

**Oracle® Communications
EAGLE Application Processor**

Release Notes

Release 16.1

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Oracle Communications EAGLE Application Processor Release Notes, Release 16.1

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Chapter 1

Introduction

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

Chapter 2

Feature Descriptions

Topics:

- *EPAP Expansion to 480M Database Entries8*
- *IPv6 support on EPAP9*
- *Enhancement Bugs.....9*

This Release delivers the following features:

- *EPAP Expansion to 480M Database Entries*
- *IPv6 support on EPAP*

EPAP Expansion to 480M Database Entries

The Oracle Communications EAGLE Application Processor (EPAP) Expansion to 480M Database Entries feature allows an EPAP on an E5-APP-B with a 480G disk to support 240 million Directory Numbers (DNs) and 240 million International Mobile Subscriber Identities (IMSI). In addition, the feature allows for the support of 48 million International Mobile Entity Identities (IMEIs). The combination of 240 million DNs, 240 million IMSIs, and 48 million IMEIs brings a maximum combination of 528 million data. This feature is supported on all EPAP configurations: Mixed EPAP, Standalone PDB, and Non-Provisioning EPAP.

Note: For the feature to work, the 480M Capacity License must be purchased, with the license capacity manually set to 480M in the EPAP. See alarm " 6000000000400000 - License capacity is not configured" in *Alarms and Maintenance Guide* for potential failure of configuration information and recovery.

The following table illustrates RTDB capacity support:

Table 1: EPAP DB Capacity Combinations

EPAP Split DB Feature	EPAP240M	Card Provisioned	Max Entries
OFF	OFF	SM4G	135M
OFF	OFF	SM8G	135M
ON	OFF	SM4G	255M
ON	OFF	SM8G	255M
OFF	ON	SM8G	288M
ON	ON	SM8G	528M (240M DN + 240M IMSI + 48M IMEI)

Hardware

The Expansion to 480M Database Entries feature is supported on the EPAP application on an E5-APP-B card with a 480G disk. The PDB capacity is configured as 255M on an E5-APP-B-01 card and 528M on an E5-APP-B-02 card.

Limitations

In order to keep RTDB database schema compatibility (see [Table 6: EPAP 16.1 Compatibility with EAGLE](#)), this feature only works with an EAGLE release that supports the same feature.

The data capacity expansion is not supported on an E5-APP-B with 300G disks.

Before upgrading to EPAP 16.1, customers should verify if either the "RTDB 80% Full" or "RTDB 90% Full" alarms are shown on the web GUI banner to determine if assistance will be required by My Oracle Support. Refer to the EPAP *Full Upgrade Guide*, Procedure 4, Pre-Full Upgrade Check for complete instructions.

IPv6 support on EPAP

The Oracle Communications EAGLE Application Processor (EPAP) IPv6 Support on EPAP feature allows the EPAP application to support IPv6 on interfaces connecting a customer provisioning interface, SSH, GUI, Query server, NTP and EMS. EPAP supports IPv4 and IPv6 data. As IPv4 and IPv6 data may be mixed, implementation is dual stack compliant.

EPAP is able to support both IPv4 and IPv6 traffic simultaneously (dual stack). The following use cases should be considered in support of IPv6:

- A new installation in an IPv6-only Network
- Adding a IPv6 cards to an existing EAGLE supporting IPv4 Networks
- Migration of IPv4 deployments to an IPv6-only Network

See *Administration Guide* for more information on IPv4 and IPv6 address support.

Hardware

The IPv6 support on EPAP feature is supported on the E5-APP-B card.

Enhancement Bugs

EPAP 16.1 supports these enhancement Bugs:

Table 2: EPAP 16.1 Enhancement Bugs

Bug # and Title	Description
20326502 Remove EPAP incremental capacity control	Removes capacity control from the EPAP product suite.
20714600 EPAP Integration with mainstream TPD as supported on E5-APP-B card	The operating platform for EPAP is upgraded from TPD 5.5.x to TPD 7.0.x with the EPAP 16.1 Release.

Chapter 3

Media and Documentation

Topics:

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

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 3: Media Pack Contents*.

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

Table 3: Media Pack Contents

Name
Oracle Communications EAGLE Application Processor (16.1.1.0.0), Tekelec
Oracle Communications EAGLE Application Processor (16.1.0.0.1), Tekelec
Oracle Communications EAGLE Application Processor (16.1.0.0.0), Tekelec

Documentation Pack

All documents available for download from the Oracle Technology Network (OTN) site (<http://docs.oracle.com>) are listed in *Table 4: Documentation Pack Contents*.

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

Table 4: Documentation Pack Contents

Core EPAP Documentation
<i>Release Notes</i>
<i>Administration Guide</i>
<i>Provisioning Database Interface User's Guide</i>
<i>Security Guide</i>
<i>Full Upgrade Guide</i>
<i>Incremental Upgrade/Installation Guide</i>
Hardware, Installation, and Maintenance Documentation
<i>Alarms and Maintenance Guide</i>
<i>Application B Card Hardware and Installation Guide</i>
Reference Documentation
<i>Licensing Information User's Guide</i>

Chapter 4

Upgrade Paths

Topics:

- [Upgrade Paths.....13](#)

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.

Upgrade Paths

The possible full upgrade paths to EPAP 16.1 are listed in the following table:

Table 5: EPAP 16.1 Full Upgrade Paths

From	To
EPAP Release 15.0*	EPAP Release 16.1
EPAP Release 16.0	EPAP Release 16.1

Legend:

- * Only EPAP 15.0 on E5-APP-B hardware can be upgraded.

Chapter 5

Product Compatibility

Topics:

- [Product Compatibility.....15](#)

This section shows release-specific compatibility with other related products.

Product Compatibility

Table 6: EPAP 16.1 Compatibility with EAGLE shows EPAP 16.1 compatibility with EAGLE.

Table 6: EPAP 16.1 Compatibility with EAGLE

Product	Release	Compatibility
EAGLE	<46.0	NC
	46.0	NC
	46.1	NC
	46.2	NC
	46.3	FC

Note: Customers should upgrade to the Fully Compatible release identified in the previous table.

Legend:

- FC - Fully Compatible
- NC - Not compatible

Chapter 6

Resolved and Known Bugs

Topics:

- *Severity Definitions.....17*
- *Resolved Bug Listing.....17*
- *Customer Known Bug Listing.....23*

This chapter lists the Resolved and Known Bugs for this release.

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
- **Minor, No Loss of Service:** Oracle severity beyond 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 section lists bugs that are resolved in the following builds:

EPAP 16.1.1.0.0-161.38.0

EPAP 16.1.0.0.1-161.34.0

EPAP 16.1.0.0.0-161.28.0.

The Resolved Bugs table shows an impact statement for Severity 1 and 2 Bugs as well as for Severity 3 Bugs that are associated with a SR.

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

Table 7: EPAP Release 16.1.1.0.0 Build 161.38.0 Resolved Bugs (4/21/17)

Bug#	SR	Sev	Title	Customer Impact
25467738		2	Replication is not working between EPAP and EAGLE QS via IPv6	Database replication between the EPAP and the Eagle QS will only work in IPv4 mode.
25418740	Y	3	SR: rept-stat-db shows all 0 for EPAP-A and EPAP-A status shows UP	The Standby EPAP status will not be updated to the STP and will not be accurately reflected in the STP status. A restart of the EPAP services is required to correct the status.
25459450		3	Import Performance Improvement	
25467713		3	QS related alarms not observed on EPAP.	
25467728		3	Wrong status of Master QS is getting displayed on EPAP	
25484588		3	EuiDB creation failed when EuiDB present in B server only	
25502735	Y	3	SR: Replace UDT time with UTC time in Full Upgrade document	Failure to properly set the system date and time during installation will cause failure of the software installation. This failure requires the installation to be restarted from the beginning.
25473869		4	New screenshots to be added in EPAP 16.1 installation doc E60146 Revision 2	
25473891		4	EXIT from screen mode to be added in in EPAP 16.1 installation doc E60146 Rev 2	
25473909		4	Extra procedure in EPAP 16.1 installation doc E60146 Revision 2	
25577274		4	Discrepancy related to the alarm raised when epap state changes to UP	

Table 8: EPAP Release 16.1.0.0.1 Build 161.34.0 Resolved Bugs (11/21/16)

Bug#	SR	Sev	Title	Customer Impact
19116772		3	[239458]3PD perl-Crypt-RSA has identified bug	
19116774		3	[239462]3PD obsolete module perl-Digest-MD2	
19116830		3	[239502]EPAP_16 - Update jcterm and jsch packages	
19117303		3	[239872]3PD Compliance tracking perl-Crypt-DH version is out-of-date	
21936245		3	R46.2_ST2:1G EPAP connection through B port is slower for RTDB download	
22699716		3	GUI displays negative DN association (-ve number) for NE	
23089458		3	EPAP16.1_ST: CNL mapping to ROP is not working in EPAP 16.1 release	
23210957		3	EPAP16.1_ST:Delete Scripts for SOG not replicating on Standby PDB	
23517787		3	EPAP16.1_ST: ROP is not working on EPAP PDB only dual setup	
23523669		3	GMT utility is getting hanged	
23525231		3	EPAP16.1_ST: Issue observed during 15 to 16.1 Migration	
23536387		3	GMT tool is processing records at a slow rate and using excessive CPU time	
23604701		3	Make a script to correct the counts in customer DB where the count is corrupted	
23710414		3	Prevent overallocation on Sm4G cards	
24358560		3	Commands showing error during incremental upgrade procedure execution – Upgrade Procedure	
24447809		3	License capacity should be set for 480M feature to work	
23710451		4	Create utility to verify DB size on SM4G before upgrade to 16.1	
24423035		4	EPAP 3rd Party package updates	

Table 9: EPAP Release 16.1.0.0.0 Build 161.28.0 Resolved Bugs (7/12/16)

Bug#	SR	Sev	Title	Customer Impact
19118807		2	[241087]EPAP 16.0: Unable to open GUI when listening ports are changed from epapconfig menu	Port definitions that are altered from their default configuration in the Configure Forwarded Ports menu will not properly function. The default port definitions should not be altered to avoid issues affecting the operation of system services.
22268240		2	EPAP16.1: Steps to be followed to open EPAP GUI on IE need to be updated .	The IE browser needs additional steps to accept the certificate needed to connect to the EPAP GUI.
23043211		2	PDBA is not cleaning up DBSession	If a session failed with a 1029 error, the next session that connects may takeover the failed connection and also report 1029 errors for its session.
23093181		2	MySQL set to write to the /tmp directory.	Database queries may fail if the temporary table data exceeds the size of the /tmp partition.
19088964		3	[217386]EPAP15.0 PDBA software is not getting started.	
19099290		3	[225806]Must check EAGLE SM4G port settings when upgrading to EPAP 15	
19102605		3	[228441]EPAP 15.0.2 : Spelling of word successful is incorrect.	
19103402		3	[229066]EPAP 15.0.2: Both EPAP server shows ACTIVE state when Switch B is down	
19103738		3	[229333]EPAP 15.0.2: Facing issue on EPAP GUI when we access it from Backup Prov IP	
19120409		3	[242349]Certificate for https is not getting installed successfully after incremental upgrade on segmented standalone setup	
19150264		3	EPAP_16.0_ST:In Segmented setup user is unable to send traps via O&M IP.	
19178559		3	EPAP_16.0: Restriction for GUI on segmented setup is not working after inc Upg.	
19304072		3	killPDBIConns script does not terminate PDBI connections as intended	
19331057		3	EPAP 15 PDB restore started via GUI hangs when PDB sites are mated	

Bug#	SR	Sev	Title	Customer Impact
19470346		3	Raise Alarm when MySQL not able to update DB for extended period	
20183494		3	eirSftp.pl process malfunctions when file handle limit exceeded	
20343166		3	DN-IMSI association failing when associated DNs are more than the new DN to be a	
20343220		3	Updated RTDB filled tables nos not sent to PDDBA after RTDB converter	
20955025		3	PDB export too slow	
21087069		3	Need to identify+push IN/OUT and other required PDDBA_DEBUG_LOG_DEBUG_LEVEL 1	
21190767		3	Standby EPAP changes state to UP automatically	
21530946		3	EPAP16.1_480M:Post restore backup files are not getting decompressed.	
22044199		3	BIRTHDATE display problem on EAGLE with EPAP 15 and 16	
22637265		3	Documentation needed for new alarm in R16.1 when EPAP state changes to UP	
22843957		3	EPAP16.1_ST:- GUI is getting terminated for a while	
23006481		3	sometimes appuser password needs to be changed twice	
23183490		3	CDS - None of the normal shutdown command shuts down the E5APPB card	
23328110		3	ELAP options showing up in EPAP Lynx UI	
19093433		4	[221039]CDS- Minicom to mate does not work for epapdev user.	
19119754		4	[241853]EPAP16.0_Pdbonly:Standby PDB/Non-prov node is not taking updates when pr	
19149237		4	EPAP16.0: "Automatic Backup not configured" is not getting clear from Non-prov	
19162612		4	Tekelec word in confirmation message of "Autoback in PDB/RTDB Backup"	
20125375		4	Add new information regarding retrieval in EPAP Admin User's Guide	

Bug#	SR	Sev	Title	Customer Impact
20263512		4	EPAP Expansion to 480M Database Entries	
20445888		4	Support IPv6 on all interfaces	
20762297		4	Support Java 1.8 client	
20837164		4	POR: Remove EPAP incremental capacity control.	
20911030		4	EPAP 16: Slow query logs not updating	
21341145		4	PDB Capacity License Enhancement	
21501260		4	Procedure to update timezone files	
21643961		4	EPAP 16.1 should support Internet Explorer 11	
21802637		4	Disable root access in EPAP	
22019434		4	Update to TPD 7.0.3	
22173133		4	EPAP16.1:- 910-6532-001_latest_Rev_Admin_manual needs updates	
22184407		4	Change parameters for Certificate Signing Request using openssl CLI tool	
22228155		4	Customer-executable procedure for installation of 480GB SSD Upgrade Kit	
22228250		4	Use SHA512 for password hashing of application users	
22372073		4	Alarms and Maintenance Guide needs Chapter on SSD Upgrade Kit Installation	
22457319		4	Display full release number on login banner	
22462281		4	EPAP 16.1 upgrade support on TPD 7.0.3	
22874153		4	Update View Any File description in EPAP Admin Manual	
23048247		4	E5-APP-B Card HW Book: Add application information for -01 and -02 card types	
23131910		4	Describe the exhaustive list of IP addresses and ports required by EPAP	
23536922		4	Update MySQL to 5.6.31	

Customer Known Bug Listing

Table 10: EPAP Release 16.1 Customer Known Bugs (4/21/17) lists known bugs in this release:

Table 10: EPAP Release 16.1 Customer Known Bugs (4/21/17)

Bug #	R	Sv	Title	Customer Impact
19118852		2	[241129]EPAP_16.0_ST:Concurrent logins of EPAP GUI is not working correctly	Concurrent logins to the EPAP GUI will be terminated by the software. Only one connection is permitted per system.
19086471		3	[210743]Uncomplete retrieve while updating DN	Customer needs to have a look at actual values before modifying DN values.
19086840		3	[213048]EPAP_14.0.2: Low system CPS when IMSI delete with DNB Self Heal ON	The CPS is low for IMSI delete so it will take relatively longer time to complete the delete operations.
19088483		3	[216959]PDBI_TXN_TIMEOUT occurs when DN retrieved using NE filter from EPAP GUI	The customer may be inconvenienced by larger queries that time out before returning the results requested. They will have to break up the large queries into smaller ones that will complete.
19088906		3	[217328]EPAP15.0 CPS for rtrv DN end values is less	When doing a rtrv at the beginning of a range the CPS is higher, when doing a rtrv at the end of a range the CPS is lower.
19089295		3	[217661]CPS for rtrv DN Block and IMEI Block from the end is less than expected	DN Block and IMEI Block provisioning may be below the expected performance rates.
19089297		3	[217662]CPS for ADD DN Block and IMEI Block at the end is less than expected	DN Block and IMEI Block provisioning may be below the expected performance rates.
19091381		3	[219444]EPAP15.0_ST: GUI via HTTPS is not working correctly	No real detrimental system impact. The user has to login again.
19102800		3	[228600]Problems/Failures while adding net/static routes in EPAP 15.0 release	Networks having static/net rules/routes do not work as expected. Like in EPAP 15, application GUI does not open properly on backup prov IP. Syscheck may show failures/error messages for correct routes also. PR 228583 created an application work around so the affects of this TPD bug are not seen. TPD still needs to be fixed to ensure there are no additional impacts.

Bug #	SR	Sv	Title	Customer Impact
19103189		3	[228900]Circular number substitution gets created instead of issuing error 1049	Incorrect NSDN might be returned for a particular DN.
19103720		3	[229320]hastatus of Server B is stuck when upgrade is performed after backout	hastatus of server is not correct.
19104465		3	[229925]EPAP 15.0.2: authorized EPAP CLI sessions are getting terminated	Existing ssh sessions are terminated.
19104482		3	[229939]EPAP 15.0.2: DN boundary is getting failed at PDB	This issue will be observed only when the DN capacity is full (120M) and IMSI is added with force=yes. The workaround is to manually alter the transLog entries.
21113097		3	DSM network subnet 10.196.10/20 failed to connect EPAP to EAGLE SM	Manual configuration of the desired DSM network is required for the 10.196.10/20 networks.
21830095		3	EPAP16.1_480M:Import rate from PDB to RTDB decreasing with time	The import rate for large databases from PDB to RTDB is slower than on smaller databases.
22275773		3	EPAP16.1_IPv6:Informative message must be displayed about system configuration	No warning message is displayed to inform the user that IPv4 will not work on an IPv6 only configuration.
22467144		3	EPAP_IPv6: Certificate is not getting installed for backup prov IP	The backup prov IP is accessible only via http.
23008748		3	PDB ONLY setup GUI and OSM interface not working as designed	The segmented configuration can only be configured with interfaces on different subnets.
23030405		3	EPAP:16.1_ST:Certificate for VIP IPs are not getting installed	The Security certificates are not installed when using the VIP interface. The VIP functionality can be utilized in HTTP mode.
23074327		3	EPAP16.1_ST:Port Forwarding must continue to ABP PDBA when other PDBA in replerr	When port forwarding is used and the system is in REPLERR state, the port forwarding may point to the system that is in the REPLERR state.
23233249		3	R_46.3_ST:Obit from ath_vxw_mgr.c, armsutil.cpp and sentry_vxw.c on SCCP card	There is no impact to customer operations.
23266906		3	EPAP16.1_ST: CFT not working properly when configured with admusr.	CFT will allow configured file transfers to directories without proper permissions.
23589365		3	EPAP16.1_ST:Unable to access EPAP GUI via HTTP for PDBonly segmented setup	In the PDBonly configuration, the web services should be used in HTTPs mode.

Bug #	SR	Sv	Title	Customer Impact
23592549		3	EPAP16.1_ST:Select mate not working properly when backup prov configured in IPv6	When configured in IPv6 only mode, the connection to the mate must be established manually instead of using the select option.
19090308		4	[218547]In some scenarios, E1032 is not observed when command is aborted	The impact is very low, as the user wants to abort the operation anyway. The E1032 error is not displayed but the previous menu is displayed.
19092504		4	[220308]In Epap 15.0_ST core.context.23785 is Observed	There could be an alarm for a core file when there is no actual impact on the system running.
19093755		4	[221306]"View RTDB status" MinDsmSz shows garbage value when no EAGLE connected	No real impact to operation.
19095364		4	[222593]The mail queue is not being delivered to the mailboxes of the users	We have not seen mail use being configured in EPAP for any customer.
19095389		4	[221507]Syscheck fs module and Linux df command calculate space used differently	May be some confusion as the two different ways to show size show two different values. However there is no operational impact.
19095593		4	[222787]IMSI Range addition should not be allowed from EPAP GUI	PDB and RTDB databases do not increase when an IMSI Range is added with EPAP GUI. In fact, RTDB does not use IMSI Range at all. IMSI Range addition should not be allowed from EPAP GUI.
19097097		4	[224027]EPAP15.0_ST:Platform version is not correct in epapconfig menu	If the customer is using this menu to determine the platform release, they will not be able to get that information. It is incorrectly displaying the EPAP version for the platform version.
19102539		4	[228386]Halt the MPS & Eject the Cd tab should be removed from GUI	No impact as the option shown on the modify/rtrv user/group GUI is not used. It may cause minor confusion.
19102993		4	[228749]Displaying wrong error message while cancelling automatic backup	The backup is not configured so there was actually nothing to change. So the only possible impact is confusion that nothing was needed to be changed.
19103263		4	[228950]EPAP 15.0.2: Ambiguity in GUI while adding IMEI and IMEIBLK.	GUI is not the same for adding IMEI and IMEI block. Does not have any negative system impact.
19103457		4	[229107]Eagle 45: IMEIBlk Version is being displayed at eagle side	This is a cosmetic issue. The IMEI block version number from GUI or PDBI is

Bug #	SR	Sv	Title	Customer Impact
				neither provisionable nor affects message processing. It takes 0 as a default value. The output of the rtrv-data-rtdb command shows this default value when it should not.
19103529		4	[229168]EPAP 15.0.2: Word NPT is being displayed after performing key exchange	Extra line printed "NPT". No impact on the functionality.
19103534		4	[229173]Script getRTDBClientStatus.pl is being exeuted on Non-Prov setup	No system impact. The getRTDBClientStatus.pl script is run as a cron job. It is not expected to run the script from CLI, hence no error message is displayed on CLI.
19103715		4	[229316]EPAP 15.0.2: Error was observed after backout	The content of the my.cnf file mentioned in the error message is good. No system impact.
19103884		4	[229446]Error logged in Pdba.err while retrieving DN range from EPAP server GUI	Unwanted entry in the log file. No other system impact.
19117687		4	[240181]RMTP Enhancement Leftover issues	No impact to customer operations.
19117710		4	[240198]PDBonly: Error varies for various scripts of rtdb in bin directory	No impact if the customer follows procedures.
19118512		4	[240839]Query & EMS server info missing from epapconfig menu display info option	No impact on functioning and provisioning of EPAP.
19118662		4	[240968]GUI message history taking time from local machine	There might be a problem when investigating alarms in different time zones.
19119317		4	[241532]16.0_ST: "PDBA status/stop" commands are executed on non-prov servers	No impact on functioning and provisioning of EPAP.
19119373		4	[241582]EPAP_16.0_ST: Extra line is displaying in alarm.log.	No impact on functioning and provisioning of EPAP.
19119704		4	[241810]16.0_ST: Syscheck is not clean on removing backup provisioning network	No impact on functioning and provisioning of EPAP.
19259816		4	EPAP16.0_ST: Banner Msg related to autobackup configuration is not getting clear	An erroneous banner message is displayed occasionally regarding the Automatic RTDB Configuration success for non-provisionable servers.
19265593		4	EPAP_16.0 : Maint core is observed on PDBonly segmented server	The Maint process core dumped on one occasion after the installation of a PDB only segmented server.

Bug #	SR	Sv	Title	Customer Impact
19333464		4	EPAP_16.0: Subscriber type is displaying when DN has retrieved in PDB db	The Subscriber type value of "0" is returned when a DN is retrieved from the PDB database. This return value differs from previously documented return values from the PDB DN retrieval command.
19974873		4	EPAP_16.0_ST: Imsi range is getting provisioned from Standby PDB	The IMSI range can be updated from a Standby PDB. This does not have a negative impact on customer operations.
19974984		4	EPAP16.0_ Tool Tip help is not getting displayed properly on IE 10.0	Tool Tip help is not rendered properly on Internet Explorer releases prior to version 11.
19975092		4	EPAP16.0: GUI Uniformity is not there	No Impact to customer operations.
22114507		4	Incorrect output of dbstattool utility	On IPv6 configured systems, the dbstattool utility returns an incorrect RTDB version. The correct version may be seen by using the rtdbInfo tool to obtain the correct RTDB version information.
22172691		4	EPAP16.1:- PDBI reports are getting pegged in cgi.dbg log	No impact to customer operations.
22231841		4	EPAP16.1:On starting PDB 1st, status of maint process is being printed twice	No impact to customer operations.
22262621		4	issues on EPAP gui while opening with backup prov ip	When connected to the GUI via the backup prov IP, the IP displayed is that of the primary Ethernet connection instead of the backup prov IP.
22279689		4	EPAP16.1:IMEI and IMEI block are not displaying in watcher on EPAP GUI	IMEI and IMEI Block are not displayed on watcher.
22297411		4	EPAP16.1_IPv6: Sync network address is getting displayed in authorized IP list	No impact to customer operations.
22379103		4	Stop EPAP software on mate while configuring provisioning network	No impact to customer operations.
22451927		4	Inconsistent calculation of RTDB used percentage	The RTDB usage report returns the greater percentage utilized of the DN and IMSI cards and its capacity utilization.
22462190		4	EPAP16.1: IP of remote EPAP is accepted when using SSH to MPS	The SSH to MPS will allow the manual selection of another system by allowing the IP address to be entered.

Bug #	SR	Sv	Title	Customer Impact
22516206		4	EPAP16.1:Data count being displayed in PSR	The accurate count can be obtained by expanding the window by one second on a PSR query.
22532637		4	EPAP16.1:PDBA DSM Report not being fetched correctly	The DSM report will return all results for cards that satisfy the report conditions. This includes all cards that are below the level that is being requested.
22661057		4	EPAP16.1_IPv6:Reload from PDB not getting cleared and stale banner is observed	The stale banner message may be displayed if connectivity is removed during reload.
22823821		4	EPAP16.1_ST: Connection not secure observed on EPAP GUI after login	In IPv6 mode, an error message stating that the connection is not secure may be displayed. This has no impact to customer operations.
22851731		4	EPAP16.1_ST: PSR is generating report without End Date and Time set	If the end date is not selected, the current date will be used.
22885804		4	EPAP16.1_ST: Low CPS when IMEI is added with same IMSI	The number of transactions per second are sub-optimal when an IMEI is added to the system.
22886326		4	Concurrent logins of EPAP GUI is allowed for same user	No impact to customer operations.
22979671		4	EPAP16.1_ST: Unwanted characters being printed in cron logs	No impact to customer operations.
23061280		4	EPAP16.1_ST:Incomplete banner raised on configuring Automatic PDB/RTDB Backup	Incomplete banner message can be displayed during backup for dual stack configured systems.
23068860		4	EPAP16.1_ST:Script failing while reconfiguring the interfaces	Re-configuring the IP interfaces may fail.
23068879		4	EPAP16.1_ST: Errors observed in syscheck on de-configuring the backup prov	Syscheck may raise erroneous alarms for the backup prov server after it is de-configured.
23074079		4	EPAP16.1_ST:Update required in epapconfig related to time zone and spellings	No impact to customer operations.
23088956		4	EPAP16.1_ST:Error logged in upgrade.log on PDBonly setup	In PDBonly configuration, Syscheck erroneously reports error messages that state "Could not talk to mate". The error message does not impact any customer operation.
23091097		4	EPAP16.1_ST: Database daemon not running on IPv6 only dual mixed setup	In IPv6 dual mixed configuration, the message that the Database Daemon is

Bug #	SR	Sev	Title	Customer Impact
				not running may be erroneously displayed for the remote PDB status.
23113724		4	Unwanted pegging of logs in snmp.log	Restarting an SNMP-monitored EPAP server can result in erroneous error messages being stored in the SNMP logs.
23181941		4	EPAP16.1_ST:Incorrect alarm being sent to NMS.	License Capacity alarm will be sent via SNMP until the capacity is configured in the system.
23210471		4	CS: CDS - Misleading UI Message need to be corrected	The message presented when the "Reboot the MPS" option is selected is misleading. The UI will need to be reconnected once the server is rebooted.
23226221		4	EPAP16.1_ST:1057 error observed instead of 1049 on EPAP GUI	If a user initiates deletion of a DN which is associated with many other DNs as NSDN then the EPAP GUI displays the error "E1017: PDBI error: 1057: PDBI_TXN_TIMEOUT". This does not have an impact to normal customer operations. The provisioning can be performed correctly using the PDBI interface.
23281792		4	EPAP16.1_ST:Number prefixes must be set only via Active PDB	Number prefixes should only be configured on the active system.
23296127		4	EPAP16.1_ST: Automatic backup configuration issue on dual mixed setup	Automatic backup schedules are replicated to mate system when configured on the active system.
23534611		4	EPAP16.1_ST:Hosts file not getting updated correctly on Non Prov node	In the Non Prov configuration, the algorithm used to determine the PDB interface may not correspond with the hosts file. The order of entry will be used to determine the PDB state.
23549912		4	Incorrect caution displayed in PDB restore	PDB backups taken from the epapconfig menu will report errors upon restore due to the naming convention used in the backup file. No impact to customer operations.
23591734		4	EPAP16.1_ST:License capacity alarm observed on Non Prov	The license capacity alarm will be raised on both the prov and non-prov system when the license capacity is not configured on the provisioning system.
23605698		4	EPAP16.1_ST:Accept/Reject message is printing twice after incremental upgrade	No impact to customer operations.

Chapter 7

Oracle References and Services

Topics:

- *My Oracle Support (MOS).....31*
- *Emergency Response.....31*
- *Customer Training.....32*
- *Locate Product Documentation on the Oracle Help Center Site.....32*
- *Locate Product Release Software on the Oracle Software Delivery Cloud Site.....32*

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

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

Appendix

A

Firmware Components

This appendix is not applicable to EAGLE, ExAP or LSMS releases.