

Oracle® Enterprise Communications Broker Release Notes



Release P-Cz3.3.0

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April 2023

The Oracle logo, consisting of a solid red square with the word "ORACLE" in white, uppercase, sans-serif font centered within it.

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Contents

About This Guide

My Oracle Support v

1 Specifications and Requirements

Supported Platforms	1-1
Browser Requirements	1-2
Download Software from MOS	1-2
Platform Boot Loaders	1-2
Upgrade Paths	1-3
Coproduct Support	1-3
Behavioral Changes	1-3
Schema Changes	1-3
SPL Support	1-4
TLS Cipher Updates	1-4
Documentation Changes	1-5

2 New Features

3 Web GUI Changes

4 Caveats, Known Issues, and Limitations

Caveats	4-1
Known Issues	4-2
Resolved Known Issues	4-5
GUI Deviations from Former GUI	4-8

About This Guide

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

- Specifications and requirements
- Upgrades and downgrades
- New features and enhancements
- Known issues, caveats, and limitations

Documentation Set

The following table describes the documentation set for the OECB.

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

Related Documentation

The following table describes related documentation for the OECB.

Document Name	Document Description
Installation and Platform Preparation Guide	Contains conceptual and procedural information for system provisioning, software installations, and upgrades.

Revision History

The following table lists changes to this document and the corresponding dates of publication.

Date	Description
January 2021	<ul style="list-style-type: none"> Initial Release
April 2021	<ul style="list-style-type: none"> Adds content for P-Cz3.3.0p1
August 2021	<ul style="list-style-type: none"> Removes 3.0.0 to 3.3.0 Upgrade Path
October 2021	<ul style="list-style-type: none"> Adds Resolved Known Issues and moves all resolved Known Issues from the open table to the resolved table. Updates Known Issues for P-Cz3.3.0p3.
April 2022	<ul style="list-style-type: none"> Updates for P-Cz3.3.0p5.
April 2023	<ul style="list-style-type: none"> Updates for P-Cz3.3.0p9.

My Oracle Support

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 (CAS) can assist you with My Oracle Support 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 My Oracle Support, select 2.

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.

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 call 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.

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 sub-header, click the **Oracle Communications documentation** link.
The Communications Documentation page appears. Most products covered by these documentation sets appear under the headings "Network Session Delivery and Control Infrastructure" or "Platforms."
4. Click on your Product and then 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.

Access to Oracle Support

Oracle customers that have purchased support have access to electronic support through My Oracle Support. For information, visit <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info> or visit <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs> if you are hearing impaired.

1

Specifications and Requirements

Oracle recommends that you review the following information before installing the software.

Supported Platforms

Platforms

- Netra X3-2 — Ships with the Operating System and software installed.
- Netra X5-2 — Ships with the Operating System and software installed.
- Oracle X7-2 — You must install the Operating System and software from a USB memory device.
- Oracle X8-2 — You must install the Operating System and software from a USB memory device.
- Go to My Oracle Support (MOS) at <https://support.oracle.com> to download the Operating System and software. See "Download Software from MOS."
- See the Software Installation information in the *Oracle Enterprise Session Border Controller Installation and Platform Preparation Guide* on https://docs.oracle.com/cd/E95619_01/index.htm for installation instructions.

Image and Boot Loader Files

The PCZ3.3.0 release uses the following image and boot loader files:

- Image—nnPCZ330.bz
- Boot loader—nnPCZ330.boot

Cores and Threads

The following list shows the recommended number of cores and the expected number of SIP threads per platform. Note that the number of SIP threads may vary, depending on the configuration of your deployment.

- VM—Recommended 8 cores. Yields 3 SIP threads.
- Oracle Servers X3-2, X5-2, X7-2, and X8-2—Recommended 16 cores. Yields 9 SIP threads.

Memory

Oracle recommends at least 16G memory for all P-Cz3.3.0 deployments.

While the above presents standard recommendations, optimum OECB resource sizing depends individual deployments. Oracle recommends that you work with consulting and/or sales teams to determine the best sizing for your deployment.

Browser Requirements

The P-CZ3.3.0 version of the Oracle Enterprise Communications Broker supports the following browser versions for navigating and configuring the GUI:

Google Chrome (Recommended)—77.0.3865.120 and above

Download Software from MOS

When you want to get a software release or a patch from Oracle, go to My Oracle Support (MOS) and download it to your system or to a USB memory device.

- Establish an account with My Oracle Support.

The following procedure requires you to enter your MOS credentials to log on.

1. Go to <https://support.oracle.com> and log on.
2. Click the **Patches & Updates** tab.
3. On the Patch Search pane, click the **Search** tab.
4. On the Search dialog, do the following:
 - a. Product is—Select a product from the drop-down list.
 - b. Release is—Select a release from the drop-down list.
5. Click **Search**.
6. On the Patch Advanced Search Results page, click the patch that you want.

The system displays information about the patch, and a dialog where you can open the Read Me file and download the software.

7. In the dialog, do the following:
 - Read Me—Click to see the build notes.
 - Download—Click to download the software.
8. Log off.

Platform Boot Loaders

The Oracle Enterprise Communications Broker (OECB) 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 `nnPCZ330.bz`, use the corresponding boot loader file named `nnPCZ330.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.

Upgrade Paths

The following in-service (hitless) upgrade and rollback paths are supported by both the OECB:

- PCZ3.1.0 to PCZ3.3.0
- PCZ3.2.0 to PCZ3.3.0

All paths require that you meet recommended resource requirements before you upgrade. If necessary, upgrade to supported path versions prior to your PCZ3.3.0 upgrade.

When upgrading to this release from a release older than the previous release, read all intermediate Release Notes documents for notification of incremental changes.

Coproduct Support

The following products and features run in concert with the Oracle Enterprise Communications Broker for their respective solutions. Contact your Sales representative for further support and requirement details.

Oracle Communications Session Delivery Manager

This release can interoperate with the following versions of the Oracle Communications Session Delivery Manager:

- SDM 8.2.3 and later

Behavioral Changes

The following information documents the behavioral changes to the Oracle Communications Session Border Controller (OCSBC) in this software release.

Storage Location for LST Files

You can no longer specify a path when defining an LST name. The location for LST files is now fixed at /code/lst. LST files in any other location do not work.

Schema Changes

The Oracle Enterprise Communications Broker (OECB) requires the PCZ3.3.0 configuration schema to support creating multiple VLANs. You must upgrade the configuration schema after you upgrade the software.

After upgrading the software to PCZ3.3.0, the system prompts you to upgrade the configuration schema the first time you log on. The configuration upgrade creates a network called "ecb" and a SIP interface with the Realm ID set to "ecb." The upgrade also exposes the Realm ID parameter in the session agent, SIP interface, LDAP, and ENUM configurations. The configuration upgrade defaults all Realm IDs to "ecb" for existing configuration elements. After the system creates the "ecb" network and adds Realm ID parameter, you can add up to four VLANs. You can set the Realm ID, as needed, in the newly added VLANs.

The updated schema makes the following changes to the GUI to support configuring multiple VLANs.

LDAP Configuration

PCZ3.3.0 exposes the RealmID parameter in the LDAP configuration. The configuration upgrade sets Realm ID to "ecb" for existing LDAP configurations.



Note:

Only the "ecb" realm can support LDAP.

ENUM Configuration

PCZ3.3.0 exposes the RealmID parameter in the ENUM configuration. The configuration upgrade sets Realm ID to "ecb" for existing ENUM configurations. You can set the Realm ID, as needed, for newly added VLANs.

SPL Support

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

C2.0.0, C2.0.1, C2.0.2, C2.0.9, C2.1.0, C2.1.1, C2.2.0, C2.2.1, C2.3.2, C3.0.0, C3.0.1, C3.0.2, C3.0.3, C3.0.4, C3.0.5, C3.0.6, C3.0.7, P1.0.0, P1.0.1, C3.1.0, C3.1.1, C3.1.2, C3.1.3, C3.1.4, C3.1.5, C3.1.6, C3.1.7, C3.1.8, C3.1.9, C3.1.10, C3.1.11, C3.1.12, C3.1.13, C3.1.14, C3.1.15, C3.1.16, C3.1.17, C3.1.18, C3.1.19, C3.1.20,

TLS Cipher Updates

Note the following changes to the DEFAULT cipher list.

Oracle recommends the following ciphers, and includes them in the DEFAULT cipher list:

- ECDHE-ECDSA-AES256-GCM-SHA384
- ECDHE-ECDSA-AES128-GCM-SHA256
- ECDHE-RSA-AES256-GCM-SHA384
- ECDHE-RSA-AES128-GCM-SHA256
- ECDHE-RSA-AES256-SHA384
- ECDHE-RSA-AES128-SHA256
- DHE-RSA-AES256-GCM-SHA384
- DHE-RSA-AES256-SHA256
- DHE-RSA-AES128-GCM-SHA256
- DHE-RSA-AES128-SHA256
- AES256-SHA256

Oracle supports the following ciphers, but does not include them in the DEFAULT cipher list:

- TLS_RSA_WITH_AES_256_GCM_SHA384

- TLS_RSA_WITH_AES_128_GCM_SHA256
- TLS_RSA_WITH_AES_128_CBC_SHA
- TLS_RSA_WITH_3DES_EDE_CBC_SHA

Oracle supports the following ciphers for debugging purposes only:

- TLS_RSA_WITH_NULL_SHA256 (debug only)
- TLS_RSA_WITH_NULL_SHA (debug only)
- TLS_RSA_WITH_NULL_MD5 (debug only)

Oracle supports the following ciphers, but considers them not secure. They are not included in the DEFAULT cipher-list, but they are included when you set the **cipher-list** attribute to **ALL**. When you configure the **cipher-list** to **ALL**, the system provides a **verify-config** message warning you that you are using these insecure ciphers.

- TLS_DHE_RSA_WITH_AES_256_CBC_SHA
- TLS_RSA_WITH_AES_256_CBC_SHA
- TLS_DHE_RSA_WITH_AES_128_CBC_SHA
- TLS_DHE_RSA_WITH_3DES_EDE_CBC_SHA

To configure TLS ciphers, use the **cipher-list** attribute in the **tls-profile** configuration element.

 **WARNING:**

When you set **tls-version** to either **tlsv1** or **tlsv11** and you want to use ciphers that Oracle considers not secure, you must manually add them to the **cipher-list** attribute.

Documentation Changes

The following information lists and describes the changes made to the Enterprise Communications Broker documentation set for release 3.3.

There are no changes to ECB documentation at release P-Cz3.3.0.

2

New Features

The PCZ3.3.0 release delivers the following enhancements and new features to improve the functionality, look, and behavior of the Oracle Enterprise Communications Broker (OECB) software.

SIP Option Response Configuration

You can configure the `ping-in-service-response-codes` parameter in the session agent configuration to refine how the OECB monitors agent status. You define one or more response codes that keep a session agent in service when sent as response to the OECB's ping request in this parameter. The OECB takes the session agent out of service if the session agent sends a response code that is not on this list. The exception to this is a 200 OK response, which, by default, always keeps the agent in-service. This behavior applies to both single and multi-hop pings.

See the *OECB Essentials Guide* for a full explanation of this feature.

Managing the ECB with SDM

You can perform configuration and fault management on the Oracle Enterprise Communications Broker (OECB) and OECB groups using Oracle's Session Delivery Manager (SDM) management system. Fault management by SDM includes the handling of SNMP traps and logs. Configuration management is based on software version, with each version able to specify which elements you can configure with SDM. The use of SDM for OECB also provides you with the ability to establish consistent configuration management across multiple OECB deployments.

As of this release, you can configure the following using Session Deliver Manager:

- access-control
- account-config
- additional-target-group
- allowed-elements-profile
- audit-logging
- authentication
- certificate-record
- dialing-context
- enum-config
- filter-config
- host-route
- ldap-config
- ldap-group
- local-subscriber-table

- network-interface
- ntp-config
- policy
- realm-config
- redundancy-config
- routing-entry
- session-agent
- session-group
- sip-authentication-profile
- sip-config
- sip-interface
- sip-manipulation
- sip-monitoring
- sip-registrar
- snmp-community
- spl-config
- sync-agent
- sync-config
- system-config
- tls-profile
- trap-receiver
- user-number
- http-server
- http-client

**Note:**

OECB does not support configuration of Security, Accounting and Performance management via SDM.

Dynamic ACLs

The OECB DoS protection functionality protects softswitches and gateways with overload protection, dynamic and static access control, and trusted device classification and separation at Layers 3-5. The OECB itself is protected from signaling and media overload, but more importantly the feature allows legitimate, trusted devices to continue receiving service even during an attack.

See the *OECB Essentials Guide* for a full explanation of this feature.

DNS Enhancements

When configured, the OECB performs DNS client functions per RFC1034 and RFC1035. The user can define one primary DNS server and two backup DNS servers for the OECB to query a domain for SRV (FQDN), AAAA (IPv6), and A (IP address) information. A common example of the OECB using DNS is to locate a SIP server via server location discovery, as described in RFC 3263. An applicable context is identifying a callee so the OECB can place a call.

See the *OECB Essentials Guide* for a full explanation of this feature.

Dynamic REFER Support

In the simplest scenarios, the Oracle Enterprise Communications Broker (OECB) supports Dynamic REFER either by proxying the REFER to the other User Agent in the dialog, or by terminating the received REFER and issuing a new INVITE to the referred party. In addition, the OECB provides dynamic refer support, which determines on a call-by-call basis whether to proxy the REFER to the next hop, or terminate the REFER and issue an INVITE. You configure these operational modes on realms and session agents.

See the *OECB Essentials Guide* for a full explanation of this feature.

Source Routing Enhancements

The OECB supports source routing based on agent hostname. You configure these routes by adding the hostname to the source agent portion of your route. When the OECB sees this hostname in the FROM URI, it uses your source route to direct the traffic. You can also configure the OECB to perform source routing on calling numbers that have a FROM header with a R-URI that contains an IP address or an FQDN. For this, the OECB attempts to determine the hostname by searching for the address or FQDN in the UserDB. If it finds the entry, the OECB inserts the hostname into the FROM and performs a route lookup.

See the *OECB Essentials Guide* for a full explanation of this feature.

Web GUI Display and Behavioral Changes

The GUI offered with PCZ3.3.0 presents major changes the previous GUI. See "Web GUI Changes" in the *Release Notes* for a centralized description of the changes, and the Oracle Enterprise Communications Broker *Administrator's Guide* and *User's Guide* for updated documentation on these changes.

Web GUI display and behavior changes do not change the behavior of service operation or any other system features.

Review the [GUI Limitations](#) section for a summary of changes to expect.

Configuration to Establish Authentication by TACACS Only

You can configure the OECB to restrict access authentication to the TACACS function, thereby enhancing system security.

This support is available in software versions P-Cz3.3.0p1 and above. See the Oracle Enterprise Communications Broker *Administrator's Guide* and *User's Guide* for extended documentation on this feature.

TCP Timers

The OECB includes timing capabilities for inbound connections that the remote peer initiated, meaning that the remote peer sent the first SYN message. You can configure timers that

define timing surrounding TCP connections, including maximum idle time for a connection before the system consider the connection inactive.

This support is available in software versions P-Cz3.3.0p1 and above. See the Oracle Enterprise Communications Broker *Administrator's Guide* and *User's Guide* for extended documentation on this feature.

Global SIP Timers

The OECB includes SIP timers that define the transaction expiration times, retransmission intervals when UDP is used as a transport, and the lifetime of dynamic TCP connections. These retransmission and expiration timers correspond to timers defined in RFC 3261.

This support is available in software versions P-Cz3.3.0p1 and above. See the Oracle Enterprise Communications Broker *Administrator's Guide* and *User's Guide* for extended documentation on this feature.

3

Web GUI Changes

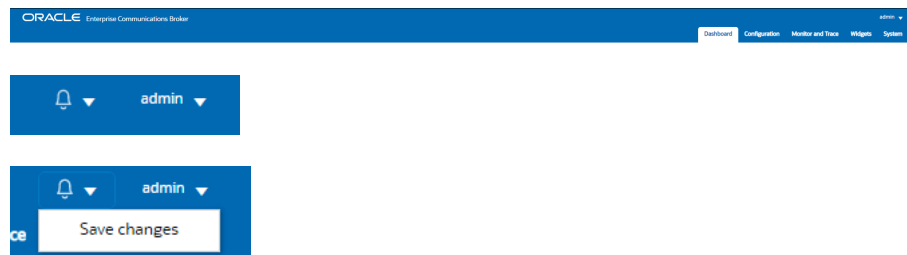
The P-Cz3.3.0 release changes the look, and some of the behavior, of the Web GUI to better align with Oracle's current styles and standards. Although most of the navigation and operations remain the same, some differences occur in the location and design of the controls you use to access and manipulate the objects on the Web GUI. The following information describes the new controls, operations, and behavior of the Web GUI.

New Web GUI Behavior

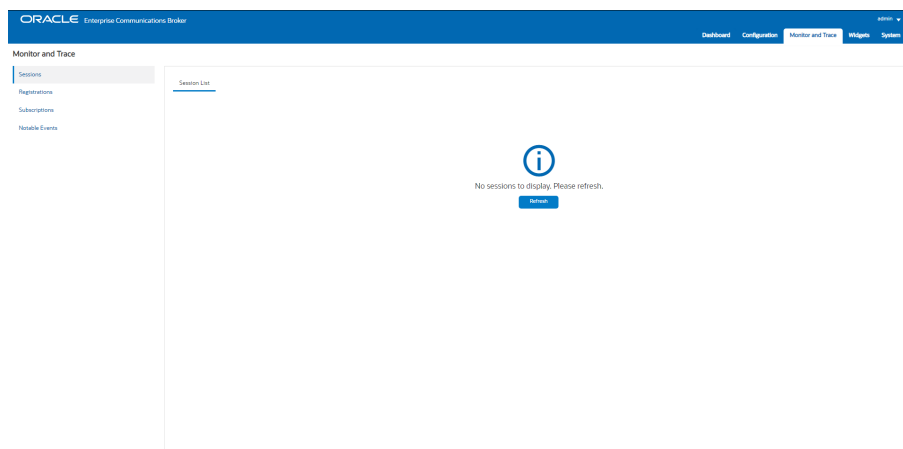
Each part of the Web GUI received updates for the P-CZ3.3.0 release. The following information describes the visual and operational changes to the header and each tab. Note that the Branding bar has a slightly different look, however, the buttons and functionality remains the same.

Oracle Header

The header displays five tabs and the User Menu removes the Preferences item. The following screen capture shows the new header, displaying the Dashboard, Configuration, Monitor and Trace, Widgets and System tabs.



- **Monitor and Trace tab**—When you click the Monitor and Trace tab, the Web GUI displays navigation in the left pane and the SIP Sessions Summary page in the center pane. The following screen capture shows the Monitor and Trace tab landing page.



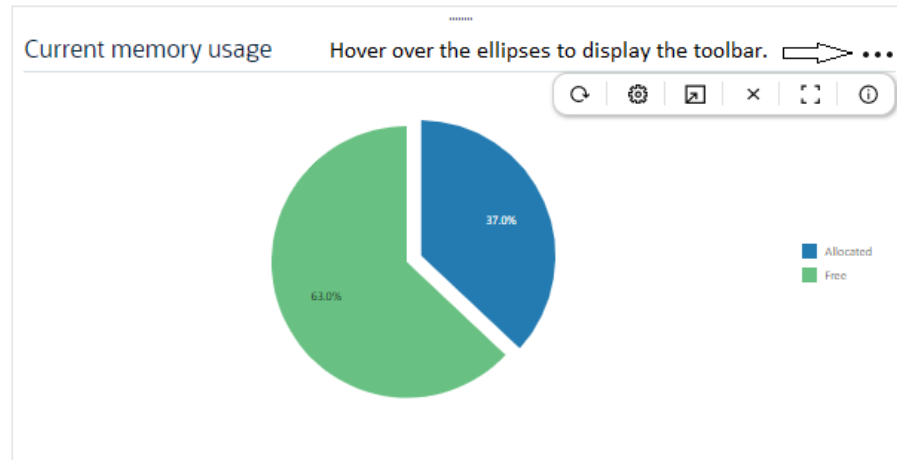
- **User Menu**—No longer includes the Screen Help link.

Dashboard Tab

- **Dashboard Controls**—The Refresh and Reset controls now display all together in the upper left side of the Dashboard page, as shown in the following screen capture. The Add Widget button appears in the upper right side.



- **Widget Controls**—As before, each Widget contains the operational controls related to its purpose. The controls now display as icons in a toolbar when you hover over the three ellipses in top right corner of the Widget.



Configuration Tab

- **Center pane header**—Now displays only the Save, Verify, Discard, and Search controls. The save, discard, verify buttons are on the right side, identified with icons. Search is on the left side, identified by an icon and a text box. The Wizard tab is moved to within the system tab. The Commands button is changed to the View Configuration button.



- **Navigation pane**—Displays icon buttons with text that take you to the labeled configuration categories. The following screen capture shows the Navigation pane under the Session Agent configuration icon. When you are within individual configuration dialogs, the GUI includes the **Back to Navigation** button, which you click to return to the initial configuration tab display.

The screenshot shows the Oracle Enterprise Communications Broker Configuration page. A sidebar on the left contains a search bar and a list of configuration objects: Additional target group, Exam servers, Groups, and Session agent. The main area displays the 'Agents' table with the following columns: Action, Select, Hostname, IP Address, Port, State, RUM With Hostname, Transport Method, and TLS Profile. The table contains 14 rows of agent data, all with a state of 'disabled'.

Action	Select	Hostname	IP Address	Port	State	RUM With Hostname	Transport Method	TLS Profile
	<input type="checkbox"/>	10.122.65.30	10.122.65.30	5060	disabled	disabled		
	<input type="checkbox"/>	10.124.1.36	10.124.1.36	5060	disabled	disabled		
	<input type="checkbox"/>	10.124.1.55	10.124.1.55	5060	disabled	disabled		
	<input type="checkbox"/>	10.124.129.7	10.124.129.7	5060	disabled	disabled		
	<input type="checkbox"/>	10.175.104.21	10.175.104.21	5060	enabled	disabled		
	<input type="checkbox"/>	10.175.107.45	10.175.107.45	5060	enabled	disabled		
	<input type="checkbox"/>	10.189.91.17	10.189.91.17	5060	enabled	disabled		
	<input type="checkbox"/>	10.189.91.72	10.189.91.72	5060	enabled	disabled		
	<input type="checkbox"/>	10.191.91.17	10.191.91.17	5060	enabled	disabled		
	<input type="checkbox"/>	10.25.233.7	10.25.233.7	5060	disabled	disabled		
	<input type="checkbox"/>	10.30.233.7	10.30.233.7	5060	disabled	disabled		
	<input type="checkbox"/>	10.48.87.74	10.48.87.74	5060	disabled	disabled		
	<input type="checkbox"/>	10.55.85.74	10.55.85.74	5060	disabled	disabled		

The Web GUI no longer displays the Discard Configuration confirmation dialog when you change tabs without saving the configuration. The system retains changes for when you return to the dialog, providing more flexibility with navigation while making, changing and saving configurations.



Note:

Re-clicking the tab or configuration object that is currently displayed does not refresh the page.

Monitor and Trace Tab

Navigation pane—Displays links to the Monitor and Trace summaries.

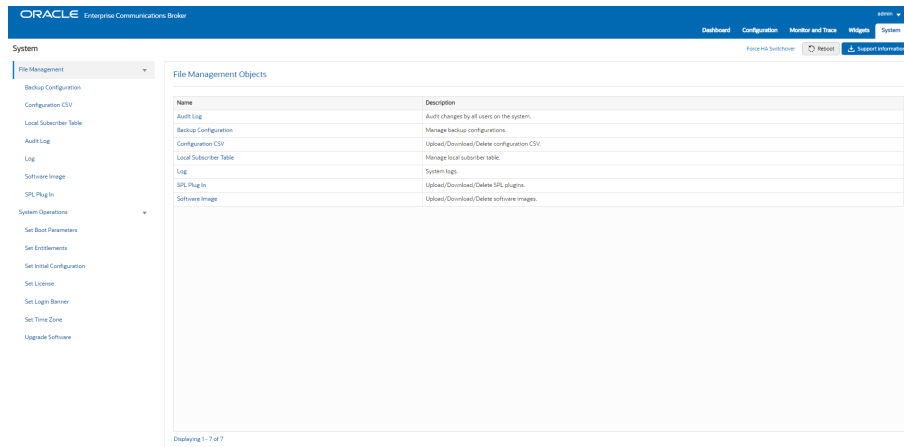
The screenshot shows the Oracle Enterprise Communications Broker Monitor and Trace page. The navigation pane on the left includes links for Sessions, Registrations, Subscriptions, and Notable Events. The main content area, titled 'Session List', displays a message: 'No sessions to display. Please refresh.' with a 'Refresh' button below it.

System Tab

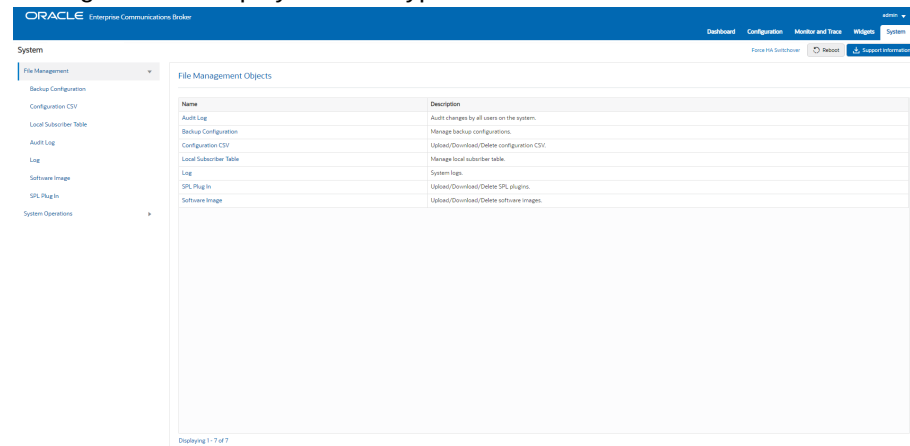
- Page header—The Force HA Switchover link is towards the right hand side of the toolbar, followed by the Reboot button and the Support Information buttons.



- Navigation pane—All functions formerly known as Wizards are moved to the System Operations link on the System tab.



- Set Boot Parameters link now within the System Operations group on the System tab.
- The File Type drop down list is removed. Use the arrow control by File Management to display the File Types.



For more information about the following enhancements, see the topics cited for each one in the ???.

- SIP Sessions Widget—The **SIP Sessions All** option for this widget is removed.
- Drop-down lists in configuration dialogs—All configuration parameters that support lists of possible values now display a drop-down list of the values rather than a blank field where you previously had to type the value. The system populates some drop-down lists, and you can populate others with the entries you prefer. See "Drop-Down Lists" in the "Configuration Dialogs Behavior" topic.
- Configuration Options fields—Options fields in configuration dialogs allow you use selected delimiters between options.(commas, semi-colons, full stops, and parens) See "Options Fields" in the "Configuration Dialogs Behavior" topic.
- Infinite pagination for lists—You can scroll continuously through lists, rather than having to click through them page-by-page. The display provides a counter to help you keep oriented. See "Monitor and Trace" and "Configuration Tab Display".
- Context persistence—In certain situations, you can switch from one tab to another and find the data on the first tab displayed as it was when you return. See "Unsaved Changes Persistence", "Configuration Tab Buttons", and "Ladder Diagrams and Display Controls".

- Monitor and Trace ladder diagrams—The Monitor and Trace tab allows you open multiple ladder diagrams and switch back-and-forth among them. Also, you can open a ladder diagram, switch away to view something else (such as another tab), and return to find the ladder diagram displaying as it was before you switched away. See “Ladder Diagrams and Display Controls”, “Ladder Diagram Buttons”, and “Display a Ladder Diagram”.
- Multi-row select actions—You can select multiple rows in a table for certain actions. See “Controls for Managing Configuration Lists”, “Display a Ladder Diagram”, “Ladder Diagrams”, “Display Controls”, and “Monitor and Trace”.
- File upload—The system allows only the parens, full stop, and space characters in the names of files that you want to upload. The system verifies the syntax before allowing the upload and displays an error message when the syntax is incorrect. See "System File Management Types and Descriptions".

4

Caveats, Known Issues, and Limitations

Oracle provides behavioral information that you need to know about the release in the form of caveats, known issues, and limitations. A caveat describes behavior that you might not expect, and explains why the system works in a certain way. A known issue describes temporarily incorrect or malfunctioning behavior, and often includes a workaround that you can use until Oracle corrects the behavior. A limitation describes a functional boundary or exclusion that might affect your deployment.

Caveats

The following items describe caveats in the P-CZ3.3.0 release.

LDAP SNMP Trap Support

LDAP SNMP traps are not supported in PCz330. ECB does not generate any LDAP failures for the following OID failures:

- 1.3.6.1.4.1.9148.2.1.8.9 apSmgmtLDAPCap
- 1.3.6.1.4.1.9148.3.2.1.6 apSysMgmtMIBLDAPServerStatusObjects
- 1.3.6.1.4.1.9148.3.2.1.6.1 apLDAPServerStatusTable
- 1.3.6.1.4.1.9148.3.2.1.6.1.1 apLDAPServerStatusEntry
- 1.3.6.1.4.1.9148.3.2.1.6.1.1.1 apLDAPConfigName
- 1.3.6.1.4.1.9148.3.2.1.6.1.1.2 apLDAPServerIpAddress
- 1.3.6.1.4.1.9148.3.2.1.6.1.1.3 apLDAPServerStatus
- 1.3.6.1.4.1.9148.3.2.4.2.10 apSysMgmtLDAPServerStatusGroup
- 1.3.6.1.4.1.9148.3.2.4.3.15 apSysMgmtLDAPServerStatusNotificationsGroup

HA Limitation

HA switchover causes TCP/TLS ports to be reset. This terminates the TCP/TLS calls that were in progress on the formerly active OECB. New call setup over TCP/TLS, however, is successful.

Logging Limitation

Setting Logging to DEBUG simultaneously with greater than 300k degrades system performance. Be sure to set Logging to WARNING or NOTICE under this condition, and only use DEBUG when absolutely required.

LDAP Support

Only the default "ecb" network can support LDAP. Additional networks cannot.

Registrar Support

Only the default "ecb" network can act as the registrar. Additional networks cannot.

ECB Sync Compatibility

ECB SYNC is supported only between nodes with the same configuration platforms. For example, X3 to X3, X5 to X5, VM to VM are supported.

Deprecated 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

Oracle recommends that you remove any prior version configuration that uses these ciphers, and that you do not configure a security profile with the expectation that these ciphers are available. Note also that TLS profiles using the **ALL** (default) value for the **cipher-list** parameter no longer use these ciphers.

**Note:**

The ACLI may still display these ciphers when you run **cipher-list ?**, but the system does not support them.

Conflicting Session Agent Fields

Do not enable the **Ping All Addresses** or **Enable OPTIONS Ping** parameters on a **Session agent** that you have configured with an **IP Address**.

Known Issues

The following table lists Known Issues and provides the Service Request ID number, a description of the issue, any workaround, when the issue occurred, and when Oracle fixed the issue. This table includes issues from previous releases that either remain open or are resolved in this release. 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 Number	Description	Found In
32928940	When invalid values are configured in SA attributes, verify-config errors are not observed. Ensure your configuration values are valid.	PCZ3.3.0p3

ID Number	Description	Found In
29582306	<p>The Dial pattern's "Delete All" function does not work properly, causing system disruption including system reboot.</p> <p>Work-around: Delete the entire plan using the "Delete Dial Plan" function and recreate your Dial plan with the appropriate Dial patterns.</p>	PCZ3.2.0
30509697	<p>An OECEB configured with 1 million user database entries stops accepting new calls for ~90 seconds after performing a save and activate.</p> <p>Work-around: Configure systems with user databases that approach 1 million entries during a maintenance window.</p> <p>In addition, Oracle recommends using the OECEB's ACLI paste-config command or the automatic CSV import feature to perform uploads of these large user databases and avoid system interruption.</p>	PCZ3.2.0
30298150	<p>Synced data is not removed after OECEB sync is turned off.</p>	PCZ3.2.0

ID Number	Description	Found In
No ID number	<p data-bbox="711 275 1032 499">If you want to establish a High Availability pair that uses IP addresses other than the defaults, perform the following procedure. Use this procedure regardless of whether the ECBs run on virtual or physical systems.</p> <p data-bbox="711 510 824 537">Procedure</p> <ol data-bbox="711 558 1032 1381" style="list-style-type: none"><li data-bbox="711 558 1032 699">1. Perform the standard HA setup with the run setup command. Allow both systems to come up as an HA pair.<li data-bbox="711 720 1032 777">2. Logon to the Active machine's GUI.<li data-bbox="711 798 1032 875">3. Navigate to Configuration > General Settings > Redundancy Config.<li data-bbox="711 896 1032 1094">4. Update the Primary and Secondary peers with the destinations 169.254.1.1 and 169.254.1.2 to the primary and secondary sip-interface addresses respectively.<li data-bbox="711 1115 1032 1192">5. Navigate to Configuration > Network > Network Settings.<li data-bbox="711 1213 1032 1381">6. Update the network interface "wancom1" with Pri Utility Addr, Sec Utility Addr and Netmask to the sip-interface values.	PCZ3.0.0

 **Note:**

The GUI does not display the network interface name in Network Settings. Choose the network interface that has the default values of:

ID Number	Description	Found In
	<ul style="list-style-type: none"> • Primary — 169.254.1.1 • Secondary — 169.254.1.2 • Netmask — 255.255.252 <p>7. Update that network interface with the primary, secondary and netmask values of the sip-interface respectively.</p> <p>8. Save and activate your changes. After the save and activate on the Active machine is complete, both the and active and standby machines become Active machines.</p> <p>9. Reboot your target primary, and then your secondary ECB's. After boot, the systems come up as an HA pair with the sip-interface values.</p> <p>The IP addresses you use must be available and valid in your network. If not, you must directly connect the two ECBs before performing this procedure to establish the HA pair initially.</p>	

Resolved Known Issues

The following table provides a list of previous Known Issues that are now resolved.

ID Number	Description	Found In	Fixed In
32383916	The system raises the critical alarm Failed to decrypt values if you do not configure the Secret parameter for any active LST element. Work around: Configure the Secret parameter for all active LST elements to avoid this alarm.	PCZ3.3.0	PCZ3.3.0p1
32179572	The Session-Agent Status search tool does not work when deployed to the Dashboard. The GUI does not allow you to edit a user database entry that contains an Address of Record. Work-around: Delete the entry and add it as a new entry with the changes that you want.	PCZ3.3.0 PCZ3.1.0	PCZ3.3.0p3 PCZ3.1.0p2 and PCZ3.2.0

ID Number	Description	Found In	Fixed In
No ID number	<p>If you see mapping errors after upgrading, for example errors about redundancy or media traffic, you may need to swap interface addresses.</p> <p>Work-around: Compare the MAC addresses on your Virtual Machine (VM) to those on your hardware. If the addresses are different, you need to swap interface addresses. Set the addresses on the hardware to match those from your VM. Use the swap command from the ECB command line.</p> <ol style="list-style-type: none"><li data-bbox="626 957 824 1094">1. Use SSH to access the command line prompt on the ECB.<li data-bbox="626 1119 850 1339">2. From the ECB prompt type sho interface mapping, and press ENTER. The system displays its mappings.<li data-bbox="626 1365 857 1444">3. Compare the mappings to your VM mappings.<li data-bbox="626 1470 841 1549">4. Type interface-mapping, and press ENTER.<li data-bbox="626 1575 867 1913">5. Type swap <eth-if-name_1 eth-if-name_2>, and press ENTER. Example: swap wancom0 s1p0 The system displays the interface mapping information after the swap and a warning that the	PCZ3.0.0	PCZ3.1.0

ID Number	Description	Found In	Fixed In
	change can affect services and requires a reboot.		
	6. At the Continue prompt, type yes , and press ENTER.		
	7. Exit the configuration.		
	8. Reboot the ECB.		

GUI Deviations from Former GUI

The new Graphical User Interface (GUI) has limitations in the way it presents itself that the user may incorrectly identify as software defects in P-CZ3.3.0. Some users familiar with typical GUI mechanisms may find these limitations to be inconsistent with what they consider normal, expected behavior.

Deviations from Former GUI

Oracle has determined that the new GUI has deviations in the way it presents itself that the user may have become familiar with via former software versions. Some users familiar with the former GUI may find these deviations to be inconsistent with what they consider normal, expected behavior.

1. Refresh, Settings, Export and Show Information buttons are changed to icons and moved from the Home page widget display to the Maximized widget display.
2. The Home Page's Refresh, Add Widget and Reset controls now apply to the Home page only. You now refresh all widgets from Home page, and must maximize individual widgets to refresh them individually.
3. Scrolling has been introduced for tables to account for large numbers of records. Each scroll click now results in moving to the next or previous 100 records.
4. Widgets on the Home page now auto-arrange when you add and delete them.
5. All device Configuration is now accessible from the Configuration tab. The Preferences setting, now available from the User's drop-down menu, allows you to list configuration elements hierarchically or alphabetically.
6. Monitoring and Trace controls are now available from a single tab named "Monitoring and Trace".
7. Widgets are now available from a single tab named "Widgets".
8. File Management controls are now available from the System tab.
9. The Force HA Switchover, Reboot and Support information access controls are now provided as tabs at the top right corner of the System tab dialog.
10. The Set Boot Parameters dialog is now available from the System tab.

11. The Wizards and Commands categories of functions have been moved to the System tab. The word "Wizard" is no longer used. Those function collections are now called "System Operations".
12. All labels, headings, and text-based names are now displayed using an Initial Capital letter format.
13. Tool tips are moved from the text labeling configuration fields to the fields themselves.
14. The GUI displays a control (cog wheel icon) when you mouse over rows. Click this control to display a menu with applicable commands.
15. The verify-config command is available at multiple locations in the GUI, which now includes a button at the top of the Configuration tab towards the right side.
16. Fields that accept numeric values now include increment/decrement buttons to enhance your ability to set those fields.
17. Widget tiles on the home page no longer have tile-specific Collapse controls. Tile-specific widget controls now include only Refresh, Settings, Export, Remove, Maximize, Information and Move.
18. The GUI no longer includes any time/date selection controls. Instead, a text field is now available to specify time searches in the Monitor and Trace tools. A tool tip also provided the valid input format for those fields.