

Oracle® Communications

EAGLE

Release Notice

Release 46.5

E84641 Revision 10

August 2019

ORACLE®

Oracle Communications, EAGLE Release Notice, Release 46.5

Copyright © 1993, 2019, 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

Table of Contents	iii
List of Tables	iv
List of Figures.....	v
Chapter 1: Introduction	1
EAGLE 46.5 Introduction	2
Revision History.....	2
Chapter 2: Feature Descriptions	3
Add GTT on SLIC IPSG [6500]	4
Hardware	4
Commands.....	5
Measurements.....	5
Limitations	6
ENUM on SLIC Network Redundancy Enhancement	6
Hardware	7
Commands.....	7
Limitations	7
Hardware Maintenance Phase for E5-IPSM Cards	7
Increase IPSG SIGTRAN Connections.....	7
Commands.....	8
Limitations	8
Increase the Number of Supported Service Module Cards per Node.....	8
Make DB Split Feature and GFlex MAP Layer Routing Work With Each Other	9
Need to Decode Multiple Components in a TCAP Message	9
Measurements.....	10
Limitations	10
Provide 2 HSL and 64 LSL on SLIC.....	10
Hardware	10
SIP NP on SLIC Network Redundancy Enhancement	11
Hardware	12
Limitations	12
Enhancement Bugs	12
Other Changes	12
Group Broadcast Signaling Units (GBSU) Functionality.....	12
Operational Changes	13
Unsolicited Alarm Messages.....	13
Unsolicited Information Messages.....	13
Error Messages.....	14
EAGLE Configuration Table Data Reports.....	17

Chapter 3: EAGLE Release 46.5 Media and Documentation	18
Media Pack	19
Documentation Pack.....	19
Chapter 4: EAGLE Release 46.5 Supported Hardware Baseline	21
EAGLE Card Overview	22
Hardware Baseline	26
Chapter 5: EAGLE Release 46.5 Supported Upgrade Paths	29
Supported Upgrade Paths	30
Generic Program Loads (Release 46.5).....	30
Chapter 6: Product Compatibility	32
Product Compatibility	33
Chapter 7: EAGLE Release 46.5 Resolved and Known Bugs	34
Severity Definitions.....	35
Resolved Bug List	36
Customer Known Bug List.....	44
Chapter 8: Oracle References and Services	61
My Oracle Support (MOS).....	62
Emergency Response	62
Customer Training.....	63
Locate Product Documentation on the Oracle Help Center Site	63
Locate Product Release Software on the Oracle Software Delivery Cloud Site	64

List of Tables

Table 1. Supported Card Types for the IPSG Application.....	4
Table 2. EAGLE Service Module Card Limits.....	9
Table 3. HCMIM and SLIC-E1T1 LED Configuration.....	11
Table 4. EAGLE 46.5 Enhancement Bugs.....	12
Table 5. New UIM for GTT on IPSG	13
Table 6. New UIM Format for GTT on IPSG.....	13
Table 7. New UIMs for TCAP Multiple Components.....	14
Table 8. Error Messages for Add GTT on SLIC IPSG [6500 TPS].....	14
Table 9. Error Messages for Add GTT on SLIC IPSG [6500 TPS].....	15

Table 10. Error Messages for Increase IPSPG SIGTRAN Connections	15
Table 11. Error Messages for Increase the Number of Supported Service Module Cards per Node	15
Table 12. Error Messages for Need to decode Multiple Components in a TCAP Message	16
Table 13. Error Messages for SIP NP on SLIC Network Redundancy Enhancement	16
Table 14. Error Messages: Non-Feature Related	16
Table 15: Media Pack Contents for 46.5.....	19
Table 16: Documentation Pack Contents	19
Table 17: EAGLE Card Overview Table	22
Table 18: EAGLE Release 46.5 Upgrade Paths.....	30
Table 19: EAGLE Release 46.5 Compatibility with Other Related Products.....	33
Table 20: EAGLE Release 46.5 Build 46.5.2.0.0-70.46.21 Resolved Bugs (March 2019).....	36
Table 21: EAGLE Release 46.5 Build 46.5.1.0.0-70.45.1 Resolved Bugs (June 2018)	36
Table 22: EAGLE Release 46.5 Build 46.5.0.0.1-70.39.1 Resolved Bugs (June 2018)	39
Table 23: EAGLE Release 46.5 Customer Known Bugs (March 2019).....	44

List of Figures

Figure 1. ENUM on SLIC Network Redundancy Model.....	6
Figure 2. SIP on SLIC Network Redundancy Model.....	11

Chapter 1: Introduction

Topics:

EAGLE 46.5 Introduction
Revision History

This Release Notice includes feature descriptions, supported hardware, and media and documentation pack contents; and identifies the supported upgrade paths. This document includes listings for both the resolved and known bugs for this release. Directions for accessing key Oracles sites and services are also identified in the Oracle References and Services chapter.

Release Notices are included in the documentation pack made available with every software release.

EAGLE 46.5 Introduction

Oracle Communications EAGLE is a platform that delivers signaling solutions to telecommunication networks worldwide.

Revision History

Date	Revision	Description
07/2017	4	Initial release for EAGLE 46.5
10/2017	5	Changes made for release 46.5.0.0.1
06/2018	7	Changes made for release 46.5.1
03/26/2019	8	Changes made for release 46.5.2
07/24/2019	9	Removed incorrect note regarding supported upgrade paths from release 46.5.2
08/19/2019	10	Added Bug 28514915 to the EAGLE 46.5.2 Resolved Bugs table. This was inadvertently omitted. Corrected E5-MASP part number in the Hardware Baseline table.

Chapter 2: Feature Descriptions

Topics:

Add GTT on SLIC IPSPG [6500]

- Hardware
- Commands
- Measurements
- Limitations

ENUM on SLIC Network Redundancy Enhancement

- Hardware
- Commands
- Limitations

Hardware Maintenance Phase for E5-IPSM Cards

Increase IPSPG SIGTRAN Connections

- Commands
- Limitations

Increase the Number of Supported Service Module Cards per Node

Make DB Split Feature and GFlex MAP Layer Routing Work With Each Other

Need to Decode Multiple Components in a TCAP Message

- Measurements
- Limitations

Provide 2 HSL and 64 LSL on SLIC

- Hardware

SIP NP on SLIC Network Redundancy Enhancement

- Hardware
- Limitations

Enhancement Bugs

Other Changes

- Group Broadcast Signaling Units (GBSU) Functionality

Operational Changes

- Unsolicited Alarm Messages
- Unsolicited Information Messages

GTT with IPSPG 10k TPS on SLIC

TCAP Multiple Components Error Messages

Error Messages for Add GTT on SLIC IPSPG [6500 TPS]

Error Messages for ENUM on SLIC Network Redundancy Enhancement

Error Messages for Increase IPSPG SIGTRAN Connections

Error Messages for Increase the Number of Supported Service Module Cards per Node

Error Messages for Need to decode Multiple Components in a TCAP Message

Error Messages for SIP NP on SLIC Network Redundancy Enhancement

Error Messages: Non-Feature Related
EAGLE Configuration Table Data
Reports

This chapter provides a summary of each feature released in EAGLE 46.5.

Add GTT on SLIC IPSG [6500]

This feature ports GTT functionality to SLIC IPSG cards. A new IP32 GPL combines GTT and IP32 capabilities to the SLIC card.

To load the new combined GPL (IP32), a SLIC card must be flashed with 32-bit flash (BLSLC32), and provisioned with `type=slic`, `appl=ipsg`, and `data=gtt`.

Note: The TPS performance was increased from 6,500 to 10,000 via an enhancement that is also part of EAGLE 46.5. The GTT throughput provided by LIM (IPSG) cards is limited to 400K. Since each GTT-enabled SLIC IPSG card supports 10K TPS, up to 40 GTT-enabled SLIC IPSG cards can be supported on a node.

The GTT throughput of 400K provided by LIM cards is counted separately from the SCCP SM subsystem throughput. The `rept-stat-sccp` command is enhanced to display the GTT statistics on GTT on LIM cards.

See Table 4 for the enhancement bug details, and Commands User's Guide for `rept-stat-sccp` details.

Hardware

The Add GTT on SLIC IPSG [6500] functionality only runs on SLIC cards with a 32-bit BLSLC32 flash GPL. The following table describes hardware and provisioning combinations for IPSG cards:

Table 1. Supported Card Types for the IPSG Application

Card Provision Type/GTT ON/OFF	ENET-B/32-bit BLMCAP OR ENET-A	SLIC/32-bit BL SLC32	SLIC 64-bit BL SLC64
ENET/ENETB (GTT cannot be enabled on ENET/ENETB card type)	Supported Loads IP32 GPL	Supported (will work as IP32 card with the ENETB card type) Loads IP32 GPL	Auto-Inhibit (HW Verification Code 174)
SLIC with GTT disabled (DATA=NOSCCP)	Not Supported (Card will Auto-inhibit) (HW Verification Code 172)	Supported (will work as a GTT disabled IP32 card with the card type SLIC) Loads IP32 GPL	Auto-Inhibit (HW Verification Code 174)
SLIC with GTT enabled (DATA=GTT)	Not Supported (Card will Auto-inhibit) (HW Verification Code 172)	Supported Loads IP32 GPL	Auto-Inhibit (HW Verification Code 174)

Commands

The following existing commands are modified to support the Add GTT on SLIC IPSP [6500 TPS] feature:

- act-gpl
- alw-card
- aud-data
- chg-card
- chg-gpl
- chg-sccp-msg
- copy-gpl
- copy-tbl
- ent-card
- init-card
- init-sys
- rept-stat-card
- rept-stat-db
- rept-stat-ddb
- rept-stat-gpl
- rept-stat-iptps
- rept-stat-sccp
- rst-card
- rtrv-card
- rtrv-gpl
- rtrv-sccp-msg
- rtrv-stp
- tst-msg

See *Commands User's Guide* for more enhancement information.

Measurements

Two new measurement registers are added to the SYSTOT-STP report for the Add GTT on SLIC IPSP [6500] feature:

- GTTONSM - number of messages on which GTT is performed on only SCCP cards.
- GTTONLIM - number of messages on which GTT is performed on only IPSP cards.

Two new measurement registers are added to the COMP-LINK, MTC-D-LINK and MTC-DTH-LINK reports:

- GTTONLIM - number of messages on which GTT is performed on a GTT-enabled IPSP card.
- GTTFORSM - number of messages that are sent by a GTT-enabled IPSP SLIC card to an SCCP card.

Limitations

GSM MAP Screening is not supported on GTT-enabled IPSP cards.

It is recommended that a linkset not have links on both GTT-enabled IPSP cards and GTT-disabled IPSP cards. This scenario can result in the GTT-disabled IPSP cards responding back with a UPU or TFP (for messages destined for a CPC), even though GTT-enabled IPSP cards can provide GTT service for some of links.

The GTT Actions SFTHROT and SFLOG are not supported on GTT-enabled IPSP cards in release 46.5.

ENUM on SLIC Network Redundancy Enhancement

This feature introduces network communication redundancy on the SLIC card. Four network interfaces will support ENUM - two for EPAP communication and two interfaces for signaling. One SLIC card running the ENUM application can connect to two EPAPs and two signaling networks at the same time. Interface A/D is used for EPAP connectivity, and interface B/C is used for the signaling network.

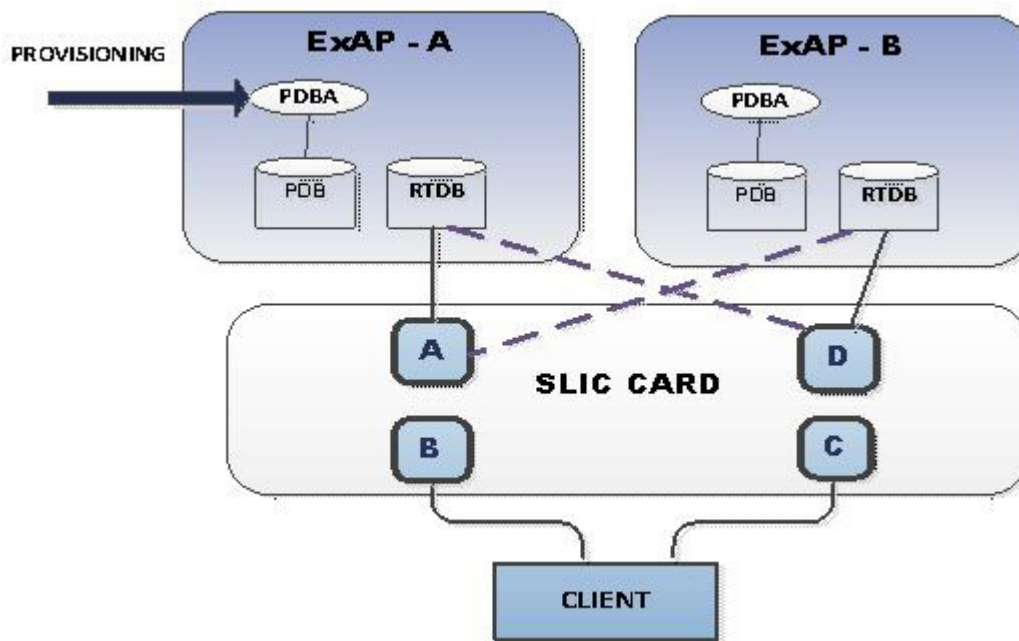


Figure 1. ENUM on SLIC Network Redundancy Model

See *ENUM User's Guide* for more information.

Hardware

Ethernet Interface A and D are used for EPAP connectivity on SLIC cards.

Ethernet Interface B and C will be used for signaling network connectivity on SLIC cards.

Ethernet adapter required — DB26/Dual-RJ45 adapter for GbE. Part #830-1102-03.

Commands

The following existing commands are modified to support the ENUM on SLIC Network Redundancy Enhancement feature:

- act-ip-lnk
- chg-ip-lnk
- dact-ip-lnk
- rept-stat-card
- rept-stat-enet
- rept-stat-enum
- rtrv-ip-lnk

The following existing pass commands are modified to support the ENUM on SLIC Network Redundancy Enhancement feature:

- option
- netstat

See *Commands User's Guide* for more enhancement information.

Limitations

Maximum of 16 SLIC cards running the ENUM feature on the SLIC shall be allowed.

Hardware Maintenance Phase for E5-IPSM Cards

E5-IPSM cards (870-2877-xx) are not supported in Release 46.5. E5-ISPM cards can remain in the EAGLE at the start of the upgrade to Release 46.5, but must be removed and replaced by the E5-ENET-B (P/N 870-2971-xx) or the SLIC (P/N 7094646) card at the completion of the upgrade. The functionality of the E5-IPSM cards is performed by the E5-ENET-B or the SLIC card.

Increase IPSG SIGTRAN Connections

This feature increases the number of associations per SLIC card loaded with the IPSG GPL from 32 to 128.

The supported signaling ports are a, a1 to a63 and b, b1 to b63.

See *Database Administration - IP7 User's Guide* for more information.

Commands

The following existing commands are modified to support the Increase IPSG SIGTRAN connections feature:

- act-lpo
- act-slk
- alw-slk
- blk-slk
- canc-lpo
- cancel-slk
- chg-assoc
- dact-slk
- dlt-slk
- ent-assoc
- ent-slk
- inh-slk
- rept-stat-assoc
- rept-stat-card
- rept-stat-iptps
- rept-stat-ls
- rept-stat-slk
- rtrv-assoc
- rtrv-card
- rtrv-ls
- rtrv-slk
- tst-slk
- unblk-slk

See *Commands User's Guide* for more enhancement information.

Limitations

When the IPSG application on SLIC hardware is hosting more than 32 IPSG M2PA/ M3UA connections, SCTPBUF Size should not be configured to less than 50, even though the ent-chg-assoc command allows configuration under 50.

Increase the Number of Supported Service Module Cards per Node

This feature increases the number of supported SM cards from 32 to 40, as described in the following table:

Table 2. EAGLE Service Module Card Limits

Description	New Limit (Cards per EAGLE)	Existing Limit (Cards per EAGLE)
EAGLE deployed with 1 EPAP and 1 ELAP (Dual ExAP)	58	32
Any card connected to EPAP ¹	40 ¹	32
Any card connected to ELAP ²	18	18
SCCP cards (Cards provisioned with APPL=VSCCP) ³	40 + 1 (in N + 1 config)	32
SIP	16	16
DEIR	16	16
ENUM	16	16

Make DB Split Feature and GFlex MAP Layer Routing Work With Each Other

This feature allows GTT Action Services to work together with the RTDB Split Feature (120M DN and 120M IMSIs via split database). The SCCP card selection on LIM cards is done on the basis of the Opcodes from the MAP layer. If the Opcode is not supported, selection is then done on the basis of the SNP parameter. For the GTT Actions table, the dependency to activate "EPAP Data Split" and GFLEX MLR is removed and the user can use the functionality of both features together. This compatibility occurs when GTT Action is executed on GTT enabled LIM cards (in cooperation with the Add GTT on SLIC IPSG (6500 TPS) enhancement).

The Services in GTT Action can also be configured if the 240 Million SPLIT DB feature is enabled, and vice versa.

Need to Decode Multiple Components in a TCAP Message

This feature allows TCAP Opcode Based Routing (TOBR) to check for the presence of more than one component in the MAP portion of the message. The appropriate OPCode GTTSet is configured with the option to process multiple component sets. TOBR decodes both components, and 2 keys are formed:

- Key 1 - Package Begin/ ACN - ShortMsgGateway V3 / Opcode ReportSMDeliveryStatus

¹ This includes SCCP cards of data type DN, IMSI or EPAP, SCCP cards with no data type if EPAP based services are turned ON, SIP cards with DATA=EPAP, ENUM and DEIR cards.

² This includes SCCP cards of data type ELAP, SCCP cards with no data type if LNP services are turned ON and SIP cards with DATA=ELAP.

³ The maximum number of SCCP cards that can be brought into service depends on the status of various ExAP-based features enabled in the system.

- Key 2 - Package Begin/ ACN - ShortMsgGateway V3 / Opcode – SendSRIforSM

TOBR searches for both the keys. If both keys have matching translations in the GTTSet, then the translation with the higher priority number is chosen for TOBR processing.

EAGLE checks up to 3 components, and ignores components after the 3rd component in the message. If there are multiple components, EAGLE decodes the MAP operation of the first 3 components.

See the "TCAP Opcode Based Routing" section in *Database Administration - GTT User's Guide* for more information.

Measurements

The TMULTCOMP measurement register is reported to the SYSTOT-STP report for the Need to decode Multiple components in a TCAP message feature. The CGTMULTCOMP register is obsolete.

Limitations

TCAP Multiple Components is partially supported with SCPVAL GTT Action. When TOBR is OFF and SCPVAL GTT Action is configured to be applied on an incoming MSU after GTT, TCAP Multiple Components functionality does not work. The option to determine whether or not to process multiple components (CHECKMULCOMP) is configured with an OPCODE GTTSET only. An OPCODE GTTSET can be configured only when TOBR is ON.

TCAP Multiple Components does not support indefinite form of length for ANSI TCAP messages.

The highest priority component selected by TCAP Multiple Components does not have any impact on Enhanced GMS (EGMS).

Provide 2 HSL and 64 LSL on SLIC

This feature provides two (2) High-Speed Links (HSL) and 64 Low-Speed Links (LSL) on the card in order to support TDM links and increase card efficiency. This feature allows SLIC to replace the HC-MIM (same capacity in one card slot instead of two card slots) or to replace the E5-E1T1 (doubles the capacity).

Note: Channel bridging is not supported on SLIC cards. Channel bridging for the location (if any) should be removed by the operator before hot swapping an HCMIM with a SLIC card.

Hardware

There are sixteen (16) LEDs, two for each E1/T1 port used to indicate port and channel (signaling link) status. One LED per E1/T1 port indicates the E1/T1 port status, and one LED per E1/T1 port indicates the aggregated channel status.

Table 3. HCMIM and SLIC-E1T1 LED Configuration

E1/T1 Port Status LED	Aggregated Channel Status LED
Green (No alarms, port has acquired timing and framing synchronization)	Green (if all channels provisioned = ISNR)
Amber (Remote alarm condition)	Amber (indicates port is the "reflected" port in Channel Bridging mode of operation. Applies only to "even" numbered ports)
Amber blinking (Loss of Frame Synchronization)	Amber blinking (if any channels provisioned = OOS)
Red blinking (all other alarms)	Red blinking (if all channels provisioned = OOS)
Red (Port not provisioned)	Red (if no channels are provisioned)

SIP NP on SLIC Network Redundancy Enhancement

This feature introduces network communication redundancy on the SLIC card. Four network interfaces will support SIP - two for ExAP communication and two interfaces for signaling. One SLIC card running the SIP application can connect to two ExAPs and two signaling networks at the same time. Interface A/D is used for ExAP connectivity, and interface B/C is used for the signaling network.

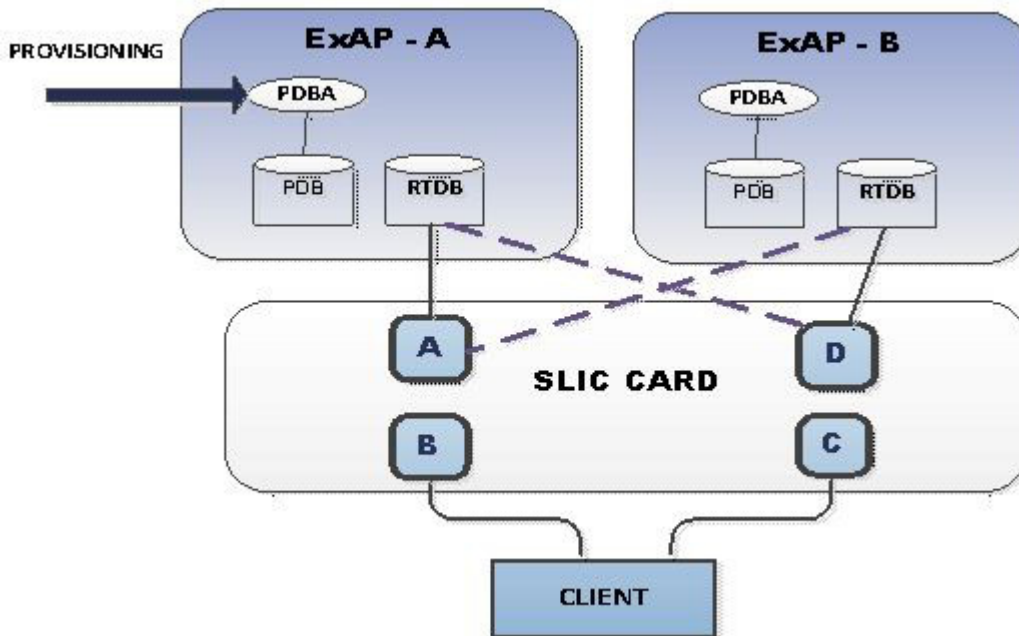


Figure 2. SIP on SLIC Network Redundancy Model

See *Database Administration - Features User's Guide* for more information.

Hardware

Ethernet Interface A and D are used for ExAP connectivity on SLIC cards.

Ethernet Interface B and C will be used for signaling network connectivity on SLIC cards.

Limitations

ExAP redundancy can be achieved automatically upon the failure of one switch or port, as the SLIC card starts the data download via another switch or port. For automatic signaling traffic redundancy, it is recommended the customer use third party IP load balancer products. In case of failure and no load balancer solution, switchover to another port may need to be done manually.

Enhancement Bugs

Table 4 shows EAGLE 56.5 enhancement bugs.

Table 4. EAGLE 46.5 Enhancement Bugs

Bug # and Title	Description
19452209 SCCP Loadsharing for up to 128 Nodes	The maximum number of PC/SSN entities supported in an Entity Set is increased from 32 to 128.
19456036 GTT with IPSG 10k TPS on SLIC	Increases the performance of throughput of IPSG to 10k TPS on a GTT-enabled IPSG SLIC card.

Other Changes

The following core enhancement is introduced in EAGLE Release 46.5:

Group Broadcast Signaling Units (GBSU) Functionality

Group Broadcast Signaling Units (GBSU) is a method to make the changes in the Dynamic Database more robust and reduce the occurrence of DDB inconsistencies. With the gbsusnminm parameter turned on, it enables applications to send Simple Network management (SNM)/Internal Network Management (INM) Group Broadcast messages. This functionality is for a system with EPM-B and SLIC cards only. The gbsusnminm parameter cannot be turned on if an A-class card is present in the system.

The current functionality is as follows:

- The default value of the gbsusnminm is OFF.
- If the gbsusnminm parameter is ON prior to upgrading to Release 46.5, the parameter will remain on after the upgrade.
- If an EPM-A card is inserted in an EAGLE with GBSU=ON, the OAM will inhibit the A-card.

See *Commands User's Guide* for more information.

Operational Changes

EAGLE Release 46.5 contains new unsolicited information messages, and new and updated error messages.

Unsolicited Alarm Messages

There are no new UAMs in Release 46.5; however, the following UAM information should be noted:

- The GTT capacity on GTT-enabled IPSP cards cannot be shared by other cards, unlike the GTT capacity on SCCP cards. Certain UAMs related to SCCP capacity, the availability of SCCP service on the whole system, GTT-enabled on two occurrences, and others are not pertinent to GTT-enabled IPSP cards.
- UAMs 328, 329, 330, 331, 335, 437, 632, 631, and 633 should only be raised or cleared with consideration to SCCP (SM) cards only and should not take into account the GTT-enabled IPSP cards.
- UAMs 453, 454, 262, 263, 336, 452 will be raised or cleared based on data from both SCCP cards and GTT-enabled IPSP cards.

Unsolicited Information Messages

The Unsolicited Information Messages (UIMs) in this section are introduced or updated in EAGLE Release 46.5.

GTT with IPSP 10k TPS on SLIC

Table 5. New UIM for GTT on IPSP

UIM	1474	Format	Output Group
Action	Added for 46.5		
Old data			
New data	GTT DB reload initiated	I-45	CARD

Table 6. New UIM Format for GTT on IPSP

Literal	I-1
---------	-----

Format	1	2	3	4	5	6	7	8
	1234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890 34567890 stationxxxx xx-xx-xx xx:xx:xx EST Rel 46.5 xxxx.xxxx CARD xxxx INFO 'text' CAUSE: xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx Report Date: xx-xx-xx Time: xx:xx:xx							
Output Example	1	2	3	4	5	6	7	8
	123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012 34567890 xxxx.1474 SYSTEM INFO GTT DB reload initiated CARD=xxxx GPL=SCCP CAUSE=<XXXXXXXXXX> Report Date:16-09-07 Time:14:42:03							

TCAP Multiple Components

Table 7. New UIMs for TCAP Multiple Components

UIM	1475	Format	Output Group
Action	Added for 46.5		
Old data			
New data	TOBR Multiple Comp: Translation found	I-43	GTT
UIM	1476	Format	Output Group
Action	Added for 46.5		
Old data			
New data	TCAPMulComp: Dup Opcode MSU discarded	I-43	GTT

Error Messages

Error Messages for Add GTT on SLIC IPSG [6500 TPS]

New and modified error codes to support the Add GTT on SLIC IPSG [6500 TPS] feature are listed in Table 8.

Table 8. Error Messages for Add GTT on SLIC IPSG [6500 TPS]

Response ID Code	Error Message	Used by Command
E2374	SCCP Subsystem not Configured	alw-map-ss inh-map-ss rept-stat-lnp rept-stat-sccp rept-stat-sfthrot
E2670	Invalid value of DATA parameter for given APPL	ent-card rept-stat-card

Response ID Code	Error Message	Used by Command
E3513	Invalid parameter combination with PERDATA param	alw/init-card init-sys
E3516	APPL must be IPSG/VSCCP with DATA parameter	rept-stat-card
E3520	Invalid TYPE and APPL combination	init-card
E5414	DATA parm must be specified with VSCCP/SIPHC/IPSG Appl	chg-card ent-card

Error Messages for ENUM on SLIC Network Redundancy Enhancement

New and modified error codes to support the ENUM on SLIC Network Redundancy Enhancement feature are listed in Table 9.

Table 9. Error Messages for Add GTT on SLIC IPSG [6500 TPS]

Response ID Code	Error Message	Used by Command
E3528	Only one UDP connection can be provisioned per lhost	ent-ip-conn

Error Messages for Increase IPSG SIGTRAN Connections

New and modified error codes to support the Increase IPSG SIGTRAN connections feature are listed in Table 10.

Table 10. Error Messages for Increase IPSG SIGTRAN Connections

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/ent-assoc
E4602	Requested Assoc Buffer Space Exceeds Available Buffer Space.	chg/ent-assoc

Error Messages for Increase the Number of Supported Service Module Cards per Node

New and modified error codes to support the Increase the number of supported Service Module cards per node feature are listed in Table 11.

Table 11. Error Messages for Increase the Number of Supported Service Module Cards per Node

Response ID Code	Error Message	Used by Command
E3584	No SCCP application card provisioned to support feature.	enable-ctrl-feat
E4258	Target card is not a SCCP application card.	rtrv-data-rtdb tst-msg

E5275	ent-card command for type DSM or SLIC already in progress	ent-card
-------	---	----------

Error Messages for Need to decode Multiple Components in a TCAP Message

New and modified error codes to support the Need to decode Multiple components in a TCAP message feature are listed in Table 12.

Table 12. Error Messages for Need to decode Multiple Components in a TCAP Message

Response ID Code	Error Message	Used by Command
E3522	CHECKMULCOMP/PRIO can be specified with OPCODE SETTYPES only	chg/ent-gta chg/ent-gttset

Error Messages for SIP NP on SLIC Network Redundancy Enhancement

New and modified error codes to support the SIP NP on SLIC Network Redundancy Enhancement feature are listed in Table 13.

Table 13. Error Messages for SIP NP on SLIC Network Redundancy Enhancement

Response ID Code	Error Message	Used by Command
E3528	Only one UDP connection can be provisioned per lhost	ent-ip-conn

Error Messages: Non-Feature Related

New and modified error codes not related to features are listed in Table 14.

Table 14. Error Messages: Non-Feature Related

Response ID Code	Error Message	Used by Command
E2017	<parm_desc> is out of range, <min>..<max> - <parm>	dlt/rtrv/set-uim-acthresh rtrv-log rtrv-trbltx
E2165	Removable drive not inserted	act-upgrade disp-disk-dir tst-disk
E2670	Invalid value of DATA parameter for given APPL	chg/ent-card rept-stat-card
E2818	A maximum of 128 PCs are allowed in a group	chg/ent-mrn
E3530	Dual ExAP or EPAP Data Split must be ON or GTT-LIM present	rept-stat-sccp
E3532	Exceeding max number of SS7 links for GTT-enabled IPSPG card	chg-card

Response ID Code	Error Message	Used by Command
E3537	Card's A/B and C/D interfaces must be unique	chg-ip-lnk
E3539	SIP NP Feature Must Be Activated	alw-card
E3595	Def Router IP Addr must be local to one of this card's signaling networks	chg-ip-card
E4205	ENUM range does not match SNUM: 1-999 or 1000-1999.	rtrv-log rtrv-trbltx
E4851	Removable media cannot be inserted	act-upgrade init-card

EAGLE Configuration Table Data Reports

No new command parameters were added for this release.

Chapter 3: EAGLE Release 46.5 Media and Documentation

Topics:

Media Pack
Documentation Pack

Oracle Communications software is available for electronic download on the Oracle Software Delivery Cloud (OSDC). Documentation is delivered electronically on the Oracle Help Center (OHC). Both the software Media Pack and 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 15: Media Pack Contents.

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

Table 15: Media Pack Contents for 46.5

Description
Oracle Communications EAGLE (46.5.0.0.1-70.39.1), Tekelec
Oracle Communications EAGLE (46.5.1.0.0-70.45.1), Tekelec
Oracle Communications EAGLE (46.5.2.0.0-70.46.21), Tekelec

Documentation Pack

All documents available for download from the Oracle Help Center (OHC) site (<http://docs.oracle.com/en/industries/communications/>) are listed in Table 16: Documentation Pack Contents.

Note: This list is accurate at the time of release, but it is subject to change. See the Oracle Help Center for the latest information.

Table 16: Documentation Pack Contents

EAGLE Core Manuals
Release Notice
Commands User’s Guide
Commands Error Recovery Reference
Database Administration – Features user’s Guide
Database Administration – GWS User’s Guide
Database Administration – GTT User’s Guide
Database Administration – IP7 Secure Gateway User’s Guide
Database Administration – SEAS User’s Guide
Database Administration – SS7 User’s Guide
Database Administration – System Management User’s Guide
Measurements Reference
Unsolicited Alarms and Information Messages Reference
Security Guide

System Health Check Guide
Software Upgrade Guide
EAGLE Feature Manuals
A-Port User's Guide
Analyzed Information Features User's Guide
ATINP User's Guide
EIR User's Guide
ENUM User's Guide
G-Flex C7 Relay User's Guide
G-Port User's Guide
IDP-Related Features User's Guide
INP/AINPQ User's Guide
IS41 GSM Migration User's Guide
MO SMS User's Guide
Numbering Plan Processor (NPP) User's Guide
SIGTRAN User's Guide
Stateful Applications User's Guide
TIF User's Guide
V-Flex User's Guide
EAGLE Hardware, Installation, and Maintenance
Hardware Reference
Installation Guide
Maintenance Guide
Application B Card Hardware and Installation Guide
Reference
Master Glossary
Previously Released Features
Related Publications Reference
Licensing Information User Manual
Table Data Report CSV File Format Reference

Chapter 4: EAGLE Release 46.5 Supported Hardware Baseline

Topics:

EAGLE Card Overview
Hardware Baseline

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 EAGLE. For a detailed description of supported hardware, see Table 17.

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 17: EAGLE Card Overview Table

Card Name as shown on the card label	Part Number	Provisioned Card Type	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 ⁴ 870-1872-02 ⁴	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
E5-E1T1 ⁵	870-1873-02	lime1	1	8	32	ss7hc blixp	ss7ansi
	870-1873-03 ⁴	limt1					ccs7itu
	870-1873-04 ⁴	lime1 (for SE-HSL)	1	8	2		ccs7itu
		limt1 (for ST-HSL-A)	1	8	2		ss7ansi

⁴ This part number is the ROHS equivalent of the immediately preceding part number.

⁵ For the E1 or T1 interface, an SS7 application (SS7ANSI or CCS7ITU) can be assigned to these cards.

Card Name as shown on the card label	Part Number	Provisioned Card Type	Per Card Slots/Ports		Links per Card	Card GPLs	Card Applications	
E5-E1T1-B ⁵	870-2970-01	lime1 limt1	1	8	64	ss7hc blmcap	ss7ansi ccs7itu	
		lime1 (for SE-HSL)	1	8	2		ccs7itu	
		limt1 (for ST-HSL-A)	1	8	2		ss7ansi	
E5-ENET	870-2212-02 870-2212-03 ⁴ 870-2212-04 ⁴ 870-2212-05 ⁴	dcm	1	2	16	iplhc blixp	iplim iplimi	
			1	2	1		ipghc blixp	ss7ipgw ippgwi
			1	2	2 Ethernet		slanhc blixp	stplan
		stc	1	2	2 Ethernet	erthc blixp	eroute	
		enet	1	4	32	ipsg blixp	ipsg	
E5-ENET-B	870-2971-01	dcm	1	2	16	iplhc blmcap	iplim iplimi	
			1	2	1		ipghc blmcap	ss7ipgw ippgwi
			1	2	2 Ethernet		slanhc blmcap	stplan
		stc	1	2	2 Ethernet	erthc blmcap	eroute	
		enet enetb	1	4	32	ipsg blmcap	eroute	
		ipsm	1	2 (use only A)	1 ipshc service	ipshc blmcap	ips	
E5-MASP	7346924 870-2903-01 ⁴ 870-2903-02 ⁴ 870-2903-03 ⁴	N/A	2	2	N/A	oamhc blmcap	oam	
E5-MCPM-B	870-3089-01	mcpm	1	2 (use only A)	1 Ethernet	mcphe blmcap	mcp	
E5-MDAL	7346923 870-2900-01 ⁴	N/A	2	N/A	N/A	N/A	N/A	

Card Name as shown on the card label	Part Number	Provisioned Card Type	Per Card Slots/Ports		Links per Card	Card GPLs	Card Applications
E5-SM4G ⁶	870-2990-01 ⁴ 870-2860-02 ⁴	dsm	2	2	2 Ethernet	sccphc blixp	vsccp
E5-SM8GB ⁶	870-2990-01	dsm	2	2 Ethernet	1 Ethernet for MPS link 1 Ethernet for Signaling (16 SCTP)	deirhc (32 bit)/ blmcap (32 bit) OR deir64 (64 bit)/ bldc64 (64 bit)	deirhc
			2	2 Ethernet	1 Ethernet for MPS link 1 Ethernet for Signaling (16 TCP; 1 UDP)	enumhc (32 bit)/ blmcap (32 bit) OR enum64 (64 bit)/ bldc64 (64 bit)	enumhc
			2	2 Ethernet	2 Ethernet for MPS links	sccphc (32 bit)/ blmcap (32 bit) OR sccp64 (64 bit)/ bldc64 (64 bit)	vsccp
			2	2 Ethernet	1 Ethernet for MPS link 1 Ethernet for Signaling (16 TCP; 1 UDP)	siphc (32 bit)/ blmcap (32 bit) OR sip64 (64 bit)/ bldc64 (64 bit)	siphc
E5-TSM	870-2943-03 ⁴	tsm	1	N/A	N/A	glshc blixp	gls
HC-MIM ²	870-2671-01 870-2671-02 870-2671-03 ⁴	lime1 limt1	2	8	64	ss7hc blixp	ss7ansi ccs7itu
		lime1 (for SE-HSL)	2	8	2		ccs7itu
HIPR2	7333484 870-2872-01 ⁴ 870-2872-02 ⁴	N/A	1	N/A	N/A	hipr2	hipr2

⁶ 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.

Card Name as shown on the card label	Part Number	Provisioned Card Type	Per Card Slots/Ports		Links per Card	Card GPLs	Card Applications
SLIC	7094646 7352578	dsm	1	4 Ethernet	2 Ethernet for MPS links 2 Ethernet for Signaling links (16 SCTP)	deir64 blslc64 ⁷	deirhc
			1	4 Ethernet	2 Ethernet for MPS links 2 Ethernet for Signaling links (1 UDP)	enum64 blslc64 ⁷	enumhc
			1	2 Ethernet	2 Ethernet for MPS links	sccp64 blslc64 ⁷	vsccp
			1	4 Ethernet	2 Ethernet for MPS links 2 Ethernet for Signaling links (16 TCP; 1 UDP)	sip64 blslc64 ⁷	siphc
		slic	1	2 Ethernet	2 Ethernet for MPS links	sccp64 blslc64 ⁷	vsccp
		enetb	1	4 Ethernet	2 Ethernet for Signaling links (32 SCTP) 2 Ethernet for Fast Copy	ipsg blslc32	ipsg
		slic	1	4 Ethernet	2 Ethernet for Signaling link (128 SCTP) 2 Ethernet for Fast Copy	ipsg blslc32	ipsg
		slic	1	4 Ethernet	2 Ethernet for Signaling link (32 SCTP) 2 Ethernet for Fast Copy	ipsg32 blslc32	ipsg + GTT
		ipsm	1	1	1 Ethernet	ipshc blslc32	ips
		stc	1	2	2 Ethernet	erthc blslc32	eroute
		mcpm	1	1	1 Ethernet	mcp hc blslc32	mcp
		dcm	1	2	2 Ethernet	slanhc blslc32	stplan

⁷ 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-bit to 64-bit flash GPL.

Card Name as shown on the card label	Part Number	Provisioned Card Type	Per Card Slots/Ports		Links per Card	Card GPLs	Card Applications
		lime1 limt1	1	4	64	ss7hc blslc32	ss7ansi ccs7itu
		lime1 (for SE-HSL)	1	2	2		ccs7itu
		lime1 (for ST-HSL-A)	1	2	2		ss7ansi

Hardware Baseline

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	
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	
		870-1872-02 Rev	
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	

Component	Part Number	ROHS Number (if applicable)	Required for:
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-MASP		7346924	
		870-2903-01 Rev C	
		870-2903-02 Rev A	
		870-2903-03 Rev A	
E5-MCPM-B		870-3089-01 Rev A	
E5-MDAL		7346923	
		870-2900-01 Rev A	
E5-SM4G		870-2860-01 Rev F	
		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 7352578	
High-speed Fiber Channel Cable		830-1344-xx	

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

Chapter 5: EAGLE Release 46.5 Supported Upgrade Paths

Topics:

Supported Upgrade Paths
Generic Program Loads (Release 46.5)

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

Supported Upgrade Paths

The possible upgrade paths to EAGLE 46.5 are listed Table 18.

Table 18: EAGLE Release 46.5 Upgrade Paths

From	To
EAGLE release 46.2	EAGLE release 46.5
EAGLE release 46.3	EAGLE release 46.5
EAGLE release 46.4	EAGLE release 46.5

Generic Program Loads (Release 46.5)

GPL System Name	Version Build 46.5.0.0.0-70.36.1	Version Build 46.5.0.0.1-70.39.1	Version Build 46.5.1.0.0-70.45.1	Version Build 46.5.2.0.0-70.46.21
Date Available	July 2017	October 2017	June 2018	March 2019
ATMHC	140.36.0	140.38.0	140.42.0	140.46.21
BLDC64	140.33.0	140.39.0	140.42.0	140.42.0
BLIXP	140.33.0	140.39.0	140.41.0	140.41.0
BLMCAP	140.33.0	140.39.0	140.42.0	140.42.0
BLSLC32	140.33.0	140.39.0	140.45.0	140.46.21
BLSLC64	140.33.0	140.39.0	140.43.0	140.46.21
DEIR64	140.35.0	140.38.0	140.42.0	140.46.21
DEIRHC	140.35.0	140.38.0	140.42.0	140.46.21
ENUM64	140.35.0	140.38.0	140.42.0	140.46.21
ENUMHC	140.35.0	140.38.0	140.42.0	140.46.21
ERTHC	140.35.0	140.38.0	140.42.0	140.46.21
GLSHC	140.35.0	140.38.0	140.42.0	140.46.21
HIPR2	140.32.0	140.32.0	140.32.0	140.32.0
IPGHC	140.36.0	140.38.0	140.42.0	140.46.21
IPLHC	140.36.0	140.38.0	140.42.0	140.46.21
IPSG	140.36.0	140.38.0	140.42.0	140.46.21
IPSG32	140.36.0	140.38.0	140.42.0	140.46.21
IPSHC	140.35.0	140.38.0	140.42.0	140.46.21

GPL System Name	Version Build 46.5.0.0.0-70.36.1	Version Build 46.5.0.0.1-70.39.1	Version Build 46.5.1.0.0-70.45.1	Version Build 46.5.2.0.0-70.46.21
MCPHC	140.35.0	140.38.0	140.42.0	140.46.21
OAMHC	140.35.0	140.38.0	140.44.0	140.46.21
SCCP64	140.35.0	140.38.0	140.42.0	140.46.21
SCCPHC	140.35.0	140.38.0	140.42.0	140.46.21
SIP64	140.35.0	140.38.0	140.42.0	140.46.21
SIPHC	140.35.0	140.38.0	140.42.0	140.46.21
SLANHC	140.35.0	140.38.0	140.42.0	140.46.21
SS7HC	140.36.0	140.38.0	140.45.0	140.46.21

Chapter 6: Product Compatibility

Topics:

Product Compatibility

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

Product Compatibility

Table 19 shows EAGLE 46.5 compatibility with other products.

Table 19: EAGLE Release 46.5 Compatibility with Other Related Products

Product	Release	Compatibility
ELAP	10.0	PC
	10.1	FC
EPAP	16.0	PC
	16.1	FC
LSMS	13.1	PC
	13.2	FC
OCEEMS	46.2	PC
	46.3	PC
	46.5	FC
FTRA	<4.5	NC
	4.5	FC ⁸
PIC	10.0	NC
	10.1	PC ⁹
	10.2	PC ⁹
EAGLE Query Server	1.0	FC

Note: Customers should upgrade EAGLE to release 46.5 before the OCEEMS is upgraded to Release 46.5. Partial compatibility is provided only to support the short period while the customer upgrades to a large network.

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

⁸ FTRA 4.5 was tested with JAVA version 8 update 121.

⁹ J7 Point Code format is NOT supported on PIC.

Chapter 7: EAGLE Release 46.5 Resolved and Known Bugs

Topics:

Severity Definitions
Resolved Bug List
Customer Known Bug List

This chapter lists the resolved and known bugs for EAGLE releases 46.5.0.0.1, 46.5.1.0.0, and 46.5.2.0.0.

These 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.

1. **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:
 - Product inoperability (total or partial outage),
 - A reduction in the capacity capability, that is, traffic/data handling capability, such that expected loads cannot be handled,
 - Any loss of emergency capability (for example, emergency 911 calls), or
 - Safety hazard or risk of security breach.
2. **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 less immediate or impending effect on product performance, customers, and the customer's operation and revenue such as:

- Reduction in product's capacity (but still able to handle the expected load),
 - Any loss of administrative or maintenance visibility of the product and/or diagnostic capability,
 - Repeated degradation of an essential component or function, or
 - Degradation of the product's ability to provide any required notification of malfunction.
3. **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.
 4. **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 of 1–Critical, 2–Major, 3–Minor, 4–Minor, No Loss of Service.

Resolved Bug List

The tables in this section list bugs resolved in the following releases:

- EAGLE 46.5.2.0.0-70.46.21
- EAGLE 46.5.1.0.0-70.45.1
- EAGLE 46.5.0.0.1-70.39.1

The resolved bug table shows an impact statement for the severity 1 and 2 bugs as well as severity 3 bugs associated with an SR.

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

Table 20: EAGLE Release 46.5 Build 46.5.2.0.0-70.46.21 Resolved Bugs (March 2019)

Bug Number	SR	Severity	Title	Customer Impact
28514915	Y	2	SR: PCR (ECM=PCR) LSL links go unstable on SLIC running R46.5.1.0.0 SS7HC GPL	E1T1 low speed links on SLIC cards are not stable (bounce/fluctuate) when link's error correction method is set to PCR.
29042379		3	SLIC V2 (part # 7352578) LEDs not working correctly	

Table 21: EAGLE Release 46.5 Build 46.5.1.0.0-70.45.1 Resolved Bugs (June 2018)

Bug Number	SR	Severity	Title	Customer Impact
25449043		2	R46.5_E1T1_SLIC: LIME1 cards boot with OBIT t4b_bm.c Line 403	SLIC-E1T1 card boots can occur randomly but the card recovers on its own.
27187036		2	IMT faulttest while HIPR2 card is booting causes SLIC cards to boot	Issuing the tst-imt command on a system with a HIPR2 card that is not IS-NR can/will cause B-class and SLIC cards to boot. All the cards that boot reside in shelves other than the one containing the HIPR2 that is not IS-NR. It can take up to 90 seconds for the HIPR2 card to become IS-NR. Should this event occur, sufficient cards in the system may boot to cause nodal isolation.

Bug Number	SR	Severity	Title	Customer Impact
27187040		2	IMT faulttest while HIPR2 card is booting causes EPM-B cards to boot	Issuing the tst-imt command on a system with a HIPR2 card that is not IS-NR can/will cause B-class and SLIC cards to boot. All the cards that boot reside in shelves other than the one containing the HIPR2 that is not IS-NR. It can take up to 90 seconds for the HIPR2 card to become IS-NR.
27257503	Y	2	UAM 0336 LIMs have been denied SCCP service before reaching system capacity	If all SCCP cards on any shelf are running at 100% capacity, some message discards are possible while the extra traffic from the same shelf gets diverted to SCCP cards in another shelf. Workaround: Distribute the SCCP cards in the systems in such a way that not all SCCP cards (of the same data type) in a single shelf are getting loaded at 100% capacity.
27558627		2	R46.6_ST:Corruption observed on Standby E5OAM	When the operator transitions from OAMHCMEAS to PLATFORMENABLE, turns on MEAS collection with the chg-meas command, and then turns on the COLLECT15MIN parameter in MEASOPTS table via the chg-measopts command, the DB becomes corrupted. The corruption gets reported later when the DB audit process runs; UIM 1187 for TBL ID 69 will be issued.
27592590	Y	2	E1/T1 link (SLK) on SLIC fails with T7 timeout after reconfiguring the same	Re-configuring existing E1/T1 links (SLK) on SLIC cards causes the link to fail with T7 timeout. Card needs to be initialized to bring the link back in service.

Bug Number	SR	Severity	Title	Customer Impact
27628787		2	R46.5_ST: T1ANSI HSL on SLIC card goes unavailable when traffic is initiated	If a constant stream of same-size packets is received by the E1/T1 SLIC (the packet size is 128 bytes (or a multiple) as measured on the wire), one of four packets is received as erred by the application, discarded, and resent by the originator. This results in early congestion as the rate is increased, and if the rate is high enough, for the link to be failed from T31 expiration.
27759543		2	All cards in a SHELF boot should one the cards be booting on a single IMT bus	In certain rare conditions, as LIM(s) (either SLIC or EPMB) that booted recover, all the other LIMs (SLIC or EPMB) in that shelf may also boot. This affects only a single shelf.
27912939	Y	2	SCCP_ELAP RIDB download failed on 64-Bit flashed SLIC SCCP card	SCCP cards provisioned to operate the ELAP RIDB do not load and the feature is unavailable to the operator on 64-bits.
28019664	Y	2	Specific sequence of ENT-PCT & DLT-PCT commands corrupting PCT table	A particular sequence of ENT-PCT and DLT-PCT commands corrupts the PCT (PC & CIC Translation) Table. Refer to KM Doc ID 2402031.1 for more details.
28128339		2	SLIC E1/T1 links getting stuck out of service	A congestion/traffic burst event can cause SLIC-E1T1 link to get stuck in an out-of-service status. Workaround: Reload the card experiencing the problem or dact/act the problem link.
24957306		3	act-lbp command fails on SLIC and causes t4b_bm.c Line 403 OBIT	
27042320		3	REL46.5_MR : ENUMHC/DEIRHC is changing to SIPHC	
27332538	Y	3	Card reset may cause LIM cards to incorrectly peg "MTCEUSG" for ax/bx links	Card reset causes LIM cards to incorrectly peg ""MTCEUSG"" for all a<x> (a1, a2,.. a31) links based on status of link ""a"" and peg ""MTCEUSG"" for all b<x> (b1, b2,.. b31) links based on status of link ""b"".

Bug Number	SR	Severity	Title	Customer Impact
27402163		3	Upgrade sets not getting updated for deleted cards	
27686338		3	ENUM response has extra bytes which are being misinterpreted	
27759421		3	Obits t4b_bm.c Line 445, tk_fpga_imt_Line 1775 & tk_geiTxRxTa Line 1021 observed	
27759552		3	EPMB/SLIC - ILM_CARD_DETECT_TIMEOUT is too short (may fail cards falsely)	
27988325		3	SLIC E1/T1 - Not adding correct amount of buffers to FPGA RX FIFO	
28042058		3	REPT-STAT-LNP generates scm_lnp.c Line 1839 trouble and doesn't print cards	User cannot review the LNP subsystem cards and stats using the rept-stat-lnp command.
26941104		4	Enable programming of new Flash for SLIC FPGA	
27254079		4	R46.5: SLICv2 BIOS Update	
27509392		4	Module tk_fpga_imt_Line 1939 Class 01b5 out of SLIC cards	
27509419		4	The zlib library used with EAGLE is dated	

Table 22: EAGLE Release 46.5 Build 46.5.0.0.1-70.39.1 Resolved Bugs (June 2018)

Bug Number	SR	Severity	Title	Customer Impact
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 "dflt" after upgrade. Hence it may cause traffic impact on EAGLEs containing GTA entries with non-default "CGPCACTION" parameter values (if 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.

Bug Number	SR	Severity	Title	Customer Impact
25434182	Y	2	rept-stat-iptps:tpscost=yes with no link configured on card cause MASP reboot	The active MASP will reboot if the operator runs rept-stat-iptps:tpscost=yes on a card with no link configured.
25741115	Y	2	EAGLE ignores RST from adjacent nodes for Eagle's INP CPC (sccp_lim.c sev-1)	EAGLE does not respond with TFA to RST messages received for INP CPC. Thus the EAGLE's INP CPC route status on the adjacent node may remain prohibited if it gets marked prohibited on the adjacent node for some reason.
20695351		3	Update "REMOVABLE CARTRIDGE" text in output text for several commands	
21225658		3	Oracle Licensing tool doesn't allow for temporarily enabled FAKs	
22119878		3	SCM function makes blocking function call to a DBCD read function.	
22145555		3	Healthcheck command changes the output groups for the command terminal	
22341968		3	ent/rtrv-slk command: MTT 3405 is out of date	
22537597		3	The csv file generated for rtrv-card command showing GPSM as card type for OAM	
22565429		3	Module gtt_obsr.c Line 2448 Class 01b4 Severity 1 raised.	
22566705		3	R_46.3_SLC:Obs Module tks_md.c Line 2923 Class 01d4 Severity 2 on SCCP cards	
23142994		3	Pass command "netstat -d 0" showing all parameters values as 0 for SCCP64	
23206546	Y	3	FTRA incorrect header format for RTRV-ASSOC csv file - missing HBTIMER	The rtrv-assoc FTRA report is missing the HBTIMER column header and therefore the columns of data after RHOSTVAL are misaligned with their titles.

Bug Number	SR	Severity	Title	Customer Impact
23215451		3	Card 5318 Module smbus.c Line 548 Class 01c3 Severity 1	
24466639		3	SM4G card is coming up in a slot provisioned as SLIC IPSG	
24468809		3	IPSM generates Module t4v_msg.c sev1 when transitioning to/from thermal level 2	
24676090	Y	3	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	
24789377		3	MAP Based Routing - Cancel Location - IMSI-wLMSI parameter is not decoded	
24815645		3	R46.3_MR: rept-stat-sccp:data=imsi may report incorrect Daily and Overall Peaks	
24837179		3	EPMA SM4GB SCCP card IMT Bus=B disconnected with overdrive GTT traffic	
25056899		3	Allow SLIC cards the ability to replace the bootloader with init-flash command	
25078679		3	COPY-DISK causes database on standby disk to go inconsistent (UAM 0034)	
25144794		3	R46.4_ST: Table checksum mismatch observed for TBL ID 69 on E5-OAM card.	
25264675		3	MBR SS7Firewall: GTT Loopset and upgrade for MBR won't work properly	

Bug Number	SR	Severity	Title	Customer Impact
25291441		3	BLDC32 needs allowed to init-flash EPMB cards.	
25374896		3	BLDC32 fails init-flashing another BLDC32 version on E5-OAM card	
25379462	Y	3	RTRV-GTA command retrieves GTA entries incorrectly when EGTA is specified	It can cause confusion as the RTRV-GTA command incorrectly retrieves GTA entries outside the specified range, when EGTA parameter is specified.
25463485		3	IMT - IMT bus status LED on front of cards show GREEN when HIPR2 is pulled	
25599819		3	Non-Configured LEDs are turned ON on SLIC IPSG card	
25616426	Y	3	ENT-IP-RTE causes DB on IPSG 1201 to go inconsistent (mdb_dcm.c Line 2603)	On an EAGLE that has gone through the R44.0 to R46.0 upgrade path, ENT-IP-RTE:LOC=1201 command can cause the DB to go inconsistent on card location 1201. Reload of card 1201 after the ent-ip-rte command will be required to clear the DB inconsistency.
19661322		4	Incorrect display of DN in Eagle trace for GPort Service	
21092534		4	CHG-ENUMOPTS Error Message: CNGLVL1/2 should be CONGLVL1/2	
22012383		4	When Flash Download fails, output wraps for checksums mismatch error.	
22137388		4	Pass command "sctp -a " prints a "UNKNOWN" peg counter	
22254242		4	Remove HW & BOTH from FC parameter's range of values for chg-trm command	
22322332		4	R_46.3: IPSG_SLC: Non Ipsg cards are coming up in to ipsg card slot.	
22488136	Y	4	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.

Bug Number	SR	Severity	Title	Customer Impact
22743040		4	SS7FIREWALL: tst-msg report is not changing with mode definition.	
22906620		4	UIM limit of 1499 needs to be changed to 1999 in commands' range of values	
22915773		4	E5-ATM Card Does Not Auto-Inhibit if Slot is Configured for SS7 GPL	
22993005		4	Loss of MEAS SS if MCPM to OAM Integrated Measurement is not done correctly	
23244057		4	DSM Apps on SLIC not Allowed on Even Slots	
23278495		4	When saving obit data, COMM tries to set task priority for nonexistent task	
23467163		4	* Implement background flash operations during Upgrade	
23557951		4	Install power values for new RoHS complaint cards into the frame power table	
24431469		4	Increase IPSP SIGTRAN connections	
24737886		4	CMT: chg-ctrl-feat and enable-ctrl-feat need to remove MFC validation checks	
24918449		4	Make DB Split feature and GFlex MAP Layer Routing work with each other	
24918865		4	Network Redundancy Enhancement on SLIC for SIP/ENUM applications	
24940416		4	SCCP Load sharing for up to 128 Nodes	
24947683		4	Need to block Multiple components in a TCAP message.	
25098131		4	Need to correct MTT message text for E3537 & E3595	
25105604		4	Add new SLIC card types to increase number of SM cards in node.	
25134689		4	Enable Upgrade to VxWorks 6.9 GPLs	

Bug Number	SR	Severity	Title	Customer Impact
25246265		4	E5-IPSM (870-2877-xx) non-compatible with EAGLE Release 46.5 or greater	
25325694		4	Display of loading percent in AST column, in situation when the card is active	
25484488		4	GTT on LIM feature	
25560092		4	ENUM Enhancement for customer in CALA	
25652163		4	Implementation of option to enable/disable specific ENUM enhancements	
25653329		4	ENUM: Missing "+" before RN value in the ENUM response for PSTN and SIP	
25685526		4	Remove the mode=convert parameter support for SLIC in init-flash command.	
25790380		4	Update P/N of RoHS E5-OAM on the Frame Power Table	

Customer Known Bug List

Please find below the known bugs and associated Customer Impact Statements in Table 23. This information is provided for information purposes only.

Table 23: EAGLE Release 46.5 Customer Known Bugs (March 2019)

Bug Number	SR	Severity	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.
24291987	Y	2	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.

Bug Number	SR	Severity	Title	Customer Impact
24704356		2	R46.4: DACT-IP-LNK on SLIC card running SIP64 causes card to reboot	This command is a debug command intended to assist troubleshooting when severe problems in external IP network affect card's normal operation. If executed during normal card operation, it may cause the card to boot.
26023475		2	Links (128) on IPSG-SLIC card are going OOS while initializing the EROUTE Cards	If (a) all EROUTE cards in the EAGLE are initialized/removed or the complete network between the EROUTE cards and the IMF is interrupted, (b) STC-style copy is used, and (c) the traffic rate is greater than 5K TPS, then signaling links will be dropped and restored.
26234613	Y	2	UAM 0336 LIMs have been denied SCCP service before reaching system capacity	If all SCCP cards on any shelf are running at 100% capacity, some message discards are possible while the extra traffic from the same shelf gets diverted to SCCP cards in another shelf. Workaround: Distribute the SCCP cards in the systems in such a way that not all SCCP cards (of the same data type) in a single shelf are getting loaded at 100% capacity.
26280132		2	R46.5_ST: RTDB Corruption observed on 64-bit EPAP SM cards after cold boot	An RTDB lookup can fail if the lookup is routed to an SM card with a corrupted RTDB. The same lookup can succeed if it is routed to another SM card with a sane DB. Rare occurrence of RTDB corruption was observed on a few 64-bit SM cards loaded with 90% or greater RTDB size on a large system, when SM cards were initialized in large group. Workaround: Setting the DSMAUD parameter in chg-stpopts as CCC auto corrects the corrupted entries on the card. The command for this is chg-stpopts:dsmaud=ccc. This option is required to be configured only on EAGLEs with EPAP features enabled. Please contact customer support for assistance if both EPAP and ELAP features are enabled on the EAGLE.
19100102	Y	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.

Bug Number	SR	Severity	Title	Customer Impact
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.
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.
19295079		3	Database Admin - IP7 User's Guide Needs Updated Flowcharts	<i>Database Administration - IP7 User's Guide</i> , 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.
20735493	Y	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.	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.
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 down times 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.

Bug Number	SR	Severity	Title	Customer 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.
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.
21962592		3	R46.2_ST2: Obvd <Module ss7_mgr.c Line 1226 Class 01c3 Severity 1>.	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.
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.
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 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.

Bug Number	SR	Severity	Title	Customer Impact
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.
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	Y	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.

Bug Number	SR	Severity	Title	Customer Impact
23856466		3	Observed Module gedti_mgr.c Line 2478 Class 01c3 Severity1 on DEIR SLIC card	None, as Eagle Eyes is a debug utility for use by or under the direction of Oracle field personnel.
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.
24523271		3	init-card:loc=<OAM>:prtnggrp=inactive does not generate MTT E4851 for USB port	Minimal to no customer impact as this is not a regular OAM command the operators use. Card can be rebooted again after removing the USB drive to recover.
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 assocs to fail	No customer impact as act-ip-lnk & dact-ip-lnk are debug commands meant for Oracle support personnel use.
24915874	Y	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.
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.

Bug Number	SR	Severity	Title	Customer Impact
25072124	Y	3	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.
25094482		3	R46.4_ST: Severity 1 "ath_vxw_mgr."with cmd init-sys:data=persist from new user	No known impact.
25324529		3	Issues after execution of commands dact-ip-lnk/act-ip-lnk with SIP/ENUM	This command is a debug command intended to assist troubleshooting when severe problems in external IP network affect card's normal operation. If executed during normal card operation, it may cause the card to boot.
25582684		3	Rel46.5_GTTonIPSG: GTT enabled IPSG card should be auto-inhibit with BLSLC64	A SLIC having the 64 bit Flash GPL (BLSLC64) inserted in an IPSG card slot will boot repeatedly until manually inhibited, flashed to the 32 bit Flash GPL (BLSLC32), or hardware replaced. No traffic impact.
25636845		3	GEI interface flags (speed and duplex) not set correctly	<p>With the recommend Ethernet port settings of 100 Mbps/Full duplex for signaling Ethernet ports, SM8G-B cards running the SIP64, ENUM64, or DEIR64 GPL (64 bit GPL is required only for EPAP DB greater than 120 Million) incorrectly set the duplex of signaling Ethernet port which can cause packet drops on signaling ports. This can cause excess re-transmits & premature congestion on signaling connection.</p> <p>Workaround: Ethernet ports on such SM cards and the corresponding ports on the LAN switch can be set to auto negotiate to avoid the problem.</p>

Bug Number	SR	Severity	Title	Customer Impact
25665463		3	Rel46.5_128con: IPST SLIC128 M2PA may boot silently (without obit)	In the rare case when the card may boot due to a workQ Panic event (Bug 25764195) the card will not produce an obit, and will boot silently. No customer impact as obit data is for Oracle personnel use.
25730463		3	SFLOG and SCPVAL GTT action parameters are not seen in the TST-MSG output	The tst-msg:mode=full/debug command output will not display action id configuration details for scpval, sflog, and sfthrot action types. Operator needs to use the rtrv-gttact:actid=<action id name displayed by tst-msg command output> command to verify the configuration details of the scpval, sflog, and sfthrot action ids that should be displayed in the tst-msg command output.
25749542		3	Rel46.5_GTTonIPST: TST-MSG not working for SMRPDA GTTSet	SMRPDA decoding is not performed and displayed for tst-msg. Support for other MBR parameters are provided in the tst-msg command.
25816076		3	IPST32 cards not cmg up in 7 mins when 40 cards are initialized simultaneously.	GTT-enabled IPST cards may take around 10 minutes to come back in service if all 40 GTT-enabled IPST cards are initialized simultaneously.
25856993		3	R46.5_ST:sentry_vxw.c obit observed on SCCP64 IMSI card during upgrade phase-3	An SM card loading the RTDB during cold reload may rarely boot during the loading process and hence may take longer to return to IS-NR as it has to reload the RTDB data again.
25907268		3	Stack corruption Observed in gpls running Vx69 with ftp files that were packed	No known impact.
25949706		3	Rel46.5_FT: SCCP ALARM STATUS not updating for REPT-STAT-SCCP:DATA=GTT cmd output	It may cause minor confusion for the operator as REPT-STAT-SCCP:DATA=GTT will not display the "Exceeded Service Error Threshold Lvl x" alarms (UAM 452 & 453) though these alarms are applicable to GTT only cards too.

Bug Number	SR	Severity	Title	Customer Impact
25962463		3	Standby MASP double boots with obit (Module mcc_queue.c Line 867 Class 01c3)	There is a rare chance that standby MASP may double boot during flash maintenance operations. Card recovers on its own with no adverse effect on the system.
25975745		3	Rx Inv Len and MSU Retran obs while running GTT traffic at ~ 500k TPS.	No service impact.
26042185		3	Rel 46.5_ST-Module vxws_msgq.c Severity 1 observed on SIP cards	While signaling port on SIP card is running traffic, a port deactivation and activation activity on corresponding port on customer's LAN switch may interfere with the normal working SIP card, indicated by the vxws_msgq.c severity 1 trouble. Workaround: Reboot the SIP cards to restore the correct functionality.
26042596		3	R46.5_ST: Severity 1 trp_tbl.c Line 1218 observed on SCCP/SIP ELAP card	
26045263		3	46.5 - SLIC does not auto inhibit when inserted as E1T1 with channel bridging	Although channel bridging is not supported on SLIC E1T1 cards, the SLIC card does not get inhibited if it is inserted in a slot provisioned for channel bridging. Channel bridging configuration should be removed by the operator before hot swapping an HC-MIM with a SLIC.
26052249		3	Sev 1 tvgrout.c, tvgr_hw.c, and tvgr_mgr.c observed while giving init-sys	No impact other than the display of these severity 1 troubles during init-sys.
26079925		3	REPT-STAT-DB always prints Active OAM's GTT DB level for standby OAM too	The REPT-STAT-DB command always prints the Active OAM's GTT DB level for both Active and Standby OAMs. If the Standby's GTT DB level is different (during an event of DB inconsistency on OAM), the operator will not be able to see a possible issue with the GTT DB level on the OAM. Workaround: Use the overall DB level ""FD CRNT"" displayed by REPT-STAT-DB to take the necessary corrective action during DB inconsistency events on the OAM.

Bug Number	SR	Severity	Title	Customer Impact
26092513		3	R46.5_ST:Severity 1 "meau.c" Line 2504 observed on MCPM card in upgrade phase3	No known impact other than the severity 1 trouble during the upgrade phase 3.
26098828		3	R46.5_ST:Upgrade does not fail when card getting flashed is removed from eagle	Upgrade might not stop if a card is removed or fails while the card is being background flashed during Upgrade Phase 2. If this occurs, the operator needs to flash the card manually after completion of upgrade.
26159826		3	R46.5 CDS: rept-stat-iptps:tpscost=yes is not supported on SLIC-IPSG	Without derived TPS display, it may cause some confusion for operator as any deviation from the IPSG Base Transaction Unit Rules may cause the IPSG card to report a lower TPS than the actual Transaction Unit usage on the card.
26180724		3	R46.5_ST: Observed mc30_stp.c and mc60_inp.c Severity1s during upgrade	The troubles indicate that some measurement data may be lost, but the loss would be the result of the cards booting during Upgrade.
26181491		3	Rel46.5_ST:Obit restart.c observed during incremental upgrade	The SM card may take a little longer to become IS-NR as it rarely boots during loading. The card recovers.
26197742		3	Obit hipr2op_isr. Line 357 obsd while initializing the IMT Bus A multiple times	No known impact. This obit is observed only during the initialization of IMT (init-mux command) and HIPR2 card returns to be IS-NR without any delay.
26198220		3	Incorrect Subsystem getting displayed in UAM 336 "LIM(s) have been denied SCCP"	On an EAGLE configured with both SCCP SM subsystem and GTT-on-IPSG (IPSGTT), UAM 336 related to SCCP SM subsystem will be wrongly reported as if it is for IPSGTT. Since UAM 336 is not applicable for IPSGTT, it should be recognized as the alarm for the SCCP SM subsystem.
26261479		3	Rel.46.5_ST:Obsrvd errors and dbcd_fd while upg. spare OAM card using COPY-DISK	No impact. The COPY-DISK command completes successfully.
26266840		3	Rel.46.5_ST:Able to provision 41 EPAP based service module cards using CHG-CARD	No impact. Even though 41 SCCP cards can be provisioned, only 40 SCCP cards can be connected to an EPAP.

Bug Number	SR	Severity	Title	Customer Impact
26278373		3	R46.5_ST: Observed OBIT Module adl_mgr.c Line 1117 Class 0280 on SCCP cards	Small subset (one to four in a group of 30+ cards) of SM cards may reboot again before returning to IS-NR during the cards/system recovery, like after an init-sys command, on a larger system.
26330298		3	R46.5_ST: IMSI cards got booted with DN cards	Both DN and IMSI SCCP SM cards will be initialized if init-card:appl=vsccp:type=<DN or IMSI> command is executed. Use init-card:loc=<DN or IMSI card location> if only DN or IMSI SCCP SM cards need to be initialized. The init-card:type=<DN or IMSI> command can be used if all DN or IMSI SM cards in the system need to be initialized.
26353916	Y	3	E2939 Cmd Rej: Unable to read the selected log	This error, E2939, prevents an operator from retrieving selected UIM/UAM logs. The chance of occurrence is very low. Workaround: Event logs file can be replaced to resolve the issue. All prior log entries will be lost but newer log entries will be captured.
26360552	Y	3	ENUM PSTNSIP service escape encodes @ sign following userinfo part in URI	The ENUM PSTNSIP (E2U+pstn:sip) service escape encodes the @ delimiter in the SIP URI while generating NAPTR Responses.
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.

Bug Number	SR	Severity	Title	Customer Impact
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.
20973079		4	R46.2_ST:Eagle CLI changes to dflt after init-sys:data=persist with two sev-1s	Occasionally when the OAM is booted it could fail to read the CLI 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.
21092771		4	Password Requirements are output after password is updated successfully	No operational impact.
21219386	y	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.
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.
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.

Bug Number	SR	Severity	Title	Customer Impact
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 reset of SLIC/EPMB class cards.
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.
24523524		4	Remove all instances of card location 1117 in parser.txt	This may result in minor confusion for the user since the command's help screen (F10 key) shows slot 1117 as a valid value even though it is no longer a valid slot location.
24691801		4	DBLM read of DB Status table on standby fails after COPY-DISK reserved disk	No known impact.
24718372		4	CMT: ent-dlk command Dependency & MTT is out-of-date	"VXWSLAN" string in the command error response may confuse operator. However, the <i>Features User's Guide</i> 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.

Bug Number	SR	Severity	Title	Customer Impact
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.
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 (GSPM-II/TDM) cards may cause some confusion for customers.
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.
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		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.
25328817	Y	4	tprc_adj.c Line 4617 Severity 1 troubles (with data = 28) from IPSG cards	Display of these severity 1 troubles can be annoying. No other impact on system functionality.
25348405		4	ent-trace command mode=brief does not show an output	ent-trace command with mode=brief does not show an output. All other modes give an output. No customer impact as ENT-TRACE is a debug command for Oracle personnel use.

Bug Number	SR	Severity	Title	Customer Impact
25374869		4	rtrv-obit command output got stuck in loop for a single instance.	During rare occasions, the rtrv-obit command may cause the OAM to continuously report the same obit. Operator will need to boot the Active OAM using init-card:loc=<Active> command and reverse roles to terminate the command.
25723016		4	Severity 1 Module dbcd_ut2.c	A severity 1 trouble will be generated if operator is trying to set UIM threshold for UIM above 1499. No other impact as currently no UIM exists in the 1500 to 1999 range.
25779758		4	Flush dynamic routes not called for SIPHC and ENUMHC	No known impact.
25794040		4	Rel46.5_GTTonIPSG:MTT E2374 text is not same in CMT and EAGLE for rept-stat-sccp	The command error text displayed by EAGLE for error E2374 may cause some confusion for the operator.
25821846		4	Rel46.5_ST:Not able to peg MSSCCPDISC register in SYSTOT report	Obsolete measurement register MSSCCPDISC in SYSTOT-STP measurement report may cause some confusion for operator. Measurement register MSSCCPDISC was replaced with registers GTTADISC0 and GTTADISC1 with the introduction of GTT Actions feature in EAGLE release 42.0.
25851477		4	HIPR2 - ALGN LED does not remain AMBER (INH) when the HIPR2 is reseated	The alignment LED of a HIPR2 should remain AMBER while the bus is inhibited as an effective aid for the operator to identify which bus is inhibited. If the HIPR2 is re-seated in its slot, the LED returns to GREEN and the HIPR2 no longer visually advertises that the bus is inhibited.
25912518		4	Rel46.5_ST: Assoc status is reported as IS-NR even when the card & links are OOS.	When an IPSG card is booted, the association state will show incorrect status for about 40 seconds. This may cause some minor confusion for operator.
25921396		4	Rel46.5_ST_observed severity Card 1113 Module os_utl.c Line 1154 Class 01c3	EAGLE may display this severity 1 trouble while turning on the OAMHCMEAS parameter. No known impact.

Bug Number	SR	Severity	Title	Customer Impact
25992378		4	R46.5_ST:dmshc_lock.c messages observed on OAM card with VxWorks6.9	If transitioning measurements from MCPM to Integrated OAM Measurements and the transition coincides with a 30 minute measurements period ending, a lockout could occur such that the measurements for the period could be lost.
26035906		4	R46.5_ST: Copy Disk copying incorrect GPLs for IP32, IP64 and BLMCAP GPLs	The incorrect trial BLMCAP GPL version and the missing trial IP32 and IP64 GPL on standby disk after the copy-disk operation may cause some confusion for the operator. However there is no impact as trial GPLs are not required for normal operation of the system.
26042922		4	R46.5_ST: UIM1187 "Table Checksum Mismatch" observed while restoring the system	No Impact. UIM 1187 printed while the DB restore operation in progress can be ignored.
26048788		4	TCAPFAMILY param accepted with TCAPOPCODE val as "NOTPRESENT" in "chg-sccp-msg"	No impact though the command should be ideally rejected.
26263558		4	Rel46.5_ST-MTCH parameter needs to be removed from "rept-meas" command	"MTCH" value is no longer valid for "TYPE" parameter of "rept-meas" command. The command rejection message may cause some confusion if "TYPE" parameter is specified as "MTCH" with rept-meas command.
26302999		4	Rel46.5_ST Sev 1 idle_tsk.c Line 1040 observed while giving init-network	idle_tsk.c Line 1040 severity 1 trouble, which is rarely observed after an init-network operation, indicates that the CPU idle time reference on the card remains incorrect until the card again boots. No known operational impact. Workaround: Reboot the card that generated the severity 1 trouble so that the CPU idle reference is corrected.
26371067		4	R46.5_ST: Obit Module lb_mgr.c Line 1588 observed on SLAN card	There is a rare chance that a small subset of SLAN cards in the EAGLE may fail to recover on time during the upgrade phase-3 window. The cards may reboot multiple times before they can recover.

Bug Number	SR	Severity	Title	Customer Impact
26373052		4	Sev1 scm_fcs.c Line 1489 obsd in Phase2 while doing the upg frm 46.3.1 to 46.5.0	No impact other than the possible display of this severity 1 trouble just once during transition from upgrade phase 0 to phase 2.

Chapter 8: Oracle References and Services

Topics:

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

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

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 are 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, and 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 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 your business can realize all of the benefits these rich solutions offer. Visit the Oracle University web site to view and register for Oracle Communications training: <http://www.oracle.com/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 displays. Most products covered by these documentation sets appear under the headings “Network Session Delivery and Control Infrastructure” or “Platforms.”

4. Click on your product and then the release number.
A list of the entire documentation set for the selected product and release appears.
5. To download a file to your location, right-click the PDF link, click **Save Target As** (or similar command based on your browser), and save to a local folder.

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 (OSDC) site, <https://edelivery.oracle.com>. Only authorized customers with a valid password may download software from the site.

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