Oracle[®] Communications EAGLE

Release Notes Release 46.4 E79794 Revision 2

April 2017



Oracle Communications EAGLE Release Notes, Release 46.4

Copyright [©] 1993, 2017, Oracle and/or its affiliates. All rights reserved.

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish, or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

If this is software or related documentation that is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, then the following notice is applicable:

U.S. GOVERNMENT END USERS: Oracle programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, delivered to U.S. Government end users are "commercial computer software" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, use, duplication, disclosure, modification, and adaptation of the programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, shall be subject to license terms and license restrictions applicable to the programs. No other rights are granted to the U.S. Government.

This software or hardware is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications that may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Intel and Intel Xeon are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. AMD, Opteron, the AMD logo, and the AMD Opteron logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group.

This software or hardware and documentation may provide access to or information about content, products, and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services unless otherwise set forth in an applicable agreement between you and Oracle. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services, except as set forth in an applicable agreement between you and Oracle.

Table of Contents

| r | ••••••• |
|---|------------------------------------|
| Chapter 2: Feature Descriptions | 8 |
| DEIR on SLIC Network Redundancy Enhancement | 9 |
| Hardware | 9 |
| Limitations | 9 |
| End Support for 1GB IMT Cable | 9 |
| Increase IPSG TPS [10k] on SLIC | |
| Commands | |
| Support SCCP on SLIC | |
| Increase the number of entries in Vendor Prefix table | 10 |
| Commands | 10 |
| Enhancement Bugs | 11 |
| Operational Changes | 11 |
| Error Messages | 11 |
| EAGLE Configuration Table Data Reports | 13 |
| · · | |
| Chapter 3. Media and Documentation | 14 |
| Chapter 3: Media and Documentation | 14 |
| Chapter 3: Media and Documentation Media Pack | 14 15 |
| Chapter 3: Media and Documentation Media Pack Documentation Pack | 14 |
| Chapter 3: Media and Documentation Media Pack Documentation Pack Chapter 4: Supported Hardware Baseline | 14 15 15 16 |
| Chapter 3: Media and Documentation Media Pack Documentation Pack Chapter 4: Supported Hardware Baseline EAGLE Card Overview | 14 |
| Chapter 3: Media and Documentation Media Pack Documentation Pack Chapter 4: Supported Hardware Baseline EAGLE Card Overview Hardware Baseline | 14 |
| Chapter 3: Media and Documentation Media Pack Documentation Pack Chapter 4: Supported Hardware Baseline EAGLE Card Overview Hardware Baseline Chapter 5: Upgrade Paths | 14 |
| Chapter 3: Media and Documentation Media Pack Documentation Pack Chapter 4: Supported Hardware Baseline EAGLE Card Overview Hardware Baseline Upgrade Path | 14 |
| Chapter 3: Media and Documentation Media Pack Documentation Pack Chapter 4: Supported Hardware Baseline EAGLE Card Overview Hardware Baseline Chapter 5: Upgrade Paths Upgrade Path Generic Program Loads | 14 |
| Chapter 3: Media and Documentation | 14 |
| Chapter 3: Media and Documentation Media Pack Documentation Pack Chapter 4: Supported Hardware Baseline EAGLE Card Overview Hardware Baseline Chapter 5: Upgrade Paths Upgrade Path Generic Program Loads Chapter 6: Product Compatibility | |

| Chapter 7: Resolved and Known Bugs | 30 |
|--|----|
| Severity Definitions | 31 |
| Resolved Bug Listing | 31 |
| Customer Known Bug Listing | 35 |
| Chapter 8: Oracle References and Services | 51 |
| My Oracle Support (MOS) | |
| Emergency Response | |
| Customer Training | 53 |
| Locate Product Documentation on the Oracle Help Center Site | 53 |
| Locate Product Release Software on the Oracle Software Delivery Cloud Site | 53 |
| Appendix A: Firmware Components | 55 |

| E79794 Revision 2, April 2017 |
|-------------------------------|
|-------------------------------|

List of Figures

| Figure 1: Network Redundancy Model Using SLIC |
|---|
|---|

List of Tables

| Table 1: EAGLE 46.4 Enhancement Bugs | 11 |
|---|----|
| Table 2: Error Messages for Increase IPSG Connections | 12 |
| Table 3: Error Messages for Network Redundancy Enhancement on SLIC | 12 |
| Table 4: Error Messages: Non-Feature Related | 12 |
| Table 5: Media Pack Contents | 15 |
| Table 6: Documentation Pack Contents | 15 |
| Table 7: EAGLE Card Overview Table | 17 |
| Table 8: Hardware Baseline Table | 21 |
| Table 9: EAGLE 46.4 Upgrade Path | 26 |
| Table 10: GPLs | 26 |
| Table 11: EAGLE 46.4 Compatibility with Other Related Products | 29 |
| Table 12: EAGLE Release 46.4 Build 46.4.0.0.0-69.19.0 Resolved Bugs (Dec. 2016) | 32 |
| Table 13: EAGLE Release 46.4 Customer Known Bugs (Dec. 2016) | 35 |

Introduction

This Release Notes includes Feature Descriptions, supported Hardware Baseline, Media and Documentation pack contents and identifies the Supported Upgrade Paths. This document also includes listings of both the Resolved and Known Bugs for this Release. Directions for accessing key Oracle sites and Services are also identified in the *Oracle References and Services* chapter.

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

Feature Descriptions

Topics:

- DEIR on SLIC Network Redundancy Enhancement9
- End Support for 1GB IMT Cable9
- Increase IPSG TPS [10k] on SLIC10
- Support SCCP on SLIC10
- Increase the number of entries in Vendor Prefix table10
- Enhancement Bugs.....11
- Operational Changes.....11

This Release delivers the following features:

- DEIR on SLIC Network Redundancy Enhancement
- End Support for 1GB IMT Cable
- Increase IPSG TPS [10k] on SLIC
- Support SCCP on SLIC

DEIR on SLIC Network Redundancy Enhancement

This feature implements SCTP Multi-homing to provide network redundancy for the EAGLE Diameter EIR feature executing on SLIC. SCTP multi-homing provides a level of fault tolerance against network failures by using alternate paths through the IP network between two endpoints.

Prior to EAGLE 46.4, the Diameter EIR application architecture only used a single network connection to the ExAP and a single connection to the client. *Figure 1: Network Redundancy Model Using SLIC* shows the SLIC Network Redundancy model introduced in EAGLE 46.4:



Figure 1: Network Redundancy Model Using SLIC

Hardware

The EAGLE supports the Diameter EIR redundancy enhancement on the SLIC card.

Limitations

A maximum of 16 SLIC cards running the Diameter EIR feature on SLIC is allowed.

End Support for 1GB IMT Cable

As of Release 46.4, EAGLE no longer supports the 1GB IMT cable. Customers are required to install 2.5GB cables and HIPR2 cards prior to upgrading to EAGLE 46.4.

Steps must be followed to ensure the cables have been properly installed. See "Cabling" in *Hardware Reference* and "Activating the HIPR2 High Rate Mode Feature" in *Database Administration - System Management* for more information.

Increase IPSG TPS [10k] on SLIC

This feature increases the TPS for IPSG on SLIC to 10K with IPSG High Throughput turned OFF.

Note: If IPSG High Throughput is turn ON for SLIC hardware, the hardware will not support rates exceeding 10K.

Commands

The following existing commands are modified to support the Increase IPSG TPS [10k] on SLIC feature:

- chg-card
- ent-card
- rept-stat-card
- rtrv-card
- rtrv-stp

See Commands User's Guide for more enhancement information.

Support SCCP on SLIC

This feature ports SCCP capability (SCCP64 GPL) to SLIC to achieve 10k TPS.

Increase the number of entries in Vendor Prefix table

This feature increases the number of Vendor Prefixes from 32 to 128. This results in the Vendor number range in the Vendor ID Table increasing from 32 to 128.

This feature supports the GSM MAP SRI Redirect feature. See *G-Port - User's Guide* for more information on the GSM MAP SRI Redirect to Serving HLR feature.

Commands

The following existing commands are modified to support the Increase the number of entries in Vendor Prefix table feature:

- chg-prefix
- dlt-prefix
- ent-vendid
- rtrv-vendid

See Commands User's Guide for more enhancement information.

Enhancement Bugs

EAGLE 46.4 supports the following enhancement Bugs:

Table 1: EAGLE 46.4 Enhancement Bugs

| Bug # and Title | Description |
|--|--|
| 20881314 Port ENUM Processing to SLIC | Ports ENUM Mobile Number Portability and Tier One Address Resolution feature capability to SLIC. |
| 20881333 Port EIR Processing to SLIC | Ports EIR processing to SLIC for the S13/S13' EIR feature only. |
| 20881363 Port SIP NP Query Processing to SLIC | Ports SIP-based NP queries capability to SLIC. |
| 20881460 Port IPSHC GPL to SLIC | Ports the IP User Interface capability (IPSHC GPL) to SLIC. |
| 21224035 ENUM NP support for E2U+SIP | ENUM supports the E2U+SIP service type. |
| 22234964 Port SLANHC to SLIC | Ports STPLAN capability (SLANHC GPL) to SLIC. |
| 22234942 Port MCPHC to SLIC | Ports the Measurements Platform capability (MCPHC GPL) to SLIC. |
| 22234955 Port ERTHC to SLIC | Ports E5-STC capability (ERTHC GPL) to SLIC. |

Operational Changes

EAGLE Release 46.4 contains new and updated error messages.

Error Messages

Error Messages for Increase IPSG Connections

New and modified error codes to support the Increase IPSG Connections feature are listed in *Table 2: Error Messages for Increase IPSG Connections*:

Feature Descriptions

| Response ID Code | Error Message | Used by Command | | |
|---------------------|-----------------------------------|---------------------------|--|--|
| E3494 | Link is invalid for card location | chg-card dlt/ent-slk | | |
| E4093 | Too many associations per card | chg-card chg/ent-assoc | | |

Table 2: Error Messages for Increase IPSG Connections

Error Messages for Network Redundancy Enhancement on SLIC

New and modified error codes to support the Network Redundancy Enhancement on SLIC feature are listed in *Table 3: Error Messages for Network Redundancy Enhancement on SLIC*:

| Response ID Code | Error Message | Used by Command |
|---------------------|---|-----------------|
| E3537 | Card's all interface IP Networks must be unique | chg-ip-lnk |
| E3587 | Dest IPAddr can't be local to any of the n/w on the card | ent-ip-rte |
| E3589 | Specified cards interface IP Address must be assigned | ent-ip-rte |
| E3595 | Def Router IP Addr must be local to this cards any network | chg-ip-card |
| E3792 | Gtwy IPAddr must be local to any one of the n/w on the card | ent-ip-rte |
| E4065 | Application Sockets on Port B Not Allowed | chg-ip-lnk |

| Table 3: Error | Messages | for Network | Redundancy | Enhancement | on SLIC |
|----------------|----------|--------------|---------------|-------------|---------|
| Tuble 0. Liloi | meduged | 101 I CONDIN | iteautiauticy | Linuncement | on one |

Error Messages: Non-Feature Related

New and modified error codes not related to features are listed in *Table 4: Error Messages: Non-Feature Related*:

Table 4: Error Messages: Non-Feature Related

| Response ID Code | Error Message | Used by Command | | | | |
|---------------------|---|------------------|--|--|--|--|
| E3510 | EPMA/SM4G card not supported for this feature | enable-ctrl-feat | | | | |

EAGLE Configuration Table Data Reports

No new command parameters were added for this release.

Media and Documentation

Topics:

- Media Pack.....15
- Documentation Pack.....15

Oracle Communications software is available for electronic download on the Oracle Software Delivery Cloud (OSDC). Documentation is delivered electronically on the Oracle Technology Network (OTN). Both the software Media Pack and the Documentation Pack are listed in this chapter.

Media Pack

All components available for download from the Oracle Software Delivery Cloud (*https://edelivery.oracle.com/*) are in *Table 5: Media Pack Contents*.

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

Table 5: Media Pack Contents

Name

Oracle Communications EAGLE (46.4.0.0.0), Tekelec

Note: Once the next release is available, EAGLE 46.4 will be removed from the OSDC.

Documentation Pack

All documents available for download from the Oracle Technology Network (OTN) site (*http://docs.oracle.com*) are listed in *Table 6: Documentation Pack Contents*.

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

Table 6: Documentation Pack Contents

Name

EAGLE Release 46.4 Documentation

Supported Hardware Baseline

Topics:

- EAGLE Card Overview.....17
- Hardware Baseline.....21

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

EAGLE Card Overview

The EAGLE Card Overview table is a resource table that provides an overview of information for cards that can be provisioned in the EAGLE. For a detailed description of supported hardware, see *Hardware Baseline*.

This table lists the following card information:

- Name of the card on the card label
- Card part number
- Provisioned card type
- Number of shelf slots that the card occupies (1 or 2)
- Number of physical ports on the card
- Maximum number of links that can be assigned to the card
- GPLs and applications that can run on the card

Table 7: EAGLE Card Overview Table

| Card Name as shown on card label | Part Number | Provisioned Card Type | Per Card Slots/Ports | | Per Card Slots/Ports | | Per Card Slots/Ports | | Per Card Slots/Ports | | Links per Card | Card GPLs | Card Applications |
|--|------------------------------|--------------------------|-------------------------|---------------|-------------------------|-----------------|------------------------------------|--|-------------------------|--|----------------------|--------------|----------------------|
| E5-APP-B | 870-3096-xx | e5appb | 2 | 4 | N/A | N/A | elap epap lsms nas imf | | | | | | |
| E5-ATM | 870-1872-01^ 870-1872-02^ | limatm lime1atm | 1 | 4 (3 used) | 3 | atmhc blixp | atmansi atmitu | | | | | | |
| E5-ATM-B | 870-2972-01 | limatm lime1atm | 1 | 4 (3 used) | 3 | atmhc blmcap | atmansi atmitu | | | | | | |
| | 870-1873-02 | lime1 limt1 | 1 | 8 | 32 | | ss7ansi ccs7itu | | | | | | |
| E5-E1T1++ | 870-1873-03^ 870-1873-04^ | lime1 (for SE-HSL) | 1 | 8 | 1 | ss7hc blixp | ccs7itu | | | | | | |
| | | limt1 (for ST-HSL-A) | 1 | 8 | 1 | | ss7ansi | | | | | | |
| E5-E1T1-B++ | 870-2970-01 | lime1 limt1 | 1 | 8 | 64 | ss7hc blmcap | ss7ansi ccs7itu | | | | | | |

| Card Name as shown on card label | Part Number | Provisioned Card Type | Per Card Slots/Ports | | Per Card Slots/Ports | | Per Card Slots/Ports | | Per Card Slots/Ports | | Per Card Slots/Ports | | Links per Card | Card GPLs | Card Applications |
|--|------------------------------|--------------------------|-------------------------|----------------------|-------------------------|------------------|-------------------------|--|-------------------------|--|-------------------------|--|----------------------|--------------|----------------------|
| | | lime1 (for SE-HSL) | 1 | 8 | 2 | | ccs7itu | | | | | | | | |
| | | limt1 (for ST-HSL-A) | 1 | 8 | 2 | | ss7ansi | | | | | | | | |
| | | | 1 | 2 | 16 | iplhc blixp | iplim iplimi | | | | | | | | |
| | 870-2212-02 | dcm | 1 | 2 | 1 | ipghc blixp | ss7ipgw ipgwi | | | | | | | | |
| E5-ENET | 870-2212-03^ 870-2212-04^ | | 1 | 2 | 2 IP Service | slanhc blixp | stplan | | | | | | | | |
| 8 | 870-2212-05^ | stc | 1 | 2 | 2 IP Service | erthc blixp | eroute | | | | | | | | |
| | | enet | 1 | 4 | 32 | ipsg blixp | ipsg | | | | | | | | |
| | | dcm | 1 | 2 | 16 | iplhc blmcap | iplim iplimi | | | | | | | | |
| | E5-ENET-B 870-2971-01 | | 1 | 2 | 1 | ipghc blmcap | ss7ipgw ipgwi | | | | | | | | |
| | | | 1 | 2 | 2 IP Service | slanhc blmcap | stplan | | | | | | | | |
| E5-ENET-B | | stc | 1 | 2 | 2 IP Service | erthc blmcap | eroute | | | | | | | | |
| | | enet enetb | 1 | 4 | 32 | ipsg blmcap | ipsg | | | | | | | | |
| | | ipsm | 1 | 2 (use only A) | 1 ipshc service | ipshc blmcap | ips | | | | | | | | |
| E5-IPSM | 870-2877-01^ 870-2877-02^ | ipsm | 1 | 2 (use only A) | 1 ipshc service | ipshc blixp | ips | | | | | | | | |

| Card Name as shown on card label | Part Number | Provisioned Card Type | Per Slots | Card /Ports | Links per Card | Card GPLs | Card Applications |
|--|--|--------------------------|--------------|----------------------|------------------------------------|--|----------------------|
| E5-MASP | >7346924 870-2903-01^ 870-2903-02^ 870-2903-03^ | N/A | 2 | 2 | N/A | oamhc blmcap | oam |
| E5-MCPM-B | 870-3089-01 | mcpm | 1 | 2 (use only A) | 1 IP service | mcphc blmcap | тср |
| E5-MDAL | ▶7346923◀ 870-2900-01^ | N/A | 2 | N/A | N/A | N/A | N/A |
| E5-SM4G† | 870-2860-01^ 870-2860-02^ | dsm | 2 | 2 | 2 IP Service | sccphc blixp | vsccp |
| E5-SM8G-B† | 870-2990-01 | dsm | 2 | 1 | 2 IP Service 16 TCP 1 UDP | deirhc (32 bit)/blmcap (32 bit) OR deir64 (64 bit)/bldc64 (64 bit) | deirhc |
| | | | 2 | 1 | 2 IP Service 16 TCP 1 UDP | enumhc (32 bit)/blmcap (32 bit) OR enum64 (64 bit)/bldc64 (64 bit) | enumhc |
| | | | 2 | 2 | 2 IP Service 16 TCP 1 UDP | sccphc (32 bit)/blmcap (32 bit) OR sccp64 (64 bit)/bldc64 (64 bit) | vsccp |

| Card Name as | Part Number | Provisioned | Per | Card | Links | Card | Card |
|------------------------|---|-----------------------|-------|--------|------------------------------------|--|--------------------|
| shown on card label | | Card Type | Slots | /Ports | per Card | GPLs | Applications |
| | | | 2 | 1 | 2 IP Service 16 TCP 1 UDP | siphc (32 bit)/blmcap (32 bit) OR sip64 (64 bit)/bldc64 (64 bit) | siphc |
| E5-TSM | 870-2943-03^ | tsm | 1 | N/A | N/A | glshc blixp | gls |
| HC-MIM++ | 870-2671-01 870-2671-02 | lime1 limt1 | 2 | 8 | 64 | ss7hc blixp | ss7ansi ccs7itu |
| | 870-2671-03^ | lime1 (for SE-HSL) | 2 | 8 | 2 | ыхр | ccs7itu |
| HIPR2 | 7333484 870-2872-01^ 870-2872-02^ | N/A | 1 | N/A | N/A | hipr2 | hipr2 |
| | | dsm | 1 | 4 | 2 IP service 16 STCP | deir64 blslc64††† | deirhc |
| | | | 1 | 2 | 2 IP service 1 UDP | enum64 blslc64††† | enumhc |
| SLIC | 7094646 | | 1 | 2 | 2 IP service 16 TCP 1 UDP | sccp64 blslc64††† | vsccp |
| | | | 1 | 2 | 2 IP Service 16 TCP 1 UDP | sip64 blslc64††† | siphc |
| | | enetb slic | 1 | 4 | 2 IP service | ipsg blslc32 | ipsg |

| Card Name as shown on card label | Part Number | Provisioned Card Type | Per (Slots | Card /Ports | Links per Card | Card GPLs | Card Applications |
|--|-------------|--------------------------|----------------|----------------|----------------------|-------------------|----------------------|
| | | | | | 32 SCTP | | |
| | | ipsm | 1 | 1 | 1 IP service | ipshc blslc32 | ips |
| | | stc | 1 | 2 | 2 IP service | erthc blslc32 | eroute |
| | | mcpm | 1 | 1 | 1 IP service | mcphc blslc32 | mcp |
| | | dcm | 1 | 2 | 2 IP service | slanhc blslc32 | stplan |

+E5-SM4G or E5-SM8G-B cards are required for the LNP, 50,000 GTT, or EPAP-related features. For more information about turning these features on, refer to the appropriate manual.

++For the E1 or T1 interface, an SS7 application (SS7ANSI or CCS7ITU) can be assigned to these cards.

For more information on the E1 or T1 interface go to Chapter 3 "System Administration Procedures" in *Database Administration - SS7 User's Guide*.

+++ If the card is not running the 64-bit flash GPL (blslc64), see "Conversion of SLIC Cards" in *Database Administration - System Management* to convert from the 32 to 64-bit flash GPL.

^This part number is the ROHS equivalent of the immediately preceding part number.

Hardware Baseline

The Hardware Baseline is shown in the following table:

| Component | Part Number | ROHS Number (if applicable) | Required for |
|-------------------------|-------------------|--------------------------------|------------------|
| Control Shelf | 870-2321-02 Rev A | 7335031 | Standard Frame |
| | 870-2321-04 Rev A | | |
| | 870-2377-01 Rev A | 870-2377-02 Rev A | Heavy Duty Frame |
| Control Shelf Backplane | 850-0330-06 Rev A | 7333412 | |

Table 8: Hardware Baseline Table

| Component | Part Number | ROHS Number (if applicable) | Required for |
|---------------------|----------------------|-----------------------------|------------------------------|
| Extension Shelf | 870-2378-01 Rev A | 7335033 | Heavy Duty Frame |
| | 870-0776-02 Rev C | | Standard Frame |
| | 870-0776-03 Rev D | | |
| | 870-0776-06 Rev A | | |
| | 870-0776-07 Rev A | | |
| | 870-0776-08 Rev A or | | |
| | 870-0776-11 Rev A | | |
| Air Management Card | 870-1824-01 Rev A | 870-1824-02 Rev A | Shelves with Fan Assembly |
| E5-APP-B | 870-3096-xx | | |
| E5-ATM | | 870-1872-01 Rev A | |
| | | 870-1872-02 Rev A | |
| E5-ATM-B | | 870-2972-01 Rev A | |
| E5-ATM Adapter | | 830-1342-05 | |
| E5-E1T1 | 870-1873-02 Rev A | 870-1873-03 Rev A | |
| | | 870-1873-04 Rev A | |
| E5-E1T1-B | | 870-2970-01 Rev A | |
| E5-ENET | 870-2212-02 Rev A | 870-2212-03 Rev A | |
| | | 870-2212-04 Rev A | |
| | | 870-2212-05 Rev A | |
| E5-ENET-B | | 870-2971-01 Rev A | |
| E5-IPSM | | 870-2877-01 Rev A | |
| | | 870-2877-02 Rev A | |
| E5-MASP | | ▶7346924◀ | |
| | | 870-2903-01 Rev C | |
| | | 870-2903-02 Rev A | |
| | | 870-2903-03 Rev A | |
| Е5-МСРМ-В | | 870-3089-01 Rev A | |
| E5-MDAL | | ▶7346923◀ | |
| | | 870-2900-01 Rev A | |
| E5-SM4G | | 870-2860-01 Rev F | |

| Component | Part Number | ROHS Number (if applicable) | Required for |
|-----------------------------------|----------------------|-----------------------------|---|
| | | 870-2860-02 Rev A | |
| E5-SM8G-B | | 870-2990-01 Rev A | |
| E5-TSM | | 870-2943-03 Rev A | |
| FAP | 870-1606-01 Rev A or | | Standard frame or standard frame with HC-MIMs |
| | 870-1606-02 Rev A | 870-1606-05 Rev A | |
| | 870-2320-01 Rev A | 870-2320-03 Rev A | Heavy duty frame or heavy duty frame with HC-MIMs |
| | 870-1823-01 Rev B | 870-2804-01 Rev B | |
| FAP-CF/EF | 870-0243-08 Rev C | | |
| FAP-MISC | 870-0243-09 Rev C | | |
| FAP Fuse and Alarm Panel | 870-2804-01 Rev A | | |
| Fast Copy Adapter Upper | | 830-1343-01 Rev A | |
| Fast Copy Adapter Lower | | 830-1343-02 Rev A | |
| HC-MIM | 870-2671-01 Rev P or | | |
| | 870-2671-02 Rev B | 870-2671-03 Rev A | |
| HIPR2 | | 7333484 | |
| | | 870-2872-01 Rev A | |
| | | 870-2872-02 Rev C | |
| SLIC | | 7094646 | |
| High-speed Fiber Channel Cable | | 830-1344-xx | |
| DC Frame Assembly | 890-1843-01 Rev C | 890-1843-02 Rev A | |
| In Heavy Duty Frame | 890-1801-01 Rev E | 890-1801-02 Rev A | |
| Kit E1 | 890-1037-01 Rev A | 890-1037-06 Rev A | |
| Kit, Holdover Clock Assy | 890-1013-01 Rev A | | |
| Fan Assy (Standard Frame) | 890-1038-01 Rev D | | |

Supported Hardware Baseline

| Component | Part Number | ROHS Number (if applicable) | Required for |
|------------------------|----------------------|--------------------------------|--------------|
| Fan Assy (Shelves with | 890-0001-01 Rev A or | 7315823 | |
| cards) | 890-0001-02 Rev A | | |

Upgrade Paths

Topics:

- *Upgrade Path.....26*
- Generic Program Loads26

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

Upgrade Path

The possible upgrade path to EAGLE 46.4 is listed in the following table:

Table 9: EAGLE 46.4 Upgrade Path

| From | То |
|--------------------|--------------------|
| EAGLE Release 46.3 | EAGLE Release 46.4 |

Note: Only one upgrade path will be supported from EAGLE 46.4.

Generic Program Loads

This section lists the latest Generic Program Loads (GPLs). When multiple builds are listed, GPL versions that changed from the previous build are in bold.

Table 10: GPLs

| GPL SYSTEM NAME | VERSION Build |
|-----------------|--------------------|
| | 46.4.0.0.0-69.19.0 |
| Date Available | Dec. 2016 |
| АТМНС | 139.19.0 |
| BLDC64 | 139.18.0 |
| BLIXP | 139.18.0 |
| BLMCAP | 139.18.0 |
| BLSLC32 | 139.18.0 |
| BLSLC64 | 139.18.0 |
| DEIR64 | 139.18.0 |
| DEIRHC | 139.19.0 |
| ENUM64 | 139.19.0 |
| ENUMHC | 139.19.0 |
| ERTHC | 139.19.0 |
| GLSHC | 139.19.0 |
| HIPR2 | 139.19.0 |
| IPGHC | 139.19.0 |
| IPLHC | 139.19.0 |

Release Notes

| GPL SYSTEM NAME | VERSION Build |
|-----------------|--------------------|
| | 46.4.0.0.0-69.19.0 |
| Date Available | Dec. 2016 |
| IPSG | 139.19.0 |
| IPSHC | 139.19.0 |
| МСРНС | 139.19.0 |
| ОАМНС | 139.19.0 |
| SCCP64 | 139.19.0 |
| SCCPHC | 139.19.0 |
| SIP64 | 139.19.0 |
| SIPHC | 139.19.0 |
| SLANHC | 139.19.0 |
| SS7HC | 139.19.0 |

Product Compatibility

Topics:

• Product Compatibility.....29

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

Product Compatibility

Table 11: EAGLE 46.4 Compatibility with Other Related Products shows EAGLE 46.4 compatibility with other products.

| Product | Release | Compatibility |
|---------|---------|---------------|
| ELAP | 10.0 | NC |
| | 10.1 | FC |
| EPAP | 16.0 | NC |
| | 16.1 | FC |
| LSMS | 13.1 | РС |
| | 13.2 | FC |
| OCEEMS | 46.2 | NC |
| | 46.3 | FC |
| FTRA | <4.5 | NC |
| | 4.5 | FC** |
| PIC | 10.0 | NC |
| | 10.1 | PC* |
| | 10.2 | PC* |

| Table 11: EAGLE 46.4 Compatibility with Other Related Products | Table 11: EAGLE 46.4 Compatibility v | with Other Related Products |
|--|--------------------------------------|-----------------------------|
|--|--------------------------------------|-----------------------------|

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

Legend:

- FC Fully Compatible
- PC Partially Compatible Product combinations are functional but have not undergone complete regression testing. Some feature capabilities may not be fully functional or supported.
- NC Not compatible
- * J7 Point Code format is NOT supported on PIC.
- ** FTRA 4.5 was tested with JAVA version 1.8.0_73-b02 installed on Windows 7 & 8, and 1.8.0_73-b02 installed on UNIX machine.

Resolved and Known Bugs

Topics:

- Severity Definitions.....31
- Resolved Bug Listing.....31
- Customer Known Bug Listing.....35

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

These bug lists are distributed to customers with a new software release at the time of General Availability (GA), and are updated for each Maintenance release.

Severity Definitions

The problem report sections in this document refer to Bug severity levels. Definitions of these levels can be found in the publication, *TL* 9000 Quality Management System Measurement Handbook.

Problem Report: A report from a customer or on behalf of the customer concerning a product or process defect requesting an investigation of the issue and a resolution to remove the cause. The report may be issued via any medium. Problem reports are systemic deficiencies with hardware, software, documentation, delivery, billing, invoicing, servicing or any other process involved with the acquisition, operation, or performance of a product. An incident reported simply to request help to bring back the service or functionality to normal without the intent to investigate and provide a resolution to the cause of the incident is not a problem report.

- Critical: Conditions that severely affect the primary functionality of the product and because of the business impact to the customer requires non-stop immediate corrective action, regardless of time of day or day of the week as viewed by a customer on discussion with the organization such as
 - 1. product inoperability (total or partial outage),
 - 2. a reduction in the capacity capability, that is, traffic/data handling capability, such that expected loads cannot be handled,
 - 3. any loss of emergency capability (for example, emergency 911 calls), or
 - 4. safety hazard or risk of security breach
- Major: Product is usable, but a condition exists that seriously degrades the product operation, maintenance or administration, etc., and requires attention during pre-defined standard hours to resolve the situation. The urgency is less than in critical situations because of a lesser immediate or impending effect on product performance, customers and the customer's operation and revenue such as
 - 1. reduction in product's capacity (but still able to handle the expected load),
 - 2. any loss of administrative or maintenance visibility of the product and/or diagnostic capability,
 - 3. repeated degradation of an essential component or function, or
 - 4. degradation of the product's ability to provide any required notification of malfunction
- Minor: Other problems of a lesser severity than 'critical' or 'major' such as conditions that have little or no impairment on the function of the system
- Minor, No Loss of Service: Oracle severity beyond what is defined by TL 9000.

The numbered severity levels in the tables below correspond to these definitions:

- 1 Critical
- 2 Major
- 3 Minor
- 4 Minor, No Loss of Service

Resolved Bug Listing

This section lists bugs that are resolved in the following build:

EAGLE 46.4.0.0.0-69.19.0.

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

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

Table 12: EAGLE Release 46.4 Build 46.4.0.0.0-69.19.0 Resolved Bugs (Dec. 2016)

| Bug # | SR | Sev | Title | Customer Impact |
|----------|----|-----|--|---|
| 21953431 | | 2 | SLIC and EPMB - card boots when killing the B imt bus | In extreme traffic conditions when one IMT fails the cards may boot. |
| 22604437 | | 2 | R_46.3: SM8G-B stay isolated & not get back on IMT (BIOS NMI) | An E5-SM8G-B card running the BLDC64 flash GPL may get stuck off the IMT bus. Both IMT LEDs on the card remain off with the APPL Proc status LED red. The card needs to be power cycled to recover. |
| 24717270 | Y | 2 | SR: Upgrade failure - E5APPB cards are showing PKTG64 as a GPL instead of EPAP | The E5-APP-B card entry in the EAGLE DB needs to be de-provisioned temporarily before the upgrade and then re-provisioned after the upgrade. |
| 24941483 | Υ | 2 | SR: R46.3 - "ntp_utl.c Line 1471" sev-1s with 1st 16 bytes (ETS) set to 0 | PIC/EMP monitoring on EAGLEs which are not connected to a valid BITS clock are impacted by this bug. The EAGLE is prevented from deriving TSC synchronization from HS clocks. The EAGLE will not alarm this condition when there is a valid HS clock source present. |
| 19112812 | Y | 3 | [236417]Updation required in Installation Manual(910-6664-001 Revision A) | Tables 82 and 83 provide information for cables and adapters for various applications but these tables do not cover the MCP, MCPHC and OAMHC applications. This could cause the customer issues with getting these applications to work. |
| 20765541 | | 3 | HIPR2 severity errors not displaying correct data output | |
| 22638625 | | 3 | enable-ctrl-feat 893-0191-04 needs to enforce that only B series cards supported | |
| 22658288 | | 3 | LIM cards hang when reset (they recover in time with watchdog) | |
| 22894981 | Y | 3 | SR: Users can use the SEAS terminal and execute Security Admin class commands | It is possible to issue administrative commands through the SEAS terminals, which according to the SEAS specification should not be allowed. However SEAS |

| Bug # | SR | Sev | Title | Customer Impact |
|----------|----|-----|---|---|
| | | | | terminal operates within a secured customer environment. |
| 22901429 | | 3 | HIPR2 - IMT lvl1 FC CRC errors are not being reported | |
| 23153497 | | 3 | OAM should reject "convert" command for SLIC cards | |
| 23283315 | | 3 | Update HIPR2 code to only run the bus at 2.5Gbps | |
| 23542175 | | 3 | Need to document SLIC adapters in Hardware Reference | |
| 24305110 | Y | 3 | SR: Enhance UAM 0541 (RTD alarm) recovery steps in EAGLE UAM guide | Customer may take unnecessary time to identify malfunctioning hardware when UAM 0541 is observed. |
| 24489789 | | 3 | DBA - Sys Mgmt User's Guide: GPL Commands Output Needs Updating | |
| 24791210 | | 3 | R46.3 Copy-disk completes with error writing to table 456 on standby TDM | |
| 24958650 | | 3 | Enable HIPR2 ability to operate at 1Gbps (to flash spares) | |
| 25042666 | Y | 3 | SR: Update EAGLE customer Docs with correct number TTMAP entries supported | The EAGLE translation type mapping feature supports translation type mappings for 255 linksets only. The incorrect information captured in the customer documentation regarding the total number of translation type mappings that can be configured in the EAGLE may cause some confusion for customers. |
| 19083499 | | 4 | [164780]HIPR2 - Preserve unreported OBITS | |
| 22018712 | | 4 | Obit: adl_mgr.c Line 930 Class 0280 on loading the GLSHC GPL | |
| 22365430 | | 4 | IPSG SLK and Card level congestion thresholds not set correctly for ENET-B card | |
| 22629228 | | 4 | R_46.3:IPSG_SLC: Rept-stat-iptps:tpscost=yes:loc=xyz is Rej with incorrect MTT | |
| 22746181 | | 4 | R46.3_ST:Severity1 in UPG_DRMS.C observed on OAMs during intra upgrade | |

| Bug # | SR | Sev | Title | Customer Impact |
|----------|----|-----|--|---|
| 23048633 | | 4 | Enable EAGLE GPLs to run on the SLIC card(s) | |
| 23059254 | | 4 | Enable redundant ExAP and signalling ports on SLIC | |
| 23302492 | | 4 | Update Commands Manual regarding 13.6Kbps SM8GB | |
| 24315295 | | 4 | Increase the number of entries in Vendor Prefix table | |
| 24326627 | | 4 | Information regarding SCTP HBTIMER/HB.interval needs to be updated in cust docs | |
| 24339435 | Y | 4 | SR:Update EAGLE Doc to capture cgpcaction details under Global Title Translation | In the Database Administration - GTT User's Guide, the cgpcaction parameter used by the chg/ent/rtrv-gta commands is not defined. The user would need to refer to the Commands User's Guide for information on this parameter. |
| 24339675 | | 4 | Increase IPSG TPS [10k] on SLIC | |
| 24355523 | | 4 | CMT: Requires a warning/disclaimer note under the pass-through command chapter | |
| 24377064 | | 4 | chg-upgrade-config threshtype=system parameter needs to be removed from command | |
| 24398058 | | 4 | [21224035]ENUM NP should support E2U+SIP | |
| 24438989 | | 4 | enable-ctrl-feat 893-0191-04 needs to enforce that only B series cards supported | |
| 24606366 | | 4 | Maintenance Guide E5-MASP Caution statement wrongly refers to E5-APP-B | |
| 24718427 | | 4 | CMT: rept-stat-card updates needed for deirhc | |
| 24737922 | | 4 | CMT: rept-stat-meas needs CARD's AST documented in Legend | |
| 24749065 | | 4 | EAGLE5, EAGLE, and IP7 product feature usage is no longer necessary | |
| 24943996 | | 4 | Disallow the use of GBSUs with A-class cards | |

Customer Known Bug Listing

Table 13: EAGLE Release 46.4 Customer Known Bugs (Dec. 2016) lists known bugs in this release:

Table 13: EAGLE Release 46.4 Customer Known Bugs (Dec. 2016)

| Bug # | SR | Sev | Title | Customer Impact |
|----------|----|-----|--|--|
| 20709922 | | 2 | R46.2_ST: DDB inconsistent on multiple cards when initializing the system | Under heavy traffic conditions if the system is initialized it is possible when auto recovering to get DDB inconsistencies. |
| 22610714 | | 2 | System capacity issue - when running 400K tps IMT VC drop | While system is running under heavy load (400K GTT TPS), loss/drop of the VC and/or discards in the HIPR2 can result in message loss between the client LIM card and the server SCCP card. |
| 24291987 | Y | 2 | SR: E5-ENET-B booted with "Module t4b_bm.c Line 443 Class 01c4" obit | If the Fast Copy port is overrun with traffic, it can/will boot due to being out of buffers. |
| 24452497 | | 2 | STC Copy function Deactivated with Mix of 16STC Cards- E5-ENET, E5-ENET-B & SLIC | "If enough STC cards are added/removed, socket congestion can be introduced such that the copied stream is reduced to 1/2 to 2/3 of the expected flow and may not recover. The way to recover is to disable monitoring, add/delete cards, and then re-enable monitoring. |
| 24608303 | | 2 | EPMA and EPMB cards booted when HIPR2 IMT Bus=B card reseated while running 400K | If a HIPR2 card is pulled out of its slot in a situation when there is a very high level of traffic on the IMT busses, multiple network cards may disconnect from the IMT bus that remains in service and they themselves boot. Customers should not plan HIPR2 card maintenance activities during high traffic hours. |
| 24704356 | | 2 | R46.4: DACT-IP-LNK on SLIC card running SIP64 causes card to reboot | No customer impact as act-ip-lnk & dact-ip-lnk are debug commands meant for Oracle support personnel use. |
| 25170994 | | 2 | The "CGPCACTION" parameter value does not carry through during Upgrade | The "CGPCACTION" parameter values in GTA entries will get reset to default value after upgrade. Hence it may cause traffic impact on EAGLEs containing GTA entries with non-default "CGPCACTION" parameter values (if |

| Bug # | SR | Sev | Title | Customer Impact |
|----------|----|-----|--|---|
| | | | | the particular GTA entry is handling specific traffic which requires a non-default "CGPCACTION" value to handle the specific traffic correctly) during upgrade phase 3 and until the GTA entries are set back with appropriate "CGPCACTION" parameter value. |
| 19100102 | | 3 | [226479]MSU loss during changeover due to Inter-EAGLE Links' remote link failure | If there are multiple link failures in a link set at the same time, it may be possible to lose some traffic. |
| 19108981 | | 3 | [233384]rept-imt-lvl1 summary of peak values sums results from all shelves | The stat is showing the sum of peaks of all ten 100 msec periods for which peak values are collected, instead of the highest value of the 10 buckets. This makes it look like the IMT was busier than it really was. |
| 19111738 | | 3 | [230876]SLAN card boots when overloaded; Module pmtc_mgr.c Line 521 Class 0240 | In extreme overload conditions it is possible for the SLAN card to boot. This is due to a traffic burst in the range of milliseconds. |
| 19115839 | | 3 | [238740]IMT LVL1 stats report - High speed Errors only avail on summary report | The output of rept-imt-lvl1 does not separate the data between shelves when there is more than one shelf. The cumulative data shown does not allow the operator to identify the correct shelf with the error. |
| 19120067 | | 3 | [242097]Traffic loss when running 4650 TU IPSG traffic on ENET-A with Fast Copy | There is no impact to routed traffic. Fast copy traffic may be disabled in certain heavy load conditions. |
| 19120373 | | 3 | [242319]Observed trouble: Module mfctmutl.c Line 1239 Class 01c3 Severity 1 | This is an indication that the timer to ensure the card is not stuck in MFC flow control has expired. No action is required by the customer as the system has self-corrected. |
| 19295079 | | 3 | Database Admin - IP7 User's Guide Needs Updated Flowcharts | The Database Administration - IP7 User's Guide, Chapter 6, has IPSG M2PA and IPSG M3UA flowcharts that do not address the Max TPS values supported by card types. |
| 20520928 | | 3 | Copy GPL fails during incremental upgrade without details as to what failed | If a failure were to occur then it is more difficult to troubleshoot as it is not obvious what caused the failure. |

| Bug # | SR | Sev | Title | Customer Impact |
|----------|----|-----|---|---|
| 20565766 | | 3 | R46.2_ST: Severity 1 "xsvf_ports.c Line 519 Class 0001" after incr upgrade | As part of the card starting up, OAM detected a failure programming the MASP's terminal processor. However there is not actually an issue and the terminal process is working correctly. |
| 20695351 | | 3 | Update "REMOVABLE CARTRIDGE" text in output text for several commands | No operational impact. |
| 20735493 | | 3 | R46.2_ST:E5-OAM boots with obit restart.c Line 1305 during pre-upgrade flash | Infrequently the OAM may boot twice after attempting to update the flash on the card. This will cause the flash to not be updated and it will have to be done again. |
| 20905738 | | 3 | R46.2_ST: Obit <module ath_vxw_mgr. Line 1860 Class 01c3> on active OAM</module | The OAM card double boots and recovers automatically. Note: If the problem was observed just after the flash image is updated, the flash image would be lost and the card would need to be re-flashed. |
| 20921994 | | 3 | COPY-MEAS command is not rejected on when MEAS removable is not present | If COPY-MEAS command is executed without inserting a removable, Command silently gets rejected by EAGLE. EAGLE does not report the command execution status to the user. |
| 21105952 | | 3 | R46.2_ST: Individual link downtime due to upgrade is more than 7 minutes | Using options like card set and threshold may increase individual link downtimes while decreasing overall system upgrade time. |
| 21106241 | | 3 | R46.2_ST:Service-affecting portion is more than 4 hours during upgrade | A very large EAGLE can take longer to upgrade than 4 hours. This is an internal target duration for Oracle. While reduced from previous releases, we are still not at target. |
| 21154415 | | 3 | R46.2_ST:Copy disk command completes with DMS errors | The command completes correctly with no impact. The rare occurrence of these false error messages during the copy-disk execution may confuse the operator. The operator needs to ignore the error message if the command completes with the "Copy-disk (fixed): from active (111x) to standby (111x) complete" message and the rept-stat-db command reports DATABASE STATUS "OK" with DB status |

| Bug # | SR | Sev | Title | Customer Impact |
|----------|----|-----|--|---|
| | | | | coherent/consistent on the disk just repaired. |
| 21225658 | | 3 | Oracle Licensing tool doesn't allow for temporarily enabled FAKs | The use of temporary FAKs is no longer possible in the EAGLE. However, operator messages which still refer to temporary FAKs may confuse operator. Otherwise, there is no other impact. |
| 21235242 | | 3 | R46.2_ST: Oversubscription of SCCP service cause congestion & discards at HIPR2 | This can occur during overloading of the SCCP subsystem. The MUX congestion discards can lead to VC OS which will lead to loss of packets between cards. When packets are lost between cards, this can lead to two kinds of DB mismatch: a) DDB inconsistency - For the route table, these generally self-recover but for the link and linkset tables they only self-recover if the link state changes. b) OAM DB inconsistency - This will be caught by the DB audit process and the card will have to be booted to correct this. |
| 21318756 | | 3 | R46.3_OAM:SYSTOT-STP UI report displays MASYSAL register value as incorrect | The number of Major Alarms existing in the machine will be incorrectly reported in the MASYSAL register of the SYSTOT-STP measurements reports. The output of commands rept-stat-alm and rept-stat-trbl may also be wrong, and/or differ in the counts they display. |
| 21494813 | | 3 | R46.2_ST:CARDS DENIED SCCP SERVICE, MFC say no service request denied for client | Some confusion as cards are not really denied service. |
| 21645956 | | 3 | SIP application card able to download data from ELAP server with data=dn | Mismatch between the format of the expected RTDB data to be downloaded (specified by the data parameter during the card provisioning) and the format of the actual data downloaded by the SIP card may result in RTDB lookup failures for the DN entries which are present in the RTDB. |
| 21780264 | | 3 | R46.2_ST2:MUX congestion discards getting reported as zero in summary, incorrect | MUX congestion discards are not being correctly pegged in rept-imt-lvl1. |
| 21837435 | | 3 | R46.2_ST2:UAM 0152 LIM(s) have been denied STPLAN service before card capacity | This is a result of an overload condition. The card may not be able to handle the |

| Bug # | SR | Sev | Title | Customer Impact |
|----------|----|-----|--|---|
| | | | | capacity until the TCP socket catches up due to the previous overload. |
| 21962592 | | 3 | R46.2_ST2:Obvd <module ss7_mgr.c<br="">Line 1226 Class 01c3 Severity 1></module> | This trouble message which indicates message discard appears only when the SCCP subsystem is oversubscribed. Hence there is no real impact due to this bug. |
| 22087498 | | 3 | R_46.3:Cards going in DDB inconsistent state with GBSU turned ON | On an EAGLE with GBSUSNMINM parameter turned ON, heavy traffic load on SCCP subsystem can cause network cards to go to DDB inconsistent state. If this occurs, incorrect routing decisions can be made resulting in MSUs being discarded inappropriately. |
| 22119878 | | 3 | SCM function makes blocking function call to a DBCD read function | It is possible in some cases in upgrade a command could be blocked for operating when it should not be. |
| 22125637 | | 3 | REPT-STAT-SCCP shows SCCP Capacity as per Engg rate for 5K SCCP throughput feat. | Minor display issue. Rept-stat-sccp displays actual (higher) rate instead of marketing (minimum) rate when 5K SCCP throughput feature in use. |
| 22145555 | | 3 | Healthcheck command changes the output groups for the command terminal | The Debug output group on the commands terminal needs to be turned back on (chg-trm:trm=xx:dbg=yes), if desired, after the healthcheck command has been issued. |
| 22341968 | | 3 | ent/rtrv-slk command: MTT 3405 is out of date | No customer impact. Commands Error Recovery Reference already has a note under E3405 which indicates the current behavior. |
| 22537597 | | 3 | The csv file generated for rtrv-card command showing GPSM as card type for OAM | The GPSM designation is obsolete and the operator may not realize that it refers to the OAM card. |
| 22565429 | | 3 | Module gtt_obsr.c Line 2448 Class 01b4 Severity 1 raised | EAGLE may generate a severity 1 message during successful execution of dlt-gttsel command. No service impact. |
| 22566705 | | 3 | R_46.3_SLC:Obs Module tks_md.c Line 2923 Class 01d4 Severity 2 on SCCP cards | When SCCP cards running at 13.6K throughput are loaded 100%, and if there is link congestion, the SCCP cards may discard traffic silently (only the severity 2 is printed). |
| 22576116 | | 3 | Unable to change password at login if standby MASP is in reboot loop | If a password expires and the standby MASP is not stable (for example, the |

| Bug # | SR | Sev | Title | Customer Impact |
|----------|----|-----|--|--|
| | | | | standby MASP is booting over and over), then the user needs to unseat the standby MASP and allow the EAGLE OAM to enter simplex mode to change the password. |
| 22604474 | | 3 | VxWorks6.9: JTAG programming of tp_top1.xsvf fails on E5-MASP cards | When this problem occurs, as the OAM has booted and is recovering, the OAM's terminal processor does not start. The OAM may reboot to recover. |
| 22630321 | | 3 | IPSG card boots without OBIT when last ERTHC card removed | IPSG cards with E5IS Active in EAGLE may boot if all EROUTE cards in the EAGLE are removed. |
| 22754653 | | 3 | R46.3_504M:Port remains unavailable when enabled after warm start of SMXG card | If an SCCP card's port is disabled at the switch between the card and the MPS, link will be disabled. After re-enabling the port at the switch, the link does not re-enable itself. To correct the condition, the card must be cold-restarted. |
| 22844195 | | 3 | R46.3_SLIC : Non-Configured LEDs are turned ON on SLIC IPSG card | The LEDs for Fast Copy Ethernet ports will light RED instead of remaining OFF when FC Mode is not configured for the card. |
| 23031432 | | 3 | R_46.3_ST:RTDB DB got corrupted on SCCP/SIP/ENUM/DEIR during incrmntl upg ph3 | The SM cards' DB may get corrupted after the upgrade. This RTDB corruption reported by the MPS Audit is a false alarm with no known impact. A work-around is to cold restart the SM cards (init-card command without data=persist parameter) post-upgrade. |
| 23142994 | | 3 | Pass command "netstat -d 0" showing all parameters values as 0 for SCCP64 | No customer impact. The information printed by the netstat -d pass command on SCCP64 GPL are mainly for Oracle debugging purpose only. |
| 23215451 | | 3 | Card 5318 Module smbus.c Line 548 Class 01c3 Severity 1 | May generate a severity-1 error message when the card boots and comes back up with no other service impact. |
| 23233727 | | 3 | DURLKOTG (link outage)counter starts only after the card became active | The customer may fail to understand the reason for MEAS reports tagging the reports as 'I' Incomplete. The OAM tags reports as Incomplete when a card within the scope of the report has not been in service anytime of the reports' period, and therefore the card is not able to provide all the MEAS data. |

| Bug # | SR | Sev | Title | Customer Impact |
|----------|----|-----|--|--|
| | | | | Thus the missing data causes the report to be Incomplete. |
| 23332396 | | 3 | ath_vxw.c Line 3384 watchdog timeout OBIT observed upgrade from 69.1.0 to 69.3.1 | Once in a while a card may double boot during a reload attempt. |
| 23542116 | | 3 | R46.4_ENUM: "RST-CARD" command is not working | alw-card command needs to be used in place of rst-card command. The function of rst-card command is same as the alw-card command. |
| 23564450 | | 3 | Module dbcdserv.c Line 1566 Class 01c5 Severity 1 generated occasionally | This severity 1 trouble will be seen only when displaying table capacities. No other impact. |
| 23566456 | | 3 | R46.4_SIP:Inhibited SIP (SLIC) card showing TPS rate in the o/p of rept-stat-sip | The total TPS displayed for an inhibited SIP card is not zero. The rept-stat-sip instead displays the last known value for the card when it was still in service. TPS displayed for an inhibited SIP card needs be ignored. |
| 23651048 | | 3 | R46.4_SIP:SIP cards not showing congestion alarms, when ACTIVE OAM gets booted | An active congestion alarm on a SIP card will not be displayed when the ACTIVE OAM is initialized. This issue is resolved when any clearing alarm or a higher priority alarm is raised on the card. |
| 23755609 | | 3 | R46.3_DDLunstbl state observed during the congestion scenario | There is little impact because of the DDL unstable issues. Normally cards going into the DDLunstb state will recover on their own. Using the STP option GBSUSNMINM should help cards avoid going into the DDLunstb state. |
| 23854973 | | 3 | R46.4_SIP:Alm # 626 clears, when running 5000 Invites/sec for a SIP card | SIP card running at 5000 TPS (which is extreme overload condition as the advertised capacity for SIP card is 4000 TPS) will cause the card not to report capacity threshold crossed alarm. Follow the procedures to add more SIP cards to handle the increased SIP traffic and to ensure normal functioning of card. |
| 23856466 | | 3 | Observed Module gedti_mgr.c Line 2478 Class 01c3 Severity1 on DEIR SLIC card | None, as EagleEyes is a debug utility for use by or under Oracle field personnel. |

| Bug # | SR | Sev | Title | Customer Impact |
|----------|----|-----|---|--|
| 24011882 | | 3 | Investigate and Analyze Card Restart | Once in a while cards can double-boot or, in the worst case, hang and must be re-seated. In the majority of cases cards recover on their own (double-boot). |
| 24443961 | | 3 | R46.4_SIP:CC gets encoded as RNCCDN in 302 response, when NPRSPFMT=RNDN | This causes the contact URI in 302 RESPONSE to get incorrectly encoded during this specific scenario. CC gets encoded in 302 contact URI (in response to INVITE with SIP RURI as local number) as RNCCDN, when looked up DIGITS is DN and NPRSPFMT is set to RNDN with INCLUDERN=OFF. |
| 24455443 | | 3 | SLIC IPSG IP port locks with Netem impairments set | When impairment noise is injected into the IP link interface for several (3 or 4) hours, the link may lock up and requires deactivating/activating (dact-ip-lnk/act-ip-lnk) to restore into service. |
| 24466639 | | 3 | SM4G card is coming up in a slot provisioned as SLIC IPSG | No known impact. SM4G card in a slot provisioned as SLIC IPSG won't provide or degrade any service. |
| 24468809 | | 3 | IPSM generates Module t4v_msg.c sev1 when transitioning to/from thermal level 2 | The card generates the documented troubles upon transition to the L2 thermal level. Irrespective of this, it is always expected to maintain card's operating temperature under operational limit to ensure proper working of card. |
| 24490900 | Y | 3 | SR: E5-ATM-A (870-1872-02, Rev B) cards fail to read board temperature | Operator will not be able to monitor the CPU temperature on a particular card using the rept-stat-card:mode=full:loc=<> command. This has been observed on only a few E5-ATM (P/N 870-1872-02, Rev B) cards. If observed, the specific card can be replaced to resolve the issue. |
| 24618439 | | 3 | Few SCCP cards are not getting flashed to release (69.11.0) during Intra upgrade | Operator will need to re-seat problem card and flash again during rare occurrences of flash failure. This issue is quite unlikely to occur at a customer's site. |
| 24666572 | | 3 | XXXX-IP-LNK on SLIC cards running DEIR64 causes some Multi homed associations to fail | No customer impact as act-ip-lnk & dact-ip-lnk are debug commands meant for Oracle support personnel use. |

| Bug # | SR | Sev | Title | Customer Impact |
|----------|----|-----|--|---|
| 24676090 | Y | 3 | SR: DEIR - Session-Id AVP not getting added in ECA message with Result-Code 5015 | The EAGLE won't include the Session-ID AVP in the ME-Identity-Check Answer (ECA) message with Result-Code: DIAMETER_INVALID_MESSAGE_LENGTH (5015), generated in response to an ME-Identity-Check Request (ECR) received with an incorrect length or a length that exceeds the supported limit. |
| 24680184 | | 3 | 46.4_ST:UNIX FTRA 4.5 server generates incorrect rtrv-stp CSV file | The GPL version of some entries in the FTRA CSV file for rtrv-stp may omit the last digit in the version, e.g., if the version is "123-456-78" the report will display "123-456-78", omitting the last digit ('9' in this case). |
| 24705493 | Y | 3 | SR: EAGLE UIM manual needs to indicate local link congestion can cause UIM 1226 | Minor missing information. Currently EAGLE UAM/UIM Reference is not capturing a scenario which can cause UIM 1226 during local link congestion. |
| 24789377 | | 3 | MAP Based Routing - Cancel Location - IMSI-wLMSI parameter is not decoded | If the system is configured to screen MAP messages with a particular cancelLocation opcode + IMSI combination, the MAP cancelLocation message containing an IMSI with LMSI will be discarded by the MAP-based Routing feature. Hence customers will not be able to make use of cancelLocation + IMSI screening functionality provided by the MAP-based Routing feature. |
| 24815645 | | 3 | R46.3_MR: rept-stat-sccp:data=imsi may report incorrect Daily and Overall Peaks | On EAGLEs with the EPAP Data Split feature activated, the rept-stat-sccp:data=imsi / rept-stat-sccp:data=imsi:mode=perf commands may report incorrect Daily and Overall Peak SCCP values for the IMSI subsystem. However, most of the time the IMSI subsystem peaks will get updated to correct values along with updates to the DN subsystem peaks. |
| 24837179 | | 3 | EPMA SM4GB SCCP card IMT Bus=B disconnected with overdrive GTT traffic | Overload on a network card can trigger a local RX FIFO Full condition in the card's IMT bus. This condition may be interpreted by the EAGLE OAM as the card being disconnected from that IMT bus. The card may continue to report as being disconnected from that IMT bus |

| Bug # | SR | Sev | Title | Customer Impact |
|----------|----|-----|---|--|
| | | | | even after the card overload condition abates.WORK AROUND: To clear the stuck condition issue the commands" "disc-imt:bus= :loc=<card slot="">" " then ""conn-imt:bus=<a <br="">b>:loc=<card slot="">""</card></card> |
| 24915874 | | 3 | R46.4_ST:Incorrect caution msg displayed with ent-card:type=dsm:data=elap/gtt | Incorrect caution message displayed by ent-card:type=dsm:data=elap/gtt command may cause some confusion. |
| 24951680 | | 3 | R46.4:Copy-disk completes with error writing to table 134 on standby TDM | The command completes correctly with no impact. The rare occurrence of these false error messages during the copy-disk execution may confuse the operator. The operator needs to ignore the error message if the command completes with the "Copy-disk (fixed): from active (111x) to standby (111x) complete" message and the rept-stat-db command reports DATABASE STATUS "OK" with DB status coherent/consistent on the disk just repaired. |
| 25043320 | | 3 | CHG-STPOPTS command allowed while Eagle is in Upgrade PHASE3 State | Attempting to modify STPOPTS values during an upgrade may cause undesired results. Operator should not attempt to modify STPOPTS values while system is in upgrade phase. |
| 25072124 | Y | 3 | SR: EAGLE raises "Exceeded Service Error Threshold" alarm for incorrect level | For the IDPR Service, the EAGLE may not correctly raise the "Exceeded Service Error Threshold Lvx" alarms at the configured error threshold levels. It may require the actual error ratio to far exceed the threshold level before the EAGLE OAM will raise the expected alarm. The command rept-stat-sccp can be executed to display the actual error/fail ratio for the IDPR Service. |
| 25078679 | | 3 | COPY-DISK causes database on standby disk to go inconsistent (UAM 0034) | The DB on the standby disk (the disk which was there in standby location during the copy-disk operation) may go inconsistent even after a successful copy-disk operation. Workaround: After a successful copy-disk operation, do a DB repair (chg-db:action=repair) keeping the same disk as active which |

| Bug # | SR | Sev | Title | Customer Impact |
|----------|----|-----|--|--|
| | | | | was active during the copy-disk operation. |
| 25094482 | | 3 | R46.4_ST: Severity 1 "ath_vxw_mgr."with cmd init-sys:data=persisit from new user | No known impact. |
| 25097539 | | 3 | R46.4_ST:On cold boot,SCCP/DEIR cards getting isolated again with restart.c obit | If attempting to cold restart the entire set of SMs cards in a node and the set is large (>12 cards), a card can get stuck for a short period while loading and then cold-boot a second time. It will load correctly the second time. |
| 25144794 | | 3 | R46.4_ST:Table checksum mismatch observed for TBL ID 69 on E5-OAM card | Issuing the command chg-measopts:collect15min=on causes the EAGLE OAM to report DB corruption on the standby disk. Workaround: Issue the command chg-db:action=repair to correct the DB corruption on the standby disk. |
| 19661322 | | 4 | Incorrect display of DN in Eagle trace for GPort Service | No customer impact as this is debug command. |
| 20255043 | | 4 | R46.2_ENUM:UDP connection stays UP on breaking ethernet connectivity with port B | UDP state is artificial as there is no concept of a session on UDP. There may be minor confusion as the Ethernet is down. The UDP stays up until it hits a fault. |
| 20267869 | | 4 | R46.2_ENUM:Severity1 jtag_com.c observed on enum cards | No impact on operation. Trouble should not be displayed. |
| 20345145 | | 4 | Incorrect mtt for S/N string format for EAGLE | It may not be immediately obvious from the error message what the user entered incorrectly. |
| 20585184 | | 4 | R46.2_ST:Sysstat command does not report correct memory stats | Display issue on debug command. No impact to customer. |
| 20630398 | | 4 | R46.2_ST :Obs Module scm_oamhc.c Line 624 Class 01e3 Severity 1 on OAM card | The OAM discards responses from application cards that the OAM itself requested while the OAM is still initializing from an init-sys command. The system self-recovers and there is no impact. |
| 20757300 | | 4 | OAM reporting cards ISOLATED/RELOADED when they did not reset | In periods of very high traffic it is possible for the OAM to report cards as isolated when they were not. |

| Bug # | SR | Sev | Title | Customer Impact |
|----------|----|-----|---|--|
| 20973079 | | 4 | R46.2_ST:Eagle CLLI changes to dflt after init-sys:data=persist with two sev-1s | Occasionally when the OAM is booted it could fail to read the CLLI from its drive. Rebooting will resolve the issue. |
| 20973465 | | 4 | R46.2_ST: Incorrect TPS for GTT in o/p of rept-stat-sccp:mode=perf | It is possible for rept-stat-sccp to report processing slight more traffic than is actually being processed. |
| 21092534 | | 4 | CHG-ENUMOPTS Error Message: CNGLVL1/2 should be CONGLVL1/2 | No customer impact. |
| 21092771 | | 4 | Password Requirements are output after password is updated successfully | No operational impact. |
| 21219386 | | 4 | E5-OAM produces trouble Module tpm_prx.c Line 1021 Class 0001 | The trouble display appears only on particular invalid key input by user. No operational impact. |
| 21228596 | | 4 | R46.2_ST: Severity 1 "pmtc_mgr.c Line 938" observed during incremental upgrade | The trouble indicates the card lost messages to another card. As the upgrade is taking cards out of service this could happen. |
| 21516032 | | 4 | output of rept-imt-lvl1 command the "High Speed Error Summary" is always ZERO | Display problem only. The HIPR2 high speed error summary is not displayed by the rept-imt-lvl1 command. Operator may need to run the rept-imt-info command to see the HIPR2 high speed error summary. |
| 21953882 | | 4 | Investigate SLIC bootup time | No customer impact. Bootup time for SLIC card currently is same as EPM-B card. |
| 22137388 | | 4 | Pass command "sctp -a <assoc name="">" prints a "UNKNOWN" peg counter</assoc> | No customer impact as this is primarily a debug command. |
| 22254242 | | 4 | Remove HW & BOTH from FC parameter's range of values for chg-trm command | No Impact. If E5-MASP hardware is used, then a value of hw or both cannot be specified for the fc parameter as documented in the Commands Error Recovery Reference. |
| 22322332 | | 4 | R_46.3:IPSG_SLC: Non Ipsg cards are coming up in to ipsg card slot | E1T1 card installed into a slot provisioned for IPSG will not get auto-inhibited. No other impact. |
| 22387101 | | 4 | Command updates needed related to ATM cards | Command parameters and/or comments are no longer applicable to the E5-ATM and might confuse the operator. |

| Bug # | SR | Sev | Title | Customer Impact |
|----------|----|-----|--|--|
| 22488136 | Y | 4 | SR: pass command "sctp -l aname" prints event log for all associations on card | This is just a display issue with no other impact. User needs to ignore the additional events printed by the pass command, which are not related to the concerned association. |
| 22519396 | | 4 | Show GWS update status or a message during extended processing time | The GWS DB update command may take longer time to process depending of the current size of the GWS database. With a large GWS DB (say more than 90% full) the command may process a long, long time 10, 20 minutes, without giving the operator feedback on status or command progress. |
| 22575564 | | 4 | SLIC - received TSU packets are placed on the High Priority Q | No known impact. |
| 22649495 | | 4 | Upgrade: conversion function for generic entry-size function need DB ver index | No customer impact. |
| 22743040 | | 4 | SS7FIREWALL: tst-msg report is not changing with mode definition | <pre>mode=debug, mode=full, and mode=brief generate the same detailed report for tst-msg:feat=gtt. Report output will not change with mode parameter value specified.</pre> |
| 22906620 | | 4 | UIM limit of 1499 needs to be changed to 1999 in commands' range of values | The extended UIM range for future use, displayed by rtrv-trbltx commands may confuse the operator. Commands like rtrv-log and xxxx-uim-acthresh will not work on the extended UIM range from 1500 thru 1999. However, there is no service impact as currently no UIMs exist in the extended range. |
| 22915773 | | 4 | E5-ATM Card Does Not Auto-Inhibit if Slot is Configured for SS7 GPL | No traffic impact though ATM card boots repeatedly if inserted into a slot provisioned for an E1T1 card. Customer documentation captures steps for verifying the slot configuration before adding a card. |
| 22993005 | | 4 | Loss of MEAS SS if MCPM to OAM Integrated Meaurement is not done correctly | If the correct procedure to migrate from the Measurements Platform to OAM Integrated Measurements in the customer documentation is not followed, the machine may end up with both PLATFORMENABLE and OAMHCMEAS being "on" in |

| Bug # | SR | Sev | Title | Customer Impact |
|----------|----|-----|--|--|
| | | | | MEASOPTS table, and the conflict may result in loss of measurements. |
| 23184333 | | 4 | Product name conflict, EAGLE 5 branding remains present in the code | Product name display issue. EAGLE may display product name as "EAGLE5" or "EAGLE 5" whereas the current brand name for the STP is "EAGLE". |
| 23226609 | | 4 | GWS: Misleading warning Message When Bind takes a Long Time | The warning message displayed by the chg-scr-xxx commands may confuse the operator. When all of the screen sets are at 90% capacity or more, the chg-scr-xxx commands may take much more time (more than 30 minutes) than actually indicated by the warning message. |
| 23267812 | | 4 | SLIC Module pmtc_mgr.c Line 620 Class 0241 | No impact as this bogus obit is observed rarely and only during the manual reseat of SLIC/EPMB class cards. |
| 23278495 | | 4 | When saving obit data, COMM tries to set task priority for nonexistent task | This causes the card to generate ath_vxw.c Line: 2924 sev-1 during reload. No other operational impact. |
| 23284464 | | 4 | DEIR, SIP, & ENUM cards should report max TPS capacity in maintenance block | No known impact. System uses hard-coded values to calculate TPS capacity of DEIR, ENUM, and SIP cards during upgrade. |
| 23316323 | | 4 | Card set list capacity for DEIR/ENUM/SIP should use Max TPS from Maint Block | No known impact. System uses hard-coded values to calculate TPS capacity of DEIR, ENUM, and SIP cards during upgrade. |
| 23641761 | Y | 4 | SR: FTRA incorrect field names for "GTT Actions (rtrv-gttact)" in customer doc | The Table Data Report CSV File Format Reference for the GTT Actions (rtrv-gttact command) has two minor errors: (1) The GTT Action Field Name is listed as ACT instead of ACTION, and (2) the CGGTMODID & CDGTMODID fields are reversed. |
| 24691801 | | 4 | DBLM read of DB Status table on standby fails after COPY-DISK reserved disk | No known impact. |
| 24691945 | | 4 | DBGC_OAMHC.C Class 01c7 trouble seen at the start of the COPY-DISK | The DB on the standby disk (the disk which was there in standby location during the copy-disk operation) may go inconsistent even after a successful copy-disk operation.Workaround: After |

| Bug # | SR | Sev | Title | Customer Impact |
|----------|----|-----|---|---|
| | | | | a successful copy-disk operation, do a DB repair (chg-db:action=repair) keeping the same disk as active which was active during the copy-disk operation. |
| 24718372 | | 4 | CMT: ent-dlk command Dependency & MTT is out-of-date | "VXWSLAN" string in the command error response may confuse operator. However, Features User's Guide captures correct SLAN configuration procedures. |
| 24718616 | | 4 | CMT: Various commands need to have DSM/DSM4G terminology updated | Various references in the documentation to obsolete DSM/DSM4G terminology may cause some confusion for customers. |
| 24718636 | | 4 | CMT: chg-ctrl-feat has an obsolete dependency check | The use of temporary FAKs is no longer possible in the EAGLE. However Various references to temporary FAKs in the documentation may confuse operator. |
| 24718783 | | 4 | CMT: init-flash has out-of-date dependency checks | Various references to obsolete flash GPLs in the documentation may cause some confusion for customers. |
| 24737683 | | 4 | CMT: various commands reference HMUX and/or HIPR | Various references in the documentation to obsolete HMUX and/or HIPR cards may cause some confusion for customers. |
| 24737725 | | 4 | CMT: ent-ls mentions only 700 links supported - need to update to 2800 | Incorrect information regarding the linkset table capacity in documentation may cause minor confusion for customer. |
| 24737886 | | 4 | CMT: chg-ctrl-feat and enable-ctrl-feat need to remove MFC validation checks | Various references in the documentation to obsolete command validation checks related to MFC may cause some confusion for customers. |
| 24737966 | | 4 | CMT: ent-slk needs to have MPL validation check removed | Various references in the documentation to obsolete MPL card may cause some confusion for customers. |
| 24737995 | | 4 | CMT: ent-bp has obsolete parameter values and validation checks | No customer impact as ent-bp command is a debug command meant for Oracle support personnel use. |
| 24742664 | | 4 | CMT: various commands need updates related to legacy OAM vs. E5-OAM cards | Various command dependencies captured in the documentation related to the obsolete legacy OAM |

| Bug # | SR | Sev | Title | Customer Impact |
|----------|----|-----|--|--|
| | | | | (GPSM-II/TDM) cards may cause some confusion for customers. |
| 24749144 | | 4 | CMT: rtrv-stp partnum parameter format needs to include Oracle format | Customer documentation is not capturing new part number format "xxxxxxx" for SLIC cards. |
| 24757013 | | 4 | CMT: various commands need TVG/MFC updates | The information regarding obsolete TVG functionality may cause confusion for operator. Operator needs to ignore information regarding TVG. |
| 24837446 | Y | 4 | SR: UAM 119 description in EAGLE UAM manual needs to be corrected | Incorrect description for UAM 119 in EAGLE UAM/UIM Reference manual may cause some confusion. UAM 119 actually indicates that the actual link transaction has fallen below the link capacity alarm threshold. |
| 25098131 | | 4 | Need to correct MTT message text for E3537 & E3595 | E3537 and E3595 error message text is unclear. E3537 should be Cmd Rej: Card's A/B and C/D interfaces must be unique. E3595 should be Cmd Rej: Def Router IP Addr must be local to this card's network. |
| 25107988 | | 4 | R46.4_ST: RTDB DATA download through port D of DEIR card is slow | Downloading EPAP data on DEIR cards using the backup ExAP port (Port D) takes much longer than anticipated compared with downloading the same data via the main ExAP port (Port A). EPAP data download via the backup ExAP port happens only during rare occasions when the ExAP primary network between the EAGLE and ExAP is completely down. |
| 25114868 | Y | 4 | SCCP serial boot command does not show command completed | The init-card:appl=vsccp:serial=yes command does not show a completion message even though it completes successfully. |
| 25120583 | | 4 | CMT: Remove chg-upgrade-config threshtype=system parameter | The chg-upgrade-config:threshtype=system command option is documented in the Commands User's Guide, but the system option is no longer valid for the threshtype parameter. |

Oracle References and Services

Topics:

- My Oracle Support (MOS).....52
- *Emergency Response.....52*
- Customer Training.....53
- Locate Product Documentation on the Oracle Help Center Site.....53
- Locate Product Release Software on the Oracle Software Delivery Cloud Site.....53

My Oracle Support (MOS)

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

Call the CAS main number at 1-800-223-1711 (toll-free in the US), or call the Oracle Support hotline for your local country from the list at *http://www.oracle.com/us/support/contact/index.html*. When calling, make the selections in the sequence shown below on the Support telephone menu:

- 1. Select 2 for New Service Request
- 2. Select 3 for Hardware, Networking and Solaris Operating System Support
- 3. Select one of the following options:
 - For Technical issues such as creating a new Service Request (SR), Select 1
 - For Non-technical issues such as registration or assistance with MOS, Select 2

You will be connected to a live agent who can assist you with MOS registration and opening a support ticket.

MOS is available 24 hours a day, 7 days a week, 365 days a year.

Emergency Response

In the event of a critical service situation, emergency response is offered by the Customer Access Support (CAS) main number at 1-800-223-1711 (toll-free in the US), or by calling the Oracle Support hotline for your local country from the list at http://www.oracle.com/us/support/contact/index.html. The emergency response provides immediate coverage, automatic escalation, and other features to ensure that the critical situation is resolved as rapidly as possible.

A critical situation is defined as a problem with the installed equipment that severely affects service, traffic, or maintenance capabilities, and requires immediate corrective action. Critical situations affect service and/or system operation resulting in one or several of these situations:

- A total system failure that results in loss of all transaction processing capability
- Significant reduction in system capacity or traffic handling capability
- · Loss of the system's ability to perform automatic system reconfiguration
- Inability to restart a processor or the system
- Corruption of system databases that requires service affecting corrective actions
- Loss of access for maintenance or recovery operations
- Loss of the system ability to provide any required critical or major trouble notification

Any other problem severely affecting service, capacity/traffic, billing, and maintenance capabilities may be defined as critical by prior discussion and agreement with Oracle.

Customer Training

Oracle University offers expert training on Oracle Communications solutions for service providers and enterprises. Make sure your staff has the skills to configure, customize, administer, and operate your communications solutions, so that your business can realize all of the benefits that these rich solutions offer. Visit the Oracle University web site to view and register for Oracle Communications training: *education.oracle.com/communication*. To reach Oracle University:

- In the US, please dial 800-529-0165.
- In Canada, please dial 866-825-9790.
- In Germany, please dial 0180 2000 526 (toll free) or +49 8914301200 (International).
- In Spain, please dial +34 91 6267 792.
- In the United Kingdom, please dial 0845 777 7 711 (toll free) or +44 11 89 726 500 (International).

For the appropriate country or region contact phone number for the rest of the world, please visit Oracle University's web site at *http://www.oracle.com/education/contacts*.

Locate Product Documentation on the Oracle Help Center Site

Oracle Communications customer documentation is available on the web at the Oracle Help Center (OHC) site, *http://docs.oracle.com*. You do not have to register to access these documents. Viewing these files requires Adobe Acrobat Reader, which can be downloaded at *http://www.adobe.com*.

- 1. Access the Oracle Help Center site at *http://docs.oracle.com*.
- 2. Click Industries.
- 3. Under the Oracle Communications subheading, click the Oracle Communications documentation link. The Communications Documentation page appears. Most products covered by these documentation sets will appear under the headings "Network Session Delivery and Control Infrastructure" or "Platforms."
- **4.** Click on your Product and then the Release Number. A list of the entire documentation set for the selected product and release appears.
- 5. To download a file to your location, right-click the **PDF** link, select **Save target as** (or similar command based on your browser), and save to a local folder.

Locate Product Release Software on the Oracle Software Delivery Cloud Site

Oracle Communications software is available for electronic download at the Oracle Software Delivery Cloud site, *https://edelivery.oracle.com*. Only authorized customers with a valid password may download software from the site.

Release Notes

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

Appendix



Firmware Components

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