# Oracle® Communications EAGLE Release Notice





Oracle Communications EAGLE Release Notice, Release 46.9

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## Introduction

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 46.9 Introduction**

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



## **Feature Descriptions**

This chapter provides a summary of each feature released in EAGLE 46.9.

## SRI\_ACK Screening

The EAGLE G-Port functionality is enhanced with SRI\_ACK Screening feature. The new functionality screens the CDPA of SRI-ACK to determine if the GT belongs to own network or not in order to avoid misuse of details.

For more details, refer to G-Port User's Guide.

#### TIF Enhancements

The Triggerless ISUP Framework (TIF) is enhanced with the following features:

- TIF to Perform Blocklisting based on Redirecting-Number Parameter: The TIF
  Redirecting-Number Based Blocklisting allows modifying CdPN based on redirecting
  number, if present in the incoming message.
- Ability to Screen on Generic Name in TIF/EPAP Blocklisting: The TIF Generic Name
  Based Screening functionality stores the blocklisted information for a particular name
  arriving from a specific linkset (National or International) on EAGLE. Therefore, any
  message arriving on EAGLE are screened with the combination of name and linkset from
  which it is arriving. This enables users to block any spam calls with different names.
- Ability to have more than 1 TIF filter make use of EPAP for Blocklisting: This
  enhancement provides TIF linkset based blocklisting to enable a misused user to still
  make legitimate calls in case it is blocked on a particular linkset. With this feature, users
  have the flexibility to block numbers coming from certain linksets.

For more details, refer to TIF User's Guide.

### Support of CAT2 SS7 Security

With this release, EAGLE is enhanced with the CAT2 SS7 feature. This security functionality allows EAGLE to detect anomalies on inbound Category 2 packets through bulk upload of customer IR.21 data in tabular format.

For more details, refer to Database Administration- GTT User's Guide.

## **EIR IMSI Allowlist Expansion**

The EIR IMSI based functionality is enhanced by increasing the number of IMSI records from 1000 to 100K. The CSL table for IMSIPFX list type supports 100K IMSI entries.

For more details, refer to EIR User's Guide.

### **EIR Logging Enhancements**

The EIR logging functionality is enhanced by adding message originator of the message to the log. The OPC along with the point code type will be send to the EPAP. Now the log message includes IMSI, IMEI, EIR response code, Point code type and Point code.

For more details, refer to EIR User's Guide.

## Enhanced Logging of UIM and Information from SM Cards for Security

With this release, EAGLE provides data analytics and visualization support along with the existing SS7 security features. The visualized data will help in understanding network status and provide important insights for taking necessary network security measures.

EAGLE Logging and Visualization generates and sends log messages and UIMs from the SCCP and SFAPP cards to an external visualization server. The log messages and UIMs are converted into the JSON format with data enrichment for enhanced visualization.

For more details on EAGLE Logging and Visualization functionality, refer to *Logging* and Visualization Feature User's Guide.

## IN IDPR Consolidation (Introduced in EAGLE 46.9.5)

The Prepaid IDP Query Relay feature is enhanced to support the IDPRCDPN(X) NPP service selection from SCCP CDPA.

With this enhancement, the IDPRCDPN(X) NPP service selection is done from SCCP CDPA. And therefore, a new parameter MERGE\_IN in the TTROPTS table is supported. If TTROPTS: MERGE\_IN is ON, the IDPRCDPN(X) selection is done from the GT list type of the CSL table. Otherwise, it is done from the SKBCSM list type table.

The  $\c CHG/RTRV-TTROPTS$  command now supports the  $\c MERGE_IN$  option. And the  $\c ENT/CHG/RTRV-CSL$  command displays entries from the csl table for list=gt. It displays the IDPRCDPN entries only if  $\c TTROPTS$ :  $\c MERGE_IN$  is ON.

## IMSI MAP Based Routing for IMEI\_Check Messages (Introduced in EAGLE 46.9.4)

With SS7 Firewall, the existing FLOBR or TOBR Framework is enhanced to allow additional MAP Components to be used in the selection process. This is done by adding five new GTT set types. These new GTT set types are linked by the OPCODE set types, as listed below.

- IMSI
- MSISDN



- VLRNB
- SMRPOA
- SMRPDA

The GTTSets of the types mentioned above are allowed to be provisioned ONLY in GTA entries from a GTTSet of the type OPCODE or one of the other GTT set types supported by this feature.

When an MSU is processed by the TOBR GTT translation with the OPTSN as one of these new set types, EAGLE decodes the TCAP part and extracts the required TCAP parameter from the MSU. The digits in this parameter are used as the key to search for the translation in the GTT set.

## Support of 756 Million LNP Entries (Introduced in EAGLE 46.9.3)

This feature increases the LNP capacity from 504 million to 756 million Telephone Numbers (TNs) or Number Pool Block (NPB) records where NPB represents a block of 1000 pooled numbers. In addition, this feature increases only the TN count from 504 million to 756 million. The maximum allowed count of all data types remains unchanged.

SLIC is required to be used for SCCP service modules for this feature.

Table 2-1 Max Data

Data Type	LNP 384M Solution	LNP 504M Solution	LNP 756M Solution
TN	384,000,000	504,000,000	756,000,000
NpaNxx	350,000	350,000	350,000
Lrn	200,000	200,000	200,000
Mr	2,000,000	2,000,000	2,000,000
LrnMr	2,000,000	2,000,000	2,000,000
OGTT	200,000	200,000	200,000

## **Enhancement Bugs**

This section shows EAGLE 46.9 enhancement bugs:

Table 2-2 Enhancement Bugs

Bug Number and Title	Description
22573735 Port ATMHC GPL as a 32 Bit Application to VxWorks 6.9	Migrate Port ATMHC GPL to VxWorks 6.9 and verify on the E5-ATMT-B cards.
22582217 Port SS7HC GPL as a 32 Bit Application to VxWorks 6.9	Migrate Port SS7HC GPL to VxWorks 6.9 and verify on the E5-E1T1-B and SLIC cards.
30191990 STP Security: Seculog data have to be deleted in a tunable period	Add a new parameter in the seculog attributes table to signify the maximum longevity of entries in the seculog, along with its UI command to modify it. For more details, refer Security Guide.



Table 2-2 (Cont.) Enhancement Bugs

Bug Number and Title	Description
31451590 EAGLE Changes for LNP greater than 504M (capacity will be 756M)	New LNPDB capacity will be 756M.

## **Operational Changes**

EAGLE release 46.9 contains new unsolicited alarm and information messages and new and updated error messages.

### **Unsolicited Information Messages**

The Unsolicited Information Messages (UIMs) in this section are introduced or updated in EAGLE release 46.9.

- 1501 Visualization connection terminated
   This UIM occurs when visualization TCP connection goes down.
- 1502 Visualization connection established
   This UIM occurs when visualization TCP connection is established.
- 1511 CAT2 IPSM to OAM Sync Started CARD NEW When IPSM to OAM sync starts for CAT2IMSI and CAT2GTA Tables
   UI commands shall not be supported during this process.
- 1512 CAT2 IPSM to OAM Sync Completed CARD NEW
   This UIM occurs when IPSM to OAM sync completes and CAT2IMSI and CAT2GTA Tables are updated.
- 1513 CAT2 OAM to SCCP Sync Started CARD NEW
   This UIM occurs when OAM to SCCP sync starts for CAT2 tables. Card remains in-flow during syncing.
- 1514 CAT2 OAM to SCCP Sync Completed CARD NEW
   This UIM occurs when OAM to SCCP sync completes for CAT2 tables. SCCP card remains out-of-flow once syncing completes.

For more details, refer to Unsolicited Alarm and Information Messages Reference.

#### **Error Messages**

New or updated error messages for release 46.9.

**Table 2-3** Error Message for Loading Mode

Response ID Code	Error Message	Used by Command
E3112	Loading Mode unstable due to SCCP service is deficient	init-card



**Table 2-4 Error Messages for TIF Enhancements** 

Response ID Code	Error Message	Used by Command
E2039	Generic Name too long	<ul><li>chg-gen-name</li><li>dlt-gen-name</li><li>ent-gen-name</li></ul>
E3639	SUBCDPN should be configured in TIFOPTS for TIFRDNBL SA	<ul><li>chg-npp-srs</li><li>ent-npp-srs</li></ul>
E3642	Invalid Generic Name	<ul><li>chg-gen-name</li><li>dlt-gen-name</li><li>ent-gen-name</li></ul>
E3643	Similar Generic name already exist	ent-gen-name
E3644	Generic name table full	ent-gen-name
E3645	Unable to read Generic name tableBefore:	<ul><li>chg-gen-name</li><li>dlt-gen-name</li><li>ent-gen-name</li></ul>
E3649	Generic name doesnot exist	<ul><li>chg-gen-name</li><li>dlt-gen-name</li></ul>
E3650	Generic name table empty	dlt-gen-name
E3651	SUBCDPN referanced in NPP-SRS cannot be removed.	chg-tifopts
E5026	ASDLKUP,CGPNASDRQD and TIFRDNBL are mutually exclusive	<ul><li>chg-npp-srs</li><li>ent-npp-srs</li></ul>

Table 2-5 Error Message for Support for CAT2 SS7 Security

Response ID Code	Error Message	Used by Command
E3652	IPSM to OAM SYNC in progress	<ul><li>rtrv-cat2-gta</li><li>rtrv-cat2-imsi</li></ul>

Table 2-6 Error Message for Visualization Support Feature

Response ID Code	Error Message	Used by Command
E3654	TCP/UDP connection is not supported on this port interface	ent-ip-conn



Table 2-7 Error Message for Support for SRI\_ACK Screening Feature

Response ID Code	Error Message	Used by Command
E3991	GPORT feature must be ON	<ul> <li>chg-ctrl-feat</li> <li>chg-gsmopts</li> <li>chg-gttact</li> <li>enable-ctrl-feat</li> <li>ent-gttact</li> <li>rtrv-gserv-data</li> </ul>

### Measurements

Table 2-8 Measurements for Logging and Visualization functionality

Event Name	SYSTOT Description
VIZUIM	Total number of UIMs sent to visualization server on SCCP and SFAPP cards
VIZMSG	Total number of message sent to visualization server

## EAGLE Configuration Table Data Reports

No changes for this release.

## EAGLE Release 46.9 Media and Documentation

Oracle Communications software is available for electronic download on the My Oracle Support (MOS) website. Documentation is delivered electronically on the Oracle Help Centre (OHC). Both the software Media Pack and Documentation Pack are listed in this chapter.

### Media Pack

All components available for download from the MOS website are in Media Pack Contents for 46.9



This list is accurate at the time of release, but is subject to change. See the MOS website for the latest information.

Table 3-1 Media Pack Contents for 46.9

Description
Oracle Communications EAGLE (46.9.5.0.0-76.48.0), Tekelec
Oracle Communications EAGLE (46.9.4.0.0-76.47.0), Tekelec
Oracle Communications EAGLE (46.9.3.0.0-76.45.0), Tekelec
Oracle Communications EAGLE (46.9.2.0.0-76.41.0), Tekelec
Oracle Communications EAGLE SEAS Forwarder (1.0.0.0.0)
Oracle Communications EAGLE (46.9.1.0.0-76.39.0), Tekelec
Oracle Communications EAGLE CAT2 (46.9.1.0.0-76.38.0)
Oracle Communications EAGLE External Database (46.9.1.0.0-76.39.0)
Oracle Communications EAGLE (46.9.0.0.0-76.28.0), Tekelec
Oracle Communications EAGLE (46.9.0.0.0-76.28.0) MIBS
Oracle Communications EAGLE CAT2 (46.9.0.0.0-76.28.0)
Oracle Communications EAGLE External Database (46.9.0.0.0-76.28.0)

### **Documentation Pack**

All documents available for download from the Oracle Help Center (OHC) are listed in Table 3-2.



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 3-2 Documentation Pack Contents**

Release Notices and Licensing Information User Manuals					
Release Notice					
Licensing Information User Manual					
EAGLE Compatibility Matrix					
EAGLE Hardware, Installation, Software Upgrade, and Maintenance					
Hardware Reference					
Installation Guide					
Maintenance Guide					
System Health Check Guide					
Software Upgrade Guide					
Application B Card Hardware and Installation Guide					
EAGLE Core Manuals					
Commands User's Guide					
Commands Error Recovery Reference					
Database Administration – Features User's Guide					
Database Administration – GTT User's Guide					
Database Administration – GWS 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					
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					
Logging and Visualization User's Guide					
MO SMS User's Guide					
Numbering Plan Processor (NPP) User's Guide					
SIGTRAN User's Guide					



Table 3-2 (Cont.) Documentation Pack Contents

SLIC Card Configuration User's Guide
Stateful Applications User's Guide
TIF User's Guide
V-Flex User's Guide
EAGLE Reference Manuals
Master Glossary
Previously Released Features
Related Publications Reference
Table Data Report CSV File Format Reference



## EAGLE Release 46.9 Supported 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 below.

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 4-1 EAGLE Card Overview Table

Card Name as shown on the card label	Part Number	Provision ed Card Type	Per Card Slots/Ports		Links per Card	Card GPLs	Card Applicatio ns
E5-APP-B	870-3096- xx	e5appb	2	4	N/A	N/A	elap epap Isms nas imf
E5-ATM-B	870-2972- 01	limatm lime1atm	1	4 (3 used)	2	athmc69 bldc32	atmansi atmitu
E5-E1T1- B <sup>1</sup>	870-2970- 01	lime1 limt1	1	8	64	ss7hc69 bldc32	ss7ansi ccs7itu
		lime1 (for SE-HSL)	1	8	2		ccs7itu
		limt1 (for ST-HSL-A)	1	8	2		ss7ansi

Table 4-1 (Cont.) EAGLE Card Overview Table

Card Name as shown on the card label	Part Number	Provision ed Card Type	Per Card Slots/Ports		Links per Card	Card GPLs	Card Applicatio ns
E5-ENET-B	870-2971- 01	stc	1	2	2 Ethernet	erthc blmcap	eroute
		enet enetb	1	4	32	ipsg blmcap	ipsg
		ipsm	1	2 (use only A)	1 ipshc service	ipshc69 bldc32	ips
E5-MASP	7346924 870-2903- 01 <sup>2</sup> 870-2903- 02 <sup>2</sup> 870-2903- 03 <sup>2</sup>	N/A	2	2	N/A	oamhc69 bldc32	oam
E5-MCPM- B	870-3089- 01	mcpm	1	2 (use only A)	1 Ethernet	mcphc69 bldc32	тср
E5-MDAL	7346923 870-2900- 01 <sup>2</sup>	N/A	2	N/A	N/A	N/A	N/A
E5- SM8GB <sup>3</sup>	870-2990- 01	dsm	2	2 Ethernet	1 Ethernet for MPS link 1 Ethernet for Signaling (16 SCTP)	deir64 (64 bit)/ bldc64 (64 bit)	deirhc
			2	2 Ethernet	1 Ethernet for MPS link 1 Ethernet for Signaling (16 TCP; 1 UDP)	enum64 (64 bit)/ bldc64 (64 bit)	enumhc
			2	2 Ethernet	2 Ethernet for MPS links	sccp64 (64 bit)/ bldc64 (64 bit)	vsccp



Table 4-1 (Cont.) EAGLE Card Overview Table

Card Name as shown on the card label	Part Number	Provision ed Card Type	Per Card S	lots/Ports	Links per Card	Card GPLs	Card Applicatio ns
			2	2 Ethernet	1 Ethernet for MPS link 1 Ethernet for Signaling (16 TCP; 1 UDP)	sip64 (64 bit)/ bldc64 (64 bit)	siphc
HIPR2	7333484 870-2872- 01 <sup>2</sup> 870-2872- 02 <sup>2</sup>	N/A	1	N/A	N/A	hipr2	hipr2
SLIC	7094646 7352578	dsm	1	4 Ethernet	2 Ethernet for MPS links 2 Ethernet for Signaling links (16 SCTP)	deir64 blslc64 <sup>4</sup>	deirhc
			1	4 Ethernet	2 Ethernet for MPS links 2 Ethernet for Signaling links (1 UDP)	enum64 blslc644	enumhc
			1	2 Ethernet	2 Ethernet for MPS links	sccp64 blslc644	vsccp
			1	4 Ethernet	2 Ethernet for MPS links 2 Ethernet for Signaling links (16 TCP; 1 UDP)	sip64 blslc644	siphc
		slic	1	2 Ethernet	2 Ethernet for MPS links	sccp64 blslc644	vsccp



Table 4-1 (Cont.) EAGLE Card Overview Table

Card Name as shown on the card label	Part Number	Provision ed Card Type	Per Card S	lots/Ports	Links per Card	Card GPLs	Card Applicatio ns
		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	ipsg blslc32	lpsg + GTT
		ipsm	1	1	1 Ethernet	ipshc69 blsl932	ips
		stc	1	2	2 Ethernet	erthc blslc32	eroute
		mcpm	1	1	1 Ethernet	mcphc69 blsl932	тср
		lime1 limt1	1	4	96	ss7hc69 blsl932	ss7ansi ccs7itu
		lime1 (for SE-HSL)	1	2	3		ccs7itu
		lime1 (for ST-HSL-A)	1	2	3		ss7ansi

<sup>&</sup>lt;sup>1</sup> For the E1 or T1 interface, an SS7 application (SS7ANSI or CCS7ITU) can be assigned to these cards.



<sup>&</sup>lt;sup>2</sup> This part number is the ROHS equivalent of the immediately preceding part number.

<sup>&</sup>lt;sup>3</sup> 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.

<sup>&</sup>lt;sup>4</sup> 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.

## 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	850-0330-03 Rev C	7333412	
	850-0330-04 Rev H		
	850-0330-06 Rev C		
	850-0330-07 Rev AA		
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		
Extension Shelf	850-0356-01 Rev C	7333417	
Backplane	850-0356-02 Rev E		
	850-0356-03 Rev D		
	850-0356-04 Rev E		
	850-0356-06 Rev AB		
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-B		870-2972-01 Rev A	
E5-ATM Adapter		830-1342-05	
E5-E1T1-B		870-2970-01 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-SM8G-B		870-2990-01 Rev A	
FAP	870-1606-01 Rev A or		Standard Frame or Standard Frame with HCMIMs
	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	



Component	Part Number	ROHS Number (if applicable)	Required for:
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	
HIPR2		7333484	
		870-2872-01 Rev A	
		870-2872-02 Rev C	
SLIC		7094646	
		7352578	
High-speed Fiber Channel Cable		830-1344-xx	
DC Frame Assembly	890-1843-01 Rev C	890-1843-02 Rev A	
In Heavy Duty Frame	890-1801-01 Rev E	890-1801-02 Rev A	
Kit E1	890-1037-01 Rev A	890-1037-06 Rev A	
Kit, Holdover Clock Assy	890-1013-01 Rev A		
Fan Assy (Standard Frame)	890-1038-01 Rev D		
Fan Assy (Shelves with	890-0001-01 Rev A or	7315823	
EPM-B cards)	890-0001-02 Rev A		

#### Note:

On EAGLEs getting upgraded to R46.9, EPAP MPS ports on Service Module cards must be configured to support 1Gbps EPAP-to-EAGLE RTDB download speed. SM cards must also be connected to EPAP with CAT5 straight-through cables (P/N 830-0724-xx or 830-1174-xx; see *Installation Guide*).



## EAGLE Release 46.9 Supported Upgrade Paths

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 46.9 are listed in the following table.

From	То
EAGLE release 46.7	EAGLE release 46.9
EAGLE release 46.8	EAGLE release 46.9

## Generic Program Loads (Release 46.9)

GPL System Name	Version Build 46.9.5.0.0-7 6.48.0	Version Build 46.9.4.0.0-7 6.47.0	Version Build 46.9.3.0.0-7 6.45.0	Version Build 46.9.2.0.0-7 6.41.0	Version Build 46.9.1.0.0-7 6.39.0	Version Build 46.9.0.0.0-7 6.28.0
Date Available	February 2022	December 2021	July 2021	June 2021	March 2021	August 2020
ATMHC	146.48.0	146.47.0	146.45.0	146.41.0	146.39.0	146.28.0
ATMHC69	146.48.0	146.47.0	146.45.0	146.41.0	146.39.0	146.28.0
BLDC32	146.47.0	146.47.0	146.39.0	146.39.0	146.39.0	146.17.0
BLDC64	146.47.0	146.47.0	146.39.0	146.39.0	146.39.0	146.24.0
BLMCAP	146.47.0	146.47.0	146.39.0	146.39.0	146.39.0	146.17.0
BLSL932	146.47.0	146.47.0	146.39.0	146.39.0	146.39.0	146.17.0
BLSLC32	146.39.0	146.39.0	146.39.0	146.39.0	146.39.0	146.17.0
BLSLC64	146.47.0	146.47.0	146.39.0	146.39.0	146.39.0	146.24.0
DEIR64	146.48.0	146.47.0	146.45.0	146.41.0	146.39.0	146.28.0
ENUM64	146.48.0	146.47.0	146.45.0	146.41.0	146.39.0	146.28.0
ERTHC	146.48.0	146.47.0	146.45.0	146.41.0	146.39.0	146.28.0
ERTHC69	146.48.0	146.47.0	146.45.0	146.41.0	146.39.0	146.28.0
HIPR2	146.1.0	146.1.0	146.1.0	146.1.0	146.1.0	146.1.0
IPSG	146.48.0	146.47.0	146.45.0	146.41.0	146.39.0	146.28.0
IPSG32	146.48.0	146.47.0	146.45.0	146.41.0	146.39.0	146.28.0
IPSG69	146.48.0	146.47.0	146.45.0	146.41.0	146.39.0	146.28.0
IPSG932	146.48.0	146.47.0	146.45.0	146.41.0	146.39.0	146.28.0
IPSHC69	146.48.0	146.47.0	146.45.0	146.41.0	146.39.0	146.28.0



GPL System Name	Version Build 46.9.5.0.0-7 6.48.0	Version Build 46.9.4.0.0-7 6.47.0	Version Build 46.9.3.0.0-7 6.45.0	Version Build 46.9.2.0.0-7 6.41.0	Version Build 46.9.1.0.0-7 6.39.0	Version Build 46.9.0.0.0-7 6.28.0
MCPHC69	146.48.0	146.47.0	146.45.0	146.41.0	146.39.0	146.28.0
OAMHC69	146.48.0	146.47.0	146.45.0	146.41.0	146.39.0	146.28.0
SCCP64	146.48.0	146.47.0	146.45.0	146.41.0	146.39.0	146.28.0
SFAPP	146.48.0	146.47.0	146.45.0	146.41.0	146.39.0	146.28.0
SIP64	146.48.0	146.47.0	146.45.0	146.41.0	146.39.0	146.28.0
SS7HC	146.48.0	146.47.0	146.45.0	146.41.0	146.39.0	146.28.0
SS7HC69	146.48.0	146.47.0	146.45.0	146.41.0	146.39.0	146.28.0



## **Product Compatibility**

Refer to EAGLE Compatibility Matrix for the product compatibility between this product release and the releases of other products.

## Load Line Up

This section lists subsystem products and versions affected by features delivered in this release. The following table contains the order in which the upgrade should take place, where 1 is first, 2 is next, and so on. The most current release should be used for all products in Table 6-1.



#### WARNING:

Failure to upgrade in the correct order may cause a service outage/discontinuity between products.

Table 6-1 Load Line Up

Product Element	Upgrade Order (if applicable)
EAGLE	1
LSMS	2
LSMS Query Server	3
ELAP	4
FTRA	5



## EAGLE Release 46.9 Resolved and Known Bugs

This chapter lists the resolved and known bugs for EAGLE release 46.9.

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 builds:

- EAGLE 46.9.5.0.0-76.48.0
- EAGLE 46.9.4.0.0-76.47.0
- EAGLE 46.9.3.0.0-76.45.0
- EAGLE 46.9.2.0.0-76.41.0
- EAGLE 46.9.1.0.0-76.39.0
- EAGLE 46.9.0.0.0-76.28.0

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.



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

Table 7-1 EAGLE Release 46.9.5.0.0-76.48.0 Resolved Bugs (February 2022)

Bug Number	SR	Severit y	Title	Customer Impact
33613760		4	IN IDPR Consolidation	

Table 7-2 EAGLE Release 46.9.4.0.0-76.47.0 Resolved Bugs (December 2021)

Bug Number	SR	Severit y	Title	Customer Impact
33580622		2	ACN Length Check to be removed for TOBR Processing	After upgrade to R46.9.1 Customer started observing packet failure due to this check. While investigating it was found that the 7 bytes length may be true for MAP messages but not true for CAP/INAP/ CS1+ or other protocols. ACNs are represented by TLV encoding and can have variable length. This bug is opened to remove the check that was placed to verify ACN length.



Table 7-2 (Cont.) EAGLE Release 46.9.4.0.0-76.47.0 Resolved Bugs (December 2021)

Bug Number	SR	Severit y	Title	Customer Impact
33580327		4	IMSI MAP Based Routing for IMEI_Check Messages	

Table 7-3 EAGLE Release 46.9.3.0.0-76.45.0 Resolved Bugs (July 2021)

Bug Number	SR	Severit y	Title	Customer Impact
33047589		3	Obsoleted EPMA cards are loading gpl and E5SM8G-B SIP ELAP card is coming IS-NR with STPOPTS:LNPTN756M=ON	
32984777		4	EAGLE Changes for LNP greater than 504M	
33028375		4	Extra comma listed in Daily LNP, SSP CSV Measurement and CSV file for gttact is missing a value	

Table 7-4 EAGLE Release 46.9.2.0.0-76.41.0 Resolved Bugs (June 2021)

Bug Number	SR	Severit y	Title	Customer Impact
32658736		2	ELAP cards are getting stuck at phase 1 loading (98%)	ELAP cards will not load and will not become active. It will affect the traffic.
32895833	Υ	3	act- upgrade:action=createsets triggers infinite loop displaying MUX sets	When using the chg- upgrade- config:threstype=set:srvsets= 2:limsets=4 commandfollowed by act- upgrade:action=createsets, the command goes into a loop on the MUX cards and the active MASP has to be pulled to stop the loop.



Table 7-5 EAGLE Release 46.9.1.0.0-76.39.0 Resolved Bugs (March 2021)

Bug Number	SR	Severit y	Title	Customer Impact
31613446		2	R46.9_ST: Observing Establishing Maintenance Baseline - timed out waiting for subprocesses.	When initializing the OAMs, the timeout expires and the user will not be able to execute commands, even in duplex mode. After waiting at least 5 minutes (a wait of one hour has been experienced), the OAM will establish the SCCP baseline and then commands can be executed normally. The wait time increases as the number of SFAPP cards in the system increases. There is no traffic impact.
32101349		2	EAGLE SFAPP (SS7 FW) - ATI & PSI Acknowledgement Decoding Error	Decoding failure of ATI response and PSI response with RESPONSE TAG results in failure of the below four use cases of SFAPP: Use Case 1, Current VLR Validation Use Case 2, Velocity Check using ATI Use Case 3, VLR validation using IMEI Use Case 4, Intelligent VLR Whitelist
31112961	Y	3	Cannot delete a cluster DPC due to E2356 Cmd Rej: Last route to DPC in use by GTT	We have a systemic issue that can affect ANSI customers who built out cluster point codes in a release sometime prior to Eagle 42.0. When deleting all translations for cluster members the customer is still unable to delete the cluster route due to a command error rejection message that states E2356 Cmd Rej: Last route to DPC in use by GTT. Per the spec, it should not be possible to assign a GT to a cluster and cluster routing should be MTP only.



Table 7-5 (Cont.) EAGLE Release 46.9.1.0.0-76.39.0 Resolved Bugs (March 2021)

Bug Number	SR	Severit y	Title	Customer Impact
31580201		3	R46.9_ST_ENUM: Obit pvdlvmsg.c is observed on ENUM when loaded from redundant port (D-port)	
31625084		3	R46.9_ST: Wrong path is getting pegged for gttaction DUP and scpval in MTCHGTTAPATH report.	
31647691		3	Rel.46.9_FT_Viz: SCCP card booted with obit "ath_vxw_mgr. Line 2057."	
31684205		3	SFAPP sync does not start after CAT2 sync	
31729089		3	Rel.46.9_ST: Observed Severity 1 "slog_rtv.c" on standby OAM card while doing GETREL when purgeperiod=1	
31732160		3	R46.9_ST: observing DB- DIFF on all 5 secondary SFAPP cards	
31784126		3	R46.9.1_MR_SFAPP: Obit "ath_vxw_mgr" is observed on SFAPP card when chg- gttapath command is entered	
31803367	Y	3	Severity 1 hcl_l2.c on E1T1 B cards	Card provisioned as LIME1 or LIMT1 may generate "Module hcl_l2.c Line 1423 Class 3036" sev-1 due to mismatch between the length indicator embedded in the signal unit and the actual size of the received signal unit for certain lengths. There is no impact to call processing.
31898644		3	Fastcopy link becomes inactive after changing mode from STC/FCOPY to OFF and vice versa.	
31973510	Y	3	Active MASP (1115/1116) went INCOHERENT after it was initialized with the USB in the latched USB port.	There is no traffic impact. User should clear the DB inconsistency alarm on OAM before doing any DB changes (ent/chg/dlt).



Table 7-5 (Cont.) EAGLE Release 46.9.1.0.0-76.39.0 Resolved Bugs (March 2021)

Bug Number	SR	Severit y	Title	Customer Impact
32299725	Y	3	MOFSM MAP V2 message is not processing MBR	MO-FSM fails MBR processing in these two cases:
				1. For MAP version 1 & 2, the IMSI should not be decoded, but MBR is discarding the message with UIM 1145 with error cause as "IMSI decoding failed" even when the IMSI set is not applied. The correct behavior is that MBR should not decode the IMSI.
				2. For MAP version 3, IMSI is an optional parameter. Again, MBR is discarding the message with UIM 1145 with error cause as "IMSI decoding failed" if no IMSI is present in the message or even when the IMSI is present but could not be decoded and the IMSI set is not applied.
31284658		4	46.9_CAT2_FT :- Issues observed with OAM to SCCP sync when TBL file with maximum entries is transfered to Eagle.	
31516392	Υ	4	E5-ENET-B w/High Throughput feature sends SRM to IMF with different card capacity (6500 or 9500)	While monitoring PIC, the customer may observe an ENET-B IPSG card with the E5-ENET-B IPSG High Throughput - 893039501 feature enabled continuously changing its TPS capacity from 6500 to 9500 and back, the customer is expecting it to remain at 9500 TPS.
31674359		4	Support for 1Gbps on SliC working as IPSG	
31830120		4	OAM boot observed while executing act-upgrade:action=getrel	



Table 7-5 (Cont.) EAGLE Release 46.9.1.0.0-76.39.0 Resolved Bugs (March 2021)

Bug Number	SR	Severit y	Title	Customer Impact
32012415		4	Enhance ASN.1 decoding to restrict additional octets in TCAP layer.	

Table 7-6 EAGLE Release 46.9.0.0.0-76.28.0 Resolved Bugs (August 2020)

Bug Number	SR	Severit y	Title	Customer Impact
28602895		2	Rel.46.7_UC#4:Learning not working correctly in Test and Learn mode occasionally	For the first two entries in the SFAPP UC4 Dynamic VLR profile table, the learning does not get completed (i.e., the VLR status does not move from GRAYLIST to ALLOWLIST/BLOCKLIST based on VLR validation results).  Workaround: Retrieve the dynamic VLR profile table after the first SFAPP(P)->OAM sync, using the rtrv-vlr-prof command. The first two entries (say, 123 and 456) in the Dynamic VLR profile table must be duplicated in Static VLR profile table using the ent-vlr-prof command. The filter for these VLRs is the operator's prerogative. If the filter is Allowlist/blocklist, a corresponding entry in the Static VLR roaming table is NOT required. If the filter is graylist, operator has to create two static VLR roaming the ent-vlr-roaming command:
				One entry with newvlr=123 and oldvlr=456 and,
				2. Other entry with newvlr=456 and oldvlr=123



Table 7-6 (Cont.) EAGLE Release 46.9.0.0.76.28.0 Resolved Bugs (August 2020)

Bug Number	SR	Severit y	Title	Customer Impact
30679528		2	R46.7.4: Observed restart.c obit due to ACL task during upgrade from 46.5 to 46.7.4	An SCCP card may continuously obit during upgrade. Should this occur, the card should be inhibited and re-flashed to end the rebooting cycle.
30794281		2	R46.9: Error "E3510 Cmd Rej: EPMA/SM4G card not supported for the feature" when enabling 13.5K TPS feature	The enable-ctrl-feat:partnum=893019104 (13.5K TPS feature) and the chg-stpopts:on=gbusnminm commands are rejected even if there are no EPMA/SM4G cards present but there are empty card slots.
30957075		2	Memory leak issue on ENUM and SIP card in case of socket write error.	The card will boot/restart after all system buffers are exhausted due to a socket write error on the ENUM and SIP cards.
31334336		2	Rel.46.9:ACT- UPGRADE:ACTION=GETRE L command failed during validation of release 46.9.0.0.0-76.17.0.	Upgrade will be impacted. Customer will not able to upgrade the system as GETREL command will fail.
31450957		2	GTTASET is not getting pegged correctly when scpval gets failed and defactid is set to fallback	The wrong register count will be reported in SYSTOT-TT/ CGTT and GTTASYS reports when scpval gets failed and defactid is set to fallback. There is no traffic impact.
31613446		2	Observing Establishing Maintenance Baseline - timed out waiting for subprocesses.	When initializing the OAMs, the timeout expires and the user will not be able to execute commands, even in duplex mode. After waiting at least 5 minutes (a wait of one hour has been experienced), the OAM will establish the SCCP baseline and then commands can be executed normally. The wait time increases as the number of SFAPP cards in the system increases. There is no traffic impact.



Table 7-6 (Cont.) EAGLE Release 46.9.0.0.76.28.0 Resolved Bugs (August 2020)

Bug Number	SR	Severit y	Title	Customer Impact
31693312		2	Diff contents on standby OAM and DDB inconsistent on SFAPP card is being observed	The command "rept-stat-db" shows "DATABASE STATUS: >> NOT OK (DMS) <<" with standby DB level showing "DIFF CONTENTS". The command "aud-data:type=ddb:display=all" shows System Status "INCONSISTENT". Customer will be unable to take a DB backup as DB status is "NOT OK". There could be other impacts as well.
23542116	Y	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.
24523271		3	init- card:loc=:prtngrp=inactive does not generate MTT E4851 for USB port	
28553522		3	R46.7_UC3_FT: Incorrect information is being displayed in ent-trace output	
28793401		3	R46.7_ST:rept-stat-slk is making eagle terminal busy	
28854099		3	Entries in VLR roaming table getting missed during Primary to Secondary SFAPP Sync.	
29167294		3	CDS: R46.7: EAGLE prints frame location as 0 in FUSE PANEL Alarm (UAM 82)	
29527709	Y	3	SR: Deleting any IP-HOST entry in the system causes associations on IPSG 1201 to fail after a reconfiguration	If user attempts to close and open any IS-NR association on card 1201, association won't come back in service.  If user configures a new association on card 1201, association on card 1201, association won't come in service. However no problem observed with the recovery of associations (existing IS-NR associations on card 1201) after failures due to network or remote events. No problem was observed for associations on IPSG cards at other locations in the customer network.

Table 7-6 (Cont.) EAGLE Release 46.9.0.0.76.28.0 Resolved Bugs (August 2020)

Bug Number	SR	Severit y	Title	Customer Impact
29701152		3	IMT restart.c obit due to iim_imt_x task	
30245881	Υ	3	SR: IPSM rejecting SSH connections (Module iptscmgr.c & sshd_v69.c troubles)	IPSM card based on E5-ENET-B rejects all SSH connections. Putty responds with "Server unexpectedly closed network connection" Card is IS-NR, link is UP, and the card can be pinged from another card. IPSM sends TCP FIN after successful Key Exchange. NOTE: The issue reported is with only one IPSM out of two IPSMs configured in the system. Also, the customer has not tried to reboot the impacted card to correct the issue.
30512348		3	Card may boot with restart.c obit while being flashed and activated	
30986455	Υ	3	SR: aud_oam.c sev-1 on OAMHC69 results in DB Audit failure & DB corruption UAM 35/UIM 1188	Initializing a MASP card running VxWorks 6.9 GPLs (BLDC32 & OAMHC69) with a removable USB drive inserted, results in DB audit failure on the MASP card as indicated by "module aud_oam.c Line 1542" severity 1 trouble.
31073710	Y	3	Memory leak issue observed on IPSM card using SSH connection with EAGLE.	This is a socket leak issue. A few sockets are not closing after the putty or secureCRT session is closed by the user. Once all of the sockets are exhausted, a "Telnet Server is busy, Please try again later" error message is displayed when a new connection is attempted.
31552512		3	Provisioned links falsely report OOS after reboot of OAM	
25921396		4	Rel46.5_ST_observed severity Card 1113 Module os_utl.c Line 1154 Class 01c3	
27059694		4	R46.6_ST:Module iptscmgr.c Line 2366 Class 0001 Severity 1	



Table 7-6 (Cont.) EAGLE Release 46.9.0.0.76.28.0 Resolved Bugs (August 2020)

Bug Number	SR	Severit y	Title	Customer Impact
27100220		4	Rel46.6_ST:RTRV-TPS cmd output needs to be updated for removal of IPLIM/IPGW	
27951231		4	Convert LIM cards to run on VxWorks 6.9 using a single command	
27992966		4	R46.7: Severity 1 from dbcd_dc.c Line 989	
28453446		4	R46.7_UC3_FT: Text note display while doing ent\dlt-mate-stp	
28554517		4	EEDB46.7:FT_Escape functionality for backup/ Restore not working	
29583508		4	R46.8.0_FT:rtrv-enum-prof command must be rejected with appropriate Message.	
29629871	Y	4	SR: rept-stat- sccp:mode=perf:data=imsi reports incorrect value for s%	
29856619		4	EIR Logging enhancements	
29914275		4	SRI_SM ACK Screening	
29914289		4	EIR IMSI Allowlist expansion	
29914323		4	FTRA rtrv-mrn support	
29914330		4	TIF to perform Blocklisting based on Redirecting-Number parameter	
30198404		4	Ability to screen on Generic Name in TIF Blocklisting	
30273130		4	Ability to have more than 1 TIF filter make use of EPAP for Blocklisting	
30461821		4	Support of CAT2 SS7 Security	
30536430		4	Seculog data have to be deleted in a tunable period	
30641618	Y	4	Unable to locate 46.6.5.0.0-73.31.1.tar.gz on USB drive	
30666648		4	Enhanced Logging of UIM and Information from SM cards for security	
3066664		4	Provide framework for visualization of information collected from EAGLE for network security	
31098064		4	Disable Upgrade by GROUPs	



Table 7-6 (Cont.) EAGLE Release 46.9.0.0.76.28.0 Resolved Bugs (August 2020)

Bug Number	SR	Severit y	Title	Customer Impact
31406227		4	Remove MTT 3112 from rtrv-data-rtdb command.	
31432546		4	CSVGEN(X) for Solaris last supported in EAGLE release 46.8	

## **Customer Known Bug List**

Please find below the known bugs and associated Customer Impact Statements in Table 7-7. This information is provided for information purposes only.

Table 7-7 EAGLE Release 46.9 Customer Known Bugs (February 2022)

Bug Number	SR	Severit y	Title	Customer Impact
32585893		2	Rel.46.9.1_ST:O bserved obit tk_pool_buff Line 3469 on E1T1 card when EROUTE cards initialized	LIM E1T1 card may reboot when all the EROUTE cards are booted at the same time. There may not be a need to reboot all the EROUTE cards at the same time. If all the EROUTE cards are going to be rebooted at the same time the below workaround can to be executed prior to reboot to prevent LIM E1T1 card reboot. Workaround: Disable the SCOPY services (set EISCOPY=off) prior to issuing the init-card:gpl=EROUTE command to prevent the out of buffers obit and E1T1 card reboot.
25665463		3	Rel46.5_128con:I PSG SLIC128 M2PA may boot silently (without obit)	In the rare case when the card may boot due to a workQPanic 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.
26023475		3	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.

Table 7-7 (Cont.) EAGLE Release 46.9 Customer Known Bugs (February 2022)

Bug Number	SR	Severit y	Title	Customer Impact
26421059		3	Rel46.6_CardOb s-Support of SLAN measurements need to be removed	Some measurement command parameters and measurement registers related to the obsolete STP LAN feature are still present in the system. This may cause some minor confusion for operators. No operational impact.
26739329		3	HIPR2 - ALIGN LED does not turn AMBER when IMT BUS is inhibited.	The Alignment LED of a HIPR2 should change to and remain AMBER while the bus is inhibited as an effective aid for the operator to identify which bus is inhibited. However occasionally, when the IMT bus is inhibited, a HIPR2 card may keep its Alignment LED colored GREEN. As a workaround, the bus can be allowed (ALW-IMT) and inhibited (INH-IMT) again to change the Alignment LED to AMBER.
26763948		3	R46.6_12k:sev1 Card 1113 Module scm_tps.c Line 3895 Class 01d0 Obs on OAM	rept-stat-iptps:history=yes command may not print the output if uithrottle (stpopts parameter) is set to 9. System Default value of uithrottle is 0. Workaround: If uithrottle (stpopts parameter) is currently set to 9, then set it to a value less than 9.
27065051		3	R46.6_ST:GTT traffic is getting dropped on IPSG32 card in congestion scenario	If MAXSLKTPS is reduced so that congestion is induced with current traffic on the link, the amount of traffic that will be passed will not be maxslktps but something significantly less or no traffic at all. Workaround: Change SLKTPS rate back to original value or reduce traffic to under maxslktps.
27703349		3	R46.6_ST:E1T1 link test failed in upg ph 2 during Upgrade to 46.6.0.0.0-73.18.	One or more E1T1 TDM signaling links may momentarily drop out (5 to 30 seconds) during Phase 2 of Upgrade. The event occurs only once per link, links recover and normal operations continue. Mate STP should be able to handle traffic if this issue causes a linkset to go down for a brief period during the upgrade maintenance window.
28185911		3	LIM/SCCP card(s) denied SFAPP alm with new SFR MFC servc needs clarification	Operator needs to run the rept-stat- mfc commands for SFAPP and SFR services or look at the measurements to determine the service that is causing the alarm.



Table 7-7 (Cont.) EAGLE Release 46.9 Customer Known Bugs (February 2022)

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Bug Number	SR	Severit y	Title	Customer Impact
28253971		3	Rel.46.7_DB_Ex p:Sev1 rmtp_utl.c with lines 349 and 384 obsrvd during upgrade	These severity 1 troubles may appear at end of the full DB download after a cold restart of a SCCP64 card. There is no known impact.
28518265		3	R46.7_UC1enh: UIM not getting generated for invalid ACN scenario in ATI ACK msg	No UIM will be generated for invalid ACN in ATI ACK for Rt-on-GT scenario. No other impact on any operation.
28964892		3	R46.7_ST:DEIR and ENUM reports are coming blank on Integrated Meas Platform	An EAGLE with no SCCP cards configured may generate blank measurement reports related to the ENUM and DEIR features.
28995862		3	Rel.46.7_ST:Une xpected Sev1's uias_cnl.c Line 243 and vlr_mgr.c Line 1460 observed on OAM card	No known impact other than the display of the severity 1 trouble.
29197515		3	R46.5.1.10_FT: UAM 115 & 116 and UIM 118 & 119 are not getting generated with tpsalmtype=maxs lktps for SLIC card	TPS alarms do not show when the card running the IPSG is a SLIC and traffic crosses its threshold value when tpsalmtype is set to MAXSLKTPS. TPS alarms are generated correctly when tpsalmtype is set to RSVDSLKTPS.
29344848		3	R46.8-DB Rejected the GTT enable command to a 32-link SLIC IPSG card	EAGLE may reject valid command chg-card:loc=xxxx:data=gtt when the card is running the IPSG32 GPL when the card has 32 links provisioned and if they are not A0 - A15 & B0 - B15. The reason is that the code considers links A0 through A15 and B0 through B15 to constitute the first 32 links on the card. Link A16 appears to the card to be the 33rd link.
29355709	Y	3	R46.6.3: SLIC V2 SCCP EPAP/ ELAP card boots on act/dact-ip- lnk:port=a	When the debug command act-ip- link and/or dact-ip-link is issued, the SLIC card may boot.



Table 7-7 (Cont.) EAGLE Release 46.9 Customer Known Bugs (February 2022)

Bug Number	SR	Severit y	Title	Customer Impact
29378816		3	R46.6.3: LINK LED for ports B & C are not working correctly if UDP\TCP connection is not configured for SIP\ENUM.	The LINK LEDs on ports B & C are illuminated green even when no UDP/TCP connections are provisioned for either port.
29378828		3	R46.6.3: LINK LED for PORT D is not working correctly for SLIC DEIR card	The colors of the LED (green/red) for the SLIC card, port D, when running the DEIR application are reversed from what they should be: red when it should be green, and green when it should be red.
29539191		3	IDPR_Enh:Modul e mdb_srvs.c Line 369 observed on LIM card while executing ent- srvsel command with ANSI domain.	When SRVSEL entries of type ANSI and ITUN24 are configured with the same values of GTI, TT, NP, NAI, and SSN, cards may observe UAM 0034 "Card database is inconsistent" and report "Module mdb_srvs.c" severity 1 trouble.
29873349		3	copy-disk command failed to copy files from active to standby causing sev 1 dmshc_utl.c Line 1240 DMS Error	The copy-disk command may fail to transfer files as expected. Workaround: Retry the operations and the copy eventually succeeds at the second or third attempt.
29883833		3	Eagle Upgrade Document E54340 Recovery C does not account for using the spare MASP as the recovery	EAGLE Software Upgrade Guide does not correctly account for or describe the proper procedure for using the spare MASP to recover from a failed Upgrade.
30013173		3	R46.8: PFXSTRIP value for SIP is not getting changed from No to Yes through chg-csl command.	The "chg-csl" command for the SIP feature to change the value of the PFXSTRIP parameter from NO back to YES does not change the value. After the "chg-csl" command is executed, the "rtrv-csl" command will display the PFXSTRIP value as NO and call processing works as per "PFXSTRIP=NO".



Table 7-7 (Cont.) EAGLE Release 46.9 Customer Known Bugs (February 2022)

Bug Number	SR	Severit y	Title	Customer Impact
30361203		3	Timing source for E1 and T1 missing from 46.8 commands manual.	The ent-e1/t1, chg-e1/t1, rtrv-e1/t1, and dlt-e1/t1 commands in the EAGLE 46.8 Commands User's Guide are missing the timing selector information. Workaround: Refer to the EAGLE 46.0 Commands User's Guide for this information.
30431027		3	R46.7:During upgrade multiple LIM cards did not return to IS-NR in less than 8 minutes	Incremental Upgrade will fail since the LIM cards failed to convert within the stipulated time.
31098175		3	The FTP command with -a option is broken	FTP with the -a option does not work. There is no impact on traffic. Workaround: Run two commands instead: Use FTP without the -a option, then use the copy-tbl command.
31186470		3	46.9:- clc_mgr.c, clc_utl.c and scm_ldr.c severity 1 are being observed on Eagle.	When a SLIC is flashed with the BLSLC64 GPL and the card is provisioned as IPS, the OAM attempts to load the IPSHC GPL to the card. The proper response of the OAM should be notification that the card is flashed with an incompatible GPL, and not attempt to load the IPSHC GPL. If the card had been flashed with the BLSL932 GPL, the OAM would have loaded the correct GPL (IPSHC69) to the card, and the clc_mgr.c & clc_utl.c troubles would not occur.
31222586		3	SR: TBGTTLS (using ENHMTP Key) not working as expected when GTTRQD is used after G- Port	TBGTTLS will not perform load sharing properly. Messages with the same SLS value will be routed to the same destination within the MAP/MRN load sharing group.
31389028	Y	3	Active E5-MASPs are not able to transfer MEAS files to FTP server with security=ON	Eagle stops sending measurement reports to configured FTP server.



Table 7-7 (Cont.) EAGLE Release 46.9 Customer Known Bugs (February 2022)

Bug Number	SR	Severit y	Title	Customer Impact
31485950		3	46.9_CAT2_FT:- CAT2 TBL files not getting transferred to Eagle when speed of IPSM link is changed from 10 to 100.	The issue happens once when the speed is changed on the EAGLE first and the far end later. The issue does not always happen.
31492022		3	Rel.46.9:Observe d Severity 1 gldr_oamhc.c and gws_shr.c on standby OAM card while booting the EAGLE (INIT- SYS)	None.
31502030		3	46.9_CAT2_FT:- "UIM 1512 CAT2 IPSM to OAM Sync Completed" not displayed when Eagle is in simplex mode.	In Simplex mode, the subject UIM is not displayed during CAT2 synchronization. Synchronization completes successfully. No impact to customer operation in Duplex mode.
31523686		3	R46.9_ST_Upg: Sev 1 "sldmgr2.c" and Obits "adl_mgr.c" & "pmtc_mgr.c" were observed in phase 3 during major upgrade	With ample load on the IMT bus during upgrade, a few cards may time-out waiting for their databases to be received from the OAM, and then boot one time. The cards typically recover normally after that and become IS-NR after successfully reloading their databases on the second try. The impact is only the additional booting of the cards - there is no impact to the IMT bus. There is no impact on functionality after upgrade completes.



Table 7-7 (Cont.) EAGLE Release 46.9 Customer Known Bugs (February 2022)

Bug Number	SR	Severit y	Title	Customer Impact
31582751		3	R46.9_ST: MOFSM MAP V2 message is not processing MBR	MO-FSM fails MBR processing in these two cases: 1. For MAP version 1 & 2, the IMSI should not be decoded, but MBR is discarding the message with UIM 1145 with error cause as "IMSI decoding failed" even when the IMSI set is not applied. The correct behavior is that MBR should not decode the IMSI. 2. For MAP version 3, IMSI is an optional parameter. Again, MBR is discarding the message with UIM 1145 with error cause as "IMSI decoding failed" if no IMSI is present in the message or even when the IMSI is present but could not be decoded and the IMSI set is not applied.
31647295		3	R46.9_ST: Observing Module mfctmutl.c Line 1334 Class 01c3 Severity 1 on IPSG cards	A few ATI ack messages do not reach the SFAPP card when the card is congested under maximum load. The corresponding UC #1, #2, and #3 messages will not be applied, but the original message will still be processed.
31858903		3	Rel.46.9.1_ST:S everity 1 " md_os.c Line 531 Class 0001 " observed while major upgrade	During upgrade phase 3, when IPSG card initializes it may generate "md_os.c Line 531 Class 0001" severity 1 message in rare circumstances. There is no impact to the system.
32215034		3	DB Audit running for more time in 46.9.0 due to addition of CAT2 feature	Customers need to execute a system backup post upgrade and want to do this during the upgrade maintenance window. The increased DB audit time delays normal system administration up to 90 minutes.
32405587		3	R46.9.1_ST: ATI- ACK and PSI- ACK getting decoded even if integer tag after result tag is missing	ATI_ACK & PSI_ACK message with missing integer tag are getting decoded successfully. This results in successful processing of message instead of throwing missing mandatory parameter error.



Table 7-7 (Cont.) EAGLE Release 46.9 Customer Known Bugs (February 2022)

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Bug Number	SR	Severit y	Title	Customer Impact
32555852		3	EAGLE 46.7.4.0.0 chg- trm:all=yes:trm=1 6 does not show logged UIMs on the term	When troubleshooting network events a customer may execute the chg-trm:trm=16:all=yes command and expect to see all UAMs and UIMs (alarms and informational messages). This does not happen so a customer may think alarms are not happening when in reality they are logged, but not written to the terminal set to all=yes.
26635708		4	Overlapd parameter is not working with rtrv- gttsel command	The overlapped GTT selector definition listed in the Commands User's Guide under the RTRV-GTTSEL command may cause some minor confusion for the user. The correct explanation is in the GTT User's Guide under the Unique GTT Selectors section.
26938777		4	R46.6_E1T1_SLI C_Enh:Unable to provision 3rd HSL on empty card location .	A SLIC card needs be inserted in the slot before more than 2 HSLs can be provisioned for the E1T1 location.
28554517		4	EEDB46.7:FT_E scape functionality for backup/Restore not working	Operator needs to abort process by entering "N" response to the 'Do you want to continue?' instead of Escape functionality.
29135154		4	Minor changes & cleanup for EAGLE Health Check document. Version #22	EAGLE System Health Check Guide contains considerations for long obsoleted GPLs and functions, which can be confusing.
29408928		4	R46.6.3_FT: Incorrect Eagle version is shown in UNIX and LINUX FTRA GUI when CSV files are created and FTRA is completed	FTRA may display incorrect EAGLE release version on the GUI when providing information about generated CSV files upon completion. However, the version mentioned inside the generated CSV files is correct.
29549597		4	R46.8_FT:Incorre ct Eagle version is shown in CSV files of UNIX and LINUX FTRA	FTRA running on Unix or Linux platform may display EAGLE version incorrectly.
30212669		4	Observed pmtc_mgr.c Line 942 during Phase 3 of upgrade	Software upgrade process - Observed pmtc_mgr.c Line 942 during Phase 3 of upgrade.



Table 7-7 (Cont.) EAGLE Release 46.9 Customer Known Bugs (February 2022)

Bug Number	SR	Severit y	Title	Customer Impact
30914993		4	DRMS Init duration has doubled	The time to initialize DRMS has increased by 3 minutes, which means that an OAM will take 3 more minutes to come IS-NR, or go to duplex mode.
31557228		4	R46.9_ST: Inconsistent output for rept- stat- sccp:data=gtt	The rept-stat-sccp:data=gtt command shows inconsistent output when the SCCP GTT card is/is not configured and the IPSG GTT card is configured. MTPRTD stats are present or missing in the output. All all GTT stats are present or only IPSG GTT stats are present in the output. There is no traffic loss.
31567725		4	46.9 Visualization - LEDs for port C on SCCP and SFAPP cards do not match requirement.	The link LED of port C remains off on SFAPP application cards, even with active connections. The link LED of port C remains GREEN even with no active connections, when it should be RED on SCCP application cards.
31646496		4	R46.9_ST: SFAPP traffic is being shown twice in rept-stat- sfapp if psi- ack\ati-ack is timed out	The TPS count is increased by 1 for every ATI/PSI ack that times out. (If all the ATI/PSI acks time out, then the TPS count shown will be twice the actual count.) There is no message loss or loss of service.
31646563		4	R46.9_ST: oamhc_init.c Severity 1 with lines 3018 and 3021 is being observed on active OAM	There is no loss of service. Debug output will not be available.
31666962		4	Rel.46.9_ST: Derived TPS not displayed correctly for 128 links	Derived TPS displayed in output of rept-stat-iptps will not be according to the de-rating factor applied.
31878460		4	Eagle 46.9.1 Upgrade doesn't report unprovisioned cards that failed to flash	During upgrade, false status of flash activation is reported for unprovisioned cards. There is no impact on system as false status is reported only for cards that are not provisioned in the database but physically inserted into the slots.
32012916		4	Rel.46.9.1_ST: Derived TPS not displayed correctly for 128 links	The rept-stat-iptps command with tpscost parameter as yes may report incorrect derived TPS. There is no traffic impact or functionality loss due to this issue.



Table 7-7 (Cont.) EAGLE Release 46.9 Customer Known Bugs (February 2022)

Bug Number	SR	Severit y	Title	Customer Impact
33129601		4	Add procedure to activate LNP licensing beyond 504M with increment of 12M entries per part number	In EAGLE 46.9.3 and any later 46.9.x releases, there are no 893-0110-xx LNP capacity part numbers for the 12M increments from 516M-756M. As a result, there is no method to configure LNP database capacity alarms as the capacity approaches any of the 516M, 528M, 756M capacity thresholds that correspond to the purchased capacity. This issue will be fixed in EAGLE 47.0.



### Oracle References and Services

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

## My Oracle Support (MOS)

My Oracle Support (MOS) is your initial point of contact for any of the following requirements:

#### Product Support:

The generic product related information and resolution of product related queries.

#### Critical Situations

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.

#### Training Need

Oracle University offers training for service providers and enterprises.

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

Call the Customer Access Support 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 <a href="http://www.oracle.com/us/support/contact/index.html">http://www.oracle.com/us/support/contact/index.html</a>. When calling, make the selections in the sequence shown below on the Support telephone menu:

- For Technical issues such as creating a new Service Request (SR), select 1.
- For Non-technical issues such as registration or assistance with My Oracle Support, select 2.
- For Hardware, Networking and Solaris Operating System Support, select 3.

You are connected to a live agent who can assist you with My Oracle Support registration and opening a support ticket.

My Oracle Support is available 24 hours a day, 7 days a week, 365 days a year.

## **Product Support**

The information in this document addresses the product releases that are currently covered under Premier Support and also some product releases that are no longer covered under Premier Support. Refer to Lifetime Support for your Oracle Application Unlimited Products on the Applications Unlimited Lifetime Support web page for support information.

Also refer to EAGLE Error Correction Policy on MOS for detailed information on bug fix and patch release policies. Refer to the Release Notices of each product release for information related to supported upgrade paths.

## Locate Product Documentation on the Oracle Help Center Site

Oracle Communications customer documentation is available on the web at the Oracle Help Center (OHC)Oracle Help Center (OHC) site. 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.

- Access OHC.
- Click Industries> Communications.The Communications Documentation page appears.
- Under Signalling and Policy header, select EAGLE.
   The list of entire documentation set for EAGLE Product Line and releases appears.
- 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. 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.

