

Oracle® Communications

EAGLE Application Processor Release Notes



Release 17.0
F58688-09
November 2024



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A Firmware Components

My Oracle Support (MOS)

[My Oracle Support \(MOS\)](#) is your initial point of contact for any of the following requirements:

- **Product Support:**
The generic product related information and resolution of product related queries.
- **Critical Situations**
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 notificationAny other problem severely affecting service, capacity/traffic, billing, and maintenance capabilities may be defined as critical by prior discussion and agreement with Oracle.
- **Training Need**
Oracle University offers training for service providers and enterprises.

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

Call the Customer Access Support 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:

- For Technical issues such as creating a new Service Request (SR), select **1**.
- For Non-technical issues such as registration or assistance with My Oracle Support, select **2**.
- For Hardware, Networking and Solaris Operating System Support, select **3**.

You are connected to a live agent who can assist you with My Oracle Support registration and opening a support ticket.

My Oracle Support is available 24 hours a day, 7 days a week, 365 days a year.

What's New in This Guide

Release 17.0.0.5.0 - F58688-09, November 2024

Updated the following sections with the details of EPAP release 17.0.0.5.0:

- Removed the media pack details for DIU upgrade from the [Media Pack](#) as DIU upgrade will be supported in a future release.
- Added the customer impact for bug 35926236 in the [Resolved Bug List](#) section.

Release 17.0.0.5.0 - F58688-08, November 2024

Updated the following sections with the details of EPAP release 17.0.0.5.0:

- [Media Pack](#)
- [Resolved Bug List](#)
- [Customer Known Bug List](#)

Release 17.0.0.4.0 - F58688-07, April 2024

Updated the following sections with the details of EPAP release 17.0.0.4.0:

- [Media Pack](#)
- [Resolved Bug List](#)
- [Customer Known Bug List](#)

Release 17.0.0.3.0 - F58688-06, March 2024

Updated the following sections with the details of EPAP release 17.0.0.3.0:

- [Media Pack](#)
- [Resolved Bug List](#)
- [Customer Known Bug List](#)

Release 17.0.0.2.0 - F58688-05, October 2023

Updated the following sections with the details of EPAP release 17.0.0.2.0:

- [Media Pack](#)
- [Resolved Bug List](#)
- [Customer Known Bug List](#)

Release 17.0.0.1.0 - F58688-04, July 2023

Made formatting changes.

Release 17.0.0.1.0 - F58688-03, June 2023

EPAP 17.0.0.1.0 Release

Updated the following sections with the details of EPAP release 17.0.0.1.0:

- [Media Pack](#)
- [Upgrade Paths](#)

-
- [Resolved Bug List](#)
 - [Customer Known Bug List](#)

1

Introduction

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

The Release Notes is included in the documentation pack made available with every software release.

2

Feature Descriptions

EPAP 17.0.0.1.0

No new features or feature enhancements have been introduced in this release.

EPAP 17.0

This chapter provides a summary of each feature released in EPAP 17.0.

- [Update to TPD 8.x](#)
- [Uplift MySQL version to 8.0](#)
- [TLS v1.3 encryption](#)
- [EPAP security hardening](#)

2.1 Update to TPD 8.x

EPAP 17.0 implements the EPAP migration from OL6-based TPD 7.x to OL8-based TPD 8.x. EPAP continues to be supported on the E5-APP-B-01 and E5-APP-B-02 cards. TPD 8.x will use the traditional rpm transaction-based iso for migration from EPAP 16.3/16.4 to EPAP 17.0.

2.2 Uplift MySQL version to 8.0

Previous EPAP releases used MySQL 5.7 to store EuiDB and PDB databases. EPAP 17.0 uses MySQL 8.0. The MEB backup used on MySQL 5.7 is not compatible with MySQL 8.0. Hence, mysqldump will be used to migrate the MySQL 5.7-based database from previous EPAP versions to a MySQL 8.0-based database in EPAP 17.0.

EPAP 17.0 continues to support the `mysql_native_password` authentication type for MySQL login.

MySQL 8.0 does not use `.frm` files. Therefore, all the checks related to `.frm` files have been removed.

2.3 TLS v1.3 encryption

Post-migration to OL8, EPAP 17.0 supports TLS v1.3. EPAP 16.3 and 16.4 supported TLS v1.2.

2.4 EPAP security hardening

EPAP 17.0 supports data replication and transfer over an encrypted channel using IPSEC. This includes data replication between Active and Standby PDB, data replication between a pair of RTDB servers, and data transfer between PDB and RTDB.

User authentication and data encryption use latest versions of MAC, Ciphers, and SSL.

3

Media and Documentation

Oracle Communications software is available for electronic download on the Oracle Software Delivery Cloud (<https://edelivery.oracle.com/>). Documentation is delivered electronically on the Oracle Help Center (OHC). Both the software Media Pack and the Documentation Pack are listed in this chapter.

3.1 Media Pack

All components available for download from the Oracle Software Delivery Cloud (<https://edelivery.oracle.com/>) are in the following tables:

Table 3-1 Media Pack Contents for EPAP 17.0.0.5.0

Name
Oracle Communications EAGLE Application Processor 17.0.0.5.0-170.27.0 ISO
Oracle Communications EAGLE Application Processor 17.0.0.5.0-170.27.0 MIBS
Oracle Communications EAGLE Application Processor 17.0.0.5.0-170.27.0 Alter Table Script
Oracle Communications EAGLE Application Processor 17.0.0.5.0-170.27.0 Restore Monitor Script
Oracle Communications Tekelec Platform Distribution 8.10.1.0.0-150.3.0

Table 3-2 Media Pack Contents for EPAP 17.0.0.4.0

Name
Oracle Communications EAGLE Application Processor 17.0.0.4.0-170.25.0
Oracle Communications EAGLE Application Processor 17.0.0.4.0-170.25.0 MIBS
Oracle Communications EAGLE Application Processor 17.0.0.4.0-170.25.0 Alter Table Script
Oracle Communications EAGLE Application Processor 17.0.0.4.0-170.25.0 Restore Monitor Script
Oracle Communications Tekelec Platform Distribution 8.9.0.1.0-130.6.0

Table 3-3 Media Pack Contents for EPAP 17.0.0.3.0

Name
Oracle Communications EAGLE Application Processor 17.0.0.3.0-170.21.0
Oracle Communications EAGLE Application Processor 17.0.0.3.0-170.21.0 MIBS
Oracle Communications EAGLE Application Processor 17.0.0.3.0-170.21.0 Alter Table Script
Oracle Communications EAGLE Application Processor 17.0.0.3.0-170.21.0 Restore Monitor Script
Oracle Communications Tekelec Platform Distribution 8.9.0.0.0-130.3.0

Table 3-4 Media Pack Contents for EPAP 17.0.0.2.0

Name
Oracle Communications EAGLE Application Processor 17.0.0.2.0-170.16.0

Table 3-4 (Cont.) Media Pack Contents for EPAP 17.0.0.2.0

Name
Oracle Communications EAGLE Application Processor 17.0.0.2.0-170.16.0 MIBS
Oracle Communications EAGLE Application Processor 17.0.0.2.0-170.16.0 Restore Monitor Script
Oracle Communications EAGLE Application Processor 17.0.0.2.0-170.16.0 Alter Table Script
Oracle Communications Tekelec Platform Distribution 8.6.0.2.0-110.12.0

Table 3-5 Media Pack Contents for EPAP 17.0.0.1.0

Name
Oracle Communications EAGLE Application Processor 17.0.0.1.0-170.13.0
Oracle Communications EAGLE Application Processor 17.0.0.1.0-170.13.0 MIBS
Oracle Communications EAGLE Application Processor 17.0.0.1.0-170.13.0 Restore Monitor Script
Oracle Communications EAGLE Application Processor 17.0.0.1.0-170.13.0 Alter Table Script
Oracle Communications Tekelec Platform Distribution 8.6.0.1.0-110.9.0

Table 3-6 Media Pack Contents for EPAP 17.0.0.0.0

Name
Oracle Communications EAGLE Application Processor 17.0.0.0.0-170.12.0
Oracle Communications EAGLE Application Processor 17.0.0.0.0-170.12.0 MIBS
Oracle Communications EAGLE Application Processor 17.0.0.0.0-170.12.0 Restore Monitor Script
Oracle Communications EAGLE Application Processor 17.0.0.0.0-170.12.0 Alter Table Script
Oracle Communications Tekelec Platform Distribution 8.6.0.0.0-110.6.0

3.2 Documentation Pack

All documents available for download from the Oracle Help Center (<http://docs.oracle.com>) are listed in [Table 3-7](#).

 **Note:**

This list is accurate at the time of release but is subject to change. See [Oracle Help Center](#) for all available documents.

Table 3-7 Documentation Pack Contents

Release Notices, Licensing Manual, and Compatibility Information
<i>Release Notes</i>
<i>Licensing Information User Manual</i>
<i>EAGLE Compatibility Matrix</i>
Hardware, Installation, and Maintenance Documentation
<i>Upgrade/Installation Guide</i>
<i>Alarms and Maintenance Guide</i>

Table 3-7 (Cont.) Documentation Pack Contents

<i>Application B Card Hardware and Installation Guide</i>
<i>System Health Check Guide</i>
Core Manuals
<i>Administration Guide</i>
<i>Provisioning Database Interface User's Guide</i>
<i>Security Guide</i>
Reference Manuals
<i>Signaling and Policy Glossary</i>

4

Supported Hardware Baseline

The hardware identified in this chapter comprises of the hardware and server versions that have been verified with this release.

4.1 EPAP Hardware Baseline

The EPAP Hardware Baseline table is a resource table that provides an overview of information for the hardware that is supported by EPAP.

This table lists the following card information:

- Name of the card on the card label
- Card part number
- SSD Capacity
- Provisioned card type in EAGLE
- Number of EAGLE shelf slots that the card occupies
- Number of physical ports on the card
- EAGLE Card Applications

Table 4-1 EPAP Hardware Baseline Table

Card Name as shown on the card label	Card Part Number	SSD Capacity	EAGLE Provisioned Card Type	EAGLE Shelf Slots/Ports per Card		EAGLE Card Applications
E5-APP-B	870-3096-01	300 GB	e5appb	2	4	epap
E5-APP-B	870-3096-02	480 GB	e5appb	2	4	epap

5

Upgrade Paths

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

5.1 Upgrade Paths

The possible upgrade paths to EPAP 17.0 are listed in the following table:

Table 5-1 EPAP 17.0 Upgrade Paths

From	To
EPAP Release 16.4	EPAP Release 17.0
EPAP Release 16.3	EPAP Release 17.0

6

Product Compatibility

Refer to *EAGLE Compatibility Matrix* for the product compatibility between this product release and the releases of other products.

7

Resolved and Known Bugs

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.

7.1 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

7.2 Resolved Bug List

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 an SR.

EPAP Release 17.0.0.5.0-170.27.0

The following table lists the bugs resolved in EPAP build 17.0.0.5.0-170.27.0:

Table 7-1 EPAP Release 17.0.0.5.0-170.27.0 Resolved Bugs (November 2024)

Bug	SR	Severity	Title	Customer Impact
35554295	Y	2	cpDiskCfg command no longer works in new release	If a disk fails, the disk replacement procedure will not work.
35651332	N	3	DSM configuration menu failing in EPAP with backup sync network	
36749074	N	3	Update SYNC network vlan.sync.single_pair_switch.t1200.conf	
36749136	N	3	Update SYNC network vlan.sync.e5appb.conf	
37143914	N	3	EPAP Delay provisioning observed sometimes	
37147292	N	3	Reverting wait_timeout value in my.cnf to 1 day (86400 sec)	
35926236	N	4	DIU upgrade support in EPAP	DIU upgrade is not supported for EPAP 17.0.0.5.0. DIU upgrade will be supported in a future release .
36507284	N	4	List pdbi connection shows different port on GUI and CLI	
36782024	N	4	Upgrade krb5-libs and krb5-devel package	
37152172	N	4	Update packages krb5-devel, krb5-libs and libkadm5 to latest version	
37178694	N	4	Update TPD to the latest version TPD.install-8.10.1.0.0_150.3.0	

EPAP Release 17.0.0.4.0-170.25.0

The following table lists the bugs resolved in EPAP build 17.0.0.4.0-170.25.0:

Table 7-2 EPAP Release 17.0.0.4.0-170.25.0 Resolved Bugs (April 2024)

Bug	SR	Severity	Title	Customer Impact
36146354	N	4	Added changes to support latest MySql version (8.0.35)	
36313234	N	4	Update mysql ,meb from 8.0.27 to mysql 8.0.35	
36313258	N	4	Update perl-PAR and perl-PAR-Packer to latest	
36413129	N	4	Update TPD 8.9 To Latest TPD 8.9.0.1.0_130.6.0	
36424808	N	4	Update jquery to version 3.7.1	

Table 7-3 EPAP Release 17.0.0.3.0-170.21.0 Resolved Bugs (March 2024)

Bug	SR	Severity	Title	Customer Impact
35926446	N	4	Remove perl-newt package from EPAP	
36011978	N	4	Update TPD, Perl-DBD, MySQL, linux-sedevl, and zlib-devel to latest	
36194730	N	4	Update TKLCswitchconfig rpms for updated tpd migration from perl-newt to curses	
36215285	N	4	Update TPD 8.8 To Latest TPD 8.9.0.0.0_130.3.0-OracleLinux8.9-x86_64.iso	
36215295	N	4	Update openssl and openssl-devel to latest 1.1.1k 12.el8_9	
36215305	N	4	Update zlib-devel package to latest	
36215313	N	4	Update TKLCvlanconfig for redundant log issue	

EPAP Release 17.0.0.2.0-170.16.0

The following table lists the bugs resolved in EPAP build 17.0.0.2.0-170.16.0:

Table 7-4 EPAP Release 17.0.0.2.0-170.16.0 Resolved Bugs (October 2023)

Bug	SR	Severity	Title	Customer Impact
35588980	N	3	Unexpected Act/Spr state observed in ha failover	
35638447	N	4	Update perl-PAR-Packer, Module-Scandeps and jquery	
35712885	N	4	EPAP MR 17.0.0.2.0: Update TPD 8	
35812611	N	4	Support More Than One PDB Backup	

EPAP Release 17.0.0.1.0-170.13.0

The following table lists the bugs resolved in EPAP build 17.0.0.1.0-170.13.0:

Table 7-5 EPAP Release 17.0.0.1.0-170.13.0 Resolved Bugs (June 2023)

Bug	SR	Severity	Title	Customer Impact
35418491	N	4	Update TPD to TPD.install-8.6.0.1.0_110.9.0	

EPAP Release 17.0.0.0.0-170.12.0

The following table lists the bugs resolved in EPAP build 17.0.0.0.0-170.12.0:

Table 7-6 EPAP Release 17.0.0.0.0-170.12.0 Resolved Bugs (March 2023)

Bug	SR	Severity	Title	Customer Impact
34311241	Y	2	Auto PDB restart script is not working as expected	PDB will not be restarted and will require customer action to regain functionality.
27684300	N	3	EPAP16.2_FOA:Incorrect information displayed to user in queryserver.log	
30080794	Y	3	SR: Disk space shortage in /var. Space usage error growing quickly	No impact to EPAP functionality. /var is used to store cron logs and some operating system files.
31613958	N	3	EPAP_16.4_FT:RTDB Reload from PDBA failing on a High Capacity DB.	
32231234	N	3	Problem in PROV to Non-PROV conversion using epapconfig menu	
24910416	N	4	EPAP16.1_MR:Errors observed in cgi.dbg on configuring PDB.	
26149567	N	4	EPAP16.2_ST: Need space in between IMEIBlock in view PDBA area.	
26335498	N	4	EPAP16.2_ST:Error observed for mate during reset.Replication needs to be updated.	
26337529	N	4	EPAP16.2_ST: SNMP read & write community can be updated without stopping EPAP	
31648791	N	4	Migrate EPAP to using OpenSSL 1.1.1, latest version	
32573502	Y	4	SR: Not able to configure remote PDB from epapconfig menu, mysql.user column count mismatch error observed	

Table 7-6 (Cont.) EPAP Release 17.0.0.0-170.12.0 Resolved Bugs (March 2023)

Bug	SR	Severity	Title	Customer Impact
33369060	N	4	Uplift MySQL to version 8	
33833992	N	4	Change MySQL Engine to InnoDB	
34103096	Y	4	Extra logging in pdba.dbg when NE is updated with DN	
34217122	N	4	Migrate EPAP to TPD 8.X	
34750069	Y	4	Isblset value should not be in rtrv_sub response by default	
34834499	N	4	Update perl-PAR and jquery	

7.3 Customer Known Bug List

EPAP Release 17.0 Customer Known Bugs

The following table lists the known bugs and associated customer impact statements.

Table 7-7 EPAP Release 17.0 Customer Known Bugs (November 2024)

Bug #	SR	Sev	Title	Customer Impact
27722102	N	3	EPAP16.2_FOA:Disaster Recovery not working on a Sync Redundant setup	No Impact to customer operations.
32319917	N	3	SR- Frequent switchover in EPAP state observed in EPAP	Customers lose functionality to update Eagle which may impact calls.
33507358	N	3	Backup fails to transfer to remote server	Customer must use a credential that does not use \$.
25644469	N	4	Dangling asd in pdb.asd table.	When multiple DNs are added at the same time from the "Add DN" screen in the GUI and the main DN is then deleted, the remaining DNs from the prior add command will have an invalid ASD value.
28486363	N	4	EPAP16.3_ST:Data replicated to standby PDB when ROP is run with noStandby	ROP data is always replicated to the standby node if the gmt command is ever executed without the --noStandby option.
28595734	N	4	Provide Read Access to OTHER users also for certain log files	Certain log files are only viewable by the epapdev and root users. Other users will not be able to read these files.

8

Oracle References and Services

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

8.1 Product Support

The information in this document addresses the product releases that are currently covered under Premier Support and also some product releases that are no longer covered under Premier Support. See [Lifetime Support for your Oracle Application Unlimited Products](#) on the Applications Unlimited Lifetime Support web page for support information.

Refer to the Release Notes of each product release for information related to supported upgrade paths.

8.2 Locate Product Documentation on the Oracle Help Center Site

Oracle Communications customer documentation is available on the web at the Oracle Help Center (OHC) [Oracle Help Center \(OHC\)](#) site. 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 [OHC](#).
2. Click **Industries > Communications**. The Communications Documentation page appears.
3. Under **Signalling and Policy** header, select **EAGLE**.
The list of entire documentation set for EAGLE Product Line and releases appears.
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, click **Save Target As** (or similar command based on your browser), and save to a local folder.

8.3 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.

A

Firmware Components

This appendix is not applicable to EAGLE, ExAP or LSMS releases. The firmware components are software that is installed on the hardware. These components are listed in the Firmware Release Notice. For more information, see the latest Firmware Release Notice.