Oracle® Enterprise Communications Broker

Release Notes

Release P-CZ2.2.0

December 2018

ORACLE®

Oracle Enterprise Communications Broker Release Notes, Release P-CZ2.2.0

Contents

About This Guide

The *Oracle® Enterprise Communications Broker Release Notes* provides the following information about the Oracle Enterprise Communications Broker (ECB) hardware and software:

- Specifications and requirements
- New features and enhancements
- Known issues and caveats

Documentation Set

The following table describes the documentation set for the ECB.

Document Name	Document Description
Administrator's Guide	Describes how to deploy the system.
Embedded Help system	Contains task-oriented topics for configuring, administering, maintaining, and troubleshooting the ECB hardware and software.
Release Notes	Contains information about the current release, including specifications, requirements, new features, enhancements, inherited features, known issues, caveats, and limitations.
SBC Family Security Guide	Provides information about security considerations and best practices from a network and application security perspective for the Enterprise family of products.
User's Guide	Describes how to configure SIP signaling management and how to tailor the system to specific needs.

Revision History

The following table describes updates to this guide.

Date	Description
July 2017	• Initial Release
August 2017	• Adds the note to the Loopback Prevention feature description in New Features.
	• Adds the best practice information to the Support for Multiple EOM Probes feature description in New Features.
	• Adds the Resolved Defects chapter.
June 2018	• Adds the ECB Sync Known Issue.
December 2018	• Adds the "Ciphers" topic to the "Deprecated Features" section.

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Specifications and Requirements

Oracle recommends that you review the following information before using the P-CZ2.2.0 release.

Supported Platforms

The following platforms and image files support the P-CZ2.2.0 release.

Platforms

Netra X3-2

Netra X5-2

Oracle X5-2

Image and Boot Loader Files

Download the following files:

- Image: nnPCZ220.bz
- Boot loader: nnPCZ220.boot

Platform Boot Loaders

Oracle Oracle Enterprise Communications Broker (ECB) platforms require a boot loader to load the operating system and software.

All ECB platforms require that the boot loader and the software image match per release. For example, if the software image filename is nnPCZ220.bz, use the corresponding boot loader file named nnPCZ220.boot.

You must install the boot loader file as /boot/bootloader on the target system. When you plan to upgrade the system image, upgrade the boot loader before booting the new system image.

SPL Support

The Oracle Enterprise Communications Broker supports the following Session Plug-in Language (SPL) engines.

- C2.0.0
- C.2.0.1
- C2.0.2
- C2.0.9
- C2.1.0

- C3.0.0
- C3.0.1
- C3.0.2
- C3.0.3
- C3.0.4
- C3.0.5
- C3.0.7
- P1.0.0
- P1.0.1

Upgrade Paths

Oracle recommends that you review the following information if you plan to upgrade to the P-CZ2.2.0 release.

nnPCZ200xx to nnPCZ220

nnPCZ210 to nnPCZ220 (for Netra X5-2)

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New Features and Enhancements

The P-CZ2.2.0 release includes the following new features and enhancements for the Oracle Enterprise Communications Broker (ECB).

Dialing Context Expansion

The software previously limited the number of dialing contexts allowed on an ECB instance to approximately 250 entries. The dialing context enhancement expands the dialing context structure to allow thousands of entries. You can upload dial plans as .csv files or configure them by way of the GUI.

Options for Resolving Request URI

As the ECB processes routing decisions, the system resolves the RequestURI according to the internal routing decision hierarchy. When customers deploy load balancers to handle redundancy and switchover, they may not want the ECB to resolve the Request URI. The ECB supports the option to return a SIP URI instead of a resolved IP address.

SHA-2 Support

The ECB supports Secure Hash Algorithm-2 (SHA-2), the successor to SHA-1, for TLS. SHA-2 improves data integrity. The ECB supports the SHA-256, 32-bit digest for signing and verification, and can generate certificate requests using SHA-2.

Stop Recursion Functionality Configurable by SIP Response Code

The ECB provides a built-in policy to stop recursion through session agent groups and cost-based routes. Formerly, the system applied the policy globally to all error conditions. Beginning with the PCZ2.2.0 release, you can apply the recursion policy based on the SIP response code received.

Support for Multiple EOM Probes

You can configure the Enterprise Operations Monitor (EOM) probes embedded in the ECB to send IPFIX traffic to multiple Operations Monitor Mediation Engines for redundancy.

Oracle recommends that you configure EOM Probes on Wancom0 (management interface) to maximize performance.

Loopback Prevention for PSTN Routed Calls

A new condition in the policy configuration can compare the previous hop or the from-uri-host in a call route to the next hop to prevent PSTN routed calls from looping back to the source ECB, when the end point is out of service. Note that the Loopback Prevention feature is not supported for the Registered users.

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GUI Changes

The navigation pane that the Oracle Enterprise Communications Broker (ECB) displays when you click the General icon on the Configuration tab displays a new object called **System Config**. The navigation pane still displays the General object, which was formerly the only object displayed. Some of the configuration elements formerly displayed under the General object, now display under the System-Config object.

Beginning with P-CZ2.2.0, the navigation pane displays the configuration objects, as follows:

General

Use **General** to specify the following:

*   Network Time Protocol (NTP) servers—Add one or more NTP servers.

*   Denial of Service (DoS)—Set the maximum SIP packet and ARP packet rates.

*   High Availability (HA)—Enable and disable HA, identify the primary and secondary devices, and specify synchronization.

System Config

Use **System Config** to specify the following:

*   System settings—Set the hostname, location, default gateway, timeouts, and restart.

*   SNMP—Enable and disable SNMP, specify the MIB system, and set SNMP traps and notifications.

*   Syslog servers—Add one or more Syslog servers, specify the system log level, and specify the process log level.

*   Communications Monitoring Probe—Enable and disable the Communications Monitor, set the group ID, set the TLS profile, enable and disable QoS, and add one or more Monitor collectors.

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Behavioral Changes

Oracle recommends that you review the following information before using the P-CZ2.2.0 release to stay informed about behavioral changes to the system and the Web GUI.

Web GUI Behavior

Formerly, widgets that run from CLI commands defaulted to a 30 second refresh frequency. The new default is "Never."

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Caveats and Known Issues

Oracle recommends that you review the following information before using the P-CZ2.2.0 release to stay informed about new caveats and known issues, as well as updates to ones that remain from previous releases.

Caveats

The following items describe caveats in the P-CZ2.2.0 release.

No Caveats reported.

Known Issues

The following table lists Known Issues provides the Bug DB number, a description of the issue, and any workaround, the found-in release, and the fixed-in release. You can reference the issues by Service Request ID and learn about any workaround, when the issued occurred, and when Oracle resolved the issue. Issues from previous releases that do not appear here do not apply to this release. You can also find information about resolved issues in the Build Notes for this release.

ID	Description	Found In	Fixed In
27240115	Problem—ECB Sync does not take effect. Workaround 1. Reboot the system.	PCZ2.2.0	

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Resolved Defects

The P-CZ2.2.0 release includes fixes for the following defects. Use the ID number learn more about a particular issue.

ID	Description
25354846	OPTIONS pings can overload EBC Processing
25520075	Memory corruption caused a failover causing the system to stop responding
19760328	SIP Monitoring and Tracing labels TLS transport as TCP
21544929	ECB does not use From Host when LDAP routing is enabled
23712225	ECB may corrupt Request URI on ENUM Response
25684081	SIP Monitoring and Tracing race condition may cause S-Pointer memory corruption
23215849	Session Agent Group round robin recursion algorithm
21538444	The ECB displays an extraneous VerifyConfig Error when an LDAP config is deleted
24363027	CommMonitor configured to send TCP packets over Media Interface may cause the Standby to stop responding
25047356	Uploading large files through the GUI may cause the system to stall
25183943	LDAP latency may result in a TCP connection tear down loop
25430130	Netra X3-2 where inaccessible media interfaces on boot may never be reinitialized

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Deprecated Features

Oracle recommends that you review the following information before using the P-CZ2.2.0 release.

Telnet Support

The system no longer supports Telnet. Note that P-CZ2.2.0 replaces the former **Telnet timeout** parameter in system-config with **Ssh timeout**. The behavior remains the same, where you set the length of time that the system waits for the next command before disconnecting.

Ciphers

The system deprecates the following ciphers, adhering to recent OpenSSL changes intended to eliminate weak ciphers:

- All DES-CBC ciphers, including:
  - TLS_DHE_RSA_WITH_DES_CBC_SHA
  - TLS_RSA_EXPORT1024_WITH_DES_CBC_SHA

The user should remove any prior version configuration that used these ciphers, and not configure a security profile with the expectation that these ciphers are available. Note also that TLS profiles using the **ALL** (default) value to the **cipher-list** parameter no longer use these ciphers.

> **Note:**
>
> Your version of the ACLI may still print these ciphers when you run **cipher-list ?**. Despite printing them in ACLI output, the system does not support them within service operations.