MPE
20089309	3	Subscriber Activity Log: Backup alarm auto-clears in 5 mins
20089578	3	Subscriber Activity Log: No msg printed to open tracelogs during load shedding
20095127	3	LDAP-Subspool and pool state not removed from mpe after terminating last session
20095199	3	Sy DbPlugin has synchronous lookup calls
20106635	3	[platform]2nd site's CMP inetmerg has problem after degrade recovery
20121669	3	[Unmanaged_MPE]Exception seen while clicking on PDN APN Suffix Report in CMP GUI
20121730	3	[KPI] Current PDN count in KPI does match the current MRA Binding count.
20123684	3	N-SiteMRA: Operations tab disappears after issuing "Reset Counters"
20127010	3	Need a check of the parent AVP when define a custom AVP

Bug Number	Severity	Title
20129464	3	N-SiteMRA: Operations tab not available in Legacy mode
20131476	3	N-Site MRA: Migration task not run on Backup MRA when Primary MRA down
20131695	3	N-SiteMRA: Sync Task status is shown as 100% complete as soon as the sync starts
20137294	3	N-SiteMRA: Null Pointer Exception on MRA Association - Reset Counters
20201295	3	[Radius2] NE of BNG type was not pushed to clean installed MRA without failover
20211008	3	[platform]Initial Configuration should give warning if no NTP ip configured
20220142	3	[KPI For RATTYPE]RATTYPESTAT is not shown in trending report
20224264	3	[CMP] exceptions in tomcat.log with after increasing load to 10 MRAs and 52 MPEs
20225284	3	[Longevity] There is IllegalStateException from bod.log during longevity test
20226560	3	[Upgrade]Mixed-version,MA status is off-line on Management Agents/system
20234752	3	There is exception if four instances are monitoring KPI dashboard on CMP
20241759	3	The association change between MPE and MA may make MPE traffic failure
20257525	3	MPE detects PNR with same ETE/Orig-Host as duplicate even after 1 minute
20264154	3	multiple xml request sent out on REST when only user profile change on CMP
20313214	3	Rollover usage record created with negative GrantedTotal after billing reset
20315051	3	[platform]replication process use memory till to 100% and then restart
20322266	3	SH lookup for Quota should not happen for AF sessions.
20322467	3	[Phase2] Binding was not removed upon receiving CoA-Disconnect
20322799	3	[platform] Replication Plan filter is empty
20326670	3	MPE cache of userstate and track quota created for unknown user with Gx ccr-i
20332705	3	[CMP - MRA Association] User should not be able to save assoc w/o Primary Index

Bug Number	Severity	Title
19112684	3	[225306]for cases in which MPE can't derive QoS for AAR message with codecs, MPE
19169301	3	Error logs about LDAP connections
19389935	3	[BoD_async_notification]The path of the Request-URI hasn't been percent-coded
19550781	3	[KPI]MPE-R and MPE-S should have different TPS benchmark for KPI dashboard
19667077	3	[CMP_GUI]Load Shedding Configuration contains items not related to Cable -APN
19684505	3	[Online_Help] Add mode control for online help
19803186	3	[Browser]The pages of CMP GUI don't display normal when zoom out with Chrome
19886527	3	[raidus phase1]thread of rsyslogd is dead during performance test
19943912	3	[Upgrade]Menus in Main Menu page are not in expected order after upgrade.
19971498	3	[Loadshedding]Hide RAR,ASR message types for Rx load shedding rule
20017870	3	[Backout] Slave Interfaces are not added in bond1 and bond2 after backout.
20065945	3	[CMP]ScheduleTask RunningTime NOT match CMP system time after Timezone changed
20072046	3	[Policy Table] popup window for email message in table is too small
20100462	3	[CMP]timezone display error in CMP GUI when Timezone=Australia/Sydney
20126350	3	[Audit log]The code shouldn't display in the Audit log page
20129679	3	Add/Delete/Edit Widget multiple clicks allow multiple entries/duplicates
20141798	3	[SWR]Save Layout button for some SWR report like Connection Status doesn't work
20171920	3	[CMP_UI]"Export CSV" button of Trending reports doesn't work on Firefox
20234386	3	[CMP-Session clean up] 2 Configurations session cleanup of sy can not push to mp
20271665	3	The number of deleted stale session in one cycle is 5001 in BoD session cleanup
20350453	3	[Sy]1st SLR times out - 2nd SLR never send out
20407050	3	WSDL for BoD session monitor service should be updated

Bug Number	Severity	Title
19113021	3	[233861]BoD session SSID contains special characters string, such session can't
19119805	3	[241890]XML fields on REST interface from CMP-SPR to be same as Sh XML from MPE-
19189360	3	Quota Enhancements : Exception for getTimeZoneOffsetDifference
19233945	3	[SWR_alarm_history]User failed to get History alarms details
19509630	3	[Dynamic quota] Incorrect PUR CamiantPoolDynamicQuota sent causing out-of-sync
19528781	3	[Cable, Longevity, BOD] There are always failed BOD sessions after 1 day running
19545449	3	System Wide Report window has an Incorrect title
19862637	3	[Radius_Phase2] Unnecessary stats are shown on MRA which may exist on MPE only
19871263	3	System Administration Privileges under User management needs some changes
19907049	3	[CMP] cannot apply configuration - Can't set the list of Subscriber Key
19983355	3	Strict option in qpSSHKeyprov.pl does not work as expected
20015087	3	Alarm 70027 can't be asserted if IP duplicated with PathHostInfo (diff interfac)
20054416	3	Incorrect GrantedTotal for other pool users after quota reset
20225357	3	[platform]Recovery of Primary HA TCP result to site1's 2server normal-OOS-normal
20397487	3	Should remove some unneeded interfaces for R11.5 BoD user guide
20440083	3	Sy session id still exist Gx session when SLR-u with NO_AVAILABLE_POLICY_COUN

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## **Oracle References and Services**

## **Topics:**

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- Locate Product Documentation on the Oracle Technology Network Site.....32
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## My Oracle Support (MOS)

MOS (<a href="https://support.oracle.com">https://support.oracle.com</a>) 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 <a href="http://www.oracle.com/us/support/contact/index.html">http://www.oracle.com/us/support/contact/index.html</a>. 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 <a href="http://www.oracle.com/us/support/contact/index.html">http://www.oracle.com/us/support/contact/index.html</a>. 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: <code>education.oracle.com/communication</code>. 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 <a href="http://www.oracle.com/education/contacts">http://www.oracle.com/education/contacts</a>.

## Locate Product Documentation on the Oracle Technology Network Site

Oracle customer documentation is available on the web at the Oracle Technology Network (OTN) site, <a href="http://docs.oracle.com">http://docs.oracle.com</a>. You do not have to register to access these documents. Viewing these files requires Adobe Acrobat Reader, which can be downloaded at <a href="http://www.adobe.com">www.adobe.com</a>.

- 1. Log into the Oracle Technology Network site at <a href="http://docs.oracle.com">http://docs.oracle.com</a>.
- Select the Applications tile.The Applications Documentation page appears.
- 3. Select Apps A-Z.
- **4.** After the page refreshes, select the Communications link to advance to the **Oracle Communications Documentation** page.
- **5.** Navigate to your Product and then the Release Number, and click the View link (note that the Download link will retrieve the entire documentation set).
- 6. To download a file to your location, right-click the PDF link and select Save Target As.

# **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, <a href="https://edelivery.oracle.com">https://edelivery.oracle.com</a>. Only authorized customers with a valid password may download software from the site.

- **1.** Log into the Oracle Software Delivery Cloud site at <a href="https://edelivery.oracle.com">https://edelivery.oracle.com</a>. 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.

## **Appendix**



## **Firmware Components**

## **Topics:**

• Firmware Components.....34

The firmware components are software that is installed on the hardware. These components are listed in this chapter, and are also listed in the Firmware Release Notice. Please refer to the latest Firmware Release Notice for any updates to this list.

## **Firmware Components**

The firmware document is available on the Oracle Technology Network (OTN) site at:

• http://docs.oracle.com/cd/E57059\_01/docs.67/E56670.pdf