Oracle® Communications

EAGLE System Health Check Guide

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Oracle Communications EAGLE System Health Check Guide, Release 46.9

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Contents

My Oracle Support (MOS)

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

- **Product Support**:
  The generic product related information and resolution of product related queries.
- **Critical Situations**
  A critical situation is defined as a problem with the installed equipment that severely affects service, traffic, or maintenance capabilities, and requires immediate corrective action. Critical situations affect service and/or system operation resulting in one or several of these situations:
  - A total system failure that results in loss of all transaction processing capability
  - Significant reduction in system capacity or traffic handling capability
  - Loss of the system's ability to perform automatic system reconfiguration
  - Inability to restart a processor or the system
  - Corruption of system databases that requires service affecting corrective actions
  - Loss of access for maintenance or recovery operations
  - Loss of the system ability to provide any required critical or major trouble notification

  Any other problem severely affecting service, capacity/traffic, billing, and maintenance capabilities may be defined as critical by prior discussion and agreement with Oracle.
- **Training Need**
  Oracle University offers training for service providers and enterprises.

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 Oracle Support Contacts. The emergency response provides immediate coverage, automatic escalation, and other features to ensure that the critical situation is resolved as rapidly as possible.

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.

What's New in This Guide

There are no updates in this document for Release 46.9.

1 Introduction

Purpose and Scope

This document describes Oracle's recommended methods and procedures to be used to evaluate Site and STP data retrieved from in-service EAGLE STP. This document is intended for use for system running EAGLE releases 45.0 or later as well as system being upgrade to those releases. The intended audience for this document is EAGLE® Engineering, Documentation, Customer Service personnel and any craft person who has completed EAGLE training and is familiar with the EAGLE interface. The scope of this document is specifically to collect data to determine the health of an in-service EAGLE prior to a software upgrade or an extension shelf installation. In general, this document may be used for an instance where the health determination of the EAGLE is required (i.e., troubleshooting).

This document should be considered the next volume to 909-0656-001; see reference [2]. The former document covers EAGLE releases 31.6 to 44.0, where this document starts at release 45.0 and will continue for future releases. The initial content of this document is equivalent to the last version of that previous document with the additions of updates to support EAGLE Release 45.0. In release 45.0, the legacy GPSM/TDM hardware is no longer supported as the MASP, so this document does not have to support both hardware setup and removes complexity of several steps that had to support both platforms.

The document is written to support all customer configurations. All of the commands specified in the procedures should be executed unless explicitly stated otherwise in the individual procedure. Not doing so may result in a delay in the analysis performed by Oracle personnel.

Analysis of data captured during this procedure is out of the scope of this document. Analysis of the data is covered in *Health Check Analysis Work Instruction, WI005139, latest revision, Tekelec*.

References

1. *Health Check Analysis Work Instruction, WI005139, latest revision, Tekelec*
2. *EAGLE 5 ISS Releases 31.6 and later System Healthcheck Document, 909-0656-001,Revision P, Version 7.2, Tekelec*
3. *TEKELEC Acronym Guide, MS005077.doc, current revision*
4. *Recommended Ethernet Port Settings for EAGLE SM Cards and EPAP Switch Ports, KM Alert Doc 2275062.1, current revision*

Acronyms

Table 1-1 Acronyms

Acronym	Definition
AST	Associate State for Maintenance
BITS	Building Integrated Timing System
DPC	Destination Point Code
DSM	Database Services Module
E5-OAM	EAGLE Operation, Admission, & Maintenance
E5-MASP	Dual-card HW assembly composed of E5-MCAP and E5-TDM
FOA	First Office Application
GPL	Generic Program Load
IMT	Interprocessor Message Transport
IS-ANR	In Service - Abnormal
IS-NR	In Service - Normal
KSR terminal	Keyboard Send Receive terminal
Legacy MASP	System using GPSM-II\TDM card set (obsolete in release 45.0)
MASP	Maintenance and Administration Subsystem Processor
MCP	Measurements Collector/Poller
PST	Primary State for Maintenance
SAK	Software Access Key
SCCP	Signaling Connection Control Part
SLIC	Service and Link Interface Card
UHC	Upgrade Health Check

For additional Acronyms, refer to *TEKELEC Acronym Guide, MS005077.doc, current revision*.

2
General Description

The health check is to be performed as directed to by software release upgrade procedures, extension shelf installation MOPs, or My Oracle Support personnel. It may also be utilized during FOA, hardware installations, or customer problem analysis.

This document outlines a series of commands and procedures to be performed on the system. With each command, there is a description of the command, expected command output, and what problems may be detected with the command. If the desired goal/output is not obtained by executing the command, contact My Oracle Support (MOS) to investigate the deficiencies.

The entire set of commands should be executed each time in order to obtain a complete system status and configuration. Some of the commands may not be supported on all EAGLE releases, resulting in a command rejection. These rejected commands will not harm the system in any way and will be verified during the analysis of the captured data. The goal of this health check procedure is to be non-intrusive. Only spare equipment swap-out and the IMT bus testing are intrusive and should be executed during a maintenance window. The procedures that are intrusive are highlighted in Health Check Type.

Recommendations for Performing Health Check

The commands in this document should be executed during periods of FOA, new software or hardware installations, upgrades, or customer problems.

Frequency of Health Check

The frequency of executing these commands should be determined in upgrade execution procedures, extension shelf installation MOP, and the release FOA plan/ strategy developed by Oracle. For software upgrade, three health checks are executed. The recommended time frames of these checks are the following: two weeks prior (UHC1), forty-eight hours prior (UHC2), and seventy-two hours following an upgrade (UHC3). For extension shelf, one health check is executed prior to installation. The exact time is based on availability of personnel and scheduled maintenance windows.

Data Capture

During the execution of this procedure, some method of data capture is necessary for proper analysis and for future reference. If a terminal emulation application is being used which supports capturing, the application should be enabled. A KSR or printer terminal may be selected as the capture terminal since output from the user terminal can be echoed to those terminal types. If no other method is available, input and output from the user terminal can be echoed to a configured printer. A capture file must be generated so a comparison can be made with other capture files from the same node to determine if any system degradation occurred between the two capture periods. Some of the procedures explicitly identify anomalies to be checked, if present,

these occurrences should be noted. After conclusion of the Health Check procedures the capture file and any notes are to be sent to Oracle for review. If the Health Check is being performed in preparation for an upgrade, contact My Oracle Support (MOS) upon completion to verify that the upgrade can be performed after analysis of the capture file

Step Check-Off and Recording Configuration

All steps in this Health Check are to be initialed by the person performing the step. Also certain steps request recording of data, which is specific to the configuration of the switch being checked.

> **Note:**
>
> The Health Check may take several hours to complete depending on the size of the system, the part number and version of MASPs in use, and user experience.

Health Check Record

Each time the System Health Check has been completed, record the date, the reason for the health check (for example, upgrade preparation, new installation, post-upgrade verification, etc.) and record which procedure passed/failed in the following table.

Table 2-1 Health Check Record

DATE	Reason for running health check	List any procedures that failed (Procedure number and name)	Technician Signature
	Upgrade HC #1		
	Upgrade HC #2		
	Upgrade HC #3		
	Extension Shelf HC		

Health Check Type

The following table lists the procedures to be executed depending on the type of health check being performed.

Table 2-2 Health Check Type Procedures

Procedure	Non-Intrusive Upgrade (UHC1, UHC3)	Intrusive Upgrade (UHC2)	Extension Shelf, New Product
Health Check Preparation	yes	yes	yes
General System Status	yes	yes	yes

Table 2-2 (Cont.) Health Check Type Procedures

Procedure	Non-Intrusive Upgrade (UHC1, UHC3)	Intrusive Upgrade (UHC2)	Extension Shelf, New Product
Report System Troubles	yes	yes	yes
Verifying Database Status	yes	yes	n/a
Verifying GPLs	yes	yes	n/a
Retrieving Obituaries	yes	yes	yes
Verify SCCP Load	yes	yes	n/a
Verifying LNP and LSMS	yes	yes	n/a
Verifying SEAS	yes	yes	n/a
Verifying optional features	yes	yes	yes
Verifying IP Signaling Status	yes	yes	yes
Verifying EROUTE	yes	yes	yes
Verifying IMT Status	yes	yes	yes
Retrieving Trouble Data	yes	yes	yes
Verifying Clock Status	yes	yes	yes
Verifying MPS [1]	yes	yes	n/a
Verify Source Database [1]	n/a	yes	n/a
Verifying Fixed and Removable Media (Part 1)[1]	n/a	yes	n/a
Testing IMT Status[1]	n/a	yes	yes
Verifying Fixed and Removable Media (Part 2)[1]	n/a	yes	n/a
Table Capacity Status	yes	yes	n/a
Health Check Conclusion	yes	yes	yes

[1] Intrusive procedures are shaded.

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Procedures

Pre-Health Check Requirements

This procedure verifies that all pre-healthcheck requirements have been met. Perform the following tasks before continuing:

Contact My Oracle Support (MOS) and ask for HEALTHCHECK ASSISTANCE.

Prerequisites

- Verify that on-site personnel are available.
- Verify that Upgrade media is on-site or Upgrade target release has been downloaded to disk. Please reference Upgrade document Appendix B for these procedures.
- Verify that all terminal and modem recourses are available for remote access.

Execute the following steps:

- Issue the following command to display GPL status.

  ```
  Rept-stat-gpl:gpl=oamHC
  ```

  Response to GPL status command is displayed.

  ```
  eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE5 XX.x.x-YY.yy.y
          GPL Auditing ON
          GPL      CARD     RUNNING      APPROVED
  TRIAL
          OAMHC    1113     135-016-000  135-016-000  135-016-000 *
          OAMHC    1115     135-016-000  135-016-000  135-016-000 *
          Command Completed.
          ;
  ```

  If either 1113 or 1115 are not displayed, this procedure fails. Otherwise, continue to next procedure.

Health Check Preparation

This procedure starts capturing all commands and command output to a printer or other terminal configured to capture data. See Data Capture for recommendation on data capture.

1. Issue the command to log in to the EAGLE terminal.

   ```
   login:uid=XXXXXX
   ```

Response to login command is displayed.

```
eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE5 XX.x.x-YY.yy.y
         User logged in on terminal X
;
```

2. Issue the command to retrieve terminal status.

   `rtrv-trm`
   Response to retrieve terminal command is displayed.

   Record the numbers that appear in the TRM column below corresponding to the terminal port being used to capture, SEAS terminals, and user terminal. In this example, terminal 12 is a printer, terminal 10 is the user's terminal, and terminal 17 is the SEAS. Refer to Data Capture for information on how to set up terminals for data capture.

   CAPTURE _____

   SEAS _____

   USER _____

   If not already activated, start mechanism to capture data. Refer to Data Capture for recommendation on data capture.

   Record the initial output group configuration for the user's and capture terminals. Also record user's TMOUT value

   Verify that all terminal groups for the printers show YES. If so, go to step 4. If any groups show NO, continue to step 3.

```
eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE5 XX.x.x-YY.yy.y
    TRM  TYPE    COMM         FC     TMOUT MXINV DURAL
    1    NONE    9600 -7-E-1 SW     30    5     00:01:00
    2    NONE    9600 -7-E-1 SW     30    5     00:01:00
    3    NONE    9600 -7-E-1 SW     30    5     00:01:00
    4    NONE    9600 -7-E-1 SW     30    5     00:01:00
    5    NONE    9600 -7-E-1 SW     30    5     00:01:00
    6    NONE    9600 -7-E-1 SW     30    5     00:01:00
    7    NONE    9600 -7-E-1 SW     30    5     00:01:00
    8    NONE    9600 -7-E-1 SW     30    5     00:01:00
    9    NONE    9600 -7-E-1 SW     30    5     00:01:00
    10   VT320   9600 -7-E-1 SW     30    5     00:01:00
    11   NONE    9600 -7-E-1 SW     30    5     00:01:00
    12   PRINTER 9600 -7-E-1 SW     30    5     00:01:00
    13   VT320   9600 -7-E-1 SW     30    5     00:01:00
    14   NONE    9600 -7-E-1 SW     30    5     00:01:00
    15   NONE    9600 -7-E-1 SW     30    5     00:01:00
    16   NONE    9600 -7-E-1 SW     30    5     00:01:00


TRM  TYPE    LOC              TMOUT MXINV DURAL     SECURE
    17   SEAS    1108             30    5     00:01:00  no
    18   TELNET  1108             30    5     00:01:00  no
    19   TELNET  1108             30    5     00:01:00  no
    20   TELNET  1108             30    5     00:01:00  no
    21   TELNET  1108             30    5     00:01:00  no
    22   TELNET  1108             30    5     00:01:00  no
```

```
    23   TELNET  1108              30    5     00:01:00  no
    24   TELNET  1108              30    5     00:01:00  no


TRM  TRAF LINK SA  SYS PU  DB
    1    YES  YES  YES YES YES YES
    2    NO   NO   NO  NO  NO  NO
    3    NO   NO   NO  NO  NO  NO
    4    NO   NO   NO  NO  NO  NO
    5    NO   NO   NO  NO  NO  NO
    6    NO   NO   NO  NO  NO  NO
    7    NO   NO   NO  NO  NO  NO
    8    NO   NO   NO  NO  NO  NO
    9    YES  YES  YES YES YES YES
    10   YES  YES  YES YES YES YES
    11   NO   NO   NO  NO  NO  NO
    12   YES  YES  YES YES NO  NO
    13   YES  YES  YES YES YES YES
    14   NO   NO   NO  NO  NO  NO
    15   NO   NO   NO  NO  NO  NO
    16   NO   NO   NO  NO  NO  NO
    17   NO   NO   NO  NO  NO  NO
    18   NO   NO   NO  NO  NO  NO
    19   NO   NO   NO  NO  NO  NO
    20   NO   NO   NO  NO  NO  NO
    21   NO   NO   NO  NO  NO  NO
    22   NO   NO   NO  NO  NO  NO
    23   NO   NO   NO  NO  NO  NO
    24   NO   NO   NO  NO  NO  NO
;
   USER  ___  ___  ___ ___ ___ ___ ___ ___ ___ ___

        TMOUT  ____

   CAP   ___  ___  ___ ___ ___ ___ ___ ___ ___ ___
```

3. Issue the command to change all terminal groups.

   `chg-trm:trm=P:all=yes`
   (Where P is the location of the capture terminal recorded in step 2)

   Response to change terminal command is displayed.

```
    eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE5 XX.x.x-YY.yy.y
    chg-trm:trm=P:all=yes
    Command entered at terminal #X.
;

    eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE5 XX.x.x-YY.yy.y
    CHG-TRM: MASP A – COMPLTD
;
```

4. Issue the command to activate capture.

   `act-echo:trm=P`

(Where P is a capture terminal port that was selected in step 2)

Response to activate command is displayed.

Verify that the capture terminal is correctly collecting data.

```
eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE5 XX.x.x-YY.yy.y
    Scroll Area Output will be echoed to Terminal X.
;
(Caution: loss of output may occur if too many terminals are echoed)
```

5. Issue the command to change the terminal groups to the optimal settings.

   `chg-trm:trm=X:all=no:tmout=0:sa=yes:sys=yes:db=yes:dbg=yes`
   (Where X is the location of the user's terminal recorded in step 2.)

   Response to change terminal command is displayed.

```
    eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE5 XX.x.x-YY.yy.y
    chg-trm:trm=X:all=no:tmout=0:sa=yes:sys=yes:db=yes:dbg=yes
    Command entered at terminal #X.
;

    eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE5 XX.x.x-YY.yy.y
    CHG-TRM: MASP A - COMPLTD
;
```

6. Issue the command to display optional features.

   `rtrv-feat`
   Response to retrieve feature command is displayed.

   Record the on/off status of the features in the following table.

```
eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE5 XX.x.x-YY.yy.y
    EAGLE FEATURE LIST

    GTT      = on      GWS      = on      NRT      = off
    X25G     = off     LAN      = on      CRMD     = off
    SEAS     = off     LFS      = off     MTPRS    = off
    FAN      = on      DSTN5000 = off     WNP      = off
    CNCF     = off     TLNP     = off     SCCPCNV  = off
    TCAPCNV  = off     IPISUP   = off     X252000  = off
    PLNP     = off     NCR      = off     ITUMTPRS = on
    SLSOCB   = off     EGTT     = on      VGTT     = on
    MPC      = on      ITUDUPPC = on      MEASPLAT = on
    TSCSYNC  = off     E5IS     = off
;
```

> **Note:**
>
> The following table lists all possible feature bits. Feature bits differ between releases, so one may appear in this table that will not exist on a particular EAGLE.

```
GTT     ON / OFF    GWS     ON / OFF    NRT     ON / OFF
LAN     ON / OFF    CRMD       ON / OFF    LFS     ON / OFF
MTPRS      ON / OFF    FAN     ON / OFF    DSTN5000  ON / OFF
WNP     ON / OFF    CNCF       ON / OFF    TLNP       ON / OFF
SCCPCNV   ON / OFF    TCAPCNV   ON / OFF    IPISUP     ON /
OFF
PLNP       ON / OFF    NCR     ON / OFF    ITUMTPRS  ON / OFF
SLSOCB     ON / OFF    EGTT       ON / OFF    VGTT       ON /
OFF
MPC     ON / OFF    ITUDUPPC  ON / OFF    MEASPLAT  ON / OFF
TSCSYNC   ON / OFF    E5IS       ON / OFF
```

7. Issue the command to display feature keys that have been enabled.

   `rtrv-ctrl-feat`
   Response to the command is displayed.

   Record if LNP ported TN feature key and LNP ELAP Configuration is on and displayed as well as the current quantity

   > **Note:**
   >
   > If feature access key outputs “off” for status or does not appear in output the feature is OFF.

   Also record whether the EIR feature is on:

   LNP ported TN: ON / OFF

   Quantity: _____

   LNP ELAP Config: ON/OFF

   EIR: ON/OFF

   Record if TPS feature key Configuration is on and displayed as well as the current quantity. Also record whether any temporary TPS keys are displayed as enabled. Verify no temporary TPS keys are enabled.

   TPS Status: __ON / OFF__

   Quantity: _____

   Temporary TPS Enabled:

   YES/NO

   If upgrading to Rel 46.4 or higher & the source release is 46.3 or prior, the HIPR2 High Rate Mode must be on. Otherwise, this procedure fails.

> **Note:**
>
> If the HIPR2-High-Rate-Mode feature (partnum=893020101) is not activated, then steps must be followed to ensure that the cables have been properly installed and operation of IMT buses at 2.5 Gbps is verified. See *Cabling* in *Hardware Reference* and *Activating the HIPR2 High Rate Mode* Feature in *Database Administration - System Management* for more information. This activity needs to be performed during a maintenance window.

```
    rtrv-ctrl-feat
    Command entered at terminal #X.
;

    eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.yy.y
    The following features have been permanently enabled:
    Feature Name              Partnum    Status  Quantity
    TPS                       893000101  on      100
    EAGLE Product             893007201  on      ----
    LNP ELAP Configuration    893010901  on      ----
    LNP ported TNs            893011036  on      384000000
    EIR                       893012301  on      ----
    HIPR2 High Rate Mode      893020101  on      ----
    G-Flex                    893021901  on      ----
    EPAP Data Split           893039801  on      ----


    The following features have been temporarily enabled:

    Feature Name              Partnum   Status Quantity   Trial
Period
    Zero entries found.


    The following features have expired temporary keys:

    Feature Name              Partnum
    Zero entries found.
```

8. Issue the command to retrieve IP security feature key.

   `rtrv-ctrl-feat:partnum=893400001`
   Response to retrieve command is displayed.

   Note any IP Security Issue that is detected.

```
    eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.yy.y
    The following features have been enabled:

    Feature Name              Partnum   Status Quantity
    EAGLE OA&M IP Security    893400001 off    ----
```

```
;
```

9. Issue the command to retrieve serial number for this node.

   `rtrv-serial-num`
   Response to retrieve command is displayed.

```
    eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.yy.y
    System serial number = nt00001659

    System serial number is locked.

;
```

All steps in this procedure were completed.

General System Status

This procedure examines the general status of all cards in the system by reporting card and system status. Look for unexplained alarms, or other entities listed as ‘other’. Any system entities listed as ‘other’ should be documented, investigated, and explained. Look for unexplained card PST and SST states (i.e. not IS-NR/Active).

1. Issue the command to display IMT errors.

   `rept-imt-lvl1:r=summary:sloc=1201:eloc=1115`
   Response to IMT report command is displayed.

   If UHC2 is being executed, verify that large values are not displayed in any highlighted columns.

```
    eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE5 XX.x.x-YY.yy.y

=============================================================================
    SUMMARY REPORT:  Totals accumulated from all requested cards

    Count                                   Bus A Value    Bus B
Value
    -----                                   -----------
```

```
-----------
    Transmit Packet                                0M
0M
    Transmit Byte                                  0M
0M
    Receive Packet                                 0M
0M
    Receive Byte                                   0M
0M
    Receive Packet with CRC Error                  0              0
    Receive Packet with Format Error               0              0
    Receive Packet with Invalid Length             0              0
    Primary Control Receive Error                  0              0
    Primary Control Transmit Error                 0              0
    Primary Control Sanity Error                   0              0
    Violation Error                                0              0
    CPU Receive FIFO Full                          0              0
    IMT Receive FIFO Half Full                     0              0
    CPU Receive FIFO Half Full                     0              0
    DMA Terminal Count Interrupt                   0              0
    MSU Retransmitted                              0              0
    MSU Safety Packet                              0              0
    ASU Safety Packet                              0              0
    TSU Safety Packet                              0              0
    IMT Receive FIFO Full                          0              0
    SSU Safety Packet                              0              0

------------------------------------------------------------------------
---
    ;END OF REPORT
;
```

2. Issue the status command for the MUX cards.

   `rept-stat-mux`
   Response to MUX status command is displayed.

   Verify that all cards are IS-NR.

   Record the types of MUX cards displayed (circle all that are applicable):

   HIPR HIPR2

   If upgrade to Rel 46.4 or higher & the source release is 46.3 or prior, then all cards must show HIGH in the BITRATE (ACT) column. Otherwise, this procedure fails.

> **Note:**
>
> If the REPT-STAT-MUX shows BITRATE (ACT) as LOW, then steps must be followed to ensure that the cables have been properly installed and operation of IMT buses at 2.5Gbps is verified. See "Cabling" in Hardware Reference and "Activating the HIPR2 High Rate Mode Feature" in Database Administration - System Management for more information. This activity needs to be performed during a maintenance window.

```
    eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE5 XX.x.x-YY.yy.y
    CARD   TYPE     PST           SST       AST       BITRATE
BITRATE  BERT
                                                     (OPER)
(ACT)    STATUS

------------------------------------------------------------------------
-------
    1109   HIPR2    IS-NR         Active    -----     LOW
LOW      UNKNOWN
    1110   HIPR2    IS-NR         Active    -----     LOW
LOW      UNKNOWN
    1209   HIPR2    IS-NR         Active    -----     LOW
LOW      UNKNOWN
    1210   HIPR2    IS-NR         Active    -----     LOW
LOW      UNKNOWN
    1309   HIPR2    IS-NR         Active    -----     LOW
LOW      UNKNOWN
    1310   HIPR2    IS-NR         Active    -----     LOW
LOW      UNKNOWN

    Command Completed.
;
```

3. Issue the report IMT information command. Repeat for all MUX types recorded in Step 2.

   `rept-imt-info:report=XXXXerr`
   (where `report=hiprerr` if HIPR cards were detected in step 2;

   `report=hipr2err` is HIPR2 cards were detected in step 2.)

   Response to report IMT information command is displayed.

> **Note:**
>
> Output abridged for brevity, Actual output varies based on software release and card type.

```
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x-YY.y.y
    XXXX Summary Report: Summed across all requested cards for each
bucket
```

```
    XXXX Hourly Bucket Statistics


=========================================================================
=====
    Bucket Low Speed Statistic           BUS A Value  BUS B Value
    ------ ------------------            -----------  -----------
    XX     IMT Rx Packet CRC Error               0            0
           IMT Rx Packet Format Error            0            0
           IMT Rx Violation Error                0            0
           IMT Rx Command Error                  0            0
           IMT Rx FIFO Full                      0            0
           IMT Rx FIFO Half Full                 0            0
           IMT Tx FIFO Full                      0            0
           IMT Tx FIFO Half Full                 1            0

           High Speed Statistic          BUS A Value  BUS B Value
           -------------------           -----------  -----------
           IMT Rx Packet CRC Error               0            0
           IMT Rx Disparity Error                0            0
           IMT Rx Sync Lost Error                0            0
           IMT Rx Code Word Error                0            0
           CPU Rx FIFO Full                      0            0
           CPU Rx FIFO Half Full                 0            0
           CPU Rx FIFO Empty Before SOM          0            0
           CPU Rx FIFO Empty Before EOM          0            0
           CPU Rx Packet SOM Before EOM          0            0
           CPU Rx Packet CRC Error               0            0
           DMA terminal count                    0            0
           CPU Tx Buffer EOB                     0            0
           CPU Tx Buffer Full                    0            0
           CPU Tx Buffer Half Full               9            9
           IMT Bypass FIFO Full                  0            0
           IMT Bypass FIFO Half Full             0            0
           IMT Rx FIFO Full                      0            0
           IMT Rx FIFO Half Full                 0            0

           Misc Speed Statistic          BUS A Value  BUS B Value
           -------------------           -----------  -----------
           Shelf ID UART Framing Error           0            0
           Shelf ID UART Overrun Error           0            0

;
```

4. Issue the command to clear IMT errors.

   `clr-imt-stats:all=yes`
   Response to clear IMT stats command is displayed.

```
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x-YY.y.y
    clr-imt-stats:all=yes
    Command entered at terminal #X.
;
    Eaglestp 98-03-09 14:09:41 EST Rel XX.X.X-x.x.x
```

```
    Clear IMT Statistics command(s) issued...
;
```

5. Issue the command to report system status.

   ```
   rept-stat-sys
   ```
   Response to system status command is displayed.

   Record the Software Release:

   REL. _____

   Record any card types that are not IS-NR.

   Investigate and record cards whose status cannot be explained.

   Card Type: _____

   Card Type: _____

   Record the number of IS-NR SS7IPGW and IPGWI cards.

   Verify the IP System is not deploying both SS7IPGW and IPGWI Cards by ensuring either SS7IPGW or IPGWI has 0 cards IS-NR.

   SS7IPGW Cards: _____

   IPGWI Cards: _____

```
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.X.X-x.x.x
    MAINTENANCE STATUS REPORT
       Maintenance Baseline established.
       Routing Baseline established.
       SCCP Baseline established.
       ALARMS:      CRIT=    0     MAJR=   X    MINR=  X
INH=    0
       OAM 1113     IS-NR          Standby
INH=    0
       OAM 1115     IS-NR          Active
INH=    0
       LIM  CARD    IS-NR=   X     Other=        X
INH=    0
       X25  CARD    IS-NR=   X     Other=        X
INH=    0
       SCCP CARD    IS-NR=   X     Other=        X
INH=    0
       GLS  CARD    IS-NR=   X     Other=        X
INH=    0
       SS7IPGW CARD IS-NR=   X     Other=        X
INH=    0
       IPGWI   CARD IS-NR=   X     Other=        X
INH=    0
       CLOCK        IS-NR=   X     Other=        X
INH=    0
       IMT          IS-NR=   X     Other=        X
       SLK          IS-NR=  XX     Other=        X
INH=    0
       DLK          IS-NR=   X     Other=        X
INH=    0
       LINK SET     IS-NR=  XX     Other=        X
```

```
INH=    0
       SS7 DPC      IS-NR=  XX     Other=        X
       X25 DPC      IS-NR=   X     Other=        X
       CLUST DPC    IS-NR=   X     Other=        X
       XLIST DPC    IS-NR=   X     Other=        X
       DPC  SS      Actv =   X     Other=        X
       SEAS SS      IS-NR=   X     Other=        X
       SEAS  X25    IS-NR=   X     Other=        X
INH=    0
       LSMS SS      IS-NR=   X     Other=        X
       LSMS  Q.3    IS-NR=   X     Other=        X
INH=    0
       TERMINAL     IS-NR=   X     Other=       XX
INH=    0
    Command Completed.
;
```

6. Issue the command to report signaling link status.

   `rept-stat-slk`

   Response to report signaling links status command is displayed.

```
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.X.X-x.x.x
    SLK      LSN         CLLI        PST          SST       AST
    1201,A   ls1         ----------- IS-NR        Avail     -----
    1201,B   ls4         ----------- OOS-MT       Unavail   -----
    1202,A   ls1         ----------- IS-NR        Avail     -----
    1202,B   ls1         ----------- IS-NR        Avail     -----
    1203,A   ls1         ----------- IS-NR        Avail     -----
    1203,B   ls2         ----------- IS-NR        Avail     -----
    1204,A   ls4         ----------- IS-NR        Avail     -----
    1204,B   ls3         ----------- IS-NR        Avail     -----
    1205,A   ls5         ----------- IS-NR        Avail     -----
    1205,A1  ls5         ----------- IS-NR        Avail     -----
    1205,A2  ls5         ----------- IS-NR        Avail     -----
    1205,A3  ls5         ----------- IS-NR        Avail     -----
    1205,B3  ls5         ----------- IS-NR        Avail     -----
    1206,A   ls6         ----------- IS-NR        Avail     -----
    1206,B   ls6         ----------- IS-NR        Avail     -----
    1207,A   ls7         ----------- IS-NR        Avail     -----
    1207,B   ls7         ----------- IS-NR        Avail     -----
    1211,A   ls11        ----------- IS-NR        Avail     -----
    1211,B   ls11        ----------- IS-NR        Avail     -----
    1301,A   ls1301i0    ----------- IS-NR        Avail     -----
    1301,B   ls1301i0    ----------- IS-NR        Avail     -----
    1302,A   ls1302i0    ----------- IS-NR        Avail     -----
    1302,B   ls1302i0    ----------- IS-NR        Avail     -----
    1303,A   ls1303i0    ----------- IS-NR        Avail     -----
    1303,B   ls1303i0    ----------- IS-NR        Avail     -----
    1304,A   ls1304i0    ----------- IS-NR        Avail     -----
    1304,B   ls1304i0    ----------- IS-NR        Avail     -----
    1311,A   ls1311i0    ----------- IS-NR        Avail     -----
    1311,B   ls1311i0    ----------- IS-NR        Avail     -----
    1311,A1  ls1311i0    ----------- IS-NR        Avail     -----
    1311,B1  ls1311i0    ----------- IS-NR        Avail     -----
```

```
    Command Completed.
;
```

7. Issue the command to retrieve card provisioning.

   ```
   rtrv-card
   ```

   Response to retrieve command is displayed.

```
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x-YY.y.y
    CARD   TYPE      APPL     LSET NAME   LINK SLC LSET NAME   LINK
SLC
    1101   ENET      IPSG     stpa220a    A    0   sc4a224a    B
0
                              sc1a221a    A1   0   sc5a225a    B1
0
                              sc2a222a    A2   0   sc6a226a    B2
0
                              sc3a223a    A3   0   sc7a227a    B3
0
                              stpa027i    A4   0   sp1a028i    B4
0
                              sc1a028i    A5   0   sp2a029i    B5
0
                              sc2a029i    A6   0   sp3a030i    B6
0
                              sc3a030i    A7   0   sp4a031i    B7
0
    1102   TSM       GLS
    1103   DSM       VSCCP
    1105   ENET      IPSG     stpa220a    A    1   sc4a224a    B
1
                              sc1a221a    A1   1   sc5a225a    B1
1
                              sc2a222a    A2   1   sc6a226a    B2
1
                              sc3a223a    A3   1   sc7a227a    B3
1
                              stpa027n    A4   1   sp1a028n    B4
1
    1106   LIME1     CCS7ITU  sc6a033i    A    0
    1107   DCM       IPGWI    sc5a032i    A    1
    1108   MCPM      MCP
    1111   ENET      IPSG     lg1111a00   A    0   lg1111i01   A1
0
                              lg1111n02   A2   0
    1112   ENET      IPSG     lg1111a00   A    1   lg1111i01   A1
1
                              lg1111n02   A2   1
    1113   E5-MCAP   OAM
    1114   TDM-A
    1115   E5-MCAP   OAM
    1116   TDM-B
    1117   MDAL
    1201   ENET      IPSG     stpa220a    A    3   sc4a224a    B
```

```
3
                                sc1a221a    A1   3   sc5a225a    B1
3
                                sc2a222a    A2   3   sc6a226a    B2
3
                                sc3a223a    A3   3   sc7a227a    B3
3
                                stpa027i    A4   3   sp1a028i    B4
3
                                sc1a028i    A5   3   sp2a029i    B5
3
                                sc2a029i    A6   3   sp3a030i    B6
3
                                sc3a030i    A7   3   sp4a031i    B7
3
                                stpa027n    A8   3   sp1a028n    B8
3
                                sc1a028n    A9   3   sp2a029n    B9
3
                                sc2a029n    A10  3   sp3a030n    B10
3
                                sc3a030n    A11  3   sp4a031n    B11
3
   1203   LIMT1     SS7ANSI    ls3307a00   A    0   ls3307a04   B
0
                                ls3307a00   A1   1   ls3307a04   B1
1
                                ls3307a00   A2   2   ls3307a04   B2
2
                                ls3307a00   A3   3   ls3307a04   B3
3
                                ls3307a08   A4   0   ls3307a12   B4
0
                                ls3307a08   A5   1   ls3307a12   B5
1
                                ls3307a08   A6   2   ls3307a12   B6
2
                                ls3307a08   A7   3   ls3307a12   B7
3
                                ls3307a16   A8   0   ls3307a20   B8
0
                                ls3307a16   A9   1   ls3307a20   B9
1
                                ls3307a16   A10  2   ls3307a20   B10
2
                                ls3307a16   A11  3   ls3307a20   B11
3
                                ls3307a24   A12  0   ls3307a28   B12
0
                                ls3307a24   A13  1   ls3307a28   B13
1
                                ls3307a24   A14  2   ls3307a28   B14
2
                                ls3307a24   A15  3   ls3307a28   B15
3
```

```
    1205   DCM       IPLIMI   sc4a031i    A    0   sc4a031n    B
0
                              sc4a031i    A1   1   sc4a031n    B1
1
    1206   DCM       IPLIMI   sc4a031i    A    8   sc4a031n    B
8
                              sc4a031i    A1   9   sc4a031n    B1
9
    1207   LIMATM    ATMANSI  sc8a228a    A    1   sc9a229a    B
1
    1208   ENET      IPSG     lg2305a00   A    7   gr2305i01   A1
7
                              gr2305n02   A2   7
    1211   ENET      IPSG     stpa220a    A    4   sc4a224a    B
4
    1212   MCPM      MCP
    1213   LIME1     CCS7ITU  ls1213i00   A    0   lr1213i04   B
0
                              ls1213i01   A1   0   lr1213i05   B1
0
    1215   ENET      IPSG     lg1111a00   A    2   lg1111i01   A1
2
                              lg1111n02   A2   2
    1216   ENET      IPSG     lg1111a00   A    3   lg1111i01   A1
3
                              lg1111n02   A2   3
    1217   DSM       VSCCP
;
```

8. Issue the command to report card status.

   `rept-stat-card`
   Response to card status command is displayed.

   Look for the slot ID of any IS-ANR or OOS-MT status cards. Ensure that any cards in this state can be explained.

   Record the card locations of the MASPs:

   Active MASP _____

   Standby MASP _____

```
eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x-YY.y.y
    CARD   VERSION      TYPE      GPL        PST
SST        AST
    1101   134-060-000  DCM       IPGHC      IS-NR
Active     -----
    1102   134-060-000  LIME1     SS7HC      IS-NR
Active     -----
    1103   134-060-000  LIME1     SS7ML      IS-NR
Active     -----
    1104   134-060-000  LIMDS0    SS7ML      IS-NR
Active     -----
    1105   134-060-000  MCPM      MCP        IS-NR
Active     -----
    1106   134-060-000  LIMATM    ATMANSI    IS-NR
```

```
Active     -----
    1107   134-060-000  DCM       IPGHC      IS-NR
Active     -----
    1108   134-060-000  DSM       SCCPHC     IS-NR
Active     -----
    1109   134-060-000  HIPR      HIPR       IS-NR
Active     -----
    1109   134-060-000  HIPR      HIPR       IS-NR
Active     -----
    1111   -----------  DSM       VSCCP      OOS-MT
Isolated   -----
    1112   134-060-000  TSM       GLSHC      IS-NR
Active     -----
    1113   134-060-000  E5MCAP    OAMHC      IS-NR
Standby    -----
    1114   -----------  E5TDM                IS-NR
Active     -----
    1115   134-060-000  E5MCAP    OAMHC      IS-NR
Active     -----
    1116   -----------  E5TDM                IS-NR
Active     -----
    1117   -----------  E5MDAL               IS-NR
Active     -----
    1201   134-060-000  DCM       IPLIMI     IS-NR
Active     -----
    Command Completed.
;
```

9. Issue the command to report card status.

   `rept-stat-card:loc=XXXX:mode=full`
   (where XXXX is the slot ID of any card that is IS-ANR or OOS-MT in step 8)

   Response to card status command is displayed.

```
eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x-YY.y.y
    CARD   VERSION      TYPE      APPL       PST
SST        AST
    XXXX   -----------  LIMDS0    SS7ANSI    OOS-MT
Isolated   ----
      ALARM STATUS       = **  0013 Card is isolated from the system
             GPL version = -----------
      IMT BUS A          = -----
      IMT BUS B          = -----
      CLOCK A            = ----
      CLOCK B            = ----
      CLOCK I            = ----
      MBD BIP STATUS     = ----
      DB STATUS          = ----
      DBD MEMORY SIZE    = ----
      HW VERIFICATION CODE = ----
      SLK A   PST        = OOS-MT          LS=e3e4
CLLI=-----------
      SLK B   PST        = OOS-MT          LS=e3e4
CLLI=-----------
      SNM    TVG RESULT  = 24 hr: ------, 5 min: ------
```

```
      SCCP   TVG RESULT  = 24 hr: ------, 5 min: ------
      EROUTE TVG RESULT  = 24 hr: ------, 5 min: ------
      SENTINEL SOCKET A  = INACTIVE
    Command Completed.
;
```

10. Repeat step 9 for all cards that were IS-ANR or OOS-MT in step 8.
11. Issue the command to display the version of the GPLs running on the system.

    `rept-stat-gpl:display=all`
    Response to GPL status command.

    If the target release is 46.7 or higher and any card displayed is running SCCPHC, SIPHC, DEIRHC or ENUMHC GPL, this step fails. Continue with this health check to identify all failures. However, failure of this step will also cause Procedure 19 to fail with obsolete CARD/GPL.

    NOTE: Cards running those GPLs need to be converted to run corresponding 64 bits GPLs. Follow conversion procedure listed under GPL Management Procedures in *Database Administration - System Management User's Guide* document to convert cards to run 64 bit GPLs.

```
    eaglestp YY-MM-DD hh:mm:ss zzza EAGLE XX.x.x-YY.y.y
    GPL Auditing  ON

    GPL        CARD      RUNNING           APPROVED      TRIAL
    OAMHC69    1113      145-025-000       145-025-000
-----------  *
           BLDC32        145-023-000       145-023-000
145-023-000
    OAMHC69    1115      145-025-000       145-025-000
-----------  *
           BLDC32        145-023-000       145-023-000
145-023-000
    HIPR2      1109      145-002-000       145-002-000
145-002-000
    HIPR2      1110      145-002-000       145-002-000
145-002-000
    HIPR2      1209      145-002-000       145-002-000
145-002-000
    HIPR2      1210      145-002-000       145-002-000
145-002-000
    SFAPP      1107      145-025-000       145-025-000
145-025-000
           BLSLC64       145-023-000       145-023-000
145-023-000
    SFAPP      1202      145-025-000       145-025-000
145-025-000
           BLSLC64       145-023-000       145-023-000
145-023-000
    SS7HC      1101      145-025-000       145-025-000
145-025-000
           BLMCAP        145-023-000       145-023-000
145-023-000
    IPSHC      1104      145-025-000       145-025-000
```

```
145-025-000
           BLMCAP        145-023-000        145-023-000
145-023-000
    IPSG       1204      145-025-000        145-025-000
145-025-000
           BLMCAP        145-023-000        145-023-000
145-023-000
    IPSG       1207      145-025-000        145-025-000
145-025-000
           BLMCAP        145-023-000        145-023-000
145-023-000
    IPSG       1208      145-025-000        145-025-000
145-025-000
           BLMCAP        145-023-000        145-023-000
145-023-000
    IPSG       1213      145-025-000        145-025-000
145-025-000
           BLMCAP        145-023-000        145-023-000
145-023-000
    IPSG       1214      145-025-000        145-025-000
145-025-000
           BLMCAP        145-023-000        145-023-000
145-023-000
    IPSG       1215      145-025-000        145-025-000
145-025-000
           BLMCAP        145-023-000        145-023-000
145-023-000
    IPSG       1216      145-025-000        145-025-000
145-025-000
           BLMCAP        145-023-000        145-023-000
145-023-000
    IPSG       1217      145-025-000        145-025-000
145-025-000
           BLMCAP        145-023-000        145-023-000
145-023-000
    IPSG       1218      145-025-000        145-025-000
145-025-000
           BLMCAP        145-023-000        145-023-000
145-023-000
    SCCP64     1111      145-025-000        145-025-000
145-025-000
           BLSLC64       145-023-000        145-023-000
145-023-000
    SCCP64     1211      145-025-000        145-025-000
145-025-000
           BLSLC64       145-023-000        145-023-000
145-023-000
    MCPHC69    1201      145-025-000        145-025-000
145-025-000
           BLDC32        145-023-000        145-023-000
145-023-000
    MCPHC69    1203      145-025-000        145-025-000
145-025-000
           BLSL932       145-023-000        145-023-000
145-023-000
```

```
    IPSHC69    1105      145-025-000        145-025-000
145-025-000
           BLSL932       145-023-000        145-023-000
145-023-000
    IPSHC69    1108      145-025-000        145-025-000
145-025-000
           BLSL932       145-023-000        145-023-000
145-023-000

    Command Completed.
;
```

12. Issue the command to retrieve the shelves.

    `rtrv-shlf`
    Response to retrieve shelf command is displayed.

```
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x-YY.y.y
    SHELF DISPLAY
    FRAME SHELF     TYPE
      1     1       CONTROL
      1     2       EXTENSION
;
```

13. Issue the command to retrieve STP.

    `rtrv-stp`
    Response to retrieve STP command is displayed.

> **Note:**
>
> Output abridged for brevity. This output displays information for one frame only.

```
    eaglestp YY-MM-DD hh:mm:ss zzza EAGLE XX.x.x-YY.y.y

    Card  Part Number  Rev Serial Number  Type     DB     APPL
GPL Version
    ----  -----------  --- -------------  ----     --     ----
-----------
    1101  870-2970-01  L   10214192225    LIME1    2048M  SS7HC
145-025-000
    1102  Empty
    1103  Empty
    1104  870-2971-01  TG  10217052393    IPSM     2048M  IPSHC
145-025-000
    1105  7094646      17  10217302123    IPSM     16384M IPSHC69
145-025-000
    1106  Empty
    1107  7094646      17  10217322156    SLIC     16384M SFAPP
145-025-000
    1108  BIP Data inv                    IPSM     16384M IPSHC69
145-025-000
```

```
    1109  870-2872-02  F   10214372130                    HIPR2
145-002-000
    1110  870-2872-02  F   10214372180                    HIPR2
145-002-000
    1111  7094646      17  10217302213    DSM     16384M SCCP64
145-025-000
    1112  Empty
    1113  870-2903-02  B   10212225164    E5MCAP  4096M  OAMHC69
145-025-000
    1114  TDM
    1115  870-2903-01  N   10208345081    E5MCAP  4096M  OAMHC69
145-025-000
    1116  TDM
    1117  E5MDAL
    1118  Empty

    1201  870-3089-01  G   10214025308    MCPM    4096M  MCPHC69
145-025-000
    1202  7094646      17  10217322153    SLIC    16384M SFAPP
145-025-000
    1203  7094646      19  10217442309    MCPM    16384M MCPHC69
145-025-000
    1204  870-2971-01  TD  10216112120    ENETB   2048M  IPSG
145-025-000
    1205  Empty
    1206  Empty
    1207  BIP Data inv                   ENETB   2048M  IPSG
145-025-000
    1208  870-2971-01  C   10210255063    ENETB   2048M  IPSG
145-025-000
    1209  870-2872-01  B   10209125128                    HIPR2
145-002-000
    1210  870-2872-02  F   10214372120                    HIPR2
145-002-000
    1211  7094646      17  10217322039    SLIC    16384M SCCP64
145-025-000
    1212  Empty
    1213  870-2971-01  M   10212465071    ENETB   2048M  IPSG
145-025-000
    1214  870-2971-01  N   10213145384    ENETB   2048M  IPSG
145-025-000
    1215  870-2971-01  N   10213415156    ENETB   2048M  IPSG
145-025-000
    1216  870-2971-01  C   10210255065    ENETB   2048M  IPSG
145-025-000
    1217  870-2971-01  TE  10216222178    ENETB   2048M  IPSG
145-025-000
    1218  870-2971-01  G   10211257067    ENETB   2048M  IPSG
145-025-000
;
```

14. Issue the command to retrieve STP.

    ```
    RTRV-STP:GPL=IPSHC
    ```

Response to retrieve STP command is displayed.

> **Note:**
>
> If upgrading to 46.5 or higher and any P/N displayed is 870-2877-xx. If so, at the end of this health check, contact the My Oracle Support.

```
    eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x -YY.y.y

    Card  Part Number  Rev Serial Number  Type     DB     APPL
GPL Version
    ----  -----------  --- -------------  ----     --     ----
-----------
    1105  870-2877-02  B   10208467329    IPSM     2048M  IPSHC
140-022-000
    1205  870-2971-01  N   10213315392    IPSM     2048M  IPSHC
140-022-000
    1215  870-2971-01  N   10213415158    IPSM     2048M  IPSHC
140-022-000
    1305  870-2877-02  B   10208507052    IPSM     2048M  IPSHC
140-022-000

    Command Completed.
;
```

15. Issue the command to retrieve event log.

    `rtrv-log:dir=bkwd:num=100:mode=full:edate=yymmdd:type=alarm:slog=act`
    (Where `yymmdd` is yesterday's date.)

    Response to retrieve log command is displayed.

    If report terminates without the `end of log` reached displayed, continue to next step. Otherwise, go to step 17.

```
eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x-YY.y.y
    Card 1115; SYS REL= XX.x.x-YY.y.y; STP CLLI=   eaglestp;
Timezone= EST

    ****02-05-27  21:29:47****
    5119.0912    SYSTEM                 Dynamic database is now
consistent
    ****02-05-27  21:19:47****
    9703.0911 ** SYSTEM                 Dynamic database is
inconsistent
                 Card 2304
    ****02-05-27  21:09:42****
    9280.0912    SYSTEM                 Dynamic database is now
consistent
    ****02-05-27  20:59:43****
    8850.0009    CARD 1115 OAMHC        MASP became active
    ****02-05-27  19:56:21****
```

```
    6209.0106    IMT BUS B              IMT Bus alarm cleared
    ****02-05-27  19:56:19****
    6208.0107  * IMT BUS B              Minor IMT failure detected
    ****02-05-27  19:22:56****
    9829.0048  * TERMINAL    8          Terminal failed
    ****02-05-27  19:22:56****
    9828.0046    TERMINAL    7          Terminal enabled
    UAM Report terminated - end of log reached
    END OF LOG REPORT.
;
```

16. Issue the command to retrieve the next set of events.

    `rtrv-log:next=500`
    Response to retrieve log command is displayed.

    If report terminates without the “end of log reached” display, the command can be repeated.

> **Note:**
>
> The amount of alarms and UIMs during a 24-period can vary greatly depending on the size and how tightly configured and controlled the system is. Retrieving additional log entries may be beneficial.

```
eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x-YY.y.y
    Card 1115; SYS REL= XX.x.x-YY.y.y; STP CLLI=   eaglestp;
Timezone= EST

    8978.0106    IMT BUS B              IMT Bus alarm cleared
    ****02-05-27  15:02:01****
    8960.0107  * IMT BUS B              Minor IMT failure detected
    ****02-05-27  13:59:06****
    6342.0912    SYSTEM                 Dynamic database is now
consistent
    ****02-05-27  13:54:18****
    6152.0085    IP7CONN ipi2106b7m2pa   IP Connection Available
    ****02-05-27  13:54:18****
    6131.0536  * IP7CONN ipi2106b7m2pa   IP Connection Excess
Retransmits
    ****02-05-27  13:49:01****
    ****02-05-27  00:58:37****
    8789.0311    DPC    2-047-2         DPC is allowed
    ****02-05-27  00:58:37****
    8787.0314    DPC    2-047-2         Route is allowed
    ****02-05-27  00:58:37****
    8786.0311    DPC    2-045-2         DPC is allowed
    ****02-05-27  00:58:37****
    8785.0314    DPC    2-045-2         Route is allowed
    UAM Report terminated - end of log reached
    END OF LOG REPORT.
;
```

17. Issue the command to retrieve the log for the standby. Repeat step 16 until the end of log reached message displays.

    ```
    rtrv-
    log:dir=bkwd:num=100:mode=full:edate=yymmdd:type=alarm:slog=s
    tb
    ```
    (Where yymmdd is yesterday's date.)

18. Issue the retrieve log command for the UIM log types. Repeat step 16 until the end of log reached message displays.

    ```
    rtrv-
    log:dir=bkwd:num=100:mode=full:edate=yymmdd:type=uim:slog=act
    ```
    (Where yymmdd is yesterday's date.)

19. Issue the command to retrieve the STP power level.

    ```
    rtrv-stp:display=power
    ```
    Response to retrieve power frame command is displayed.

    Note any of the power threshold numbers prefixed with a "+" sign.

    ```
    eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x-YY.y.y

               Power Threshold          Power Consumption
        Frame   (Amps)    (Watts)         (Amps)    (Watts)
        -----   -----------------        -----------------
        CF00       45        2160          37.71       1810
        EF00       40        1920          33.99       1631
        EF01       35        1680          10.00        480
        EF04      +30       +1440          14.06        675

        Command Completed.
    ;
    ```

20. Issue the command to retrieve the threshold alarm levels.

    ```
    rtrv-th-alm
    ```
    Response to retrieve threshold alarm command is displayed.

    ```
    eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x-YY.y.y
        Thermal Alarm Level 1:                      92%
        Thermal Alarm Level 2:                      100%
        SCCP TPS Threshold:                         80%
        SCCP Calculation Method:                    N
        LNP TN  DB Alarm Level 1:                   80%
        LNP TN  DB Alarm Level 2:                   95%
        GTT SCCP Service Alarm Level 1:             10%
        GTT SCCP Service Alarm Level 2:             20%
        Non-GTT SCCP Service Alarm Level 1:         10%
        Non-GTT SCCP Service Alarm Level 2:         20%
        SCCP Service Alarm Level 1 Interval:        0
        SCCP Service Alarm Level 2 Interval:        0
        IMT Bus Combined Utilization Alarm Level 1: 70%
        IMT Bus Combined Utilization Alarm Level 2: 80%
        IMT Bus Congestion Alarm Level 1:           70%
        IMT Bus Congestion Alarm Level 2:           80%
    ```

```
    RTRV-TH-ALM: MASP B - COMPLTD.
;
```

21. Issue the command to retrieve the site ID.

    `rtrv-sid`
    Response to retrieve command is displayed.

```
eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x-YY.y.y
       PCA             PCI          PCN
CLLI              PCTYPE
       200-080-200     7-080-7      7-080-7-aa
tklc9051301       ANSI
                     s-7-080-7    s-7-080-7-aa

       CPCA
       200-081-000

       CPCI (INP)
       7-082-0         s-7-082-0

       CPCN (INP)
       7-082-0-aa        7-082-0-bc      s-7-082-0-aa
s-7-082-0-bc


       CPCA (GFLEX)
       200-085-000

       CPCI (GFLEX)
       7-085-0         s-7-085-0

       CPCN (GFLEX)
       7-085-0-aa        7-085-0-bc      s-7-085-0-aa
s-7-085-0-bc


       CPCA (MNP)
       200-086-000

       CPCI (MNP)
       7-086-0         s-7-086-0

       CPCN (MNP)
       7-086-0-aa        7-086-0-bc      s-7-086-0-aa
s-7-086-0-bc
;
```

22. Issue the command to retrieve SCTP associations.

    `rtrv-assoc:display=all`
    The response to the retrieve command is displayed.

```
    eaglestp YY-MM-DD hh:mm:ss zzz PPPPP XX.x.x-YY.y.y
                    CARD  IPLNK
    ANAME           LOC   PORT  LINK ADAPTER LPORT RPORT OPEN ALW
```

```
    iplma1103a2m2pa 1103  B     A2   M2PA    2175  2163  YES  YES
    iplma1103a3m2pa 1103  B     A3   M2PA    2176  2164  YES  YES
    iplma1103b2m2pa 1103  B     B2   M2PA    2179  2167  YES  YES
    iplma1103b3m2pa 1103  B     B3   M2PA    2180  2168  YES  YES
    iplma2116am2pa  2116  A     A    M2PA    3186  3166  YES  YES
    iplma2116a1m2pa 2116  A     A1   M2PA    3187  3167  YES  YES
    iplma2116a2m2pa 2116  A     A2   M2PA    3188  3168  YES  YES
    iplma2116a3m2pa 2116  A     A3   M2PA    3189  3169  YES  YES
    iplma2116bm2pa  2116  B     B    M2PA    3190  3170  YES  YES
    iplma2116b1m2pa 2116  B     B1   M2PA    3191  3171  YES  YES
    iplma2116b2m2pa 2116  B     B2   M2PA    3192  3172  YES  YES
    iplma2116b3m2pa 2116  B     B3   M2PA    3193  3173  YES  YES
    g1101asua400a   1101  A     A    SUA     7300  7300  YES  YES
    g1101asua500a   1101  A     A    SUA     2400  2400  YES  YES
    g1102asua400a   1102  A     A    SUA     2300  2300  YES  YES
    g1102asua500a   1102  A     A    SUA     2400  2400  YES  YES

    IP Appl Sock/Assoc table is (16 of 4000) 1% full

;
```

23. Issue the command to retrieve T1 ports.

    ```
    rtrv-t1
    ```

    The response to the retrieve command is displayed.

```
eaglestp YY-MM-DD hh:mm:ss zzz PPPPP XX.x.x-YY.y.y
          T1
    LOC   PORT  ENCODE  T1TSEL    FRAMING  LL   CHANBRDG
    1304  3     B8ZS    LINE      ESF      133  ------    CHAN
----
    1304  4     B8ZS    LINE      ESF      133  ------    CHAN
----
    2203  5     B8ZS    LINE      ESF      133  ------    CHAN
----
    2203  6     B8ZS    LINE      ESF      133  ------    CHAN
----
    2314  7     B8ZS    LINE      ESF      133  ------    CHAN
----
    2314  8     B8ZS    LINE      ESF      133  ------    CHAN
----
    3113  1     B8ZS    LINE      ESF      133  ------    CHAN
----
    3113  2     B8ZS    LINE      ESF      133  ------    CHAN
----
    3214  3     B8ZS    LINE      ESF      133  ------    CHAN
----
    3214  4     B8ZS    LINE      ESF      133  ------    CHAN
----
    3307  5     B8ZS    LINE      ESF      133  ------    CHAN
----
    3307  6     B8ZS    LINE      ESF      133  ------    CHAN
----
    4104  7     B8ZS    LINE      ESF      133  ------    CHAN
----
```

```
    4104  8     B8ZS    LINE      ESF      133  ------    CHAN
----
    1107  1     B8ZS    LINE      ESF      133  ------    CHAN
----
    1107  2     B8ZS    LINE      ESF      133  ------    CHAN
----

;
```

24. Issue the command to retrieve T1 ports.

    `rtrv-e1`
    The response to the retrieve command is displayed.

```
    eaglestp YY-MM-DD hh:mm:ss zzz PPPPP XX.x.x-YY.y.y
          E1
LINK    MINSU
    LOC   PORT  CRC4  CAS  ENCODE  E1TSEL    SI  SN  CHANBRDG
CLASS   RATE
    1203  1     ON    OFF  HDB3    LINE      0   0   ------
CHAN    ----
    1203  2     ON    OFF  HDB3    LINE      0   0   ------
CHAN    ----
    1203  3     ON    OFF  HDB3    LINE      0   0   ------
CHAN    ----
    1203  4     ON    OFF  HDB3    LINE      0   0   ------
CHAN    ----
    1207  2     ON    OFF  HDB3    LINE      0   0   ------
CHAN    ----
    1207  3     ON    OFF  HDB3    LINE      0   0   ------
CHAN    ----
    1208  3     ON    OFF  HDB3    LINE      0   0   ------
CHAN    ----
    1208  4     ON    OFF  HDB3    LINE      0   0   ------
CHAN    ----
;
```

25. Issue the command to report IP TPS usage.

    `rept-stat-iptps`
    The response to the status command is displayed.

```
eaglestp YY-MM-DD hh:mm:ss zzz PPPPP XX.x.x-YY.y.y
    IP TPS USAGE REPORT

               THRESH  CONFIG         TPS     PEAK
PEAKTIMESTAMP

-------------------------------------------------------------------
    LSN
    ls2206i00    100%    2400  TX:      0      109   10-03-05
10:41:51
                             RCV:      0        0   00-00-00
00:00:00
    ls2206i01    100%    2400  TX:      0       84   10-03-05
10:41:51
```

```
                                RCV:      0        0   00-00-00
00:00:00
    ls2206i02    100%    2400  TX:       0       85   10-03-05
10:41:51
                                RCV:      0        0   00-00-00
00:00:00
    ls2206i03    100%    2400  TX:       0       84   10-03-05
10:41:51
                                RCV:      0        0   00-00-00
00:00:00
    lg1111a00    100%   13280  TX:       0     2883   10-03-08
15:26:06
                                RCV:      0        0   00-00-00
00:00:00
    lg2305a00    100%   13280  TX:       0      374   10-03-08
17:19:36
                                RCV:      0        0   00-00-00
00:00:00
    lg1111i01    100%   13280  TX:       0     2883   10-03-08
15:14:06
                                RCV:      0        0   00-00-00
00:00:00
    lg1315i00    100%    5000  TX:       0        9   10-03-12
20:10:36
                                RCV:      0        0   00-00-00
00:00:00
    lg5315i00    100%     380  TX:       0        0   00-00-00
00:00:00
                                RCV:      0        0   00-00-00
00:00:00
    lg1111n02    100%   13280  TX:       0     2883   10-03-08
15:19:06
                                RCV:      0        0   00-00-00
00:00:00
    lg1316n00    100%    5000  TX:       0        9   10-03-12
20:10:36
                                RCV:      0        0   00-00-00
00:00:00
    sc1a221a     100%    3200  TX:       1     2883   10-03-08
15:54:36
                                RCV:      0     2920   10-03-08
18:09:21
    sc3a223a     100%    3200  TX:       1     2972   10-03-08
18:39:06
                                RCV:      0     2920   10-03-08
17:30:21
    sc3a030i     100%    3200  TX:       1     2724   10-03-08
17:17:06
                                RCV:      0     2724   10-03-08
16:44:21

------------------------------------------------------------------

    Command Completed.
;
```

26. Issue the command to generate a measurements report.

    `rept-meas:enttype=stp:type=mtcd`
    If measurement collection is ON, the response to the report command is displayed.

```
    eaglestp YY-MM-DD hh:mm:ss zzz PPPPP XX.x.x-YY.y.y
    TYPE OF REPORT: DAILY MAINTENANCE MEASUREMENTS ON STP
    REPORT PERIOD: LAST
    REPORT INTERVAL:  YY-MM-DD,  00:00:00 THROUGH 23:59:59

    STP-MTCD MEASUREMENTS

    These measurements are from 10-03-15, 00:00:00 through 23:59:59.
    ORIGMSUS   = 228575718, TRMDMSUS   = 204657972, THRSWMSU   =
167565746,
    MTPRESTS   =         0, DTAMSULOST =         0, MSINVDPC
=         0,
    MSINVSIO   =         0, OMSINVDPC  =         0, MSINVLNK
=         0,
    MSINVSIF   =         0, MSNACDPC   =        78, MSINVSLC
=         0,
    GTTPERFD   =  72959128, GTTUN0NS   =     12096, GTTUN1NT
=       360,
    MSSCCPFL   =         0, MSULOST1   =         0, MSULOST2
=         0,
    MSULOST3   =         0, MSULOST4   =         0, MSULOST5
=         0,
    DRDCLFLR   =   4207376, DURLKOTG   =   4207370, CRSYSAL
=       486,
    MASYSAL    =     23558, MISYSAL    =      2863, XLXTSPACE
=         0,
    XLXTELEI   =         0, TTMAPPF    =         0, MSUDSCRD
=         0,
    OVSZMSG    =         0, GFGTMATCH  =   3888000, GFGTNOMCH
=         0,
    GFGTNOLKUP =         0, MSUSCCPFLR =         0, MSSCCPDISC
=         0,
    MSIDPNOMCH =         0, MSIDPMATCH =         0, MSULOST6
=         0,
    SCCPLOOP   =         0

;
```

    If measurement collection is OFF, the response to the report command is displayed.

> **Note:**
>
> This parameter (`chg-meas:collect`) does not affect measurements collection and generation for the Measurements Platform. It only activates or deactivates the reporting of scheduled measurements to the UI for the Measurements Platform.

```
    eaglestp YY-MM-DD hh:mm:ss zzz PPPPP XX.x.x-YY.y.y
    TYPE OF REPORT: DAILY MAINTENANCE MEASUREMENTS ON STP
    REPORT PERIOD: LAST
    REPORT INTERVAL:  YY-MM-DD,  00:00:00 THROUGH 23:59:59

   STP-MTCD MEASUREMENTS

    Measurement data are not current.
;
```

All steps in this procedure were completed.

Report System Troubles

This procedure examines non-network system troubles that should be corrected. Some examples of non-network troubles are:

- Terminal Failed
- Card has bad A or B system clock
- Card is not running approved GPL
- LIM denied SCCP service
- IMT Bus A failed

If there are any non-network troubles, which cannot be resolved, they should be documented.

In some cases, non-network troubles may not be correctable. For example, a terminal port connected to a modem will report Terminal Failed if the modem is not dialed in.

The procedure will also examine the devices that have their alarms inhibited. In some cases, these alarm inhibits may need to be cleared.

This procedure examines non-network system troubles that should be corrected (See examples above.)

1. Issue the command to report trouble status.

   `rept-stat-trbl:display=timestamp`
   Response to trouble status command is displayed.

   Record any non-network troubles.

   Trouble _____

```
    eaglestp 98-03-09 14:09:29 EST Rel XX.X.X
```

```
    Searching devices for alarms...
;
    eaglestp 98-03-09 14:09:30 EST Rel XX.X.X
    SEQN UAM  AL DEVICE   ELEMENT      TROUBLE TEXT
    5728.0048  * TERMINAL   14         Terminal failed
                 98-03-09  10:05:36
    5729.0048  * TERMINAL   15         Terminal failed
                 98-03-09  10:05:36
    5731.0013 ** CARD 1214 SS7ANSI     Card is isolated from the
system
                 98-03-09  13:57:40
    5604.0013 ** CARD 1111 SCCP        Card is isolated from the
system
                 98-03-09  13:57:40
    5732.0236 ** SLK 1214,A lsn1214    REPT-LKF: not aligned
                 98-03-09  13:57:40
    5733.0236 ** SLK 1214,B lsn1214    REPT-LKF: not aligned
                 98-03-09  13:57:40
    5734.0236 ** SLK 1106,A lsnx1      REPT-LKF: not aligned
                 98-03-09  13:57:40
    5735.0318 ** LSN lsn1214           REPT-LKSTO: link set
prohibited
                 98-03-09  13:57:40
    5736.0318 ** LSN lsnx1             REPT-LKSTO: link set
prohibited
                 98-03-09  13:57:40
    Command Completed.
;
```

2. Issue the command to report inhibited alarms.

   `rept-stat-alm:display=inhb`
   Response to alarm status command is displayed.

```
eaglestp 98-03-09 14:10:29 EST Rel XX.X.X
    rept-stat-alm:display=inhb
    Command entered at terminal #4.
    ALARM  TRANSFER= RMC
    ALARM  MODE      CRIT= AUDIBLE     MAJR= AUDIBLE     MINR=
SILENT
    ALARM  FRAME 1     CRIT=   2         MAJR=   4         MINR=   0
    ALARM  FRAME 2     CRIT=   0         MAJR=   0         MINR=   0
    ALARM  FRAME 3     CRIT=   0         MAJR=   0         MINR=   0
    ALARM  FRAME 4     CRIT=   0         MAJR=   0         MINR=   0
    ALARM  FRAME 5     CRIT=   0         MAJR=   0         MINR=   0
    ALARM  FRAME 6     CRIT=   0         MAJR=   0         MINR=   0
    ALARM  FRAME OAP   CRIT=   0         MAJR=   0         MINR=   0
    PERM. INH. ALARMS  CRIT=   0         MAJR=   0         MINR=   0
    TEMP. INH. ALARMS  CRIT=   0         MAJR=   0         MINR=   0
    ACTIVE ALARMS      CRIT=   2         MAJR=   4         MINR=   0
    TOTAL ALARMS       CRIT=   2         MAJR=   4         MINR=   0

    ALARM INHIBIT REPORT
    --------------------
    DEVICE   ELEMENT         DURATION  ALM INH LVL  CUR ALM LVL
```

```
    ------   -------         --------  -----------  -----------
    CARD     1101            PERM      MINR         MAJR+
    Command Completed.
;
```

All steps in this procedure were completed.

Verifying Database Status

This procedure verifies that your database is coherent, not in transition and that all cards are running at the same database level.

1. Perform this step only if on-site personnel are available. If no personnel are available then go to step 2.

   Insert a current release system removable media into the system.
   For E5-MASP, insert a thumbdrive USB in the Active MASP's latched USB port.

2. Issue the command to report database status.

   `rept-stat-db:display=all`
   Response to database command is displayed if running E5 MASP.

   (OAM-USB status is only shown for the active MASP)

   Examine the columns labeled C, T and LEVEL output by this command.

   All entries in C should be coherent which is indicated by a Y.

   Verify entries in column 'T' show 'N', which indicates that the database is not in transition except the OAM-RMV, OAM-USB, and TDM-BKUP, which show a dash.

   All entries in LEVEL are numeric values. All entries in this column should be the same value except TDM-BKUP, OAM-RMV and OAM-USB.

```
    eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x-YY.y.y
    DATABASE STATUS: >> OK <<
            TDM 1114 ( STDBY)                TDM 1116 ( ACTV )
            C   LEVEL    TIME LAST BACKUP     C   LEVEL    TIME
LAST BACKUP
            - -------- ---------------------- - --------
----------------------
    FD BKUP Y      YYY YY-MM-DD HH:MM:SS TTTT Y      YYY YY-MM-DD
HH:MM:SS TTTT
    FD CRNT Y      XXX                        Y      XXX
            MCAP 1113                        MCAP 1115
            - --------                       - --------
    RD BKUP -    -         -        -         Y      ZZZ YY-MM-DD
HH:MM:SS TTTT
    USB BKP -    -         -        -         -    -
-       -

    CARD/APPL  LOC   C  T  LEVEL       TIME LAST UPDATE   EXCEPTION
    ---------  ----  -  -  ----------  -----------------
--------------
    SCCP       1101  Y  N  XXX         YY-MM-DD HH:MM:SS       -
    SCCP       1102  Y  N  XXX         YY-MM-DD HH:MM:SS       -
    GLS        1103  Y  N  XXX         YY-MM-DD HH:MM:SS       -
```

```
    GLS         1104  Y  N  XXX          YY-MM-DD HH:MM:SS       -
    SS7GX25     1105  Y  N  XXX          YY-MM-DD HH:MM:SS       -
    OAM-RMV     1113  -  -       -           -        -          -
    TDM-CRNT    1114  Y  N  XXX          YY-MM-DD HH:MM:SS       -
    TDM-BKUP    1114  Y  -  YYY          YY-MM-DD HH:MM:SS  DIFF LEVEL
    OAM-RMV     1115  Y  -  ZZZ          YY-MM-DD HH:MM:SS  DIFF LEVEL
    OAM-USB     1115  -  -       -           -        -          -
    TDM-CRNT    1116  Y  N  XXX          YY-MM-DD HH:MM:SS       -
    TDM-BKUP    1116  Y  -  YYY          YY-MM-DD HH:MM:SS  DIFF LEVEL
    SS7ANSI     1201  Y  N  XXX          YY-MM-DD HH:MM:SS       -
    SS7ANSI     1202  Y  N  XXX          YY-MM-DD HH:MM:SS       -
    SS7ANSI     1203  Y  N  XXX          YY-MM-DD HH:MM:SS       -
    CCS7ITU     1211  Y  N  XXX          YY-MM-DD HH:MM:SS       -
    GLS         1218  Y  N  XXX          YY-MM-DD HH:MM:SS       -

;
```

3. Send a distributed network database (DDB) audit request to the active OAM.

   `aud-data:type=ddb:display=all`
   Response to the `aud-data` command is displayed.

```
eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x-YY.y.y
    DDB AUDIT REPORT
        SYSTEM STATUS: OK
        RESPONDING CARDS: 169
        INCONSISTENT CARDS: (0)
        AUDIT START TIME: 18/06/2009  17:53:16
        NON RESPONDING CARDS: (0)
        QUIET PERIOD: 500 ms

    RTE         LINK SET   LINK       CM CARD    CM CLSTR   MATED
APPL MTP GLOBLS
    H'0a045208 H'020fb1c3 H'05dbdce5 H'00009b73 H'0000a398
---------- H'00000000
            LOC=1201      IDLE PERIOD=711345              DDB
UPDATES=218290

    H'0a045208 H'020fb1c3 H'05dbdce5 H'00009b73 H'0000a398
---------- H'00000000
            LOC=1203      IDLE PERIOD=711310              DDB
UPDATES=265207

    H'0a045208 H'020fb1c3 H'05dbdce5 H'00009b73 H'0000a398
---------- H'00000000
            LOC=1205      IDLE PERIOD=711330              DDB
UPDATES=303056

  :
  :
  :

    H'0a045208 H'020fb1c3 H'05dbdce5 H'00009b73 H'0000a398
---------- H'00000000
            LOC=6115      IDLE PERIOD=711520              DDB
```

```
UPDATES=173933

    H'0a045208 H'020fb1c3 H'05dbdce5 H'00009b73 H'0000a398
H'00f1f4c3 H'00000000
            LOC=6117      IDLE PERIOD=711225              DDB
UPDATES=75945

    H'0a045208 H'020fb1c3 H'05dbdce5 H'00009b73 H'0000a398
---------- H'00000000
            LOC=1101      IDLE PERIOD=711185              DDB
UPDATES=202383

    H'0a045208 H'020fb1c3 H'05dbdce5 H'00009b73 H'0000a398
---------- H'00000000
            LOC=1111      IDLE PERIOD=711535              DDB
UPDATES=168151
;
```

All steps in this procedure were completed.

Verifying GPLs

This procedure verifies that all GPLs are correctly distributed throughout the system, including fixed disks and removable media.

1. Issue the command to display GPL status.

   ```
   rtrv-gpl
   ```
   Response to retrieve GPL command is displayed.

   Verify that all GPLs in the APPROVED, TRIAL, and REMOVE TRIAL columns match those in the RELEASE column.

   Also verify that no GPL alarms exist. (Alarms are shown here as an example.)

   Verify that the removable media drive can be read and its GPL contents correspond to current Release GPLs.

   ```
       eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP  XX.x.x-YY.y.y
       GPL Auditing  ON

       GPL       CARD  RELEASE      APPROVED         TRIAL
   REMOVE TRIAL
       GLS       1114  134-060-000  134-060-000      134-060-000
   134-060-000
       GLS       1116  134-060-000  134-060-000      134-060-000
   -----------
       GLS       1115  -----------  -----------      -----------
   -----------
       IMT       1114  134-060-000  134-060-000      134-060-000
   134-060-000
       IMT       1116  134-060-000  134-060-000      134-060-000
   -----------
       IMT       1115  -----------  -----------      -----------
   -----------
       ATMANSI   1114  134-060-000  134-060-000      134-060-000
   ```

```
134-060-000
    ATMANSI   1116  134-060-000  134-060-000      134-060-000
-----------
    ATMANSI   1115  -----------  -----------      -----------
-----------
    BPHCAP    1114  134-050-000  134-050-000      134-050-000
134-050-000
    BPHCAP    1116  134-050-000  134-050-000      134-050-000
-----------
    BPHCAP    1115  -----------  -----------      -----------
-----------
    BPDCM     1114  134-050-000  134-049-000 ALM  134-050-000
134-050-000
    BPDCM     1116  134-050-000  134-050-000      134-050-000
-----------
    BPDCM     1115  -----------  -----------      -----------
-----------
    BLMCAP    1114  134-060-000  134-060-000      134-060-000
134-060-000
    BLMCAP    1116  134-060-000  134-060-000      134-060-000
-----------
    BLMCAP    1115  -----------  -----------      -----------
-----------
    OAMHC     1114  134-060-000  134-060-000      134-060-000
134-060-000
    OAMHC     1116  134-060-000  134-060-000      -----------
-----------
    OAMHC     1115  -----------  -----------      -----------
-----------
    HIPR2     1114  134-060-000  134-060-000      134-060-000
134-060-000
    HIPR2     1116  134-060-000  134-060-000      134-060-000
-----------
    HIPR2     1115  -----------  -----------      -----------
-----------

{output abridged for brevity.}
```

2. Issue the command to display `IPLHC GPL` status.

   `REPT-STAT-GPL:GPL=IPLHC`
   Response to GPL status command is displayed.

> **Note:**
>
> If any IPLHC card is displayed, at the end of this health check, contact the My Oracle Support.

```
    eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y
    GPL Auditing  ON

    GPL         CARD      RUNNING            APPROVED       TRIAL
    IPLHC       1306      XXX-XXX-XXX        XXX-XXX-XXX    XXX-XXX-
```

```
XXX
    IPLHC      2111      XXX-XXX-XXX        XXX-XXX-XXX   XXX-XXX-
XXX
    IPLHC      4306      XXX-XXX-XXX        XXX-XXX-XXX   XXX-XXX-
XXX

    Command Completed.
;
```

3. Issue the command to display IPGHC GPL status.

   `REPT-STAT-GPL:GPL=IPGHC`
   Response to GPL status command is displayed.

> **Note:**
>
> If any IPGHC card is displayed, at the end of this health check, contact the My Oracle Support.

```
eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y
    GPL Auditing  ON

    GPL        CARD      RUNNING            APPROVED      TRIAL
    IPGHC      1215      XXX-XXX-XXX        XXX-XXX-XXX   XXX-XXX-
XXX
    IPGHC      2107      XXX-XXX-XXX        XXX-XXX-XXX   XXX-XXX-
XXX
    IPGHC      5307      XXX-XXX-XXX        XXX-XXX-XXX   XXX-XXX-
XXX

    Command Completed.
;
```

All steps in this procedure were completed.

Retrieving Obituaries

This procedure retrieves all recently logged obituaries. These obituaries describe the status of the system just before a processor restarted due to a hardware or software failure. The data includes a register and stack dump of the processor, card location, reporting module number, software code location, and class of the fault detected.

1. Issue the command to retrieve obits from MASP A.

   `rtrv-obit:loc=1113`
   Response to retrieve obit command is displayed.

   Capture any obits that have been generated since the last system health check. If this is the first check, record any unexplained obits.

```
    eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP  XX.x.x-YY.y.y
    NOTICE: Only 1 obit(s) to retrieve in the log.
;
```

```
    eaglestp 98-03-09 18:58:47 EST Rel XX.X.X

------------------------------------------------------------------------
----
    STH: Received a BOOT APPL-Obituary reply for restart
        Card 2203   Module ath_vxw.c  Line  2837  Class 0001
        Register Dump :
            EFL=00000000    CS =0000        EIP=00000000    SS =0000
            EAX=00000000    ECX=00000000    EDX=00000000
EBX=00000000
            ESP=00000000    EBP=00000000    ESI=00000000
EDI=00000000
            DS =0000        ES =0000        FS =0000        GS =0000

        Stack Dump :
        [SP+1E]=0000    [SP+16]=0000    [SP+0E]=0000    [SP+06]=0000
        [SP+1C]=0000    [SP+14]=0000    [SP+0C]=0000    [SP+04]=0000
        [SP+1A]=0000    [SP+12]=0000    [SP+0A]=0000    [SP+02]=0000
        [SP+18]=0000    [SP+10]=0000    [SP+08]=0000    [SP+00]=0000

        User Data Dump :
        30 78 30 31 63 63 39 37 65 38 20 41 50 50 4c 20
0x01cc97e8.APPL.
        57 61 74 63 68 64 6f 67 20 74 69 6d 65 6f 75 74
Watchdog.timeout
        20 72 65 73 65 74                                .res
    Report Date:02-01-01  Time:03:33:49

------------------------------------------------------------------------
----
;
```

2. Issue the command to retrieve obits from MASP B.

   `rtrv-obit:loc=1115`
   Response to retrieve obit command is displayed.

   Capture any obits that have been generated since the last system health check. If this is the first check, record any unexplained obits.

```
    eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP  XX.x.x-YY.y.y    NOTICE:
Only 3 obit(s) to retrieve in the log.
;
    eaglestp 98-03-09 18:58:56 EST Rel XX.X.X

------------------------------------------------------------------------
----
    STH: Received a BOOT APPL-Obituary reply for restart
        Card 2217   Module pvdlvmsg.c  Line  2755  Class 0001
        Register Dump :
            EFL=00000246    CS =0008        EIP=00410368    SS =0010
            EAX=00000000    ECX=00000000    EDX=00000003
EBX=007f7490
            ESP=00da064c    EBP=00da0684    ESI=00da066c
EDI=00da0680
            DS =0010        ES =0010        FS =0010        GS =0010
```

```
        Stack Dump :
        [SP+1E]=0000    [SP+16]=03c4    [SP+0E]=2d54    [SP+06]=0000
        [SP+1C]=0000    [SP+14]=7552    [SP+0C]=3250    [SP+04]=0000
        [SP+1A]=03c3    [SP+12]=0054    [SP+0A]=8d86    [SP+02]=007f
        [SP+18]=f1da    [SP+10]=554f    [SP+08]=4eb0    [SP+00]=7490

        User Data Dump :
        50 32 54 2d 4f 55 54 00 52 75 c4 03 da f1 c3 03      P2T-
OUT.Ru......
        00 00 00 00                                          ....


    Report Date:02-01-01  Time:18:59:23

------------------------------------------------------------------------
----
;
```

All steps in this procedure were completed.

Verify SCCP Load

This procedure verifies that SCCP card loads are all below 40%. Verify that all cards that should be in service show PST - IS-NR. Record cards that do not show the expected status.

1. Issue the command to display SCCP status.

   ```
   rept-stat-sccp
   ```
   Response to SCCP status command is displayed.

   Verify that the number in the column labeled MSU USAGE is below 40% for all cards. Record any card slots, which are above 40% for later use.

   SCCP _____

   SCCP _____

   SCCP _____

   E2374: SCCP not configured, displayed if no SCCP feature enabled.

   ```
    eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP  XX.x.x-YY.y.y
    SCCP SUBSYSTEM REPORT   IS-NR          Active     -----
         SCCP ALARM STATUS   = No Alarms
    GFLEX SERVICE REPORT    IS-ANR         Active     -----
         GFLEX ALARM STATUS  =  *  0527 Service abnormal
    MNP SERVICE REPORT      IS-ANR         Active     -----
         MNP ALARM STATUS    =  *  0527 Service abnormal
    INPQ SUBSYSTEM REPORT   IS-NR          Active     -----
         ASSUMING MATE'S LOAD
         INPQ:   SSN STATUS  = Allowed     MATE SSN STATUS =
Prohibited
         INP ALARM STATUS    = No Alarms

    SCCP Cards Configured= 3      Cards IS-NR= 3
   ```

```
    System Daily Peak SCCP Load       1200   TPS 13-01-23 06:45:12
    System Overall Peak SCCP Load     1200   TPS 13-01-23 06:45:12
    System Total SCCP Capacity        2550   TPS (2550   max SCCP
Capacity)
    System SCCP Capacity Calc. Method (N)
    System TPS Alarm Threshold        2040   TPS ( 80% System   N
SCCP Capacity)

    CARD   VERSION      PST           SST        AST       MSU   CPU
                                                           USAGE
USAGE

------------------------------------------------------------------
---
    1207 P XXX-XXX-XXX  IS-NR         Active     -----      37%
31%
    1217   XXX-XXX-XXX  IS-NR         Active     -----      37%
8%
    1315   XXX-XXX-XXX  IS-NR         Active     -----      37%
6%

------------------------------------------------------------------
---
    SCCP Service Average MSU Capacity =  37%   Average CPU Capacity
=  15%

    AVERAGE CPU USAGE PER SERVICE:
      GTT    =   1%  GFLEX  =   1%  MNP    =   2%  SMSMR  =   2%
IAR    =   0%
      MTPRTD =   0%
      INPMR  =   1%  INPQ   =   0%

    TOTAL SERVICE STATISTICS:
                                          FAIL     REROUTE\      FORWARD
      SERVICE    SUCCESS    ERRORS    RATIO     WARNINGS        TO
GTT     TOTAL
      GTT:          4025         0      0%           -
-      4025
      GFLEX:       19184         0      0%           0
0     19184
      MNP:          6378         0      0%           0
1600      7978
      SMSMR:           0         0      0%           0
6450      6450
      IAR:             0         0      0%           0
0         0
      MTPRTD:          0         0      0%           -
-         0
      INPMR:        4789         0      0%           0
0      4789
      INPQ:        10427         0      0%           0
-     10427

    Command Completed.
;
```

2. Issue the command to display SCCP status.

   `rept-stat-sccp:mode=perf`
   Response to SCCP status command is displayed.

```
    eaglestp YY-MM-DD hh:mm:ss TTTT PPPP  XX.x.x-YY.y.y
    SCCP SUBSYSTEM REPORT   IS-NR          Active     -----
         SCCP ALARM STATUS   = No Alarms
    GFLEX SERVICE REPORT    IS-ANR         Active     -----
         GFLEX ALARM STATUS  =  *  0527 Service abnormal
    MNP SERVICE REPORT      IS-ANR         Active     -----
         MNP ALARM STATUS    =  *  0527 Service abnormal

    SCCP Cards Configured= 3      Cards IS-NR= 3
    System Daily Peak SCCP Load       1200   TPS 13-01-23 06:45:12
    System Overall Peak SCCP Load     1200   TPS 13-01-23 06:45:12
    System Total SCCP Capacity        2550   TPS (2550   max SCCP
Capacity)
    System SCCP Capacity Calc. Method (N)
    System TPS Alarm Threshold        2040   TPS ( 80% System   N
SCCP Capacity)

    TPS STATISTICS

=========================================================================
=======
    CARD   CPU      TOTAL       CLASS 0          CLASS 1
           USAGE    MSU RATE    MESSAGING RATE   MESSAGING RATE

-------------------------------------------------------------------------
---
    1207    32%       340         311               29
    1217     8%       346         330               16
    1315     6%       317         297               20

-------------------------------------------------------------------------
---
    AVERAGE MSU USAGE =  37%
    AVERAGE CPU USAGE =  15%
    TOTAL MSU RATE    = 1003

    STATISTICS FOR PAST 30 SECONDS

=========================================================================
=====
    TOTAL MSUS:        52737
    TOTAL ERRORS:          0

    HIGHEST 06 OVERALL DAILY PEAKS         LAST 06 DAILY PEAK SCCP
LOADS

=========================================================================
=======
    1200   TPS 13-01-23 06:45:12           1200   TPS 13-01-23
06:45:12
```

```
    1197   TPS 13-01-21 06:23:04           1186   TPS 13-01-22
23:49:55
    1196   TPS 13-01-19 04:40:43           1197   TPS 13-01-21
06:23:04
    1193   TPS 13-01-20 21:28:37           1193   TPS 13-01-20
21:28:37
    1186   TPS 13-01-22 23:49:55           1196   TPS 13-01-19
04:40:43
    1183   TPS 13-01-18 23:42:31           1183   TPS 13-01-18
23:42:31

    Command Completed.
;
```

3. If the EPAP Data Split feature was on in Health Check Preparation Step 7, issue the command to display Split Data status. Otherwise, go to step 5.

   `rept-stat-sccp:data=dn`
   Response to Split Data status is displayed.

```
eaglestp YY-MM-DD hh:mm:ss TTTT PPPP  XX.x.x-YY.y.y
    SCCP DNSUBSYSTEM REPORT   IS-NR          Active     -----
         SCCP ALARM STATUS   = No Alarms

    SCCP Cards Configured= 1      Cards IS-NR= 1
    System Daily Peak SCCP Load       0      TPS 13-04-26 10:44:18
    System Overall Peak SCCP Load     0      TPS 00-00-00 00:00:00
    System Total SCCP Capacity        5000   TPS (5000   max SCCP
Capacity)
    System SCCP Capacity Calc. Method (N)
    System TPS Alarm Threshold        4000   TPS ( 80% System   N
SCCP Capacity)

    CARD   VERSION      PST           SST        AST       MSU
CPU   DATA
                                                           USAGE
USAGE TYPE

------------------------------------------------------------------
---
    1101 P 027-062-002  IS-NR         Active     -----       0%
5%  DN

------------------------------------------------------------------
---
    AVERAGE MSU USAGE =   0%
    AVERAGE CPU USAGE =   5%
    TOTAL MSU RATE    =   0


    Command Completed.
;
```

4. Repeat step 3 for IMSI data.

   Repeat the status command specifing: `data=imsi`.

5. Issue the command to display SCCP status.

   `rept-stat-sccp:data=epap`
   Response to SCCP status is displayed.

   E2400: Dual ExAP Config feature must be Enabled, displayed if Dual ExAP Config feature is not enabled

```
eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x-YY.y.y
    SCCP SUBSYSTEM REPORT   IS-NR          Active     -----
         SCCP ALARM STATUS   = No Alarms

    SCCP Cards Configured= 3      Cards IS-NR= 3
    System Daily Peak SCCP Load       0      TPS 17-11-28 00:00:07
    System Overall Peak SCCP Load     41047  TPS 17-11-22 04:12:44
    System Total SCCP Capacity        40800  TPS (40800  max SCCP
Capacity)
    System SCCP Capacity Calc. Method (N)
    System TPS Alarm Threshold        32640  TPS ( 80% System   N
SCCP Capacity)

    CARD   VERSION      PST           SST        AST       MSU
CPU   DATA
                                                           USAGE
USAGE TYPE

------------------------------------------------------------------
---
    2303   141-019-000  IS-NR         Active     -----       0%
1%  EPAP
    4207 P 141-019-000  IS-NR         Active     -----       0%
3%  EPAP
    5205   141-019-000  IS-NR         Active     -----       0%
2%  EPAP

------------------------------------------------------------------
---
    AVERAGE MSU USAGE =   0%
    AVERAGE CPU USAGE =   2%
    TOTAL MSU RATE    =   0


    Command Completed.
;
```

6. Issue the command to display network status for the card.

   `pass:loc=xxxx:cmd="netstat –i"`
   (where XXXX is the slot ID of an SCCP card that is displayed in step 9.)

   Response to NETSTAT command is displayed.

   For each card, verify both ports are configured to 1Gig EPAP-to-EAGLE download speed (displayed as 1000MB.).

> **Note:**
>
> See References for further information on port configuration.

```
    eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x-YY.y.y
    PASS: Command sent to card
;

    eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x-YY.y.y
    SDS Shell Output

    -> tklc_ifShow
    lo (unit number 0):
         Flags: (0x48049) UP LOOPBACK MULTICAST TRAILERS ARP
RUNNING INET_UP
         Type: SOFTWARE_LOOPBACK
         inet: 127.0.0.1
         Netmask 0xff000000 Subnetmask 0xff000000
         Metric is 0
         Maximum Transfer Unit size is 1536
         0 packets received; 1 packets sent
         0 multicast packets received
         0 multicast packets sent
         0 input errors; 0 output errors
         0 collisions; 0 dropped
         0 output queue drops
    DPLend (unit number 0):
         Flags: (0x20043) UP BROADCAST ARP RUNNING
         Type: ETHERNET_CSMACD
         Ethernet address is 00:00:00:00:00:00
         Metric is 0
         Maximum Transfer Unit size is 485
         0 octets received
         0 octets sent
         0 unicast packets received
         0 unicast packets sent
         0 non-unicast packets received
         0 non-unicast packets sent
         0 incoming packets discarded
         0 outgoing packets discarded
         0 incoming errors
         0 outgoing errors
         0 unknown protos
         0 collisions; 0 dropped
         0 output queue drops
    gei (unit number 0):
         Flags: (0x78043) UP BROADCAST MULTICAST ARP RUNNING INET_UP
         PHY Flags: (0x12114) AUTONEG 1000MB FDX DIX
         Type: ETHERNET_CSMACD
         inet: 192.168.120.7
         Broadcast address: 192.168.120.255
         Netmask 0xffffff00 Subnetmask 0xffffff00
         Ethernet address is 00:00:17:0d:7f:8a
```

```
            Metric is 0
            Maximum Transfer Unit size is 1500
            27358978 octets received
            120833444 octets sent
            819180 unicast packets received
            80673 unicast packets sent
            1798225 multicast packets received
            52 multicast packets sent
            18821781 broadcast packets received
            985700 broadcast packets sent
            0 incoming packets discarded
            0 outgoing packets discarded
            0 incoming errors
            0 outgoing errors
            0 unknown protos
            0 collisions; 0 dropped
            0 output queue drops
        gei (unit number 1):
            Flags: (0x78043) UP BROADCAST MULTICAST ARP RUNNING INET_UP
            PHY Flags: (0x12114) AUTONEG 1000MB FDX DIX
            Type: ETHERNET_CSMACD
            inet: 192.168.121.11
            Broadcast address: 192.168.121.255
            Netmask 0xffffff00 Subnetmask 0xffffff00
            Ethernet address is 00:00:17:0d:7f:8b
            Metric is 0
            Maximum Transfer Unit size is 1500
            922842738 octets received
            2982650752 octets sent
            805755 unicast packets received
            30769745 unicast packets sent
            1556943 multicast packets received
            104 multicast packets sent
            7609692 broadcast packets received
            985724 broadcast packets sent
            0 incoming packets discarded
            0 outgoing packets discarded
            0 incoming errors
            0 outgoing errors
            0 unknown protos
            0 collisions; 0 dropped
            0 output queue drops
        value = 26 = 0x1a

    ;

        NETSTAT command complete

    ;
```

7. Repeat step 6 for all SCCP cards that are displayed in step 5.

   All steps in this procedure were completed.

Verifying LNP and LSMS

Perform procedure only if LNP feature is on, see Health Check Preparation, Step 7 This procedure displays LNP subsystem and LSMS statuses. Ensure that all cards that should be in service show PST - IS-NR. Record cards that do not show the expected status.

This procedure shall also evaluate the SCCP hardware to determine if an upgrade is valid.

1. Issue the command to display LNP status.

   ```
   rept-stat-lnp
   ```
   Response to LNP status command is displayed.

   Verify that cards that are supposed to be in service are IS-NR.

   Verify that there are no errors.

```
eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP  XX.x.x-YY.y.y
    LNP SUBSYSTEM REPORT    IS-NR           Active       -----
    ASSUMING MATE'S LOAD
    LNP Cards Configured=15
    CARD   PST            SST       GTT STATUS   LNP STATUS   CPU
USAGE
    1201   IS-NR          Active    ACT          ACT              1%
    1208   IS-NR          Active    ACT          ACT              1%
    1218   IS-NR          Active    ACT          ACT              1%
    1301   IS-NR          Active    ACT          ACT              1%
    1308   IS-NR          Active    ACT          ACT              0%
    1318   IS-NR          Active    ACT          ACT              1%
    2108   IS-NR          Active    ACT          ACT              1%
    2118   IS-NR          Active    ACT          ACT              1%
    2208   IS-NR          Active    ACT          ACT              1%
    2218   IS-NR          Active    ACT          ACT              1%
    2308   IS-NR          Active    ACT          ACT              1%
    1101   IS-NR          Active    ACT          ACT              1%
    1102   IS-NR          Active    ACT          ACT              1%
    1103   IS-NR          Active    ACT          ACT              1%
    1108   IS-NR          Active    ACT          ACT              1%

    LNPQS:
      SSN STATUS = Allowed           MATE SSN STATUS = Prohibited
      ACG:  OVERLOAD LEVEL = 0   MIC USAGE =  0%

    AVERAGE USAGE: GTT =  1%   LNPMR =  1%   LNPQS =  1%
    AVERAGE CPU USAGE =  1%
    TOTAL ERRORS:
      GTT:         0 out of    1603
      LNPMR:       0 out of      38
      LNPQS:       0 out of    5406
    Command Completed.
;
```

2. Issue the command to display card status.

`rept-stat-card:mode=full:loc=XXXX`
(Where XXXX is the location of each SCCP card displayed in Step 2)

Response to card status command is displayed.

Verify that all cards have at least 4096MB of daughterboard memory.

```
    eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP  XX.x.x-YY.y.y
    CARD   VERSION      TYPE      GPL        PST
SST        AST
    1111   138-011-000  DSM       SCCPHC      IS-NR
Active     -----
      ALARM STATUS       = No Alarms.
      BPDCM   GPL version = 138-011-000
      IMT BUS A           = Conn
      IMT BUS B           = Conn
      CLOCK A             = Active
      CLOCK B             = Idle
      CLOCK I             = Idle
      MBD BIP STATUS      = Valid
      MOTHER BOARD ID     = SMXG A
      DBD STATUS          = Valid
      DBD TYPE            = None
      DBD MEMORY SIZE     = 4096M
      HW VERIFICATION CODE = ----
      CURRENT TEMPERATURE   =  52C (126F)
      PEAK TEMPERATURE:     =  52C (126F)     [16-03-16 09:34]
      SCCP % OCCUP        = 37%
      APPLICATION SERVICING
                                          TVG    MFC         TVG
MFC
          SNM     REQ STATUS =   24 hr: ------ ---, 5 min: ------
---
          INM     REQ STATUS =   24 hr: ------ ---, 5 min: ------
---
          MTP3    REQ STATUS =   24 hr:        G--, 5 min:
G--
      IPLNK STATUS
          IPLNK  IPADDR             STATUS     PST
          A      192.168.120.5      UP         IS-NR
          B      192.168.121.3      UP         IS-NR
      DSM IP CONNECTION
          PORT   PST             SST
          A      IS-NR           Active
          B      IS-NR           Active

    Command Completed.
;
```

3. If LNP is ON as recorded in Health Check Preparation Step 6, then issue the command to retrieve LNP options. Otherwise, go to next procedure.

   `rtrv-lnpopts`
   Response to LNP options command is displayed.

   Record audit status:

AUD: _____

If LNP auditing is on, go to next procedure.

```
    eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP  XX.x.x-YY.y.y
    LNP OPTIONS
    ----------------------
    AMASLPID    = 000000000
    INCSLP      = no
    AMACTYPE    = 000
    AMAFEATID   = 000
    CIC         = 0000
    AUD         = off
    SP          =
    FRCSMPLX    = no
    ADMHIPRI    = no
    GTWYSTP     = no
;
```

4. If LNP ported TN is 48000000 or higher or the LNP ELAP Configuration feature key is ON, go to next procedure. Otherwise, issue the command to turn LNP Audit on.

   `chg-lnpopts:aud=on`
   Response to LNP options command is displayed.

```
    eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP  XX.x.x-YY.y.y
    CHG-LNPOPTS: MASP A - COMPLTD
;
```

   For UHC#2, the LNP Audit must be allowed to run for at least 24 hours.

> **Note:**
>
> Allow LNP auditing to run for at least 24 hours prior to upgrade.

All steps in this procedure were completed.

Verifying SEAS

Perform procedure only if SEAS feature is on, see Health Check Preparation, Step 6. This procedure verifies that SEAS feature is available. Ensure that all interfaces that should be in service show PST - IS-NR. Record interfaces that do not show the expected status.

- Issue the command to display SEAS status.

  `rept-stat-seas`
  Response to SEAS status command is displayed if SEAS over IP feature is turned on.

Verify that all entries are IS-NR and there are no alarms.

```
eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP  XX.x.x-YY.y.y
        SEAS SYSTEM                       PST         SST
AST

------------------------------------------------------------
                                        IS-NR       Avail
-----
        ALARM STATUS = No Alarms

        TERM    IPADDR           PORT    PST         SST
AST
    ----------------------------------------------------------
        18     120.30.10.11     15      IS-NR       Active
-----
        ALARM STATUS = No Alarms

        40     128.30.15.12     16      IS-NR       Active
-----
        ALARM STATUS = No Alarms
```

All steps in this procedure were completed.

Verifying Optional Features

This procedure displays information on which optional features have been enabled.

1. Issue the command to retrieve STP options.

   `rtrv-stpopts`
   Response to the command is displayed.

   Record whether the following options are turned on:

   DSMAUD: ON / OFF / CCC

   Note: DSMAUD only displayed with certain features enabled (e.g. GFLEX, INP, GPORT)

   Verify the GBSUSNMINM option status:
   GBSUSNMINM: ON / OFF

   If upgrading to 46.2 and beyond, MFC must be on. If MFC is set to off, this procedure **fails**.

   ```
   eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE5 XX.x.x-YY.yy.y
   STP OPTIONS
   ------------------------------
   MTPT31CTL                     1
   MTPLTI                      yes
   MTPLTCTDPCQ                   3
   MTPLTST                   10000
   MTPXLQ                      500
   MTPXLET                     100
   MTPXLOT                      90
   MTPDPCQ                    8000
   ```

```
TFATFRPR                  1000
MTPRSI                      no
MTPRSIT                   5000
MTPLPRST                   yes
MTPT10ALT                30000
UIMRD                       no
SLSCNV                     off
CRITALMINH                  no
DISPACTALMS                 no
NPCFMTI            14-00-00-00
GSMDFLT                discard
GSMDECERR                 pass
DEFCC                        1
DEFNDC                     970
DSMAUD                      on
RPTLNPMRSS                 yes
RANDSLS                    off
RSTRDEV                    off
SECMTPMATE                 off
SECMTPSID                  off
SECMTPSNM                  off
SECSCCPSCMG                off
CNVCGDA                     no
CNVCGDI                     no
CNVCGDN                     no
CNVCGDN24                   no
CNVCGDN16                   no
GTCNVDFLT                  yes
ANSIGFLEX                   no
ARCHBLDID                   on
MFC                         on
PCT                        off
PCN16FMT                   745
UITHROTTLE                   0
GBSUSNMINM                  on
GDPCA            --------------
EPAP240M                   off
```

2. If E5IS feature is recorded as on in Health Check Preparation Step 6, then issue the retrieve command. Otherwise, go to step 4.

   `rtrv-eisopts`
   Response to the command is displayed.

   Record the value of EISCOPY & FCMODE values:

   EISCOPY: ON / OFF

   FCMODE: STC/OFF/FCOPY

```
eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP  XX.x.x-YY.y.y
    EIS OPTIONS
    -------------------------------
    EISCOPY = ON
    FAST COPY OPTIONS
    -------------------------------
    FCGPL = IPSG  FCMODE = FCOPY
```

```
    FCGPL = IPGHC FCMODE = FCOPY
    -------------------------------
```

3. Issue the command to retrieve user-specified options for the IP networks used by the EAGLE.

   `rtrv-netopts`
   Response to the command is displayed.

   Record the value of PVN, PVNMASK, FCNA, FCNAMASK, FCNB and FCNBMASK.

```
    eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP  XX.x.x-YY.y.y
    NETWORK OPTIONS
    -----------------
    PVN        = 172.20.48.0
    PVNMASK    = 255.255.252.0
    FCNA       = 172.21.48.0
    FCNAMASK   = 255.255.254.0
    FCNB       = 172.22.48.0
    FCNBMASK   = 255.255.254.0
```

4. Issue the command to retrieve measurement options.

   `rtrv-measopts`
   Response to the measurement options command is displayed.

```
    eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP  XX.x.x-YY.y.y
    PLATFORMENABLE   = on
    COLLECT15MIN     = off
    CLLIBASEDNAME    = off
    OAMHCMEAS        = off
    ----------------------
    SYSTOTSTP        = on
    SYSTOTTT         = on
    COMPLINK         = on
    COMPLNKSET       = on
    COMPSCTPASOC     = off
    COMPSCTPCARD     = off
    COMPUA           = off
    GTWYSTP          = on
    GTWYLNKSET       = on
    GTWYORIGNI       = on
    GTWYORIGNINC     = on
    GTWYLSORIGNI     = on
    GTWYLSDESTNI     = on
    GTWYLSONISMT     = off
    NMSTP            = on
    NMLINK           = on
    NMLNKSET         = on
    AVLLINK          = on
    AVLDLINK         = off
;
```

5. Issue the command to retrieve user-specified options for the SCCP application.

   `rtrv-sccpopts`
   Response to the command is displayed.

```
    eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP  XX.x.x-YY.y.y

    SCCP OPTIONS
    ------------------------------
    CLASS1SEQ                   off
    CCLEN                         0
    ACLEN                         0
    INTLUNKNNAI                  no
    SUBDFRN                     off
    DFLTGTTMODE                CdPA
    MTPRGTT                     off
    MTPRGTTFALLBK          mtproute
    UNQGTTSEL             bestmatch
    DELCCPREFIX              pfxwcc
    GTTDIST                     all
;
```

6. Issue the command to retrieve user-specified options for the GSM.

   `rtrv-gsmopts`
   Response to the command is displayed.

```
    eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP  XX.x.x-YY.y.y
    GSM OPTIONS
    ---------------------------
    MULTCC          = NONE          MULTCC          = NONE
    MULTCC          = NONE          MULTCC          = NONE
    MULTCC          = NONE          MULTCC          = NONE
    MULTCC          = NONE          MULTCC          = NONE
    MULTCC          = NONE          MULTCC          = NONE
    DEFMAPVR        = 1

    DEFMCC          = 911           DEFMNC          = NONE
    CCNC            = 1970          MCCMNC          = 911666
    CCNC            = NONE          MCCMNC          = NONE
    CCNC            = NONE          MCCMNC          = NONE
    CCNC            = NONE          MCCMNC          = NONE
    CCNC            = NONE          MCCMNC          = NONE
    CCNC            = NONE          MCCMNC          = NONE
    CCNC            = NONE          MCCMNC          = NONE
    CCNC            = NONE          MCCMNC          = NONE
    CCNC            = NONE          MCCMNC          = NONE
    CCNC            = NONE          MCCMNC          = NONE

    SRIDN           = TCAP          SRIDNNOTFOUND   = GTT
    CRPTT           = NONE          SRISMGTTRTG     = OFF
    MSRNDIG         = RNDN          MSRNNAI         = 1
    MSRNNP          = 10            MSISDNTRUNC     = 0
    SRFADDR         = 19705552222   SRFNAI          = 1
    SRFNP           = 1             MSRNLEN         = 30
```

```
SERVERPFX        = NONE            GSM2IS41         = NONE
MIGRPFX          = SINGLE          IS412GSM         = NONE

SPORTTYPE        = NONE            DFLTRN           = NONE

EIRGRSP          = OFF             EIRRSPTYPE       = TYPE1
EIRIMSICHK       = OFF

ENCODECUG        = OFF             ENCODENPS        = ON
ENCDNPSPTNONE    = OFF             ENCDNPSDNNOTFOUND= OFF

G-Flex MLR OPTIONS :
   GFLEXMAPLAYERRTG = NONE

   REGSS       = OFF  ACTSS       = OFF  DACTSS      = OFF
   INTSS       = OFF  AUTHFAILRPT = OFF  RSTDATA     = OFF
   PROCUNSTRQT = OFF  RDYFORSM    = OFF  PURGMOBSS   = OFF
   SRILOC      = OFF;
```

7. Issue the command to retrieve user-specified options for IS41 GSM Migration.

   `rtrv-is41opts`
   Response to the options command is displayed.

```
eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP  XX.x.x-YY.y.y
    IS41 OPTIONS
    ----------------------
    SMSREQBYPASS    = NO
    LOCREQDN        = SCCP
    IEC             = NONE
    NEC             = NONE
    RSPCGPARI       = FRMSG
    RSPCGPAPCP      = FRMSG
    RSPCDPARI       = FRMSG
    RSPCDPAPCP      = OFF
    RSPCGPANAI      = NONE
    RSPCGPANP       = NONE
    RSPCGPATT       = NONE
    MTPLOCREQNAI    = FRMSG
    RSPPARM         = TLIST
    RSPDIG          = RNDN
    RSPNON          = NONE
    RSPNP           = 2
    RSPMIN          = HOMERN
    MSCMKTID        = 0
    MSCSWITCH       = 0
    ESNMFG          = 0
    ESNSN           = 0
    RSPDIGTYPE      = 6
    LOCREQRMHRN     = NO
    TCAPSNAI        = FRMSG
    MTPLOCREQLEN    = 0
    SPORTTYPE       = NONE
    DFLTRN          = NONE
```

```
    LOCREQRSPND     = OFF
;
```

8. If SNMP Feature was on in Health Check Preparation, Step 7 then issue the retrieve option command. Otherwise, go to step 10.

   `rtrv-snmpopts`
   Response to the command is displayed.

```
eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP  XX.x.x-YY.y.y
    SNMP OPTIONS
    ------------------------------
    SNMPUIM    on
    GETCOMM    public
    SETCOMM    private
```

9. Issue the retrieve IP Host command for SNMP.

   `rtrv-snmp-host`
   Response to the retrieve command is displayed.

```
eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP  XX.x.x-YY.y.y
    IPADDR   10.241.14.62
      HOST      dcmsnmptraphost1
      CMDPORT   161
      TRAPPORT  162
      HB        60
      TRAPCOMM  public

    IPADDR   10.241.14.61
      HOST      dcmsnmptraphost2
      CMDPORT   161
      TRAPPORT  162
      HB        60
      TRAPCOMM  public


    SNMP HOST table is (2 of 2) 100% full
```

10. If SIP NP Feature was on in Health Check Preparation Step 7, then issue the retrieve option command. Otherwise, go to step 12.

    `rtrv-sipopts`
    Response to the command is displayed.

```
    eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP  XX.x.x-YY.y.y
    INCLUDENPDI    = on
    INCLUDERN      = on
    NPRSPFMT       = RNDN
    RNFMT          = RN
    NPLKUPFAIL     = 404
    RNCONTEXT      = Null
```

11. Issue the report SIP status command.

    `rept-stat-sip`

Response to the status command is displayed if configured, else E2688 Cmd Rej: SIP not Configured is displayed.

```
eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE5 XX.x.x-YY.yy.y
    SIP ALARM STATUS = **  0625 SIP capacity normal, card(s)
abnormal
    SIP Cards Configured= 3      Cards IS-NR= 1

    CARD   VERSION     PST           SST       TPS    PTPS
PTIMESTAMP

------------------------------------------------------------------
------
    1101   004-061-004 IS-ANR        MPS Unavl 0      0
00-00-00 00:00:00
    1103   004-062-000 IS-NR         Active    100    100
02-01-08 10:55:23
    1105   ----------- OOS-MT        Isolated  0      0
00-00-00 00:00:00

------------------------------------------------------------------
------

    TOTAL SERVICE STATISTICS:

==================================================================
======
    SERVICE    SUCCESS    ERROR      WARNINGS   BYPASS     TOTAL
    SIPNP:     0          0          0          0          0

    Command Completed
```

12. Issue the report DEIR status command.

    ```
    rept-stat-deir
    ```

    Response to the status command is displayed if configured, else E2791 Cmd Rej: DEIR not Configured is displayed.

```
eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE5 XX.x.x-YY.yy.y
    DEIR ALARM STATUS = No Alarms
    DEIR Cards Configured= 1          Cards IS-NR= 1
    Average CPU Usage  =  1%

    CARD     VERSION    PST            SST        AST       TPS
PTPS

------------------------------------------------------------------
------
    1107 P 135-016-000 IS-NR           Active     -----     0      0

------------------------------------------------------------------
------

    TOTAL DEIR SERVICE STATISTICS:
```

```
==========================================================================
======
    SERVICE   SUCCESS     ERROR       WARNINGS   OVERFLOW    TOTAL
    DEIR SRV: 0           0           0          0           0

    Command Completed.
;
```

13. Issue the report ENUM status command.

    `rept-stat-enum`
    Response to the status command is displayed if configured, else E3188 Cmd Rej: ENUM not Configured is displayed.

```
eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x-YY.yy.y
    ENUM ALARM STATUS = No Alarms
    ENUM Cards Configured= 2          Cards IS-NR= 2

    CARD     VERSION    PST            SST        AST       TPS

------------------------------------------------------------------------
------
    2303   139-019-000 IS-NR           Active     -----      4006
    1105   139-019-000 IS-NR           Active     -----      1000

------------------------------------------------------------------------
------

    TOTAL SERVICE STATISTICS:

==========================================================================
======
    SERVICE   SUCCESS     ERROR      RECEIVED
    ENUM     : 41495       78689       120178

==========================================================================
======
    SERVICE   RCODE1      RCODE2      RCODE3      RCODE4
RCODE5     TOTAL
    ENUM     : 12          0           78136       541
0          78689


    Command Completed.
;
```

All steps in this procedure were completed.

Verifying IP Signaling Status

This procedure displays the status of IP Signaling connections and Application Servers. Verify that all IP Signaling connections and Application Servers that should be in service show a state of IS-NR. Record connections or Application Servers that do not show the expected status.

1. Issue the command to display SCTP Association status.

   `rept-stat-assoc`
   Response to SCTP Association status command is displayed.

   Verify that all SCTP Associations that should be in service are IS-NR.

```
    eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP  XX.x.x-YY.y.y
    ASSOCIATION       PST           SST
    ipgwa1            IS-NR         ASP-ACTIVE
    ipgwa2            IS-NR         ASP-ACTIVE
    iplima1           IS-NR         ESTABLISHED
    iplima2           IS-NR         ESTABLISHED
    Command Completed.
;
```

2. Issue the command to display Application Server status.

   `rept-stat-as`
   Response to Application Server status command is displayed.

   Verify that all Application Servers that should be in service are IS-NR.

```
    eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP  XX.x.x-YY.y.y
    AS                PST           SST
    ipgwas1           IS-NR         AS-ACTIVE
    ipgwas2           IS-NR         AS-ACTIVE
    Command Completed.
;
```

   All steps in this procedure were completed.

Verifying EROUTE

This procedure displays the status of the STC cards, and also displays any cards that are denied EROUTE service. Record cards that are denied EROUTE service. This procedure issues the `netstat` command to STC cards to determine if IP addresses have been associated with the card. Record cards that do not have IP addresses associated with them.

1. Issue the command to display EROUTE status.

   `rept-stat-mon:type=eroute`
   Response to EROUTE status command is displayed.

   Verify that all cards listed are in IS-NR state.

> **Note:**
>
> If any cards are denied eroute service, the text CARDS DENIED EROUTE SERVICE: will be displayed followed by the card locations.

```
eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP  XX.x.x-YY.y.y
    EROUTE SUBSYSTEM REPORT IS-NR         Active     -----
    STC Cards Configured= 7  Cards IS-NR= 7
    EISCOPY BIT = ON
    System Threshold = 80% Total Capacity
    System Peak EROUTE Load:            8000 Buffers/Sec
    System Total EROUTE Capacity:       9600 Buffers/Sec

    SYSTEM ALARM STATUS = No Alarms.

    CARD   VERSION      PST           SST        AST        TVG   CPU
                                                            USAGE
USAGE

------------------------------------------------------------------
    1205   236-024-005  IS-NR         Active     -----       35%
52%
    1211   236-024-005  IS-NR         Active     -----       35%
52%
    1303   236-024-005  IS-NR         Active     -----       35%
52%
    1311   236-024-005  IS-NR         Active     -----       35%
52%
    1313   236-024-005  IS-NR         Active     -----       35%
52%
    2211   236-024-005  IS-NR         Active     -----       35%
52%
    2213   236-024-005  IS-NR         Active     -----       35%
52%

------------------------------------------------------------------
    EROUTE Service Average TVG Capacity =  35%  Average CPU
Capacity =  52%


    Command Completed.
;
```

2. Issue the command to display network status for the card.

   `Pass:loc=xxxx:cmd="netstat –i"`
   (where XXXX is the slot ID of an STC card that is IS-NR in step 1.)

   Response to NETSTAT command is displayed.

   Verify both Port A (Seeq 0) and Port B (Seeq 1) of the STC card have an associated IP address.

> **Note:**
>
> For E5-ENET card, verify both Port A (GEI 2) and Port B (GEI 0) have associated IP addresses

```
    eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP  XX.x.x-YY.y.y
    PASS: Command sent to card
;

    eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP  XX.x.x-YY.y.y
    lo (unit number 0):
         Flags: (0x48049) UP LOOPBACK MULTICAST TRAILERS ARP
RUNNING INET_UP
         Type: SOFTWARE_LOOPBACK
         inet: 127.0.0.1
         Netmask 0xff000000 Subnetmask 0xff000000
         Metric is 0
         Maximum Transfer Unit size is 1536
         0 packets received; 1 packets sent
         0 multicast packets received
         0 multicast packets sent
         0 input errors; 0 output errors
         0 collisions; 0 dropped
         0 output queue drops
    DPLend (unit number 0):
         Flags: (0x60043) UP BROADCAST ARP RUNNING INET_UP
         Type: ETHERNET_CSMACD
         inet: 172.20.48.243
         Broadcast address: 172.20.51.255
         Netmask 0xffff0000 Subnetmask 0xfffffc00
         Ethernet address is 00:00:00:00:00:f3
         Metric is 0
         Maximum Transfer Unit size is 485
         42 octets received
         28 octets sent
         1 unicast packets received
         1 unicast packets sent
         0 non-unicast packets received
         0 non-unicast packets sent
         0 incoming packets discarded
         0 outgoing packets discarded
         0 incoming errors
         0 outgoing errors
         0 unknown protos
         0 collisions; 0 dropped
         0 output queue drops
    gei (unit number 2):
         Flags: (0x70043) UP BROADCAST ARP RUNNING INET_UP
         PHY Flags: (0x12012) 100MB FDX DIX
         Type: ETHERNET_CSMACD
         inet: 192.168.53.68
         Broadcast address: 192.168.53.255
         Netmask 0xffffff00 Subnetmask 0xffffff00
```

```
            Ethernet address is 00:00:17:0d:87:a8
            Metric is 0
            Maximum Transfer Unit size is 1500
            118464 octets received
            44920 octets sent
            698 unicast packets received
            698 unicast packets sent
            0 multicast packets received
            0 multicast packets sent
            1152 broadcast packets received
            2 broadcast packets sent
            0 incoming packets discarded
            0 outgoing packets discarded
            0 incoming errors
            0 outgoing errors
            0 unknown protos
            0 collisions; 0 dropped
            0 output queue drops
        gei (unit number 3):
            Flags: (0x78042) DOWN BROADCAST MULTICAST ARP RUNNING
INET_UP
            PHY Flags: (0x2224) AUTONEG DIX
            Type: ETHERNET_CSMACD
            inet: 172.21.48.243
            Broadcast address: 172.21.49.255
            Netmask 0xffff0000 Subnetmask 0xffffffe00
            Ethernet address is 00:00:17:0d:87:a9
            Metric is 0
            Maximum Transfer Unit size is 2000
            0 octets received
            0 octets sent
            0 unicast packets received
            0 unicast packets sent
            0 multicast packets received
            0 multicast packets sent
            0 broadcast packets received
            0 broadcast packets sent
            0 incoming packets discarded
            0 outgoing packets discarded
            0 incoming errors
            0 outgoing errors
            0 unknown protos
            0 collisions; 0 dropped
            0 output queue drops
        gei (unit number 1):
            Flags: (0x78042) DOWN BROADCAST MULTICAST ARP RUNNING
INET_UP
            PHY Flags: (0x2224) AUTONEG DIX
            Type: ETHERNET_CSMACD
            inet: 172.22.48.243
            Broadcast address: 172.22.49.255
            Netmask 0xffff0000 Subnetmask 0xffffffe00
            Ethernet address is 00:00:17:0d:88:9f
            Metric is 0
            Maximum Transfer Unit size is 2000
```

```
            0 octets received
            0 octets sent
            0 unicast packets received
            0 unicast packets sent
            0 multicast packets received
            0 multicast packets sent
            0 broadcast packets received
            0 broadcast packets sent
            0 incoming packets discarded
            0 outgoing packets discarded
            0 incoming errors
            0 outgoing errors
            0 unknown protos
            0 collisions; 0 dropped
            0 output queue drops
;

    eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP  XX.x.x-YY.y.y

    NETSTAT command complete
```

3. Repeat steps 1 - 2 for all STC cards that are IS-NR in step 1.

   All steps in this procedure were completed.

Verifying IMT Status

This procedure verifies that the IMT Bus is free of errors. This procedure is run in correspondence with General System Status .

1. Issue the command to display IMT errors.

   `rept-imt-lvl1:sloc=1201:eloc=1115:r=summary`
   Response to IMT report command is displayed.Ensure that all highlighted columns contain zeroes.

```
    eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP  XX.x.x-YY.y.y

==========================================================================
======
    SUMMARY REPORT:  Totals accumulated from all requested cards

    Count                                 Bus A Value    Bus B
Value
    -----                                 -----------
-----------
    Transmit Packet                                0M
0M
    Transmit Byte                                  0M
0M
    Receive Packet                                 0M
0M
    Receive Byte                                   0M
0M
    Receive Packet with CRC Error                  0             0
```

```
    Receive Packet with Format Error                0               0
    Receive Packet with Invalid Length              0               0
    Primary Control Receive Error                   0               0
    Primary Control Transmit Error                  0               0
    Primary Control Sanity Error                    0               0
    Violation Error                                 0               0
    CPU Receive FIFO Full                           0               0
    IMT Receive FIFO Half Full                      0               0
    CPU Receive FIFO Half Full                      0               0
    DMA Terminal Count Interrupt                    0               0
    MSU Retransmitted                               0               0
    MSU Safety Packet                               0               0
    ASU Safety Packet                               0               0
    TSU Safety Packet                               0               0
    IMT Receive FIFO Full                           0               0
    SSU Safety Packet                               0               0

------------------------------------------------------------------------
------
    ;END OF REPORT
;
```

2. If non-zeros, the command to display IMT level 1 information.

   `rept-imt-lvl1:sloc=1201:eloc=1115:r=full`
   Response to MUX status command is displayed.

   Note: Output abridged for brevity.

```
eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP  XX.x.x-YY.y.y

========================================================================
======
    FULL REPORT:  Totals accumulated from all requested cards

    Count                                   Bus A Value    Bus B
Value
    -----                                   -----------
-----------
    Transmit Packet                                 0M
0M
    Transmit Byte                                   0M
0M
    Receive Packet                                  0M
0M
    Receive Byte                                    0M
0M
    Receive Packet with CRC Error                   0               0
    Receive Packet with Format Error                0               0
    Receive Packet with Invalid Length              0               0
    Primary Control Receive Error                   0               0
    Primary Control Transmit Error                  0               0
    Primary Control Sanity Error                    0               0
    Violation Error                                 0               0
    CPU Receive FIFO Full                           0               0
    IMT Receive FIFO Half Full                      0               0
```

```
    CPU Receive FIFO Half Full                    0             0
    DMA Terminal Count Interrupt                  0             0
    MSU Retransmitted                             0             0
    MSU Safety Packet                             0             0
    ASU Safety Packet                             0             0
    TSU Safety Packet                             0             0
    IMT Receive FIFO Full                         0             0
    SSU Safety Packet                             0             0

------------------------------------------------------------------------
------
    ;END OF REPORT
;
```

3. Issue the status command for the MUX cards.

   `rept-stat-mux`
   Response to MUX status command is displayed. Verify that all cards are IS-NR. Record the types of MUX cards displayed (circle all that are applicable): HMUX HIPR HIPR2

```
    eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP  XX.x.x-YY.y.y
    CARD   TYPE       PST            SST        AST
    1109   HMUX       IS-NR          Active     -----
    1110   HMUX       IS-NR          Active     -----
    1209   HMUX       IS-NR          Active     -----
    1210   HMUX       IS-NR          Active     -----
    1309   HIPR       IS-NR          Active     -----
    1310   HIPR       IS-NR          Active     -----
    2109   HIPR2      IS-NR          Active     -----
    2110   HIPR2      IS-NR          Active     -----

    Command Completed.
;
```

4. Issue the report IMT information command. Repeat for all MUX types recorded in Step 3.

   `rept-imt-info:report=XXXXerr`
   (where `report=hmuxerr` if HMUX cards were detected in step 3;

   `report=hiprerr` if HIPR cards were detected in step 3;

   `report=hipr2err` is HIPR2 cards were detected in step 3.)

   Response to report IMT information command is displayed.

> **Note:**
>
> Output abridged for brevity. Actual output varies based on software release and card type.

```
    eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP  XX.x.x-YY.y.y
    XXXX Summary Report: Summed across all requested cards for each
bucket
```

```
    XXXX Hourly Bucket Statistics


=============================================================================
=====
    Bucket Low Speed Statistic           BUS A Value  BUS B Value
    ------ ------------------            -----------  -----------
    XX     IMT Rx Packet CRC Error               0            0
           IMT Rx Packet Format Error            0            0
           IMT Rx Violation Error                0            0
           IMT Rx Command Error                  0            0
           IMT Rx FIFO Full                      0            0
           IMT Rx FIFO Half Full                 0            0
           IMT Tx FIFO Full                      0            0
           IMT Tx FIFO Half Full                 1            0

           High Speed Statistic          BUS A Value  BUS B Value
           -------------------           -----------  -----------
           IMT Rx Packet CRC Error               0            0
           IMT Rx Disparity Error                0            0
           IMT Rx Sync Lost Error                0            0
           IMT Rx Code Word Error                0            0
           CPU Rx FIFO Full                      0            0
           CPU Rx FIFO Half Full                 0            0
           CPU Rx FIFO Empty Before SOM          0            0
           CPU Rx FIFO Empty Before EOM          0            0
           CPU Rx Packet SOM Before EOM          0            0
           CPU Rx Packet CRC Error               0            0
           DMA terminal count                    0            0
           CPU Tx Buffer EOB                     0            0
           CPU Tx Buffer Full                    0            0
           CPU Tx Buffer Half Full               9            9
           IMT Bypass FIFO Full                  0            0
           IMT Bypass FIFO Half Full             0            0
           IMT Rx FIFO Full                      0            0
           IMT Rx FIFO Half Full                 0            0

           Misc Speed Statistic          BUS A Value  BUS B Value
           -------------------           -----------  -----------
           Shelf ID UART Framing Error           0            0
           Shelf ID UART Overrun Error           0            0

;
```

All steps in this procedure were completed.

Retrieving Trouble Data

This procedure retrieves the most recently logged troubles. Estimated time for completion: 5 minutes

1. Issue the command to retrieve troubles from MASP A.

   ```
   rtrv-trbl:loc=1113:num=15
   ```

Response to retrieve trouble command is displayed. Troubles shown here are only examples. Note any unexplained troubles. (The troubles shown are examples only, actual troubles - if any - may differ.)

```
eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP  XX.x.x-YY.y.y
    rtrv-trbl:loc=1113:num=15
    Command entered at terminal #X.
;
    eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP  XX.x.x-YY.y.y
    NOTICE: Only 2 trouble(s) to retrieve in the log.
;
    eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP  XX.x.x-YY.y.y
    Card 1113   Module SCM_UTL0.C  Line  4101  Class 01bc  Severity
1
        0f                                                  .
    Report Date:YY-MM-DD  Time:hh:mm:ss
;
    eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP  XX.x.x-YY.y.y
    Card 1107   Module ED_ENET.C  Line  437  Class 01c3  Severity 1
        bc 5e 20 00 07 2d 12 00 d4 9b 00 00
00          .^...-.......
    Report Date:YY-MM-DD  Time:hh:mm:ss
;
```

2. Issue the command to retrieve troubles from MASP B.

   `rtrv-trbl:loc=1115:num=15`
   Response to retrieve trouble command is displayed. Troubles shown here are only examples.

   Note any unexplained troubles. (The troubles shown are examples only, actual troubles - if any - may differ.)

```
eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP  XX.x.x-YY.y.y
    rtrv-trbl:loc=1115:num=15
    Command entered at terminal #X.
;
    eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP  XX.x.x-YY.y.y
    NOTICE: Only 1 trouble(s) to retrieve in the log.
;
    eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP  XX.x.x-YY.y.y
    Card XXXX   Module XXXXXXXX.C  Line  XXXX  Class XXXX  Severity
X
        0f                                                  .
    Report Date:YY-MM-DD  Time:hh:mm:ss
;
    eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP  XX.x.x-YY.y.y
    5876.1083    SYSTEM       INFO    REPT COND: system alive
                 Report Date:YY-MM-DD  Time:hh:mm:ss
;
```

3. If the amount of output displayed on the capture terminal is excessive, then issue the command to change the terminal output groups.

   `chg-trm:trm=P:all=no:sys=yes:sa=yes:db=yes`

(Where P is the location of the capture terminal used in Pre-Health Check Requirements)

Response to change terminal command is displayed.

```
eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP  XX.x.x-YY.y.y
    chg-trm:trm=P:all=no:sys=yes:sa=yes:db=yes
    Command entered at terminal #X.
;

    eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP  XX.x.x-YY.y.y
    CHG-TRM: MASP A - COMPLTD
;
```

All steps in this procedure were completed.

Verifying Clock Status

This procedure verifies your system clock status. Specifically, the primary and secondary composite clocks and the A and B clocks going to each card are examined. Both the Primary and Secondary composite clocks should be good (IDLE or ACTIVE) on both the active and standby MASP. There should be no cards reporting a bad A clock and no cards reporting a bad B clock in step 1.

1. Issue the command to report clock status.

   `rept-stat-clk:mode=full`
   Response to clock status command is displayed.

   Verify that both composite clocks are either in IDLE or ACTIVE state on both ACTIVE and STANDBY MASP.

   All highlighted cards-with-bad-CLK values should equal zero.

```
eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x-YY.y.y
    COMPOSITE                           PST           SST       AST
        SYSTEM CLOCK                    IS-NR         Idle
-----
    ALARM STATUS = No Alarms.
        Primary Comp Clk 1114   (CLK A) IS-NR         Active
        Primary Comp Clk 1116   (CLK B) IS-NR         Active
        Secondary Comp Clk 1114 (CLK A) IS-NR         Idle
        Secondary Comp Clk 1116 (CLK B) IS-NR         Idle

    Clock      Using       Bad
    CLK A      173         0
    CLK B      2           0
    CLK I      0           --

    HIGH SPEED                           PST           SST
AST
        SYSTEM CLOCK                    IS-NR         Active
-----
    ALARM STATUS = No Alarms.
        Primary HS Clk 1114  (HS CLK A) IS-NR         Active
        Primary HS Clk 1116  (HS CLK B) IS-NR         Active
```

```
    Secondary HS Clk 1114(HS CLK A)  IS-NR         Idle
    Secondary HS Clk 1116(HS CLK B)  IS-NR         Idle

HS CLK TYPE 1114     = RS422
HS CLK LINELEN 1114  = -----
HS CLK TYPE 1116     = RS422
HS CLK LINELEN 1116  = -----

Clock      Using       Bad
HS CLK A   19          0
HS CLK B   0           0
HS CLK I   0           --

Cards with bad clock source:
CARD             CLK A       CLK B       HS CLK A    HS CLK B
------------------------------------------------------------


Command Completed.
;
```

2. Issue the command to retrieve the clock options.

   `rtrv-clkopts`
   Response to retrieve command is displayed.

```
eaglestp YY-MM-DD hh:mm:ss zone PPP XX.x.x-YY.y.y
CLK OPTIONS
-----------------------

PRIMARY
-----------------------
HSCLKSRC          rs422
HSCLKLL        longhaul

SECONDARY
-----------------------
HSCLKSRC          rs422
HSCLKLL        longhaul

;
```

   All steps in this procedure were completed.

Verifying MPS

The purpose of this procedure is to determine the health of MPS.

1. Issue the command to display MPS status.

   `rept-stat-mps`
   Response to MPS status command is displayed, if any of the features requires ELAP/EPAP.

If the MTT error 4102 is output go to step 2.

```
eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP  XX.x.x-YY.y.y

                      VERSION       PST            SST        AST
    MPS A             027-015-000   OOS-MT         Fault     -----
        CRITICAL PLATFORM    ALARM DATA = No Alarms
        MAJOR    PLATFORM    ALARM DATA = h'0123456789ABCDEF
        MINOR    PLATFORM    ALARM DATA = h'0123456789ABCDEF
        CRITICAL APPLICATION ALARM DATA = No Alarms
        MAJOR    APPLICATION ALARM DATA = h'0123456789ABCDEF
        MINOR    APPLICATION ALARM DATA = No Alarms
              ALARM STATUS = ** 0371  Major Platform Failure(s)

                      VERSION       PST            SST        AST
     MPS B            027-015-000   OOS-MT         Fault
-----
        CRITICAL PLATFORM    ALARM DATA = No Alarms
        MAJOR    PLATFORM    ALARM DATA = No Alarms
        MINOR    PLATFORM    ALARM DATA = No Alarms
        CRITICAL APPLICATION ALARM DATA = h'0123456789ABCDEF
        MAJOR    APPLICATION ALARM DATA = h'0123456789ABCDEF
        MINOR    APPLICATION ALARM DATA = No Alarms
              ALARM STATUS = *C 0373  Critical Application
Failure(s)

    CARD   PST          SST       LNP STAT
    1106 P IS-NR        Active    ACT
    1201   IS-ANR       Active    SWDL
    1205   OOS-MT-DSBLD Manual    -------
    1302   OOS-MT       Fault     -------
    1310   IS-ANR       Standby   SWDL

    CARD 1106 ALARM STATUS = No Alarms
    CARD 1201 ALARM STATUS = No Alarms
    CARD 1205 ALARM STATUS = No Alarms
    CARD 1302 ALARM STATUS = ** 0013 Card is isolated from the
system
    CARD 1310 ALARM STATUS = No Alarms

    Command Completed.
;
```

2. If DSM Audit was recorded as being on in Verifying IP Signaling Status Step 1, or is not displayed then go to step 2. Otherwise, if DSM Audit is off, then execute this step. Issue the command to change STP options.

   `chg-stpopts:dsmaud=on`
   Response to the command is displayed.

```
eaglestp YY-MM-DD hh:mm:ss zzz PPPPP XX.x.x-YY.y.y
    CHG-STPOPTS: MASP B – COMPLTD
;
```

All steps in this procedure were completed.

Verify Source Database

The purpose of this procedure is to determine the presence of unsupported or obsolete references in the system prior to doing an upgrade when performing the UHC#2 as described in section 2.3, table 3. Otherwise, go to Procedure 20.

> **Note:**
>
> It is important that the target release has been downloaded to the fixed disk, and for target release 46.0 and higher that the system has been configured to use the recommended CHG-UPGRADE-CONFIG:THRESTYPE=SET upgrade method.**[1]**

This procedure verifies the presence of the following:

- obsolete cards
- network address conflicts with the PVN and FCN network address

> **Note:**
>
> This procedure is intrusive meaning the target OAM application must be loaded temporarily to complete this procedure. To ensure accuracy, it is strongly suggested that data capture be active during this procedure because the information produced by this procedure will be used to guide the change of hardware or the modification of the database so potential issues don't effect successful complete of the upgrade.

The Software Access Key (SAK) for the upgrade target release is required for this procedure if upgrading *to* 45.0, 45.1 or 46.0.

1. If removable media is present, remove it from the system.

   > **Note:**
   >
   > it is important that the target release has been downloaded to the fixed disk, and for target release 46.0 and higher that the system has been configured to use the recommended CHG-UPGRADE-CONFIG:THRESTYPE=SET upgrade method.

   In the EAGLE Software Upgrade Procedure; see Appendix B: Preparations for Upgrade Execution on how to download the software release to the fixed disk for the applicable target release [B.1: Target Release Software Download] and on how to configure the system to use the card-set upgrade method [B2: Configuring Card-Set Network Conversion Method.]

2. Issue the upgrade command to display the database status.

   ```
   ACT-UPGRADE:ACTION=DBSTATUS
   ```

Response to the upgrade - database status command is displayed. Verify that the Inactive Partition Group database version displays the target release's version.

```
    eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP  XX.x.x.x.x-YY.y.y

    DATABASE STATUS: >> OK <<
            TDM 1114 ( STDBY)                TDM 1116 ( ACTV )
            C   LEVEL    TIME LAST BACKUP     C   LEVEL    TIME
LAST BACKUP
            - -------- ---------------------- - --------
----------------------
    FD BKUP Y   148913 12-10-09 04:49:11 GMT  Y   148913 12-10-09
04:49:11 GMT
    FD CRNT Y   148913                        Y
148913
            MCAP 1113                         MCAP 1115
            - --------                        - --------
    RD BKUP -    -         -        -         -    -
-        -
    USB BKP -    -         -        -         -    -
-        -

    CARD/APPL  LOC   C  T  LEVEL       TIME LAST UPDATE   VERSION
STATUS
    ---------  ----  -  -  ----------  -----------------
------------------
    OAM-RMV    1113  -  -      -           -        -          -
    TDM-CRNT   1114  Y  N  148913      12-10-09 04:47:40
133-003-000  NORMAL
    TDM-BKUP   1114  Y  -  148913      12-10-09 04:47:40
133-003-000  NORMAL
    OAM-RMV    1115  -  -      -           -        -          -
    OAM-USB    1115  -  -      -           -        -          -
    TDM-CRNT   1116  Y  N  148913      12-10-09 04:47:40
133-003-000  NORMAL
    TDM-BKUP   1116  Y  -  148913      12-10-09 04:47:40
133-003-000  NORMAL

    INACTIVE PARTITION GROUP
    CARD/APPL  LOC   C  T  LEVEL       TIME LAST UPDATE   VERSION
STATUS
    ---------  ----  -  -  ----------  -----------------
------------------
    TDM-CRNT   1114  Y  -  1           00-00-00 00:00:00
135-000-000  NORMAL
    TDM-BKUP   1114  Y  -  1           00-00-00 00:00:00
135-000-000  NORMAL
    TDM-CRNT   1116  Y  -  1           00-00-00 00:00:00
135-000-000  NORMAL
    TDM-BKUP   1116  Y  -  1           00-00-00 00:00:00
135-000-000  NORMAL

;
```

3. Issue the card status to verify the location of the active MASP slot.

`rept-stat-card:appl=oam`
Response to the card status command is displayed.

Record the card locations of both MASPs and the running GPL:

Act MASP _____

Stby MASP ____

MASP GPL: _____

For this sample output, cards 1113/1114 are standby and 1115/1116 are active.

```
   eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP  XX.x.x.x.x-YY.y.y
    CARD   VERSION      TYPE      GPL        PST
SST        AST
    1113   XXX-XXX-XXX  E5MCAP    OAMHC      IS-NR
Standby    -----
    1115   XXX-XXX-XXX  E5MCAP    OAMHC      IS-NR
Active     -----

    Command Completed.
;
```

4. Inhibit the standby MASP.

   `inh-card:loc=XXXX`
   (Where XXXX is the location of the standby MASP slot recorded in step 3)

   Response to the inhibit command is displayed.

   Verify UAM 514 is displayed.

```
    eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x.x.x-YY.y.y
    Card is inhibited.
;

    eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x.x.x-YY.y.y
**  7991.0514 ** CARD xxxx OAMHC         Standby MASP is inhibited
;

Wait for card to boot and return to the IMT bus.
```

5. Download target release flash to the standby MASP.

   `init-flash:loc=XXXX:code=trial`
   (Where XXXX is the location of the standby MASP slot recorded in step 3)

   Response to flash initialization is shown.

   Verify UAM 0004 is displayed.

```
    eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x.x.x-YY.y.y
    FLASH Memory Download for card xxxx started.
;
    eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x.x.x-YY.y.y
    FLASH Memory Download for card xxxx completed.
;
```

```
    eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x.x.x-YY.y.y
*   8003.0004  * GPL SYSTEM BLMCAP       Card is running non-
activated GPL
;

Wait for card to boot and return to the IMT bus.
```

6. Retrieve the GPLs running on the card location.

   `rept-stat-gpl:loc=XXXX`
   (Where XXXX is the location of the standby MASP slot recorded in step 3)

   Response to the card status command is displayed.

   Repeat the previous step if a valid version of the flash GPL is not displayed.

> **Note:**
>
> Valid flash GPL for the MASP cards can be either BLMCAP or BLDC32 depending on the release. BLMCAP is valid for 46.6 and prior. BLDC32 is valid in 46.6 or later.

```
   eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x.x.x-YY.y.y
    GPL        CARD      RUNNING            APPROVED      TRIAL
    OAMHC      XXXX      -----------         -----------
-----------
           BLDC32        YYY-YYY-YYY ALM+    XXX-XXX-XXX   YYY-YYY-
YYY

    Command Completed.
;
```

7. Run the target release GPL on the standby MASP.

   `alw-card:loc=XXXX:code=inactiveprtn`
   (target release downloaded to inactive partition)

   (Where XXXX is the location of the standby MASP recorded in step 3)

   Response to command is shown.

```
    eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x.x.x-YY.yy.y
    INFO: Provisioning subsystem is in duplex mode.
;
```

> **Note:**
>
> UAMs are generated during this step. An audible alarm is generated. Wait for the new standby MASP to come up in standby mode and system returns to duplex mode.

8. Issue command to report the GPLs running on Standby MASP.

`rept-stat-gpl:loc=XXXX`
(Where XXXX is the location of the standby MASP slot recorded in step 3)

Verify that the standby MASP is running target release GPLs. The standby MASP will display ALM to indicate that the card is not running the approved version GPL.

```
eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x.x.x-YY.y.y
    GPL Auditing  ON

    GPL        CARD      RUNNING            APPROVED      TRIAL
    OAMHC69    xxxx      YYY-YYY-YYY ALM    XXX-XXX-XXX   XXX-XXX-
XXX  *
           BLDC32        YYY-YYY-YYY ALM+   XXX-XXX-XXX   XXX-XXX-
XXX

    Command Completed.
;
```

9. Issue command to report the GPLs running on the Active MASP.

   `rept-stat-gpl:loc=yyyy`
   (Where XXXX is the location of the active MASP slot recorded in Step 3)

   Verify that the active MASP is running source release GPL.

```
    eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x.x.x-YY.y.y
    GPL Auditing  ON

    GPL        CARD      RUNNING            APPROVED      TRIAL
    OAMHC69    yyyy      XXX-XXX-XXX        XXX-XXX-XXX   XXX-XXX-
XXX  *
           BLDC32        XXX-XXX-XXX        XXX-XXX-XXX   XXX-XXX-
XXX

    Command Completed.
;
```

10. Perform an OAM role change by booting the active OAM.

    `init-card:loc=YYYY`
    (Where YYYY is the location of the active MASP recorded in step 3)

    Response to card initialization is shown.

```
    eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x-YY.y.y
    init-card:loc=xxxx
    Command entered at terminal #10.
;
    eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x-YY.y.y
    Init Card command issued to card xxxx
;
```

11. Issue command to log back in to the system.

    `login:uid=XXXXXX`
    (Where XXXXXX is a valid login ID)

Response to login command is displayed.

```
eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x-YY.yy.y Upg Phase 0
User logged in on terminal X
```

12. Issue the command to activate capture.

    `act-echo:trm=P`
    (Where P is a capture terminal port that was selected in Health Check Preparation, Step 2)

    Response to activate command is displayed.

    Verify that the capture terminal is correctly collecting data.

```
    eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x-YY.yy.y Upg Phase 0
    Scroll Area Output will be echoed to Terminal X.
;
(Caution: loss of output may occur if too many terminals are echoed)
```

13. Issue the card status to verify the location of the active MASP slot.

    `rept-stat-card:appl=oam`
    Response to the card status command is displayed.

    Record the card locations of both MASPs:

    Active MASP _____

    Standby MASP _____

    For this sample output, 1113 is the active and 1115 is standby.

> **Note:**
>
> GPL & PST display for the standby MASP can be ignored.

```
eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x.x.x-YY.yy.y Upg Phase 0
    CARD   VERSION      TYPE    GPL        PST
SST        AST

    1113    XXX-XXX-XXX E5MCAP  OAMHC      IS-NR
Active     -----
    1115    XXX-XXX-XXX E5MCAP  ?????      IS-NR
Standby    -----
    Command Completed.
;
```

14. Inhibit the standby MASP.

    `inh-card:loc=YYYY`
    (Where YYYY is the location of the standby MASP recorded in step 12)

    Response to the inhibit command is displayed.

Verify UAM 514 is displayed.

```
    eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x.x.x-YY.yy.y Upg
Phase 0
    Card is inhibited.
;

    eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x.x.x-YY.yy.y Upg
Phase 0
**  7991.0514 ** CARD yyyy OAMHC         Standby MASP is inhibited
;

Wait for card to boot and return to the IMT bus.
```

15. Download target release flash to the standby MASP.

    `init-flash:loc=YYYY:code=trial`
    (Where YYYY is the location of the standby MASP recorded in step 12)

    Response to flash initialization is shown.

```
eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x,x,x-YY.yy.y Upg Phase 0
    FLASH Memory Download for card yyyy started.
;
    eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x.x.x-YY.yy.y Upg
Phase 0
    FLASH Memory Download for card yyyy completed.
;

Wait for card to boot and return to the IMT bus.
```

16. Retrieve the GPLs running on the card location.

    `rept-stat-gpl:loc=YYYY`
    (Where YYYY is the location of the standby MASP slot recorded in step 12)

    Response to the card status command is displayed.

    Repeat the previous step if valid version of the flash GPL is not displayed.

    May need to wait up to 15 minutes to see the GPL in trial and approved column.

```
eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x.x.x-YY.yy.y Upg Phase 0
    GPL        CARD      RUNNING            APPROVED      TRIAL
    OAMHC      1113      -----------        -----------
-----------
           BLMCAP        YYY-YYY-YYY ALM +  XXX-XXX-XXX   YYY-YYY-
YYY

    Command Completed.
;
```

17. Run the target release GPL on the standby MASP.

    `alw-card:loc=YYYY:code=inactiveprtn`
    (target release downloaded to inactive partition)

(Where YYYY is the location of the standby MASP recorded in step 12)

Response to allow card command is shown.

```
    eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x.x.x-YY.yy.y Upg
Phase 0
    Card has been allowed.
;
```

18. Issue the card status command to verify the target release GPL is running.

`rept-stat-gpl:gpl=oamhc69`
Response from the status command is displayed.

Verify that the GPL versions that are displayed in the “RUNNING” is the target release and different from versions displayed in the “APPROVED”.

> **Note:**
>
> The ALM is displayed when the GPL auditing has completed a cycle. ALM does not have to be displayed to continue.

Verify that both MASP cards are running the same GPL version.

If no cards are displayed, repeat step 34 where **gpl=oamhc**.

If not running the correct versions contact the My Oracle Support.

```
    eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x-YY.yy.y Upg Phase 0
    rept-stat-gpl:gpl=oam
    Command entered at terminal #10.
;
    eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x-YY.yy.y Upg Phase 0
    GPL Auditing  ON

    APPL      CARD      RUNNING         APPROVED      TRIAL
    OAMHC69   1113      XXX-XXX-XXX ALM YYY-YYY-YYY   -----------
    OAMHC69   1115      XXX-XXX-XXX ALM YYY-YYY-YYY   -----------
    Command Completed.
;
```

19. Issue the command to report card status to determine the active MASP.

`rept-stat-card`
Typical response to a card status command.

Determine if both MASPs are IS-NR. If not, pause until the LEDs indicate both MASP are back or wait 30 seconds and then execute the previous step again.

Otherwise, determine the active MASP by finding which area of shaded text reports `active`.

Record the active MASP location: _____

Note: any `isolated` cards should be plugged into their slots if possible.

```
eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x-YY.yy.y Upg Phase 0
    CARD   VERSION      TYPE      GPL        PST
SST        AST
    1101   -----------  ENETB     IPSG       OOS-MT
Isolated   -----
    1102   134-070-034  LIMATM    ATMHC      IS-NR
Active     -----
    1103   134-070-034  LIME1ATM  ATMHC      IS-NR
Active     -----
    1104   134-070-034  LIME1     SS7HC      IS-NR
Active     -----
    1105   134-070-034  E5ENETB   IPSG       IS-NR
Active     -----
    1106   134-070-034  DCM       IPGHC      IS-NR
Active     -----
    1107   134-070-034  DSM       SCCPHC     IS-NR
Active     -----
    1108   134-070-034  DCM       IPLHC      IS-NR
Active     -----
    1109   134-070-034  HIPR2     HIPR2      IS-NR
Active     -----
    1110   134-070-034  HIPR2     HIPR2      IS-NR
Active     -----
    1111   134-070-034  STC       ERTHC      IS-NR
Active     -----
    1112   134-070-034  TSM       GLSHC      IS-NR
Active     -----
    1113   134-070-034  E5MCAP    OAMHC      IS-NR
Active     -----
    1114   -----------  E5TDM                IS-NR
Active     -----
    1115   134-070-034  E5MCAP    OAMHC      IS-NR
Standby    -----
    1116   -----------  E5TDM                IS-NR
Active     -----
    1117   -----------  E5MDAL               IS-NR
Active     -----
    1201   -----------  ENETB     IPSG       OOS-MT
Isolated   -----
    1202   134-070-034  LIMT1     SS7HC      IS-NR
Active     -----
    Command Completed.
;
```

20. Issue the `Send Message` command that performs checks for obsolete cards.

    `send-msg:loc=XXXX:ds=1:da=h'1d:f=h’61`
    (Where XXXX is the location of the active MASP)

> **Note:**
>
> It is important to enter the correct active MASP location determined in the previous step. Incorrect results could be displayed otherwise.

Response to the `Send Message` command is displayed. Verify the output for the following checks:

Verify the shaded text (shown) does not indicate any incorrect hardware is found. Unsupported/obsolete cards are indicated with ***. If obsolete cards are shown then this check fails until the target's baseline hardware is installed.

Record the count of obsolete cards:

_____

```
    eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x-YY.yy.y Upg Phase 0
    System Buffer sent has following attributes :
        Msg Length = H'0010
        Dest Card = H'00fa
        Orig Subsys = H'0001            Dest Subsys = H'0001
        Orig Appl ID = H'0030           Dest Appl ID = H'001d
        Func ID = H'0061                Bus/Ret/Sut = H'0002
        Violation Ind = H'0000
    User Message sent to location XXXX.
;

    eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x-YY.yy.y
    IMT Bus Check Started
    IMT Bus Check Completed Successfully.

    Hardware Validation Test Started...
    [DSM-1G Obsolescence Test for IPS application.]
    [TSM-256 Obsolescence Test for GLS application.]
    [LIM-ATM Obsolescence Test for ATMANSI/ATMITU application.]
    [E1/T1 MIM Obsolescence Test for SS7ANSI/CCS7ITU application.]
    [DSM Obsolescence Test for VSCCP application.]
    [DCM/EDCM Obsolescence Test.]
    [EDSM Obsolescence Test for MCPM application.]
    [E1/T1 MPL Obsolescence Test for SS7ML application.]

    *** CARD/GPL in slot 1101  is obsolete
    *** CARD/GPL in slot 1102  is obsolete
    *** CARD/GPL in slot 1105  is obsolete
    *** CARD/GPL in slot 1111  is obsolete

     Obsolete card's count = 4

    Hardware Validation Test Failed, Upgrade can not proceed.
;
```

21. Issue the `Send Message` command that checks for possible conflicts of IP addresses configured in the system.

    `send-msg:loc=XXXX:ds=1:da=h'1d:f=h’63`

(Where XXXX is the location of the active MASP)

> **Note:**
>
> It is important to correctly enter the active MASP location determined in step 35. Otherwise, incorrect results could be displayed.

Response to command is displayed.

Verify that the IP Address Validation check passes if running the target release of 45.x. Or the check is not required in target release of 46.0 and beyond.

```
    eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x-YY.yy.y Upg Phase 0
    System Buffer sent has following attributes :
        Msg Length = H'001c
        Dest Card = H'00fa
        Orig Subsys = H'0001 Dest Subsys = H'0001
        Orig Appl ID = H'0030 Dest Appl ID = H'001d
        Func ID = H'0063 Bus/Ret/Sut = H'0002
        Violation Ind = H'0000
    User Message sent to location XXXX.
;

In 45.x:

    eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x-YY.yy.y Upg Phase 0

    IP Address Validation Report

    IP Address Validation Result: Pass.
;

In 46.0 and beyond:

    eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x-YY.yy.y Upg Phase 0
    Health Check: This check is no longer necessary.
;
```

22. If the target release is 45.0, 45.1, or 46.0, issue the command to enter the software access key. Otherwise if target release is 46.1 or later, go to step 23.

    `chg-upgrade-config:sak=XXXXXXXXXXXXX:src=fixed`
    (Where XXXXXXXXXXXXX is the Software Access Key)

    Response to command is displayed.

    Verify the command completed successfully and the correct Upgrade target release is output

    If system is running release 46.5.X or 46.6.X and target release is 46.7.X, update the bootloader version of SLIC SM cards running 64-bit GPL while the system in in HC2 phase-0 with the following steps:

    - Issue the Send Message command that performs checks for obsolete cards. Where, XXXX = Location of the active MASP

- Check the status of SM card.
- Execute the command

> **Note:**
>
> Ignore if it reports Error *E2603: Cmd Rej: Card must be inhibited before executing this command*.

- Execute the command

> **Note:**
>
> If card is running correct bootloader then it will display message: "BOOTLOADER not changed for card xxxx. Already running requested bootloader." otherwise it will update the correct bootloader.

```
    eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x-YY.yy.y Upg Phase 0
    chg-upgrade-config:sak=XXXXXXXXXXXX:src=zzzzz
    Command entered at terminal #6.
;

    eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x-YY.yy.y Upg Phase 0

    Upgrade target: EAGLE XX.x.x-YY.y.y
;

    eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x-YY.y.y
    Command Completed.
;
```

```
send-msg:loc=XXXX: ds=1:da=64:f=171
```

```
rept-stat-card:mode=full:loc=XXXX
```

```
init-flash:mode=rplcebl:loc=XXXX:bits=64
```

```
INIT-FLASH:MODE=rplcebl:FORCE=YES:LOC=XXXX
```

23. Issue the command to retrieve the upgrade configuration.

```
rtrv-upgrade-config
```

Response to the retrieve-card command is displayed.

```
eaglestp YY-MM-DD hh:mm:ss zzz PPPPP XX.x.x-YY.y.y
    Software Access Key no longer required for this system

    Configured Upgrade Threshold Type: SET
      Number of SERVICE Sets: 2
      Number of LINK Sets: 2
```

```
    Command Completed.
;
```

24. Issue the command to initialize the active and standby MASP cards so that they are running the source release software.

    `init-card:appl=oam`
    Response to the initialize-card command is displayed.

```
    eaglestp YY-MM-DD hh:mm:ss zzz PPPPP XX.x.x-YY.y.y
    init-card:appl=oam
    Command entered at terminal #X.
;
```

25. Issue command to log back in to the system.

    `login:uid=XXXXXX`
    (Where XXXXXX is a valid login ID)

    Response to login command is displayed.

```
eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x-YY.yy.y
User logged in on terminal X
```

26. Issue the command to activate capture.

    `act-echo:trm=P`
    (Where P is a capture terminal port that was selected in Health Check Preparation, Step 2)

    Response to activate command is displayed.

    Verify that the capture terminal is correctly collecting data.

```
    eaglestp YY-MM-DD hh:mm:ss zzzz PPPPP XX.x.x-YY.yy.y
    Scroll Area Output will be echoed to Terminal X.
;
(Caution: loss of output may occur if too many terminals are echoed)
```

27. Issue the command to report card status.

    `rept-stat-card`
    Typical response to card status command.

> **Note:**
>
> Compare this output with the rept-stat-card done prior to booting the target MASP. The display should be the same.

```
eaglestp YY-MM-DD hh:mm:ss zzzz PPPPP XX.x.x-YY.yy.y
    CARD   VERSION      TYPE      GPL        PST
SST        AST
    1101   134-061-000  DCM       IPGHC      IS-NR
Active     ALMINH
    1102   134-061-000  DCM       IPLHC      IS-NR
```

```
Active     ALMINH
    1103   134-061-000  E5ENET    IPSG       IS-NR
Active     -----
    1107   134-061-000  DSM       VSCCP      IS-NR
Active     -----
    1109   134-058-000  HIPR      HIPR       IS-NR
Active     -----
    1110   134-058-000  HIPR      HIPR       IS-NR
Active     -----
    1111   134-061-000  DSM       SCCPHC     IS-NR
Active     -----
    1113   134-061-000  E5MCAP    OAMHC      IS-NR
Standby    -----
    1114   -----------  E5TDM                IS-NR
Active     -----
    1115   134-061-000  E5MCAP    OAMHC      IS-NR
Active     -----
    1116   -----------  E5TDM                IS-NR
Active     -----
    1117   -----------  E5MDAL               IS-NR
Active     -----
    1201   134-061-000  LIMDS0    SS7ML      IS-NR
Active     -----    Command Completed.
;
```

28. Issue the command to report trouble status.

    `rept-stat-trbl:display=timestamp`
    Response to trouble status command is displayed.

    Record any non-network alarms.

    Alarm _____

```
    eaglestp YY-MM-DD hh:mm:ss zzz PPPPP XX.x.x-YY.yy.y
    Searching devices for alarms...
;
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x-YY.y.y
    SEQN UAM  AL DEVICE   ELEMENT      TROUBLE TEXT
    5728.0048  * TERMINAL   14         Terminal failed
                 98-03-09  10:05:36
    5729.0048  * TERMINAL   15         Terminal failed
                 98-03-09  10:05:36
    5731.0013 ** CARD 1214 SS7ANSI     Card is isolated from the
system
                 98-03-09  13:57:40
    5604.0013 ** CARD 1111 SCCP        Card is isolated from the
system
                 98-03-09  13:57:40
    5732.0236 ** SLK 1214,A lsn1214    REPT-LKF: not aligned
                 98-03-09  13:57:40
    5733.0236 ** SLK 1214,B lsn1214    REPT-LKF: not aligned
                 98-03-09  13:57:40
    5734.0236 ** SLK 1106,A lsnx1      REPT-LKF: not aligned
                 98-03-09  13:57:40
    5735.0318 ** LSN lsn1214           REPT-LKSTO: link set
```

```
prohibited
                98-03-09  13:57:40
    5736.0318 ** LSN lsnx1             REPT-LKSTO: link set
prohibited
                98-03-09  13:57:40
    Command Completed.
;
```

All steps in this procedure were completed.

Verifying Fixed and Removable Media (Part 1)

This procedure verifies that EAGLE fixed disks and removable drives are accessible and in proper working order. Disks\drives are exercised by issuing test disk and backup commands. If no on-site personnel are available and the removable drive is not inserted then this procedure needs to be rescheduled.

1. Issue the command to backup to the fixed disk.

   `chg-db:action=backup`
   Response to backup command is displayed.

```
    eaglestp YY-MM-DD hh:mm:ss zzz PPPPP XX.x.x-YY.yy.y
    7706.1114    CARD 1115    Database BACKUP started
                 Report Date:98-03-09  Time:17:59:25
;

    eaglestp YY-MM-DD hh:mm:ss zzz PPPPP XX.x.x-YY.yy.y
    BACKUP (FIXED): MASP B - Backup starts on active MASP.
;

    eaglestp YY-MM-DD hh:mm:ss zzz PPPPP XX.x.x-YY.yy.y
    BACKUP (FIXED): MASP B - Backup on active MASP to fixed disk
complete.
;

    eaglestp YY-MM-DD hh:mm:ss zzz PPPPP XX.x.x-YY.yy.y
    BACKUP (FIXED): MASP B - Backup starts on standby MASP.
;

    eaglestp YY-MM-DD hh:mm:ss zzz PPPPP XX.x.x-YY.yy.y
    BACKUP (FIXED): MASP B - Backup on standby MASP to fixed disk
complete.
;
```

   If not already inserted, insert the source removable media drive into the system.

> **Note:**
>
> The insertion of a removable drive is required to complete this procedure. If drive cannot be inserted, this procedure fails. After failing this procedure, go to Step 9 and to complete the check of the fixed disks.

2. Issue the command to backup to the removable. Otherwise, procedure needs to be rescheduled.

   `chg-db:action=backup:dest=remove`
   Response to backup command is displayed.

   Record the location of the active MASP:

   [1113 or 1115] _____.

```
    eaglestp YY-MM-DD hh:mm:ss zzz PPPPP XX.x.x-YY.yy.y
    BACKUP (REMOVABLE): MASP A - Backup starts on active MASP.
;

    eaglestp YY-MM-DD hh:mm:ss zzz PPPPP XX.x.x-YY.yy.y
    0465.1114    CARD 1113    Database BACKUP started
                 Report Date:98-03-31  Time:00:02:03
;

    eaglestp YY-MM-DD hh:mm:ss zzz PPPPP XX.x.x-YY.yy.y
    BACKUP (REMOVABLE): MASP A - Backup to removable cartridge
complete.
;

    eaglestp YY-MM-DD hh:mm:ss zzz PPPPP XX.x.x-YY.yy.y
    0466.1116    CARD 1113    Database action ended - OK
                 Report Date:98-03-31  Time:00:05:08
;
```

3. Issue the command to copy GPLs from active TDM to removable drive.

   `copy-gpl:sloc=XXXX:ddrv=remove`
   (Where XXXX is the active TDM location (1114 or 1116) that corresponds to the MASP slot recorded in step 5)

   Response to copy GPL command is displayed.

   Verify command completes successfully.

```
eaglestp YY-MM-DD hh:mm:ss zzz PPPPP XX.x.x-YY.yy.y
    COPY GPL:  MASP Y - COPY STARTS ON ACTIVE MASP
    COPY GPL:  MASP Y - COPY TO REMOVABLE CARTRIDGE COMPLETE
;

(Where Y is the active MASP – A or B)
```

4. Issue the commands to display disk directory of the fixed disk.

   `disp-disk-dir:loc=XXXX`
   (Where XXXX is the standby TDM)

   Response to the display command is displayed.

   Verify command completes successfully.

Note that the output data may vary from this example.

```
    eaglestp YY-MM-DD hh:mm:ss zzz PPPPP XX.x.x-YY.yy.y

    DISP-DISK-DIR  Loc=1114  Dev = FIXED(Active)
    Filename  Ext            Length
    DMS1024   CFG             32768
    dbstat    bkp             47662
    dbstat    tbl             47662
    ipas      tbl            262090
    mcfg      bkp               156
    mcfg      tbl               156

 (additional files listed …)


    File(s) : 465    Bytes : 1925810639
    Disk Size (MB) : 7515
;
```

5. Issue this command to test the fixed disk.

   `tst-disk:loc=XXXX:partition=all`
   (Where XXXX is the standby fixed disk)

   Response to the test disk command is displayed.

   Verify that there are no errors and retries are indicated.

   This command will complete in less than a minute.

```
    eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x-YY.y.y

         TST-DISK RESULTS:
         Total clusters: 983290
         Free Clusters: 983290
         Bad Clusters: 0
         Total Free Space: 3933160
         Max. Contiguous Free Space: 3933160
         Files: 932
         Folders: 0
         Bytes in Files: 3761348
         Lost Chains: 0
         Bytes in Lost Chains: 0
;
```

6. Issue the commands to display disk directory of the removable media.

   `disp-disk-dir:loc=xxxx:src=remove`
   (Where XXXX is the active MASP)

   Response to disp-disk-dir command is displayed.

   Verify command completes successfully.

Note that the output data may vary from this example.

```
    eaglestp YY-MM-DD hh:mm:ss TTT PPP XX.x.x-YY.y.y
    DISP-DISK-DIR  Loc=1115  Dev = REMOVE
    Filename  Ext            Length
    DMS1024   CFG             32768
    TATMANSI  ELF           3145728
    TATMHC    ELF           5242880
    TATMITU   ELF           3145728
    TBLBEPM   ELF           3145728
    TBLBIOS   ELF           3145728

(additional files listed …)


    File(s) : 182    Bytes : 511026520
    Disk Size (MB) : 1910
;
```

7. Issue this command to test the removable media.

   `tst-disk:disk=remove:loc=xxxx`
   (Where XXXX is the active MASP)

   Response from the `tst-disk` command is displayed.

   For E5OAM system, execution time is under a minute.

   Verify that there are no errors and no retries indicated in output.

```
eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x-YY.y.y

         TST-DISK RESULTS:
         Total clusters: 149949
         Free Clusters: 149949
         Bad Clusters: 0
         Total Free Space: 599796
         Max. Contiguous Free Space: 517336
         Files: 431
         Folders: 0
         Bytes in Files: 1323558
         Lost Chains: 0
         Bytes in Lost Chains: 0
;
```

8. Remove the removable drives from the active and standby MASP. Update the label with release and database level. Store in a safe place for later use.
9. Issue the command to initialize the active MASP.

   `init-card:loc=XXXX`
   (Where XXXX is the location of the active E5-MASP)

   Response to the initialize command is displayed.

```
    eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x-YY.y.y
```

```
    init-card:loc=XXXX
    Command entered at terminal #10.
;
    eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x-YY.y.y
**  6573.0013 ** CARD XXXX OAMHC         Card is isolated from the
system
                ASSY SN:  xxxxxxxxxxxx
;
    eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x-YY.y.y
    6577.0014    CARD XXXX OAMHC         Card is present
                 ASSY SN:  xxxxxxxxxxxx
;
```

10. Issue the command to log in to the EAGLE terminal.

    `login:uid=XXXXXX`
    (Where XXXXXX is your login ID)

    Response to login command is displayed.

```
eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x-YY.y.y
    User logged in on terminal X
;
```

11. Issue the command to activate capture.

    `act-echo:trm=P`
    (Where P is a terminal port used in #unique_23/unique_23_Connect_42_GUID-59010D58-ED83-40DB-8A63-C9EF9D8DD527, Step 5)

    Response to activate command is displayed.

```
     eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x-YY.y.y
    Scroll Area Output will be echoed to Terminal X.
;
```

12. Repeat Steps 4-6 for the formerly-active TDM.

    All steps in this procedure were completed.

Testing IMT Status

This procedure tests that the IMT Buses are healthy.
This procedure should be executed in a maintenance window. If it cannot be done in a maintenance window, then this procedure needs to be rescheduled.

If no on-site personnel are available, then step 7 needs to be rescheduled.

1. Issue the command to report the status of the IMT buses.

    `rept-stat-imt:mode=full`
    Response to report IMT status command is displayed.

```
eaglestp YY-MM-DD HH:MM:SS tzone Rel XX.X.X-YY.Y.Y
     IMT   PST             SST        AST
```

```
      A    IS-NR           Active     -----
      ALARM STATUS       = No Alarms.

     IMT   PST            SST        AST
      B    IS-NR           Active     -----
      ALARM STATUS       = No Alarms.
    Command Completed.
;
```

2. If in a maintenance window, issue the command to inhibit the IMT bus.

   `inh-imt:bus=A`
   Response to inhibit IMT bus command is displayed.

```
    eaglestp YY-MM-DD HH:MM:SS tzone Rel XX.X.X-YY.Y.Y
    Inhibit IMT Bus A command issued
;

    eaglestp YY-MM-DD HH:MM:SS tzone Rel XX.X.X-YY.Y.Y
    0401.0098    IMT BUS A             IMT inhibited
;
```

3. Issue the command to test the IMT bus.

   `tst-imt:type=faulttest:bus=A`
   Response to test IMT bus command is displayed.

   `Test Passed` message displayed.

```
eaglestp YY-MM-DD HH:MM:SS tzone Rel XX.X.X-YY.Y.Y

    IMT Fault Isolation Bus A
    Fault Location    Probable Cause    Failure(s)
    No Faults Found
                                        All Tests Passed
;
```

4. Issue the command to allow the IMT bus.

   `alw-imt:bus=A`
   Response to allow IMT bus command is displayed.

```
eaglestp YY-MM-DD HH:MM:SS tzone Rel XX.X.X-YY.Y.Y
    Allow IMT Bus A command issued
;

    eaglestp YY-MM-DD HH:MM:SS tzone Rel XX.X.X-YY.Y.Y
    0403.0097    IMT BUS A             IMT allowed
;
```

5. Issue the command for the Extended BERT test.

   `tst-imt:type=extbert:time=10:bus=A`
   Response to test IMT bus command is displayed.

Otherwise, error E4765 Cmd Rej: Obsolete MUX cards detected in the system is displayed when the hardware is invalid for this command.

PASS messages displayed in BERT Status column.

```
    eaglestp YY-MM-DD HH:MM:SS tzone Rel XX.X.X-YY.Y.Y
    Extended BERT: Command in progress...
;

    eaglestp YY-MM-DD HH:MM:SS tzone Rel XX.X.X-YY.Y.Y
    Extended BERT: Target Bus A will be inhibited
;

    eaglestp YY-MM-DD HH:MM:SS tzone Rel XX.X.X-YY.Y.Y
    5042.0098    IMT BUS A               IMT inhibited
;

    eaglestp YY-MM-DD HH:MM:SS tzone Rel XX.X.X-YY.Y.Y
    Extended BERT: Active MASP will be reconnected on Bus A
;

    eaglestp YY-MM-DD HH:MM:SS tzone Rel XX.X.X-YY.Y.Y
    Extended BERT: Extended processing time required.
    Results will be displayed on test completion.
;

    eaglestp YY-MM-DD HH:MM:SS tzone Rel XX.X.X-YY.Y.Y
    Command Completed.

After 10 minutes:

    eaglestp YY-MM-DD HH:MM:SS tzone Rel XX.X.X-YY.Y.Y
    Extended Bit Error Rate Test Bus A
    MAX ERROR = 20      TIME = 00:10:00    START TIME = 12:10:30
    TEST STATUS = PASS

    CARD  TYPE      SERIAL_NUMBER    BERT_STATUS BIT_ERROR
ERRORED_SEC DURATION
    1110  HIPR2     10208345012      PASS        3
2           01:00:00
    1210  HIPR2     10208345031      PASS        2
1           01:00:00
    1310  HIPR2     10208345052      PASS        5
3           01:00:00

 ;

    eaglestp YY-MM-DD HH:MM:SS tzone Rel XX.X.X-YY.Y.Y
    Extended BERT: Target Bus A will be allowed
;

    eaglestp YY-MM-DD HH:MM:SS tzone Rel XX.X.X-YY.Y.Y
    5042.0098    IMT BUS A               IMT allowed
;
```

6. Issue the status command for the IMT buses.

   `rept-stat-imt:mode=full`
   Response to IMT bus status command is displayed.

   Verify that bus has returned to IS-NR.

```
eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x-YY.y.y
     IMT   PST             SST        AST
      A    IS-NR            Active     -----
      ALARM STATUS       = No Alarms.

     IMT   PST             SST        AST
      B    IS-NR            Active     -----
      ALARM STATUS       = No Alarms.
    Command Completed.
;
```

7. Repeat Steps 2 – 6 for IMT Bus B.

   Repeat command in order to test IMT Bus B.
   If upgrading to Release 46.4 or later from Release 46.3 or prior; visually inspect the IMT cables.

   If cables are incorrect, this procedure fails.

> **Note:**
>
> If the correct cables are not installed, then steps must be followed to ensure that the cables have been properly installed and operation of IMT buses at 2.5Gbps is verified. See "Cabling" in Hardware Reference and Activating the HIPR2 High Rate Mode Feature in Database Administration - System Management for more information. This activity needs to be performed during a maintenance window.

> **Note:**
>
> All IMT cables in the system need to be the high-speed fiber-channel cables (P/N 830-1344-xx.) Review all part numbers for all IMT cables present in the system.

All steps in this procedure were completed.

Verifying Fixed and Removable Media (Part 2)

This procedure verifies that EAGLE fixed disks and removable media are accessible and in proper working order. Disks will be exercised by issuing test disk and backup commands. If no on-site personnel are available to insert the source release removable media then this procedure needs to be rescheduled. This procedure must be done in a maintenance window.

1. Verify that a **source release removable media** is inserted in the active MASP. If in a maintenance window, issue the command to display card status.

`rept-stat-card:appl=oam`
Response to card status command is displayed.

Determine which MASP is currently Standby by looking in the column labeled SST.

Record the locations of the MASPs:

Active MASP _____

Standby MASP _____

```
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x-YY.y.y
    CARD   VERSION      TYPE      GPL        PST
SST        AST
    1113   XXX-XXX-XXX  E5MCAP    OAMHC      IS-NR
Standby    -----
    1115   XXX-XXX-XXX  E5MCAP    OAMHC      IS-NR
Active     -----

    Command Completed.
;
```

2. Remove Standby E5MASP from the system. Slide the MASP H/S switch (SW3) on the standby MASP up to the unlocked position (Wait for all drive LEDs to transition to a steady blue). Remove the standby E5MASP card determined in step 1.
3. Issue the command to report clock status.

   `rept-stat-clk:mode=full`
   Response to clock status command is displayed.

   Verify that all cards are using the clock on the other E5MASP.

```
eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x-YY.y.y
    COMPOSITE                          PST          SST       AST
        SYSTEM CLOCK                   IS-ANR       Idle
-----
    ALARM STATUS = No Alarms.
        Primary Comp Clk 1114   (CLK A)  IS-NR         Active
        Primary Comp Clk 1116   (CLK B)  IS-NR         Idle
        Secondary Comp Clk 1114 (CLK A)  IS-NR         Idle
        Secondary Comp Clk 1116 (CLK B)  IS-NR         Idle

    Clock      Using       Bad
    CLK A      3           0
    CLK B      0           3
    CLK I      0           --

    HIGH SPEED                          PST           SST
AST
        SYSTEM CLOCK                   IS-NR         Idle
-----
    ALARM STATUS = No Alarms.
        Primary HS Clk 1114  (HS CLK A)  IS-NR         Active
        Primary HS Clk 1116  (HS CLK B)  IS-NR         Idle
        Secondary HS Clk 1114(HS CLK A)  IS-NR         Idle
        Secondary HS Clk 1116(HS CLK B)  IS-NR         Idle
```

```
    HS CLK TYPE 1114     = RS422
    HS CLK LINELEN 1114  = -----
    HS CLK TYPE 1116     = RS422
    HS CLK LINELEN 1116  = -----

    Clock      Using       Bad
    HS CLK A   0           0
    HS CLK B   0           0
    HS CLK I   0           --

    Cards with bad clock source:
    CARD              CLK A       CLK B       HS CLK A    HS CLK B
    ------------------------------------------------------------
    1103              Active      Fault       -----       -----
    1105              Active      Fault       -----       -----
    1113              Active      Fault       -----       -----

    Command Completed.
;
```

4. Place spare E5MASP in system. Insert the spare E5MASP card Slide the MASP H/S switch (SW3) on the standby MASP down to the locked position (Wait for the MASP H/S LED to transition from blinking blue to off and the MASP to come up in standby mode).
5. Display database version information.

   `rept-stat-db:display=version`
   Verify that the standby TDM contains the same database version as the active.

   If the database version on the standby disk is not the same as the active disk, stop the procedure and contact My Oracle Support.

```
eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE5 XX.x.x-YY.yy.y
    DATABASE STATUS: >> NOT OK (DMS) <<
            TDM 1114 ( ACTV )                TDM 1116 ( STDBY)
            C   LEVEL    TIME LAST BACKUP    C   LEVEL    TIME
LAST BACKUP
            - -------- -------------------- - --------
--------------------
    FD BKUP Y   XXXXXX YY-MM-DD hh:mm:ss TTT  Y   ZZZZZZ YY-MM-DD
hh:mm:ss TTT
    FD CRNT Y   XXXXXX                        Y   ZZZZZZ DIFF LEVEL
            MCAP 1113                         MCAP 1115
            - --------                        - --------
    RD BKUP Y   XXXXXX YY-MM-DD hh:mm:ss TTT  -    -
-        -
    USB BKP -    -         -        -         -    -
-        -

    CARD/APPL  LOC   C  T  LEVEL       TIME LAST UPDATE   VERSION
STATUS
    ---------  ----  -  -  ----------  -----------------
------------------
    OAM-RMV    1113  -  -      -           -        -          -
    OAM-USB    1113  -  -      -           -        -          -
```

```
    TDM-CRNT   1114  Y  N   XXXXXX     YY-MM-DD hh:mm:ss  XXX-XXX-
XXX  NORMAL
    TDM-BKUP   1114  Y  -   XXXXXX     YY-MM-DD hh:mm:ss  XXX-XXX-
XXX  NORMAL
    OAM-RMV    1115  -  -      -           -        -          -
    TDM-CRNT   1116  Y  N   ZZZZZZ     YY-MM-DD hh:mm:ss  XXX-XXX-
XXX  NORMAL
    TDM-BKUP   1116  Y  -   ZZZZZZ     YY-MM-DD hh:mm:ss  XXX-XXX-
XXX  NORMAL
;
```

6. Issue the command to verify the GPL versions.

   `rtrv-gpl`
   Response to retrieve GPL command is displayed.

   Verify the column between the Approved and Trial shows no alarms for the Standby TDM that was recorded in Step 2. If an alarm is found, go to step 11. Otherwise, go to Step 8.

```
    eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE5 XX.x.x-YY.yy.y
    BLMCAP    1114  XXX-XXX-XXX  XXX-XXX-XXX      XXX-XXX-XXX  XXX-
XXX-XXX
    BLMCAP    1116  XXX-XXX-XXX  XXX-XXX-XXX ALM  XXX-XXX-XXX  XXX-
XXX-XXX
    BLMCAP    1113  -----------  -----------      -----------
-----------
    OAMHC     1114  XXX-XXX-XXX  XXX-XXX-XXX      XXX-XXX-XXX  XXX-
XXX-XXX
    OAMHC     1116  XXX-XXX-XXX  XXX-XXX-XXX      XXX-XXX-XXX  XXX-
XXX-XXX
    OAMHC     1113  -----------  -----------      -----------
-----------
    HIPR2     1114  XXX-XXX-XXX  XXX-XXX-XXX      XXX-XXX-XXX  XXX-
XXX-XXX
    HIPR2     1116  XXX-XXX-XXX  XXX-XXX-XXX      XXX-XXX-XXX  XXX-
XXX-XXX
    HIPR2     1113  -----------  -----------      -----------
-----------
    HIPR      1114  XXX-XXX-XXX  XXX-XXX-XXX      XXX-XXX-XXX  XXX-
XXX-XXX
    HIPR      1116  XXX-XXX-XXX  XXX-XXX-XXX      XXX-XXX-XXX  XXX-
XXX-XXX
    HIPR      1113  -----------  -----------      -----------
-----------
    SS7HC     1114  XXX-XXX-XXX  XXX-XXX-XXX      XXX-XXX-XXX  XXX-
XXX-XXX
    SS7HC     1116  XXX-XXX-XXX  XXX-XXX-XXX      XXX-XXX-XXX  XXX-
XXX-XXX
    SS7HC     1113  -----------  -----------      -----------
-----------
    BLBIOS    1114  133-043-000  133-043-000      133-043-000
133-043-000
    BLBIOS    1116  133-043-000  133-043-000      133-043-000
133-043-000
    BLBIOS    1113  -----------  -----------      -----------
```

```
-----------
    BLCPLD    1114  133-055-000  133-055-000      133-055-000
133-055-000
    BLCPLD    1116  133-055-000  133-055-000      133-055-000
133-055-000
    BLCPLD    1113  -----------  -----------      -----------
-----------
    GLSHC     1114  XXX-XXX-XXX  XXX-XXX-XXX      XXX-XXX-XXX  XXX-
XXX-XXX
    GLSHC     1116  XXX-XXX-XXX  XXX-XXX-XXX      XXX-XXX-XXX  XXX-
XXX-XXX
    GLSHC     1113  -----------  -----------      -----------
-----------
;
```

7. Issue the command to copy GPLs.

   `copy-gpl:sloc=yyyy:dloc=XXXX`
   (Where yyyy is the active MASP(1113/1115) and XXXX is the standby TDM (1114/1116) location recorded in step 1)

   Response to copy GPL command is displayed. Verify command completes successfully.

```
    eaglestp YY-MM-DD hh:mm:ss TTT PPP XX.x.x-YY.y.y
    COPY GPL:  MASP B - COPY STARTS FROM REMOVABLE CARTRIDGE TO
STANDBY TDM
    COPY GPL:  MASP B - COPY TO STANDBY TDM COMPLETE
;
```

8. Issue the command to repair the standby disk.

   `chg-db:action=repair`
   Response to repair command is displayed.

   This command may take up to 45 minutes to complete.

```
eaglestp YY-MM-DD hh:mm:ss TTT PPP XX.x.x-YY.y.y
    BACKUP (FIXED): MASP B - Repair starts on standby MASP.
;
    sysint211 98-03-09 18:07:59 EST Rel XX.X.X
    BACKUP (FIXED): MASP B - Repair on standby MASP to fixed disk
complete.
```

9. Issue the commands to display disk directory of the standby MASP.

   `disp-disk-dir:loc=XXXX`
   (Where XXXX is the standby MASP disk slot)

   Response to display disk directory command is displayed.

   Verify command completes successfully.

   Note that the output data may vary from this example.

```
eaglestp YY-MM-DD hh:mm:ss TTT PPP XX.x.x-YY.y.y
```

```
    DISP-DISK-DIR  Loc=1114  Dev = FIXED(Active)
    Filename  Ext            Length
    DMS1024   CFG             32768
    dbstat    bkp             47662
    dbstat    tbl             47662
    ipas      tbl            262090
    mcfg      bkp               156
    mcfg      tbl               156

 (additional files listed …)


    File(s) : 465    Bytes : 1925810639
    Disk Size (MB) : 7515
;
```

10. Issue this command to test the fixed disk.

    `tst-disk:partition=all:loc=XXXX`
    (Where XXXX is the standby MASP disk slot recorded in step 2)

    Response to the test disk command is displayed.

    Verify that there are no errors and retries are indicated.

```
eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x-YY.y.y

         TST-DISK RESULTS:
         Total clusters: 149949
         Free Clusters: 149949
         Bad Clusters: 0
         Total Free Space: 599796
         Max. Contiguous Free Space: 517336
         Files: 431
         Folders: 0
         Bytes in Files: 1323558
         Lost Chains: 0
         Bytes in Lost Chains: 0
;
```

11. Issue the initialize card command for the active MASP.

    `init-card:loc=XXXX`
    (Where for the first time executing this command, XXXX is the location of the active MASP recorded in step 2; Where for the second time executing this command, XXXX is the location of the standby MASP recorded in step 1)

    Response to the initialize command is displayed.

```
     eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x-YY.y.y
*   0261.0013  * CARD XXXX OAM         Card is isolated from the
system
                 ASSY SN:   xxxxxxxx
;
     eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x-YY.y.y
    5038.0014    CARD XXXX OAM         Card is present
```

```
                    ASSY SN:   xxxxxxxx
;
```

12. Issue the command to log in to the EAGLE terminal.

    `login:uid=XXXXXX`
    (Where XXXXXX is your login ID)

    Response to login command is displayed.

```
     eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x-YY.y.y
    User logged in on terminal X
;
```

13. Issue the command to activate capture. See Data Capture for information on how to set up terminals for data capture.

    `act-echo:trm=P`
    (Where P is a terminal port used in Health Check Preparation, Step 3)

    Response to activate command is displayed.

```
     eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x-YY.y.y
    act-echo:trm=P
    Command entered at terminal #X.
;

     eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x-YY.y.y
    Scroll Area Output will be echoed to Terminal X.
;
```

14. Issue the command to report the status of the MDAL.

    `rept-stat-card:loc=1117`
    Response to the status command is displayed.

    Verify that status is IS-NR.

```
    eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE5 XX.x.x-YY.yy.y
    CARD   VERSION      TYPE      APPL       PST
SST        AST
    1117   -----------  E5MDAL               IS-NR
Active     -----
    Command Completed.
;
```

15. Repeat Steps 13 – 18. If second time executing this step, continue to next step.
16. Inhibit the standby MASP so that the spare MASP may be removed from the system.

    `inh-card:loc=XXXX`
    (Where XXXX is the location of the standby MASP.)

    Response to the inhibit command is displayed.

Verify UAM 514 is displayed.

```
    eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x-YY.y.y
    Card is inhibited.
;

    eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x-YY.y.y
**  7991.0514 ** CARD xxxx OAMHC         Standby MASP is inhibited
;

Wait for card to boot and return to the IMT bus.
```

17. Remove Standby E5MASP from the system.

    Slide the MASP H/S switch (SW3) on the standby MASP up to the unlocked position (Wait for all drive LEDs to transition to a steady blue).
    Remove the standby E5MASP card; the location specified in Step 13

    Insert the spare E5MASP card

    Slide the MASP H/S switch (SW3) on the standby MASP down to the locked position (Wait for the MASP H/S LED to transition from blinking blue to off and the MASP to come up in standby mode).

18. Issue the allow card to bring the standby MASP in service.

    `alw-card:loc=xxxx`
    (Where XXXX is the location of the standby MASP specified in step 18)

    Response to allow card is displayed.

```
eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x-YY.y.y
    Card has been allowed.
;

    eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x-YY.y.y
    1798.0014    CARD XXXX OAM           Card is present
                 ASSY SN:  10202081389
;
```

19. Display database version information.

    `act-upgrade:action=dbstatus`
    Verify that the standby MASP contains the same database version as the active.

    If the database version on the standby disk is not the same as the active disk, first repeat previous step and then contact My Oracle Support.

    If target release was downloaded, verify the version of the inactive partition is that of the upgrade target release, the database level is 1 and the coherency is Y. If otherwise, contact My Oracle Support.

```
eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE5 XX.x.x-YY.yy.y
                        VERSION       PST            SST        AST
    DATABASE STATUS: >> OK <<
            TDM 1114 ( STDBY)                TDM 1116 ( ACTV )
            C   LEVEL    TIME LAST BACKUP     C   LEVEL    TIME
LAST BACKUP
            - -------- ---------------------- - --------
```

```
----------------------
    FD BKUP Y   148913 12-10-09 04:49:11 GMT  Y   148913 12-10-09
04:49:11 GMT
    FD CRNT Y   148913                        Y
148913
            MCAP 1113                         MCAP 1115
            - --------                        - --------
    RD BKUP -    -         -        -         -    -
-        -
    USB BKP -    -         -        -         -    -
-        -

    CARD/APPL  LOC   C  T  LEVEL       TIME LAST UPDATE   VERSION
STATUS
    ---------  ----  -  -  ----------  -----------------
------------------
    OAM-RMV    1113  -  -      -           -        -          -
    TDM-CRNT   1114  Y  N  148913      12-10-09 04:47:40  ZZZ-ZZZ-
ZZZ  NORMAL
    TDM-BKUP   1114  Y  -  148913      12-10-09 04:47:40  ZZZ-ZZZ-
ZZZ  NORMAL
    OAM-RMV    1115  -  -      -           -        -          -
    OAM-USB    1115  -  -      -           -        -          -
    TDM-CRNT   1116  Y  N  148913      12-10-09 04:47:40  ZZZ-ZZZ-
ZZZ  NORMAL
    TDM-BKUP   1116  Y  -  148913      12-10-09 04:47:40  ZZZ-ZZZ-
ZZZ  NORMAL

    INACTIVE PARTITION GROUP
    CARD/APPL  LOC   C  T  LEVEL       TIME LAST UPDATE   VERSION
STATUS
    ---------  ----  -  -  ----------  -----------------
------------------
    TDM-CRNT   1114  Y  -  1           00-00-00 00:00:00  XXX-XXX-
XXX  NORMAL
    TDM-BKUP   1114  Y  -  1           00-00-00 00:00:00  XXX-XXX-
XXX  NORMAL
    TDM-CRNT   1116  Y  -  1           00-00-00 00:00:00  XXX-XXX-
XXX  NORMAL
    TDM-BKUP   1116  Y  -  1           00-00-00 00:00:00  XXX-XXX-
XXX  NORMAL

;
```

All steps in this procedure were completed.

Table Capacity Status

The following procedure is for data collection only. It does not have any pass fail criteria and does not include command response output.
This procedure collects the current capacity of certain database tables. Upon analysis of the health check data capture, it is the goal of this procedural to identify if table capacity is approaching any limitation prior to any impact on the EAGLE's performance.

1. Issue the following command.

   ```
   rtrv-ls
   ```

2. Issue the following command.

   ```
   rtrv-tbl-capacity
   ```

3. Issue the following command.

   ```
   rept-stat-sys
   ```

4. If EGTT feature is on, go to Step 6. If GTT feature is on (refer to Health Check Preparation, Step 6), issue the following command. Otherwise, go to the end of this procedure.

   ```
   rtrv-tt
   ```

5. Issue the following command.

   ```
   rtrv-gtt:type=XX
   ```
   (Where XX is any Type displayed in step 4)

6. If any LNP feature is on, issue the following command.

   ```
   rtrv-lnp-serv
   ```

7. Issue the following command.

   ```
   rtrv-cspc
   ```

8. Issue the following command.

   ```
   rtrv-npp-srs
   ```

Health Check Conclusion

This procedure returns the EAGLE to the configuration prior to the start of this health check.

1. Issue the command to changes the user's terminal output group configuration.

   ```
   chg-trm:trm=P:YYY=yes,ZZZ=no
   ```
   (ZZZ is another output group that was recorded in Health Check Preparation, Step 2.)

   (YYY is an output group that was recorded in Health Check Preparation, Step 2.)

   (Where P is the location of the printer terminal recorded in Health Check Preparation Step 2.)

   Response to change terminal command is displayed.

   ```
       eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP  XX.x.x-YY.y.y
       chg-trm:trm=P:YYY=yes,ZZZ=no
       Command entered at terminal #X.
   ;

       eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP  XX.x.x-YY.y.y
       CHG-TRM: MASP A - COMPLTD
   ;
   ```

2. Issue the command to changes the user's terminal output group configuration.

`chg-trm:trm=X:YYY=yes,ZZZ=no:TMOUT=TTT`
(Where X is the location of the user's terminal recorded in Health Check Preparation, Step 2.)

(YYY is an output group that was recorded in Health Check Preparation, Step 2.)

(ZZZ is another output group that was recorded in Health Check Preparation, Step 2.)

(TTT is the timeout value that was recorded in Health Check Preparation, Step 2.)

Response to change terminal command is displayed.

```
    eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP  XX.x.x-YY.y.y
    chg-trm:trm=X:YYY=yes,ZZZ=no
    Command entered at terminal #X.
;

    eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP  XX.x.x-YY.y.y
    CHG-TRM: MASP A - COMPLTD
;
```

3. Issue the command to cancel capture.

`canc-echo:trm=P`
(Where P is a terminal port that was recorded in Health Check Preparation, Step 2.)

Response to cancel command is displayed.

```
eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP  XX.x.x-YY.y.y
    canc-echo:trm=P
    Command entered at terminal #X.
;

    eaglestp 98-03-09 08:29:26 EST Rel XX.X.X-YY.Y.Y
    Scroll Area Output echo disabled for terminal X.
;
```

All steps in this procedure were completed.

4
Completion of Health Check

When the System Health Check has been completed, record all procedures completed, data along with the date into Health Check Record. Contact your local Oracle Global Customer Support Center if any failed procedures. Be prepared to identify your Release level, which procedures failed, and at what point each procedure failed.