Oracle® Enterprise Session Border Controller

Release Notes

Release E-CZ7.3.0

March 2018

Oracle Enterprise Session Border Controller Release Notes, Release E-CZ7.3.0

Contents

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About This Guide

The Oracle Enterprise Session Border Controller Release Notes provides information about:

- Platform Support
- Inherited features
- New features
- Known Issues
- Caveats

Documentation Set

The following table describes the documents included in the Oracle Enterprise Session Border Controller E-CZ7.3.0 documentation set.

Document Name	Document Description
ACLI Configuration Guide	Contains information about the installation, configuration, and administration of the Enterprise Oracle Enterprise Session Border Controller.
Acme Packet 1100 Hardware Installation Guide	Contains information related to the hardware components, features, installation, start-up, operation, and maintenance of the Acme Packet 1100.
Web GUI Users Guide	Contains information about using the tools and features of the Oracle Enterprise Session Border Controller Web GUI.
Release Notes	Contains information about this release, including platform support, new features, caveats, known issues, and limitations.

Related Documentation

The following table describes related documentation for the Oracle Communications Session Border Controller.

Document Name	Document Description
Acme Packet 3820 Hardware Installation Guide	Contains information about the components and installation of the Acme Packet 3820.
Acme Packet 4500 Hardware Installation Guide	Contains information about the components and installation of the Acme Packet 4500.

Document Name	Document Description
Acme Packet 4600 Hardware Installation Guide	Contains information about the components and installation of the Acme Packet 4600.
Acme Packet 6300 Hardware Installation Guide	Contains information about the components and installation of the Acme Packet 6300.
Release Notes	Contains information about the current documentation set release, including new features and management changes.
ACLI Configuration Guide	Contains information about the administration and software configuration of the Oracle Enterprise Session Border Controller.
ACLI Reference Guide	Contains explanations of how to use the ACLI, as an alphabetical listings and descriptions of all ACLI commands and configuration parameters.
Maintenance and Troubleshooting Guide	Contains information about Oracle Enterprise Session Border Controller logs, performance announcements, system management, inventory management, upgrades, working with configurations, and managing backups and archives.
MIB Reference Guide	Contains information about Management Information Base (MIBs), Acme Packet's enterprise MIBs, general trap information, including specific details about standard traps and enterprise traps, Simple Network Management Protocol (SNMP) GET query information (including standard and enterprise SNMP GET query names, object identifier names and numbers, and descriptions), examples of scalar and table objects.
Accounting Guide	Contains information about the Oracle Enterprise Session Border Controller's accounting support, including details about RADIUS accounting.
HDR Resource Guide	Contains information about the Oracle Enterprise Session Border Controller's Historical Data Recording (HDR) feature. This guide includes HDR configuration and system-wide statistical information.
Administrative Security Essentials	Contains information about the Oracle Enterprise Session Border Controller's support for its Administrative Security license.
Security Guide	Contains information about security considerations and best practices from a network and application security perspective for the Oracle Enterprise Session Border Controller family of products.

Revision History

The following table describes updates to this guide.

September 2016	Initial Release
November 2016	Adds the following Known Issue • Redundancy Configuration Adds the following Caveats • Packet trace • Session Replication Recording • Source-based Routing • SPL Headers for SIP Metadata • SRTP- Hold and resume SRTP calls
December 2016	Adds the following Caveat • SSH
March 2017	• Updates the supported FPGA version to 2.22 and removes the **show qos** command from the "QoS NIU Version Requirement for Acme Packet 3820 and Acme Packet 4500" section.
April 2017	• Adds the note about Web GUI support to the Platform Bootloaders topic.
May 2017	• Adds the following note: Online, HA upgrades on VM-based systems are not supported between E-C[XZ]6.x.x and E-CZ7.x.x releases. to Supported Platforms section.
October 2017	Adds the following Caveat • Interface Utilization Support
March 2018	Adds the following Caveat • Comm Monitor

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Oracle Enterprise Session Border Controller Description

The Oracle Enterprise Session Border Controller (E-SBC) connects disparate Internet Protocol (IP) communications networks while mitigating security threats, curing interoperability problems, and ensuring reliable communications. The E-SBC protects and controls real-time voice, video, and Unified Communications (UC) as they traverse IP network borders.

Overview

Available in software and appliance configurations, the E-SBC is highly scalable and includes an industry-leading feature set.

- Strong security. As the E-SBC protects IP telephony and UC infrastructure, services, and applications, it also ensures confidentiality, integrity, and availability. The E-SBC protects against fraud, service theft, malicious attacks, system overloads, and other events that affect service.
- Easy interoperability. The E-SBC provides extensive signaling and media control features to help businesses overcome interoperability challenges that commonly occur when interfacing with public IP network services. The E-SBC also performs protocol interworking and dial plan management for integration with legacy systems.
- Assured reliability. The E-SBC ensures Public Switched Telephone Networks (PSTN)-like availability and service quality for IP communications. The E-SBC enforces service quality, balances loads across trunks, and reroutes sessions around interface disruptions to optimize network performance, circumvents equipment and facility problems, and ensures business continuity.

Functions and Modes

Businesses install the E-SBC at Session Initiation Protocol (SIP) network borders, where enterprise communications systems interface with public network services and where disparate multi-vendor systems must be managed.

Customers use the E-SBC to:

- Connect to SIP trunking services and the Internet
- Access communications services
- Communicate securely with remote workers
- Manage sessions across a multi-vendor UC environment
- Connect contact center locations and Business Process Outsourcing (BPO) services

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Supported Platforms

The following platforms support the E-CZ7.3.0 release.

- Oracle Hardware Platforms: Acme Packet 1100, Acme Packet 3820, Acme Packet 4500, Acme Packet 4600, and Acme Packet 6300
- Virtual Platforms: VMWare 5.5 ESXi Hypervisor

Release Image File Names

Use the following files for a new deployment.

Oracle Hardware

- Image:
  - Use nnECZ730.64.bz for the Acme Packet 1100, the Acme Packet 4500, Acme Packet 4600, and the Acme Packet 6300 for new installations and for upgrades.
  - Use nnECZ730.32.bz for the Acme Packet 3820.
- Boot loader: November 2013 or newer

Virtual Machines

- VMWare: nnECZ730.64-img-bin_vmware.ova

> **Note:**
>
> Online, HA upgrades on VM-based systems are not supported between E-C[XZ]6.x.x and E-CZ7.x.x releases.

Upgrade Image File Names

Use the following files to upgrade virtual machine deployments.

- Image: nnECZ730.64.bz
- Boot loader: nnECZ730.64.boot

CPU Support for the Acme Packet 3820 and Acme Packet 4500

Note the following requirements for CPU support on the Acme Packet 3820 and the Acme Packet 4500.

- The system supports the following versions for the 32-bit Acme Packet 3820.

Board Revision	Minimum Version
3	v3.13
4	v4.03

- The system supports only the 64-bit CPU2 on the Acme Packet 4500, and only CPU revision MOD-0026-xx. The system does not support CPU revision MOD-0008-xx.

Board Revision	Minimum Version
3	v3.18
4	v4.10

- An Acme Packet 3820 older than August 2009 with a revision lower than 3.08 requires a BIOS update.

Platform Boot Loaders

Oracle Enterprise Session Border Controller (E-SBC) platforms require a boot loader to load the operating system and software.

Stage 1 and Stage 2 Boot Loaders

Stage 1 and Stage 2 boot loaders on the nn4500 and the nn3820 must not be dated any earlier than July 3, 2013 (MOS patch #1815632). From the command line, use the **show version boot** command to view the boot loader version.

> **Note:**
>
> Network booting for release 7.x by way of FTP and TFTP on the nn4500 and the nn3820 requires the November 2013 or later boot loader.

Stage 3 Boot Loader

All platforms require the Stage 3 boot loader. Every new software release contains a system software image and a Stage 3 boot loader. When you plan to upgrade your system image, upgrade the Stage 3 boot loader before booting the new system image.

The boot loader file name corresponds to the software image filename. For example, if the software image filename is nnECZ730.64.bz, the corresponding Stage 3 boot loader filename is nnECZ730.boot. The boot loader file must be installed as /boot/bootloader on the target system.

The Stage 3 boot loader is compatible with previous releases.

> **Note:**
>
> The E-SBC does not support loading the boot loader by way of the Web GUI.

NIU and Feature Group Requirements

The following tables list the feature groups for all hardware and virutal platforms that require a specific Network Interface Unit (NIU).

Table 2-1 Acme Packet 1100 NIU and Feature Group Support Matrix

NIU	IPSec	SRTP	QoS	Transcoding	ISDN PRI
Acme Packet 1100 Ethernet interface	✗	✓	✓	✓ (requires transcoding module)	✗
Acme Packet 1100 TDM interface	Not applicable	Not applicable	Not applicable	Not applicable	✓

Table 2-2 Acme Packet 3820 NIU and Feature Group Support Matrix

NIU	IPSec	SRTP	QoS	Transcoding
Clear (RJ45)	✗	✗	✗	✗
Clear (SFP)	✗	✗	✗	✗
ETCv1 *	✓	✓	✓	✗
ETCv2	✓	✓	✓	✗
Encryption	✗	✗	✗	✗
QoS	✗	✗	✓ **	✗
Encryption & QoS	✗	✗	✓ **	✗
Transcoding	✗	✗	✓ ***	✓

Table 2-3 Acme Packet 4500 NIU and Feature Group Support Matrix

NIU	IPSec	SRTP	QoS	Transcoding
Clear (RJ45)	✗	✗	✗	✗
Clear (SFP)	✗	✗	✗	✗
ETCv1 *	✓	✓	✓	✗
ETCv2	✓	✓	✓	✗
Encryption	✗	✗	✗	✗
QoS	✗	✗	✓ **	✗
Encryption & QoS	✗	✗	✓ **	✗
Transcoding	✗	✗	✓ ***	✓

Table 2-4 Acme Packet 4600 NIU and Feature Group Support Matrix

NIU	IPSec	SRTP	QoS	Transcoding
4x1Gig or 2x10Gig NIU	✓	✓	✓	✓ (requires transcoding module)

Table 2-5 Acme Packet 6300 NIU and Feature Group Support Matrix

NIU	IPSec	SRTP	QoS	Transcoding
2x10Gig NIU	✓	✓	✓	with transcode NIU
Transcode NIU	✗	✗	✗	✓

Table 2-6 Virtual Machine and Feature Group Support Matrix

	IPSec	SRTP	QoS	Transcoding
Virtual Machine	✗	✓	✓	✓ (G729, PCMU, PCMA)

Footnotes

- * The system does not support an ETCv1 Card with 4GB RAM. This NIU is identified by a revision lower than 2.09. Use the **show prom-info phy** command and see the ETC NIU **Functionalrev** attribute to confirm compatibility.
- ** IPv4, only.
- *** IPv4, only. Non-transcoded calls, only.
- **** Limited codec support. G711u, G711a, G729

QoS NIU Version Requirement for Acme Packet 3820 and Acme Packet 4500

A Network Interface Unit (NIU) that supports the Quality of Service (QoS) feature group on the Acme Packet 3820 and the Acme Packet 4500, except the two Enhanced Traffic Control (ETC) cards, requires QoS Field Programmable Gate Array (FPGA) revision 2.22 for the E-CZ7.3.0 release. The *Acme Packet 4500/3820 V2.22 QOS FPGA Upgrade 24369382* image is available at My Oracle Support, https://support.oracle.com/, with a customer account.

Supported SPL Engines

Each release supports a number of versions of the SBC Programming Language (SPL) engine, which is required to run SPL plug-ins on the Oracle Enterprise Session Border Controller (E-SBC).

This release supports the following versions of the SPL engine.

- C2.0.0
- C2.0.1
- C2.0.2
- C2.0.9
- C2.1.0
- C2.1.1
- C2.2.0

- C2.2.1
- C2.3.1
- C3.0.0
- C3.0.1
- C3.0.2
- C3.0.3
- C3.0.4
- C3.0.6
- C3.0.7
- C3.1.0
- C3.1.1
- C3.1.2
- C3.1.3
- C3.1.4
- C3.1.5
- C3.1.6

Use the `show spl` command to see the version of the SPL engine running on the E-SBC.

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Inherited Features

The following features were first available in the E-C[xz]6.4.0M4 release and in the E-C[xz]6.4.0M5 release, but were not included in the E-CZ7.2.0 release. These features are new to the E-C7.3.0 release compared to the E-C7.2.0 release.

For more information, see the noted documentation.

E-CZ6.4.0M4

- TCP/FIN failover for Avaya clients. See the ACLI Configuration Guide > Session Plug-In Language chapter.
- Avaya attended transfer support. See the ACLI Configuration Guide > Session Plug-In Language chapter.
- SRTP re-key on re-INVITE. See the ACLI Configuration Guide > Security chapter.

E-CZ6.4.0M5

- Administrative Security License. See the ACLI Configuration Guide > Getting Started chapter.
- SIP hold-refer-reinvite. See the ACLI Configuration Guide > SIP Signalling chapter and the Web GUI User Guide > Configuration chapter > Expert Mode Workspace section > Session Router Configuration section.

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New Features and Enhancements

The baseline for the E-CZ730 release is the E-CZ720 GA release. The E-CZ730 release includes the following enhancements and features.

- Acme Packet 4600. Adds support for the new Acme Packet 4600 hardware platform.
- Bidirectional Time Division Multiplexing (TDM). Adds support for incoming calls to facilitate both inbound and outbound communications on the TDM interface.
- H.323-SIP source call address passthrough. Adds support to pass the sourceCallSignalAddress IE information through the Interworking Function (IWF).
- SIP hold-refer-reinvite. Adds the SIP hold-refer-reinvite parameter to REFER with Replaces.
- SRTP and Transcoding.
- Virtual Machine Edition capacity enhancement.
- Web GUI Enhancements. Adds enhancements to the look and operation of the Web GUI, plus the following functions:
  - Force an HA switch over
  - Obtain support information
  - Set a license serial number
  - Set the logon banner text
  - Set the session entitlement limit
  - TACACS+ authentication

Acme Packet 4600

Oracle Communications introduces the Acme Packet 4600 hardware platform for E-CZ7.3.0.

The Acme Packet 4600 supports the Oracle Enterprise Session Border Controller. This platform is based on the Acme Packet 6300 architecture and features encryption and transcoding in a single system. Transcoding functionality can utilize up to twelve transcoding modules on the NIU. The encryption feature set relies on the SSM3 encryption module. The Acme Packet 4600 platform runs the 64-bit software image exclusively.

The NIU provides six media ports (for example, 4 x GbE and 2 x 10GbE) on a single NIU card. Simultaneous operations of the GbE and 10GbE media ports is unsupported.

The Acme Packet 4600 contains an 80GB or 400GB internally mounted SSD memory drive. The system employs the same file system as the Acme Packet 6x.0.0 platform that runs the E-CZ7.3.0. series software. The mounted partitions include the /boot partition (2GB), the /code partition (2GB) and the /opt partition. The /opt partition is intended for core dumps, log files, and CDRs.

The Acme Packet 4600 has five cooling fans mounted of the front on the chassis to maintain proper operating temperature. The chassis contains 1:1 fully redundant AC and DC power

supplies and load share when both are powered on. The two power supplies also have integrated fans.

The Acme Packet 4600 FRU list consists of the following:

- Acme Packet 4600 Chassis w/Mainboard
- Acme Packet 4600 NIU
- Transcoding Module
- Signaling Security Module (a.k.a. Encryption SSM3)
- Solid State Drive (80GB SSD or 400GB SSD)
- AC-input 1100-watt Power Supply w/cabling
- DC-input 1100-watt Power Supply w/cabling
- Fan Pod
- System Air Filter
- SFP Module (1 GbE)
- SFP+ Module (10GbE)

Bidirectional TDM

The Oracle Enterprise Session Border Controller (E-SBC) ECZ730 release adds support for inbound Time Division Multiplexing (TDM) calls to the existing outbound support to allow bidirectional TDM operations.

The TDM card always supports bidirectional calls, but you can configure TDM for unidirectional operations. When only outbound TDM operations are configured, the system will provide an error message when it receives an inbound call. If only inbound TDM operations are configured, the system will not generate an outbound call.

Configuring TDM for bidirectional operations requires configuring both an inbound TDM local policy and an outbound local TDM policy.

If you configured outbound TDM in a previous release, you can upgrade with no effect on the previous configuration. If you upgrade and you want to add inbound TDM, you need only to create the local TDM policy for inbound TDM calls.

The following parameters are added to the TDM profile.

- Signalling. The default is pri_cpe.
  - Choose pri_cpe if you want TDM to use an external clock.
  - Choose pri_net if you want TDM to use an internal clock.
- Echo cancellation. The default is enabled. You can disable this parameter.

You can configure the inbound and outbound TDM local policies from the ACLI command line and from the Web GUI in either Basic mode or Expert mode. See the ACLI Configuration Guide, the Web GUI User Guide, and the Web GUI Help for instructions.

TDM is an option supported on the Acme Packet 1100 and it requires the TDM card.

H.323-SIP Source Call Address Passthrough

For FCC auditing requirements, the Oracle Enterprise Session Border Controller (E-SBC) can provide the originating IP address of endpoints using the Video Relay Service (VRS) service.

Because the FCC also requires h.323 for all calls between VRS vendors, the E-SBC passes the IP address and port information in the h.225 sourceCallSignalAddress through the h.323 Inter-working Function (IWF) function. You can extract the information from a SIP header parameter in the SIP message. You can use any SIP header parameter.

The SIP INVITE message includes a new header type called h225SourceCallSignalAddress. For example:

```
INVITE sip:1000@192.168.38.2:5060 SIP/2.0
Via: SIP/2.0/UDP 192.168.38.0:5060;branch=z9hG4bK55gtsj3018lfr5etc7e1.1
Contact: "2000"<sip:2000@192.168.38.0:5060;transport=udp>
Supported: 100rel
From: "2000"<sip:2000@192.168.38.0:5060>;tag=5435c12f000e2e7b
To: <sip:1000@192.168.38.2:5060>
Call-ID: 00000100007f13ce5435c12f000ddcc4@127.0.0.1
h225SourceCallSignalAddress: 172.16.38.5:10005   <--New header type.
CSeq: 2 INVITE
Content-Length: 126
Content-Type: application/sdp
Max-Forwards: 70

v=0
o=IWF 1 1 IN IP4 192.168.38.0
s=H323 Call
c=IN IP4 192.168.38.0
t=0 0
m=audio 10000 RTP/AVP 0
a=rtpmap:0 PCMU/8000
```

You must enable and configure the **h225SourceCallSignalAddress** parameter on the E-SBC to perform IWF operations. You can enable and configure this parameter from the ACLI command line or from the Web GUI in Expert mode.

SRTP and Transcoding

Secure Real Time Transport Protocol (SRTP) allows secure media transmission. Transcoding is the ability to convert between media streams that are based upon different codecs. The Oracle Enterprise Session Border Controller supports IP-to-IP transcoding for SIP sessions and can connect two voice streams that use different coding algorithms with one another. Both SRTP

and transcoding are available in the same call. This feature is not available on the Acme Packet 3820 or Acme Packet 4500 platforms.

As of this release of the software, SRTP and transcoding may be combined for the same call. This behavior is available by default and no extra configuration is required.

Virtual Machine Edition Enhancement

The ova file includes a VM configuration that allows the Virtual Machine Edition (VME) to run at the following maximum capacities.

- 1, 000 sessions (media anchored)
- 1,000 SRTP call legs
- 100 G.711<->729 transcode sessions

Web GUI Enhancements

The E-CZ7.3.0 release adds the following enhancements to the Web GUI.

- Authentication. Adds TACACS+ authentication to the list of supported types in the authentication object configuration in Expert mode.
- Banner. Displays only the **Notifications** button and the **<user name>** button.
- Configuration
  - Adds support to configure inbound Time Division Multiplexing (TDM) in Basic mode.
  - Adds support to launch a text display of the sub-objects related to a configuration element in Expert mode. A configuration element that contains sub-objects displays the **Show configuration** button on the corresponding Edit configuration page.
  - Adds support in Expert mode so that when you click a cell in the Realm ID column in a table the system displays the realm configuration.
- Logon page. Updates the appearance.
- Monitor and Trace
  - Adds support in Expert mode to view the corresponding Realm Configuration when you click a cell in the Realm ID column in a table.
  - Adds support for the system to perform live paging from tables.
- Notifications. Adds alarms to **Notifications**.
- Stats Portal. Moves the display of Stats Portal data from the Home page to the Widgets tab.
- System tab
  - Adds the Force HA switchover page. Use **Switch to standby** to switch from the primary to the secondary.
  - Adds the Support information page. Use **Support information** to generate a file that you can save and send to Oracle Customer Support to help troubleshoot the system.
  - Changes the File management drop down list. Removes the SIP Trunk Express bootstrap file type.

Widgets

- Adds Display alarms
- Adds Show configuration
- Adds Show health
- Adds Show users

Wizards

- Adds the Wizards button to the Configuration page on the Web GUI.
- Adds Set entitlement limit
- Adds Set license serial number
- Adds Set logon banner text

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Known Issues

The following list describes known issues in the E-CZ7.3.0 release.

File Systems

For users with AP3820 and AP4500 systems with a hard-disk, an upgrade from pre-E-CZ7.1.0 software to this version will not change the hard drive's filesystem from FAT-32 to ext3 to preserve any existing data. This results in the SFTP application not providing the expected filesystem user security. To rectify this, reformat the system's hard-disk.

> **Note:**
>
> By reformatting the hard-disk, you will lose the contents of /opt and any other user-created partitions located under /mnt.

H.323

HA Redundancy is not supported for H.323 calls.

IPSec

When the security-association configuration element is configured as an IPv6 SA, it is not RTC enabled.

The **transport-protocols** parameter in **security-policy** configuration element is set to the default of all, regardless of configuration.

RFC2833 to UII Inter-working

SIP-H323 hairpin calls with DTMF tone indication inter-working are not supported.

SIP-KPML

SIP-KPML to RFC 2833 conversion for DTMF events is not supported in this release.

SIP Over TCP

No more than 500 SIP Interfaces with SIP over TCP are supported.

Subnet Configuration

Do not configure media and management (wancom) interfaces with the same subnet, regardless of VLAN.

Redundancy Configuration

Do not use the 169.254.16.x or 169.254.21.x networks in the redundancy-config of the Oracle SBC (including the network-interface configuration for the wancom1 and wancom2 interfaces) when installed on an Acme Packet platform that includes a transcoding card. The system uses

these networks to provide software to transcoding DSPs. When the user configures the redundancy configuration with these networks, the system fails to route this software properly.

Workaround: Choose any available network for redundancy other than 169.254.16.x or 169.254.21.x. Note that user documentation describes redundancy configuration using the 169.254.1.x/16 network, which works properly with transcoding cards.

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Caveats

The following notes explain cautionary details to consider when using the E-CZ7.3.0 release.

Interface Utilization Support

The Interface Utilization: Graceful Call Control, Monitoring, and Fault Management feature is unsupported in this release.

Archive Logs

Archiving log files is unsupported on AP3820 and AP4500 platforms without a HDD installed.

DTMF Interworking

RFC 2833 interworking with H.323 is unsupported.

SIP-KPML to RFC2833 conversion is not supported for transcoded calls.

Fragmented Ping Support

The Oracle Enterprise Session Border Controller does not respond to inbound fragmented ping packets.

FTP Support

The Oracle Enterprise Session Border Controller's FTP Server is deprecated. Only SFTP server services are supported.

FTP Client access for features such as HDR/CDR push remains.

H.323 Signaling Support

If H.323 and SIP traffic are run in system, each protocol (SIP, H.323) should be configured in its own separate realm.

High Availability

When the AP6300 experiences call rates over 650 CPS, SIP and/or MBCD may fail to synchronize.

HMR action on Call-ID

HMR operations on the Call-ID: header are deprecated.

LDAP Support

The Acme Packet 6300 does not support LDAP.

Log File Download Error

When you attempt to download too many log files from the Web GUI at one time, the system may display an error message because the Oracle Enterprise Session Border Controller does not have enough storage space for compressing the logs. The work around is to download the log

files in smaller chunks. Oracle recommends that you delete all log files after they are downloaded.

Media Hairpinning

Media hairpinning is not supported for hair-pin/spiral call flows involving both H.323 and SIP protocols.

Media Playback

The system does not support using the Media Playback feature in conjunction with the SIPREC feature.

MGCP Signaling Support

MGCP Signaling is not supported in this release.

Minimum EOM Version

For large TCP packets, the minimum required version for Enterprise Operations Monitor (EOM) is 3.3.70.

Comm Monitor

Problem: When running SIP Monitor & Trace and Comm-Monitor simultaneously, while the system is passing TLS over TCP calls on a system with high load, the ESBC may fall-over and not reboot. The issue affects all platforms.

Workaround: Run SIP Monitor & Trace or Comm-Monitor individually, not simultaneously.

Packet Trace

- Output from the packet trace local feature on hardware platforms running this software version may display invalid MAC addresses for signaling packets.
- Do not run packet trace simultaneously with other Oracle Enterprise Session Border Controller replication features, such as LI, SRS, SIP Monitoring and Trace, and Call Recording. These features may interfere with each other, corrupting each one's results.

Phy Link Redundancy

Phy link redundancy is not supported in this release.

Physical Interface and Network Interface RTC Support

After changing any Physical Interface configuration, a system reboot is required.

RTCP Generation

RTCP generation is not supported in this release.

SCTP

SCTP Multihoming is not supported in this release.

Session Replication for Recording

Session Replication for Recording is not supported in this release. Note that the configuration continues to display the "call-recording-server-id" parameter, which Oracle recommends that you do not attempt to use. Enabling this parameter prevents successful TCP connections.

SSH

Do not use Secure Shell (SSH) to connect to the Oracle Enterprise Session Border Controller with the ECZ7.3.0m2p3 release. Using SSH can result in loss of access to the standby system. Use a console connection or Telnet.

SIP hold-refer-reinvite

The SIP hold-refer-reinvite function is unresponsive on multi-core devices, such as the Acme Packet 4600 and the Acme Packet 6300. The work around is to add the new parameter in the following procedure to system-config on the Acme Packet 4600 and the Acme Packet 6300.

1. From the ACLI, go to **configure terminal** > **system** > **system-config**.
2. For the **Options** attribute, type **sip_threads=1**, and press ENTER.
3. Save and activate the configuration.

Source-based Routing

The source routing feature as configured by system-config --> source-routing is deprecated. Please review the HIP information in the Network Interface section in the System Configuration chapter of the ACLI Configuration guide for background of accessing SBC Administrative Applications over media Interfaces.

SPL Extension Headers

The first time you create the SPL extension header list, you need only to save and activate the configuration for the list to take effect. When you modify the existing SPL extension header list you need to save and activate the configuration, and reboot the system for the changes to take effect. Real Time Configuration (RTC) does not apply to the header extension option.

SRTP Caveats

MIKEY key negotiation is not supported.

The ARIA cipher is not supported.

Linksys SRTP is not supported.

For hold and resume SRTP calls, if the rollover counter increments, upon a subsequent hold and resume action without an SRTP rekey or SSRC change an SRTP rekey, the media portion of the call will be lost. This Caveat only applies to systems running Encryption or QoS & Encryption NIUs.

T.38 Fax Transcoding

T.38 Fax transcoding available for G711 only at 10ms, 20ms, 30ms ptimes.

Transcoding - general

Only SIP signaling is supported with transcoding.

Codec policies can only be used with realms associated with SIP signaling.

Transcoding is not available in conjunction with SRTP on the Acme Packet 3820 and the Acme Packet 4500.

QoS is not supported for transcoded calls.

SIPREC may not be performed on a transcoded call.

Web GUI and IPv4-IPv6 Support

The Web GUI supports only IPv4.