

**Oracle® Communications  
EAGLE**

Release Notes

Release 46.2

**E63568 Revision 2**

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# Chapter 1

## Introduction

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

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

# Chapter 2

## Feature Description

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### Topics:

- *ENUM Mobile Number Portability and Tier One Address Resolution .....8*
- *Enhancement Bugs.....12*
- *Operational Changes.....13*

This Release delivers the following feature:

- *ENUM Mobile Number Portability and Tier One Address Resolution*

## ENUM Mobile Number Portability and Tier One Address Resolution

The ENUM Mobile Number Portability and Tier One Address Resolution (ENUM) feature of the Oracle Communications EAGLE enhances the ability of EAGLE to access the Number Portability database (RxDB) using ENUM protocol. Using the ENUM interface supported on UDP, EAGLE is able to process a destination number lookup in an IP-based addressing scheme in the Number Portability database and provide a routing solution to the originating carrier.

### Hardware

The ENUM feature is supported on the E5-SM8G-B card running the ENUMHC GPL. A maximum of 16 E5-SM8G-B cards per EAGLE can be configured as ENUM cards.

### Commands

The following commands are added to support the ENUM feature:

- `chg-enumopts` – This command changes the ENUM-specific data in the ENUM Options table (ENUMOPTS).
- `chg-enum-prof` – This command changes an existing entry in the ENUM Profile table (ENUMPROF) containing the ENUM Response Resource Records (RRs) in the supported formats.
- `chg-enum-profsel` – This command modifies an existing entry in ENUM Profile Selection table (ENUMPRID) mapping Entity ID to Profile ID or ENUM DN Block Profile table (ENUMDNBK) mapping DN Blocks to Profile ID.
- `dlt-enum-acl` – This command deletes an entry from the ENUM Access Control List table (ENUMACL).
- `dlt-enum-prof` – This command deletes an entry in the ENUM Profile table (ENUMPROF).
- `dlt-enum-profsel` – This command deletes an entry in ENUM Profile Selection table (ENUMPRID) for a specific Entity ID or an entry from ENUM DN Block Profile table (ENUMDNBK) for a specific DN Block.
- `ent-enum-acl` – This command adds a new entry of the IP address of a trusted ENUM client to the ENUM Access Control List table (ENUMACL).
- `ent-enum-prof` – This command adds a new entry in the ENUM Profile table (ENUMPROF) containing the ENUM Response Resource Records (RRs) in the supported formats.
- `ent-enum-profsel` – This command adds a new entry in the ENUM Profile Selection table (ENUMPRID) mapping Entity ID to Profile ID or the ENUM DN Block Profile table (ENUMDNBK) mapping DN Blocks to Profile ID.
- `rept-stat-enum` – This command displays the overall status of the ENUM service on the EAGLE.
- `rtrv-enum-acl` – This command displays a specific entry or all entries in the ENUM Access Control List table (ENUMACL).
- `rtrv-enumopts` – This command displays the ENUM-specific data in the ENUM Options table (ENUMOPTS). This command has no parameters.



- `rtrv-enum-prof` – This command displays an entry for a specific Profile ID or all entries in the ENUM Profile table (ENUMPROF).
- `rtrv-enum-profsl` – This command displays an entry for a specific Entity ID in table ENUMPRID, an entry for a specific DN Block in table ENUMDNBK, or all entries in table ENUMPRID and ENUMDNBK.

The following existing commands are modified to support the ENUM feature:

- `act-ftp-trans`
- `act-gpl`
- `alw-card`
- `aud-data`
- `chg-gpl`
- `chg-ip-conn`
- `chg-ip-lnk`
- `chg-mtc-measopts`
- `chg-upgrade-config`
- `copy-ftp`
- `copy-gpl`
- `copy-tbl`
- `disp-disk-stats`
- `disp-tbl`
- `dlt-ip-conn`
- `ent-card`
- `ent-ip-conn`
- `inh-card`
- `init-card`
- `init-network`
- `init-sys`
- `rept-ftp-meas`
- `rept-stat-alm`
- `rept-stat-card`
- `rept-stat-db`
- `rept-stat-gpl`
- `rept-stat-mps`

- `rept-stat-rtddb`
- `rept-stat-trbl`
- `rmv-card`
- `rst-card`
- `rtrv-gpl`
- `rtrv-ip-lnk`
- `rtrv-mtc-measopts`
- `rtrv-stp`
- `set-tbl`

### PASS Command

The ENUM application supports the following pass-through commands:

- `arp` - display and modify the Internet to Ethernet address translation tables used by the address resolution protocol.
- `connmgr` - connection manager event logging services used to display different connection details of the card.
- `cpum` - display cpu utilization.
- `ee` - Eagle Eyes support on ENUM cards for capturing ENUM packet wireshark traces.
- `msucount` - display number of queries and responses for an ENUM connection.
- `netstat` - display network statistics from the tcp/ip stack.
- `nslookup` - return the ip address for a given hostname or return a hostname for a given ip address.
- `ping` - test for the presence of hosts on the network.
- `sysstat` - display sys buffer, cpuconfig, database-related information.
- `traceroute` - determine the path taken by a UDP message to a specified remote host.

### Measurements

Thirty-seven new measurement registers are added to the MTCD-ENUM and SYSTOT-ENUM reports for the ENUM feature. The pegs for these measurement registers are collected on a per-system basis for 30-minute and daily intervals.

System Level:

- `ENUMACLDISC` - total number of ENUM queries discarded due to ACL validation failure
- `ENUMCNAMERX` - total number of CNAME queries received
- `ENUMCNGDISC` - total number of ENUM queries discarded due to congestion
- `ENUMNAPTRRX` - total number of NAPTR queries received
- `ENUMNSRX` - total number of NS queries received
- `ENUMQRYRJTD` - total number of ENUM queries rejected by ENUM server

- ENUMQRYRX - total number of ENUM queries received
- ENUMTXDEFPR - total number of ENUM responses sent with default ENUM profile
- ENUMTXRC0 - total number of successful ENUM response sent (RCODE = 0)
- ENUMTXRC1 - total number of ENUM error response sent due to ENUM Query format error (Format Error RCODE = 1)
- ENUMTXRC2 - total number of ENUM error response sent due to ENUM Server failure (Server Failure Error RCODE = 2)
- ENUMTXRC3 - total number of ENUM error response sent due to non-existent domain error (Non-existent Domain Error RCODE = 3)
- ENUMTXRC4 - total number of ENUM error response sent due to not implemented error (Not Implemented Error RCODE = 4)
- ENUMTXRC5 - total number of ENUM error response sent due to refusal by ENUM server (Refused Error RCODE = 5)

Card Level:

- ENUMCACLDSC - total number of ENUM queries discarded due to ACL validation failure
- ENUMCCNAMRX - total number of CNAME queries received
- ENUMCCNGDSC - total number of ENUM queries discarded due to congestion
- ENUMCNAPTRX - total number of NAPTR queries received
- ENUMCNSRX - total number of NS queries received
- ENUMCQRRJTD - total number of ENUM queries rejected by ENUM server
- ENUMCQRYRX - total number of ENUM queries received
- ENUMCTXDEFPR - total number of ENUM responses sent with default ENUM profile
- ENUMCTXRC0 - total number of successful ENUM response sent (RCODE = 0)
- ENUMCTXRC1 - total number of ENUM error response sent due to ENUM Query format error (Format Error RCODE = 1)
- ENUMCTXRC2 - total number of ENUM error response sent due to ENUM Server failure (Server Failure Error RCODE = 2)
- ENUMCTXRC3 - total number of ENUM error response sent due to non-existent domain error (Non-existent Domain Error RCODE = 3)
- ENUMCTXRC4 - total number of ENUM error response sent due to not implemented error (Not Implemented Error RCODE = 4)
- ENUMCTXRC5 - total number of ENUM error response sent due to refusal by ENUM server (Refused Error RCODE = 5)

Entity Level:

- ENUMENTMSGs - total number of ENUM queries received or ENUM responses sent per entity

Access Control List (ACL) Level:

- ENUMACLQRCV - total number of ENUM queries received
- ENUMACLQRJD - total number of ENUM queries rejected by ENUM server due to congestion and invalid ENUM messages causing error message to be sent to client
- ENUMACLRC0 - total number of successful ENUM response sent (RCODE = 0)
- ENUMACLRC1 - total number of ENUM error response sent due to ENUM Query format error (Format Error RCODE = 1)
- ENUMACLRC2 - total number of ENUM error response sent due to ENUM Server failure (Server Failure Error RCODE = 2)

- ENUMACLRC3 - total number of ENUM error response sent due to non-existent domain error (Non-existent Domain Error RCODE = 3)
- ENUMACLRC4 - total number of ENUM error response sent due to not implemented error (Not Implemented Error RCODE = 4)
- ENUMACLRC5 - total number of ENUM error response sent due to refusal by ENUM server (Refused Error RCODE = 5)

## Limitations

- If the ENUM card loses its ExAP connection, the cable from the ENUM card must be moved manually to the other switch and the ENUM card re-provisioned with the IP address of the other switch.
- If the ExAP database connection is lost, the ENUM card continues to process traffic with the copy of the database it had before the connection was lost, even if the database is stale.
- If the Signaling Network interface on an ENUM card stops functioning, the ENUM traffic corresponding to that Signaling Network interface is discarded.
- If the ENUM application stops functioning on an ENUM card, all open ENUM transactions handled by that card are lost.
- Load-balancing of ENUM on the EAGLE is not supported.
- STC Monitoring, SLAN Copy, and Fast Copy are not supported for ENUM Traffic.
- The EPAP Data Split feature must be turned on at the EAGLE with 240M EPAP database (120M DNS + 120 M IMSIs) to download the EPAP database on the ENUM card and bring the ENUM card to an in-service state (IS-NR).
- The ENUM Interface Support on EAGLE feature does not support FTRA for new commands.

## Enhancement Bugs

EAGLE 46.2 supports these enhancement Bugs:

**Table 1: EAGLE 46.2 Enhancement Bugs**

| Bug # and Title   | Description   |
|---|---|
| 19082574<br>[134528] Increase GWS rules from 4000 to 8000                                 | GWS rules have a maximum of 8000.                                       |
| 19082575<br>[134529] Increase GWS screensets from 256 to 1024                             | GWS screensets have a maximum of 1024.                                  |
| 19247409<br>Release 46.0 is the last EAGLE SW Release that supports HIPR (870-2574-01/02) | The HIPR (870-2574-01/02) card is no longer supported after EAGLE 46.0. |

## Operational Changes

EAGLE Release 46.2 contains new and updated alarms and error messages.

### Unsolicited Alarm Messages

The Unsolicited Alarm Messages (UAMs) in this section are introduced in EAGLE Release 46.2.

#### EAGLE ENUM Mobile Number Portability and Tier One Address Resolution feature

**Table 2: New UAMs for ENUM**

| UAM ID | Severity | Message Text                         | Output Group | Notes   |
|--------|----------|--------------------------------------|--------------|---|
| 120    | Critical | ENUM SYSTEM is not available         | SYSTEM       | The system has no ENUM card which is Active/IS-NR.  |
| 121    | Normal   | ENUM SYSTEM is available             | SYSTEM       | The number of active ENUM cards (IS-NR state) are equal to or more than half the configured ENUM cards. |
| 122    | Major    | ENUM SYSTEM normal, card(s) abnormal | SYSTEM       | The number of active ENUM cards (IS-NR state) are less than half the configured ENUM cards.             |
| 123    | Normal   | ENUM SYSTEM is removed               | SYSTEM       | All ENUM cards are deleted from the system.   |
| 124    | Minor    | ENUM Threshold -Level 1 exceeded     | CARD         | CONGLVL1 of ENUM card capacity has been exceeded.   |
| 125    | Major    | ENUM Threshold -Level 2 exceeded     | CARD         | CONGLVL2 of ENUM card capacity has been exceeded.   |
| 126    | Normal   | ENUM Threshold Condition cleared     | CARD         | Congestion was cleared on ENUM card.  |
| 127    | Critical | ENUM card capacity exceeded          | CARD         | ENUM Card capacity has been exceeded.   |
| 129    | Normal   | ENUM Card TPS normal                 | CARD         | ENUM card capacity is normal.   |

**20K GTT TPS****Table 3: New UAMs for 20K GTT TPS**

| UAM ID | Severity | Message Text                           | Output Group | Notes  |
|--------|----------|--|--------------|--|
| 548    | Major    | GTT HexTree DB corrupted. TPS derated  | CARD         | There is a memory corruption in HexTree DB that is affecting the lookup of GTT translations.                                       |
| 549    | Major    | GTT HexTree DB incoherent. TPS derated | CARD         | The HexTree DB could not be updated successfully on RADB command and the DB is incoherent.   |
| 550    | Normal   | GTT HexTree DB alarm cleared.          | CARD         | GTT HexTree DB alarm is cleared. This will be issued when the HexTree DB is corrupt or incoherent and GTTHITPS is then turned OFF. |

**Unsolicited Information Messages**

The Unsolicited Information Messages (UIMs) in this section are introduced in EAGLE Release 46.2.

**Non-Feature Related****Table 4: New UIMs for Non-Feature Related**

|          |   |        |              |
|----------|---|--------|--------------|
| UIM      | 1472                                    | Format | Output Group |
| Action   | Added for 46.2                          |        |              |
| Old data |   |        |              |
| New data | SCTP Buffer full timer expired, Restart | I1     | CARD         |
| UIM      | 1473                                    | Format | Output Group |
| Action   |   |        |              |
| Old data |   |        |              |
| New data | Unable to connect to socket             | I1     | CARD         |

**Error Messages****Error Messages for ENUM Mobile Number Portability and Tier One Address Resolution**

New and modified error codes to support the ENUM Mobile Number Portability and Tier One Address Resolution feature are listed in [Table 5: Error Messages for ENUM Mobile Number Portability and Tier One Address Resolution](#):

Table 5: Error Messages for ENUM Mobile Number Portability and Tier One Address Resolution

| Response ID Code | Error Message                                      | Used by Command  |
|------------------|--|--|
| E2073            | SCCP or SIP or DEIR or ENUM not Configured         | rept-stat-mps  |
| E2075            | Speed=1000 can be specified only with ExAP Port    | chg-ip-lnk   |
| E2136            | At least one optional parameter is required        | dlt-enum-profsel   |
| E2144            | Location invalid for hardware configuration        | rept-stat-enum   |
| E2155            | Invalid parameter combination specified            | chg/dlt/rtrv-enum-profsel<br>chg/ent-enum-prof<br>ent-enum-profsel<br>rept-stat-enum<br>rtrv-enum-prof |
| E2366            | LOC must be specified                              | rept-stat-enum   |
| E2704            | Invalid IPADDR                                     | dlt/ent/rtrv-enum-acl  |
| E3179            | SIPNP Feat not enabled or no ENUM card provisioned | chg/dlt/ent/rtrv-ip-conn<br>rept-stat-ipconn   |
| E3180            | TCP protocol is not supported for ENUM card        | ent-ip-conn  |
| E3181            | Card location specified must be an SIP/ENUM card   | rtrv-ip-conn   |
| E3182            | Failure accessing ENUMACL table                    | dlt/ent/rtrv-enum-acl  |
| E3183            | Failure accessing ENUMPRID table                   | chg/dlt/ent/rtrv-enum-profsel  |
| E3184            | Failure accessing ENUMPROF table                   | chg/dlt/ent/rtrv-enum-prof<br>chg/dlt/ent-enum-profsel   |
| E3185            | Failure accessing ENUM DNBLK table                 | chg/dlt/ent/rtrv-enum-profsel  |
| E3187            | Card location specified must be an ENUM card       | rept-stat-enum   |
| E3188            | ENUM not Configured                                | rept-stat-enum   |

| Response ID Code | Error Message                                     | Used by Command                   |
|------------------|---|-----------------------------------|
| E3189            | At least one profile name must be specified       | chg/ent-enum-profsel              |
| E3190            | RRDOMAIN must be specified                        | chg/ent-enum-prof                 |
| E3191            | RPDOMAIN must be specified                        | chg/ent-enum-prof                 |
| E3192            | Profile Name not present in ENUM PROF table       | chg/ent-enum-profsel              |
| E3193            | ENUM ACL table is full                            | ent-enum-acl                      |
| E3194            | ENTITYID or SDN and EDN must be specified         | ent-enum-profsel                  |
| E3195            | At least one ENUM card must be provisioned        | chg-mtc-measopts<br>rept-ftp-meas |
| E3196            | Overlapping entry must be removed                 | ent-enum-acl<br>ent-enum-profsel  |
| E3197            | ENTITY ID or SDN or EDN must be specified         | chg-enum-profsel                  |
| E3203            | SDN and EDN digit length must be the same         | ent-enum-profsel                  |
| E3204            | EDN must be greater than or equal to SDN          | ent-enum-profsel                  |
| E3205            | SPARM must be specified alone or with RTYPE=NAPTR | rtrv-enum-prof                    |
| E3206            | Profile name must be unique                       | ent-enum-prof                     |
| E3207            | Entity ID must be unique                          | ent-enum-profsel                  |
| E3208            | Order of the profile is incorrect                 | chg/ent-enum-profsel              |
| E3211            | At least one profile name should have valid value | chg-enum-profsel                  |
| E3214            | conglvl1 must be less than conglvl2               | chg-enumopts                      |
| E3217            | Profile name is referenced by PRID or DNBLK table | dlt-enum-prof                     |
| E3219            | NAPTR profiles must be unique                     | chg/ent-enum-profsel              |



| Response ID Code | Error Message   | Used by Command   |
|------------------|---|---|
| E3221            | ENUM PRID Table is full                                     | ent-enum-profsel  |
| E3222            | ENUM PROF Table is full                                     | ent-enum-prof   |
| E3223            | ENUM DNBLK Table is full                                    | ent-enum-profsel  |
| E3227            | SPARM=SIP is not supported for default profile              | chg-enum-prof   |
| E3229            | SDN and EDN must be specified                               | ent-enum-profsel  |
| E3230            | RRDOMAIN must be specified with sparm=sip                   | ent-enum-prof   |
| E3231            | Default profile cannot be deleted                           | dlt-enum-prof   |
| E3234            | Default Profile cannot be associated with any profsel entry | chg/ent-enum-profsel  |
| E3235            | Response type can only be changed for the default profile   | chg-enum-prof   |
| E3236            | SDN and EDN must be unique                                  | ent-enum-profsel  |
| E3240            | SIP or ENUM not configured                                  | rept-stat-ipconn  |
| E3739            | No Entry found  | chg/dlt-ip-conn<br>chg/ent-assoc<br>chg/dlt/rtrv-enum-prof<br>dlt-ip-host<br>dlt/rtrv-enum-acl<br>dlt/rtrv-enum-profsel |
| E3760            | IP Address must be unique                                   | chg-ip-card<br>ent-enum-acl<br>ent-ip-host  |
| E4820            | Failure accessing EGLEOPTS table                            | chg/rtrv-enumopts   |

#### Error Messages for Increase GWS Rules from 4000 to 8000

New and modified error codes to support the Increase GWS Rules from 4000 to 8000 feature are listed in [Table 6: Error Messages for Increase GWS Rules from 4000 to 8000](#):

Table 6: Error Messages for Increase GWS Rules from 4000 to 8000

| Response ID Code | Error Message                         | Used by Command   |
|------------------|---------------------------------------|---|
| E2565            | Gateway screening rules table is full | ent-scr-aftpc<br>ent-scr-blkdpc<br>ent-scr-blkopc<br>ent-scr-cdpa<br>ent-scr-cgpa<br>ent-scr-destfld<br>ent-scr-dpc<br>ent-scr-isup<br>ent-scr-opc<br>ent-scr-sio<br>ent-scr-tt |
| E3237            | Cannot change the last screenset      | chg-scrset  |

**Error Messages: Non-Feature Related**

New and modified error codes not related to features are listed in [Table 7: Error Messages: Non-Feature Related](#):

Table 7: Error Messages: Non-Feature Related

| Response ID Code | Error Message  | Used by Command |
|------------------|--|-----------------|
| E3239            | Card does not use MPS functionality                      | rept-stat-mps   |
| E3241            | The Card Set List is not valid, verify or create         | act-upgrade     |
| E3248            | MFC Off, upgrade aborted                                 | act-upgrade     |
| E4230            | First 2 characters of Serial Number must be alphabetical | ent-serial-num  |
| E5480            | This upgrade action is unavailable in this release       | act-upgrade     |
| E5481            | THRES parameter not valid when using threstype = SET     | act-upgrade     |

| Response ID Code | Error Message                                       | Used by Command    |
|------------------|---|--------------------|
| E5482            | SRVSETS or LIMSETS not valid unless threstype = SET | chg-upgrade-config |
| E5483            | LOC must be specified with ASSIGNSET                | chg-upgrade-config |
| E5484            | ASSIGNSET value out of range for card group         | chg-upgrade-config |

# Chapter 3

## Media and Documentation

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### Topics:

- [Media Pack.....21](#)
- [Documentation Pack.....21](#)

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

## Media Pack

All components available for download from the Oracle Software Delivery Cloud (<https://edelivery.oracle.com/>) are in *Table 8: Media Pack Contents*.

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

**Table 8: Media Pack Contents**

| Name  |
|---|
| Oracle Communications EAGLE (46.2.0.0.1), Tekelec |

## Documentation Pack

All documents available for download from the Oracle Technology Network (OTN) site (<http://docs.oracle.com>) are listed in *Table 9: Documentation Pack Contents*.

**Note:** This list is accurate at the time of release, but is subject to change. Please view the Oracle Help Center site for the latest information.

**Table 9: Documentation Pack Contents**

| Name                             |
|----------------------------------|
| EAGLE Release 46.2 Documentation |

# Chapter 4

## Supported Hardware Baseline

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### Topics:

- [EAGLE Card Overview.....23](#)
- [Hardware Baseline.....26](#)

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

## EAGLE Card Overview

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

This table lists the following card information:

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

**Table 10: EAGLE Card Overview Table**

| Card Name as shown on 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                | 1                    | 4          | N/A            | N/A             | elap<br>epap<br>lsms<br>nas<br>imf |
| E5-ATM                           | 870-1872-01^<br>870-1872-02^                | limatm<br>lime1atm    | 1                    | 4 (3 used) | 3              | atmhc<br>blixp  | atmansi<br>atmitu                  |
| E5-ATM-B                         | 870-2972-01                                 | limatm<br>lime1atm    | 1                    | 4 (3 used) | 3              | atmhc<br>blmcap | atmansi<br>atmitu                  |
| E5-E1T1++                        | 870-1873-02<br>870-1873-03^<br>870-1873-04^ | lime1<br>limt1        | 1                    | 8          | 32             | ss7hc<br>blixp  | ss7ansi<br>ccs7itu                 |
|                                  |   | lime1 (for SE-HSL)    | 1                    | 8          | 1              |                 | ccs7itu                            |
|                                  |   | limt1 (for ST-HSL-A)  | 1                    | 8          | 1              |                 | ss7ansi                            |
| E5-E1T1-B++                      | 870-2970-01                                 | lime1                 | 1                    | 8          | 64             | ss7hc           | ss7ansi                            |

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



| Card Name as shown on card label  | Part Number                                  | Provisioned Card Type | Per Card Slots/Ports |                | Links per Card                  | Card GPLs                                     | Card Applications        |
|---|--|-----------------------|----------------------|----------------|---------------------------------|---|--------------------------|
| E5-MASP   | 870-2903-01^<br>870-2903-02^<br>870-2903-03^ | N/A                   | 2                    | 2              | N/A                             | oamhc<br>blmcap                               | oam                      |
| E5-MCPM-B   | 870-3089-01                                  | mcpm                  | 1                    | 2 (use only A) | 1 IP service                    | mcphc<br>blmcap                               | mcp                      |
| E5-MDAL   | 870-2900-01^                                 | N/A                   | 2                    | N/A            | N/A                             | N/A   | N/A                      |
| E5-SM4G†  | 870-2860-01^<br>870-2860-02^                 | dsm                   | 2                    | 2              | 2 IP Service                    | sccphc<br>blixp                               | vsccp                    |
| E5-SM8G-B†  | 870-2990-01                                  | dsm                   | 2                    | 1              | 2 IP Service<br>16 TCP<br>1 UDP | deirhc<br>siphc<br>sccphc<br>blmcap<br>enumhc | deirhc<br>siphc<br>vsccp |
| E5-TSM  | 870-2943-03^                                 | tsm                   | 1                    | 1              | N/A                             | glshc<br>blixp                                | gls                      |
| HC-MIM††  | 870-2671-01<br>870-2671-02                   | lime1<br>limt1        | 2                    | 8              | 64                              | ss7hc   | ss7ansi<br>ccs7itu       |
|   | 870-2671-03^                                 | lime1 (for SE-HSL)    | 2                    | 8              | 2                               | blixp   | ccs7itu                  |
| HIPR2   | 870-2872-01^<br>870-2872-02^                 | N/A                   | 1                    | N/A            | N/A                             | hipr2   | hipr2                    |
| <p>†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.</p> <p>††For the E1 or T1 interface, an SS7 application (SS7ANSI or CCS7ITU) can be assigned to these cards.</p> <p>For more information on the E1 or T1 interface go to Chapter 3 “System Administration Procedures” in <i>Database Administration - SS7 User’s Guide</i>.</p> <p>^This part number is the ROHS equivalent of the immediately preceding part number.</p> |  |                       |                      |                |                                 |   |                          |

## Hardware Baseline

The Hardware Baseline is shown in the following table.

**Table 11: Hardware Baseline Table**

| Component               | Part Number          | ROHS Number (if applicable) | Required for              |
|-------------------------|----------------------|-----------------------------|---------------------------|
| Control Shelf           | 870-2321-02 Rev A    | 870-2321-08 Rev A           | 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    | 850-0330-07 Rev A           |                           |
| Extension Shelf         | 870-2378-01 Rev A    | 870-2378-02 Rev A           | Heavy Duty Frame          |
|                         | 870-0776-02 Rev C    |                             | Standard Frame            |
|                         | 870-0776-03 Rev D    |                             |                           |
|                         | 870-0776-06 Rev A    |                             |                           |
|                         | 870-0776-07 Rev A    |                             |                           |
|                         | 870-0776-08 Rev A or |                             |                           |
|                         | 870-0776-11 Rev A    |                             |                           |
| Air Management Card     | 870-1824-01 Rev A    | 870-1824-02 Rev A           | Shelves with Fan Assembly |
| E5-APP-B                | 870-3096-xx          |                             |                           |
| E5-ATM                  |                      | 870-1872-01 Rev A           |                           |
|                         |                      | 870-1872-02 Rev A           |                           |
| E5-ATM-B                |                      | 870-2972-01 Rev A           |                           |
| E5-ATM Adapter          |                      | 830-1342-05                 |                           |
| E5-E1T1                 | 870-1873-02 Rev A    | 870-1873-03 Rev A           |                           |
|                         |                      | 870-1873-04 Rev A           |                           |
| E5-E1T1-B               |                      | 870-2970-01 Rev A           |                           |
| E5-ENET                 | 870-2212-02 Rev A    | 870-2212-03 Rev A           |                           |
|                         |                      | 870-2212-04 Rev A           |                           |
|                         |                      | 870-2212-05 Rev A           |                           |
| E5-ENET-B               |                      | 870-2971-01 Rev A           |                           |

| Component                      | Part Number          | ROHS Number (if applicable) | Required for                                      |
|--------------------------------|----------------------|-----------------------------|---|
| E5-IPSM                        |                      | 870-2877-01 Rev A           |   |
|                                |                      | 870-2877-02 Rev A           |   |
| E5-MASP                        |                      | 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                        |                      | 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                          |                      | 870-2872-01 Rev A           |   |
|                                |                      | 870-2872-02 Rev C           |   |
| High-speed Fiber Channel Cable |                      | 830-1344-xx                 |   |
| DC Frame Assembly              | 890-1843-01 Rev C    | 890-1843-02 Rev A           |   |

| Component                                     | Part Number          | ROHS Number (if applicable) | Required for |
|---|----------------------|-----------------------------|--------------|
| 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 HC-MIM or EPM-B cards) | 890-0001-01 Rev A or |                             |              |
|   | 890-0001-02 Rev A    | 890-0001-04 Rev A           |              |

# Chapter 5

## Upgrade Paths

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### Topics:

- [Upgrade Paths.....30](#)
- [Generic Program Loads .....30](#)

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

## Upgrade Paths

The possible upgrade paths to EAGLE 46.2 are listed in [Table 12: EAGLE 46.2 Upgrade Paths](#).

**Table 12: EAGLE 46.2 Upgrade Paths**

| From               | To                 |
|--------------------|--------------------|
| EAGLE Release 45.0 | EAGLE Release 46.2 |
| EAGLE Release 46.0 | EAGLE Release 46.2 |
| EAGLE Release 46.1 | EAGLE Release 46.2 |

## Generic Program Loads

[Table 13: GPLs - Build 46.2.0.0.0-67.8.1 and Build 46.2.0.0.1](#) lists the latest Generic Program Loads (GPLs). When multiple builds are listed, GPL versions that changed from the previous build are in bold.

**Table 13: GPLs - Build 46.2.0.0.0-67.8.1 and Build 46.2.0.0.1**

| GPL SYSTEM NAME       | VERSION Build<br>46.2.0.0.0-67.8.1 | VERSION Build<br>46.2.0.0.1-67.10.0 |
|-----------------------|------------------------------------|-------------------------------------|
| <b>Date Available</b> | <b>11/3/15</b>                     | <b>2/3/16</b>                       |
| ATMHC                 | 137.5.0                            | <b>137.10.0</b>                     |
| BLBEPM                | 133.43.0                           | 133.43.0                            |
| BLBIOS                | 133.43.0                           | 133.43.0                            |
| BLBSMG                | 133.43.0                           | 133.43.0                            |
| BLCPLD                | 133.55.0                           | 133.55.0                            |
| BLDIAG6               | 137.5.0                            | 137.5.0                             |
| BLIXP                 | 137.5.0                            | <b>137.9.0</b>                      |
| BLMCAP                | 137.5.0                            | <b>137.9.0</b>                      |
| BLROM1                | 133.56.0                           | 133.56.0                            |
| BLVXW6                | 137.5.0                            | 137.5.0                             |
| DEIRHC                | 137.8.0                            | <b>137.10.0</b>                     |
| ENUMHC                | 137.5.0                            | <b>137.10.0</b>                     |
| ERTHC                 | 137.5.0                            | <b>137.10.0</b>                     |
| GLSHC                 | 137.5.0                            | <b>137.10.0</b>                     |

| <b>GPL SYSTEM NAME</b> | <b>VERSION Build</b><br><b>46.2.0.0.0-67.8.1</b> | <b>VERSION Build</b><br><b>46.2.0.0.1-67.10.0</b> |
|------------------------|--|---|
| <b>Date Available</b>  | <b>11/3/15</b>                                   | <b>2/3/16</b>                                     |
| HIPR2                  | 137.3.0  | 137.3.0   |
| IMTPCI                 | 137.5.0  | 137.5.0   |
| IPGHC                  | 137.8.0  | <b>137.10.0</b>                                   |
| IPLHC                  | 137.8.0  | <b>137.10.0</b>                                   |
| IPSG                   | 137.8.0  | <b>137.10.0</b>                                   |
| IPSHC                  | 137.5.0  | <b>137.10.0</b>                                   |
| MCPHC                  | 137.5.0  | <b>137.10.0</b>                                   |
| OAMHC                  | 137.7.0  | <b>137.10.0</b>                                   |
| PKTGHC                 | 167.5.0  | <b>167.10.0</b>                                   |
| PLDPMC1                | 133.56.0   | 133.56.0  |
| SCCPHC                 | 137.5.0  | <b>137.10.0</b>                                   |
| SIPHC                  | 137.5.0  | <b>137.10.0</b>                                   |
| SLANHC                 | 137.5.0  | <b>137.10.0</b>                                   |
| SS7HC                  | 137.5.0  | <b>137.10.0</b>                                   |

# Chapter 6

## Product Compatibility

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### Topics:

- [Product Compatibility.....33](#)

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



## Product Compatibility

*Table 14: EAGLE 46.2 Compatibility with Other Related Products* shows EAGLE 46.2 compatibility with other products.

**Table 14: EAGLE 46.2 Compatibility with Other Related Products**

| Product | Release | Compatibility |
|---------|---------|---------------|
| ELAP    | <9.0    | NC            |
|         | 9.0     | NC            |
|         | 10.0    | FC            |
| EPAP    | <14.0   | NC            |
|         | 14.0    | NC            |
|         | 15.0    | PC**          |
|         | 16.0    | FC            |
| LSMS    | <12.0   | NC            |
|         | 12.0    | PC*           |
|         | 13.0    | FC*           |
|         | 13.1    | FC            |
| OCEEMS  | 45.0    | PC            |
|         | 46.0    | PC            |
|         | 46.2    | FC            |
| FTRA    | <4.4    | NC            |
|         | 4.4     | NC            |
|         | 4.5     | FC***         |
| ECAP    | <41.1   | NC            |
|         | 41.1    | PC**          |
| PIC     | 9.0     | PC            |
|         | 10.0    | PC**          |

**Note:** EAGLE 46.2 customers should upgrade their other products to the Fully Compatible releases identified in the table above.

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
- \* Inherited from ELAP 10.0 Release Compatibilities
- \*\* J7 Point Code format is NOT supported on ECAP 41.1, EPAP 16.0 and PIC 10.0.
- \*\*\*FTRA 4.5 was tested with JAVA version 1.8.0\_31-b13.

# Chapter 7

## Resolved and Known Bugs

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### Topics:

- [Severity Definitions.....36](#)
- [Resolved Bug Listing.....36](#)
- [Customer Known Bug Listing.....43](#)

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

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

## Severity Definitions

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

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

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

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

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

## Resolved Bug Listing

This section lists Bugs that are resolved in the following builds:

**EAGLE 46.2.0.0.1-67.10.0.**

EAGLE 46.2.0.0.0-67.8.1.

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

**Note:** Resolved bugs are sorted in ascending order by Severity (Sev), and then by Bug number.

**Table 15: EAGLE Release 46.2.0.0.1 Resolved Bugs (2/3/16)**

| Bug #    | SR | Sev | Title   | Customer Impact   |
|----------|----|-----|---|---|
| 22307682 | Y  | 2   | SR: GWS table corruption observed after EAGLE R46.2.0-67.8.1 upgrade            | "Customer with 'allowed cgpa' will see messages improperly screened as this table gets corrupted."  |
| 22330075 | Y  | 2   | SR: EAGLE OAM reports "DIFF CONTENTS" for fixed DB post R46.2.0-67.8.1 upgrade  | This would occur if customer has 'allowed cgpa' due to BUG 22307682.  |
| 20285852 |    | 3   | R46.2_ENUM: Random Incomplete interval for MTCD and MTCH ENUM meas report       |   |
| 22313642 |    | 3   | port BUG 22240198 to 67.0 (NMI status register needs cleared before hard reset) |   |
| 22332206 | Y  | 3   | SR: Module mfc_serv_cnt Line 466 Class 01d0 Severity 1 troubles on 46.2         | When the machine is experiencing heavy Class 1 traffic, there may be congestion conditions on the IMT bus and interfere with some normal maintenance operations, such as flashing of cards. |
| 22482822 |    | 3   | Post upgrade PVALUE for PARAM other than 1 is getting reset to 0 in RTRV-UAPS.  |   |
| 21896172 |    | 4   | Module mfc_serv_cnt Line 466 Class 01d0 Severity 1 generated on E5 E1           |   |
| 22031622 |    | 4   | Faulty network card caused E5-MASP cards to obit "Module mcc_queue.c Line 795"  |   |

**Table 16: EAGLE Release 46.2.0.0.0 Resolved Bugs (11/3/15)**

| Bug #    | SR | Sev | Title  | Customer Impact  |
|----------|----|-----|--|--|
| 19109329 | Y  | 2   | [233647]Card DB load timeout (GWS not loading) | When this condition is hit the GWS tables may not be updated with the most recent changes. This is shown as the cards are in transition. Work around is to change the involved linksets to have "none" for screen set then back to the |

| Bug #    | SR | Sev | Title   | Customer Impact   |
|----------|----|-----|---|---|
|          |    |     |   | required screenset. Note: While set to "none" there will be no screening done on these linksets.  |
| 19261601 |    | 2   | Active MASP boots (obits module ath_vxw_mgr. Line 1828) on deleting SLK   | Deleting C-links with non-default TFATCABMLQ in a linkset may cause the OAM cards to boot.  |
| 20995905 |    | 2   | Update required to E54340 - EAGLE Software Upgrade Guide  | When upgrading to 46.2, if obsolete GPLs are not removed (making necessary space for new ones), the upgrade procedure will fail.  |
| 21697682 |    | 2   | Reduce load on HIPR card when SCCP service is oversubscribed  | If the SCCP service/subsystem is oversubscribed, sufficient nodal congestion can be caused resulting in HIPR cards booting.   |
| 21874394 | Y  | 2   | SR: ANSI SNM messages TFP, TFR & TFA are having SIO priority value of 0   | Network management messages can be discarded earlier than they should be during link congestion.  |
| 19092381 |    | 3   | [220216]EAGLE ENUM Mobile Number Portability and Tier One Address Resolution  |   |
| 19096392 |    | 3   | [223452]Continuous scm_hw.c Sev 1 reports   |   |
| 19098255 |    | 3   | [225009]init-flash command with sloc and eloc param.  |   |
| 19100316 |    | 3   | [209337]R44_SLAN-MFC: SEV1 Module meascdwr.c on Active E5-MASP  |   |
| 19100953 | Y  | 3   | [224879]E5-APP-B STP reports EPAP_B as isolated but server is Up and running (similar status on PDB sites after Auto PDB/RTDB backup) | Incorrect status of standby server as isolated may be shown on EAGLE STP.   |
| 19101549 |    | 3   | [227578]Meas Sev 1s after set-time  |   |
| 19103087 | Y  | 3   | [228815]Severity from meascdwr.c Line 378 is generating continuously at 10 minute interval  | The Sev1s are being generated at every 10 minute intervals, therefore they are filling the Trouble queue and potentially masking real problems. This can be avoided by not issuing set-time with a new time in the 5 minute boundary. |
| 19105728 | Y  | 3   | [230877]Rept-stat-clk is not reporting HS clock usage on a ATM card if the link that uses HS clock is one other than link A           | rept-stat-clk incorrectly reports HS clock usage of ATM cards. Command may not report actual number of ATM cards which use internal or external HS clock source for links.  |

| Bug #    | SR | Sev | Title   | Customer Impact   |
|----------|----|-----|---|---|
| 19105830 |    | 3   | [223195]R45:Module dmrg_utl.c Line 1393 Class 01c5 Sev 1 observed during inter release upgrade  |   |
| 19108375 |    | 3   | [232904]Rept-stat-mps is displaying the status of SCCP cards and its ports which are not using MPS functionality                      |   |
| 19108977 |    | 3   | [233383]IMT-LVL1 status report error (shows invalid number of HIPR2s in the system)   |   |
| 19109181 |    | 3   | [233522]R45.1:Severity 1 ipsg_m3ua_sl Line 1768 Observed when an IPSEG-M3UA link went into congestion                                 |   |
| 19111740 |    | 3   | [215787]MMI terminal truncating the hourly reports  |   |
| 19113364 | Y  | 3   | [233712]Obit on IPSEG card from ath_vxw_mgr Module (Line 1728 Class 01c3) during congestion event                                     | An IPSEG card can crash/boot if congestion is experienced on the Fast Copy ports.     |
| 19116005 | Y  | 3   | [136804]IPSEG linkset report status not consistent  | Customer can get confused with the display of a non-consistent linkset report.        |
| 19116027 |    | 3   | [223833]R45_ExAP: Error counters for REPT-STAT-SCCP are not being incremented when UIM 1074 is displayed                              |   |
| 19116140 |    | 3   | [234833]IPSEG-M3UA SLK not auto recovering  |   |
| 19116160 |    | 3   | [233516]False UIM generated at thermal threshold level 1 on DEIR card.  |   |
| 19116184 |    | 3   | [233591]R45.1:UIM 1256 "NP Circular Route Detected" not coming for INPQ messages/service when circular route is detected              |   |
| 19116482 | Y  | 3   | [239218]IP Connection Unavailable/ Available alarm on OAMHC forwarded to IMF but IMF does not interpret this alarm (MO_OID NOT Found) | The OAM IP alarms cause the PIC to report MO_OID not found. There is no other impact. |
| 19116705 |    | 3   | [239403]R46.0_SIPEnh: EAGLE is responding early with 513 Message too large in response to a SIP INVITE message                        |   |

| Bug #    | SR | Sev | Title   | Customer Impact |
|----------|----|-----|---|-----------------|
| 19116755 |    | 3   | [239446]R46.0_J7:tst-slk is accepted on M3UA links which is not correct as per CMT                    |                 |
| 19116889 |    | 3   | [239555]bcast.c Line 1945 trouble is generated when<br>INIT-CARD:APPL=xxxx is rejected                |                 |
| 19117057 |    | 3   | [239680]R46.0_J1:Severity1<br>dmshc_cmio.c on E5-OAM when we format disk during upgrade               |                 |
| 19118236 |    | 3   | [240615]R46.0: Observed trouble<br><Module xsvf_ports.c Line 492 Class 0001 Severity 1>               |                 |
| 19118342 |    | 3   | [240525]The Approved and Trial GPL versions are not displayed for OAMHC in upgrade mode               |                 |
| 19118619 |    | 3   | [240929]Services do not validate Spare flag when use Query's CgPA PC/OPC as DPC for the Response      |                 |
| 19118818 |    | 3   | [241098]R46.0_SIPEnh: Incorrect handling of Read/Write error on UDP connection.                       |                 |
| 19118930 |    | 3   | [241193]eagleeyes_mgr ent_flt: array out-of-bounds error  |                 |
| 19119099 |    | 3   | [241343]MTT 4905 has typo in error message string   |                 |
| 19119203 |    | 3   | [241435]Duplicate MTT error message text in ent-sid Commands Manual entries for MTTs 2802 and 2801    |                 |
| 19119278 |    | 3   | [241495]Severity of UAM 329 should only be raised only if at least one IS-ANR SCCP card in the system |                 |
| 19119523 |    | 3   | [235867]MTT 3341 - text discrepancy and command question  |                 |
| 19422153 |    | 3   | Misleading alarm if card is auto inhibited for<br>STH_MB_CURRENT_REVISION mismatch                    |                 |
| 19788253 |    | 3   | Rept-stat-sccp:mode=perf output displays wrong date and time for peak loads                           |                 |



| Bug #    | SR | Sev | Title   | Customer Impact |
|----------|----|-----|---|-----------------|
| 19811452 |    | 3   | [214323]R44_STC:Traffic is not getting copied to the IMF server after booting one of the two server cards |                 |
| 19920432 |    | 3   | Upgrade to 46.1.0-65.27.12 upgrade stops when threstype=SET   |                 |
| 20070950 |    | 3   | R46.1:CGPC is getting updated for a Forward message with CNVCLGITU=OFF.                                   |                 |
| 20070985 |    | 3   | R46.1:CDPA PC is not getting modified for a Forward message with CNVCLGITU=ON.                            |                 |
| 20077569 |    | 3   | R46.1:CGPC not getting modified with CNVCLGITU=ON for FWD/DUP message                                     |                 |
| 20098765 |    | 3   | Release 46.0 is the last EAGLE SW Release that supports HIPR (870-2574-01/02)                             |                 |
| 20325140 |    | 3   | Commands related to features to be updated to align with marketing approach                               |                 |
| 20326225 |    | 3   | E5-APP-B does not show as supported in 45 and 46 when it is.  |                 |
| 20358863 |    | 3   | UAM/UIM HW Verification Codes Table needs to be updated   |                 |
| 20371363 |    | 3   | Commands User's Guide: act-gpl output example error   |                 |
| 20393299 |    | 3   | CGPC not getting updated for DUP/FWD message in domain crossing scenario.                                 |                 |
| 20395904 |    | 3   | Measurements Reference: Need to document size limitation for SIP, S13, & ENUM                             |                 |
| 20481930 |    | 3   | Commands Error Recovery E2892 corrections needed  |                 |
| 20645638 |    | 3   | Need safety/watchdog on reroute queue in ICMM on SCCP cards   |                 |
| 21849736 |    | 3   | EPMB cards coming off IMT bus   |                 |
| 19082574 |    | 4   | [134528]Increase GWS rules from 4000 to 8000  |                 |

| Bug #    | SR | Sev | Title  | Customer Impact   |
|----------|----|-----|--|---|
| 19082575 |    | 4   | [134529]Increase GWS screensets from 256 to 1024                                 |   |
| 19098427 |    | 4   | [225124]init-flash - enhancement   |   |
| 19101601 |    | 4   | [227627]Change Module udt_ldr.c Line 1115 Class 01c3 trouble to a UIM            |   |
| 19118361 |    | 4   | [240708]Enable EAGLE IP links for 1000Mbps speeds                                |   |
| 19180138 |    | 4   | rept-stat-clk does not show proper HS clock status after primary clock is pulled |   |
| 19446525 |    | 4   | Make MFC required for upgrades to 46.2   |   |
| 19509586 |    | 4   | DBCDSERV.C Line 1565 Class 015c trouble generated with RTRV-TBL-CAPACITY command |   |
| 19730120 |    | 4   | Upgrade Stopped in upg phase 2 due to Valid Card Set not present                 |   |
| 19893706 | Y  | 4   | RTRV-LOG may incorrectly print application/GPL details for old UAM 84 record     | None from a system operational standpoint as this is a display issue. It can lead to confusion for the operator.  |
| 19997340 | Y  | 4   | Doc Bug: Use "T1/J1PORT" device type display for T1 and J1 PORT alarm examples   | The UAM/UIM Manual for UAM 0369 identifies T1PORT and for UAM 0506 identifies J1PORT, but both should instead refer to T1/J1PORT since both UAMs are applicable to either T1 or J1. |
| 20002651 |    | 4   | Update S/N string format for EAGLE   |   |
| 20019276 |    | 4   | SCCP Service Subsystem degraded, card(s) abnormal UAM need to be added           |   |
| 20138233 |    | 4   | SM4G-A reporting incorrect(?) DSM size   |   |
| 20145464 |    | 4   | New rule change for Valid serial number caused change to the text for MTT E4230  |   |
| 20574549 |    | 4   | EAGLE help for commands "ent-card" & "rtrv-stp" needs to be updated.             |   |
| 20574877 |    | 4   | "init-sys" command supports force parameter but it's missing from CMT.           |   |

| Bug #    | SR | Sev | Title  | Customer Impact  |
|----------|----|-----|--|--|
| 20661984 | Y  | 4   | SR: EAGLE: UAM 318 (link set prohibited) though actual linkset SST is Restricted | Confusion as output could show the linkset as prohibited when in reality it is only restricted.  |
| 20733488 |    | 4   | R46.2_ST:CMT needs to be updated for Inpopts:amaslpid=none.                      |  |
| 20812007 |    | 4   | SR: Update Hardware Reference doc to include 64 LSL support on E5-E1T1-B cards   |  |
| 20859076 |    | 4   | SR: Software Upgrade Guide (E54340 Revision 01) corrections                      |  |
| 20859141 |    | 4   | SR: System Health Check Guide (E54339 Revision 2) corrections                    |  |
| 20867532 |    | 4   | Document the Java version used for FTRA testing                                  |  |
| 20880351 |    | 4   | Missing parameters sipconglvl1 & sipconglvl2 in "CHG-TH-ALM" command CMT.        |  |
| 21641732 | Y  | 4   | SR: Update EAGLE cust docs with max diameter msg length supported by DEIR        | The maximum diameter message length of 448 bytes is not documented in the UAM/UIM manual or in the EIR User's Guide.   |
| 21645853 |    | 4   | Need to document location of EAGLE System Number                                 |  |
| 21744965 |    | 4   | Update EAGLE cust docs with MAP protocol versions supported by G-Flex MLR.       |  |
| 21821758 | Y  | 4   | SR: Update EAGLE cust docs E58683 with UAM retrieval limitation in rtrv-log      | The Commands User's Guide for the rtrv-log command does not state that the Alarm log only stores minimal information about each alarm. Only a few alarms support multiple-line formats that would be displayed when mode=full is used. |

## Customer Known Bug Listing

*Table 17: EAGLE Release 46.2 Customer Known Bugs (2/3/16)* lists known bugs in this release:

Table 17: EAGLE Release 46.2 Customer Known Bugs (2/3/16)

| Bug#     | SR | Sev | Title  | Customer Impact   |
|----------|----|-----|--|---|
| 19100102 |    | 2   | [226479]R45: MSU loss observed during changeover due to remote link failure on Inter-EAGLE Links | If there are multiple link failures in a link set at the same time, it may be possible to lose some traffic.  |
| 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.   |
| 21294961 | Y  | 2   | SR: Excessive packet drops may cause IPSG to obit "ath_vxw_mgr. Line 1743"                       | If the EAGLE Sigtran card has an established association on an unstable network (that is, one causing multiple 'holes' in the received data stream), the card may boot while managing the 'holes' (filling in holes, and discarding previously acknowledged data to make room to fill in holes that are not at the head of the receive stream).   |
| 21856737 |    | 2   | R46.2_ST2: Both IMTs up, we keep getting HIPR2 boots in an oversubscribed EROUTE.                | In extreme cases of oversubscription of EROUTE cards it is possible for the HIPR2 cards to boot. If a HIPR2 card fails on both buses the system will be isolated. Mitigation: Distribute EROUTE cards widely within the system to ensure there is enough capacity for all cards being monitored. Work around: In the unexpected event of oversubscription to EROUTE, disable the SCOPY function from LIM cards. |
| 19081572 |    | 3   | [56325]SCTP association allows connection from network != RHOST                                  | SCTP clients can attach to EAGLE SCTP servers as long as 1 of the IP addresses in the SCTP INIT message matches the provisioned RHOST.  |
| 19081970 |    | 3   | [108435]Multihomed M3UA assoc is dropped due to cable pull in low traffic                        | At very low uni-directional traffic rates, multi-homed associations may be dropped if the RTIMES/RMIN parameters are not tuned properly.  |
| 19082243 | Y  | 3   | [120158]EAGLE does not allow user to manipulate the listing order of a combined linkset          | Customer will have to delete all provisioning in the system and then re-add the data back in the order that they would like it listed in the route table. The current behavior may not allow the customer to groom their network for load sharing without a great deal of re-provisioning.  |
| 19085815 |    | 3   | [205113]Alarm "333 DPC Subsystem Normal" is not occurring when ssn is                            | DPC 333 clearing alarm is getting missed, but the SSN, DPC, and route status are correct.   |

| Bug#     | SR | Sev | Title   | Customer Impact  |
|----------|----|-----|---|--|
|          |    |     | configured and route comes to allowed from prohibited state   |  |
| 19098111 |    | 3   | [224893]The OAM determined that a card failed to load and produces a trouble  | A trouble is displayed when a UIM would be best suited to let the user know the card did not load.   |
| 19100830 |    | 3   | [227063]in phase 3, act-upgrade command attempts to reflash MUX cards if the command is re-entered after failure                      | May do an extra upgrade of MUX cards causing the upgrade to extend.  |
| 19106524 |    | 3   | [231484]R45-E5-E1T1-B:LIM denied SCCP service observed for E5-E1T1-B/E5-E1T1 with 40-byte MSU even at below the card-supported limits | In the unlikely event that a customer network uses SCCP traffic that has a high portion of SCCP MSUs under 40 bytes, not all will receive SCCP service when using this card.   |
| 19111738 |    | 3   | [230876]R45_1M_TPS: SLAN server card booted up with obit Module pmtc_mgr.c Line 521 Class 0240, when over loaded                      | In extreme overload conditions it is possible for the SLAN card to boot. This is due to a traffic burst in the range of milliseconds.  |
| 19112812 | Y  | 3   | [236417]Updation required in Installation Manual(910-6664-001 Revision A)   | Tables 82 and 83 provide information for cables and adapters for various applications but these tables do not cover the MCP, MCPHC and OAMHC applications. This could cause the customer issues with getting these applications to work. |
| 19113193 |    | 3   | [236684]Point code displayed in CSV file by "csv_rtrv_print_pc" function contains leading blank spaces                                | CSV files may contain leading spaces in the fields.  |
| 19114266 |    | 3   | [237523]chg-ip-lnk: Error # 3760 isn't listed.  | Customer maybe confused on exactly what is allowed to be entered.  |
| 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.                            |
| 19117789 |    | 3   | [240256]R46_ST:CHG-SCR-OPC command takes extended processing time with IGLS feature On  | System is unavailable for further command entry until current command completes.   |
| 19118387 |    | 3   | [240733]EPMB class cards (includes E5-OAM and SM8GB) get stuck off IMT bus  | In extreme overload it is possible for E5-xxx-B cards to fail to reconnect to the IMT bus. To recover the cards must be power cycled.  |

| Bug#     | SR | Sev | Title  | Customer Impact  |
|----------|----|-----|--|--|
| 19119209 | Y  | 3   | SR: [241439]EAGLE not complying to SCTP restart section 5.2.2 in RFC 4960 when running M3UA on IPSG                                  | The association on the EAGLE may appear to be hung and eventually issue an abort if the endpoint attempts to restart the association as a recovery action.   |
| 19119477 |    | 3   | [241658]HIPR2 - fibre channel bottle neck with large packets   | This condition has only been observed with lab tool testing. However it may be possible in extreme load conditions when using features like BICC or STC copy to cause an IMT bus to fail.  |
| 19119627 |    | 3   | [234090]Rel_45.1_J7: CGPC is not getting updated from CGPA GTA translation, which is defined in case of FORWARD/DUPLICATE GTT ACTION | MSU's CGPC will not be updated correctly with crossing network domains and forward GTT ACTION parameter<br>CGPCOGMSG=opcicmsg and CGPA-RI=GT.  |
| 19120067 |    | 3   | [242097]ST_46.0: Monitored traffic loss is observed while running traffic at around 4650 TU on an ENET-A IPSG card with Fast copy    | There is no impact to routed traffic. Fast copy traffic may be disabled in certain heavy load conditions.  |
| 19120373 |    | 3   | [242319]R46.0: Observed trouble <Module mfctmutl.c Line 1239 Class 01c3 Severity 1>  | This is an indication that the timer to ensure the card is not stuck in MFC flow control has expired. No action is required by the customer as the system has self-corrected.  |
| 19239019 |    | 3   | R46.0:SIP Congestion alarms flooded on print trm with no SIP traffic running.  | If upgrading a system with SIP cards the terminal may get flooded with ALM "626: 626 - Unused trouble text entry" and major alarm "0622 ** CARD 4305 SIPHC SIP Threshold Level1" for all the SIPHC cards in the system.  |
| 19295079 |    | 3   | Database Admin - IP7 User's Guide Needs Updated Flowcharts   | The Database Administration - IP7 User's Guide, Chapter 6, has IPSG M2PA and IPSG M3UA flowcharts that do not address the MaxTPS values supported by card types.   |
| 19388261 |    | 3   | Upgrade cmd terminates with DB Maint. Required error due to DB levels unequal  | The OAM may take longer than expected to be available after boot. This can cause the upgrade to fail during Phase 2. This can happen when the DB levels between the active and standby MASP are different. Verify the DB levels are the same and if so re-issue the upgrade command. |
| 19811376 |    | 3   | [214270]Rel_44.0_STC: Copy function gets de-activated/activated on IPGW cards when an IMT failure is produced in EAGLE               | Small amount of STC traffic loss can happen when substantial traffic load is running and one IMT bus fails.  |

| Bug#     | SR | Sev | Title  | Customer Impact  |
|----------|----|-----|--|--|
| 20144008 |    | 3   | R46.2: Invalid MTT error code  | When the operator enters an invalid point code, the machine rejects it as it should. But the error message that it displays says that the point code caused a mismatch, when it should indicate that the point code is invalid.  |
| 20158218 |    | 3   | R46.2: NM reports generated at random intervals                                  | Possible to occasionally be missing a 5 minute measurement report.   |
| 20315330 |    | 3   | R46.2_SIP: SIP card gets isolated when static route is not defined for UDP       | SIP card will boot if a remote server uses UDP as the transport for sending a SIP request, and a static route to the server isn't defined. Note: TCP is normally used as the transport for SIP (SIP relies on the transport for reliability and UDP is not guaranteed as TCP). |
| 20333400 |    | 3   | MFC Watchdog not firing while card is stuck IN FLOW CONTROL                      | The MFC watchdog is a fail-safe to prevent a card from remaining in flow control beyond a certain time. Without the MFC WD, if the card is in flow control, it may remain in flow control until either the load is removed or the card is restarted.                           |
| 20440186 |    | 3   | MTT 3455 text is out-of-date. E5-ENET/E5-ENET-B cards support 16 links/card      | Possible confusion as the card will already be supporting more links than the error text indicates.  |
| 20440240 |    | 3   | init-flash dependency text is wrong/misleading                                   | May be confusion on how to update the flash on the OAM cards.  |
| 20440758 |    | 3   | ent/rtrv-slk has confusing/incorrect verification check description and MTT text | Customer could be confused when working on the ATM card b links.   |
| 20463133 |    | 3   | ent-slk command's ipliml2 parameter should be eliminated                         | ent-slk command includes information for obsolete parameter ipliml2.   |
| 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.   |
| 20535502 |    | 3   | R46.2_ST: Severity 1 "Module mfctmutl.c Line 1307" on SIP/ENUM/DEIR cards.       | No impact as the cards are complaining about a service they do not use.  |
| 20556471 |    | 3   | R46.2_ST: Obs sev1 Module meau.c Line 3530 Class 0001 Severity 1 on MCPM Card    | The trouble indicates that the MCP card was not able to determine the adapter type for an IPSG card whose link is down.  |
| 20565766 |    | 3   | R46.2_ST: Severity 1 "xsvf_ports.c Line 519 Class 0001" after incr upgrade       | As part of the card starting up, OAM detected a failure programming the MASP's terminal processor. However there is not actually an issue and the terminal process is working correctly.   |

| Bug#     | SR | Sev | Title  | Customer Impact  |
|----------|----|-----|--|--|
| 20571270 |    | 3   | R46.2_ST: Provisioned isolated card does not get assigned to any sets group.     | Only impact is if after upgrade started cards are added.   |
| 20640003 |    | 3   | R46.2_ST:SRVR RESLCTD is not getting pegged in rept-stat-mfc cmd with mode=stats | Can not use MFC stats to know who had server traffic redirected.   |
| 20644122 |    | 3   | R46.2_ST: Incorrect status for inhibited SCCP cards in rept-stat-mfc:mode=act    | REPT-STAT-MFC may show incorrect status (ACT versus UNAVL) for SCCP cards. There is no other impact.   |
| 20644449 |    | 3   | R46.2_ST: Severity 1 mfcfctmr.c Line 1891 Class 01c3 on SCCP cards               | This trouble indicates that there could have been an invalid service denied/flow control indication to the client cards.   |
| 20695351 |    | 3   | Update "REMOVABLE CARTRIDGE" text in output text for several commands            | No operational impact.   |
| 20733304 |    | 3   | SR: R46.2_ST:Part #, Rev, Serial # and Type missing for HIPR2 in rtrv-stp.       | Will have to manually check cards for this information.  |
| 20735493 |    | 3   | R46.2_ST:E5-OAM boots with obit restart.c Line 1305 during pre-upgrade flash     | Infrequently the OAM may boot twice after attempting to update the flash on the card. This will cause the flash to not be updated and it will have to be done again.   |
| 20736513 |    | 3   | R46.2_ST: remove restriction specified by MTT error code # E4326.                | Feature for higher capacity cannot be enabled for LNP when the system is not connected to an ELAP. This only becomes an issue if the ELAP already has a higher capacity RTDB than the EAGLE.   |
| 20765541 |    | 3   | HIPR2 severity errors not displaying correct data output                         | In some cases the HIPR2 data displayed with trouble is incorrect. No impact to customer as it is not readable by the customer.   |
| 20802492 | Y  | 3   | SR: SACK with incorrect chunk length when a SHUTDOWN chunk is appended to it     | EAGLE may send a SACK with incorrect chunk length when a SHUTDOWN chunk is appended to it. It is allowed to bundle a SHUTDOWN chunk with a SACK chunk as per RFC 4960, section 9.2. However in such cases, it is observed that EAGLE is incorrectly populating the chunk length field of SACK chunk with actual chunk length of SACK chunk + chunk length of SHUTDOWN chunk. |
| 20814163 |    | 3   | R46.2_ST: Assigned card again becomes unassigned card in upgrade type as set.    | If cards not assigned to SET before upgrade, assigning during upgrade without recreating the sets may not work correctly.  |



| Bug#     | SR | Sev | Title  | Customer Impact   |
|----------|----|-----|--|---|
| 20814251 |    | 3   | R46.2_ST: Deleted card which was part of sets upgrade fails the set upgrade.     | Deleting a card that is already in set for upgrade will cause upgrade to fail as it will try to upgrade card that is not there.   |
| 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.  |
| 20983064 |    | 3   | System booting/crash when init-card:appl=sccp (HIPR2s are booting)               | If a large number of cards are reseated while the system is under heavy load, this may result in a node isolation due to HIPR2 booting.   |
| 21025905 |    | 3   | Assoc on card goes OOS & Card not responding to PASS cmd for HB_ACK & ABORT MSG  | Some signal units with invalid length of zero and a correct checksum could cause the card to stop working correctly. These are not valid messages per the RFC so it is highly unlikely to occur.  |
| 21038737 |    | 3   | R46.2_ST:Sev1 Module "mfc_snif.c Line 549 Class 01d0" on E5OAM and SCCP card     | The user does not need to take action as the problem is self-healing.   |
| 21055845 |    | 3   | MTT E3237 text should be updated   | If the screen sets are provisioned at maximum capacity (1023 screen sets) and the chg-scrset command is used to change a screen set, the MTT error "E3237 Cmd Rej: Cannot change the last screenset" is generated. This error message text is incorrect and should instead read "E3237 Cmd Rej: Cannot change the screenset". |
| 21073477 |    | 3   | IPSG card booted with restart.c while executing pass:cmd="sctp -r-l xxx":loc=xxx | This is a debug command that should only be used on guidance from Support. Improper usage can cause failure.  |
| 21092097 |    | 3   | Upgrade not flashing all cards in a mixed group when one flash type fails        | When using flash on multiple card types the procedure stops on first failure without trying to update rest of cards.  |
| 21105952 |    | 3   | R46.2_ST: Individual link downtime due to upgrade is more than 7 minutes.        | Using options like card set and threshold may increase individual link downtimes while decreasing overall system upgrade time.  |
| 21106241 |    | 3   | R46.2_ST:Service-affecting portion is more than 4 hours during upgrade.          | A very large EAGLE can take longer to upgrade than 4 hours. This is an internal target duration for Oracle. While reduced from previous releases, we are still not at target.   |
| 21154415 |    | 3   | R46.2_ST:Copy disk command completes with DMS errors.                            | Command completed correctly with no impact.   |

| Bug#     | SR | Sev | Title  | Customer Impact  |
|----------|----|-----|--|--|
| 21177864 |    | 3   | R46.2_ST:Severity 1 mrs_mgr.cpp on OAM card , when e1180801 connected to E5-MS   | No impact. Sev 1 will be removed for this case in the future.  |
| 21225048 |    | 3   | R_ST:BLMCAP SCCP cards do not load on IMT with 46.0.0 BLMCAP GPL running.        | It may be possible that a manual reset of a card is required to get the system to recognize it on the IMT bus. The SCCP card would have to be running the flash from 46.0 while running 46.2 SW.   |
| 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. |
| 21297486 |    | 3   | R46.2_ST:IPGW ENET-B card shows type=E5ENETB in rept-stat-card output            | Display shows wrong card type for location.  |
| 21343768 |    | 3   | R46.2_ST:Obvd Obit <Module ath_vxw_mgr. Line 1860 Class 01c3> on IPSG LIM        | If Fast Copy is disabled, there are certain rare corner cases where it may cause the card to boot.   |
| 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.   |
| 21494951 |    | 3   | R46.2_ST:IPGW cards little over advertised 4K TPS, PDUs gets discarded for SCCP  | Premature traffic discarding could occur if traffic exceeds advertised limit.  |
| 21645772 |    | 3   | R46.2_ST:rtrv-obit cmd o/p on active OAM fails to report one obit, which occur.  | Obits may not be recorded on OAM when the SCCP subsystem is oversubscribed.  |
| 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.  |

| Bug#     | SR | Sev | Title  | Customer Impact  |
|----------|----|-----|--|--|
| 21651718 |    | 3   | R46.2_ST:NO SCCP throughput<br>FAK turned ON,SMXG-A/B<br>cards taking high traffic.                              | Card is processing more than officially<br>supported traffic.  |
| 21779643 |    | 3   | R46.2_ST2:Group of LIM cards<br>sending traffic to inhibited<br>SM8G-B SCCP 5311.                                | If for some reason the initial internal indication<br>is lost and the card is not available, the system<br>will self-check and recover.  |
| 21780264 |    | 3   | R46.2_ST2:MUX congestion<br>discards getting reported as zero<br>in summary, incorrect                           | MUX congestion discards are not being<br>correctly pegged in rept-imt-lvl1.  |
| 21781464 |    | 3   | R46.2_ST2: Module<br>vxws_msgq.c Line 498 Severity<br>1 observed on SIP card.                                    | If traffic is running at card capacity, a network<br>fault/transmission error can cause the card's<br>queues to fill and drop a connection.  |
| 21837435 |    | 3   | R46.2_ST2:UAM 0152 LIM(s)<br>have been denied STPLAN<br>service before card capacity.                            | This is a result of an overload condition. The<br>card may not be able to handle the capacity<br>until the TCP socket catches up due to the<br>previous overload.  |
| 21856116 |    | 3   | R46.2_ST2: GTT TRAFFIC<br>getting denied and discarded<br>with SCCPOPTS:GTTDIST=GTT                              | GTT traffic may get discarded when the GTT<br>distribution method is changed.  |
| 21856705 |    | 3   | R46.2_ST2:System boots, when<br>SCCP capacity oversubscribed<br>with one IMT up.                                 | If the SCCP subsystem is oversubscribed and<br>one IMT is down, the system may boot.   |
| 21937204 |    | 3   | S13/S13' Interface responds with<br>incorrect error  | According to the 3GPP spec TS 29.272, if a<br>matching entry for the IMEI in the check<br>request is not found, the response/answer<br>should contain the Experimental Result AVP<br>with unknown equipment error (see table<br>6.2.1.1). The EAGLE's implementation contains<br>a Result Code AVP, and thus does not match<br>the protocol's requirement. |
| 19092669 |    | 4   | [220443]R45_IPRTE:Support for<br>F9 / executing canc-cmd for the<br>O/P of command<br>"RTRV-IP-RTE" is not given | Customer may have to wait for command to<br>finish executing before being able to enter<br>another command.  |
| 19422258 |    | 4   | Missing HW verification code<br>90 from Table 45 of doc<br>910-6667-001  | None as upper level alarm will advise as to<br>actions needed.   |
| 19529870 |    | 4   | Trouble Text is<br>misaligned/incorrect in output<br>of REPT-STAT-TRBL.  | No operational impact.   |
| 19828586 |    | 4   | R46.1_ST:Module iplk_utl.c Line<br>1435 Class 01c3 Severity 1<br>during upgrade.                                 | While the card's software is being updated, the<br>application stops processing data that arrives  |

| Bug#     | SR | Sev | Title  | Customer Impact  |
|----------|----|-----|--|--|
|          |    |     |  | to its IP ports and produces these troubles to indicate that its buffers have overflowed.  |
| 20001516 | Y  | 4   | EAGLE R46.0: gpla_oamhc.c Line 201 sev-1s from E5-OAM                            | When code is starting up after reset of OAM, the audit process may start before the OAM is ready. The audit process will reset and continue when the OAM is ready.         |
| 20163097 |    | 4   | Does MTT E2251 need to be updated?   | This is just a display issue.  |
| 20163182 |    | 4   | Update MTT E2766   | Customer could be confused as it should indicate "SEAS" instead of "OAP".  |
| 20227368 | Y  | 4   | Doc bug-UAMs for which "informational(2)" sev to be expected in E5OAM SNMP traps | The product documentation currently lacks an explanation of what is an "informational" message or the effect that one of those messages may have on the total alarm count. |
| 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.   |
| 20282155 |    | 4   | BIOS is unable to find or read boot sector from SATA drive after cold restart    | It is possible in case of warm boot failure for the card to fail to recover on its on. Physical reset will clear the issue.  |
| 20284216 |    | 4   | R46.2_ENUM:pollmv.c Line 326 Class 01d0 Severity 1 deact and act on Port A       | No known impact on the measurements this trouble was in relation to.   |
| 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.  |
| 20402441 |    | 4   | ENUM - UAM 448 "RTDB database is incoherent" is not generated.                   | May be confusing to user as the alarming for ENUM is different than other subsystems.  |
| 20454138 |    | 4   | Update UAM #174 string with "%-Full level reached-upload required"               | No operational impact.   |
| 20506268 |    | 4   | Unable to load trial after card goes MEA due to Incompatible Flash Version       | Once a card goes MEA because of mismatched symbols, the alw-card command will only load the approved GPL, even if code=trial is specified.                                 |

| Bug#     | SR | Sev | Title  | Customer Impact  |
|----------|----|-----|--|--|
| 20518496 |    | 4   | R46.2_ST: "tst-imt" command with "type=faulttest" is not working properly.         | On some very specific setups tst-imt may give false errors.  |
| 20524954 |    | 4   | rept-stat-mfc:mode=act STATUS column is incomplete, misleading                     | Could make it more confusing to troubleshoot when there is a problem affecting MFC.  |
| 20553830 |    | 4   | R46.2_ST:Rept-stat-iptps display wrong Peak TPS for linkset associated with J7 PC  | Peak TPS for J7 links may not be correct.  |
| 20591141 |    | 4   | R46.2_ST: Sev 1 "imte_lvl.c Line 1446 Class 01b4" on IMT stats verification        | No 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.   |
| 20669905 |    | 4   | R46.2_ST:sum of major and critical alarms is displayed wrong in REPT-STAT-ALM cmd. | There could be confusion as the total number of alarms reported will not match the actual number of alarms generated.  |
| 20710766 |    | 4   | rept-stat-card:appl=oam during upgrade phase 0 is not displaying the GPL name      | As it is the OAM there is only one GPL so there is no impact. The version which is needed to be verified is displayed.   |
| 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.   |
| 20836134 |    | 4   | Measurements not reporting link down time correctly                                | Duration of processor outage may not be correct in measurements.   |
| 20883755 |    | 4   | SR: Rtrv-stp displays wrong part number for E5-APP-B cards                         | This card is not on the IMT bus, so the OAM does not have a way to verify the exact part number. The power consumption for the different E5-APP-B configurations is the same. The only impact is the exact part number (and SSD capacity) has to be verified either manually or by directly accessing the E5-APP-B card. |
| 20955251 |    | 4   | SR: EAGLE Commands manual needs update/correction for chg-ip-lnk command           | May be confusion on how to use chg-ip-lnk for OAM.   |
| 20973079 |    | 4   | R46.2_ST:EAGLE CLLI changes to dflt after init-sys:data=persist with two sev-1s    | Occasionally when the OAM is booted it could fail to read the CLLI from its drive. Rebooting will resolve the issue.   |

| Bug#     | SR | Sev | Title   | Customer Impact  |
|----------|----|-----|---|--|
| 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.   |
| 21050127 |    | 4   | Module dbcdserv.c Line 3308 Class 01b1 Severity 1 05 generated after upgrade    | Having J7 point codes provisioned could cause these troubles to be output.   |
| 21056314 |    | 4   | BTREE rebalancing during upgrade occurs in Phase 0 and Phase 2                  | May cause the upgrade to run slightly longer than needed. No other impact.   |
| 21092534 |    | 4   | CHG-ENUMOPTS Error Message: CNGLVL1/2 should be CONGLVL1/2                      | No customer impact.  |
| 21092771 |    | 4   | Password Requirements are output after password is updated successfully         | No operational impact.   |
| 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.   |
| 21235707 |    | 4   | rtrv-vendid text displayed in the end incorrect                                 | None. The word "table" is missing from the "VENDID table is (X of 500) X% full" output line.   |
| 21279510 |    | 4   | SIP FD007616 version 7.1 updates need to be incorporated into Feature Manual    | SIP feature manual is missing some prefix characters that are valid. Customer will not be aware they can use them.   |
| 21351377 |    | 4   | SIP response message from EAGLE is malformed in response to INVITE msg          | The malformed SIP response message from EAGLE to the client will cause the routing failure of the SIP response message by the clients.   |
| 21479874 |    | 4   | SR: System Health Check Guide (E54339 Revision 3) corrections                   | Added details to ensure no issues during health check.   |
| 21840312 | Y  | 4   | SR: rept-stat-iptps:history=yes prints incorrect AVG RTT values for links       | Customer may think RTT is higher than it really is because the RTT average is a cumulative of the lower ports.   |
| 21931781 |    | 4   | Upgrade Configuration is not saved across upgrades                              | The threshold type will need to be set prior to the next upgrade on that system. The Upgrade Procedure requires that the user checks the threshold type twice: once in the preparation procedure (Procedure 29 Step 4) and again, prior to starting the upgrade (Procedure 7, Step 3). |

| Bug#     | SR | Sev | Title   | Customer Impact                               |
|----------|----|-----|---|---|
| 21931822 |    | 4   | LNP Ported LRNs approaching<br>Feat. Cap. alarm is toggling<br>every 30 seconds | Duplicate alarms reported when near capacity. |

# Chapter 8

## Oracle References and Services

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### Topics:

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- *Emergency Response.....57*
- *Customer Training.....58*
- *Locate Product Documentation on the Oracle Help Center Site.....58*
- *Locate Product Release Software on the Oracle Software Delivery Cloud Site.....58*



## My Oracle Support (MOS)

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

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

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

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

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

## Emergency Response

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

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

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

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

## Customer Training

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

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

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

## Locate Product Documentation on the Oracle Help Center Site

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

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

## Locate Product Release Software on the Oracle Software Delivery Cloud Site

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

1. Log into the Oracle Software Delivery Cloud site at <https://edelivery.oracle.com>.  
The **Terms & Restrictions** page appears.
2. Read and accept both the Oracle Trial License Agreement and the Export Restrictions Agreement.  
The **Media Pack Search** page appears.
3. Select **Oracle Communications** for Product Pack and **Tekelec** for Platform.
4. Click the **Go** button.  
All media packs that meet the search criteria are displayed on the page.
5. Select the media pack for your Product and Release Number and click the **Continue** button.  
The **Download** page appears.
6. Provide a valid password in the **Password** field and click the **Go** button.
7. To download a file to your location, click the **Download** button.

# Appendix

# A

## Firmware Components

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