Oracle® Communications
EAGLE Software Upgrade Guide

Release 46.9

F34060-03

November 2020

ORACLE®

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F34060-03

Contents

6   Recovery Procedures

A   Upgrading Flash-Based GPL on Non-In-Service and Unprovisioned Network Cards

B   Preparations For Upgrade Execution

C   Entering Upgrade Software Access Key

D   Supplemental Information For Procedure 8, Step 2

E   EEDB Installation

F   Upgrading Source Release 46.5.1.10.0 to Target Release 46.5.1.20.0 (46.9.1.20.0)

G   Customer Sign Off

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.

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  Oracle University offers training for service providers and enterprises.

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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.

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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 methods utilized and procedures executed to perform a software upgrade on any in-service EAGLE-based STP to EAGLE Software Release 45.0, 45.1, 46.0, 46.1, 46.2, 46.3, 46.5, or 46.6 as well as any future maintenance releases. The audience for this document includes Oracle customers as well as these Oracle CommunicationsEAGLE groups: Software Development, Product Verification, Technical Communications, and Customer Service including the Upgrade Center and New Product Engineering. This document provides step-by-step instructions to execute any upgrade to Release 45.0 and beyond.

See appropriate upgrade kit instructions/references for the software upgrade of peripheral equipment.

References

External

1. *EAGLE 45.0 and above Health Check Procedure*, E54339, latest revision
2. *EAGLE 46.8 Maintenance Manual*, F11910, latest revision
3. *EAGLE 46.8 Database Administration – System Management*, F11885, latest revision

Internal

The following are references internal to Oracle. They are provided here to capture the source material used to create this document. Internal references are only available to Oracle personnel.

1. *EAGLE Hardware Field Baseline*, CGBU_ENG_24_1893, latest revision, Tekelec
2. *TEKELEC Acronym Guide*, CGBU_ENG_24_1732, current revision
3. Tekelec Eagle - Eng Release Mapping web page, , http://devtools.nc.tekelec.com/cgi-bin/eng_eag.cgi, Tekelec
4. Tekelec CSR-PR Reports By Build, http://devtools.nc.tekelec.com/cgi-bin/release_desc.cgi
5. Tekelec Tekpedia web page, http://tekpedia.ssz.tekelec.com/tekpedia/index.php/Methods_to_correct_distributed_network_database_(DDB)_inconsistencies, Tekelec
6. *EAGLE 45.0 Product Functional Specification* PF005994, latest version, GSS Product Management
7. *EAGLE 45.1 Product Functional Specification* PF006147, latest version, GSS Product Management

8. *EAGLE 46.0 Product Functional Specification* PF006165, latest version, GSS Product Management

9. *EAGLE 46.6 Product Functional Specification* CGBU_025773, latest version, GSS Product Management

Software Release Numbering

To determine the correct GPL version numbers for the EAGLE® applications, refer to the appropriate internal release-mapping web tool or to the *Release Notice* located on **My Oracle Support** web portal. Appendix G describes how to access **My Oracle Support** web portal. For FOA releases or Engineering prototype releases, refer to internal references [6] in section 1.2.2.

> **Note:**
>
> Verifying the correct GPL versions ensures that the system is being upgraded to the correct target software release.

Database Version Number

To determine the correct database version numbers for the EAGLE® release, refer to the appropriate internal release-mapping web tool. Appendix G describes how to access **My Oracle Support** web portal. For FOA releases or Engineering prototype releases, refer to internal references [6] in section 1.2.2.

Acronyms and Terminology

Table 1-1   Acronyms

Acronym	Definition
AWA	Alternate Work Area
DDB	Dynamic Database
DDL	Dynamic Data Load
E5-MDAL	EAGLE Maintenance Disk and Alarm Card
E5-OAM	EAGLE Operation, Admission, & Maintenance
FAK	Feature Access Key
FOA	First Office Application
GA	General Availability
GLS	Generic Loading Service
GPL	Generic Program Load
GPSM	Legacy General Purpose Service Module
IMT	Interprocessor Message Transport
IS-NR	In Service - Normal
IS-ANR	In Service - Abnormal
KSR	Keyboard Send & Receive
LA	Limited Availability

Table 1-1   (Cont.) Acronyms

Acronym	Definition
LIM	Link Interface Module
LNP	Local Number Portability
LSMS	Local Service Management System
MCPM	Measurement Collection and Polling Module
MPS	Multi Purpose Server
MSD	Media Software Delivery
OAM	Operations Administration and Maintenance
OAP	Operations, Administration and Maintenance Applications Processor
OOS-MT	Out Of Service - Maintenance
RMD	Removable Media Drive/Disk such as USB
SAK	Software Access Key
SATA	Serial ATA
SEAS	Signaling Engineering and Administration System
SLIC	Service and Link Interface Card
SSD	Server Software Delivery
STP	Signal Transfer Point
TDM	Terminal Disk Module
TPS	Transactions Per Second (feature)
UHC	Upgrade Health Check

Table 1-2   Terminology

Terminology	Definition
Backout (abort)	The process to take a system back to a Source Release prior to completion of upgrade and commitment to Target release. Includes restoration of source databases and system configuration.
DDay	Date of the start of the maintenance window of the upgrade execution.
E5-OAM system	An EAGLE running with E5-MCAP & E5-MDAL cards for front-end hardware.
Fixed disk based upgrade	An upgrade that uses the inactive partitions of the fixed disks as the workspaces to covert the data. With 9Gb and bigger hard drives, this is the expected method.
HHour	Hour at which the system enters upgrade phase 0 during upgrade execution.
Incremental upgrade	**EAGLE:** Upgrade to a maintenance release (external customers) or upgrade to a new build (internal test labs).
Intra-release upgrade	Any upgrade within a release; this includes incremental as well as full function upgrades where only the minor database version changes. Note: Intra-release upgrades are not covered by this document.
Intrusive Operation	Operation that impacts the redundancy of the system by isolation of the duplicate component.

Table 1-2   (Cont.) Terminology

Terminology	Definition
Legacy system	An EAGLE running with GPSMII, TDM, & MDAL cards for front-end hardware.
	This hardware is obsolete beginning in Release 45.0.
Non-intrusive Operation	Operation that collects data and does not impact the redundancy of the system.
Non-preserving upgrade	"Upgrade" that does not adhere to the standard goals of software upgrade methodology. The outcome of the execution is that the system is running on the Target Release; however the Source Release database was **not** preserved.
Rollback	The process to take a system from a Target Release back to a Source Release including preservation of databases and system configuration.
Session 0	This is a new set of tasks required in the Upgrade Health Check #2 timeframe. The work needs to be accomplished successfully prior to the execution of the upgrade.
Source release	Software release from which the system is upgraded.
Target release	Software release to which the system is upgraded.
Upgrade Media	The USB thumb drives for E5-MCAP systems

Table 1-3   Generic VS. E5-OAM Terminology

Generic Term	E5-OAM Term
Drive Slot	Thumb Drive on the E5-MCAP
Fixed Disk	Sata Drive
MASP	E5-MCAP
Removable media	Removable media
RMD	USB Thumb Drive
Upgrade media	USB Thumb Drive

Recommendations

1. It is recommended that command input and command-line/scroll-area output be captured during the execution of an upgrade. The preferred method is the use of two serial terminals; one used to enter commands and to echo to the second, which is set to capture all output except for traffic-related unsolicited messages. These terminals should be configured as KSR type. Another acceptable method is the use of one serial terminal, which has a terminal-emulation application that supports input/output capture. This terminal should be set to the KSR type. It is unacceptable to use a telnet terminal since it does not support the echo capability. Serial terminals are designated ports 1 – 16 and telnet terminal are designed ports 17 and above.

2. It is recommended that measurement collection be retrieved prior to upgrade execution because, if the MCPM or Intergrated Measurements features are not enabled, the data collected will not be persistent across the upgrade. Inhibiting measurements does NOT stop collection that is already in progress. OAM-based measurements are inhibited on the next cycle. It is recommended that time

should be given to allow the current cycle to complete. Those procedures that inhibit measurements manually contain steps to ensure that current collection is complete.

3. It is recommended that the OAP terminals be turned down for SEAS-enabled systems and others with high OAP traffic. If OAP terminals are not inhibited, any database updates successfully entered during the period between the last database backup and Upgrade Phase 0 are lost if it becomes necessary to fall back to the source release using the spare E5-MASP.

4. It is recommended that the Measurements Platform NOT be shut down and the Measurement Collection and Polling Module (MCPM) cards NOT be inhibited.

5. It is recommended to issue the command in Procedure 8, Step 1 with the threshold type assigned to SET (Card Set network conversion method.) In addition, it is recommended that the card sets be created with the number of service card sets assigned to 2 and the number of link card sets to 4. The following command is issued in Procedure 8, Step 1:
```
ACT-UPGRADE:ACTION=CONVERTSTP:SRC=FIXED
```

Based on a system's configuration and customer objectives, the SRVSETS and LIMSETS parameters of the CHG-UPGRADE-CONFIG comand may be adjusted. Refer to Appendix B.2for the procedure to configure the Card Set network conversion method. If the network conversion phase of the upgrade is pushing the execution of the upgrade outside the maintenance window the configuration can be altered to reduce the execution time. Please go to Appendix G to contact support to determine the recommended course of action.

6. Although an IP telnet terminal may be configured, the terminal is not recommended for use in the upgrade process because it does not support echo and capture mode. Any application connected via a Telnet session through an IPSM card, should be configured for interruption during the upgrade. That application's configuration procedure needs to be provided by the application's manufacturer.

7. The following commands obtain the current system status. It is recommended that the following commands be run in order to obtain the current system status in the following situations: 1) prior to and completion of executing the upgrade, 2) the upgrade terminates prior to successful completion and 3) before re-starting the upgrade. The commands should be issued in addition to the diagnosis of the any terminating condition. This status is not complete and inclusive, additional commands, which are deemed relevant, can be run at that time.

```
REPT-STAT-SYS
REPT-STAT-GPL:DISPLAY=ALL
REPT-STAT-CARD
REPT-STAT-SLK
REPT-STAT-TRBL
RTRV-TRBL:NUM=25:LOC=<1113|1115>
RTRV-STP
ACT-UPGRADE:ACTION=DBSTATUS
```

2
General Description

This document defines the step-by-step actions performed to execute a software upgrade of an in-service EAGLE® STP from the source release to the target release.

The following figure shows the general steps for all processes of performing a software upgrade from hardware inventory to final upgrade health check.

Figure 2-1   Upgrade Process
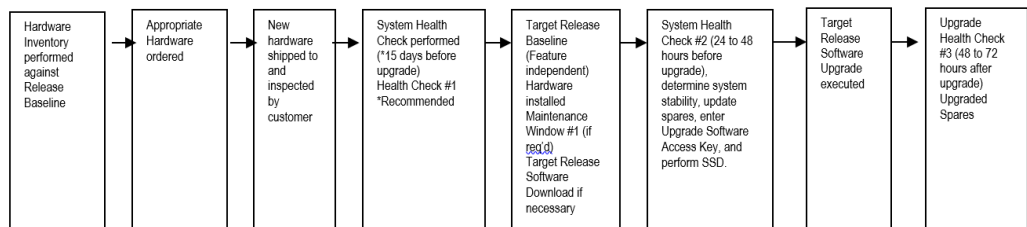
The following table lists the steps required to successfully complete the upgrade process.

Table 2-1   Upgrade Tasks to be Completed

Upgrade Process Task	Date completed	Reference
Hardware Inventory		
Hardware Ordered		
New Hardware received		
System Health Check #1 performed.		[1]
System Health Check #1 output verified		
Target Release Baseline Hardware installed		
Target Software Release download (via Electronic Software Distribution or Upgrade Media).		[Appendix B.1.]
System Health Check #2 performed.		[1]
Enter Upgrade Software Access Key		[Appendix C]
Configure Network Conversion Method.		[Appendix B.2]
System Health Check #2 verified		

Table 2-1   (Cont.) Upgrade Tasks to be Completed

Upgrade Process Task	Date completed	Reference
Software Upgrade Session 1 completed		
Health Check #3 performed.		[1]
Software Upgrade Session 2 completed		

During the software upgrade execution, phase flags are displayed in the output messages to indicate upgrade progress. The output messages shown in this document are for example purposes only and do not display upgrade phase values unless a specific request to verify the phase is given, i.e., Procedure 6, step 15. The goal in doing this is to make this document describe the generic upgrade procedure.

The following table lists the phase flags displayed during the upgrade process. These flags are used to indicate the progress made by the upgrade function. The internal upgrade processing, which is initiated by the activate-upgrade command, controls these flags.

Table 2-2   Phases of Upgrade Execution

Release Displayed	Phase Indicator[1]	Conversion	Software Running	Database Configuration
Source			Source	Source
Source	Phase 0	Database	Target	Source
Target	Phase 2	Database	Target	Target
Target	Phase 3	Network	Target	Target
Target			Target	Target

3

Upgrade Overview

This section provides a brief overview of the recommended method for upgrading the source release software that is installed and running on an EAGLE® STP to the Target Release software. The basic upgrade process and approximate time frame is outlined in Table 6. Upgrade Readiness Activities, Table 7. Pre-Upgrade Execution Activities, Table 8. Upgrade Execution Overview and Table 9. Post Upgrade Overview with the backout procedure shown in Table 10. Backout Procedure Overview.

It is assumed that upgrade of peripheral(s) is coordinated with and executed in parallel with the EAGLE upgrade to ensure that all work is performed within the maintenance window. Note that several variables affect the upgrade times shown in the tables – the timing values shown are estimates only.

The EAGLE has no known restriction that would prevent the upgrading of any peripheral in parallel with it.

Required Materials

1. One (1) source release system removable media.
2. One (1) target-release upgrade media for MSD or FTP server for remote download.
3. A valid EAGLE login ID and password with all user privileges enabled.
4. One (1) spare fixed disk at the source release: required in the event of recovery.
5. Capability to capture data via a printer, PC, or modem to allow remote access for **My Oracle Support** personnel.
6. List of GPLs from section 1.3 should be kept on hand for reference throughout the upgrade or refer to Appendix G to locate the Release Notice on **My Oracle Support** web portal.
7. The Software Access Key (SAK) must be available and entered (this activity should be done during the same maintenance window as the upgrade health check #2.)

Upgrade Preparation Overview

The activities listed in the table below need to be accomplished successfully prior to the maintenance window in which the upgrade is to be executed in. A day is equivalent to the period of time between scheduled maintenance windows.

Table 3-1   Upgrade Readiness Activities

Session / Phase	Time Frame	Activity	Impact
UHC #1	Dday – 7	Upgrade Health Check # 1	Non-intrusive

Table 3-1   (Cont.) Upgrade Readiness Activities

Session / Phase	Time Frame	Activity	Impact
Session 0	Dday – 2	Target Release Software Download	Intrusive (format-disk, OAM boot)
UHC #2	Dday – 2	Upgrade Health Check # 2	Intrusive (H/W swap, IMT bus)
Session 0	Dday – 2	Configure Card-Set Network Conversion Method	Non-intrusive
Session 0	Dday – 2	Entering Upgrade Software Access Key	Non-intrusive

Pre-Upgrade Overview

The pre-upgrade procedures, shown in the table below, may be optionally executed prior to entering the maintenance window. All of these activities are completed during Session 1.

Table 3-2   Pre-Upgrade Execution Activities

Session / Phase	Time Frame	Activity	Impact
Pre-Phase 0	Hhour – 2	Verify Pre-Upgrade Requirements and Capturing Upgrade Data	Non-intrusive
Pre-Phase 0	Hhour – 2	Retrieve System's Node-Level Processing Option Indicators	Non-intrusive
Pre-Phase 0	Hhour – 2	Backing Up the Database	Non-intrusive
Pre-Phase 0	Hhour – 1	Updating the Source Release Spare E5-MASP	Non-intrusive
Pre-Phase 0	Hhour – 1	Verifying All Database	Non-intrusive
Pre-Phase 0	Hhour	Inserting Target Release System Removable Media.	Non-intrusive

Upgrade Execution Overview

The procedures shown in the table below are executed in the maintenance window.

Table 3-3   Upgrade Execution Overview

Session / Phase	Time Frame	Activity	Impact
Pre-Phase 0	Hhour	Retrieve measurements data reports	Non-intrusive
Phase 0	Hhour	Initializing Front-End to Run in the Target Release.	Intrusive
Phase 0	Hhour	Verifying all Databases	Non-intrusive
Phase 0 & 2	Hhour	OAM Conversion	Intrusive
Phase 3	Hhour	Network Conversion	Intrusive

The procedures, shown in the table below are executed in the maintenance window.

Table 3-4   Post Upgrade Overview

Session / Phase	Time Frame	Activity	Impact
Phase 3	Hhour + 3	Completing Upgrade/ Return to Full Function Mode.	Non-intrusive
Post-upgrade	Hhour + 3	Backing Up Converted Database	Non-intrusive
Session 2	Dday + 2	Upgrading Removable Media	Non-intrusive
Session 2	Dday + 2	Backing Up Fixed Disk	Non-intrusive
Session 2	Dday + 2	Upgrade Spare Fixed Disk.	Intrusive
Session 2	Dday + 2	Verifying All Databases.	Non-intrusive

Backout Procedure Overview

The procedures shown in the table below are executed in the maintenance window.

Table 3-5   Backout Procedure Overview

Session / Phase	Time Frame	Activity	Impact
Phase 0 - 3	Hhour	Load and Run Source OAM	Non-intrusive

Table 3-5   (Cont.) Backout Procedure Overview

Session / Phase	Time Frame	Activity	Impact
Phase 0 - 3	Hhour	Full fallback using Fixed Disk as OAM conversion workspace – Case 1 Or	Intrusive
		Full fallback using Fixed Disk as OAM conversion workspace – Case 2	
		Or	
		Full fallback using Fixed Disk as OAM conversion workspace – Case 3	
Phase 0 - 3	Hhour	Network Conversion to Source Release	Intrusive

4

Upgrade Preparation

- Perform hardware inventory to identify any hardware not supported by the target release baseline.
- Bring all non-supported hardware up to baseline (to be coordinated with **My Oracle Support** personnel).
- Perform pre-upgrade system health checks to establish that the system is fit to upgrade.
- Download target release software if necessary (E5-MASP) or capability available.
- Configure network conversion to use Card-Set method.
- Enter upgrade Software Access Key (SAK).

Hardware Upgrade Preparation

Before the upgrade execution, the customer site should have three source-release fixed drives (E5-TDMs \ Sata fixed drives) and at least one source-release removable media (two if using SSD). If MSD, a target-release upgrade media drive (USB drives for E5-MASP systems) must be created as outlined in appendix B1 before the upgrade. Before the target release installation, the spare equipment inventory should be as shown in Table 11 and Table 12.

Table 4-1   Equipment Inventory Before Upgrade If Media Software Delivery (MSD)

Equipment	In-service	Spare	Upgrade	Totals:
Source-release fixed drives	2	1	0	3
Source-release removable media	1	0	0	1
Target-release fixed drives	0	0	0	0
Target-release upgrade media	0	0	1	1

Table 4-2   Equipment Inventory Before Upgrade If Server Software Delivery (SSD)

Equipment	In-service	Spare	Upgrade	Totals:
Source-release fixed drives	2	1	0	3
Source-release removable media	2	0	0	2
Target-release fixed drives	0	0	0	0

Table 4-2   (Cont.) Equipment Inventory Before Upgrade If Server Software Delivery (SSD)

Equipment	In-service	Spare	Upgrade	Totals:
Target-release upgrade media	0	0	0	0

During the procedure, both the active and standby in-service source-release E5-TDMs are converted to the target release and the spare is reserved in case a fallback to the source release is required. Upon completion of the procedure, the spare equipment should be as shown in the tables below.

> **Note:**
>
> The spare E5-TDM and source-release RMDs are upgraded to the target release in the second session. This allows a soak period for the target release and the possibility to fallback to the source release.

Table 4-3   Spare Equipment After Upgrade If Media Software Delivery (MSD)

Equipment	In-service	Spare	Upgrade	Totals:
Source-release fixed drives	0	0	1	1
Source-release removable media	0	0	1	1
Target-release fixed drives	2	0	0	2
Target-release upgrade media	1	0	0	1

Table 4-4   Spare Equipment After Upgrade If Server Software Delivery (SSD)

Equipment	In-service	Spare	Upgrade	Totals:
Source-release fixed drives	0	0	1	1
Source-release removable media	0	0	1	1
Target-release fixed drives	2	0	0	2
Target-release upgrade media	1	0	0	1

Software Upgrade Preparation

In releases 45.x and 46.0, it is necessary for the customer to obtain a Software access Key (SAK) from Oracle to perform the upgrade; the SAK should be entered during System Health Check #2 (see Appendix C). The SAK is used in the validation of the target release software. In release 46.1 and higher, it is not neccessay for the

customer to obtain a SAK. Also, the target release software needs to be loaded onto the inactive partition of the E5-TDMs (see Appendix B). The release can either be downloaded from the E5-MASP upgrade media (USB drive) or via an FTP server. In order to utilize this software download capability via an FTP server, the EAGLE must have an IPSM Card installed in the system. See General Description section for general steps and timeline associated with the upgrade process.

5

Software Upgrade Procedure

Call the Oracle support hotlines [see Appendix G] prior to executing this upgrade to ensure that the proper media are available for use.

Before upgrade, users must perform the EAGLE system health check [1]. This check ensures that the system to be upgraded is in an upgrade-ready state. Performing the system health check determines which alarms are present in the system and if upgrade can proceed with these alarms.

> ⚠ **WARNING:**
>
> If there are cards in the system, which are not in IS-NR state, these cards should be brought to the IS-NR before the upgrade process is started. If it is not possible to bring the cards IS-NR, contact My Oracle Support [see Appendix G].If any card cannot be brought in-service, the card should be inhibited after entering Phase 2 (during procedure 8). If any GLS card is in OOS-MT or IS-ANR state, none of the SCCP or LIM cards will load. The sequence of upgrade is such that cards providing support services to other cards will be upgraded first.

> ⚠ **WARNING:**
>
> Do not start the upgrade process without the required spare equipment; without spare equipment, recovery procedures cannot be executed!

Please read the following notes on upgrade procedures:

1. Procedure completion times shown here are estimates. Times may vary due to differences in database size, user experience, and user preparation.

2. Command steps that require user entry are indicated with white-on-black step numbers.

3. The shaded area within response steps must be verified in order to successfully complete that step.

4. Where possible, EXACT command response outputs are shown. EXCEPTIONS are as follows:

   • Banner information is displayed in a format form only.

   • System-specific configuration information such as **card location**, **terminal port # assignments,** and **system features.**

   • ANY information marked with "XXXX" or "YYYY." Where appropriate, instructions are provided to determine what output should be expected in place of "XXXX or YYYY"

5. After completing each step and at each point where data is recorded from the screen, a check box should be provided.

6. Captured data is required for future support reference.

7. Each procedural step is numbered chronologically within each procedure.

Software Upgrade Execution – Session 1

Verifying Pre-Upgrade Requirements and Capturing Upgrade Data

This procedure verifies that all pre-upgrade requirements have been met.
Should THIS PROCEDURE FAIL, Contact the Oracle support hotlines [see My Oracle Support (MOS)] AND **ASK FOR UPGRADE ASSISTANCE.**

1. Complete pre-upgrade tasks

   All of the following tasks must be completed before continuing.

   • Perform hardware inventory.

   • Verify that all target-release baseline hardware has been installed. And any obsolete hardware has been replaced.

   • Verify that a full complement of EAGLE® spares is available, including a source-release fixed disk.

   > **Note:**
   >
   > This fixed disk's database should have been repaired in Upgrade Health Check [1].

   • Verify that you have at least one source-release RMD with an up-to-date database.

   > **Note:**
   >
   > This drive's database should have been backed up in Upgrade Health Check [1].

   • Verify that you have one target-release upgrade media drives provided by Oracle for upgrade **Or** Target-Release software has been downloaded to the inactive disk partitions (see section 4.2).

   • Verify that you have a copy of the Target Release's System Release Notes (see section 1.3.)

   • Verify that an EAGLE system health check has been performed and the output capture file has been validated by My Oracle Support.

   • Perform upgrade time calculations to ensure that the upgrade can be completed within the window.

   • Collect all measurement reports.

   • Verify that all required documentation is included in the upgrade kit. [See section 4.2].

2. Issue the command to display terminal status.

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

3. Record the terminals in the TRM column that have TYPE of PRINTER[1]. Also record the terminal being used to enter commands (the user terminal)[2] Or terminals used by external applications that issue commands to the EAGLE.

In this example, terminal 12 is a printer, terminal 10 is the user terminal, and terminal 2 is KSR.
Capture _____

USER _____

Ext. Application: _____

See recommendation #1 & #6 in section 1.6

If **not** echoing to the printer or KSR, go to step 8.

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

```
eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x.x.x-YY.y.y
rtrv-trm
Command entered at terminal #10.
;
eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x.x.x-YY.y.y
TRM  TYPE    COMM         FC    TMOUT MXINV DURAL
1    OAP     19200 -7-E-1 SW    30    5      00:01:00
2    KSR     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    OAP     19200 -7-E-1 SW     30    5      00:01:00
10   KSR      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  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 YES YES
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
;


USER      ___   ___   ___ ___ ___ ___
TMOUT  ___
CAP       ___   ___   ___ ___ ___ ___
```

5. Echo command input to capture terminal. If the capture terminal is the user terminal go to step 7.

   `act-echo:trm=P`
   (Where the value for `P` is one of the printer/KSR terminal port numbers recorded in step 3)

   Response to activate command is displayed.

   ```
   eaglestp YY-MM-DD hh:mm:ss TTTT PPP   XX.x.x.x.x-YY.y.y
   act-echo:trm=P
   Command entered at terminal #10.
   ```

6. If capture terminal's output groups are not all set to YES, issue the change terminal command.

   `chg-trm:trm=P:all=yes`
   (`P` is the terminal port that is specified in step 5)

   Response to change terminal command is displayed.

   ```
   eaglestp YY-MM-DD hh:mm:ss TTTT PPP   XX.x.x.x.x-YY.y.y
   chg-trm:trm=P:all=yes
   Command entered at terminal #10.
   ```

7. If the output group and timeout on the user terminal are not set correctly, issue the command to change terminal timeout and display groups.

   `chg-trm:trm=USER:all=no:sa=yes:sys=yes:db=yes:dbg:yes:tmout=0`
   (Where the value of `USER` is the user terminal number shown in Step 2)

   Response to change terminal command is displayed.

   ```
   eaglestp YY-MM-DD hh:mm:ss TTTT PPP   XX.x.x.x.x-YY.y.y
   chg-trm:trm=USER:sa=yes:sys=yes:db=yes:dbg:yes:tmout=0
   Command entered at terminal #10.
   ```

8. Issue the command to display the system features

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

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

9. Issue the command to display the FAK features.

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

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

   The following features have been permanently enabled:

   ```
   Feature Name            Partnum    Status Quantity
   FEATURE_A               XXXXXXXXX on      ----
   FEATURE_B               XXXXXXXXX on      nn
   ```

   The following features have been temporarily enabled:

   ```
   Feature Name        Partnum    Status Quantity   Trial Period Left
   Zero entries found.
   ```

   The following features have expired temporary keys:

   ```
   Feature Name        Partnum
   Zero entries found.
   ```

10. Issue the command to display the system serial number.

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

    Record the system serial number as shown:

    SN: _____

    Additionally, record in Appendix E.

11. Verify the serial number is locked.

    `rtrv-serial-num`

    ```
    Command entered at terminal #4.
    ```

```
;
eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x.x.x-YY.y.y
System serial number = nt00009999

System serial number is locked.
```

12. Issue the command to retrieve records from the event log.

```
rtrv-
log:dir=bkwd:edate=YYMMDD:etime=HHMMSS:snum=XXXX:enum=YYYY:nu
m=NNN
```
(Where *YYMMDD* is today's date and *HHMMSS* is one hour ago.)

(Where *XXXX*, *YYYY*, and *NNN* are the values listed in Table 16.)

Response to retrieve command is displayed.

Determine if the report termination reason meets the pass/fail criteria in Table 17.

```
eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x.x.x-YY.y.y
Card 1113; SYS REL= 35.1.0-56.31.0; STP CLLI=  tklc1190601;
Timezone= EST

****06-09-19  10:49:46****
1426.0311    DPC    012-095-015       DPC is allowed
****06-09-19  10:49:45****
1424.0314    DPC    012-095-015       Route is allowed
****06-09-19  10:46:33****
0667.0312  * DPC    012-095-015       DPC is restricted
****06-09-19  10:46:33****
0665.0312  * DPC    012-095-015       DPC is restricted
****06-09-19  10:32:19****
3100.0311    DPC    012-079-001       DPC is allowed
****06-09-19  10:32:18****
3098.0314    DPC    012-079-001       Route is allowed
****06-09-19  10:30:41****
2828.0312  * DPC    012-079-001       DPC is restricted
****06-09-19  10:30:41****
2827.0316    DPC    012-079-001       Route is prohibited
****06-09-19  10:30:41****
2825.0312  * DPC    012-086-004       DPC is restricted
UAM Report terminated - max. or num= count reached
END OF LOG REPORT.
```

13. Repeat steps 12 for all sets of UAMs listed in the following table:

Table 5-1   DDL-Hunt-related UAM ranges

SNUM	ENUM	NUM	UAM Text*
Start UAM	*End UAM*	*Maximum Events*	
200	200	15	RCVRY-LFK: link available
236	236	15	REPT-LFK: not aligned

Table 5-1   (Cont.) DDL-Hunt-related UAM ranges

SNUM	ENUM	NUM	UAM Text*

264	275	50	`REPT-LINK-CGST:congestion level X to Y`
			`RCVRY-LINK-CGST:congestion has cleared`
			`REPT-LINK-CGST:discard level X to Y`
			`RVCRY-LINK-CGST:discard has cleared`

311	313	50	`DPC is prohibited`
			`DPC is restricted`
			`DPC is allowed`

314	316	50	`Route is prohibited`
			`Route is restricted`
			`Route is allowed`

Table 5-2   Retrieve Log Termination Pass/Fail Criteria

Termination Reason	Pass/Fail	Comment
no records found within specified range	Pass	
X records displayed (where X is less then NUM.)	Pass	
max. or num= count reached	Further Analysis Required	See Determination and Recovery of DDL Hunt during Upgrade

Backing Up the Database

This procedure backs up the active current database to the fixed disk and the removable media. This procedure is required to retain changes made by this upgrade process and match the distributed network database.

Should THIS PROCEDURE FAIL, CONTACT My Oracle Support (MOS) AND **ASK FOR <u>UPGRADE ASSISTANCE</u>.**

1. Issue the command to display database status.

   ```
   rept-stat-db
   ```
   Response from the command is displayed.

   Look in the columns labeled `C` and `LEVEL` output by this command.

   Verify entries in column `C` show `Y` which indicates coherence.

   Verify both `FD CRNT` Levels are equal.

   ```
           eaglestp YY-MM-DD hh:mm:ss TTTT PPP 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    XXXX YY-MM-DD HH:MM:SS TTTT Y    XXXX YY-MM-
DD HH:MM:SS TTTT
       FD CRNT Y    XXXX                           Y
XXXX
              MCAP 1113                          MCAP 1115
              - --------                         - --------
       RD BKUP Y    XXXX YY-MM-DD HH:MM:SS TTTT Y    XXXX YY-MM-
DD HH:MM:SS TTTT
       USB BKP -    -        -         -         -    -
-        -
```

2. Issue the command to back up the database.

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

   Command execution time: approximately 4 – 20 minutes, longer for large databases.

```
eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x.x.x-YY.y.y
       5042.1114    CARD 1115    Database BACKUP started
                    Report Date:YY-MM-DD  Time:hh:mm:ss
    ;
       eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x.x.x-YY.y.y
       BACKUP (FIXED): MASP B - Backup starts on active MASP.
    ;
       eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x.x.x-YY.y.y
       BACKUP (FIXED): MASP B - Backup on active MASP to fixed
disk complete.
    ;
       eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x.x.x-YY.y.y
       BACKUP (FIXED): MASP B - Backup starts on standby MASP.
    ;
       eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x.x.x-YY.y.y
       5045.1116    CARD 1115    Database action ended - OK
                    Report Date:YY-MM-DD  Time:hh:mm:ss
    ;
       eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x.x.x-YY.y.y
       BACKUP (FIXED): MASP B - Backup on standby MASP to fixed
disk complete.
    ;
```

3. Insert the RMD containing the source release into the drive slot. Wait for the RMD to be detected by the system

4. Issue the Change-Database command to back up the database to RMD.

   `chg-db:action=backup:dest=remove`

Response to backup command is displayed.

```
eaglestp YY-MM-DD hh:mm:ss TTTT PPP   XX.x.x.x.x-YY.y.y
        chg-db:action=backup:dest=remove
        Command entered at terminal #10.
    ;

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

        eaglestp YY-MM-DD hh:mm:ss TTTT PPP   XX.x.x.x.x-YY.y.y
        BACKUP (REMOVABLE): MASP A - Backup to removable device
complete
```

5. Issue the command to copy the GPLs to RMD.

   ```
   copy-gpl
   ```
   Response to copy command is displayed.

   ```
     eaglestp YY-MM-DD hh:mm:ss TTTT PPP   XX.x.x.x.x-YY.y.y
        copy-gpl
        Command entered at terminal #10.
    ;
        eaglestp YY-MM-DD hh:mm:ss TTTT PPP   XX.x.x.x.x-YY.y.y
        COPY GPL: MASP A - COPY STARTS ON ACTIVE MASP
        COPY GPL: MASP A - COPY TO REMOVABLE CARTRIDGE COMPLETE
   ```

6. Issue the command to report database status.

   ```
   rept-stat-db
   ```
   Response to database status command is displayed.

   Check that all DB levels are the same.

   ```
eaglestp YY-MM-DD hh:mm:ss EST PPP 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      XXX YY-MM-DD hh:mm:ss TTTT Y      XXX YY-MM-
DD hh:mm:ss TTTT
        FD CRNT Y      XXX                            Y      XXX
                MCAP 1113                           MCAP 1115
                - --------                           - --------
        RD BKUP -      -     -        -        Y      XXX YY-MM-
DD hh:mm:ss TTTT
        USB BKP -      -     -        -        -
-        -       -
   ```

7. Issue the command to display GPL status.

   ```
   rtrv-gpl
   ```
   Response from the retrieve command is displayed.

Verify that the GPL versions that are displayed in the RELEASE and REMOVE TRIAL columns are correct; see Software Release Numbering.

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


        GPL     CARD  RELEASE      APPROVED       TRIAL
REMOVE TRIAL
        GGGGGG1  1114  XXX-XXX-XXX  XXX-XXX-XXX    XXX-XXX-XXX
XXX-XXX-XXX
        GGGGGG1  1116  XXX-XXX-XXX  XXX-XXX-XXX    XXX-XXX-XXX
-----------
        GGGGGG1  1113  -----------  -----------    -----------
-----------
        GGGGGG2  1114  XXX-XXX-XXX  XXX-XXX-XXX    XXX-XXX-XXX
XXX-XXX-XXX
        GGGGGG2  1116  XXX-XXX-XXX  XXX-XXX-XXX    XXX-XXX-XXX
-----------
        GGGGGG2  1113  -----------  -----------    -----------
-----------
        GGGGGG3  1114  XXX-XXX-XXX  XXX-XXX-XXX    XXX-XXX-XXX
XXX-XXX-XXX
        GGGGGG3  1116  XXX-XXX-XXX  XXX-XXX-XXX    XXX-XXX-XXX
-----------
        GGGGGG3  1113  -----------  -----------    -----------
-----------
        OAMHC    1114  XXX-XXX-XXX  XXX-XXX-XXX    -----------
-----------
        OAMHC    1116  XXX-XXX-XXX  XXX-XXX-XXX    -----------
-----------
        OAMHC    1113  -----------  -----------    -----------
-----------
        GGGGGG4  1114  XXX-XXX-XXX  XXX-XXX-XXX    XXX-XXX-XXX
XXX-XXX-XXX
        GGGGGG4  1116  XXX-XXX-XXX  XXX-XXX-XXX    XXX-XXX-XXX
-----------
        GGGGGG4  1113  -----------  -----------    -----------
-----------
        GGGGGG5  1114  XXX-XXX-XXX  XXX-XXX-XXX    XXX-XXX-XXX
XXX-XXX-XXX
        GGGGGG5  1116  XXX-XXX-XXX  XXX-XXX-XXX    XXX-XXX-XXX
-----------
        GGGGGG5  1113  -----------  -----------    -----------
-----------
        GGGGGG6  1114  XXX-XXX-XXX  XXX-XXX-XXX    XXX-XXX-XXX
XXX-XXX-XXX
        GGGGGG6  1116  XXX-XXX-XXX  XXX-XXX-XXX    XXX-XXX-XXX
-----------
        GGGGGG6  1113  -----------  -----------    -----------
-----------
```

8. Remove the Source-Release RMD. Store the RMD in a safe location.

Updating the Source-Release Spare Fixed Disk

This procedure backs up the active current database to the spare fixed disk to ensure that a valid recovery spare is available.

Should THIS PROCEDURE FAIL, CONTACT My Oracle Support (MOS) AND **ASK FOR <u>UPGRADE ASSISTANCE</u>.**

1. Issue the report card status command.

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

   Record the card locations of both MASPs as well as the part number of the E5-MASP:

   ```
   Act E5-MASP _____


         p/n _____


         Stby E5-MASP _____
         p/n _____


   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. Place spare E5-MASP in system.

3. Record the part number for the spare E5-TDM:

   p/n _____

4. 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 E5-MASP card determined in step 1.

5. Insert the spare E5-MASP card. Slide the MASP H/S switch (SW3) on the new 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).

   > ✏ **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.

6. Issue the report status command for the standby MASP.

```
rept-stat-card:loc=xxxx:mode=full
```
(Where xxxx is the STBY MASP slot from step 1 above)

Verify that the backup goes to IS-NR

```
    eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x.x.x-YY.y.y
         CARD    VERSION      TYPE       GPL        PST
SST       AST
         xxxx   xxx-xxx-xxx  E5MCAP     OAMHC      IS-NR
Standby   DB-DIFF
         ALARM STATUS       = No Alarms.
         BLMCAP GPL version = XXX-XXX-XXX
         IMT BUS A          = Conn
         IMT BUS B          = Conn
         MBD BIP STATUS     = Valid
         MOTHER BOARD ID    = E5-MCAP
         DBD STATUS         = Valid
         DBD TYPE           = 1G ENET
         DBD MEMORY SIZE    = 4096M
         HW VERIFICATION CODE = ----
         CURRENT TEMPERATURE   =  33C ( 92F)
         PEAK TEMPERATURE:     =  37C ( 99F)     [13-05-19 08:02]
            TROUBLE TEXT VER.   = ----
         IPLNK STATUS
             IPLNK  IPADDR              STATUS     PST
             A      192.168.53.89       UP         IS-NR
         Command Completed.
```

7. Issue the command to retrieve GPL versions.

```
rtrv-gpl
```
Response from the retrieve command is displayed.

Verify correct source release levels.

If any of the standby E5-MASP GPLs indicate ALM, it is possible that the fixed disk has not gone through session 2 of the previous upgrade. Stop the procedure and contact My Oracle Support (MOS).

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

       GPL      CARD  RELEASE      APPROVED        TRIAL
REMOVE TRIAL
       GGGGGG1  1114  XXX-XXX-XXX  XXX-XXX-XXX     XXX-XXX-XXX
-----------
       GGGGGG1  1116  XXX-XXX-XXX  XXX-XXX-XXX ALM XXX-XXX-XXX
-----------
       GGGGGG1  1113  -----------  -----------     -----------
-----------
       GGGGGG2  1114  XXX-XXX-XXX  XXX-XXX-XXX     XXX-XXX-XXX
-----------
       GGGGGG2  1116  XXX-XXX-XXX  XXX-XXX-XXX ALM XXX-XXX-XXX
-----------
       GGGGGG2  1113  -----------  -----------     -----------
-----------
       GGGGGG3  1114  XXX-XXX-XXX  XXX-XXX-XXX     XXX-XXX-XXX
```

```
            -----------
            GGGGGG3   1116  XXX-XXX-XXX  XXX-XXX-XXX ALM  XXX-XXX-XXX
-----------
            GGGGGG3   1113  -----------  -----------      -----------
-----------
            OAMHC     1114  XXX-XXX-XXX  XXX-XXX-XXX      -----------
-----------
            OAMHC     1116  XXX-XXX-XXX  XXX-XXX-XXX      -----------
-----------
            OAMHC     1113  -----------  -----------      -----------
-----------
            GGGGGG4   1114  XXX-XXX-XXX  XXX-XXX-XXX      XXX-XXX-XXX
-----------
            GGGGGG4   1116  XXX-XXX-XXX  XXX-XXX-XXX      XXX-XXX-XXX
-----------
            GGGGGG4   1113  -----------  -----------      -----------
-----------
            GGGGGG5   1114  XXX-XXX-XXX  XXX-XXX-XXX      XXX-XXX-XXX
-----------
            GGGGGG5   1116  XXX-XXX-XXX  XXX-XXX-XXX      XXX-XXX-XXX
-----------
            GGGGGG5   1113  -----------  -----------      -----------
-----------
            GGGGGG6   1114  XXX-XXX-XXX  XXX-XXX-XXX      XXX-XXX-XXX
-----------
            GGGGGG6   1116  XXX-XXX-XXX  XXX-XXX-XXX      XXX-XXX-XXX
-----------
            GGGGGG6   1113  -----------  -----------      -----------
-----------
```

8. Issue the command to repair the standby TDM's database.

   ```
   chg-db:action=repair
   ```

   > **Note:**
   >
   > The system will need approximately 2 minutes after step 5 to acquire duplex mode. As a result, the system will reject the `chg-db` command until it is back in duplex mode.

   Response to the repair command is displayed.

   Wait for the `repair complete` message to display and the MASP returns to in-service.

   ```
     eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x.x.x-YY.y.y
         chg-db:action=repair
         Command entered at terminal #10.
     ;

         eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x.x.x-YY.y.y
         REPAIR: MASP A - Repair starts on standby MASP.
     ;
   ```

```
            eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x.x.x-YY.y.y
            REPAIR: MASP A - Repair from fixed disk complete.
```

9. Place original standby E5-MASP in system.

10. 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).

11. Remove the standby E5-MASP card determined in step 1.

12. Insert the original standby E5-MASP card.

13. Slide the MASP H/S switch (SW3) on the original 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).

> ✎ **Note:**
>
> UAMs are generated during this step. An audible alarm is generated.

14. Wait for the original standby E5-MASP to come up in standby mode and system returns to duplex mode.

Verifying All Databases

This procedure verifies that all databases are coherent and at the same level, which includes current and backup partitions on both fixed disks.

Should THIS PROCEDURE FAIL, CONTACT My Oracle Support (MOS) AND **ASK FOR UPGRADE ASSISTANCE.**

1. Issue the command to display database information.

   `rept-stat-db:display=all`
   Response to the command is displayed.

   Look in the columns labeled 'C,' 'T', and 'LEVEL' output by this command.

   Verify entries in column 'C' show 'Y', which indicates coherence.

   Verify entries in column 'T' show 'N' (backup and RMD may show a dash), which indicates that the database is not in transition.

   Verify all entries in the database LEVEL column are the same.

   LEVEL is a value, which varies depending on the system.

   If the STDBY databases are not coherent or not at the correct level, repeat Updating the Source-Release Spare Fixed Disk, step 8.

   Verify that the MPS databases are coherent.

```
eaglestp YY-MM-DD hh:mm:ss TTTT PPP  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       YYY YY-MM-DD hh:mm:ss TTTT Y          1
-      -
        FD CRNT Y      XXX                           Y       XXX
              MCAP 1113                           MCAP 1115
              - --------                          - --------
        RD BKUP -    -        -       -           Y        1
-       -
        USB BKP -    -        -       -           -     -
-       -
          CARD/APPL  LOC   C  T  LEVEL      TIME LAST UPDATE
EXCEPTION
          ---------  ----  -  -  ----------  -----------------
--------------
        SS7HC      1101  Y  N  XXX         YY-MM-DD HH:MM:SS       -
        IPLHC      1103  Y  N  XXX         YY-MM-DD HH:MM:SS       -
        VSCCP      1104  Y  N  XXX         YY-MM-DD HH:MM:SS       -
        ERTHC      1105  Y  N  XXX         YY-MM-DD HH:MM:SS       -
        MCP        1107  Y  N  XXX         YY-MM-DD HH:MM:SS       -
        GLS        1108  Y  N  XXX         YY-MM-DD HH:MM:SS       -
        IPSHC      1111  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       -
        OAM-RMV    1115  Y  -  1           00-00-00 00:00:00  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       -

                        ELAP A ( STDBY )
                        C  BIRTHDATE        LEVEL       EXCEPTION
                        -  -----------------  ----------
--------------
        RTDB            Y  YY-MM-DD hh:mm:ss    ZZZZZZZ       -
        RTDB-EAGLE         YY-MM-DD hh:mm:ss    ZZZZZZZ       -

                        ELAP B  ( ACTV )
                        C  BIRTHDATE        LEVEL       EXCEPTION
                        -  -----------------  ----------
--------------
        RTDB            Y  YY-MM-DD hh:mm:ss    ZZZZZZZ       -
        RTDB-EAGLE         YY-MM-DD hh:mm:ss    ZZZZZZZ       -

                        EAGLE RTDB REPORT
        CARD/APPL  LOC   C  BIRTHDATE        LEVEL
EXCEPTION   IN-SRVC
        ---------  ----  -  -----------------  ----------
------------ -----------
        VSCCP      1104  Y  YY-MM-DD hh:mm:ss    ZZZZZZZ
-     DDd HHh MMm
```

2. (Required) Enter text of second step here.

    (Optional) Enter the result of the step here.

(Optional) Enter the result of the procedure here.

Initializing MASPs to Run on Target-Release GPLs

This procedure loads the target-release gpl to both masps. This procedure requires that both masps be rebooted (one at a time) and verified as running the target-release gpls.

Should THIS PROCEDURE FAIL, CONTACT My Oracle Support (MOS) AND **ASK FOR** <u>**UPGRADE ASSISTANCE**</u>**.**

1. Remove the USB flash drives from E5-MASPs.

> **✎ Note:**
>
> The target-release is assumed to have been downloaded to the inactive partition prior to the execution of this procedure (see Software Upgrade Preparation.)

2. Inhibit the standby MASP.

   ```
   INH-CARD:LOC=XXXX
   ```
   (Where XXXX is the location of the standby MASP slot recorded in Updating the Source-Release Spare Fixed Disk, Step 1)

   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 EST PPP XX.x.x.x.x-YY.y.y
         **  5045.0514 ** CARD XXXX OAMHC        Standby MASP is
   inhibited
      ;
   ```

> **✎ Note:**
>
> Wait for the card to boot and return to the IMT bus.

3. Issue the report card status command.

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

   Verify that standby MASP is OSS-MT-DSBLD.

   For this sample output, 1113 is standby and 1115 is Active.

   ```
     eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x.x.x-YY.y.y
          CARD   VERSION      TYPE      GPL        PST
   SST       AST
          1113   ----------   E5MCAP    OAMHC      OOS-MT-DSBLD
   ```

```
Manual        -----
       1115    XXX-XXX-XXX   E5MCAP     OAMHC       IS-NR
Active        -----
```

4. Download target-release flash to the standby MASP.

`INIT-FLASH:LOC=XXXX:CODE=TRIAL`
(Where xxxx is the location used in the previous command)

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
         ;
```

> **✎ Note:**
>
> Wait for card to boot and return to the IMT bus.

5. Retrieve the GPLs running on the card location.

`REPT-STAT-GPL:LOC=XXXX`
(Where xxxx is the location used in the previous command)

Response to the card status command is displayed.

The card should be running the trial version of the GPL. If the approved and trial versions are the same no ALM will be present.

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

        Command Completed.
```

6. Run the target-release GPL on the standby MASP

`ALW-CARD:LOC=XXXX:CODE=INACTIVEPRTN`
(target release on the inactive partition)

(Where xxxx is the location of the standby MASP used in the previous command)

Response to allow-card command is shown.

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

7. Retrieve status of the MASPs

`REPT-STAT-GPL:GPL=OAMHC`
Verify standby MASP running target release GPL. The standby MASP will display
ALM to indicate that the card is not running the approved version GPL.

> ✎ **Note:**
>
> Standby MASP will not be displayed here if Eagle is getting upgraded
> from R46.4 or earlier to R46.5 or later. If so, run step 14 verify the GPL
> on standby MASP. Otherwise, go to step 9.

```
  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
       OAMHC       1113       XXX-XXX-XXX       XXX-XXX-XXX
       OAMHC       1115       YYY-YYY-YYY     XXX-XXX-XXX

       Command Completed.
```

8. Retrieve GPL status of the standby MASP.

`REPT-STAT-GPL:LOC=XXXX`
(Where `XXXX` is the location of the standby MASP slot recorded in Updating the
Source-Release Spare Fixed Disk, Step 1)

Verify standby MASP running target release GPLs. Here the standby MASP will
display GPL as EOAM (instead of OAMHC) if Eagle is getting upgraded from
R46.4 or earlier to R46.5 or later.

```
  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
       EOAM        1115       140-030-000       -----------
-----------
              BLMCAP        140-030-000 ALM+   138-029-000
140-030-000

       Command Completed.
```

9. Perform an OAM role change by booting the active MASP.

`INIT-CARD:LOC=XXXX`
(Where `XXXX` is the location of the active MASP recorded in Updating the Source-
Release Spare Fixed Disk, Step 1)

Response to card initialization is shown

```
eaglestp YY-MM-DD hh:mm:ss TTTT PPP   XX.x.x.x.x-YY.y.y
        Init Card command issued to card xxxx
```

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

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

Response to login command is displayed.

Ignore any login failure message.

Verify the Upgrade Phase in Banner.

```
eaglestp YY-MM-DD hh:mm:ss TTTT PPP   XX.x.x.x.x-YY.y.y Upg Phase 0
            User logged in on terminal UU.
    ;


            ? Login failures since last successful LOGIN
        Last successful LOGIN was on port ? on ??-??-?? @ ??:??:??
```

11. Echo command input to capture terminal.

`ACT-ECHO:TRM=P`
(Where `P` is the terminal port number specified in Verifying Pre-Upgrade Requirements and Capturing Upgrade Data, Step 3)

Response to print capture command is displayed.

```
eaglestp YY-MM-DD hh:mm:ss TTTT PPP   XX.x.x.x.x-YY.y.y Upg Phase x
        Scroll Area Output will be echoed to Port P.
```

12. 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.

Circle the status of both E5-MASPs:

`1113`: Active or Standby

`1115`: Active or Standby

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

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

```
eaglestp YY-MM-DD hh:mm:ss TTTT PPP   XX.x.x.x.x-YY.y.y
      CARD    VERSION      TYPE     GPL         PST
SST        AST

      1113    XXX-XXX-XXX E5MCAP  OAMHC       IS-NR
Active      -----
```

```
          1115    XXX-XXX-XXX E5MCAP  OAMHC        IS-NR
Standby    -----
       Command Completed
```

13. Inhibit the standby MASP

    `INH-CARD:LOC=XXXX`
    (Where `XXXX` is the location of the standby MASP identified in the previous command)

    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 EST PPP XX.x.x.x.x-YY.y.y Upg
    Phase x
          **  5045.0514 ** CARD XXXX OAMHC        Standby MASP is
    inhibited
      ;
    ```

    > **Note:**
    >
    > Wait for the card to boot and return to the IMT bus.

14. Download target release flash to the standby MASP.

    `INIT-FLASH:LOC=XXXX:CODE=TRIAL`
    (Where `XXXX` is the location of the standby MASP used in the previous command)

    Response to flash initialization is shown.

    ```
      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.
    ;
    ```

    > **Note:**
    >
    > Wait for card to boot and return to the IMT bus.

15. Retrieve the GPLs running on the card location.

    `REPT-STAT-GPL:LOC=XXXX`
    (Where `XXXX` is the location of the standby MASP slot used in the previous command)

    Response to the card status command is displayed.

The card should be running the trial version of the GPL. If the approved and trial versions are the same no ALM will be present.

```
eaglestp YY-MM-DD hh:mm:ss TTTT EAGLEEAGLE XX.x.x-YY.yy.y
       GPL          CARD      RUNNING            APPROVED      TRIAL
       OAMHC        1115      -----------        -----------
-----------
          BLMCAP            YYY-YYY-YYY ALM+   XXX-XXX-XXX    YYY-
YYY-YYY

       Command Completed.
```

16. Run the target release GPL on the standby MASP

    `ALW-CARD:LOC=XXXX:CODE=INACTIVEPRTN`
    (target release on the inactive partition)

    (Where `XXXX` is the location of the standby MASP used in the previous command)

    Response to allow card command is shown.

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

17. Issue the command to display the status of the MASPs' GPL

    `REPT-STAT-GPL:GPL=OAMHC69`
    Response from the retrieve command is displayed.

    Verify that the GPL versions that are displayed in the `RUNNING` column are correct; see Software Release Numbering.

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

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

    > **✎ Note:**
    >
    > If no cards are displayed, repeat this step where `gpl=oamhc`.

18. If GPLs are not correct, do the following:

    a. Repeat Steps 2 - 17.

    b. Contact My Oracle Support (MOS).

19. Issue the command to display the version of the Flash GPL running on card `1113`.

    `REPT-STAT-CARD:LOC=1113:MODE=FULL`
    Response from the retrieve command is displayed.

    Record version of BLMCAP running on E5-MASP.

GPL Version: _____

GPL Version: _____

> **Note:**
>
> For upgrade to release 46.6 & later, UAM 0225, "CARD running outdated Flash GPL" is displayed in Alarm Status.

```
          eaglestp YY-MM-DD hh:mm:ss TTTT PPP   XX.x.x.x.x-
YY.y.y
          CARD    VERSION      TYPE      GPL         PST
SST      AST
          1113   XXX-XXX-XXX  E5MCAP     OAMHC       IS-NR
Standby    -----
          ALARM STATUS       = No Alarms.
          BLMCAP  GPL version = YYY-YYY-YYY
          IMT BUS A          = Conn
          IMT BUS B          = Conn
          CLOCK A            = Active
          CLOCK B            = Idle
          CLOCK I            = Idle
          MBD BIP STATUS     = Valid
          MOTHER BOARD ID    = E5-MCAP
          DBD STATUS         = Valid
          DBD TYPE           = 1G ENET
          DBD MEMORY SIZE    = 4096M
          HW VERIFICATION CODE = ----
          TROUBLE TEXT VER.   = ----
          IPLNK STATUS
             IPLNK  IPADDR              STATUS     PST
             A      192.168.53.89       UP         IS-NR
          Command Completed.
```

20. Repeat steps 18 – 19, for location 1115.

Verifying the Target Release and Software Access Key

This procedure verifies that the Upgrade Software Access Key has been entered.

Should THIS PROCEDURE FAIL, CONTACT My Oracle Support (MOS) AND **ASK FOR UPGRADE ASSISTANCE.**

- Validate the Software Access Key with the upgrade target release.

  ```
  ACT-UPGRADE:ACTION=CHKREL:SRC=FIXED
  ```
  Response from the software validation.

  Verify the Upgrade target release is correct.

  For pre-46.1 release, verify the Software Access Key is valid. SAK is not used from release 46.1 forward.

If either the upgrade target release is incorrect or the Software Access Key is invalid STOP the upgrade and contact My Oracle Support (MOS).

```
eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x.x.x-YY.y.y
      act-upgrade:action=chkrel:src=zzzz
      Command entered at terminal #10.
  ;

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

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

      Software Access Key valid for target release

      Copy Release data to ramdisk.

      Validate Release data on ramdisk.

      Eagle Release successfully validated.

      Command Complete : Upgrade action completed successfully
```

OAM Conversion

Verifying all Databases

This procedure verifies that all of the fixed disk's database partitions have not been converted and are still coherent and at the same level.

> **Note:**
>
> Refer to Configuring Card-Set Network Conversion Method to configure the Card Set network conversion method for target release 46.0 and higher.

Should THIS PROCEDURE FAIL, CONTACT My Oracle Support (MOS) AND **ASK FOR** <u>**UPGRADE ASSISTANCE**</u>**.**

1. Issue the command to display database status during upgrades.

   `ACT-UPGRADE:ACTION=DBSTATUS`
   Response to the command is displayed.

   Look in the columns labeled 'C', 'T', and 'LEVEL' output by this command.

   Verify entries in column 'C' show 'Y', which indicates coherence or '-'.

   Verify column 'T' shows 'N' for both CRNT databases, which indicates that those databases are not in transition

   Or if target release is on the inactive partition, the database level is "1".

   Verify all entries in the database 'Level' column marked as 'XXX' are the same.

Verify that the version numbers displayed are correct.

```
  DATABASE STATUS: >> OK <<
            TDM 1114 ( STDBY)                TDM 1116 ( ACTV )
            C    LEVEL    TIME LAST BACKUP    C    LEVEL    TIME
LAST BACKUP
            - -------- --------------------- - --------
---------------------
       FD BKUP Y     XXX YY-MM-DD hh:mm:ss TTTT Y     XXX YY-MM-
DD hh:mm:ss TTTT
       FD CRNT Y     XXX YY-MM-DD hh:mm:ss TTTT Y     XXX YY-MM-
DD hh:mm:ss TTTT
            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  XXX         YY-MM-DD hh:mm:ss  XXX-
XXX-XXX  NORMAL
       TDM-BKUP  1114  Y  -  XXX         YY-MM-DD hh:mm:ss  XXX-
XXX-XXX  NORMAL
       OAM-RMV   1115  -  -     -          -        -         -
       OAM-USB   1115  -  -     -          -        -         -
       TDM-CRNT  1116  Y  N  XXX         YY-MM-DD hh:mm:ss  XXX-
XXX-XXX  NORMAL
       TDM-BKUP  1116  Y  -  XXX         YY-MM-DD hh:mm:ss  XXX-
XXX-XXX  NORMAL

       INACTIVE PARTITION GROUP
       CARD/APPL  LOC   C  T  LEVEL      TIME LAST UPDATE
VERSION      STATUS
       --------- ----  -  -  ---------  -----------------
-------------------
       TDM-CRNT  1114  Y  -  1          YY-MM-DD hh:mm:ss  ZZZ-
ZZZ-ZZZ  NORMAL
       TDM-BKUP  1114  Y  -  1          YY-MM-DD hh:mm:ss  ZZZ-
ZZZ-ZZZ  NORMAL
       TDM-CRNT  1116  Y  -  1          YY-MM-DD hh:mm:ss  ZZZ-
ZZZ-ZZZ  NORMAL
       TDM-BKUP  1116  Y  -  1          YY-MM-DD hh:mm:ss  ZZZ-
ZZZ-ZZZ  NORMAL
```

2. Issue the command to retrieve the upgrade configuration.

`rtrv-upgrade-config`
Response to the retrieve command is displayed.

If target rlease is 46.0 or 45.x, verify that SAK is set.

The Threshold Type will be GROUP or SET.

```
          eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x-YY.yy.y Upg
Phase x
       Software Access Key entered on system : vbsevhcea7vy5

       Configured Upgrade Threshold Type: SET
          Number of SERVICE Sets: X
          Number of LINK Sets: Y

       Command Completed.
```

> **✎ Note:**
>
> Refer to Configuring Card-Set Network Conversion Method to configure the Card Set network conversion method.

STP Conversion

This begins the actual STP conversion process. This procedure begins during Upgrade Phase 0 and ends as part of Upgrade Phase 3.
See recommendation #5 in Recommendations before executing this procedure.

If the upgrade execution terminates before successfully completing, see recommendation #7 in Recommendations.

Should THIS PROCEDURE FAIL, CONTACT My Oracle Support (MOS) AND **ASK FOR <u>UPGRADE ASSISTANCE</u>.**

1. Issue the command to begin database conversion.

   Note that the duration of this command is dependent on the size of the database and the size of the network configuration. The duration can be from about two hours when using threshold type SET to up to 8-10 hours in large systems using threshold type GROUP.
   Supplemental Information For Procedure 8, Step 2 contains messages illustrative of the output of upgrade during this series of operations.

2. If the threshold type is set to SET in Verifying all Databases, Step 2 issue the following command:

   ```
   ACT-UPGRADE:ACTION=CONVERTSTP:SRC=FIXED
   ```

   > **✎ Note:**
   >
   > While upgrading from Release 46.9 to Release 46.9.1 or later releases, change PURGEPERIOD to 0 using the CHG-ATTR-SECULOG:PURGEPERIOD=0 command.

3. If the threshold type is set to GROUP in Verifying all Databases, Step 2, issue the following command:

   ```
   ACT-UPGRADE:ACTION=CONVERTSTP:SRC=FIXED:THRES=75
   ```

The following table lists the actions completed by the command:

Table 5-3   Act Upgrade Command Actions

Fixed workspace	
A	OAM based measurements are inhibited.
B	N/A
C	The standby disk is formatted based on the target release configuration table.
D	The target release GPLs are copied onto the standby TDM.
E	The existing database is converted onto the standby disk, upgrading the existing EAGLE source-release tables to target-release tables.
F	The standby MASP boots automatically.
G	The active MASP then boots allowing the standby to resume the active role. Proceed to step 2 to log back into the system and restart output capture.
H	The standby disk is formatted based on the target release configuration table.
I	The target release GPLs are copied onto the standby TDM.
J	The existing database is converted onto the standby disk, upgrading the existing EAGLE source-release tables to target-release tables.
K	The standby MASP boots automatically.
L	Initialization of Network cards.

Command is displayed.

Note the banners transitions from Phase 0 to Phase 3.

Software troubles from the DMS_LOCK.C module may be generated, for incremental upgrade only, while GPLs are being copied. These software troubles are not expected but, if they occur in this circumstance, they are not service affecting.

Completion notice of successful upgrade.

If upgrade does not complete successfully, see recommendation # 7 in section Recommendations.

```
eaglestp YY-MM-DD hh:mm:ss EST Rel XX.x.x-XX.x.x  Upg Phase 0
      act-upgrade:action=convertstp:thres=XX
      Command entered at terminal #10.
```

NOTICE: One of the following messages will be output at the start of the upgrade process to indicate which workspace (fixed or removable) has been selected by the system for OAM conversion:

```
eaglestp YY-MM-DD hh:mm:ss EST Rel XX.x.x-XX.x.x  Upg Phase 0
        Using inactive standby partitions for OAM conversion
(disk=dddd)
```

(Where `dddd` defines conversion workspace)

NOTICE: See Samples of Message from Convertstp Action for Act-Upgrade Command for samples of output messages.

```
eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y Upg Phase 3
         Command Complete : Upgrade action completed successfully
```

> **Note:**
>
> If upgrade terminates abnormally in phase 3 due to cards being in IS-ANR|DDL Hunt, contact My Oracle Support (MOS) for assistance in executing Determination and Recovery of DDL Hunt During Upgrade.

4. After item G in step 1, issue the command to log back in to the system.

```
LOGIN:UID=XXXXXX
```
(Where `XXXXX` is a vald login ID)

Response to login command is displayed.

Ignore any login failure message.

```
eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y Upg Phase x
User logged in on terminal 10.
```

```
? Login failures since last successful LOGIN
Last successful LOGIN was on port ? on ??-??-?? @ ??:??:??
```

5. Issue the command to reactivate printer capture of upgrade process.

```
ACT-ECHO:TRM=P
```
(Where `P` is the terminal port number specified in Verifying Pre-Upgrade Requirements and Capturing Upgrade Data, Step 3)

Response to print capture command is displayed.

```
 eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y Upg Phase x
        Scroll Area Output will be echoed to Port P.
```

6. Issue the command to display database status during upgrades.

```
ACT-UPGRADE:ACTION=DBSTATUS
```
Response from the command is displayed.

Look in the columns labeled 'C', 'LEVEL' and 'VERSION STATUS' output by this command.

Verify entries in column 'C' show 'Y' which indicates coherence or '-'.

Verify both 'FD CRNT' Levels are equal.

Verify 'VERSION STATUS' shows NORMAL in the active partition group. NOTE: this will not occur until step 2 above is completed.

```
  eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y Upg Phase x
        DATABASE STATUS: >> OK <<
                TDM 1114 ( STDBY)                    TDM 1116 ( ACTV )
                C   LEVEL    TIME LAST BACKUP     C    LEVEL     TIME
LAST BACKUP
            - -------- -------------------- - --------
---------------------
        FD BKUP Y      XXX YY-MM-DD hh:mm:ss TTTT Y     XXX YY-MM-
DD hh:mm:ss TTTT
        FD CRNT Y      XXX YY-MM-DD hh:mm:ss TTTT Y     XXX YY-MM-
DD hh:mm:ss TTTT
                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  XXX        YY-MM-DD hh:mm:ss  XXX-
XXX-XXX  NORMAL
        TDM-BKUP   1114  Y  -  XXX        YY-MM-DD hh:mm:ss  XXX-
XXX-XXX  NORMAL
        OAM-RMV    1115  -  -     -          -        -          -
        OAM-USB    1115  -  -     -          -        -          -
        TDM-CRNT   1116  Y  N  XXX        YY-MM-DD hh:mm:ss  XXX-
XXX-XXX  NORMAL
        TDM-BKUP   1116  Y  -  XXX        YY-MM-DD hh:mm:ss  XXX-
XXX-XXX  NORMAL


        INACTIVE PARTITION GROUP
        CARD/APPL  LOC   C  T  LEVEL     TIME LAST UPDATE
VERSION     STATUS
        ---------  ----  -  -  ---------  -----------------
-------------------
        TDM-CRNT   1114  Y  -  ZZZ        YY-MM-DD hh:mm:ss  ZZZ-
ZZZ-ZZZ  UPG 3
        TDM-BKUP   1114  Y  -  ZZZ        YY-MM-DD hh:mm:ss  ZZZ-
ZZZ-ZZZ  UPG 3
        TDM-CRNT   1116  Y  -  ZZZ        YY-MM-DD hh:mm:ss  ZZZ-
ZZZ-ZZZ  UPG 3
        TDM-BKUP   1116  Y  -  ZZZ        YY-MM-DD hh:mm:ss  ZZZ-
ZZZ-ZZZ  UPG 3
```

7. Issue the report card status command to verify network cards.

```
REPT-STAT-CARD
```
Response to the card status command is displayed.

Verify that the cards are IS-NR, OOS-MT | Isolated or OOS-MT-DSBLD.

Verify that the GPL versions that are displayed in the "VERSION" column are correct; see Software Release Numbering.

```
  eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y Upg Phase x
        CARD    VERSION       TYPE     APPL       PST
SST        AST
        1101    XXX-XXX-XXX  DSM      SCCPHC     IS-NR
Active     -----
        1102    XXX-XXX-XXX  DSM      SCCPHC     IS-NR
Active     -----
        1103    XXX-XXX-XXX  TSM      GLSHC      IS-NR
Active     -----
        1104    XXX-XXX-XXX  TSM      GLSHC      IS-NR
Active     -----
        1105    XXX-XXX-XXX  LIMDS0   SS7ML      IS-NR
Active     -----
        1111    XXX-XXX-XXX  IPSM     IPSHC      OOS-MT
Isolated   -----
        1113    XXX-XXX-XXX  E5MCAP   OAMHC      IS-NR
Active     -----
        1114    -----------  E5TDM    -------    IS-NR
Active     -----
        1115    XXX-XXX-XXX  E5MCAP   OAMHC      IS-NR
Standby    -----
        1116    -----------  E5TDM    -------    IS-NR
Active     -----
        1117    -----------  E5MDAL   -------    IS-NR
Active     -----
        1201    XXX-XXX-XXX  LIMDS0   SS7ML      IS-NR
Active     -----
        1202    XXX-XXX-XXX  LIMDS0   SS7ML      IS-NR
Active     -----
        1203    XXX-XXX-XXX  LIMT1    SS7ML      IS-NR
Active     -----
        1204    XXX-XXX-XXX  LIMT1    SS7HC      IS-NR
Active     -----
        1205    XXX-XXX-XXX  DCM      SS7IPGW    IS-NR
Active     -----
        1207    XXX-XXX-XXX  DCM      IPGWI      IS-NR
Active     -----
        1211    XXX-XXX-XXX  LIMDS0   MPLGA      IS-NR
Active     -----
        1215    xxx-xxx-xxx  DSM      SCCPHC     IS-NR
Active     -----
        1217    xxx-xxx-xxx  DSM      SCCPHC     IS-NR
Active     -----
        3101    xxx-xxx-xxx  LIMATM   ATMANSI    IS-NR
Active     -----
        3102    xxx-xxx-xxx  LIMATM   ATMANSI    IS-NR
Active     -----
        Command Completed.
```

8. Issue the command to display GPL status.

```
RTRV-GPL
```
Response from the retrieve command is displayed.

Verify that the GPL versions that are displayed in the "RELEASE" column are correct; see Software Release Numbering.

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

       GPL       CARD  RELEASE      APPROVED       TRIAL
REMOVE TRIAL
       GGGGGG1   1114  XXX-XXX-XXX  XXX-XXX-XXX    XXX-XXX-XXX
-----------
       GGGGGG1   1116  XXX-XXX-XXX  XXX-XXX-XXX    XXX-XXX-XXX
-----------
       GGGGGG1   1113  -----------  -----------    -----------
-----------
       GGGGGG2   1114  XXX-XXX-XXX  XXX-XXX-XXX    XXX-XXX-XXX
-----------
       GGGGGG2   1116  XXX-XXX-XXX  XXX-XXX-XXX    XXX-XXX-XXX
-----------
       GGGGGG2   1113  -----------  -----------    -----------
-----------
       GGGGGG3   1114  XXX-XXX-XXX  XXX-XXX-XXX    XXX-XXX-XXX
-----------
       GGGGGG3   1116  XXX-XXX-XXX  XXX-XXX-XXX    XXX-XXX-XXX
-----------
       GGGGGG3   1113  -----------  -----------    -----------
-----------
       OAMHC     1114  XXX-XXX-XXX  XXX-XXX-XXX    -----------
-----------
       OAMHC     1116  XXX-XXX-XXX  XXX-XXX-XXX    -----------
-----------
       OAMHC     1113  -----------  -----------    -----------
-----------
       GGGGGG4   1114  XXX-XXX-XXX  XXX-XXX-XXX    XXX-XXX-XXX
-----------
       GGGGGG4   1116  XXX-XXX-XXX  XXX-XXX-XXX    XXX-XXX-XXX
-----------
       GGGGGG4   1113  -----------  -----------    -----------
-----------
       GGGGGG5   1114  XXX-XXX-XXX  XXX-XXX-XXX    XXX-XXX-XXX
-----------
       GGGGGG5   1116  XXX-XXX-XXX  XXX-XXX-XXX    XXX-XXX-XXX
-----------
       GGGGGG5   1113  -----------  -----------    -----------
-----------
       GGGGGG6   1114  XXX-XXX-XXX  XXX-XXX-XXX    XXX-XXX-XXX
-----------
       GGGGGG6   1116  XXX-XXX-XXX  XXX-XXX-XXX    XXX-XXX-XXX
-----------
       GGGGGG6   1113  -----------  -----------    -----------
-----------
```

Completion of Session 1

Migrate to VxWorks6.9

Migrate the OAM and selected modules to VxWorks 6.9 if target release is 46.6 or above.

If the source release is 46.5 or prior and the target release is 46.6 or later, then execute Migrate the MASP Cards Running VxWorks 6.4 GPL to VxWorks 6.9 GPL through IPS Application is Provisioned on SLIC Card, Migrate the Same to VxWorks6.9. Otherwise, go to Completing Upgrade/Return to Full-Function Mode.

If the display/report is for a command such as RTRV-GPL, or REPT-STAT-GPL, any command intended to display or Operate on a particular GPL, then EAGLE displays the correct GPL name, i.e.: OAMHC or OAMHC69. But when the command intends to display the status of a card, then EAGLE displays the generic name that is OAMHC for OAMHC and/or OAMHC69, MCPHC for MCPHC and/or MCPHC69; IPSHC for IPSHC and/or IPSMHC69.

Migrate the MASP Cards Running VxWorks 6.4 GPL to VxWorks 6.9 GPL

This procedure flashes the MASPs to BLDC32 to load new VxWorks 6.9 flash images. Should THIS PROCEDURE FAIL, CONTACT My Oracle Support AND **ASK FOR UPGRADE ASSISTANCE.**

1. Issue the card status to verify the location of the active/standby MASP slots.

   ```
   REPT-STAT-CARD:APPL=OAM
   ```
   Response to the card status command is displayed.

   Record the MASP in the standby role:

   Standby: `1113` or `1115`

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

   ```
   eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y
       CARD    VERSION       TYPE    GPL         PST
   SST         AST

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

2. Report the GPLs running on the card location.

   ```
   REPT-STAT-GPL:LOC=XXXX
   ```
   (Where `XXXX` is the location of the standby MASP slot display in the above step.)

   Response from the status command is displayed.

   Record the flash image running on the standby MASP:

BLMCAP or BLDC32

If the "ALM" indicator is displayed for the card's flash image, continue. Or if the card is running BLMCAP, continue. Otherwise, go to step 12.

```
eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x-YY.yy.y Upg Phase 3
    GPL         CARD       RUNNING               APPROVED      TRIAL
    OAMHC       XXXX       XXX-XXX-XXX           XXX-XXX-XXX   XXX-XXX-
XXX
            ZZZZZZ         YYY-YYY-YYY ALM       YYY-YYY-YYY   YYY-YYY-
YYY

    Command Completed.
;
```

3. Issue the command to inhibit the standby MASP.

   ```
   INH-CARD:LOC=XXXX
   ```
   (Where XXXX is the location of the standby MASP slot used in the previous command.)

   Response to the inhibit command is displayed

   Verify UAM 514 is displayed.

   If the ALM indication was displayed in step 4, continue. Otherwise, go to step 6.

   ```
   eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y Upg Phase 3
       Card is inhibited.
   ;

       eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y Upg
   Phase 3
   **  5045.0514 ** CARD XXXX OAMHC          Standby MASP is inhibited
   ;
   ```

   > **Note:**
   >
   > Wait for the card to boot and return to the IMT bus.

4. Download the approved version flash to the standby MASP.

   ```
   INIT-FLASH:LOC=XXXX:CODE=APPR
   ```
   (Where XXXX is the location of the standby MASP slot used in the previous command.)

   Response to flash initialization is shown.

   Verify UAM 0004 is displayed.

   If the card is running BLMCAP, continue. Otherwise, go to step 9.

   ```
   eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y Upg Phase 3
       FLASH Memory Download for card xxxx started.
   ;
       eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y Upg
   ```

```
Phase 3
    FLASH Memory Download for card xxxx completed.
;
    eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y Upg
Phase 3
    8003.0004  * GPL SYSTEM ZZZZZZ       Card is running non-
activated GPL
;
```

> **Note:**
>
> Wait for card to boot and return to the IMT bus.

5. Issue command to activate the flash on standby MASP.

   `ACT-FLASH:loc=XXXX`
   (Where `XXXX` is the location of the standby MASP slot used in the previous command.)

   Response to the activate command is displayed.

   ```
       eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y Upg Phase
   3
       FLASH Memory Activation for card XXXX Started.
   ;
       eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y Upg Phase 3
       FLASH Activation for card XXXX Completed.
   ;
   ```

6. Issue flash command to download the bootloader image.

   `INIT-FLASH:LOC=XXXX:MODE=RPLCEBL:BITS=32`
   (Where `XXXX` is the location of the standby MASP slot used in the previous command.)

   Response to flash command is shown.

   ```
       eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y  Upg
   Phase 3
       BOOTLOADER change for card XXXX SUCCESSFUL.
   ;
       eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y   Upg
   Phase 3
       Command Completed.
   ;
   ```

7. Issue command to download approved flash image.

   `INIT-FLASH:LOC=XXXX:CODE=APPR:GPL=BLDC32`
   (Where `XXXX` is the location used in the previous command)

   Response to flash initialization is shown.

Verify UAM 0004 is displayed.

```
    eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y Upg
Phase 3
    FLASH Memory Download for card xxxx started.
;
    eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y Upg
Phase 3
    FLASH Memory Download for card xxxx completed.
;
    eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y Upg
Phase 3
    8003.0004  * GPL SYSTEM BLDC32       Card is running non-
activated GPL
;
```

8. Retrieve the GPLs running on the card location.

   REPT-STAT-GPL:LOC=XXXX
   (Where XXXX is the location used in the previous command)

   Response to the GPL status command is displayed.

   Verify that card is running BLDC32 GPL.

```
    eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y Upg
Phase 3
    GPL         CARD      RUNNING             APPROVED       TRIAL
    OAMHC       XXXX      -----------         -----------
-----------
         BLDC32     YYY-YYY-YYY+     YYY-YYY-YYY   XXX-XXX-
XXX

    Command Completed.
;
```

9. Issue command to activate the flash on standby MASP.

   ACT-FLASH:loc=XXXX
   (Where XXXX is the location of the standby MASP used in the previous command)

   Response to the activate command is displayed.

```
eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y Upg Phase 3
    FLASH Memory Activation for card XXXX Started.
;
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y Upg Phase 3
    FLASH Activation for card XXXX Completed.
;
```

10. Issue command to allow the standby MASP.

    ALW-CARD:LOC=XXXX
    (Where XXXX is the location of the standby MASP used in the previous command)

Response to allow-card command is shown.

```
    eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y Upg
Phase 3
    Card has been allowed.
;
```

11. Issue command to report the status of the Standby MASP.

`REPT-STAT-CARD:LOC=XXXX:MODE=FULL`
(Where `XXXX` is the location of the standby MASP used in the previous command.)

Response to the card's status report is displayed.

Verify that the standby MASP is running the BLDC32 flash GPL.

```
eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x.x.x-YY.y.y Upg Phase 3
    CARD    VERSION      TYPE       GPL         PST
SST       AST
    xxxx    xxx-xxx-xxx  E5MCAP     OAMHC       IS-NR
Standby    ---
        ALARM STATUS      = No Alarms.
        BLDC32 GPL version = YYY-YYY-YYY
        IMT BUS A         = Conn
        IMT BUS B         = Conn
        MBD BIP STATUS     = Valid
        MOTHER BOARD ID    = E5-MCAP
        DBD STATUS         = Valid
        DBD TYPE           = 1G ENET
        DBD MEMORY SIZE    = 4096M
        HW VERIFICATION CODE = ----
        CURRENT TEMPERATURE   =  33C ( 92F)
        PEAK TEMPERATURE:     =  37C ( 99F)    [13-05-19 08:02]
        TROUBLE TEXT VER.   = ----
        IPLNK STATUS
            IPLNK  IPADDR              STATUS     PST
            A      XXX.XXX.XX.XX       UP         IS-NR
Command Completed.
;
```

12. If this is the first pass through this procedure, issue command to boot the active MASP. Otherwise, continue to next procedure.

`INIT-CARD:LOC=YYYY`
(Where `YYYY` is the location of the active MASP)

Response to card initialization is shown.

```
    eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y Upg
Phase 3
    Init Card command issued to card YYYY
;
```

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

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

Response to login command is displayed.

Ignore any login failure message.

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

? Login failures since last successful LOGIN
Last successful LOGIN was on port ? on ??-??-?? @ ??:??:??
```

14. Echo command input to capture terminal.

```
ACT-ECHO:TRM=P
```
(Where P is the terminal port number specified in Verifying Pre-Upgrade Requirements and Capturing Upgrade Data, Step 3)

Response to print capture command is displayed.

Repeat Steps 1 – 11 for the formerly active MASP.

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

Migrate the MCPM Cards Running VxWorks 6.4 GPL to VxWorks 6.9 GPL

This procedure flashes the MCPM cards to load new VxWorks 6.9 flash images. For SLIC cards running the MCP application, use the next procedure.
Execute the below procedure for every MCPM card present in the system.

Should THIS PROCEDURE FAIL, CONTACT My Oracle Support AND **ASK FOR UPGRADE ASSISTANCE.**

1. If the source release was 46.5 or prior, issue the MCPM card status command. Otherwise, continue to next procedure.

```
REPT-STAT-CARD:APPL=MCP
```
Response to the card status command is displayed.

```
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    CARD    VERSION      TYPE       GPL         PST
SST        AST
    XXXX    XXX-XXX-XXX  MCPM       MCPHC       IS-NR
Active      -----
    XXXX    XXX-XXX-XXX  MCPM       MCPHC       IS-NR
Active      -----

    Command Completed.
;
```

2. For each MCPM-type card listed above, issue the GPL status command.

```
REPT-STAT-GPL:LOC=XXXX
```
(Where XXXX is the location of a MCPM card slot listed in previous step.)

Response to the status command is displayed.

If the "ALM" indictor is displayed for the card's flash image, continue. If card is running BLMCAP, continue. Otherwise repeat step 2 for next MCPM card in list.

```
eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x-YY.yy.y
GPL         CARD       RUNNING              APPROVED     TRIAL
MCPHC       XXXX       XXX-XXX-XXX          XXX-XXX-XXX  XXX-XXX-
XXX
         ZZZZZZ        ZZZ-ZZZ-ZZZ ALM      YYY-YYY-YYY  YYY-YYY-
YYY

Command Completed.
```

3. Issue command to inhibit the card.

```
INH-CARD:LOC=XXXX
```
(Where XXXX is the location of the MCPM card use in previous command.)

Response to the inhibit command is displayed

If the ALM indication was displayed in step 2, continue. Otherwise, go to step 6.

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

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

> **✎ Note:**
>
> Wait for the card to boot and return to the IMT bus.

4. Issue command to download approved flash image.

```
INIT-FLASH:LOC=XXXX:CODE=APPR
```
(Where XXXX is the location of the MCPM card use in previous command.)

Response to flash initialization is shown.

Verify UAM 0004 is displayed. If card is running BLDC32, go to step 5. Otherwise, continue.

```
    eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y
    FLASH Memory Download for card xxxx started.
;
    eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y
    FLASH Memory Download for card xxxx completed.
;
    eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y
8003.0004  * GPL SYSTEM ZZZZZZ      Card is running non-activated
GPL
```

```
;
```

> ✎ **Note:**
>
> Wait for card to boot and return to the IMT bus.

5. Issue command to activate the flash image.

   `ACT-FLASH:LOC=XXXX`
   (Where XXXX is the location of the MCPM card use in previous command.)

   Response to the activate command is displayed.

   ```
   eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
       FLASH Memory Activation for card XXXX Started.
   ;
       eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
       FLASH Activation for card XXXX Completed.
   ;
   ```

6. Issue flash command to download the bootloader image.

   `INIT-FLASH:LOC=XXXX:MODE=RPLCEBL:BITS=64`
   (Where XXXX is the location of the MCPM card use in previous command.)

   Response to flash command is shown.

   If either response is displayed, then proceed to the next step.

   ```
       eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y
       BOOTLOADER change for card XXXX SUCCESSFUL.
   ;
       eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y
       Command Completed.
   ;

   OR
      If the bootloader was succesfully downloaded previously:

       eaglestp 17-01-20 12:19:04 MST  EAGLE XX.x.x.x.x-YY.y.y
       BOOTLOADER not changed for card XXXX. Already running requested
   bootloader.
   ;
       eaglestp 17-01-20 12:19:04 MST  EAGLE XX.x.x.x.x-YY.y.y
       Command Completed.
   ;
   ```

7. Download target-release flash to the MCPM card.

   `INIT-FLASH:LOC=XXXX:CODE=APPR:GPL=BLDC32`
   (Where XXXX is the location used in the previous command)

   Response to flash initialization is shown.

Verify UAM 0004 is displayed.

```
    eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y
    FLASH Memory Download for card xxxx started.
;
    eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y
    FLASH Memory Download for card xxxx completed.
;
    eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y
*   8003.0004  * GPL SYSTEM BLDC32       Card is running non-
activated GPL
;
```

> **✎ Note:**
>
> Wait for card to boot and return to the IMT bus.

8. Issue command to activate the flash image.

   `ACT-FLASH:loc=XXXX`
   (Where xxxx is the location of the MCPM card used in the previous command)

   Response to the activate command is displayed.

   ```
   eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
       FLASH Memory Activation for card XXXX Started.
   ;
       eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
       FLASH Activation for card XXXX Completed.
   ;
   ```

9. Issue the allow command to reload the MCPM card.

   `ALW-CARD:LOC=XXXX`
   (Where xxxx is the location of the card used in the previous command)

   Response to allow-card command is shown.

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

10. Retrieve status of the MCPM card if present in the system.

    `REPT-STAT-GPL:LOC=XXXX`
    (Where xxxx is the location of the card used in the previous command)

    Response to GPL status command.

    Verify that MCPM card is BLDC32 GPL.

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

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```
     GPL          CARD        RUNNING                APPROVED        TRIAL
     MCPHC69      XXXX        XXX-XXX-XXX            XXX-XXX-XXX     XXX-XXX-
XXX
             BLDC32          YYY-YYY-YYY            YYY-YYY-YYY     YYY-YYY-
YYY

     Command Completed.
;
```

11. Issue command to report the status of the measurement system.

    REPT-STAT-MEAS
    Response to Measurement status command.

    Verify that MCPM cards have returned to IS-NR

    ```
        eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y
                               PST            SST          AST
        MEAS SS                IS-NR          Active      -----
            ALARM STATUS =   No Alarms

        CARD    VERSION         TYPE    PST            SST          AST
        XXXX P XXX-XXX-XXX      MCPM    IS-NR          Active      -----
            IP Link A                   IS-NR          Active      -----
        XXXX   XXX-XXX-XXX      MCPM    IS-NR          Active      -----
            IP Link A                   IS-NR          Active      -----

        CARD XXXX ALARM STATUS = No Alarms
        CARD XXXX ALARM STATUS = No Alarms

        Command Completed.
    ;
    ```

12. If this is the last card listed in Step 1, continue to next procedure. Otherwise, repeat Steps 2 - 11 for the next card listed in Step 1.

> **✎ Note:**
>
> Wait till this flashed MCPM card to complete reloading before proceeding to next step.

MCP Application is Provisioned on SLIC Card, Migrate the Same to VxWorks6.9

This procedure is to migrate the SLIC card running MCP application to Vxworks6.9 from VxWorks6.4. Execute the below procedure for every MCPM application running on SLIC in the system.
Should THIS PROCEDURE FAIL, CONTACT My Oracle Support AND **ASK FOR UPGRADE ASSISTANCE.**

1. If the source release was 46.5 or prior, issue the MCPM card status command. Otherwise, continue to next procedure.

```
REPT-STAT-CARD:APPL=MCP
```
Response to the card status command is displayed.

```
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    CARD    VERSION     TYPE      GPL         PST
SST       AST
    XXXX    XXX-XXX-XXX  SLIC      MCPHC       IS-NR
Active     -----
    XXXX    XXX-XXX-XXX  SLIC      MCPHC       IS-NR
Active     -----

    Command Completed.
;
```

2. For each card with type equal to SLIC listed above, issue the GPL status commend.

```
REPT-STAT-GPL:LOC=XXXX
```
(Where XXXX is the location of a MCPM/SLIC card slot listed in previous step.)

Response to the GPL status command is displayed.

If the ALM indictor is displayed for the card's flash image, continue. If card is running BLSLC32, continue. Otherwise repeat step 2 for next SLIC card in list.

```
eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x-YY.yy.y
    GPL         CARD      RUNNING             APPROVED    TRIAL
    MCPHC       XXXX      XXX-XXX-XXX         XXX-XXX-XXX  XXX-XXX-
XXX
        BLSLC32       ZZZ-ZZZ-ZZZ ALM     YYY-YYY-YYY  YYY-YYY-
YYY

    Command Completed.
```

3. Issue command to inhibit the card.

```
INH-CARD:LOC=XXXX
```
(Where XXXX is the location of the MCPM/SLIC card)

Response to the inhibit command is displayed

If the ALM indication was displayed in step 2, continue. Otherwise, go to step 6.

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

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

;
```

> **Note:**
>
> Wait for the card to boot and return to the IMT bus.

4. Issue command to download approved flash image.

   ```
   INIT-FLASH:LOC=XXXX:CODE=APPR
   ```
   (Where XXXX is the location of the MCPM card use in previous command.)

   Response to flash initialization is shown. Verify UAM 0004 is displayed. If card is running BLSL932, go to step 5. Otherwise, continue.

   ```
   eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y Upg Phase 3
       FLASH Memory Download for card xxxx started.
   ;
       eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y Upg
   Phase 3
       FLASH Memory Download for card xxxx completed.
   ;
       eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y Upg
   Phase 3
      8003.0004  * GPL SYSTEM ZZZZZZ        Card is running non-
   activated GPL
   ;
   ```

> **Note:**
>
> Wait for card to boot and return to the IMT bus.

5. Issue command to activate the flash image.

   ```
   ACT-FLASH:LOC=XXXX
   ```
   (Where XXXX is the location of the MCPM card use in previous command.)

   Response to the activate command is displayed.

   ```
   eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y Upg Phase 3
       FLASH Memory Activation for card XXXX Started.
   ;
       eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y Upg Phase 3
       FLASH Activation for card XXXX Completed.
   ;
   ```

6. Issue flash command to download target-release flash to the MCPM card.

   ```
   INIT-FLASH:LOC=XXXX:CODE=APPR:GPL=BLSL932
   ```
   (Where XXXX is the location used in the previous command)

   Response to flash initialization is shown.

   Verify UAM 0004 is displayed.

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

```
    eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y
    FLASH Memory Download for card xxxx completed.
;
    eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y
*   8003.0004  * GPL SYSTEM BLSL932     Card is running non-
activated GPL
;
```

> **Note:**
>
> Wait for card to boot and return to the IMT bus.

7. Issue command to activate the flash image.

   ACT-FLASH:LOC=XXXX
   (Where XXXX is the location of the MCPM card used in the previous command)

   Response to the activate command is displayed.

   ```
   eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
       FLASH Memory Activation for card XXXX Started.
   ;
       eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
       FLASH Activation for card XXXX Completed.
   ;
   ```

8. Issue the allow command to reload the MCPM card.

   ALW-CARD:LOC=XXXX
   (Where XXXX is the location of the card used in the previous command)

   Response to allow-card command is shown.

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

9. Issue command to report GPL status.

   REPT-STAT-GPL:LOC=XXXX
   Response to GPL status command.

   Verify that MCPM card is running BLSL932 GPL.

   ```
   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
       MCPHC69     XXXX      XXX-XXX-XXX       XXX-XXX-XXX   XXX-XXX-
   XXX
               BLSL932     YYY-YYY-YYY       YYY-YYY-YYY   YYY-YYY-
   YYY
   ```

```
          Command Completed.
      ;
```

10. Issue command to report the status of the measurement system.

    REPT-STAT-MEAS
    Response to Measurement status command.

    Verify that MCPM cards have returned to IS-NR

    ```
    eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y
                            PST             SST         AST
    MEAS SS                 IS-NR           Active      -----
        ALARM STATUS =   No Alarms

    CARD    VERSION         TYPE    PST             SST         AST
    XXXX P XXX-XXX-XXX      MCPM    IS-NR           Active      -----
        IP Link A                  IS-NR           Active      -----
    XXXX   XXX-XXX-XXX      MCPM    IS-NR           Active      -----
        IP Link A                  IS-NR           Active      -----

    CARD XXXX ALARM STATUS = No Alarms
    CARD XXXX ALARM STATUS = No Alarms

    Command Completed.
    ;
    ```

11. If this is last card listed in Step 1, continue to next procedure. Otherwise, repeat Steps 2 - Step 9 for the next card listed in Step 1.

    > ✎ **Note:**
    >
    > Wait till this flashed MCPM card to complete reloading before proceeding to next step.

Migrate the IPS (ENET-B) Cards Running VxWorks 6.4 GPL to VxWorks 6.9 GPL

This procedure is to migrate the IPSM cards from VxWorks6.4 to VxWorks6.9. For SLIC cards running the IPS application, use the next procedure. Execute the below procedure for every IPSM card present in the system.
Should THIS PROCEDURE FAIL, CONTACT My Oracle Support AND **ASK FOR UPGRADE ASSISTANCE.**

1. If the source release was 46.5 or prior, issue the IPSM card status command. Otherwise, continue to next procedure.

   REPT-STAT-CARD:APPL=IPS
   Response to the card status command is displayed.

   ```
   eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
       CARD    VERSION         TYPE        GPL         PST
   SST         AST
       XXXX    XXX-XXX-XXX  IPSM       IPSHC       IS-NR
   ```

```
Active       -----
    XXXX    XXX-XXX-XXX  IPSM        IPSHC        IS-NR
Active       -----

    Command Completed.
;
```

2. For each IPSM-type card listed above, issue the GPL status commend.

   `REPT-STAT-GPL:LOC=XXXX`
   (Where `XXXX` is the location of an IPSM card slot listed in previous step.)

   Response to the status command is displayed. If the `ALM` indictor is displayed for the card's flash image, continue. If card is running `BLMCAP`, continue. Otherwise repeat step 2 for next IPSM card in list.

```
eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x-YY.yy.y
    GPL         CARD      RUNNING           APPROVED     TRIAL
    IPSHC       XXXX      XXX-XXX-XXX       XXX-XXX-XXX  XXX-XXX-
XXX
        ZZZZZZ        ZZZ-ZZZ-ZZZ ALM    YYY-YYY-YYY   YYY-YYY-
YYY

    Command Completed.
```

3. Issue command to inhibit the card.

   `INH-CARD:LOC=XXXX`
   (Where `XXXX` is the location of the IPSM card use in previous command.)

   Response to the inhibit command is displayed.

   If the `ALM` indication was displayed in step 2, continue. Otherwise, go to step 6.

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

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

;
```

> **Note:**
> Wait for the card to boot and return to the IMT bus.

4. Issue command to download approved flash image.

   `INIT-FLASH:LOC=XXXX:CODE=APPR`
   (Where `XXXX` is the location of the IPSM card use in previous command.)

Response to flash initialization is shown. Verify UAM 0004 is displayed. If card is running BLDC32, go to step 5. Otherwise, continue.

```
eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y
    FLASH Memory Download for card xxxx started.
;
    eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y
    FLASH Memory Download for card xxxx completed.
;
    eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y
   8003.0004  * GPL SYSTEM ZZZZZZ      Card is running non-
activated GPL
;
```

> **Note:**
>
> Wait for card to boot and return to the IMT bus.

5. Issue command to activate the flash image.

   `ACT-FLASH:loc=XXXX`
   (Where xxxx is the location of the IPSM card use in previous command.)

   Response to the activate command is displayed.

```
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    FLASH Memory Activation for card XXXX Started.
;
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    FLASH Activation for card XXXX Completed.
;
```

6. Issue flash command to download the bootloader image.

   `INIT-FLASH:LOC=XXXX:MODE=RPLCEBL:BITS=64`
   (Where xxxx is the location of the IPSM card use in previous command.)

   Response to flash command is shown. If either response is displayed, then proceed to the next step.

```
    eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y
    BOOTLOADER change for card XXXX SUCCESSFUL.
;

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

OR
   If the bootloader was succesfully downloaded previously:

    eaglestp 17-01-20 12:19:04 MST  EAGLE XX.x.x.x.x-YY.y.y
    BOOTLOADER not changed for card XXXX. Already running requested
bootloader.
;
```

```
eaglestp 17-01-20 12:19:04 MST  EAGLE XX.x.x.x.x-YY.y.y
Command Completed.
```
;

7. Download target-release flash to the IPSM card.

`INIT-FLASH:LOC=XXXX:CODE=APPR:GPL=BLDC32`
(Where `XXXX` is the location of the IPSM card use in previous command.)

Response to flash initialization is shown.

Verify UAM 0004 is displayed.

```
eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y
FLASH Memory Download for card xxxx started.
```
;
```
eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y
FLASH Memory Download for card xxxx completed.
```
;
```
eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y
*   8003.0004  * GPL SYSTEM BLDC32        Card is running non-
activated GPL
```
;

> **Note:**
>
> Wait for card to boot and return to the IMT bus.

8. Issue command to activate the flash image.

`ACT-FLASH:loc=XXXX`
(Where `XXXX` is the location of the IPSM card used in the previous command)

Response to the activate command is displayed.

```
eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
FLASH Memory Activation for card XXXX Started.
```
;
```
eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
FLASH Activation for card XXXX Completed.
```
;

9. Issue the allow command to reload the IPSM card.

`ALW-CARD:LOC=XXXX`
(Where `XXXX` is the location of the card used in the previous command)

Response to allow-card command is shown.

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

10. Retrieve status of the IPSM card if present in the system.

ORACLE®

```
REPT-STAT-GPL:LOC=XXXX
```
Response to GPL status command.

Verify that IPSM card is running BLDC32 flash GPL

```
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
IPSHC69     XXXX       XXX-XXX-XXX        XXX-XXX-XXX    XXX-XXX-
XXX
         BLDC32       YYY-YYY-YYY         YYY-YYY-YYY    YYY-YYY-
YYY


Command Completed.
;
```

11. If this is the last card listed in Step 1, continue to next procedure. Otherwise, repeat Steps 2 - 10 for the next card listed in Step 1.

> **✎ Note:**
>
> Wait till this flashed IPSM card to complete reloading before proceeding to next step.

IPS Application is Provisioned on SLIC Card, Migrate the Same to VxWorks6.9

This procedure is to migrate the SLIC card running IPS application to Vxworks6.9 from VxWorks6.4. Execute the below procedure for every SLIC card with IPS application, present in the system.
Should THIS PROCEDURE FAIL, CONTACT My Oracle Support AND **ASK FOR UPGRADE ASSISTANCE**.

1. If the source release was 46.5 or prior, issue the IPSM card status command. Otherwise, continue to next procedure.

   ```
   REPT-STAT-CARD:APPL=IPS
   ```
   Response to the card status command is displayed.

   ```
   eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
   CARD     VERSION      TYPE      GPL        PST
SST       AST
   XXXX    XXX-XXX-XXX  SLIC      IPSHC      IS-NR
Active     -----
   XXXX    XXX-XXX-XXX  SLIC      IPSHC      IS-NR
Active     -----

   Command Completed.
;
   ```

2. For each IPSM/SLIC card listed above, issue the GPL status commend.

```
REPT-STAT-GPL:LOC=XXXX
```
(Where XXXX is the location of the IPSM/SLIC card slot listed in previous step.)

Response to the GPL status command is displayed.

If the ALM indictor is displayed for the card's flash image, continue. If card is running BLSLC32, continue.

Otherwise repeat step 2 for next SLIC card in list.

```
    eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x-YY.yy.y
    GPL         CARD       RUNNING            APPROVED       TRIAL
    IPSHC       XXXX       XXX-XXX-XXX         XXX-XXX-XXX   XXX-XXX-
XXX
        BLSLC32            ZZZ-ZZZ-ZZZ ALM    YYY-YYY-YYY    YYY-YYY-
YYY

    Command Completed.
```

3. Issue command to inhibit the card.

```
INH-CARD:LOC=XXXX
```
(Where XXXX is the location of the IPSM/SLIC card slot listed in previous step.)

Response to the inhibit command is displayed.

If the ALM indication was displayed in step 2, continue. Otherwise, go to step 6.

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

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

;
```

> **Note:**
>
> Wait for the card to boot and return to the IMT bus.

4. Issue command to download approved flash image.

```
INIT-FLASH:LOC=XXXX:CODE=APPR
```
(Where XXXX is the location of the IPSM/SLIC card use in previous command.)

Response to flash initialization is shown. Verify UAM 0004 is displayed. If card is running BLSL932, go to step 5. Otherwise, continue.

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

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

> **✎ Note:**
>
> Wait for card to boot and return to the IMT bus.

5. Issue command to activate the flash image.

   `ACT-FLASH:loc=XXXX`
   (Where XXXX is the location of the IPSM/SLIC card use in previous command.)

   Response to the activate command is displayed.

```
eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    FLASH Memory Activation for card XXXX Started.
;
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    FLASH Activation for card XXXX Completed.
;
```

6. Issue flash command to download target-release flash to the IPSM/SLIC card.

   `INIT-FLASH:LOC=XXXX:CODE=APPR:GPL=BLSL932`
   (Where XXXX is the location used in the previous command)

   Response to flash initialization is shown.

   Verify UAM 0004 is displayed.

```
    eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y
    FLASH Memory Download for card xxxx started.
;
    eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y
    FLASH Memory Download for card xxxx completed.
;
    eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y
*   8003.0004  * GPL SYSTEM BLSL932      Card is running non-
activated GPL
;
```

> **✎ Note:**
>
> Wait for card to boot and return to the IMT bus.

7. Issue command to activate the flash image.

   `ACT-FLASH:loc=XXXX`
   (Where XXXX is the location of the IPSM/SLIC card used in the previous command)

Response to the activate command is displayed.

```
eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    FLASH Memory Activation for card XXXX Started.
;
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    FLASH Activation for card XXXX Completed.
;
```

8. Issue the allow command to reload the IPSM card.

   ```
   ALW-CARD:LOC=XXXX
   ```
   (Where XXXX is the location of the card used in the previous command)

   Response to allow-card command is shown.

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

9. Issue command to report GPL status.

   ```
   REPT-STAT-GPL:LOC=XXXX
   ```
   Response to GPL status command.

   Verify that IPSM card is running BLSL932 GPL.

   ```
   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
   IPSHC69     XXXX        XXX-XXX-XXX         XXX-XXX-XXX   XXX-XXX-
   XXX
           BLSL932     YYY-YYY-YYY         YYY-YYY-YYY   YYY-YYY-
   YYY

       Command Completed.
   ;
   ```

   If this is last card listed in Step 1, continue to next procedure. Otherwise, repeat Steps 2 - Step 9 for the next card listed in Step 1.

   > **Note:**
   >
   > Wait till this flashed IPSM/SLIC card to complete reloading before proceeding to next step.

Completing Upgrade/Return to Full-Function Mode

This procedure completes the upgrade and returns the system to full-function mode. Verification of the GPL distribution is also performed.

Should THIS PROCEDURE FAIL, CONTACT My Oracle Support AND **ASK FOR UPGRADE ASSISTANCE.**

1. If system remains in upgrade mode, issue the command to initialize both MASPs. Otherwise, go to step 4.

   `INIT-CARD:APPL=OAM`
   Response to the init command is displayed.

   Verify the banner display full-function mode after the MASPs boot.

   ```
       eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y Upg Phase x
       init-card:appl=oam
       Command entered at terminal #10.
   ;

       eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
       0002.0009    CARD 1113 OAMHC       MASP became active
   ;
   ```

2. Issue the 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 EST PPP XX.x.x.x.x-YY.y.y
       User logged in on terminal 10.
   ;
   ```

3. Issue the command to reactivate printer capture.

   `ACT-ECHO:TRM=P`
   (Where `P` is the terminal port number specified in Verifying Pre-Upgrade Requirements and Capturing Upgrade Data, Step 5)

   Response to printer capture command is displayed.

   ```
       eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
       act-echo:trm=X
       Command entered at terminal #10.
   ;
   ```

4. Issue the command to display card status.

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

   Verify that no "ALM" indicator is displayed.

   If GPL versions are not displayed, wait for the MASPs to return to service and re-issue the command.

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

       GPL         CARD     RUNNING            APPROVED      TRIAL
       OAMHC        1113     XXX-XXX-XXX ALM    XXX-XXX-XXX   XXX-XXX-
   ```

```
XXX   *
        BLDC32          XXX-XXX-XXX         XXX-XXX-XXX     XXX-XXX-
XXX
    OAMHC       1115        XXX-XXX-XXX         XXX-XXX-XXX     XXX-XXX-
XXX   *
        BLDC32          XXX-XXX-XXX         XXX-XXX-XXX     XXX-XXX-
XXX
    ATMHC       1206        XXX-XXX-XXX         XXX-XXX-XXX     XXX-XXX-
XXX
        BLIXP           XXX-XXX-XXX         XXX-XXX-XXX     XXX-XXX-
XXX
    HIPR2       1209        XXX-XXX-XXX         XXX-XXX-XXX     XXX-XXX-
XXX
    HIPR2       1210        XXX-XXX-XXX         XXX-XXX-XXX     XXX-XXX-
XXX
    HIPR        1109        XXX-XXX-XXX         XXX-XXX-XXX     XXX-XXX-
XXX
    HIPR        1110        XXX-XXX-XXX         XXX-XXX-XXX     XXX-XXX-
XXX
    SS7HC       1201        XXX-XXX-XXX         XXX-XXX-XXX     XXX-XXX-
XXX
        BLIXP           XXX-XXX-XXX         XXX-XXX-XXX     XXX-XXX-
XXX
    SS7HC       1202        XXX-XXX-XXX         XXX-XXX-XXX     XXX-XXX-
XXX
        BLIXP           XXX-XXX-XXX         XXX-XXX-XXX     XXX-XXX-
XXX
    GLSHC       1213        XXX-XXX-XXX         XXX-XXX-XXX     XXX-XXX-
XXX
        BLIXP           XXX-XXX-XXX         XXX-XXX-XXX     XXX-XXX-
XXX
    GLSHC       1214        XXX-XXX-XXX         XXX-XXX-XXX     XXX-XXX-
XXX
        BLIXP           XXX-XXX-XXX         XXX-XXX-XXX     XXX-XXX-
XXX
    SCCPHC      1107        XXX-XXX-XXX         XXX-XXX-XXX     XXX-XXX-
XXX
        BLIXP           XXX-XXX-XXX ALM     XXX-XXX-XXX     XXX-XXX-
XXX
    SCCPHC      1111        XXX-XXX-XXX         XXX-XXX-XXX     XXX-XXX-
XXX
        BLIXP           XXX-XXX-XXX         XXX-XXX-XXX     XXX-XXX-
XXX
    Command Completed.
;
```

5. Establish system status.

   See recommendation # 7 in Recommendations.

Backing Up Converted Database

This procedure backs up the converted Target-Release database to the fixed disk and to either the removable media or the DB FTP server if provisioned. Verification of the converted database is also done.

Should THIS PROCEDURE FAIL, CONTACT My Oracle Support AND **ASK FOR UPGRADE ASSISTANCE.**

1. If the target release was on the RMD, insert the target-release RMD. Then go to step 6. If a source-release RMD is available and the target release was on the inactive partition, insert the RMD and continue. Otherwise, go to step 13.

> **✎ Note:**
>
> DO NOT use the source release RMD created in Backing Up the Database.

Once inserted, allow time for the RMD to be detected by the system.

RMD is inserted in the latched USB port on the active E5-MASP.

2. Issue the command to retrieve measurement status.

```
rtrv-meas-sched
```
Response to retrieve command is displayed.

Record if collection is on or off:

_____

Record if system configuration requires measurements to be on or off:

_____

If COLLECT=ON, continue to next step. Otherwise, go to Step 4.

```
eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    COLLECT        = off
    SYSTOT-STP     = (off)
    SYSTOT-TT      = (off)
    COMP-LNKSET    = (off)
    COMP-LINK      = (off)
    MTCD-STP       = (on)
    MTCD-LINK      = (on)
    MTCD-LNKSET    = (on)
;
```

3. Issue the command to turn off measurement collection.

```
chg-meas:collect=off
```
Response to the change command is displayed.

```
eaglestp YY-MM-DD hh:mm:ss zzzz PPP XX.x.x.x.x-YY.y.y
    chg-meas:collect=off
    Command entered at terminal #XX.
;

    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    CHG-MEAS: MASP A - COMPLTD
;
```

4. Issue the command to format the RMD.

```
FORMAT-DISK:TYPE=SYSTEM:FORCE=YES
```
Response to format command is displayed.

If the format fails, first repeat the previous step, and then contact My Oracle Support.

```
eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    Format-disk of system removable cartridge started.
    Extended processing required, please wait.
;

    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    Format-disk of system removable cartridge completed.
;
```

5. Issue the command to copy the GPLs to the RMD.

```
COPY-GPL
```
Response to copy command is displayed.

```
eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    COPY-GPL
    Command entered at terminal #10.
;

    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    COPY-GPL: MASP A - COPY STARTS ON ACTIVE MASP
;

    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    COPY-GPL: MASP A - COPY COMPLETED ON ACTIVE MASP
;
```

6. Issue the command to report database status.

```
REPT-STAT-DB
```
Response to database status command is displayed.

Check entries in 'C' should be coherent, which is indicated by a 'Y'.

If all FD BKUP & FD CRNT entries in column 'LEVEL' are the same, go to step 9.

```
    eaglestp YY-MM-DD hh:mm:ss EST PPP 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      XXX YY-MM-DD hh:mm:ss TTTT Y     XXX YY-MM-DD
hh:mm:ss TTTT
    FD CRNT Y      XXX YY-MM-DD hh:mm:ss TTTT Y     XXX YY-MM-DD
hh:mm:ss TTTT
            MCAP 1113                            MCAP 1115
            - --------                           - --------
    RD BKUP -       -      -      -          N       1
-       -
```

```
      USB BKP -        -      -       -         -        -
-         -
```

7. Issue the database command to backup the fixed disks.

   `CHG-DB:ACTION=BACKUP`
   Response and progress of back up command are displayed.

   ```
       eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
       5028.1114    CARD 1115     Database BACKUP started
                    Report Date:YY-MM-DD  Time:hh:mm:ss
   ;


       eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
       BACKUP (FIXED): MASP A - Backup starts on active MASP.
   ;


       eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
       BACKUP (FIXED): MASP A - Backup on active MASP to fixed disk
   complete.
   ;


       eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
       BACKUP (FIXED): MASP A - Backup starts on standby MASP.
   ;


       eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
       5031.1116    CARD 1115     Database action ended - OK
                    Report Date:YY-MM-DD  Time:hh:mm:ss
   ;


       eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
       BACKUP (FIXED): MASP A - Backup on standby MASP to fixed disk
   complete
   ;
   ```

8. Issue the command to report database status.

   `rept-stat-db`
   Response to database status command is displayed.

   Check: entries in `C` should be coherent, which is indicated by a `Y`.

   Verify both `FD CRNT` and `FD BKUP` Levels are equal.

   ```
       eaglestp YY-MM-DD hh:mm:ss TTTT PPP  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     XXX YY-MM-DD hh:mm:ss TTTT Y     XXX
   -       -
       FD CRNT Y     XXX                        Y     XXX
           MCAP 1113                        MCAP 1115
   ```

```
          - --------                       - --------
     RD BKUP -     -          -        -         N        1
-        -
     USB BKP -     -          -        -         -        -
-          -
;
```

9. Issue the database command to back up to the target-release RMD.

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

    ```
         eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
         5035.1114    CARD 1115     Database BACKUP started
                     Report Date:YY-MM-DD  Time:hh:mm:ss

         eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
         BACKUP (REMOVABLE): MASP B - Backup starts on active MASP.
    ;

         eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
         BACKUP (REMOVABLE): MASP B - Backup to removable cartridge
    complete.
    ;
    ```

10. Issue the command to report database status.

    `rept-stat-db`
    Response to database status command is displayed.

    Check entries in `C` should be coherent, which is indicated by a `Y`.

    ```
         eaglestp YY-MM-DD hh:mm:ss EST PPP 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      XXX YY-MM-DD hh:mm:ss TTTT Y      XXX YY-MM-DD
    hh:mm:ss TTTT
         FD CRNT Y      XXX                       Y      XXX
                MCAP 1113                         MCAP 1115
                - --------                        - --------
         RD BKUP -      -     -        -          Y      XXX YY-MM-DD
    hh:mm:ss TTTT
         USB BKP -      -     -        -          -      -
    -         -
    ```

11. Issue the command to display GPL status.

    `rtrv-gpl`
    Response from the retrieve command is displayed.

Verify that the GPL versions that are displayed in the RELEASE and REMOVE TRIAL column are correct; see Software Release Numbering.

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

    GPL      CARD  RELEASE     APPROVED      TRIAL
REMOVE TRIAL
    GGGGGG1  1114  XXX-XXX-XXX XXX-XXX-XXX   XXX-XXX-XXX  XXX-
XXX-XXX
    GGGGGG1  1116  XXX-XXX-XXX XXX-XXX-XXX   XXX-XXX-XXX
-----------
    GGGGGG1  1113  ----------- -----------   -----------
-----------
    GGGGGG2  1114  XXX-XXX-XXX XXX-XXX-XXX   XXX-XXX-XXX  XXX-
XXX-XXX
    GGGGGG2  1116  XXX-XXX-XXX XXX-XXX-XXX   XXX-XXX-XXX
-----------
    GGGGGG2  1113  ----------- -----------   -----------
-----------
    GGGGGG3  1114  XXX-XXX-XXX XXX-XXX-XXX   XXX-XXX-XXX  XXX-
XXX-XXX
    GGGGGG3  1116  XXX-XXX-XXX XXX-XXX-XXX   XXX-XXX-XXX
-----------
    GGGGGG3  1113  ----------- -----------   -----------
-----------
    OAMHC    1114  XXX-XXX-XXX XXX-XXX-XXX   -----------
-----------
    OAMHC    1116  XXX-XXX-XXX XXX-XXX-XXX   -----------
-----------
    OAMHC    1113  ----------- -----------   -----------
-----------
    GGGGGG4  1114  XXX-XXX-XXX XXX-XXX-XXX   XXX-XXX-XXX  XXX-
XXX-XXX
    GGGGGG4  1116  XXX-XXX-XXX XXX-XXX-XXX   XXX-XXX-XXX
-----------
    GGGGGG4  1113  ----------- -----------   -----------
-----------
    GGGGGG5  1114  XXX-XXX-XXX XXX-XXX-XXX   XXX-XXX-XXX  XXX-
XXX-XXX
    GGGGGG5  1116  XXX-XXX-XXX XXX-XXX-XXX   XXX-XXX-XXX
-----------
    GGGGGG5  1113  ----------- -----------   -----------
-----------
    GGGGGG6  1114  XXX-XXX-XXX XXX-XXX-XXX   XXX-XXX-XXX  XXX-
XXX-XXX
    GGGGGG6  1116  XXX-XXX-XXX XXX-XXX-XXX   XXX-XXX-XXX
-----------
    GGGGGG6  1113  ----------- -----------   -----------
-----------

;
```

12. Remove the target-release RMD from the drive slot.

Store the RMD in a safe location.

13. If the system is configured for remote backups, issue the database command to backup to remote FTP server. Otherwise, go to step 14.

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

```
eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    5035.1114    CARD 1115    Database BACKUP started
                 Report Date:YY-MM-DD  Time:hh:mm:ss

    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    BACKUP (SERVER): MASP B - Backup starts on active MASP.
;

    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    BACKUP (SERVER): MASP B - Backup to server complete.
;
```

14. If step 3 was executed, issue the command to turn the measurements collection on.

```
chg-meas:collect=on
```
Response to change measurement command is displayed.

```
eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x.x.x-YY.y.y
    chg-meas:collect=on
    Command entered at terminal #10.
;

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

Upgrade Session 2

Verifying Upgrade Session 2 Requirements

This procedure verifies that all upgrade session 2 requirements have been met. This procedure assumes an acceptable amount of soak time has occurred since the end of session #1. The expected norm for soak time is 48 hours.
Should THIS PROCEDURE FAIL, CONTACT My Oracle Support AND **ASK FOR UPGRADE ASSISTANCE.**

- Complete pre-upgrade session 2 tasks.

  Verify that an EAGLE system health check 3 has been performed prior to upgrade session 2 execution.

Upgrading Removable Medias

This procedure describes how to update source-release removable media to the target release. See recommendation #2 in Recommendations.

Should THIS PROCEDURE FAIL, CONTACT My Oracle Support AND **ASK FOR UPGRADE ASSISTANCE.**

1. Echo command input to capture terminal. See recommendation #1 & #6 in Recommendations.

```
act-echo:trm=P
```
(Where the value for P is one of the printer/KSR terminal port numbers recorded in Verifying Pre-Upgrade Requirements and Capturing Upgrade Data, Step 3)

Response to activate command is displayed.

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

2. If capture terminal's output groups are not all set to YES, issue the change terminal command.

```
chg-trm:trm=P:all=yes
```
(P is the terminal port that is specified in step 1)

Response to change terminal command is displayed.

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

3. If the measurements platform is enabled[1] go to step 9. Otherwise, issue the command to retrieve measurement status.

> **✎ Note:**
>
> If enabled, the measurements platform feature is displayed in Procedure 1, Step 11.

```
rtrv-meas-sched
```

Response to retrieve command is displayed.

Record if collection is on or off:

_____

Record if system configuration requires measurements to be on or off:

_____

If COLLECT=ON, continue to next step. Otherwise, go to Step 9.

```
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    COLLECT        = off
    SYSTOT-STP     = (off)
    SYSTOT-TT      = (off)
    COMP-LNKSET    = (off)
    COMP-LINK      = (off)
```

```
        MTCD-STP      = (on)
        MTCD-LINK     = (on)
        MTCD-LNKSET   = (on)
;
```

4. Issue the command to turn off measurement collection.

```
chg-meas:collect=off
```
Response to the change command is displayed.

```
    eaglestp YY-MM-DD hh:mm:ss zzzz PPP XX.x.x.x.x-YY.y.y
    chg-meas:collect=off
    Command entered at terminal #XX.
;

    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    CHG-MEAS: MASP A – COMPLTD
;
```

5. Issue measurement report command.

```
rept-meas:type=systot:enttype=stp
```
Response to the command is displayed.

If command fails, reattempt in five minutes until it completes, See Table below.

```
E2278 Cmd Rej: 30-minute measurement collection in progress

    eaglestp YY-MM-DD hh:mm:ss zzzz PPP XX.x.x.x.x-YY.y.y
    rept-meas:type=systot:enttype=stp
    Command entered at terminal #XX.
;
```

6. If LNP feature on, issue measurement report command.

> ✎ **Note:**
>
> This cmd is not supported in 46.3.

```
rept-meas:type=mtcd:enttype=lnp
```

Response to the command is displayed.

If command fails, reattempt in five minutes until it completes, See Table below.

```
E2277 Cmd Rej: Daily measurement collection in progress

    eaglestp YY-MM-DD hh:mm:ss zzzz PPP XX.x.x.x.x-YY.y.y
    rept-meas:type=mtcd:enttype=lnp
    Command entered at terminal #XX.
;
```

7. Issue measurement report command.

```
rept-meas:type=mtcdth:enttype=stp
```

ORACLE®

Response to the command is displayed.

If command fails, reattempt in five minutes until it completes, See Table below.

If no source cartridges need upgrading, go to next procedure.

```
E2276 Cmd Rej: Day-to-hour measurement collection in progress

    eaglestp YY-MM-DD hh:mm:ss zzzz PPP XX.x.x.x.x-YY.y.y
    rept-meas:type= mtcdth:enttype=stp
    Command entered at terminal #XX.
;
```

8. Insert the source-release RMD to be upgraded into the drive slot on the active MASP.

   Once inserted, allow time for the RMD to be detected by the system.
   RMD is inserted in the latched USB port on the active E5-MASP.

9. Issue the command to format the RMD.

   ```
   format-disk:type=system:force=yes
   ```
   Response to format command is displayed.

   If the format should fail, first repeat Step 16, then contact My Oracle Support.

   ```
   eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
       Format-disk of system removable cartridge started.
       Extended processing required, please wait.
   ;

       eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
       Format-disk of system removable cartridge completed.
   ;
   ```

10. Issue the command to copy the GPLs to the target-release RMD.

    ```
    copy-gpl
    ```
    Response to copy command is displayed.

    ```
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
        copy-gpl
        Command entered at terminal #10.
    ;

        eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
        COPY-GPL: MASP A - COPY STARTS ON ACTIVE MASP
    ;

        eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
        COPY-GPL: MASP A - COPY COMPLETED ON ACTIVE MASP
    ;
    ```

11. Issue the command to backup the target-release database to the RMD.

    ```
    chg-db:action=backup:dest=remove
    ```

Response to backup command is displayed.

```
eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    5035.1114    CARD 1115    Database BACKUP started
                 Report Date:YY-MM-DD  Time:hh:mm:ss
;

    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    BACKUP (REMOVABLE): MASP B - Backup starts on active MASP.
;

    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    BACKUP (REMOVABLE): MASP B - Backup to removable cartridge
complete.
;
```

12. Remove the target-release RMD from the drive slot and store it in a safe place.

If upgrading more RMDs, repeat step 15-22.

Table 5-4   MTT Errors Generated When Measurement Collection is in Progress

Response ID Code:	Command Reject Text for MTT error:
E2276	Day-to-hour measurement collection in progress
E2277	Daily measurement collection in progress
E2278	30-minute measurement collection in progress
E2279	5-minute measurement collection in progress
E2290	Hourly measurement collection in progress
E3688	15-minute measurement collection in progress

Backing Up Fixed Disk

This procedure backs up the converted target-release database to the fixed disk. This is done to ensure a recent database backup has been performed. Verification of the converted database is also done.
Should THIS PROCEDURE FAIL, CONTACT My Oracle Support AND **ASK FOR UPGRADE ASSISTANCE.**

- Issue the command to backup the database to the fixed disks.

```
chg-db:action=backup
```
Response and progress of the backup command are displayed.

```
eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    5028.1114    CARD 1115    Database BACKUP started
                 Report Date:YY-MM-DD  Time:hh:mm:ss
;

    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    BACKUP (FIXED): MASP A - Backup starts on active MASP.
;
```

```
        eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
        BACKUP (FIXED): MASP A - Backup on active MASP to fixed disk
complete.
;

        eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
        BACKUP (FIXED): MASP A - Backup starts on standby MASP.
;

        eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
        5031.1116    CARD 1115    Database action ended - OK
                   Report Date:YY-MM-DD  Time:hh:mm:ss
;

        eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
        BACKUP (FIXED): MASP A - Backup on standby MASP to fixed disk
complete.
;
```

Migrate the ATMITU or ATMANSI (E5-ATM-B) Cards Running VxWorks 6.4 GPL to VxWorks 6.9 GPL

> **✏️ Note:**
>
> Run this procedure if the target release is 46.9.0 and later.

This procedure flashes the LIMATM or LIME1ATM-type E5-ATM-B cards to load new VxWorks 6.9 flash images. Execute the below procedure for every LIMATM or LIME1ATM-type E5-ATM-B card present in the system.
Should THIS PROCEDURE FAIL, CONTACT My Oracle Support AND **ASK FOR UPGRADE ASSISTANCE.**

1. If the source release was 46.7.x and later, issue the LIMATM or LIME1ATM-type card status command. Otherwise, continue to next procedure.

   `REPT-STAT-CARD:APPL=ATMITU` OR `REPT-STAT-CARD:APPL=ATMANSI`
   Response to the card status command is displayed.

   ```
       eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
                        CARD    VERSION      TYPE      GPL
   PST            SST      AST
                        XXXX    XXX-XXX-XXX  LIMATM    ATMHC     IS-
   NR         Active    -----
                        XXXX    XXX-XXX-XXX  LIMATM    ATMHC     IS-
   NR         Active    -----

                        Command Completed.
                        ;
   ```

2. For each LIMATM or LIME1ATM-type card listed above, issue the GPL status command.

```
REPT-STAT-GPL:LOC=XXXX
```
(Where XXXX is the location of a LIMATM or LIME1ATM-type card slot listed in previous step.)

Response to the status command is displayed.

If the "ALM" indictor is displayed for the card's flash image, continue. If card is running BLMCAP, continue. Otherwise repeat step 2 for next LIMATM or LIME1ATM-type card in list.

```
    eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x-YY.yy.y
                              GPL          CARD        RUNNING
APPROVED        TRIAL
                              ATMHC        XXXX        XXX-XXX-XXX
XXX-XXX-XXX    XXX-XXX-XXX
                              ZZZZZZ          ZZZ-ZZZ-ZZZ ALM     YYY-
YYY-YYY    YYY-YYY-YYY

                              Command Completed.
```

3. Issue command to cancel the links on the card.

```
DACT-SLK:LOC=XXXX:LINK=<LINK NAME>
```
(Where XXXX is the location of the LIMATM or LIME1ATM-type card used in the previous step)

4. Issue command to inhibit the card.

```
INH-CARD:LOC=XXXX
```
(Where XXXX is the location of the LIMATM or LIME1ATM-type card use in previous command.)

Response to the inhibit command is displayed

If the ALM indication was displayed in step 2, continue. Otherwise, go to step 7.

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

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

                              Command Completed.
                              ;
```

> **✎ Note:**
>
> Wait for the card to boot and return to the IMT bus.

5. Issue command to download approved flash image.

```
INIT-FLASH:LOC=XXXX:CODE=APPR:GPL=BLMCAP
```

(Where XXXX is the location of the LIMATM or LIME1ATM-type card use in previous command.)

Response to flash initialization is shown.

Verify UAM 0004 is displayed. If card is running BLDC32, go to step 7. Otherwise, continue.

```
    eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y
                            FLASH Memory Download for card xxxx
started.
                            ;
                            eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE
XX.x.x.x.x-YY.y.y
                            FLASH Memory Download for card xxxx
completed.
                            ;
                            eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE
XX.x.x.x.x-YY.y.y
                            8003.0004  * GPL SYSTEM ZZZZZZ
Card is running non-activated GPL
                            ;
```

> **Note:**
>
> Wait for card to boot and return to the IMT bus.

6. Issue command to activate the flash image.

   `ACT-FLASH:LOC=XXXX`
   (Where XXXX is the location of the LIMATM or LIME1ATM-type card use in previous command.)

   Response to the activate command is displayed.

```
eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
                            FLASH Memory Activation for card XXXX
Started.
                            ;
                            eaglestp YY-MM-DD hh:mm:ss EST PPP
XX.x.x.x.x-YY.y.y
                            FLASH Activation for card XXXX
Completed.
                            ;
```

7. Issue flash command to download the bootloader image.

   `INIT-FLASH:LOC=XXXX:MODE=RPLCEBL:BITS=64`
   (Where XXXX is the location of the LIMATM or LIME1ATM-type card use in previous command.)

   Response to flash command is shown.

If either response is displayed, then proceed to the next step.

```
eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y
                    BOOTLOADER change for card XXXX SUCCESSFUL.
                    ;

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

                    OR
                    If the bootloader was succesfully
downloaded previously:

                    eaglestp 17-01-20 12:19:04 MST  EAGLE
XX.x.x.x.x-YY.y.y
                    BOOTLOADER not changed for card XXXX.
Already running requested bootloader.
                    ;

                    eaglestp 17-01-20 12:19:04 MST  EAGLE
XX.x.x.x.x-YY.y.y
                    Command Completed.
                    ;
```

8. Download target-release flash to the LIMATM or LIME1ATM-type card.

   INIT-FLASH:LOC=XXXX:CODE=APPR:GPL=BLDC32
   (Where XXXX is the location used in the previous command)

   Response to flash initialization is shown.

   Verify UAM 0004 is displayed.

```
eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y
                     FLASH Memory Download for card xxxx
started.
                     ;
                     eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE
XX.x.x.x.x-YY.y.y
                     FLASH Memory Download for card xxxx
completed.
                     ;
                     eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE
XX.x.x.x.x-YY.y.y
                     *   8003.0004  * GPL SYSTEM
BLDC32       Card is running non-activated GPL
                     ;
```

> **✏ Note:**
>
> Wait for card to boot and return to the IMT bus.

9. Issue command to activate the flash image.

   `ACT-FLASH:loc=XXXX`
   (Where `XXXX` is the location of the LIMATM or LIME1ATM-type card used in the previous command)

   Response to the activate command is displayed.

   ```
   eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
                                 FLASH Memory Activation for card XXXX
   Started.
                                 ;
                                 eaglestp YY-MM-DD hh:mm:ss EST PPP
   XX.x.x.x.x-YY.y.y
                                 FLASH Activation for card XXXX
   Completed.
                                 ;
   ```

10. Issue the allow command to reload the LIMATM or LIME1ATM-type card.

    `ALW-CARD:LOC=XXXX`
    (Where `XXXX` is the location of the card used in the previous command)

    Response to allow-card command is shown.

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

11. Retrieve status of the LIMATM or LIME1ATM-type card if present in the system.

    `REPT-STAT-GPL:LOC=XXXX`
    (Where `XXXX` is the location of the card used in the previous command)

    Response to GPL status command.

    Verify that LIMATM or LIME1ATM-type card is BLDC32 GPL.

    ```
                                 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
                                 ATMHC69      XXXX        XXX-XXX-XXX
   XXX-XXX-XXX    XXX-XXX-XXX
                                 BLDC32          YYY-YYY-YYY          YYY-
   YYY-YYY    YYY-YYY-YYY
    ```

```
                    Command Completed.
                    ;
```

12. Issue command to activate the links.

    ```
    ACT-SLK:LOC=XXXX:LINK=<LINK NAME>
    ```
    (Where XXXX is the location of the LIMATM or LIME1ATM-type card in Step 3)

13. Issue command to report the status of the LIMATM or LIME1ATM-type cards.

    `REPT-STAT-CARD:APPL=LIMATM` OR `REPT-STAT-CARD:APPL=LIME1ATM`
    Response to the status command.

    Verify that LIMATM or LIME1ATM cards have returned to IS-NR

    ```
        eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
                            CARD    VERSION       TYPE        GPL
    PST             SST        AST
                            XXXX    XXX-XXX-XXX   LIMATM      ATMHC       IS-
    NR          Active      -----
                            XXXX    XXX-XXX-XXX   LIMATM      ATMHC       IS-
    NR          Active      -----

                            Command Completed.
                            ;
    ```

14. If this is the last card listed in Step 1, continue to next procedure. Otherwise, repeat Steps 2 - 13 for the next card listed in Step 1.

    > **Note:**
    >
    > Wait till this flashed LIMATM or LIME1ATM-type card to complete reloading before proceeding to next step.

Migrate the E5-E1T1-B Cards Running VxWorks 6.4 GPL to VxWorks 6.9 GPL

> **Note:**
>
> Run this procedure if the target release is 46.9.0 and later.

This procedure flashes the LIME1 or LIMT1 E5-E1T1-B cards to load new VxWorks 6.9 flash images. For SLIC cards running the SS7HC GPL, use the next procedure. Execute the below procedure for every LIME1 or LIMT1 E5-E1T1-B card present in the system.

Should THIS PROCEDURE FAIL, CONTACT My Oracle Support AND **ASK FOR UPGRADE ASSISTANCE.**

1. If the source release was 46.7.x and later, issue the LIME1 or LIMT1 card status command. Otherwise, continue to next procedure.

   `REPT-STAT-CARD:APPL=SS7ANSI` OR `REPT-STAT-CARD:APPL=CCS7ITU`
   Response to the card status command is displayed.

   ```
       eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
                           CARD    VERSION      TYPE
   GPL          PST          SST         AST
                           XXXX    XXX-XXX-XXX  LIME1          SS7HC
   IS-NR           Active       -----
                           XXXX    XXX-XXX-XXX  LIME1          SS7HC
   IS-NR           Active       -----

                           Command Completed.
                           ;
   ```

2. For each LIME1 or LIMT1 E5-E1T1-B-type card listed above, issue the GPL status command.

   `REPT-STAT-GPL:LOC=XXXX`
   (Where XXXX is the location of a LIME1 or LIMT1 E5-E1T1-B card slot listed in previous step.)

   Response to the status command is displayed.

   If the "ALM" indictor is displayed for the card's flash image, continue. If card is running BLMCAP, continue. Otherwise repeat step 2 for next LIME1 card in list.

   ```
       eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x-YY.yy.y
                                   GPL           CARD
   RUNNING              APPROVED     TRIAL
                                   SS7HC       XXXX         XXX-XXX-
   XXX          XXX-XXX-XXX    XXX-XXX-XXX
                                   ZZZZZZ         ZZZ-ZZZ-ZZZ ALM
   YYY-YYY-YYY     YYY-YYY-YYY

                                   Command Completed.
   ```

3. Issue command to cancel the links on the card.

   `DACT-SLK:LOC=XXXX:LINK=<LINK NAME>`
   (Where XXXX is the location of the LIME1 or LIMT1 E5-E1T1-B card used in the previous step)

4. Issue command to inhibit the card.

   `INH-CARD:LOC=XXXX`
   (Where XXXX is the location of the LIME1 or LIMT1 E5-E1T1-B card use in previous command.)

   Response to the inhibit command is displayed

If the `ALM` indication was displayed in step 2, continue. Otherwise, go to step 7.

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

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

                                  Command Completed.
                                  ;
```

> **Note:**
>
> Wait for the card to boot and return to the IMT bus.

5. Issue command to download approved flash image.

   `INIT-FLASH:LOC=XXXX:CODE=APPR:GPL=BLMCAP`
   (Where `XXXX` is the location of the LIME1 or LIMT1 E5-E1T1-B card use in previous command.)

   Response to flash initialization is shown.

   Verify UAM 0004 is displayed. If card is running BLDC32, go to step 7. Otherwise, continue.

```
    eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y
                                  FLASH Memory Download for card xxxx
started.
                                  ;
                                  eaglestp YY-MM-DD hh:mm:ss TTTT
EAGLE XX.x.x.x.x-YY.y.y
                                  FLASH Memory Download for card xxxx
completed.
                                  ;
                                  eaglestp YY-MM-DD hh:mm:ss TTTT
EAGLE XX.x.x.x.x-YY.y.y
                                  8003.0004  * GPL SYSTEM
ZZZZZZ        Card is running non-activated GPL
                                  ;
```

> **Note:**
>
> Wait for card to boot and return to the IMT bus.

6. Issue command to activate the flash image.

   `ACT-FLASH:LOC=XXXX`

(Where XXXX is the location of the LIME1 or LIMT1 E5-E1T1-B card use in previous command.)

Response to the activate command is displayed.

```
eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
                             FLASH Memory Activation for card XXXX
Started.
                             ;
                             eaglestp YY-MM-DD hh:mm:ss EST PPP
XX.x.x.x.x-YY.y.y
                             FLASH Activation for card XXXX
Completed.
                             ;
```

7. Issue flash command to download the bootloader image.

   `INIT-FLASH:LOC=XXXX:MODE=RPLCEBL:BITS=64`
   (Where XXXX is the location of the LIME1 or LIMT1 E5-E1T1-B card used in the previous command.)

   Response to flash command is shown.

   If either response is displayed, then proceed to the next step.

```
   eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y
                             BOOTLOADER change for card XXXX
SUCCESSFUL.
                             ;

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

                             Command Completed.
                             ;

                             OR
                             If the bootloader was succesfully
downloaded previously:

                             eaglestp 17-01-20 12:19:04 MST  EAGLE
XX.x.x.x.x-YY.y.y
                             BOOTLOADER not changed for card XXXX.
Already running requested bootloader.
                             ;

                             eaglestp 17-01-20 12:19:04 MST  EAGLE
XX.x.x.x.x-YY.y.y

                             Command Completed.
                             ;
```

8. Download target-release flash to the LIME1 or LIMT1 E5-E1T1-B card.

   `INIT-FLASH:LOC=XXXX:CODE=APPR:GPL=BLDC32`
   (Where XXXX is the location used in the previous command)

   Response to flash initialization is shown.

Verify UAM 0004 is displayed.

```
    eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y
                                FLASH Memory Download for card xxxx
started.
                                ;
                                eaglestp YY-MM-DD hh:mm:ss TTTT
EAGLE XX.x.x.x.x-YY.y.y
                                FLASH Memory Download for card xxxx
completed.
                                ;
                                eaglestp YY-MM-DD hh:mm:ss TTTT
EAGLE XX.x.x.x.x-YY.y.y
                                *   8003.0004  * GPL SYSTEM
BLDC32       Card is running non-activated GPL
                                ;
```

> **Note:**
>
> Wait for card to boot and return to the IMT bus.

9. Issue command to activate the flash image.

   `ACT-FLASH:loc=XXXX`
   (Where XXXX is the location of the LIME1 or LIMT1 E5-E1T1-B card used in the previous command)

   Response to the activate command is displayed.

```
eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
                                FLASH Memory Activation for card XXXX
Started.
                                ;
                                eaglestp YY-MM-DD hh:mm:ss EST PPP
XX.x.x.x.x-YY.y.y
                                FLASH Activation for card XXXX
Completed.
                                ;
```

10. Issue the allow command to reload the LIME1 or LIMT1 E5-E1T1-B card.

    `ALW-CARD:LOC=XXXX`
    (Where XXXX is the location of the card used in the previous command)

    Response to allow-card command is shown.

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

```
                                        ;
```

11. Retrieve status of the LIME1 or LIMT1 E5-E1T1-B card if present in the system.

    ```
    REPT-STAT-GPL:LOC=XXXX
    ```
    (Where XXXX is the location of the card used in the previous command)

    Response to GPL status command.

    Verify that LIME1 or LIMT1 card is BLDC32 GPL.

```
                                    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
                                    SS7HC69    XXXX       XXX-XXX-
XXX        XXX-XXX-XXX    XXX-XXX-XXX
                                    BLDC32          YYY-YYY-YYY
YYY-YYY-YYY    YYY-YYY-YYY

                                    Command Completed.
                                    ;
```

12. Issue command to activate the links.

    ```
    ACT-SLK:LOC=XXXX:LINK=<LINK NAME>
    ```
    (Where XXXX is the location of the LIME1 or LIMT1 card in Step 3)

13. Issue command to report the status of the LIME1 or LIMT1 cards.

    ```
    REPT-STAT-CARD:APPL=SS7ANSI OR REPT-STAT-CARD:APPL=CCS7ITU
    ```
    Response to the status command.

    Verify that LIME1 or LIMT1 cards have returned to IS-NR

```
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
                        CARD    VERSION       TYPE
GPL          PST          SST          AST
                        XXXX    XXX-XXX-XXX  LIME1        SS7HC
IS-NR          Active        -----
                        XXXX    XXX-XXX-XXX  LIME1        SS7HC
IS-NR          Active        -----

                        Command Completed.
                        ;
```

14. If this is the last card listed in Step 1, continue to next procedure. Otherwise, repeat Steps 2 - 13 for the next card listed in Step 1.

> **✎ Note:**
>
> Wait till this flashed LIME1 or LIMT1 E5-E1T1-B card to complete reloading before proceeding to next step.

CCS7ITU or SS7ANSI Application is Provisioned on SLIC Card, Migrate the Same to VxWorks6.9

> **✎ Note:**
>
> Run this procedure if the target release is 46.9.0 and later.

This procedure is to migrate the SLIC card running SS7HC GPL to Vxworks6.9 from VxWorks6.4. Execute the below procedure for every LIME1 or LIMT1 application running on SLIC in the system.
Should THIS PROCEDURE FAIL, CONTACT My Oracle Support AND **ASK FOR UPGRADE ASSISTANCE.**

1. If the source release was 46.7.x and later, issue the LIME1 or LIMT1 card status command. Otherwise, continue to next procedure.

   `REPT-STAT-CARD:APPL=SS7ANSI` OR `REPT-STAT-CARD:APPL=CCS7ITU`
   Response to the card status command is displayed.

   ```
       eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
                       CARD    VERSION     TYPE       GPL
   PST          SST      AST
                       XXXX    XXX-XXX-XXX  LIME1      SS7HC
   IS-NR        Active     -----
                       XXXX    XXX-XXX-XXX  LIME1      SS7HC
   IS-NR        Active     -----

                       Command Completed.
                       ;
   ```

2. For each card with type equal to LIME1 or LIMT1 listed above, issue the GPL status commend.

   `REPT-STAT-GPL:LOC=XXXX`
   (Where `XXXX` is the location of a LIME1 or LIMT1 SLIC card slot listed in previous step.)

   Response to the GPL status command is displayed.

   If the `ALM` indictor is displayed for the card's flash image, continue. If card is running BLSLC32, continue.

   ```
   eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x-YY.yy.y
                               GPL        CARD
   RUNNING          APPROVED    TRIAL
                               SS7HC      XXXX      XXX-XXX-
   ```

```
XXX            XXX-XXX-XXX    XXX-XXX-XXX
                                    BLSLC32          ZZZ-ZZZ-ZZZ ALM
YYY-YYY-YYY    YYY-YYY-YYY

                                    Command Completed.
```

3. Issue command to cancel the links on the card.

   `DACT-SLK:LOC=XXXX:LINK=<LINK NAME>`
   (Where XXXX is the location of the LIME1 or LIMT1 SLIC card used in the previous step)

4. Issue command to inhibit the card.

   `INH-CARD:LOC=XXXX`
   (Where XXXX is the location of the LIME1 or LIMT1 SLIC card)

   Response to the inhibit command is displayed

   If the `ALM` indication was displayed in step 2, continue. Otherwise, go to step 7.

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

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

                                Command Completed.

                                ;
```

> **Note:**
>
> Wait for the card to boot and return to the IMT bus.

5. Issue command to download approved flash image.

   `INIT-FLASH:LOC=XXXX:CODE=APPR`
   (Where XXXX is the location of the LIME1 or LIMT1 SLIC card use in previous command.)

   Response to flash initialization is shown. Verify UAM 0004 is displayed.

```
eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y Upg Phase 3
                                FLASH Memory Download for card xxxx
started.
                                ;
                                eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE
XX.x.x.x.x-YY.y.y Upg Phase 3
                                FLASH Memory Download for card xxxx
completed.
                                ;
                                eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE
```

```
XX.x.x.x.x-YY.y.y Upg Phase 3
                          8003.0004  * GPL SYSTEM ZZZZZZ
Card is running non-activated GPL
                          ;
```

> **Note:**
>
> Wait for card to boot and return to the IMT bus.

6. Issue command to activate the flash image.

`ACT-FLASH:LOC=XXXX`
(Where XXXX is the location of the LIME1 or LIMT1 SLIC card use in previous command.)

Response to the activate command is displayed.

```
eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y Upg Phase 3
                          FLASH Memory Activation for card XXXX
Started.
                          ;
                          eaglestp YY-MM-DD hh:mm:ss EST PPP
XX.x.x.x.x-YY.y.y Upg Phase 3
                          FLASH Activation for card XXXX
Completed.
                          ;
```

7. Issue update bootloader command.

`INIT-FLASH:LOC=XXXX:MODE=RPLCEBL:BITS=64`

8. Issue flash command to download target-release flash to the LIME1 or LIMT1 SLIC card.

`INIT-FLASH:LOC=XXXX:CODE=APPR:GPL=BLSL932`
(Where XXXX is the location used in the previous command)

Response to flash initialization is shown.

Verify UAM 0004 is displayed.

```
eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y
                          FLASH Memory Download for card xxxx
started.
                          ;
                          eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE
XX.x.x.x.x-YY.y.y
                          FLASH Memory Download for card xxxx
completed.
                          ;
                          eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE
XX.x.x.x.x-YY.y.y
                          *   8003.0004  * GPL SYSTEM
BLSL932      Card is running non-activated GPL
```

ORACLE®

```
                              ;
```

> **Note:**
>
> Wait for card to boot and return to the IMT bus.

9. Issue command to activate the flash image.

   `ACT-FLASH:LOC=XXXX`
   (Where `XXXX` is the location of the LIME1 or LIMT1 SLIC card used in the previous command)

   Response to the activate command is displayed.

```
eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
                              FLASH Memory Activation for card XXXX
Started.
                              ;
                              eaglestp YY-MM-DD hh:mm:ss EST PPP
XX.x.x.x.x-YY.y.y
                              FLASH Activation for card XXXX
Completed.
                              ;
```

10. Issue the allow command to reload the LIME1 or LIMT1 SLIC card.

    `ALW-CARD:LOC=XXXX`
    (Where `XXXX` is the location of the card used in the previous command)

    Response to allow-card command is shown.

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

11. Issue command to report GPL status.

    `REPT-STAT-GPL:LOC=XXXX`
    Response to GPL status command.

    Verify that LIME1 or LIMT1 SLIC card is running BLSL932 GPL.

```
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
                    SS7HC69     XXXX        XXX-XXX-XXX          XXX-
XXX-XXX    XXX-XXX-XXX
                    BLSL932     YYY-YYY-YYY         YYY-YYY-
YYY   YYY-YYY-YYY
```

```
                              Command Completed.
                              ;
```

12. Issue command to activate the links.

    ```
    ACT-SLK:LOC=XXXX:LINK=<LINK NAME>
    ```
    (Where XXXX is the location of the LIME1 or LIMT1 card in Step 3)

13. Issue command to report the status of the LIME1 or LIMT1 cards.

    `REPT-STAT-CARD:APPL=SS7ANSI` OR `REPT-STAT-CARD:APPL=CCS7ITU`
    Response to the status command.

    Verify that LIME1 or LIMT1 cards have returned to IS-NR

    ```
        eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
                            CARD    VERSION            TYPE
    GPL         PST           SST          AST
                            XXXX    XXX-XXX-XXX      LIME1
    SS7HC       IS-NR          Active      -----
                            XXXX    XXX-XXX-XXX      LIME1
    SS7HC       IS-NR          Active      -----

                            Command Completed.
                            ;
    ```

14. If this is last card listed in Step 1, continue to next procedure. Otherwise, repeat Steps 2 - Step 13 for the next card listed in Step 1.

    > ✎ **Note:**
    >
    > Wait till this flashed LIME1 or LIMT1 card to complete reloading before proceeding to next step.

Upgrading Spare MASPs

This procedure describes how to upgrade your spare MASPsto the target release. Should THIS PROCEDURE FAIL, CONTACT My Oracle Support AND **ASK FOR UPGRADE ASSISTANCE.**

1. Issue the command to display card status.

   `REPT-STAT-CARD:APPL=OAM`
   Response to the card status command is displayed.

   Determine MASP activity.

   Act MASP _____

   Stby MASP _____

   ```
        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. Issue the command to inhibit standby MASP.

   `INH-CARD:LOC=XXXX`
   (Where `XXXX` is the location for the Standby MASP in the previous steps.)

   Response to the command is displayed.

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

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

3. Place spare E5-MASP in 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 E5-MASP card determined in step 2.

   Insert the spare E5-MASP card.

   Slide the MASP H/S switch (SW3) on the new 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).

   > **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.

4. Issue command to report the GPLs running on the card location.

   `REPT-STAT-GPL:LOC=XXXX`
   (Where `XXXX` is the location for the Standby MASP recorded Step 1.)

   Response to the status command is displayed.

   If the `ALM` indicator is displayed for the card's flash image, continue. If the target release is 46.6 or higher and the card is running `BLMCAP`, continue. Otherwise, go to step 20.

```
    eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x.x.x-YY.y.y
    GPL         CARD      RUNNING              APPROVED        TRIAL
    GGGGG       XXXX      -----------          -----------
-----------
         BLMCAP         YYY-YYY-YYY ALM    XXX-XXX-XXX    YYY-YYY-
YYY
```

```
        Command Completed.
    ;
```

5. Download the approved version flash to the standby MASP.

```
INIT-FLASH:LOC=XXXX:CODE=APPR
```
(Where `XXXX` is the location of the standby MASP slot used in the previous command.)

Response to flash initialization is shown.

Verify UAM 0004 is displayed.

If the target release is 46.6 or higher and the card is running BLMCAP, continue. Otherwise, go to step 18.

```
eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y
    FLASH Memory Download for card xxxx started.
;
    eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y
   FLASH Memory Download for card xxxx completed.
;
    eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y
8003.0004  * GPL SYSTEM ZZZZZZ      Card is running non-activated
GPL
;
```

> **Note:**
>
> Wait for card to boot and return to the IMT bus.

6. Issue command to activate the flash on standby MASP

```
ACT-FLASH:loc=XXXX
```
(Where `XXXX` is the location of the standby MASP used in the previous command)

Response to the activate command is displayed.

```
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    FLASH Memory Activation for card XXXX Started.
;
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    FLASH Activation for card XXXX Completed.
;
```

7. Issue flash command to download the bootloader image.

```
INIT-FLASH:LOC=XXXX:MODE=RPLCEBL:BITS=32
```
(Where `XXXX` is the location of the standby MASP slot used in the previous command.)

Response to flash command is shown.

```
    eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y  Upg
Phase 3
    BOOTLOADER change for card XXXX SUCCESSFUL.
```

```
    ;

        eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y    Upg
    Phase 3
        Command Completed.
    ;
```

8. Issue command to download approved BLDC32 flash image.

    `INIT-FLASH:LOC=XXXX:CODE=APPR:GPL=BLDC32`
    (Where `XXXX` is the location used in the previous command)

    Response to flash initialization is shown.

    Verify UAM 0004 is displayed.

    ```
    eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y
        FLASH Memory Download for card xxxx started.
    ;
        eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y
        FLASH Memory Download for card xxxx completed.
    ;
        eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y
      8003.0004  * GPL SYSTEM BLDC32      Card is running non-
    activated GPL
    ;
    ```

    > **Note:**
    >
    > Wait for card to boot and return to the IMT bus.

9. Retrieve the GPLs running on the card location.

    `REPT-STAT-GPL:LOC=XXXX`
    (Where `XXXX` is the location used in the previous command)

    Response to the GPL status command is displayed.

    Verify that card is running BLDC32 GPL.

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

        Command Completed.
    ;
    ```

10. Activate the flash on standby MASP.

    `ACT-FLASH:loc=XXXX`
    (Where `XXXX` is the location of the standby MASP used in the previous command)

Response to the activate command is displayed.

```
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y Upg Phase
3
    FLASH Memory Activation for card XXXX Started.
;
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y Upg Phase 3
    FLASH Activation for card XXXX Completed.
;
```

11. Insert target-release USB into the drive slot on the standby E5-MASP.

    Once inserted, allow time for the RMD to be detected by the system.

12. Issue the command to allow card.

    ```
    alw-card:loc=XXXX
    ```
    Where XXXX is the location for the Standby MASP.

    Response to the command is displayed.

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

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

13. Issue the command to display MASP status.

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

    Verify the MASP cards are running the same version of the OAM application GPL.

    ```
        eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x.x.x-YY.y.y
        CARD     VERSION     TYPE     GPL         PST
    SST        AST
        1113     XXX-XXX-XXX TTTTT    GGGG        IS-NR
    ACTIVE      ----
        1115     XXX-XXX-XXX TTTTT    GGGG        IS-NR
    STANDBY     ----
        Command Completed.
    ;
    ```

14. Issue the command to display security log status.

    ```
    rept-stat-seculog
    ```
    Response to the command is displayed.

    If the ENTRIES column displays any value other than 0 for the Standby ROLE,
    proceed to the next step. Otherwise, go to step 34.

    ```
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
        rept-stat-seculog
        Command entered at terminal #10.
    ;
    ```

```
eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
              -- SINCE LAST UPLOAD --  OLDEST    NEWEST    LAST
LOC   ROLE     ENTRIES %FULL OFLO FAIL RECORD    RECORD    UPLOAD
1114 Active   19      1     No   No   99-01-01 99-01-01 00-00-00
                                      13:43:37 14:08:12 00:00:00

1116 Standby 0       0     No   No   99-01-01 99-01-01
99-01-01
                                      13:39:39 13:43:10 14:07:59
;
```

15. Issue the command to copy the security log from the standby disk to FTA area.

```
copy-seculog:slog=stb:dfile=upgP15.spr
```
Response to copy seculog command is displayed.

If this command fails, proceed to next step. Otherwise, go to step 34.

```
eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    Security log on TDM 111X copied to file upgP15.spr on TDM 111Y
;
```

```
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    0468.0177    SECULOG 111X         Security log exception
cleared
;
```

16. Issue the command to display the FTA directory.

```
disp-fta-dir
```
Response to display directory command is displayed.

If there are any files that need to be saved, they need to be removed via a file transfer.

```
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    File Transfer Area Directory of fixed disk 111Y

    FILENAME                          LENGTH   LAST MODIFIED      LBA
    YYMMDDs.log                       2560256  99-01-03 10:18:44
388769
    YYMMDDa.log                       2560256  99-01-03 10:19:20
393770
    m60_lnp.csv                       0        99-01-03 13:10:38
398771
     3 File(s) 21093376 bytes free
;
```

17. Issue the command to delete ALL files in the transfer area

```
dlt-fta:all=yes
```
Response to the delete command is displayed.

```
eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    dlt-fta:all=yes
```

```
        Command entered at terminal #nn.
;
```

18. Repeat Steps 27-28.

19. Issue the command to copy the active MASP image to the standby disk.

    `copy-disk:dloc=XXXX:force=yes:format=yes`
    (Where XXXX is the location of the STANDBY E5-TDM recorded in Step 2)

    Response to the copy-disk command is displayed.

    Note that user terminal port may be automatically logged out.

    Wait for the card reload to complete.

```
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    Copy-disk (fixed): from active (YYYY) to standby (XXXX) started.
    Extended processing required, please wait.
;
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    Copy-disk (fixed): from active (YYYY) to standby (XXXX)
complete.
    Measurements may be allowed now if desired.
;
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    0485.0014    CARD 1115 OAMHC        Card is present
;
```

20. If the disk copy fails repeat steps 34-35.

    a. Repeat Steps 34-35.

    b. If second attempt fails, contact My Oracle Support

21. If the measurements platform is enabled then go next procedure. Otherwise, if Procedure 17 Steps 7 & 8 were executed, issue the command to turn the measurements collection on.

    `CHG-MEAS:COLLECT=ON`
    Response to change measurement command is displayed.

```
eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    chg-meas:collect=on
    Command entered at terminal #10.
;

    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    CHG-MEAS: MASP A - COMPLTD
;
```

Upgrading Spare HIPR2 Cards

This procedure describes how to upgrade your spare HIPR2 cards.
Should THIS PROCEDURE FAIL, CONTACT My Oracle Support AND **ASK FOR UPGRADE ASSISTANCE.**

1. Issue the command to display imt bus status.

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

```
eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    CARD    TYPE        PST            SST         AST         BITRATE
    1109    HIPR2       IS-NR          Active      -----       HIGH
    1110    HIPR2       IS-NR          Active      -----       HIGH
    1209    HIPR2       IS-NR          Active      -----       HIGH
    1210    HIPR2       IS-NR          Active      -----       HIGH
    1309    HIPR2       IS-NR          Active      -----       HIGH
    1310    HIPR2       IS-NR          Active      -----       HIGH
    Command Completed.
;
```

2. Issue the command to display imt bus status.

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

Verify that both imt buses are IS-NR.

If either bus is not IS-NR Stop this procedure and contact My Oracle Support

```
eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    rept-stat-imt
    Command entered at terminal #10.
;
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.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.
;
```

3. Issue the command to initialize the IMT bus B at low speed only if the HIPR2 card is getting upgraded from R46.3 or earlier to R46.4 or higher. Otherwise, go to step 6.

```
init-mux:bus=b:hs=no
```
Response to the above command is displayed.

```
eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    init-mux:bus=b:hs=no
    Command entered at terminal #10.
;

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

4. Issue the command to display imt bus status.

```
rept-stat-mux
```

Response to the MUX status command is displayed.

```
eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    CARD    TYPE       PST            SST        AST        BITRATE
    1109    HIPR2      IS-NR          Active     -----      HIGH
    1110    HIPR2      IS-NR          Active     -----      LOW
    1209    HIPR2      IS-NR          Active     -----      HIGH
    1210    HIPR2      IS-NR          Active     -----      LOW
    1309    HIPR2      IS-NR          Active     -----      HIGH
    1310    HIPR2      IS-NR          Active     -----      LOW
    Command Completed.
;
```

5. Issue the command to display imt bus status

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

Verify that both imt buses are IS-NR.

If either bus is not IS-NR Stop this procedure and contact My Oracle Support

```
eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    rept-stat-imt
    Command entered at terminal #10.
;
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.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.
;
```

6. Issue the command to inhibit IMT bus-B.

```
inh-imt:bus=b
```
Response to the command is displayed.

```
eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    Inhibit IMT Bus B command issued
;

    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    8687.0098    IMT BUS B              IMT inhibited
;
```

7. Swap spare HIPR2 cards with those on the IMT B-bus. (i.e. location 1110, 1210)

8. Issue the command to allow IMT bus-B.

```
alw-imt:bus=b
```

Response to the command is displayed.

```
eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    Allow IMT Bus B command issued
;

    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    8712.0097     IMT BUS B                 IMT allowed
;
```

9. Issue the command to display imt bus status.

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

```
eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    CARD   TYPE       PST          SST        AST        BITRATE
    1109   HIPR2      IS-NR        Active     -----      HIGH
    1110   HIPR2      IS-NR        Active     -----      LOW
    1209   HIPR2      IS-NR        Active     -----      HIGH
    1210   HIPR2      IS-NR        Active     -----      LOW
    1309   HIPR2      IS-NR        Active     -----      HIGH
    1310   HIPR2      IS-NR        Active     -----      LOW
    Command Completed.
;
```

10. Issue the command to display imt bus status.

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

Verify that both imt buses are IS-NR.

If either bus is not IS-NR Stop this procedure and contact My Oracle Support.

```
eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    rept-stat-imt
    Command entered at terminal #10.
;
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.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.
;
```

11. Issue the card status command to identify the MUX cards in the system.

```
rept-stat-gpl:gpl=hipr2
```
Response to the command is displayed.

Record the CARD locations for all MUX cards in the system not running the APPROVED version of the GPL.

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

APPL        CARD        RUNNING            APPROVED        TRIAL
HIPR2       XX09        XXX-XXX-XXX        XXX-XXX-XXX     XXX-XXX-
XXX
HIPR2       XX10        YYY-YYY-YYY ALM    XXX-XXX-XXX     XXX-XXX-
XXX
HIPR2       XX09        XXX-XXX-XXX        XXX-XXX-XXX     XXX-XXX-
XXX
HIPR2       XX10        YYY-YYY-YYY ALM    XXX-XXX-XXX     XXX-XXX-
XXX
HIPR2       XX09        XXX-XXX-XXX        XXX-XXX-XXX     XXX-XXX-
XXX
HIPR2       XX10        YYY-YYY-YYY ALM    XXX-XXX-XXX     XXX-XXX-
XXX
HIPR2       XX09        XXX-XXX-XXX        XXX-XXX-XXX     XXX-XXX-
XXX
HIPR2       XX10        YYY-YYY-YYY ALM    XXX-XXX-XXX     XXX-XXX-
XXX
Command Completed.
;
```

12. Enter the command to initialize the FLASH on a MUX card on the B-bus that is not running the APPROVED version of the GPL.

```
init-flash:sloc=1110:eloc=XX10:code=appr:gpl=hipr2
```
(Where XX = is a last shelf number with a spare MUX being flashed.)

Response to the flash initialization is shown.

```
eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
init-flash:loc=XX10:code=appr:gpl=hipr2
Command entered at terminal #10.
;
eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
FLASH Memory Download for card XX10 Started.
;
eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
FLASH Memory Download for card XX10 Completed.
;
```

13. Enter the command to initialize the current bus.

```
init-mux:bus=b
```
Response to the initialization command is displayed.

```
eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
5080.0014    CARD XX10 HIPR2        Card is present
;
eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
5081.0014    CARD YY10 HIPR2        Card is present
;
```

```
     eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
*    5082.0004  * GPL SYSTEM HIPR2      Card is running non-
activated GPL
```

14. Issue the command to display imt bus status.

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

```
eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    CARD   TYPE        PST             SST         AST        BITRATE
    1109   HIPR2       IS-NR           Active      -----      HIGH
    1110   HIPR2       IS-NR           Active      -----      HIGH
    1209   HIPR2       IS-NR           Active      -----      HIGH
    1210   HIPR2       IS-NR           Active      -----      HIGH
    1309   HIPR2       IS-NR           Active      -----      HIGH
    1310   HIPR2       IS-NR           Active      -----      HIGH
    Command Completed.
;
```

15. Issue the command to display imt bus status.

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

Verify that both imt buses are IS-NR.

If either bus is not IS-NR Stop this procedure and contact My Oracle Support.

```
eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    rept-stat-imt
    Command entered at terminal #10.
;
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.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.
;
```

16. Issue the command to activate the flash on a MUX card flashed in step 12.

```
act-flash:sloc=1110:eloc=XX10:gpl=hipr2
```
(Where XX is a last shelf number with spare MUX being flashed)

Response to the activate command is displayed.

```
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    FLASH Memory Activation for card 1110-XX10 Started.
;
    XX.x.x.x.x-YY.y.y

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

```
*   2395.0002  * GPL SYSTEM HIPR2        Card is not running
approved GPL
;

    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    FLASH Activation for cards 1110 - XX10 completed.
    LOC YY10 : FLASH OPERATION COMPLETED
    LOC XX10 : FLASH OPERATION COMPLETED


    ALL CARD RESULTS PASSED
;

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

17. Issue the command to display the HIPR2 card GPL status.

    ```
    rept-stat-gpl:gpl=hipr2
    ```
    Verify that all HIPR2 cards are running the approved GPL.

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

        APPL      CARD      RUNNING           APPROVED      TRIAL
        HIPR2     XX09      XXX-XXX-XXX       XXX-XXX-XXX   XXX-XXX-
    XXX
        HIPR2     XX10      XXX-XXX-XXX       XXX-XXX-XXX   XXX-XXX-
    XXX
        HIPR2     XX09      XXX-XXX-XXX       XXX-XXX-XXX   XXX-XXX-
    XXX
        HIPR2     XX10      XXX-XXX-XXX       XXX-XXX-XXX   XXX-XXX-
    XXX
        HIPR2     XX09      XXX-XXX-XXX       XXX-XXX-XXX   XXX-XXX-
    XXX
        HIPR2     XX10      XXX-XXX-XXX       XXX-XXX-XXX   XXX-XXX-
    XXX
        HIPR2     XX09      XXX-XXX-XXX       XXX-XXX-XXX   XXX-XXX-
    XXX
        HIPR2     XX10      XXX-XXX-XXX       XXX-XXX-XXX   XXX-XXX-
    XXX
        Command Completed.
    ;
    ```

18. Repeat steps 1-17 until all spare HIPR2 cards have been flashed.

Verifying All Databases

This procedure verifies the databases on the fixed disk and the removable media.
Should THIS PROCEDURE FAIL, CONTACT My Oracle Support AND **ASK FOR
UPGRADE ASSISTANCE.**

1. Issue the command to display database information.

    ```
    rept-stat-db:display=all
    ```
    Response to the command is displayed.

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

Verify entries in column C show Y, which indicates coherence.

Verify entries in column T show N (except the E5-MDAL), which indicates that the database is not in transition.

Verify all entries in the database LEVEL column are the same.

LEVEL is a value, which varies depending on the system.

If the STDBY databases are not coherent or not at the correct level, repeat Updating the Source-Release Spare Fixed Disk, step 8.

Verify that the MPS databases are coherent.

```
eaglestp YY-MM-DD hh:mm:ss TTTT PPP   XX.x.x.x.x-YY.y.y
    DATABASE STATUS: >> OK <<
            TDM 1114 ( ACTV )                     TDM 1116 ( STDBY)
            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      YYY YY-MM-DD
hh:mm:ss TTTT
   USB BKP -      -          -          -          -      -
-          -

   CARD/APPL  LOC   C  T  LEVEL       TIME LAST UPDATE   EXCEPTION
   ---------  ----  -  -  ----------  -----------------
--------------
   SS7ANSI    1101  Y  N  XXX         06-04-19 12:13:02      -
   SS7ANSI    1103  Y  N  XXX         06-04-19 12:13:02      -
   GLS        1104  Y  N  XXX         06-04-19 12:13:02      -
   SS7ANSI    1105  Y  N  XXX         06-04-19 12:13:02      -
   SS7ANSI    1106  Y  N  XXX         06-04-19 12:13:02      -
   VSCCP      1107  Y  N  XXX         06-04-19 12:13:02      -
   VSCCP      1111  Y  N  XXX         06-04-19 12:13:02      -
   OAM-RMV    1113  -  -     -           -          -        -
   TDM-CRNT   1114  Y  N  XXX         06-04-19 12:13:02      -
   TDM-BKUP   1114  Y  -  YYY         06-04-18 16:11:18  DIFF LEVEL
   OAM-RMV    1115  Y  -  YYY         06-04-18 16:11:18  DIFF LEVEL
   OAM-USB    1115  -  -     -           -          -        -
   TDM-CRNT   1116  Y  N  XXX         06-04-19 12:13:02      -
   TDM-BKUP   1116  Y  -  YYY         06-04-18 16:11:18  DIFF LEVEL
   E5MDAL     1117  Y  -  YYY         06-04-18 16:11:18  DIFF
LEVEL
                    EPAP A  ( ACTV )
                    C  BIRTHDATE          LEVEL       EXCEPTION
                    -  ----------------  ----------
--------------
   PDB                 03-09-04 15:09:38  418231879       -
   RTDB             Y  03-09-04 15:09:38  418231879       -
```

```
     RTDB-EAGLE              06-02-06 22:13:06   418231879          -

                      EPAP B ( STDBY )
                       C  BIRTHDATE          LEVEL        EXCEPTION
                       -  ----------------   ----------
--------------
     PDB                     03-09-04 15:09:38  418231879         -
     RTDB               Y   03-09-04 15:09:38  418231879         -
     RTDB-EAGLE              06-02-06 22:13:06  418231879         -

                      EAGLE RTDB REPORT
     CARD/APPL  LOC   C  BIRTHDATE          LEVEL        EXCEPTION
IN-SRVC
     ---------  ----  -  ----------------   ----------   ------------
-----------
     VSCCP      1107  Y  06-02-06 22:13:06   418231879
-      0d   4h 33m
     VSCCP      1111  Y  06-02-06 22:13:06   418231879
-      0d   4h 33m

   ;
```

2. When the command completes, remove the target-release RMD from the drive slot.

   Store the RMD in a safe location.

Session 2 Completion

This procedure resumes measurement collection.
Should THIS PROCEDURE FAIL, CONTACT My Oracle Support AND **ASK FOR UPGRADE ASSISTANCE.**

- Issue status command for troubles.

  `rept-stat-trbl`
  Response to command is displayed.

  If UAM 0002 is present where xxxx is a flash GPL (i.e. BLMCAP or BLIXP), record it below:

  _____

  _____

  If any GPL is recorded contact My Oracle Support and report the GPL alarm.

```
   eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
   SEQN UAM  AL DEVICE    ELEMENT       TROUBLE TEXT
   0329.0048  * TERMINAL   15           Terminal failed
   0330.0048  * TERMINAL   16           Terminal failed
   0006.0002  * GPL SYSTEM XXXX         Card is not running approved
GPL
   0331.0176  * SECULOG 1116            Stdby security log—upload
required
   0332.0308 *C SYSTEM                  Node isolated due to SLK
failures
```

```
            Command Completed.
    ;
```

6
Recovery Procedures

Before executing any of these procedures, contact My Oracle Support at Oracle Support Contacts Global Directory [see My Oracle Support (MOS).] In the event that other platforms are being upgraded in parallel, a determination whether recovery action is required on those platforms is required. Persons performing the upgrade should be familiar with these upgrade documents.

Backout Setup Procedures

Execute this section only if there is a problem and it is desired to revert back to the pre-upgrade version of the software.

> ⚠ **WARNING:**
>
> Do not attempt to perform these backout procedures without first contacting the **My Oracle Support at Oracle Support Contacts Global Directory**.

Revert MASP, MCPM and IPSM to VxWorks6.4

Execute this section only if there is a problem and it is desired to revert to the pre-upgrade version of the software for the MASP, MCPM and IPSM cards.
If the source release is 46.5 or prior and the target release is 46.6 or later, then execute Revert IPS (ENET-B) cards on VxWorks6.4 through Revert the MASP Card to VxWorks6.4.

If system is running on VxWorks6.9 but pre-upgrade version is on VxWorks6.4 then following are the steps to revert the system to former state:

- First revert the cards to VxWorks6.4 (Revert IPS (ENET-B) cards on VxWorks6.4 to Revert the MASP Card to VxWorks6.4)

- Follow the normal recovery procedure A, B or C

Revert IPS (ENET-B) cards on VxWorks6.4

This procedure is to revert the IPSM cards to VxWorks6.4.
Execute the below procedure for every IPSM card present in the system.

SHOULD THIS PROCEDURE FAIL, CONTACT My Oracle Support AND **ASK FOR UPGRADE ASSISTANCE**.

1. If source release is 46.5 or prior, issue the card status command.

    ```
    REPT-STAT-CARD:APPL=IPS
    ```

Response to the card status command is displayed.

```
eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    CARD    VERSION     TYPE      GPL         PST
SST       AST
    XXXX    XXX-XXX-XXX  IPSM       IPSHC      IS-NR
Active      ----
    XXXX    XXX-XXX-XXX  IPSM       IPSHC      IS-NR
Active      ----

    Command Completed.
;
```

2. For each card listed above, issue the GPL status commend.

```
REPT-STAT-GPL:LOC=XXXX
```
(Where XXXX is the location of the IPSM card)

Response to the GPL status command is displayed.

If card is running BLDC32, go to next step. Otherwise repeat Step 2 for next IPSM card listed in Step 1.

```
eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x-YY.yy.y
    GPL         CARD      RUNNING            APPROVED     TRIAL
    IPSHC69      XXXX    XXX-XXX-XXX        XXX-XXX-XXX  XXX-XXX-
XXX
          BLDC32       YYY-YYY-YYY        YYY-YYY-YYY  YYY-YYY-
YYY

    Command Completed.
;
```

3. Issue command to inhibit the card.

```
INH-CARD:LOC=XXXX
```
(Where XXXX is the location of the IPSM card use in previous command.)

Response to the inhibit command is displayed.

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

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

;
```

> **✏ Note:**
>
> Wait for the card to boot and return to the IMT bus.

4. Download target-release flash to the IPSM card.

```
INIT-FLASH:LOC=XXXX:CODE=APPR:GPL=BLMCAP
```

(Where XXXX is the location used in the previous command)

Response to flash initialization is shown.

Verify UAM 0004 is displayed.

```
    eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y
    FLASH Memory Download for card xxxx started.
;
    eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y
    FLASH Memory Download for card xxxx completed.
;
    eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y
*   8003.0004  * GPL SYSTEM BLMCAP       Card is running non-
activated GPL
;
```

> **Note:**
>
> Wait for card to boot and return to the IMT bus.

5. Issue command to activate the flash image.

ACT-FLASH:loc=XXXX
(Where XXXX is the location of the IPSM card used in the previous command)

Response to the activate command is displayed.

```
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    FLASH Memory Activation for card XXXX Started.
;
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    FLASH Activation for card XXXX Completed.
;
```

6. Issue the allow command to reload the IPSM card.

ALW-CARD:LOC=XXXX
(Where XXXX is the location of the IPSM card used in the previous command)

Response to allow-card command is shown.

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

7. Issue command to report the GPLs running on the IPSM card.

REPT-STAT-GPL:LOC=XXXX
(Where XXXX is the location of the IPSM card used in the previous command)

Response to GPL status command.

Verify that IPSM card is running BLMCAP flash GPL.

```
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
    IPSHC       XXXX        XXX-XXX-XXX         XXX-XXX-XXX    XXX-XXX-
XXX
            BLMCAP          YYY-YYY-YYY         YYY-YYY-YYY    YYY-YYY-
YYY

    Command Completed.
;
```

If this is the last card listed in Step 1, continue to next procedure. Otherwise, repeat Steps 2 - 7 for the next card listed in Step 1.

> ✎ **Note:**
>
> Wait till this flashed IPSM card to complete reloading before proceeding to next step.

Revert IPSM Application Running on SLIC to VxWorks6.4

This procedure reverts the SLIC card running the IPS application to VxWorks6.4. Execute the below procedure for every SLIC card with IPS application present in the system.

SHOULD THIS PROCEDURE FAIL, CONTACT My Oracle Support AND **ASK FOR UPGRADE ASSISTANCE**.

1. If source release is 46.5 or prior, issue the card status command.

   ```
   REPT-STAT-CARD:APPL=IPS
   ```
   Response to the card status command is displayed.

   ```
       eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
       CARD    VERSION     TYPE        GPL         PST
   SST         AST
       XXXX    XXX-XXX-XXX  SLIC        IPSHC       IS-NR
   Active      ----
       XXXX    XXX-XXX-XXX  SLIC        IPSHC       IS-NR
   Active      ----

       Command Completed.
   ;
   ```

2. For each card with type equal to SLIC listed above, issue the GPL status command.

   ```
   REPT-STAT-GPL:LOC=XXXX
   ```
   (Where XXXX is the location of the IPSM/SLIC card slot listed in previous step.)

   Response to the card status command is displayed.

If card is running BLSL932, go to next step. Otherwise repeat Step 2 for next SLIC card listed in Step 1.

```
eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x-YY.yy.y
GPL          CARD        RUNNING             APPROVED        TRIAL
IPSHC69      XXXX        XXX-XXX-XXX         XXX-XXX-XXX    XXX-XXX-
XXX
       BLSL932       YYY-YYY-YYY          YYY-YYY-YYY    YYY-YYY-
YYY

Command Completed.
;
```

3. Issue command to inhibit the card.

`INH-CARD:LOC=XXXX`
(Where `XXXX` is the location of the IPSM/SLIC card)

Response to the inhibit command is displayed.

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

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

;
```

> **Note:**
>
> Wait for the card to boot and return to the IMT bus.

4. Issue flash command to download target-release flash to the IPSM/SLIC card.

`INIT-FLASH:LOC=XXXX:CODE=APPR:GPL=BLSLC32`
(Where `XXXX` is the location used in the previous command)

Response to flash initialization is shown.

Verify UAM 0004 is displayed.

```
    eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y
    FLASH Memory Download for card xxxx started.
;
    eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y
    FLASH Memory Download for card xxxx completed.
;
    eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y
*   8003.0004  * GPL SYSTEM BLSLC32      Card is running non-
activated GPL
;
```

> **✏ Note:**
>
> Wait for card to boot and return to the IMT bus.

5. Issue command to activate the flash image.

   `ACT-FLASH:loc=XXXX`
   (Where `XXXX` is the location of the IPSM/SLIC card used in the previous command.)

   Response to the activate command is displayed.

   ```
       eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
       FLASH Memory Activation for card XXXX Started.
   ;
       eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
       FLASH Activation for card XXXX Completed.
   ;
   ```

6. Issue the allow command to reload the IPSM/SLIC card.

   `ALW-CARD:LOC=XXXX`
   (Where `XXXX` is the location of the IPSM/SLIC card used in the previous command.)

   Response to allow-card command is shown.

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

7. Issue command to report GPL status.

   `REPT-STAT-GPL:LOC=XXXX`
   (Where `XXXX` is the location of the IPSM/SLIC card used in the previous command.)

   Response to GPL status command

   Verify that IPSM/SLIC card is running BLSLC32 flash GPL.

   ```
   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
       IPSHC       XXXX        XXX-XXX-XXX         XXX-XXX-XXX     XXX-XXX-
   XXX
               BLSLC32     YYY-YYY-YYY         XXX-XXX-XXX     YYY-YYY-
   YYY

       Command Completed.
   ;
   ```

   If this is last card listed in Step 1, continue to next procedure. Otherwise, repeat Steps 2 - Step 6 for the next card listed in Step 1.

> **Note:**
>
> Wait till this flashed IPSM/SLIC card to complete reloading before proceeding to next step.

Revert MCPM Cards on VxWorks6.4

This procedure is to revert the MCPM cards to VxWorks6.4.
Execute the below procedure for every MCPM card present in the system.

SHOULD THIS PROCEDURE FAIL, CONTACT My Oracle Support AND **ASK FOR UPGRADE ASSISTANCE**.

1. If source release is 46.5 or prior, issue the card status command.

   ```
   REPT-STAT-CARD:APPL=MCP
   ```
   Response to the card status command is displayed.

   ```
       eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x-YY.y.y
       CARD    VERSION      TYPE      GPL         PST
   SST         AST
       XXXX    XXX-XXX-XXX  MCPM      MCPHC       IS-NR
   Active      ----
       XXXX    XXX-XXX-XXX  MCPM      MCPHC       IS-NR
   Active      ----

       Command Completed.
   ;
   ```

2. For each card with type equal to SLIC listed above, issue the GPL status command.

   ```
   REPT-STAT-GPL:LOC=XXXX
   ```
   (Where XXXX is the location of the MCPM card.)

   Response to the card status command is displayed.

   If card is running BLDC32, go to next step. Otherwise repeat Step 2 for next MCPM card listed in Step 1.

   ```
       eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x-YY.yy.y
       GPL          CARD      RUNNING            APPROVED      TRIAL
       MCPHC69      XXXX    XXX-XXX-XXX        XXX-XXX-XXX   XXX-XXX-XXX
            BLDC32          YYY-YYY-YYY        YYY-YYY-YYY   YYY-YYY-YYY

       Command Completed.
   ;
   ```

3. Issue command to inhibit the card.

   ```
   INH-CARD:LOC=XXXX
   ```
   (Where XXXX is the location of the MCP card use in previous command.)

Response to the inhibit command is displayed.

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

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

;
```

> **Note:**
>
>   Wait for the card to boot and return to the IMT bus.

4. Download target-release flash to the MCPM card.

   `INIT-FLASH:LOC=XXXX:CODE=APPR:GPL=BLMCAP`
   (Where XXXX is the location used in the previous command)

   Response to flash initialization is shown.

   Verify UAM 0004 is displayed.

```
eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y
    FLASH Memory Download for card xxxx started.
;
    eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y
    FLASH Memory Download for card xxxx completed.
;
    eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y
*   8003.0004  * GPL SYSTEM BLMCAP       Card is running non-
activated GPL
;
```

> **Note:**
>
>   Wait for card to boot and return to the IMT bus.

5. Issue command to activate the flash image.

   `ACT-FLASH:loc=XXXX`
   (Where XXXX is the location of the MCPM card used in the previous command.)

   Response to the activate command is displayed.

```
eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    FLASH Memory Activation for card XXXX Started.
;
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    FLASH Activation for card XXXX Completed.
;
```

6. Run the target-release GPL on the MCPM card.

`ALW-CARD:LOC=XXXX`
(Where `XXXX` is the location of the MCP card used in the previous command.)

Response to allow-card command is shown.

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

7. Issue command to report the GPLs running on the MCPM card.

`REPT-STAT-GPL:LOC=XXXX`
(Where `XXXX` is the location of the MCP card used in the previous command.)

Response to GPL status command

Verify that MCPM card is running BLMCAP flash GPL.

```
    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
    MCPHC       XXXX       XXX-XXX-XXX        XXX-XXX-XXX
-----------
        BLMCAP             YYY-YYY-YYY        XXX-XXX-XXX    YYY-YYY-
YYY


    Command Completed.
;
```

If this is last card listed in Step 1, continue to next procedure. Otherwise, repeat Steps 2 - Step 6 for the next card listed in Step 1.

> **Note:**
>
> Wait till this flashed MCPM card to complete reloading before proceeding to next step.

Revert MCPM Application Running on SLIC card to VxWorks6.4

This procedure is to revert the SLIC card with MCPM application to VxWorks6.4. Execute the below procedure for every SLIC card running the MCP application present in the system.

SHOULD THIS PROCEDURE FAIL, CONTACT My Oracle Support AND **ASK FOR UPGRADE ASSISTANCE**.

1. If source release is 46.5 or prior, issue the card status command.

`REPT-STAT-CARD:APPL=MCP`

Response to the card status command is displayed.

```
eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
   CARD    VERSION     TYPE      GPL         PST
SST        AST
   XXXX    XXX-XXX-XXX  SLIC      MCPHC       IS-NR
Active     ----
   XXXX    XXX-XXX-XXX  SLIC      MCPHC       IS-NR
Active     ----

   Command Completed.
;
```

2. For each MCPM/SLIC card listed above, issue the GPL status command.

   `REPT-STAT-GPL:LOC=XXXX`
   (Where `XXXX` is the location of the MCPM/SLIC card slot listed in previous step.)

   Response to the card status command is displayed.

   If card is running BLSL932, go to next step. Otherwise repeat Step 2 for next card listed in Step 1.

```
eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x-YY.yy.y
GPL         CARD      RUNNING            APPROVED    TRIAL
MCPHC69     XXXX     XXX-XXX-XXX        XXX-XXX-XXX  XXX-XXX-XXX
        BLSL932      YYY-YYY-YYY        YYY-YYY-YYY  YYY-YYY-YYY

   Command Completed.
;
```

3. Issue command to inhibit the card.

   `INH-CARD:LOC=XXXX`
   (Where `XXXX` is the location of the MCPM/SLIC card use in previous command.)

   Response to the inhibit command is displayed.

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

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

;
```

> **✎ Note:**
>
> Wait for the card to boot and return to the IMT bus.

4. Issue flash command to download target-release flash to the MCPM card.

   `INIT-FLASH:LOC=XXXX:CODE=APPR:GPL=BLSLC32`

(Where xxxx is the location used in the previous command)

Response to flash initialization is shown.

Verify UAM 0004 is displayed.

```
eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y
    FLASH Memory Download for card xxxx started.
;
    eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y
    FLASH Memory Download for card xxxx completed.
;
    eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y
*   8003.0004  * GPL SYSTEM BLSLC32      Card is running non-
activated GPL
;
```

> **Note:**
>
> Wait for card to boot and return to the IMT bus.

5. Issue command to activate the flash image.

   ```
   ACT-FLASH:loc=XXXX
   ```
   (Where xxxx is the location of the MCPM card used in the previous command.)

   Response to the activate command is displayed.

   ```
   eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
       FLASH Memory Activation for card XXXX Started.
   ;
       eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
       FLASH Activation for card XXXX Completed.
   ;
   ```

6. Run the target-release GPL on the MCPM card.

   ```
   ALW-CARD:LOC=XXXX
   ```
   (Where xxxx is the location of the MCPM\SLIC card used in the previous command.)

   Response to allow-card command is shown.

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

7. Retrieve status of the MCPM\SLIC card.

   ```
   REPT-STAT-GPL:LOC=XXXX
   ```
   (Where xxxx is the location of the MCPM card used in the previous command.)

   Response to GPL status command

Verify that MCPM/SLIC card is running BLSLC32 flash GPL.

```
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
MCPHC       XXXX       XXX-XXX-XXX         XXX-XXX-XXX
-----------
    BLSLC32             YYY-YYY-YYY         XXX-XXX-XXX   YYY-YYY-
YYY


Command Completed.
;
```

If this is last card listed in Step 1, continue to next procedure. Otherwise, repeat Steps 2 - Step 6 for the next card listed in Step 1.

> **Note:**
>
> Wait till this flashed MCPM/SLIC card to complete reloading before proceeding to next step.

Revert the MASP Card to VxWorks6.4

This procedure is to revert the MASP cards to VxWorks6.4.
SHOULD THIS PROCEDURE FAIL, CONTACT My Oracle Support AND **ASK FOR UPGRADE ASSISTANCE**.

1. If source release is 46.5 or prior, issue the card status to verify the location of the active/standby MASP slots.

   REPT-STAT-CARD:APPL=OAM
   Response to the card status command is displayed.

   Record the MASP in the standby role:

   Standby: 1113 or 1115

   ```
   eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y
   CARD     VERSION       TYPE    GPL         PST
SST         AST

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

2. Report the GPLs running on the card location.

   REPT-STAT-GPL:LOC=XXXX
   (Where XXXX is the location of the standby MASP slot display in the above step.)

Response from the retrieve command is displayed.

Verify that card is running the BLDC32 flash GPL

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

Command Completed.
;
```

3. Issue the command to inhibit the standby MASP.

`INH-CARD:LOC=XXXX`
(Where XXXX is the location of the standby MASP slot used in previous command.)

Response to the inhibit command is displayed.

Verify UAM 514 is displayed.

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

eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y
** 5045.0514 ** CARD XXXX OAMHC       Standby MASP is
inhibited
;
```

> **Note:**
>
> Wait for the card to boot and return to the IMT bus.

4. Issue pass command to enable the Shell command.

`PASS:LOC=XXXX:SHELLCMD="-enable"`
(Where XXXX is the location of the Standby MASP)

Response to the pass command.

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

5. Set the global variable to revert the bootloader.

`PASS:lOC=XXXX:SHELLCMD="g_backout_6_9_bootloader=1"`
(Where XXXX is the location of the Standby MASP)

Response to the pass command.

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

6. Issue flash command to download the bootloader image.

`INIT-FLASH:LOC=XXXX:MODE=RPLCEBL:BITS=32`
(Where XXXX is the location of the Standby MASP slot used in the previous command.)

Response to flash command is shown.

```
    eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y
    BOOTLOADER change for card XXXX SUCCESSFUL.
;

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

7. Download target-release flash to the standby MASP card.

`INIT-FLASH:LOC=XXXX:CODE=APPR:GPL=BLMCAP`
(Where XXXX is the location used in the previous command.)

Response to flash initialization is shown.

Verify UAM 0004 is displayed.

```
    eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y
    FLASH Memory Download for card xxxx started.
;
    eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y
    FLASH Memory Download for card xxxx completed.
;
    eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y
*   8003.0004  * GPL SYSTEM BLMCAP        Card is running non-
activated GPL
;
```

> **Note:**
>
> Wait for card to boot and return to the IMT bus.

8. Retrieve the GPLs running on the card location.

`REPT-STAT-GPL:LOC=XXXX`
(Where XXXX is the location of the standby MASP slot used in the previous command.)

Response to the GPL status command is displayed.

Verify that card is running BLMCAP GPL.

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

    Command Completed.
;
```

9. Issue command to activate the flash on standby MASP.

   ACT-FLASH:LOC=XXXX
   (Where XXXX is the location of the standby MASP used in the previous command)

   Response to the activate command is displayed.

```
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    FLASH Memory Activation for card XXXX Started.
;
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    FLASH Activation for card XXXX Completed.
;
```

10. Issue command to allow the standby MASP to load.

    ALW-CARD:LOC=XXXX
    (Where XXXX is the location of the standby MASP used in the previous command)

    Response to allow-card command is shown.

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

11. Issue command to report the status of the Standby MASP.

    REPT-STAT-CARD:lOC=XXXX
    Response from the retrieve command is displayed.

    Verify that Standby MASP card running is running BLMCAP flash GPL.

```
eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x.x.x-YY.y.y
    CARD    VERSION      TYPE       GPL         PST
SST        AST
    XXXX    XXX-XXX-XXX  E5MCAP     OAMHC       IS-NR
Standby    -----
       ALARM STATUS        = No Alarms.
       BLMCAP  GPL version = YYY-YYY-YYY
       IMT BUS A           = Conn
       IMT BUS B           = Conn
       CURRENT TEMPERATURE = 33C ( 92F)
       PEAK TEMPERATURE:   = 33C ( 92F)     [17-10-14 00:30]
```

```
      Command Completed.
  ;
```

12. If this is the first pass through this procedure, issue command to boot the active MASP. Otherwise, go to Step 15.

    `INIT-CARD:LOC=YYYY`
    (Where `YYYY` is the location of the active MASP.)

    Response to card initialization is shown.

    ```
        eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y
        Init Card command issued to card YYYYY
    ;
    ```

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

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

    Response to login command is displayed.

    Ignore any login failure message.

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

    ? Login failures since last successful LOGIN
    Last successful LOGIN was on port ? on ??-??-?? @ ??:??:??
    ```

14. Echo command input to capture terminal.

    `ACT-ECHO:TRM=P`
    (Where `P` is the terminal port number specified in Verifying Pre-Upgrade Requirements and Capturing Upgrade Data, Step 3)

    Response to print capture command is displayed.

    Repeat Steps 1 – 11 for the formerly active MASP.

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

15. Issue the command to display the cards running with BLDC32 flash GPL

    `REPT-STAT-GPL:GPL=BLDC32`
    Response from the GPL status command is displayed.

    Verify that no cards are displayed.

    ```
    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

        Command Completed.
    ;
    ```

Recovery Procedure A

Perform this Recovery Procedure in order to copy the BLMCAP GPLs from the source after performing procedures Full Fallback Using Spare E5-MASP, Full Fallback Using Fixed Disk As OAM Conversion Workspace – Case 1, Full Fallback Using Fixed Disk As OAM Conversion Workspace – Case 2, and Full Fallback Using Fixed Disk As OAM Conversion Workspace – Case 3 when upgrading with the fixed workspace.

> **✐ Note:**
>
> If the source release is 46.5 or prior, perform this procedure only when the MASPs are running the BLMCAP flash image. Otherwise Procedures Revert IPS (ENET-B) cards on VxWorks6.4 - Revert the MASP Card to VxWorks6.4 must be performed before this procedure.

SHOULD THIS PROCEDURE FAIL, CONTACT My Oracle Support AND **ASK FOR UPGRADE ASSISTANCE**.

When directed to by My Oracle Support, execute this procedure: After the completion of Full Fallback Using Spare E5-MASP, Full Fallback Using Fixed Disk As OAM Conversion Workspace – Case 1, Full Fallback Using Fixed Disk As OAM Conversion Workspace – Case 2, Full Fallback Using Fixed Disk As OAM Conversion Workspace – Case 3 (but not Fall Back Procedure for Network Cards).

1. If a USB drive is present in the system, remove it.

2. If recovering from release 46.3 or later back to a release of 46.2 or earlier, go to step 16, else continue to next step.

3. Insert pre-upgrade source release media into the active MASP.

   Once inserted, allow time for the source-release RMD to be detected by the system.

4. Issue the command to retrieve BLMCAP application data.

   ```
   rtrv-gpl:gpl=blmcap
   ```
   Response to `rtrv-gpl` command is displayed.

   Record the `REMOVE TRIAL` version:

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

       GPL       CARD  RELEASE       APPROVED        TRIAL
   REMOVE TRIAL
       BLMCAP    1114  xxx-xxx-xxx   xxx-xxx-xxx     yyy-yyy-yyy
   -----------
       BLMCAP    1116  xxx-xxx-xxx   xxx-xxx-xxx     yyy-yyy-yyy  xxx-
   xxx-xxx
       ;
   ```

5. Issue the command to change the gpl.

   ```
   chg-gpl:gpl=blmcap:ver=xxx-xxx-xxx
   ```

(Where `xxx-xxx-xxx` is the GPL version recorded in the previous step)

Response to `chg-gpl` command is displayed.

```
eaglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x.x.x-YY.y.y
BLMCAP upload to 1116 completed
BLMCAP upload to 1114 completed
System Release ID table upload to 1116 completed
System Release ID table upload to 1114 completed
;
```

6. Issue the report card status command.

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

   Record which MASP is Active and Standby.

   Record the card locations of the MASPs:

   Act MASP _____

   Stby MASP _____

   > **Note:**
   >
   > The Standby MASP may report IS-ANR (and the Standby TDM may report 00S-MT|Isolated.) If so, check LEDs on the card. If LEDs are green, it is OK to proceed. This condition will clear after step 21.

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

7. Remove the source-release RMD from the drive slot.

   Store RMD in a safe place.

8. Repeat step 8 until the standby location is IS-NR in step 9.

9. Force a switchover by issuing `initialize-card` command.

   `init-card:loc=YYYY`
   Where `YYYY` is the active MASP location recorded in step 9.

10. Issue the command to log 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 PPP  XX.x.x.x.x-YY.y.y
User logged in on terminal X
```

11. Issue the command to initialize both MASP cards.

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

Ensure that the release shown in the banner is the source release after the MASP becomes active again.

```
eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
*   0261.0013  * CARD 111X OAMHC       Card is isolated from the
system
                  ASSY SN: xxxxxxxx
;

    eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x.x.x-YY.y.y
    5001.0009     CARD 111X OAMHC        MASP became active
;
    eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x.x.x-YY.y.y
    5038.0014     CARD XXXX OAMHC        Card is present
                  ASSY SN: xxxxxxxx
;
```

12. Continue to Recovery Procedure C if directed by the My Oracle Support. Otherwise verify the system with the EAGLE health check References.

> ✏️ **Note:**
>
> Command `REPT-STAT-GPL:DISPLAY=ALL` can be used to verify this step.

Recovery Procedure B

Full Fallback Using Spare E5-MASP

Perform the recovery procedure if directed to do so by My Oracle Support when failure occurs in STP Conversion, Step 1, Item C through Migrate the MCPM Cards Running VxWorks 6.4 GPL to VxWorks 6.9 GPL.
This procedure is a full fallback to the source-release on the spare E5-MASP.

> ✏️ **Note:**
>
> If the source release is 46.5 or prior, perform this procedure only when the MASPs are running the BLMCAP flash image. Otherwise Revert IPS (ENET-B) cards on VxWorks6.4 - Revert the MASP Card to VxWorks6.4 must be performed before this procedure.

SHOULD THIS PROCEDURE FAIL, CONTACT My Oracle Support AND **ASK FOR UPGRADE ASSISTANCE**.

When directed to by My Oracle Support, execute this procedure.

1. If upgrade using the fixed disk method, use Full Fallback Using Fixed Disk As OAM Conversion Workspace – Case 1.

   Only perform this procedure if directed by My Oracle Support

2. Issue the report card status command.

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

   Determine MASP activity. Record which MASP is Active and Standby.

   Record the card locations of both sets of MASPs:

   Act MASP _____

   Stby MASP _____

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

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

3. Remove USB drive from system if present.

4. Place spare E5-MASP in 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 E5-MASP card determined in step 2.

   Insert the spare E5-MASP card.

   Slide the MASP H/S switch (SW3) on the new 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).

   > **✎ Note:**
   >
   > UAMs are generated during this step. An audible alarm is generated. Wait for the new standby E5-MASP to come up in standby mode and system returns to duplex mode.

5. Insert the source-release media into the system.

   A source-release USB drive in the active E5-MASP.
   Once inserted, allow time for the source-release RMD to be detected by the system

6. After the standby MASP is available, issue the command to initialize the active MASP.

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

Response to command is displayed.

```
eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    init-card:loc=XXXX
    Command entered at terminal #10.
;
    eaglestp 99-01-02 08:28:34 EST Rel XX.x.x-XX.x.x
*   0261.0013  * CARD XXXX OAMHC      Card is isolated from the
system
                ASSY SN: xxxxxxxx
;
    5038.0014    CARD XXXX OAMHC      Card is present
                ASSY SN: xxxxxxxx
;
```

7. Issue the command to log 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 PPP  XX.x.x.x.x-YY.y.y
    User logged in on terminal X
```

8. Inhibit the standby MASP.

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

Response to the command is displayed.

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

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

9. Put the E5-MASP system in simplex mode.

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).
```
Init-card:loc=XXXX
```

(Where XXXX is the location of the ACTIVE MASP slot)

Wait for the active OAM to return to service and enter simplex mode.

10. Issue the retrieve GPL command to verify source-release GPLs.

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

Verify that the GPL versions in REMOVE TRIAL column and RELEASE column match those in Software Release Numbering for Source- Release GPLs.

Example here has location 1114 as the Active MASP slot.

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

    APPL     CARD  RELEASE      APPROVED        TRIAL
REMOVE TRIAL
    SS7ANSI  1114  XXX-XXX-XXX  XXX-XXX-XXX     XXX-XXX-XXX  XXX-
XXX-XXX
    SS7ANSI  1116  -----------  -----------     -----------
-----------
    ATMANSI  1114  XXX-XXX-XXX  XXX-XXX-XXX     XXX-XXX-XXX  XXX-
XXX-XXX
    ATMANSI  1116  -----------  -----------     -----------
-----------
    CCS7ITU  1114  XXX-XXX-XXX  XXX-XXX-XXX     XXX-XXX-XXX  XXX-
XXX-XXX
    CCS7ITU  1116  -----------  -----------     -----------
-----------
    SS7GX25  1114  XXX-XXX-XXX  XXX-XXX-XXX     XXX-XXX-XXX  XXX-
XXX-XXX
    SS7GX25  1116  -----------  -----------     -----------
-----------
    IMT      1114  XXX-XXX-XXX  XXX-XXX-XXX     XXX-XXX-XXX  XXX-
XXX-XXX
    IMT      1116  -----------  -----------     -----------
-----------
    BPHCAP   1114  XXX-XXX-XXX  XXX-XXX-XXX     XXX-XXX-XXX  XXX-
XXX-XXX
    BPHCAP   1116  -----------  -----------     -----------
-----------
;
```

11. Issue the command to retrieve measurement setup.

   rtrv-meas-sched
   Response to retrieve command is displayed.

   Record if collection is on or off:

   _____

   If COLLECT=ON, continue to next step. Otherwise, go to Step 20.

```
    eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x.x.x-YY.y.y
    COLLECT       = off
    SYSTOT-STP    = (off)
    SYSTOT-TT     = (off)
    COMP-LNKSET   = (off)
    COMP-LINK     = (off)
    MTCD-STP      = (on)
    MTCD-LINK     = (on)
    MTCD-LNKSET   = (on)
;
```

12. Issue the command to turn off measurement collection.

> **Note:**
>
> If executed, this step causes the database level to increment.

```
chg-meas:collect=off
```
Response to the change command is displayed.

```
eaglestp YY-MM-DD hh:mm:ss TTTT PPP   XX.x.x.x.x-YY.y.y
    chg-meas:collect=off
    Command entered at terminal #10.
;
    eaglestp YY-MM-DD hh:mm:ss TTTT PPP   XX.x.x.x.x-YY.y.y
    CHG-MEAS: MASP A – COMPLTD
;
```

13. Inhibit the standby MASP.

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

Response to the command is displayed.

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

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

14. Bring the standby E5-MASP system back on the bus.

Slide the E5-MASP H/S switch (SW3) on the standby MASP down to the locked position (Wait for E5MASP H/S LED to transition from blinking blue to a steady blue and the card to return to the IMT bus.)

15. Issue the command to initialize the flash memory.

```
init-flash:code=appr:loc=XXXX
```
Where XXXX is the location for the Standby MASP.

Response to the init flash command is displayed.

Wait for the downloading to complete.

```
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.
;
```

16. Issue the command to activate the flash on the standby MASP.

ORACLE

```
act-flash:loc=XXXX
```
(Where XXXX is the location for the Standby MASP.)

Response to the activate command is displayed.

```
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    act-flash:loc=XXXX
    Command entered at terminal #10.
;
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    FLASH Memory Activation for card XXXX Started.
;
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    FLASH Activation for card XXXX Completed.
;
```

17. Issue the command to allow card.

```
alw-card:loc=XXXX
```
Where XXXX is the location for the Standby MASP.

Response to the command is displayed.

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

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

18. Issue the report card status command.

```
rept-stat-card:appl=oam
```
Response from the retrieve command is displayed.

Verify that the standby MASP is running the upgrade source release GPL.

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

19. Issue the command to display security log status.

```
rept-stat-seculog
```
Response to the command is displayed.

If the ENTRIES column displays any value other than 0 for the Standby ROLE, proceed to the next step. Otherwise, go to step 24.

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

```
     Command entered at terminal #10.
;
     eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x.x.x-YY.y.y
               -- SINCE LAST UPLOAD --  OLDEST    NEWEST    LAST
     LOC  ROLE    ENTRIES %FULL OFLO FAIL  RECORD    RECORD    UPLOAD
     1114 Active  19      1     No   No    99-01-01 99-01-01 00-00-00
                                           13:43:37 14:08:12 00:00:00
     1116 Standby 0       0     No   No    99-01-01 99-01-01
99-01-01
                                           13:39:39 13:43:10 14:07:59
;
```

20. Issue the command to copy the security log from the standby disk.

```
copy-seculog:slog=stb:dfile=upg.procC
```
Response to the copy security log command is displayed.

If this command fails, proceed to next step. Otherwise, go to Step 24.

```
eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x.x.x-YY.y.y
    Security log on TDM 111X copied to file upg28.procC on TDM 111Y
;

     eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x.x.x-YY.y.y
     0468.0177    SECULOG 111X         Security log exception
cleared
;
```

21. Issue the command to display the FTA directory.

```
disp-fta-dir
```
Response to the command is displayed.

If there are any files that need to be saved, they need to be removed via a file transfer.

```
eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x.x.x-YY.y.y
    File Transfer Area Directory of fixed disk 1114

    FILENAME                          LENGTH   LAST MODIFIED      LBA
    YYMMDDs.log                       2560256  99-01-03 10:18:44
388769
    YYMMDDa.log                       2560256  99-01-03 10:19:20
393770
    m60_lnp.csv                       0        99-01-03 13:10:38
398771
      3 File(s) 21093376 bytes free
;
```

22. Issue the command to delete ALL files in the transfer area.

```
dlt-fta:all=yes
```
Response to the delete command is displayed.

```
     eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x.x.x-YY.y.y
     dlt-fta:all=yes:loc=XXXX
```

```
        Command entered at terminal #nn.
    ;
```

23. Repeat Steps 19-20.

24. Issue the command to copy to the standby disk.

    ```
    copy-disk:dloc=XXXX:force=yes:format=yes
    ```
    (Where XXXX is the location of the STANDBY TDM)

    Response to the copy-disk command is displayed.

    Wait for the card reload to complete.

    If this is the second time performing this step, go to Step 30. Otherwise continue.

    ```
        eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x.x.x-YY.y.y
        Copy-disk (fixed): from active (YYYY) to standby (XXXX) started.
        Extended processing required, please wait.
    ;

        eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x.x.x-YY.y.y
        Copy-disk (fixed): from active (XXXX) to standby (XXXX)
    complete.
        Measurements may be allowed now if desired.
    ;
        eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x.x.x-YY.y.y
        0485.0014    CARD 1115 OAMHC        Card is present
    ;
    ```

25. Issue the command to display card status.

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

    Verify that the GPL versions that are displayed in the VERSION column are correct; see Software Release Numbering.

    Record the location of the Standby MASP:

    MASP _____

    ```
        eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x.x.x-YY.y.y
        rept-stat-card
        Command entered at terminal #10.
    ;
        eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x.x.x-YY.y.y
        CARD    VERSION      TYPE    APPL      EST
    SST       AST
        1101    XXX-XXX-XXX  DSM     SCCPHC    IS-NR
    Active      -----
        1102    XXX-XXX-XXX  DSM     SCCPHC    IS-NR
    Active      -----
        1103    XXX-XXX-XXX  TSM     GLSHC     IS-NR
    Active      -----
        1104    XXX-XXX-XXX  TSM     GLSHC     IS-NR
    Active      -----
        1105    XXX-XXX-XXX  LIMDS0  SS7ML     IS-NR
    Active      -----
    ```

```
    1111   XXX-XXX-XXX  IPSM    IPSHC      IS-NR
Active      -----
    1113   XXX-XXX-XXX  E5MCAP  OAMHC      IS-NR
Active      -----
    1114   -----------  E5TDM   -------    IS-NR
Active      -----
    1115   XXX-XXX-XXX  E5MCAP  OAMHC      IS-NR
Standby     -----
    1116   -----------  E5TDM   -------    IS-NR
Active      -----
    1117   -----------  E5MDAL  -------    IS-NR
Active      -----
    1201   XXX-XXX-XXX  LIMDS0  SS7ML      IS-NR
Active      -----
    1202   XXX-XXX-XXX  LIMDS0  SS7ML      IS-NR
Active      -----
    1203   XXX-XXX-XXX  DCM     IPLHC      IS-NR
Active      -----
    1204   XXX-XXX-XXX  DCM     IPLHC      IS-NR
Active      -----
    1211   XXX-XXX-XXX  DCM     IPGHC      IS-NR
Active      -----
    1218   XXX-XXX-XXX  TSM     GLSHC      IS-NR
Active      -----
    Command Completed.
;
```

26. Inhibit the standby MASP.

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

    Response to the command is displayed.

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

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

27. Replace the standby E5-MASP with the E5-MASP removed in step 4.

    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 E5-MASP card.

    Insert the spare E5-MASP card.

    Slide the MASP H/S switch (SW3) on the new 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).

> **📝 Note:**
>
> UAMs are generated during this step. An audible alarm is generated. Wait for the new standby E5-MASP to come up in standby mode and system returns to duplex mode.

28. Insert the source-release media into the system.

    Insert an USB drive in the standby E5-MCAPs.
    Once inserted, allow time for the source-release RMD to be detected by the system

29. Repeat steps 15 - 24.

    After completing Step 24 the second time, continue to Step 30.

30. If steps 12 was executed, issue the command to turn the measurements collection on.

    ```
    chg-meas:collect=on
    ```
    Response to change measurement command is displayed.

    ```
    eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x.x.x-YY.y.y
        chg-meas:collect=on
        Command entered at terminal #10.
    ;


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

31. Execute Procedure 17.

    If this completes the recovery as directed by My Oracle Support, verify the system with the EAGLE health check in References. Otherwise continue with Recovery Procedure C.
    If failure occurred prior to entering Phase 3, recovery is complete.

Full Fallback Using Fixed Disk As OAM Conversion Workspace – Case 1

Perform the recovery procedure if directed to do so by My Oracle Support when failure occurs in Verifying the Target Release and Software Access Key through STP Conversion, Step 1.

> **📝 Note:**
>
> this procedure is done in lieu of Backing Up Fixed Disk for the case where a removable disk was NOT used as the workspace for the OAM conversion.

> **✎ Note:**
>
> If the source release is 46.5 or prior, perform this procedure only when the MASPs are running the BLMCAP flash image. Otherwise Revert IPS (ENET-B) cards on VxWorks6.4 to Revert the MASP Card to VxWorks6.4 must be performed before this procedure.

SHOULD THIS PROCEDURE FAIL, CONTACT My Oracle Support AND **ASK FOR UPGRADE ASSISTANCE**.

When directed to by My Oracle Support, execute this procedure:

If failure occurred between Verifying the Target Release and Software Access Key and STP Conversion, Step 1, Table: Act Upgrade Command Actions, Item E.

1. Only perform this procedure if directed by My Oracle Support.

2. If present, remove the target-release media from the system.

3. Issue the command to initialize both MASP cards.

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

   Ensure that the release shown in the banner is the source release after the MASP becomes active again.

   ```
       eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
   *   0261.0013  * CARD 111X OAMHC        Card is isolated from the
   system
                    ASSY SN: xxxxxxxx
   ;

       eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x.x.x-YY.y.y
       5001.0009    CARD 111X OAMHC         MASP became active
   ;
       eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x.x.x-YY.y.y
       5038.0014    CARD XXXX OAMHC        Card is present
                    ASSY SN: xxxxxxxx
   ;
   ```

4. Execute Recovery Procedure A.

Full Fallback Using Fixed Disk As OAM Conversion Workspace – Case 2

Perform this recovery procedure if directed to do so by My Oracle Support when failure occurred between STP Conversion, Step 1, Item F through Item I. . This procedure makes the partition with the source GPLs active on both TDMs.

> **Note:**
>
> If the source release is 46.5 or prior, perform this procedure only when the MASPs are running the BLMCAP flash image. Otherwise Revert IPS (ENET-B) cards on VxWorks6.4 to Revert the MASP Card to VxWorks6.4 must be performed before this procedure.

SHOULD THIS PROCEDURE FAIL, CONTACT My Oracle Support AND **ASK FOR UPGRADE ASSISTANCE**.

When directed to by My Oracle Support, execute this procedure:

If failure occurred between STP Conversion, Step 1, Table: Act Upgrade Command Actions, Item F and STP Conversion, Step 1, Table: Act Upgrade Command Actions, Item I.

1. Remove USB drive from system if present.

2. Issue the command to display database status during upgrades.

   ```
   act-upgrade:action=dbstatus
   ```
   Response to the command is displayed.

   Look at the status field and determine the loc of the TDM marked `UPG 2`.

```
eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x.x.x-YY.y.y Upg Phase X
;    DATABASE STATUS: >> NOT OK (DMS) <<
          TDM 1114 ( STDBY)                   TDM 1116 ( ACTV )
           C    LEVEL    TIME LAST BACKUP    C    LEVEL    TIME
LAST BACKUP
           - -------- --------------------- - --------
----------------------
    FD BKUP Y   nnnnnn     -        -        Y    nnnnnn YY-MM-DD
hh:mm:ss zzz
    FD CRNT Y   nnnnnn                       Y    nnnnnn
          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  nnnnnn      YY-MM-DD hh:mm:ss  ZZZ-ZZZ-
ZZZ  UPG 2
    TDM-BKUP   1114  Y  -  nnnnnn      YY-MM-DD hh:mm:ss  ZZZ-ZZZ-
ZZZ  UPG 2
    OAM-RMV    1115  -  -     -           -         -         -
    OAM-USB    1115  -  -     -           -         -         -
    TDM-CRNT   1116  Y  N  nnnnnn      YY-MM-DD hh:mm:ss  XXX-XXX-
XXX  NORMAL
```

```
      TDM-BKUP   1116  Y  -  nnnnnn       YY-MM-DD hh:mm:ss  XXX-XXX-
XXX  NORMAL

      INACTIVE PARTITION GROUP
      CARD/APPL  LOC   C  T  LEVEL        TIME LAST UPDATE   VERSION
STATUS
      ---------  ----  -  -  ----------   -----------------
-------------------
      TDM-CRNT   1114  Y  -  nnnnnn       YY-MM-DD hh:mm:ss  XXX-XXX-
XXX  NORMAL
      TDM-BKUP   1114  Y  -  nnnnnn       YY-MM-DD hh:mm:ss  XXX-XXX-
XXX  NORMAL
      TDM-CRNT   1116  N  -  1            00-00-00 00:00:00  ZZZ-ZZZ-
ZZZ  NORMAL
      TDM-BKUP   1116  N  -  1            00-00-00 00:00:00  ZZZ-ZZZ-
ZZZ  NORMAL
```

3. If the TDM marked in UPG 2 is the active MASP continue. Otherwise, go to step 6.

4. Issue the command to init active location.

   `init-card:loc=YYYY`
   (Where YYYY is location of active MASP)

   Response to initialize command is displayed.

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

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

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

   Response to login command is displayed.

   Ignore any login failure message.

```
eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x.x.x-YY.y.y
        User logged in on terminal 10.
;

? Login failures since last successful LOGIN
Last successful LOGIN was on port ? on ??-??-?? @ ??:??:??
```

6. Issue the command to display active/inactive disk partitions.

   `send-msg:ds=1:da=h'5d:f=h'47:loc=YYYY`
   (Where YYYY is location of active MASP)

   Response to command.

> **Note:**
>
> Look for the command response on a terminal with all output display groups set to yes (printer/ksr terminal port specified in, Verifying Pre-Upgrade Requirements and Capturing Upgrade Data, Step 6)

```
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y Upgrade
Phase x
    System Buffer sent has following attributes :
        Msg Length = H'0010
        Dest Card = H'00fb
        Orig Subsys = H'0001          Dest Subsys = H'0001
        Orig Appl ID = H'0030         Dest Appl ID = H'005d
        Func ID = H'0047              Bus/Ret/Sut = H'0002
        Violation Ind = H'0000
    User Message sent to location YYYY.
;

    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y Upgrade
Phase x
    ACTIVE OAM Partition Grp Info:
    num_group = 2
    num_partitions_per_group = 2
    active_partitions[]  = 0    1
    inactive_partitions[] = 2    3
;

    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y Upgrade
Phase x
    STANDBY OAM Partition Grp Info:
    num_group = 2
    num_partitions_per_group = 2
    active_partitions[]  = 2    3
    inactive_partitions[] = 0    1
;
```

7. Issue the command to swap active/inactive disk partitions.

```
send-msg:ds=1:da=h'5d:f=h'48:loc=YYYY
```
(Where `YYYY` is location of active MASP)

Response to command.

> **Note:**
>
> Look for the command response on a terminal with all output display groups set to yes (printer/ksr terminal port specified in Verifying Pre-Upgrade Requirements and Capturing Upgrade Data, Step 6)

Compare the values for the active_partitions and inactive_partitions with those in **step 6**. For the STANDBY OAM, the values for the active_partitions shown should

equal those for the inactive_partitions shown in **step 6**, and vice-versa. For the
ACTIVE OAM, both sets of values should be identical.

```
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    System Buffer sent has following attributes :
        Msg Length = H'0010
        Dest Card = H'00fb
        Orig Subsys = H'0001            Dest Subsys = H'0001
        Orig Appl ID = H'0030           Dest Appl ID = H'005d
        Func ID = H'0048                Bus/Ret/Sut = H'0002
        Violation Ind = H'0000
    User Message sent to location YYYY.
;
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    Partition switch PASSED
;
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    ACTIVE OAM Partition Grp Info:
    num_group = 2
    num_partitions_per_group = 2
    active_partitions[]   = 0    1
    inactive_partitions[] = 2    3
;


    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    STANDBY OAM Partition Grp Info:
    num_group = 2
    num_partitions_per_group = 2
    active_partitions[]   = 0    1
    inactive_partitions[] = 2    3
;
```

8. Inhibit the standby MASP.

    ```
    inh-card:loc=XXXX
    ```
    (Where xxxx is the location for 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.x.x-YY.y.y
   Card is inhibited.
;

   eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y Upg Phase x
   **  5045.0514 ** CARD XXXX OAMHC        Standby MASP is
inhibited
;
    ```

> **✎ Note:**
>
> Wait for the card to boot and return to the IMT bus.

9. Issue the command to initialize the flash memory on the standby MASP.

> **Note:**
>
> The approved flash GPL is the source version.

`init-flash:code=appr:loc=XXXX`
(Where XXXX is the location for the Standby MASP.)

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
;
```

> **Note:**
>
> Wait for card to boot and return to the IMT bus.

10. Issue the command to activate the flash on the standby MASP.

`act-flash:loc=XXXX`
(Where XXXX is the location for the Standby MASP.)

Response to the activate command is displayed.

```
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    act-flash:loc=XXXX
    Command entered at terminal #10.
;
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    FLASH Memory Activation for card XXXX Started.
;
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    FLASH Activation for card XXXX Completed.
;
```

11. Issue the command to allow card.

`alw-card:loc=XXXX`
(Where XXXX is the location for the Standby MASP.)

Response to the command is displayed.

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

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

12. Determine the status of the GPLs running on the card location.

`rept-stat-gpl:loc=XXXX`
(Where XXXX is the location for the Standby MASP.)

Response from the status command is displayed.

Verify the standby MASP is running the upgrade source release GPLs. Verify that no "ALM" indicator is displayed.

```
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
   OAMHC      1115       134-074-000          -----------
-----------
         BLMCAP          134-070-000          134-070-000  134-070-000

   Command Completed.
;
```

13. If the active MASP is not running the upgrade source release GPL continue. Otherwise go to step 20.

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

Response to initialize command is displayed.

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

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

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

Response to login command is displayed.

Ignore any login failure message.

```
eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x.x.x-YY.y.y
        User logged in on terminal 10.
;


? Login failures since last successful LOGIN
Last successful LOGIN was on port ? on ??-??-?? @ ??:??:??
```

15. Inhibit the standby MASP.

    ```
    inh-card:loc=XXXX
    ```
    (Where XXXX is the location for 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.x.x-YY.y.y
      Card is inhibited.
    ;


      eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y Upg Phase x
      **  5045.0514 ** CARD XXXX OAMHC        Standby MASP is
    inhibited
    ;
    ```

    > **Note:**
    >
    > Wait for the card to boot and return to the IMT bus.

16. Issue the command to initialize the flash memory on the standby MASP.

    ```
    init-flash:code=appr:loc=XXXX
    ```
    (Where XXXX is the location for the Standby MASP.)

    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
    ;
    ```

> **Note:**
>
> Wait for card to boot and return to the IMT bus.

17. Issue the command to activate the flash on the standby MASP.

`act-flash:loc=XXXX`
(Where `XXXX` is the location for the Standby MASP.)

Response to the activate command is displayed.

```
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
   act-flash:loc=XXXX
   Command entered at terminal #10.
;
   eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
   FLASH Memory Activation for card XXXX Started.
;
   eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
   FLASH Activation for card XXXX Completed.
;
```

18. Issue the command to allow card.

`alw-card:loc=XXXX`
(Where `XXXX` is the location for the Standby MASP.)

Response to the command is displayed.

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

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

19. Determine the status of the GPLs running on the card location.

`rept-stat-gpl:loc=XXXX`
(Where `XXXX` is the location for the Standby MASP.)

Response from the status command is displayed.

Verify that the standby MASP is running the upgrade source release GPLs. Verify that no `ALM` indicator is displayed.

```
   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
   OAMHC      1115      134-074-000         -----------
-----------
        BLMCAP           134-070-000        134-070-000  134-070-000
```

```
        Command Completed.
    ;
```

20. Execute Recovery Procedure A.

Full Fallback Using Fixed Disk As OAM Conversion Workspace – Case 3

Perform this recovery procedure if directed to do so by My Oracle Support when failure occurred between STP Conversion, Step 1 and Completing Upgrade/Return to Full-Function Mode [End of Session 1] This procedure makes the partition with the source GPLs active on both TDMs.

> **Note:**
>
> If the database level in the target release is different from the last database level of the source release, this procedure CANNOT BE USED; contact My Oracle Support.

> **Note:**
>
> If the source release is 46.5 or prior, perform this procedure only when the MASPs are running the BLMCAP flash image. Otherwise Revert IPS (ENET-B) cards on VxWorks6.4 to Revert the MASP Card to VxWorks6.4 must be performed before this procedure.

SHOULD THIS PROCEDURE FAIL, CONTACT My Oracle Support AND **ASK FOR UPGRADE ASSISTANCE**.

When directed to by My Oracle Support, execute this procedure:

If failure occurred between STP Conversion, Step 1 and Migrate the MCPM Cards Running VxWorks 6.4 GPL to VxWorks 6.9 GPL [End of Session 1].

1. If this is an incremental upgrade (i.e. the SOURCE release equals the TARGET release, go to Verifying All Databases, Step 1.

Complete all steps from Verifying All Databases to the end of Session 1 (Migrate the MCPM Cards Running VxWorks 6.4 GPL to VxWorks 6.9 GPL).

> **Note:**
>
> When executing Verifying All Databases through Migrate the MCPM Cards Running VxWorks 6.4 GPL to VxWorks 6.9 GPL in the recovery scenario, the terminology of source and target are reversed. Target release becomes the software load that is being recovered to (45.0.0) and the source release becomes the software load that was upgraded to (45.0.1).

2. Remove USB drive from system if present.

3. Issue the command to display active/inactive disk partitions.

```
send-msg:ds=1:da=h'5d:f=h'47:loc=YYYY
```
(Where YYYY is location of active MASP)

Response to command.

> **Note:**
>
> Look for the command response on a terminal with all output display groups set to yes (printer\ksr terminal port specified in Verifying Pre-Upgrade Requirements and Capturing Upgrade Data, Step 6)

```
eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y Upgrade Phase x
    System Buffer sent has following attributes :
        Msg Length = H'0010
        Dest Card = H'00fb
        Orig Subsys = H'0001          Dest Subsys = H'0001
        Orig Appl ID = H'0030         Dest Appl ID = H'005d
        Func ID = H'0047              Bus/Ret/Sut = H'0002
        Violation Ind = H'0000
    User Message sent to location XXXX.
;
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y Upgrade
Phase x
    ACTIVE OAM Partition Grp Info:
    num_group = 2
    num_partitions_per_group = 2
    active_partitions[]   = 2    3
    inactive_partitions[] = 0    1
;
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y Upgrade
Phase x
    STANDBY OAM Partition Grp Info:
    num_group = 2
    num_partitions_per_group = 2
    active_partitions[]   = 2    3
    inactive_partitions[] = 0    1
;
```

4. Issue the command to swap active/inactive disk partitions.

```
send-msg:ds=1:da=h'5d:f=h'48:loc=YYYY
```
(Where YYYY is location of active MASP)

Response to command.

> **Note:**
>
> Look for the command response on a terminal with all output display groups set to yes (printer\ksr terminal port specified in Verifying Pre-Upgrade Requirements and Capturing Upgrade Data, Step 6)

Compare the values for the active_partitions and inactive_partitions with those in
step 3. For the STANDBY OAM, the values for the active_partitions shown should
equal those for the inactive_partitions shown in **step 3**, and vice-versa. For the
ACTIVE OAM, both sets of values should be identical.

```
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    System Buffer sent has following attributes :
        Msg Length = H'0010
        Dest Card = H'00fb
        Orig Subsys = H'0001            Dest Subsys = H'0001
        Orig Appl ID = H'0030           Dest Appl ID = H'005d
        Func ID = H'0048                Bus/Ret/Sut = H'0002
        Violation Ind = H'0000
    User Message sent to location XXXX.
;
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    Partition switch PASSED
;

    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    ACTIVE OAM Partition Grp Info:
    num_group = 2
    num_partitions_per_group = 2
    active_partitions[]   = 2    3
    inactive_partitions[] = 0    1
;

    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    STANDBY OAM Partition Grp Info:
    num_group = 2
    num_partitions_per_group = 2
    active_partitions[]   = 0    1
    inactive_partitions[] = 2    3
;
```

5. Inhibit the standby MASP.

   `inh-card:loc=XXXX`
   (Where XXXX is the location for 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.x.x-YY.y.y
    Card is inhibited.
;

   eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y Upg Phase x
    **  5045.0514 ** CARD XXXX OAMHC        Standby MASP is
inhibited
;
```

> **Note:**
>
> Wait for the card to boot and return to the IMT bus.

6. Issue the command to initialize the flash memory on the standby MASP.

```
init-flash:code=trial:loc=XXXX
```
(Where XXXX is the location for the Standby MASP.)

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
;
```

> **Note:**
>
> Wait for card to boot and return to the IMT bus.

7. Issue the command to activate the flash on the standby MASP.

```
act-flash:loc=XXXX
```
(Where XXXX is the location for the Standby MASP.)

Response to the activate command is displayed.

```
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    act-flash:loc=XXXX
    Command entered at terminal #10.
;
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    FLASH Memory Activation for card XXXX Started.
;
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    FLASH Activation for card XXXX Completed.
;
```

8. Issue the command to allow card.

```
alw-card:loc=XXXX
```
(Where XXXX is the location for the Standby MASP.)

Response to the command is displayed.

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

ORACLE

```
;

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

9. Determine the status of the GPLs running on the card location.

   `rept-stat-gpl:loc=XXXX`
   (Where XXXX is the location for the Standby MASP.)

   Response from the status command is displayed.

   Verify that the standby MASP is running the upgrade source release GPLs.

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

        GPL       CARD      RUNNING           APPROVED      TRIAL
        OAMHC69   XXXX      XXX-XXX-XXX        -----------
-----------
            BLDC32        XXX-XXX-XXX        YYY-YYY-YYY   XXX-XXX-
XXX

        Command Completed.
;
```

10. Issue the command to init active location.

    `init-card:loc=YYYY`
    (Where YYYY is location of active MASP)

    Response to initialize command is displayed.

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

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

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

    Response to login command is displayed.

    Ignore any login failure message.

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

```
? Login failures since last successful LOGIN
Last successful LOGIN was on port ? on ??-??-?? @ ??:??:??
```

12. Issue the command to display active/inactive disk partitions.

    ```
    send-msg:ds=1:da=h'5d:f=h'47:loc=XXXX
    ```
    (Where XXXX is location of newly active MASP)

    Response to command.

    > **Note:**
    >
    > Look for the command response on a terminal with all output display groups set to yes (printer\ksr terminal port specified in Verifying Pre-Upgrade Requirements and Capturing Upgrade Data, Step 6)

    If the standby partition information is not displayed, wait for the standby MASP to return to service and repeat step 11.

    ```
    Command Accepted - Processing
        eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x-YY.yy.y Upgrade
    Phase x
        System Buffer sent has following attributes :
            Msg Length = H'0010
            Dest Card = H'00fb
            Orig Subsys = H'0001          Dest Subsys = H'0001
            Orig Appl ID = H'0030         Dest Appl ID = H'005d
            Func ID = H'0047              Bus/Ret/Sut = H'0002
            Violation Ind = H'0000
        User Message sent to location YYYY.
    ;
        eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x-YY.yy.y Upgrade
    Phase x
        ACTIVE OAM Partition Grp Info:
        num_group = 2
        num_partitions_per_group = 2
        active_partitions[]   = 0    1
        inactive_partitions[] = 2    3
    ;
        eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x-YY.yy.y Upgrade
    Phase x
        STANDBY OAM Partition Grp Info:
        num_group = 2
        num_partitions_per_group = 2
        active_partitions[]   = 2    3
        inactive_partitions[] = 0    1
    ;
    ```

13. Issue the command to swap active/inactive disk partitions.

    ```
    send-msg:ds=1:da=h'5d:f=h'48:loc=XXXX
    ```
    (Where XXXX is location of active MASP)

    Response to command.

> **📎 Note:**
>
> : Look for the command response on a terminal with all output display groups set to yes (printer\ksr terminal port specified in Verifying Pre-Upgrade Requirements and Capturing Upgrade Data, Step 6)

Compare the values for the active_partitions and inactive_partitions with those in **step 12**. For the STANDBY OAM, the values for the active_partitions shown should equal those for the inactive_partitions shown in **step 12**, and vice-versa. For the ACTIVE OAM, both sets of values should be identical.

```
eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x-YY.yy.y
    System Buffer sent has following attributes :
        Msg Length = H'0010
        Dest Card = H'00fb
        Orig Subsys = H'0001            Dest Subsys = H'0001
        Orig Appl ID = H'0030           Dest Appl ID = H'005d
        Func ID = H'0048                Bus/Ret/Sut = H'0002
        Violation Ind = H'0000
    User Message sent to location YYYY.
;
    eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x-YY.yy.y
    Partition switch PASSED
;
    eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x-YY.yy.y
    ACTIVE OAM Partition Grp Info:
    num_group = 2
    num_partitions_per_group = 2
    active_partitions[]   = 0    1
    inactive_partitions[] = 2    3
;
    eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x-YY.yy.y
    STANDBY OAM Partition Grp Info:
    num_group = 2
    num_partitions_per_group = 2
    active_partitions[]   = 0    1
    inactive_partitions[] = 2    3
;
```

14. Inhibit the standby MASP.

   `inh-card:loc=YYYY`
   (Where `YYYY` is the location for 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.x.x-YY.y.y
    Card is inhibited.
;

    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y Upg Phase x
    **  5045.0514 ** CARD XXXX OAMHC         Standby MASP is
```

```
inhibited
;
```

> **Note:**
>
> Wait for the card to boot and return to the IMT bus.

15. Issue the command to initialize the flash memory on the standby MASP.

    ```
    init-flash:code=appr:loc=YYYY
    ```
    (Where YYYY is the location for the Standby MASP.)

    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
    ;
    ```

> **Note:**
>
> Wait for card to boot and return to the IMT bus.

16. Issue the command to activate the flash on the standby MASP.

    ```
    act-flash:loc=YYYY
    ```
    (Where YYYY is the location for the Standby MASP.)

    Response to the activate command is displayed.

    ```
        eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
        FLASH Memory Activation for card XXXX Started.
    ;
        eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
        FLASH Activation for card XXXX Completed.
    ;
    ```

17. Issue the command to allow card.

    ```
    alw-card:loc=YYYY
    ```
    (Where YYYY is the location for the Standby MASP.)

Response to the command is displayed.

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


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

18. Determine the status of the GPLs running on the card location.

    `rept-stat-gpl:loc=XXXX`
    (Where XXXX is the location for the Standby MASP.)

    Response from the retrieve command is displayed.

    Verify that the both MASP are running the upgrade source release GPLs. Verify that no "ALM" indicator is displayed

```
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        XXX-XXX-XXX         -----------
-----------
        BLDC32              XXX-XXX-XXX         XXX-XXX-XXX     XXX-XXX-
XXX

    Command Completed.
;
```

19. Execute Procedure 15.

Recovery Procedure C

Fall Back Procedure for Network Cards

This procedure captures the card and link status data required when performing a manual fallback of the network cards back to the source-release GPLs.

1. Issue the command to report card status.

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

    Record all network card applications present for future reference within the procedure.

```
eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    CARD    VERSION     TYPE        GPL         PST
SST         AST
    1101    XXX-XXX-XXX DSM         SCCPHC      IS-NR
Active       -----
    1102    XXX-XXX-XXX DCM         IPLHC       IS-NR
Active       -----
```

```
    1103   XXX-XXX-XXX  TSM         GLSHC        IS-NR
Fault       -----
    1105   XXX-XXX-XXX  DCM         IPGHC        IS-NR
Active      -----
    1109   XXX-XXX-XXX  HIPR        HIPR         IS-NR
Active      -----
    1110   XXX-XXX-XXX  HIPR        HIPR         IS-NR
Active      -----
    1111   XXX-XXX-XXX  MCPM        MCPHC        IS-ANR
Active      -----
    1113   XXX-XXX-XXX  E5MCAP      OAMHC        IS-NR
Active      -----
    1114   -----------  E5TDM       -------      IS-NR
Active      -----
    1115   XXX-XXX-XXX  E5MCAP      OAMHC        IS-NR
Standby     -----
    1116   -----------  E5TDM       -------      IS-NR
Active      -----
    1117   -----------  E5MDAL      -------      IS-NR
Active      -----
    1201   XXX-XXX-XXX  LIMT1       SS7HC        IS-NR
Active      -----
    1202   XXX-XXX-XXX  LIMT1       SS7HC        IS-NR
Active      -----
    1209   XXX-XXX-XXX  HIPR2       HIPR2        IS-NR
Active      -----
    1210   XXX-XXX-XXX  HIPR2       HIPR2        IS-NR
Active      -----
    1211   XXX-XXX-XXX  DCM         IPGHC        IS-NR
Active      -----
    1217   XXX-XXX-XXX  TSM         GLSHC        IS-NR
Active      -----
    1218   XXX-XXX-XXX  IPSM        IPSHC        IS-NR
Active      -----
    Command Completed.
;
```

2. Issue the card status command.

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

If any MCPM cards are displayed, continue to next step. Otherwise, go to Step 4.

```
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    CARD   VERSION     TYPE      GPL        PST
SST       AST
    1111   134-064-000  MCPM       MCPHC      IS-NR
Active      -----
    1112   134-064-000  MCPM       MCPHC      IS-NR
Active      -----

    Command Completed.
;
```

3. Issue the send message command. Repeat for each MCPM card.

> **✏ Note:**
>
> This command causes the MCPM card to boot with an OBIT indicating a USER INITIATED COLD RESTART. All Measurements data not sent to an FTP server is lost. Waiting for the next scheduled Measurement FTP transfer and use of the `rept-ftp-meas`command to save desired measurements can minimize these losses before proceeding with this step.

```
send-msg:ds=8:da=h'17:f=22:loc=XXXX
```

(Where XXXX is location of the MCPM cards display in previous step.)

Response to the send message command is displayed.

```
eaglestp YY-MM-DD hh:mm:ss TTTT PPP   XX.x.x.x.x-YY.y.y
    System Buffer sent has following attributes :
        Msg Length = H'0010
        Dest Card = H'00f7
        Orig Subsys = H'0001            Dest Subsys = H'0001
        Orig Appl ID = H'004d           Dest Appl ID = H'001d
        Func ID = H'0016                Bus/Ret/Sut = H'0002
        Violation Ind = H'0000
    User Message sent to location XXXX.

    Command Completed.
;
```

4. Issue the upgrade activation command.

   If the threshold type is set to SET in Verifying all Databases, Step 2 and the source release is 46.0 or higher, issue the following command:
   `ACT-UPGRADE:ACTION=CONVERTSTP:SRC=FIXED`

   Otherwise, issue the following command:

   `ACT-UPGRADE:ACTION=CONVERTSTP:SRC=FIXED:THRES=75`

   (If another thres value is to be used see recommendation #5 in Recommendations.)

   Response to the upgrade command is displayed.

   Completion notice of successful upgrade.

   If upgrade does not complete successfully, see recommendation # 7 in Recommendations.

```
eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y Upg Phase 3
    Hardware Validation Test Started
    [ASM Obsolescence Test for all applications.]
    [DSM Obsolescence Test for MCP application.]

    Hardware Validation Test Completed Successfully.
;

    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y Upg Phase 3
```

```
        Starting network conversion...
;

        eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y Upg Phase 3
        Upgrading MUX card 1109
;
```

Output continues until the following is displayed

```
eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y Upg Phase 3

        Command Complete : Upgrade action completed successfully
;
```

5. Go to STP Conversion, Step 6.

Complete all steps from STP Conversion, Step 6 to the end of STP Conversion. Then perform Completing Upgrade/Return to Full-Function Mode to complete the roll-back.

Restoring Flash-Based Service Cards

This procedure restores Service Cards that are flash based. This group includes IPSHC, MCPHC, DEIRHC, ENUMHC, SCCPHCand SIPHC cards.
This procedure updates each card with the source release GPLs.

1. Issue the command to display the GPL status.

```
rept-stat-gpl:gpl=YYYY
```
(Where `YYYY` is one of the Flash-Based service card types listed above.)

Response to the command is displayed.

Record the CARD locations for all cards that have alarms:

```
eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    rept-stat-gpl:gpl=YYYY
    Command entered at terminal #10.
;
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    GPL Auditing  ON

    APPL       CARD     RUNNING              APPROVED      TRIAL
    YYYYY      1101     XXX-XXX-XXX ALM   XXX-XXX-XXX   XXX-XXX-XXX
    YYYYY      1103     XXX-XXX-XXX ALM   XXX-XXX-XXX   XXX-XXX-XXX
Command Completed.
;
```

2. Issue the command to inhibit the card if the card is provisioned.

```
inh-card:loc=XXXX
```
(Where `XXXX` is the card location of the cards determined in Step 1)

Response to the inhibit command is displayed.

Wait for the `Command completed` response before proceeding

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

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

3. Issue the command to initialize the flash memory.

   `flash-card:code=appr:force=yes:loc=XXXX`

   > **Note:**
   >
   > this command causes the card to boot.

   Response to the flash card command is displayed.

   Wait for command complete to indicate that the card is finished loading before proceeding.

```
eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    flash-card:code=appr:force=yes:loc=XXXX
    Command entered at terminal #10.
;

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

4. Issue the command to allow the card if the card is provisioned.

   > **Note:**
   >
   > Specifying the DATA=PERSIST parameter for SCCP application cards allows for warm restart if possible.

   `alw-card:loc=XXXX`

   (Where XXXX is the card location of the cards determined in Step 1)

   OR

   `alw-card:loc=XXXX:data=persist`

   (Where XXXX is the location of an SCCP card determined in Step 1)

   Response to the allow command is displayed.

   Wait for the card to finish loading before proceeding (approximately 30 seconds).

> **Note:**
>
> If card is MCPM, it may boot with an Obit for Module EMM_MCP.C Class 0001. This is expected behavior and is not service affecting.

```
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    alw-card:loc=1201
    Command entered at terminal #10.
;
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    Card has been allowed.
;
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    Command Completed.
;
```

5. Repeat Steps 2 – 4 for each card in the current group that has an alarm.

6. Repeat steps 1 - 5 for each group of cards (VSCCP, ISP, MCP, EROUTE, SCCPHC, IPSHC, ERTHC, and SIPHC)

7. Issue the command to display the card status.

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

Verify that all Flash-Based Service cards are IS-NR and are running the Source-Release GPL versions, as per your reference list of GPLs

For any such card that is not IS-NR or running the correct GPL, repeat Step 2.

```
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    rept-stat-card
    Command entered at terminal #10.
;
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    CARD    VERSION      TYPE      GPL        PST
SST       AST
    1101    XXX-XXX-XXX  DSM       VSCCP      IS-NR
Active      -----
    1102    XXX-XXX-XXX  DSM       VSCCP      IS-NR
Active      -----
    1103    XXX-XXX-XXX  TSM       GLSHC      IS-NR
Active      -----
    1104    XXX-XXX-XXX  TSM       GLSHC      IS-NR
Active      -----
    1105    XXX-XXX-XXX  LIMDS0    SS7ML      IS-NR
Active      -----
    1109    XXX-XXX-XXX  HIPR      HIPR       IS-NR
Active      -----
    1110    XXX-XXX-XXX  HIPR      HIPR       IS-NR
Active      -----
    1111    XXX-XXX-XXX  LIMT1     SS7HC      IS-NR
Active      -----
    1113    XXX-XXX-XXX  E5MCAP    OAMHC      IS-NR
```

```
Active      -----
    1114   -----------   E5TDM       -------     IS-NR
Active      -----
    1115   XXX-XXX-XXX   E5MCAP      OAMHC       IS-NR
Standby     -----
    1116   -----------   E5TDM       -------     IS-NR
Active      -----
    1117   -----------   E5MDAL      -------     IS-NR
Active      -----
    1201   XXX-XXX-XXX   LIMDS0      SS7ML       IS-NR
Active      -----
    1202   XXX-XXX-XXX   LIMDS0      SS7ML       IS-NR
Active      -----
    1203   XXX-XXX-XXX   LIMDS0      SS7ML       IS-NR
Active      -----
    1204   XXX-XXX-XXX   LIMDS0      SS7ML       IS-NR
Active      -----
    Command Completed.
;
```

Restoring Flash-Based Link Cards

Link cards include SS7HC, IPLHC, IPGHC, and ATMHC cards.
This procedure updates each card with the source release GPLs.

> **✎ Note:**
>
> Steps 3 through 8 are to be repeated for EACH Link card in the system.

1. Issue the command to display the GPL status.

   ```
   rept-stat-gpl:gpl=YYYY
   ```
   (Where YYYY is one of the Flash-Based Link card types listed above.)

   Response to the command is displayed.

   Record the CARD locations for all cards which have alarms:

   _____

   _____

   _____

   _____

   _____

   _____

   _____

   ```
       eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
       rept-stat-gpl:gpl=YYYY
       Command entered at terminal #10.
   ;
   ```

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

    APPL      CARD      RUNNING         APPROVED      TRIAL
    XXXXXXX   1201      XXX-XXX-XXX ALM XXX-XXX-XXX   XXX-XXX-XXX
    XXXXXXX   1202      XXX-XXX-XXX ALM XXX-XXX-XXX   XXX-XXX-XXX
    XXXXXXX   1205      XXX-XXX-XXX ALM XXX-XXX-XXX   XXX-XXX-XXX
    XXXXXXX   1207      XXX-XXX-XXX ALM XXX-XXX-XXX   XXX-XXX-XXX
    XXXXXXX   1209      XXX-XXX-XXX     XXX-XXX-XXX   XXX-XXX-XXX
    XXXXXXX   1211      XXX-XXX-XXX     XXX-XXX-XXX   XXX-XXX-XXX
 Command Completed.
;
```

2. Issue command to display provisioned links.

```
rept-stat-card:loc=XXXX
```
(Where XXXX is a card in alarm from Step 1.)

Response displayed.

Note which links are IS-NR for this card.

```
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    rept-stat-card:loc=XXXX
    Command entered at terminal #10.
;

    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    CARD    VERSION      TYPE     APPL      PST
SST       AST
    XXXX   XXX-XXX-XXX  XXXXXX   XXXXXX     IS-NR
Active    -----
     ALARM STATUS     = *  0021 Clock A for card failed, Clock
B normal
     XXXXXX GPL version = XXX-XXX-XXX
     IMT BUS A         = Conn
     IMT BUS B         = Conn
     SLK A   PST       = IS-NR          LS=XXXX
CLLI=-----------
     SLK B   PST       = IS-NR          LS=XXXX
CLLI=-----------
     SLK A1  PST       = OOS-MT         LS=XXXX
CLLI=-----------
     SLK B1  PST       = IS-NR          LS=XXXX
CLLI=-----------
     SLK A2  PST       = IS-NR          LS=XXXX
CLLI=-----------
     SLK B2  PST       = IS-NR          LS=XXXX
CLLI=-----------
     SLK A3  PST       = IS-NR          LS=XXXX
CLLI=-----------
     SLK B3  PST       = IS-NR          LS=XXXX
CLLI=-----------
    Command Completed.
;
```

3. Issue the command to initialize the flash memory.

```
flash-card:code=appr:force=yes:loc=XXXX
```

> **Note:**
>
> this command causes the card to boot.

Response to the flash card command is displayed.

Wait for command complete to indicate that the card is finished loading before proceeding.

```
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    flash-card:code=appr:force=yes:loc=XXXX
    Command entered at terminal #10.
;

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

4. Issue command to display provisioned links.

```
rept-stat-card:loc=XXXX
Response displayed.
```

Verify that the links that were IS-NR in Step 4 are IS-NR now

```
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    rept-stat-card:loc=XXXX
    Command entered at terminal #10.
;

    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    CARD    VERSION      TYPE       APPL       PST
SST        AST
    XXXX    XXX-XXX-XXX  XXXXXX     XXXXXX     IS-NR
Active     XXXXX
      ALARM STATUS      = **  0228 REPT-E1F:FAC-E1 Port 1 LOS
failure
      IMT    VERSION    = XXX-XXX-XXX
      PROM   VERSION    = XXX-XXX-XXX
      IMT BUS A         = Conn
      IMT BUS B         = Conn
      SLK A   PST       = IS-NR             LS=XXXX
CLLI=-----------
      SLK B   PST       = OOS-MT            LS=XXXX
CLLI=-----------
    Command Completed.
;
```

5. Repeat Steps 2 - 4 for each card in the group from Step 1 that has an alarm.

6. Repeat Steps 1-5 for each Flash-Based Link card group (Refer to Software Release Numbering to see list of GPLs.)

7. Issue the command to display the GPL status.

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

Verify that all Flash-Based Link cards are IS-NR and are running the Source-Release GPL versions, as per your reference list of GPLs

For any card that is not IS-NR or running the correct GPL, repeat Steps 2-4.

```
eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    rept-stat-card
    Command entered at terminal #10.
;
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    CARD    VERSION      TYPE     APPL       EST
SST        AST
    1101    XXX-XXX-XXX  DSM      SCCPHC     IS-NR
Active     -----
    1102    XXX-XXX-XXX  DSM      SCCPHC     IS-NR
Active     -----
    1103    XXX-XXX-XXX  TSM      GLSHC      IS-NR
Active     -----
    1104    XXX-XXX-XXX  TSM      GLSHC      IS-NR
Active     -----
    1105    XXX-XXX-XXX  DCM      IPGHC      IS-NR
Active     -----
    1111    XXX-XXX-XXX  IPSM     IPSHC      IS-NR
Active     -----
    1113    XXX-XXX-XXX  E5MCAP   OAMHC      IS-NR
Active     -----
    1114    -----------  E5TDM    -------    IS-NR
Active     -----
    1115    XXX-XXX-XXX  E5MCAP   OAMHC      IS-NR
Standby    -----
    1116    -----------  E5TDM    -------    IS-NR
Active     -----
    1117    -----------  E5MDAL   -------    IS-NR
Active     -----
    1201    XXX-XXX-XXX  LIMDS0   SS7ML      IS-NR
Active     -----
    1202    XXX-XXX-XXX  LIMDS0   SS7ML      IS-NR
Active     -----
    1203    XXX-XXX-XXX  LIMATM   ATMANSI    IS-NR
Active     -----
    1204    XXX-XXX-XXX  IPSM     IPSHC      IS-NR
Active     -----
    Command Completed.
;
```

Restoring Mux Cards

This procedure updates each card with the source release GPLs. Mux cards include HIPR, and HIPR2 cards, which run HIPR, and HIPR2 GPLs respectively.

1. Issue the card status command to identify the MUX cards in the system.

   ```
   rept-stat-gpl:gpl=YYYY
   ```
   (Where YYYY is one of the Flash-Based Mux card types listed above.)

   Response to the command is displayed.

   Record the CARD locations for all cards in the system:

   _____

   _____

   _____

   _____

   _____

   _____

   _____

   ```
       eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
       rept-stat-gpl:gpl=YYYY
       Command entered at terminal #10.
   ;
       eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
       GPL Auditing  ON

       APPL        CARD      RUNNING            APPROVED       TRIAL
       YYYY        XX09      XXX-XXX-XXX ALM    XXX-XXX-XXX    XXX-XXX-
   XXX
       YYYY        XX10      XXX-XXX-XXX        XXX-XXX-XXX    XXX-XXX-
   XXX
       YYYY        XX09      XXX-XXX-XXX ALM    XXX-XXX-XXX    XXX-XXX-
   XXX
       YYYY        XX10      XXX-XXX-XXX        XXX-XXX-XXX    XXX-XXX-
   XXX
       YYYY        XX09      XXX-XXX-XXX        XXX-XXX-XXX    XXX-XXX-
   XXX
       YYYY        XX10      XXX-XXX-XXX        XXX-XXX-XXX    XXX-XXX-
   XXX
       YYYY        XX09      XXX-XXX-XXX ALM    XXX-XXX-XXX    XXX-XXX-
   XXX
       YYYY        XX10      XXX-XXX-XXX        XXX-XXX-XXX    XXX-XXX-
   XXX
       Command Completed.
   ;
   ```

2. Enter the command to initialize the FLASH on the next Mux card on the current bus.

   ```
   init-flash:loc=XXZZ:code=appr
   ```

(Where `XX` = is a shelf number and, `ZZ` depends on which bus is being flashed. 09 is bus A; 10 is bus B.)

Response to the flash initialization is shown.

```
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    init-flash:loc=XX09:code=appr
    Command entered at terminal #10.
;
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    FLASH Memory Download for card XXZZ Started.
;
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    FLASH Memory Download for card XXZZ Completed.
;
```

3. Repeat steps 1-2 for each Mux card type on the current bus.

> **Note:**
>
> Steps 1-2 must be performed for all MUX card types on one bus before performing these steps for any MUX card types on the other bus.

4. Enter the command to initialize the current bus.

```
init-mux:bus=x
```

> **Note:**
>
> Warning: Do not use the FORCE= parameter. Use of this parameter may result in network outage. Analysis of the alternate bus is required.

(Where `x` = A or B, depending on current bus: xx09 is bus A; xx10 is bus B.)

Response to the initialization command is displayed.

```
eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    init-mux:bus=a
    Command entered at terminal #10.
;
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    5080.0014    CARD XXZZ YYYY          Card is present
;
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    5081.0014    CARD XXZZ YYYY          Card is present
;
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
*   5082.0004  * GPL SYSTEM YYYY         Card is running non-
activated GPL
```

5. Issue the command to activate the flash on the next MUX card on the current bus.

```
act-flash:loc=XXZZ
```

(Where `XX` = is a shelf number and, `ZZ` depends on which bus is being flashed. 09 is bus A; 10 is bus B.)

Response to the activate command is displayed.

```
eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    act-flash:loc=XXZZ
    Command entered at terminal #10.
;
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    FLASH Memory Activation for card XXZZ Started.
;
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    FLASH Activation for card XXZZ Completed.
;
```

6. Repeat step 5 for each MUX card on the current bus (A or B.)

7. Repeat steps 2-6 for the second bus (A or B.)

8. Issue the command to display the MUX card GPL status.

    `rept-stat-gpl:gpl=YYYY`
    (Where `YYYY` is hipr for HIPR cards, or hipr2 for HIPR2 cards.)

    Verify that all MUX card types are running the approved GPL.

```
eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    rept-stat-gpl:gpl=Y
    Command entered at terminal #10.
;
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
    GPL Auditing  ON

    APPL        CARD       RUNNING            APPROVED       TRIAL
    YYYY        XX09       XXX-XXX-XXX        XXX-XXX-XXX    XXX-XXX-
XXX
    YYYY        XX10       XXX-XXX-XXX        XXX-XXX-XXX    XXX-XXX-
XXX
    YYYY        XX09       XXX-XXX-XXX        XXX-XXX-XXX    XXX-XXX-
XXX
    YYYY        XX10       XXX-XXX-XXX        XXX-XXX-XXX    XXX-XXX-
XXX
    YYYY        XX09       XXX-XXX-XXX        XXX-XXX-XXX    XXX-XXX-
XXX
    YYYY        XX10       XXX-XXX-XXX        XXX-XXX-XXX    XXX-XXX-
XXX
    YYYY        XX09       XXX-XXX-XXX        XXX-XXX-XXX    XXX-XXX-
XXX
    YYYY        XX10       XXX-XXX-XXX        XXX-XXX-XXX    XXX-XXX-
XXX
    Command Completed.
;
```

9. Repeat step 8 for all MUX card types.

A
Upgrading Flash-Based GPL on Non-In-Service and Unprovisioned Network Cards

This procedure determines any BLIXP, BLMCAP, BLDC64, BLSLC32, or BLSLC64 cards that are inhibited, and updates each card with its target release GPLs. (See Software Release Numbering for complete list of flash GPLs.)

1. Issue the command to display the GPL status.

   ```
   rept-stat-gpl:gpl=XXXX
   ```
   (Where XXXX is the GPL listed in the header of the procedure)

   Response to the command is displayed.

   Record any card which shows an alarm:

   _____

   _____

   _____

   ```
   eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
       rept-stat-gpl:gpl=xxxx
       Command entered at terminal #10.
   ;

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

       APPL      CARD      RUNNING           APPROVED      TRIAL
       XXXXXX    1101      xxx-xxx-xxx       xxx-xxx-xxx   xxx-xxx-
   xxx
       XXXXXX    1103      xxx-xxx-xxx       xxx-xxx-xxx   xxx-xxx-
   xxx
       XXXXXX    1111      xxx-xxx-xxx ALM   xxx-xxx-xxx   xxx-xxx-
   xxx
       Command Completed.
   ;
   ```

2. Issue the status command for specific card.

   ```
   rept-stat-card:loc=XXXX
   ```
   (Where XXXX is the card location recorded in the previous step.)

   Response to the command is displayed.

   If the PST for the card is OOS-MT-DSBLD or the command is rejected with MTT error E2144 Cmd Rej: Location invalid for hardware configuration, go to step 4.

   ```
   eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
       CARD    VERSION       TYPE      APPL       PST
   SST        AST
   ```

```
       1111    -----------  DSM          VSCCP          OOS-MT-DSBLD
Manual     ---
        ALARM STATUS        = No Alarms.
        BPDCM GPL version   = 002-115-000
        IMT BUS A           = -----
        IMT BUS B           = -----
        SCCP % OCCUP        = 0%
     Command Completed.
```

3. Issue the command to inhibit card.

   `inh-card:loc=XXXX`
   Response to the command is displayed.

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

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

4. Issue the command to flash all GPLs on the card.

   `flash-card:code=appr:loc=XXXX`

   > ✎ **Note:**
   >
   > This command causes the card to boot.

   Response to the flash command is displayed.

   Wait for the card to finish loading before proceeding.

   ```
   eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
       flash-card:code=appr:loc=XXXX
       Command entered at terminal #10.
   ;



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

5. If step 3 was executed, issue the command to allow card.

   `alw-card:loc=XXXX`
   Response to the command is displayed.

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

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

6. Repeat Steps 2 – 5 for all cards recorded in step 1.

7. Repeat Steps 1 – 6 for each group of Flash-Based cards (see Software Release Numbering.)

B

Preparations For Upgrade Execution

Target Release Software Download

The following procedure is a reference for the commands that will download an EAGLE software release to the inactive partition group of the TDM from either a remote FTP server or from the thumb drive containing the upgrade target release for the E5-MASP.

The following items are required before the release can be downloaded to the EAGLE from a FTP server:

- E5-IPSM or E5-ENET-B card running IPS application defined, configured, and IS-NR
- DIST application FTP server provisioned

Download Target Software Release and Create USB Upgrade Media

This procedure downloads the target software release and creates the USB upgrade media using a Windows PC.

Should THIS PROCEDURE FAIL, CONTACT My Oracle Support AND **ASK FOR UPGRADE ASSISTANCE.**

1. Using a PC running Windows 7 or later, download the target EAGLE Release from the Oracle Software Delivery Cloud (OSDC) to a local directory.

    - Go to http://edelivery.oracle.com
    - Sign In
    - Search for the target EAGLE software release
    - Accept the Oracle Standard Terms and Restrictions
    - Click on the link to the zip file for the target EAGLE software release
    - Save the zip file to a local directory, for example `C:\Users\Admin\Desktop\uusb_media`
    - Unzip the `Vxxxxxx-01.zip` file that was downloaded to the same local directory.
    - This will produce a `<eagle target software release number>.exe` file.

2. Open a command window as Administrator: on Window 7 go to **Start** -> **All Programs** -> **Accessories**, right click on **Command Prompt** and select **Run as Administrator**; on Windows 8/10, go to Start, type `cmd.exe` in the search box,

right click on **Command Prompt** and select **Run as Administrator**; then **Change Directory** to the path of the local directory.

```
C:\Users\Admin>cd Desktop/uusb_media
C:\Users\Admin\Desktop\uusb_media>
```

3. Extract the downloaded release in the local directory by entering the name of the .exe file as seen in step 1 and verify that the directory contains the following files: the target release file `46.xx.xx.xx.xx-6X.yy.yy.tar.gz`, `uusb.clf`, `mkdosfs.exe`, `pvu.exe`, `uusb.exe`.

```
C:\Users\Admin\Desktop\uusb_media><eagle target software release
number>

7-Zip SFX 9.20  Copyright (c) 1999-2010 Igor Pavlov  2010-11-18

Processing archive:
C:\Users\Admin\Desktop\uusb_media\46.3.0.0.0-68.12.0.e

Extracting   46.3.0.0.0-68.12.0.tar.gz
Extracting   uusb.clf
Extracting   mkdosfs.exe
Extracting   pvu.exe
Extracting   uusb.exe

Everything is Ok
```

4. If the target release is 46.3.0.0.0 or later and you need to create USB Upgrade Media, continue with the next step; otherwise stop.

5. Insert EAGLE USB media into a PC USB port.

6. Goto **Start** -> **Computer** and wait for USB drive to be detected. Note its drive letter.

7. Enter `uusb` command with the release filename and drive of the USB media, where `46.xx.xx.xx.xx-68.yy.yy.tar.gz` is the name of the release file in the directory from step 3 and E: is the USB media drive letter from above step 6.

```
C:\Users\Admin\Desktop\uusb_media>uusb.exe
46.xx.xx.xx.xx-68.yy.yy.tar.gz e:

Copyright (c) 1993, 2014, Oracle and/or its affiliates. All rights
reserved.
Upgrade Media Creator Utility v1_1_0

2016:02:23 15:30:04 Checking whether Disk is present or not: ( e: )
2016:02:23 15:30:04 Disk is present in Drive: ( e: )
2016:02:23 15:30:04 Start Building .....
2016:02:23 15:30:04 Setting drive status: Busy
2016:02:23 15:30:04 Creating Partition ....
2016:02:23 15:30:04 Partitioning Drive:  \\.\PHYSICALDRIVE1 ,
REMOVABLE, USB
2016:02:23 15:30:04 Drive \\.\PHYSICALDRIVE1 . Prepared partitions

2016:02:23 15:30:04 Formatting Partitions:  e: , 32 , 1
```

```
mkdosfs.exe 2.11 (12 Mar 2005)
Win32 port by Jens-Uwe Mager <jum@anubis.han.de>
mkdosfs.exe: unable to lock \\.\e:
2016:02:23 15:30:04 Formatted drive e: UPGRADEUSB DISK

2016:02:23 15:30:04 Copying File  pvu.exe
2016:02:23 15:30:05 pvu.exe file successfully copied to Drive e:

2016:02:23 15:30:05 Copying File  uusb.clf
2016:02:23 15:30:05 uusb.clf file successfully copied to Drive e:

2016:02:23 15:30:05 Copying File  46.3.0.0.0-68.12.0.tar.gz
2016:02:23 15:30:16 46.3.0.0.0-68.12.0.tar.gz file successfully
copied to Dr
e:

2016:02:23 15:30:16 Validating Disk........
2016:02:23 15:30:16 Validation Process Completed: e:

2016:02:23 15:30:16 Setting drive status: Ready
```

8. Close the Command window and directory folder, properly eject the USB media and remove it from the PC. The USB media is now ready to use for EAGLE upgrade.

Download Target Release to Inactive Partition

This procedure downloads the target release to inactive partition of the TDMs.

Should THIS PROCEDURE FAIL, CONTACT My Oracle Support AND **ASK FOR UPGRADE ASSISTANCE.**

1. Remove the thumb drives from the E5-MASPs.

   If downloading the upgrade target release from an FTP server, continue, otherwise go to step 3.

2. Issue the command to display the status of the IPSM cards.

   `rept-stat-card:appl=ips`
   Response from the command is displayed.

   Verify there is an IPSM card running the IPSHC gpl and that the card is IS-NR. If no such card present in the system this procedure cannot be executed.

```
    eaglestp YY-MM-DD hh:mm:ss TTTT PPP   XX.x.x.x.x-YY.y.y
      CARD    VERSION       TYPE     GPL         PST
SST       AST
      1101    XXX-XXX-XXX IPSM     IPSHC       IS-NR
Active       -----
;
```

3. Issue the command to display database status of both TDM partitions

   `act-upgrade:action=dbstatus`
   Response to the command is displayed.

   Record the card locations of the MASPs:

Act MASP _____

Stby MASP ____

Verify if either of the inactive partitions has not been formatted. Mark below. Example shows that inactive partition of 1116 not formatted.

If a database LEVEL, VERSION or STATUS is displayed the inactive partition has been formatted.

Disk formatted.

1114 _____

1116 _____

```
eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y Upg Phase x
    DATABASE STATUS: >> OK <<
            TDM 1114 ( STDBY)                TDM 1116 ( ACTV )
            C   LEVEL    TIME LAST BACKUP    C   LEVEL     TIME
LAST BACKUP
            - -------- -------------------- - --------
----------------------
    FD BKUP Y     XXX YY-MM-DD hh:mm:ss TTTT Y     XXX YY-MM-DD
hh:mm:ss TTTT
    FD CRNT Y     XXX YY-MM-DD hh:mm:ss TTTT Y     XXX YY-MM-DD
hh:mm:ss TTTT
            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  XXX         YY-MM-DD hh:mm:ss  XXX-XXX-
XXX  NORMAL
    TDM-BKUP   1114  Y  -  XXX         YY-MM-DD hh:mm:ss  XXX-XXX-
XXX  NORMAL
    OAM-RMV    1115  -  -      -          -        -          -
    OAM-USB    1115  -  -      -          -        -          -
    TDM-CRNT   1116  Y  N  XXX         YY-MM-DD hh:mm:ss  XXX-XXX-
XXX  NORMAL
    TDM-BKUP   1116  Y  -  XXX         YY-MM-DD hh:mm:ss  XXX-XXX-
XXX  NORMAL

    INACTIVE PARTITION GROUP
    CARD/APPL  LOC   C  T  LEVEL       TIME LAST UPDATE
VERSION      STATUS
    ---------  ----  -  -  ----------  -----------------
-------------------
    TDM-CRNT   1114  Y  -  ZZZ         YY-MM-DD hh:mm:ss  ZZZ-ZZZ-
ZZZ  UPG 3
    TDM-BKUP   1114  Y  -  ZZZ         YY-MM-DD hh:mm:ss  ZZZ-ZZZ-
```

```
ZZZ  UPG 3
    TDM-CRNT   1116  -  -      -         -       -        -
    TDM-BKUP   1116  -  -      -         -       -        -

;
```

If either of the inactive partitions has not been formatted continue. If the target release is 46.2 or higher, continue. Otherwise go to Step 14.

4. Issue the command to retrieve measurement setup.

   `rtrv-meas-sched`
   Response to retrieve command is displayed.

   Record if collection is on or off:

   _____

   If COLLECT=ON, continue to next step. Otherwise, go to Step 6.

   ```
       eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x.x.x-YY.y.y
       COLLECT        = off
       SYSTOT-STP     = (off)
       SYSTOT-TT      = (off)
       COMP-LNKSET    = (off)
       COMP-LINK      = (off)
       MTCD-STP       = (on)
       MTCD-LINK      = (on)
       MTCD-LNKSET    = (on)
   ;
   ```

5. Issue the command to turn off measurement collection.

   > **Note:**
   >
   > If executed, this step causes the database level to increment.

   `chg-meas:collect=off`

   Response to the change command is displayed.

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

6. Issue the command to display security log status.

   `rept-stat-seculog`
   Response to the command is displayed.

   If the ENTRIES column displays any value other than 0 for the Standby ROLE, proceed to the next step. Otherwise, go to step 10.

   ```
   eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x.x.x-YY.y.y
       rept-stat-seculog
       Command entered at terminal #10.
   ```

```
;
     eaglestp YY-MM-DD hh:mm:ss TTTT PPP   XX.x.x.x.x-YY.y.y
                -- SINCE LAST UPLOAD --   OLDEST    NEWEST    LAST
     LOC  ROLE    ENTRIES %FULL OFLO FAIL  RECORD    RECORD    UPLOAD
     1114 Active  19      1     No   No    99-01-01 99-01-01 00-00-00
                                           13:43:37 14:08:12 00:00:00
     1116 Standby 0       0     No   No    99-01-01 99-01-01
99-01-01
                                           13:39:39 13:43:10 14:07:59
;
```

7. Issue the command to copy the security log from the standby disk.

   `copy-seculog:slog=stb:dfile=upg.appB`
   Response to the copy security log command is displayed.

   If this command fails, proceed to next step. Otherwise, go to Step 10.

```
eaglestp YY-MM-DD hh:mm:ss TTTT PPP   XX.x.x.x.x-YY.y.y
    Security log on TDM 111X copied to file upg.appB on TDM 111Y
;

     eaglestp YY-MM-DD hh:mm:ss TTTT PPP   XX.x.x.x.x-YY.y.y
     0468.0177    SECULOG 111X           Security log exception
cleared
;
```

8. Issue the command to display the FTA directory.

   `disp-fta-dir`
   Response to the command is displayed.

   If there are any files that need to be saved, they need to be removed via a file transfer.

```
eaglestp YY-MM-DD hh:mm:ss TTTT PPP   XX.x.x.x.x-YY.y.y
    File Transfer Area Directory of fixed disk 1114

    FILENAME                          LENGTH    LAST MODIFIED      LBA
    YYMMDDs.log                       2560256   99-01-03 10:18:44
388769
    YYMMDDa.log                       2560256   99-01-03 10:19:20
393770
    m60_lnp.csv                       0         99-01-03 13:10:38
398771
     3 File(s) 21093376 bytes free
;
```

9. Issue the command to delete ALL files in the transfer area.

   `dlt-fta:all=yes`
   Response to the delete command is displayed.

```
eaglestp YY-MM-DD hh:mm:ss TTTT PPP   XX.x.x.x.x-YY.y.y
    dlt-fta:all=yes:loc=XXXX
```

```
                Command entered at terminal #10.
    ;
```

10. Issue the command to format the inactive partition of the standby MASP.

    ```
    format-disk:prtngrp=inactive:type=fixed:force=yes:low=no
    ```
    Response from the format disk command is displayed.

    ```
    eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x.x.x-YY.y.y
        Format-disk of system fixed disk started.
        Extended processing required, please wait.

        eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x.x.x-YY.y.y
        Format-disk of system fixed disk complete.
    ;
    ```

11. Issue the command to display database status of both TDM partitions.

    ```
    act-upgrade:action=dbstatus
    ```
    Response to the command is displayed.

    Verify the inactive partition of the standby has been formatted. And the active partition is valid.

    If a database LEVEL, VERSION or STATUS is displayed the inactive partition has been formatted.

    If the database LEVEL of the active partition of the active and standby are not the same stop the procedure and contact My Oracle Support [see My Oracle Support (MOS).]

    ```
    eaglestp YY-MM-DD hh:mm:ss EST PPP 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     XXX YY-MM-DD hh:mm:ss TTTT Y     XXX YY-MM-DD
    hh:mm:ss TTTT
        FD CRNT Y     XXX YY-MM-DD hh:mm:ss TTTT Y     XXX YY-MM-DD
    hh:mm:ss TTTT
                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  XXX         YY-MM-DD hh:mm:ss  XXX-XXX-
    XXX  NORMAL
        TDM-BKUP   1114  Y  -  XXX         YY-MM-DD hh:mm:ss  XXX-XXX-
    ```

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

    INACTIVE PARTITION GROUP
    CARD/APPL  LOC   C  T  LEVEL       TIME LAST UPDATE
VERSION      STATUS
    ---------  ----  -  -  ----------  ----------------
-------------------
    TDM-CRNT   1114  N  -  1          YY-MM-DD hh:mm:ss  ZZZ-ZZZ-
ZZZ  NORMAL
    TDM-BKUP   1114  N  -  1          YY-MM-DD hh:mm:ss  ZZZ-ZZZ-
ZZZ  NORMAL
    TDM-CRNT   1116  -  -  -          -        -
-
    TDM-BKUP   1116  -  -  -          -        -
-

;
```

If the inactive partition of the active MASP has not been formatted continue, otherwise go to Step 30.

12. Issue the command to boot the Active MASP recorded in Step 3.

```
init-card:loc=XXXX
```
(Where XXXX is the location of the active MASP record in a previous)

Response to init card command is displayed.

```
    eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x.x.x-YY.y.y
*   0261.0013  * CARD 111X OAMHC      Card is isolated from the
system
              ASSY SN: xxxxxxxx
;

    eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x.x.x-YY.y.y
    5001.0009    CARD 111X OAMHC       MASP became active
;
    eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x.x.x-YY.y.y
    5038.0014    CARD XXXX OAMHC       Card is present
              ASSY SN: xxxxxxxx
;
```

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

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

Response to login command is displayed.

Ignore any login failure message.

```
eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x.x.x-YY.y.y
        User logged in on terminal 10.
;

? Login failures since last successful LOGIN
Last successful LOGIN was on port ? on ??-??-?? @ ??:??:??
```

14. Repeat step 6 – 11.

If downloading the upgrade target release from an FTP server, continue. Otherwise, insert upgrade media into drive slot and go to step 16.

Once inserted, allow time for the upgrade media to be detected by the system.

For E5-MASP systems, the USB drive is inserted in the flush mounted USB port on the active E5-MASP.

15. Issue command to retrieve the FTP servers provisioned on the system.

```
rtrv-ftp-serv
```
Response to the command is displayed.

Verify that a software distribution, DIST, application server has been provisioned.

If the DIST has not been provisioned, contact My Oracle Support for assistance.

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


    APP       IPADDR           LOGIN           PRIO  PATH
    --------  ---------------  ---------------  ----  ----
    DIST      XXX.XX.X.XX      aaaaaa          Z
aaaaaaaaaaaaaaaaaaaa

    No entries found
;
```

16. Issue command to retrieve the EAGLE target release software.

```
act-upgrade:action=getrel:release="xx.xx.xx-
yy.yy.yy.tar.gz" :src=server (downloading from
the FTP server)
```
or

```
act-upgrade:action=getrel:release="xx.xx.xx-
yy.yy.yy.tar.gz" :src=usb(downloading from upgrade media)
```
(Where `xx.xx.xx-yy.yy.yy` is the release-build number of the upgrade target load (ex. `45.0.1-64.70.36.tar.gz`).

Response to the command is displayed.

Command execution time: approximately 20 – 30 minutes.

If the software release has been downloaded from the USB drive, disconnect the drive from the E5-MASP.

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

```
;

    eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x.x.x-YY.y.y
    Validate database release xx.xx.xx-yy.yy.yy.tar
;


    eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x.x.x-YY.y.y
    Copy database release to inactive partition
;


    eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x.x.x-YY.y.y
    Eagle Release successfully downloaded
;


    eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x.x.x-YY.y.y
    Command Complete : Upgrade action completed successfully
;
```

17. Issue the command to display database status of both TDM partitions.

`act-upgrade:action=dbstatus`
Response to the command is displayed.

Verify the inactive partitions of the active & standby have been downloaded with the target release by confirming that database `VERSION` is the target version. `C` (coherency), `LEVEL`, and `STATUS` will be displayed as shown.

```
    eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x-YY.yy.y
    DATABASE STATUS: >> OK <<
            TDM 1114 ( ACTV )               TDM 1116 ( STDBY )
            C   LEVEL    TIME LAST BACKUP    C   LEVEL    TIME
LAST BACKUP
            - -------- -------------------- - --------
----------------------
    FD BKUP Y     XXX YY-MM-DD hh:mm:ss TTTT Y     XXX YY-MM-DD
hh:mm:ss TTTT
    FD CRNT Y     XXX YY-MM-DD hh:mm:ss TTTT Y     XXX YY-MM-DD
hh:mm:ss TTTT
            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  XXX         YY-MM-DD hh:mm:ss  XXX-XXX-
XXX  NORMAL
    TDM-BKUP   1114  Y  -  XXX         YY-MM-DD hh:mm:ss  XXX-XXX-
XXX  NORMAL
    OAM-RMV    1115  -  -     -          -        -         -
    OAM-USB    1115  -  -     -          -        -         -
```

```
      TDM-CRNT    1116  Y  N  XXX            YY-MM-DD hh:mm:ss   XXX-XXX-
XXX  NORMAL
      TDM-BKUP    1116  Y  -  XXX            YY-MM-DD hh:mm:ss   XXX-XXX-
XXX  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   ZZZ-ZZZ-
ZZZ  NORMAL
      TDM-BKUP    1114  Y  -  1              00-00-00 00:00:00   ZZZ-ZZZ-
ZZZ  NORMAL
      TDM-CRNT    1116  Y  -  1              00-00-00 00:00:00   ZZZ-ZZZ-
ZZZ  NORMAL
      TDM-BKUP    1116  Y  -  1              00-00-00 00:00:00   ZZZ-ZZZ-
ZZZ  NORMAL

   ;
```

18. If step 5 was executed, issue the command to turn the measurements collection on. Otherwise, go to the end of the procedure.

    `chg-meas:collect=on`
    Response to the change command is displayed.

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

Configuring Card-Set Network Conversion Method

This procedure provides the steps to configure the system to use the card-set method during the network conversion portion (Phase 3) of the upgrade.

Should THIS PROCEDURE FAIL, CONTACT My Oracle Support AND **ASK FOR UPGRADE ASSISTANCE.**

> ✏ **Note:**
>
> The system should be running the target release on MASPs of 46.0 or higher. This procedure should be run after Procedure 29, Step 40 in *E54339* OR Before STP Conversion in this document.

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

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

Verify that the version of OAMHC GPL running is 46.0 or later.

```
eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x-YY.yy.y Upg Phase 0
    GPL Auditing  ON

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

2. Issue the command to retrieve the upgrade configuration.

   `rtrv-upgrade-config`
   Response to the retrieve command is displayed.

   If the Threshold Type has not already been changed to SET, it will be either GROUP or SYSTEM.

   If the SAK is not set, perform Entering Upgrade Software Access Key.

   ```
   eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x-YY.yy.y Upg Phase x
   Software Access Key entered on system : vbsevhcea7vy5

   Configured Upgrade Threshold Type: GROUP

   Command Completed.
   ;
   ```

3. Issue the command to change the upgrade configuration

   `chg-upgrade-config:threstype=set:srvsets=X:limsets=Y`

   > **Note:**
   >
   > Refer to Recommendations, recommendation # 5 for the values of X and Y.

   Response to the command is displayed.

   ```
   eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x-YY.yy.y Upg Phase x
       chg-upgrade-config:threstype=set:srvsets=X:limsets=Y
       Command entered at terminal #tt.

       Command Completed.
   ;
   ```

4. Issue the command to retrieve the upgrade configuration

   `rtrv-upgrade-config`
   Response to the retrieve command is displayed.

   ```
   eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x-YY.yy.y Upg Phase x
   Software Access Key entered on system : vbsevhcea7vy5
   ```

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

      Command Completed.
   ;
```

5. Issue the command to report the card status.

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

```
    eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x-YY.yy.y Upg Phase x
    CARD   VERSION      TYPE      GPL         PST
SST        AST
    1101   134-076-000  DCM       IPGHC       IS-NR
Active     -----
    1102   134-076-000  DCM       IPGHC       IS-NR
Active     -----
    1103   134-076-000  DCM       IPLHC       IS-NR
Active     -----
    1104   134-076-000  DCM       IPLHC       IS-NR
Active     -----
    1105   134-076-000  DSM       SCCPHC      IS-NR
Active     -----
    1107   134-076-000  MCPM      MCPHC       IS-NR
Active     -----
    1109   134-069-000  HIPR2     HIPR2       IS-NR
Active     -----
    1110   134-069-000  HIPR2     HIPR2       IS-NR
Active     -----
    1111   134-076-000  IPSM      IPSHC       IS-NR
Active     -----
    1112   134-076-000  TSM       GLSHC       IS-NR
Active     -----
    1113   134-076-000  E5MCAP    OAMHC       IS-NR
Standby    -----
    1114   -----------  E5TDM                 IS-NR
Active     -----
    1115   134-076-000  E5MCAP    OAMHC       IS-NR
Active     -----
    1116   -----------  E5TDM                 IS-NR
Active     -----
    1117   -----------  E5MDAL                IS-NR
Active     -----
    1201   134-076-000  LIMT1     SS7HC       IS-NR
Active     -----
    1205   134-076-000  DSM       SCCPHC      IS-NR
Active     -----
    1207   134-076-000  TSM       GLSHC       IS-NR
Active     -----
    1209   134-069-000  HIPR2     HIPR2       IS-NR
Active     -----
    1210   134-069-000  HIPR2     HIPR2       IS-NR
Active     -----
```

```
     1211   134-076-000  LIMDS0     SS7ML       IS-NR
Active      -----
     1212   134-076-000  LIMDS0     SS7ML       IS-NR
Active      -----
     1213   134-076-000  LIMDS0     SS7ML       IS-NR
Active      -----
     1214   134-076-000  LIMDS0     SS7ML       IS-NR
Active      -----
     1215   134-076-000  LIMDS0     SS7ML       IS-NR
Active      -----
     1216   134-076-000  DCM        IPLHC       IS-NR
Active      -----
     1217   134-076-000  DSM        SCCPHC      IS-NR
Active      -----
     1301   134-076-000  LIMDS0     SS7ML       IS-NR
Active      -----
     1302   134-076-000  LIMDS0     SS7ML       IS-NR
Active      -----
     1303   134-076-000  LIMDS0     SS7ML       IS-NR
Active      -----
     1304   134-076-000  LIMDS0     SS7ML       IS-NR
Active      -----
     1305   134-076-000  LIMDS0     SS7ML       IS-NR
Active      -----
     1306   134-076-000  LIMDS0     SS7ML       IS-NR
Active      -----
     1307   134-076-000  LIMDS0     SS7ML       IS-NR
Active      -----
     1308   134-076-000  LIMDS0     SS7ML       IS-NR
Active      -----
     1309   134-069-000  HIPR2      HIPR2       IS-NR
Active      -----
     1310   134-069-000  HIPR2      HIPR2       IS-NR
Active      -----
     1311   134-076-000  MCPM       MCPHC       IS-NR
Active      -----
     1315   134-076-000  IPSM       IPSHC       IS-NR
Active      -----
     1316   134-076-000  IPSM       IPSHC       IS-NR
Active      -----
     1317   134-076-000  DSM        SCCPHC      IS-NR
Active      -----

     Command Completed.
;
```

6. Issue the upgrade activation command to create card sets.

```
act-upgrade:action=createsets
```
Response to the command is displayed.

> **Note:**
>
> The `Create Set` command assigns cards to sets using an optimal distribution, which assumes that the system is stable. If the system's configuration is such that the distribution of the cards is not desirable, contact My Oracle Support for assistance when uncertain on how to alter the sets of cards. Otherwise, continue to next step if a change to the assignment of cards is necessary.

```
eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x-YY.yy.y Upg Phase x
ACT-UPGRADE: Creating card set list...

Card set list created.
;

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

Card List: Group =     MUX, Set =  1
===================================
CARD      APPL   LINKS       TPS
-----------------------------------
1209       HIPR2     N/A        N/A
1309       HIPR2     N/A        N/A
1109       HIPR2     N/A        N/A
-----------------------------------
  MUX= 50%

;

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

Card List: Group =     MUX, Set =  2
===================================
CARD      APPL   LINKS       TPS
-----------------------------------
1210       HIPR2     N/A        N/A
1310       HIPR2     N/A        N/A
1110       HIPR2     N/A        N/A
-----------------------------------
  MUX= 50%

;

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

Card List: Group = SERVICE, Set =  1
===================================
CARD      APPL   LINKS       TPS
-----------------------------------
1205       SCCP     N/A       1700*
1207        GLS     N/A          0
1315        IPS     N/A          0
1311        MCP     N/A          0
```

```
1105      SCCP    N/A     1700*
1111       IPS    N/A        0
------------------------------------
   GLS= 50%
   IPS= 66%
   MCP= 50%
  SCCP= 50%
```

;

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

Card List: Group = SERVICE, Set =  2
===================================
CARD       APPL   LINKS      TPS
------------------------------------
1217      SCCP    N/A     1700*
1316       IPS    N/A        0
1317      SCCP    N/A     1700*
1107       MCP    N/A        0
1112       GLS    N/A        0
------------------------------------
   GLS= 50%
   IPS= 33%
   MCP= 50%
  SCCP= 50%
```

;

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

Card List: Group =    LINK, Set =   1
===================================
CARD       APPL   LINKS      TPS
------------------------------------
1201       SS7      8       N/A
1213       SS7      2       N/A
1215       SS7      1       N/A
1216     IPLIM      8*      N/A
1302       SS7      1       N/A
1304       SS7      1       N/A
1306       SS7      1       N/A
1308       SS7      1       N/A
1101     IPGWY      1*      N/A
------------------------------------
   ATM=  0%
 IPGWY= 50%
 IPLIM=100%
   SS7= 52%
```

;

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

Card List: Group =    LINK, Set =   2
===================================
```

```
CARD      APPL    LINKS      TPS
----------------------------------
1211       SS7      4        N/A
1212       SS7      5        N/A
1214       SS7      1        N/A
1301       SS7      1        N/A
1303       SS7      1        N/A
1305       SS7      1        N/A
1307       SS7      1        N/A
1102      IPGWY     1*       N/A
1103      IPLIM     0        N/A
1104      IPLIM     0        N/A
----------------------------------
  ATM=  0%
IPGWY= 50%
IPLIM=  0%
  SS7= 48%
```

;

```
    eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x-YY.yy.y Upg Phase x
    xxxx is unassigned.
    End of Card List display.
```
;

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

    Command Complete : Upgrade action completed successfully
```
;

7. If cards need to be moved to a different set, issue the command to change the upgrade configuration.

> **Note:**
>
> If card is unassigned, it can also be add to a set with this command. Unassigned cards are usually cards that were not IS-NR when the card sets were created.

```
chg-upgrade-config:loc=XXXX:assignset=NN
```
(Where XXXX is the card to be moved and NN is the set it should move to.)

Response to the command is displayed.

```
eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x-YY.yy.y Upg Phase x
    chg-upgrade-config:loc=XXXX:assignset=NN
    Command entered at terminal #tt.

    Command Completed.
```
;

8. Issue the one of the following commands to retrieve the card-set configuration

```
act-upgrade:action=displaysets
rtrv-upgrade-config:display=sets
rtrv-upgrade-config:display=limsets
rtrv-upgrade-config:display=srvsets
```

Response to the retrieve command is displayed.

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

Card List: Group =     MUX, Set =  1
====================================
CARD      APPL   LINKS      TPS
------------------------------------
1209       HIPR2    N/A       N/A
1309       HIPR2    N/A       N/A
1109       HIPR2    N/A       N/A
------------------------------------
  MUX= 50%
```

;

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

Card List: Group =     MUX, Set =  2
====================================
CARD      APPL   LINKS      TPS
------------------------------------
1210       HIPR2    N/A       N/A
1310       HIPR2    N/A       N/A
1110       HIPR2    N/A       N/A
------------------------------------
  MUX= 50%
```

;

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

Card List: Group = SERVICE, Set =  1
====================================
CARD      APPL   LINKS      TPS
------------------------------------
1205       SCCP    N/A     1700*
1207        GLS    N/A        0
1315        IPS    N/A        0
1311        MCP    N/A        0
1105       SCCP    N/A     1700*
1111        IPS    N/A        0
------------------------------------
  GLS= 50%
  IPS= 66%
  MCP= 50%
 SCCP= 50%
```

```
        ;

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

            Card List: Group = SERVICE, Set =  2
            ==================================
            CARD      APPL   LINKS      TPS
            -----------------------------------
            1217      SCCP    N/A     1700*
            1316      IPS     N/A        0
            1317      SCCP    N/A     1700*
            1107      MCP     N/A        0
            1112      GLS     N/A        0
            -----------------------------------
              GLS= 50%
              IPS= 33%
              MCP= 50%
             SCCP= 50%

        ;

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

            Card List: Group =    LINK, Set =  1
            ==================================
            CARD      APPL   LINKS      TPS
            -----------------------------------
            1201      SS7      8       N/A
            1213      SS7      2       N/A
            1215      SS7      1       N/A
            1216     IPLIM     8*      N/A
            1302      SS7      1       N/A
            1304      SS7      1       N/A
            1306      SS7      1       N/A
            1308      SS7      1       N/A
            1101     IPGWY     1*      N/A
            -----------------------------------
              ATM=  0%
            IPGWY= 50%
            IPLIM=100%
              SS7= 52%

        ;

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

            Card List: Group =    LINK, Set =  2
            ==================================
            CARD      APPL   LINKS      TPS
            -----------------------------------
            1211      SS7      4       N/A
            1212      SS7      5       N/A
            1214      SS7      1       N/A
            1301      SS7      1       N/A
            1303      SS7      1       N/A
```

```
      1305        SS7        1        N/A
      1307        SS7        1        N/A
      1102      IPGWY        1*       N/A
      1103      IPLIM        0        N/A
      1104      IPLIM        0        N/A
      ------------------------------------
        ATM=   0%
      IPGWY= 50%
      IPLIM=   0%
        SS7= 48%

;

      eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x-YY.yy.y Upg Phase x
      xxxx is unassigned.
      End of Card List display.
;

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

      Command Complete : Upgrade action completed successfully
;
```

9. Repeat steps 7 – 8 as cards need to be moved.

C

Entering Upgrade Software Access Key

This procedure will validate the Upgrade Software Access Key against the upgrade target release.

The Upgrade Software Access Key is used for releases 45.x and 46.0. It is no longer used for release 46.1 and later.

Should THIS PROCEDURE FAIL, CONTACT My Oracle Support (MOS) AND **ASK FOR <u>UPGRADE ASSISTANCE</u>.**

1. If a USB drive is present, remove it.

   If server software delivery (SSD): no RMD should be inserted in drive slot.

2. For release 45.x through 46.0, issue the command to validate the Upgrade Software Access Key.[1]Skip this command for releases 46.1 and later.

   > ✎ **Note:**
   >
   > If SAK unavailable, contact My Oracle Support (MOS).

   ```
   chg-upgrade-config:sak=XXXXXXXXXXXXX:src=fixed
   ```

   (Where XXXXXXXXXXXXXX is the Software Access Key.)

   Response to command is displayed.

   Verify the correct Upgrade target release is in the output.

   ```
   eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x.x.x-YY.y.y
       chg-upgrade-config:key=XXXXXXXXXXXXX:src=zzzzz
       Command entered at terminal #6.
   ;

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

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

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

D

Supplemental Information For Procedure 8, Step 2

Samples of Message from Convertstp Action for Act-Upgrade Command

The following are illustrative of the messages displayed on the user terminal during the semantic check of the upgrade command in STP Conversion, step 3. Headers have been removed for brevity.

IMT Bus Check Started

IMT Bus Check Completed Successfully.

;

Hardware Validation Test Started

Hardware Validation Test Completed Successfully.

;

IP Route Conflict Validation Report

No conflicts with Eagle PVN and FCN found

End IP Route Conflict Validation Report.

;

Using inactive standby partitions for OAM conversion (disk=*xxxxx*)

The following are illustrative of the messages to be seen on the console during STP Conversion, step 3 of the upgrade procedure if the `fixed disk` is used for OAM conversion workspace. Headers and messages not directly output by upgrade have been omitted.

Using inactive standby partitions for OAM conversion (dest=fixed)
;
ACT-UPGRADE: MASP A - BLIXP GPL processing.
;
ACT-UPGRADE: MASP A - GPL uploaded.
;
Starting to format the Standby TDM...
;
Format-disk of standby fixed disk complete.
;
Starting to copy GPLs to Standby TDM from removable...
;
GPLs copy completed.
;
Tables conversion started...
;
NOTICE: Converting XXXX.TBL
;
Starting to copy system tables to Standby TDM from Active TDM...
;
Converting Standby OAM System partition.
Preserving the source-release DB version.
Conversion of Standby TDM has completed
;
Marking Standby TDM Upgrade Phase = 2...
;
Swapping Active and Inactive partition on Standby...
;
Standby MASP has not finished initializing - please wait...
;
SYSTEM TREE REBALANCING STARTED
;
Table xxxxxxx.tbl: REBALANCING COMPLETED
;
Table yyyyyyy.tbl: REBALANCING COMPLETED
;
12576 OF 12576 TREES REBALANCED
13 OF 13 TABLES REBALANCED
SYSTEM TREE REBALANCING COMPLETED
;
Standby MASP has not finished initializing - please wait...
;
Starting to backup Standby TDM...
;
ACT-UPGRADE: MASP B - Active MASP will reboot and be converted for upgrade.
;
Starting to format the Standby TDM...

;

Format disk in progress

;

Format-disk of standby fixed disk complete.

;

Starting to copy GPLs to Standby TDM from removable...

;

NOTICE: Converting XXXX.TBL

;

Starting to copy system tables to Standby TDM from Active TDM...

;

Converting Standby OAM System partition.
Preserving the source-release DB version.
Conversion of Standby TDM has completed

;

Marking Standby TDM Upgrade Phase = 2...

;

Swapping Active and Inactive partition on Standby...

;

Standby MASP has not finished initializing - please wait...

;

Starting to backup Standby TDM...

;

ACT-UPGRADE: OAM upgrade complete
ACT-UPGRADE: prepare to initialize network cards

;

Starting network conversion...

;

Upgrading n of m <APPL> cards [XXXX]

;

Command in Progress : Network conversion in progress

;

ACT-UPGRADE: Network conversion complete

;

ACT-UPGRADE: Network upgrade complete

;

Command Complete : Upgrade action completed successfully

;

INFO: Provisioning subsystem is in duplex mode.

;

Determination and Recovery of DDL Hunt During Upgrade

> **✎ Note:**
>
> The following section should be completed with the assistance of My Oracle Support (MOS).

After loading its GPL and database tables, the last step required by an MTP card is to crossload its dynamic database (DDB) from adjacent cards. The DDB contains the status of all routes, linksets, and links provisioned in the system. The Dynamic Data Load (DDL) is the process where a loading MTP card obtains the current view of the network via downloading it from an already IS-NR network card. In order for a network card to download a proper view of the network status, the network must remain quiescent during the download. If an update to the DDB occurs, then the download aborts and restarts. Depending on the size of the network, it may take as long as 4 seconds to complete this process. Please note that the network must remain stable (no changes) during this phase for the download to complete successfully.

The card reports its PST as IS-ANR and its SST as DDL Hunt:

```
Card Failure: Card 1101 did not return to IS-NR.
Status of card 1101:  PST:  IS-ANR          SST:  DDL Hunt   AST:  -----
```

Please note this appendix addresses DDL during Upgrade. Refer to References for recovery in full function mode.

A system is considered unstable when provisioned and configured devices are cycling from an alarmed state to a clear state. Bouncing links, link congestion and discard, and DPC|Route transition have the most impact on the DDL Hunt state. The table below lists these conditions by UAM number and describes the recovery steps.

The guideline to determine if DDL Hunt is possible when a card boots and tries to reload is based on the number of DDB events, which causes network management messages to be generated. An event is one cycle of alarming and clearing:

```
1237.0236 ** SLK 1201,A1  tklclset   REPT-LKF: not aligned
    1240.0200    SLK 1201,A1              RCVRY-LKF: link available
```

One event consists of two transactions, which generates two network management messages. Eight events in one minute causes sixteen messages which averages to a stability period of less than four seconds. This can range from eight events per one device to one event per eight devices.

Table D-1   Recovery from DDL Hunt by UAM

UAM	Device	Condition	Recovery
0236|0200	SLK	Bouncing Link	A) Issue DDB checksum SEND-MSG per internal References
			B) Issue CANC-SLK to deactivate the affected link
0264 – 0269	SLK	Link Congestion	A) Issue DDB checksum SEND-MSG per internal References
			B) Investigate the far-end and fix the far-end
			C) Issue CANC-SLK to deactivate the affected link
0270 – 0275	SLK	Link Discard	A) Issue DDB checksum SEND-MSG per internal References
			B) Investigate the far-end and fix the far-end
			C) Issue CANC-SLK to deactivate the affected link
0311 – 0313	Route	DPC Transition	A) Issue DDB checksum SEND-MSG per internal References
			B) Investigate the far-end and fix the far-end
			C) Issue CANC-SLK to deactivate the affected link
0314 – 0316	Route	Route Transition	A) Issue DDB checksum SEND-MSG per internal References
			B) Investigate the far-end and fix the far-end
			C) Issue CANC-SLK to deactivate the affected link

> **Note:**
>
> If the front-end switches activity, device may return to previous state.

SWOPS Sign Off.

Table D-2   Discrepancy List

Date	Test Case	Description of Failures and/or Issues. Any CSRs / RMAs issued during Acceptance. Discrepancy	Resolution and Upgrade Center Engineer Responsible	Resolution Date:

E

EEDB Installation

This section defines the step-by-step actions performed to execute EEDB software installation on **E5-APP-B-02**.

Figure E-1   Initial EEDB Application Installation Path
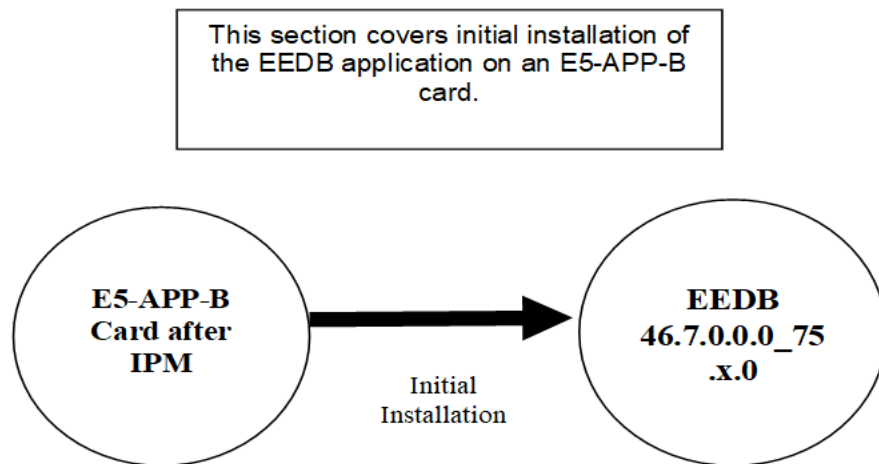
Upgrade Overview

Required Materials

- Two (2) target-release USB media or a target-release ISO file.
- A terminal and null modem cable to establish a serial connection.
- Write down the system configuration information.

Table E-1   EEDB System Configuration Information

Description	Information
Node A IP (IPv4)	
Node A NetMask (IPv4)	
Node A Default Router IP (IPv4)	
Node B IP (IPv4)	
Node B NetMask (IPv4)	
Node B Default Router IP (IPv4)	
NTP1 IP (IPv4)	

Table E-1 (Cont.) EEDB System Configuration Information

Description	Information
NTP2 IP (IPv4)	
NTP3 IP (IPv4)	
VIP	
Time Zone	

- Passwords for users on the local system:

Table E-2 EEDB User Password Table

EEDB USERS		
Login	**Node A password**	**Node B password**
root		
eedbconfig		
admusr		

Installation Phases

The following table illustrates the progression of the installation process by procedure with estimated times. The estimated times and the phases that must be completed may vary due to differences in typing ability and system configuration. The phases outlined in Upgrade Preparation Overview and **Pre-Upgrade Overview** are to be executed in the order they are listed.

Table E-3 Installation Phases for EEDB

Phase	Elapsed Time (Minutes)		Activity	Procedure
	This Step	**Cum.**		
Connectivity setup	15	15	Set up connectivity to the MPS Servers.	Setting Up the Upgrade Environment for EEDB
Pre-upgrade check	5	20	Verify requirements for install are met.	Verify the Pre-Upgrade Requirements
Configure the Network	5	25	Configure the Network using platcfg on Node A	Configure Network Interface Using platcfg Utility
Configure the Network	5	30	Configure the Network using platcfg on Node B	Configure Network Interface Using platcfg Utility
Create the bulkconfig file	5	35	Create the configuration file	Create Configuration File on Node A

Table E-3   (Cont.) Installation Phases for EEDB

Phase	Elapsed Time (Minutes)		Activity	Procedure
	This Step	**Cum.**		
Create the bulkconfig file	5	40	Create the configuration file	Create Configuration File on Node B
Pre-install health check	5	45	Run the syscheck utility to verify that all servers are operationally sound on Node A.	Perform System Health Check
Pre-install health check	5	50	Run the syscheck utility to verify that all servers are operationally sound on Node B.	Perform System Health Check
Configure Server Node A	5	55	Set hostname, designation and time.	Pre-Install Configuration on Node A
Configure Server Node B	5	60	Set hostname, designation and time.	Pre-Install Configuration on Node B
Install Servers	30	90	Install software on Node A and B	Install Application on Node A, Install Application on Node B

Upgrade Preparation

Setting Up the Upgrade Environment for EEDB

This procedure sets up the upgrade environment. Windows are opened for both MPS servers.

> **✎ Note:**
>
> Call My Oracle Support (MOS) for assistance if modem access is the method use for upgrade.

Should THIS PROCEDURE FAIL, CONTACT My Oracle Support (MOS) AND **ASK FOR <u>UPGRADE ASSISTANCE</u>.**

1. Establish a connection to MPS A.

   If access to the MPS servers is not available through an IP network, connect to the E5-APP-B card via the serial port.

For connecting the E5-APP-B A card, disconnect the console cable from the serial port on the E5-APP-B B card's adapter. The cable should be disconnected at the point where it connects to the serial port labeled 'S1' on the E5-APP-B B card's adapter and use it for serial access. Cable part numbers - 830-1220-xx.

2. On the workstation, open one terminal window in preparation for establishing remote connections to the MPS servers.

   Create a terminal window.

3. Create a terminal window for MPS A.

   Create a terminal window and give it a title of MPS A.

4. MPS A: Enable capture file and verify the correspondent file is created.

   Enable the data capture and verify that the data capture file is created at the path specified.

5. Log into MPS A.

   ```
   <hostname> console login:  admusr
   password:    <password>
   ```

6. MPS A: Start screen Session.

   Execute the following command to start screen and establish a console session with MPS A.
   ```
   $ screen –L
   ```

7. Establish a connection to MPS B.

   If access to the MPS servers is not available through an IP network, connect to the E5-APP-B card via the serial port.
   For connecting the E5-APP-B B card, disconnect the console cable from the serial port on the E5-APP-B A card's adapter. The cable should be disconnected at the point where it connects to the serial port labeled 'S1' on the E5-APP-B A card's adapter and use it for serial access. Cable part numbers - 830-1220-xx

8. Create a terminal window for MPS B.

   Create a terminal window and give it a title of MPS B.

9. MPS B: Enable capture file and verify a correspondent file is created.

   Enable the data capture and verify that the data capture file is created at the path specified.

10. Log into MPS B.

   ```
   <hostname> console login:  admusr
   password:    <password>
   ```

11. MPS B: Start screen Session.

   Execute the following command to start screen and establish a console session with MPS B.
   ```
   $ screen –L
   ```

   MPS A and B: Procedure Complete.

Verify the Pre-Upgrade Requirements

This procedure verifies that all pre-upgrade requirements have been met.

> **Note:**
>
> Call My Oracle Support for assistance if modem access is the method use for upgrade.

Should THIS PROCEDURE FAIL, CONTACT My Oracle Support AND **ASK FOR UPGRADE ASSISTANCE**.

1. Verify all required materials are present.

   Verify that the materials listed in Upgrade Material List (Required Materials) are present.

2. Verify the availability of passwords for MPS systems.

   Refer to Required Materials for the list of users.
   This procedure is complete.

Software Installation Procedures

Create Configuration File on Node A

This procedure creates the EEDB configuration file.

> **Note:**
>
> Call My Oracle Support (MOS) for assistance if modem access is the method use for upgrade.

SHOULD THIS PROCEDURE FAIL, CONTACT My Oracle Support AND **ASK FOR UPGRADE ASSISTANCE**.

> **Note:**
>
> Installation of the Operating System on an Oracle Application Server should be completed before starting installation procedure. Refer to IPM MPS Server with TPD 7.6.X for TPD installation.

1. Log in as `admusr` user.

   If not already logged in, then login as `admusr`:

   ```
   [hostname] consolelogin:  admusr
   password:    password
   ```

2. Switch super user to root.

```
$ sudo su -
```

3. Create the file in root directory named as `bulkconfig`.

```
$ vim /root/bulkconfig
```
Content of file should be as follow:

```
host,<NodeA-hostname>,<Node A-IP>,bond0:1,<Node A- NetMask>,<Node A
Default route>,1A
host,<NodeB-hostname>,<Node B-IP>,bond0:1,<Node B- NetMask>,<Node B
Default route>,1B
vip,<Virtual IP>,bond0:2,<VIP Netmask>
ntpserver1,<NTP Server IP>
timezone,America/New_York
```

For Example:

```
host,Santos-A,10.75.141.64,bond0:1,255.255.255.0,10.75.141.1,1A
host,Santos-B,10.75.141.65,bond0:1,255.255.255.0,10.75.141.1,1B
vip,10.75.141.66,bond0:2,255.255.255.0
ntpserver1,10.250.32.10
timezone,America/New_York
```

> **Note:**
>
> Upto 3 NTP servers can be added in bulkconfig file. NTP servers should have names ntpserver1, ntpserver2 and ntpserver3 respectively.

This procedure is complete.

Create Configuration File on Node B

This procedure creates the EEDB configuration file.

> **Note:**
>
> Call My Oracle Support for assistance if modem access is the method use for upgrade.

Should THIS PROCEDURE FAIL, CONTACT My Oracle Support AND **ASK FOR UPGRADE ASSISTANCE.**

> **Note:**
>
> Installation of the Operating System on an Oracle Application Server should be completed before starting installation procedure. Refer to IPM MPS Server with TPD 7.6.X for TPD installation.

1. Log in as `admusr` user on Node B.

   If not already logged in, then login as `admusr`:

   ```
   [hostname] consolelogin:  admusr
   password:    password
   ```

2. Switch super user to root.

   ```
   $ sudo su -
   ```

3. Create the file in root directory named as `bulkconfig`.

   ```
   $ vim /root/bulkconfig
   ```
   Content of file should be as follow:

   ```
   host,<NodeA-hostname>,<Node A-IP>,bond0:1,<Node A- NetMask>,<Node A
   Default route>,1A
   host,<NodeB-hostname>,<Node B-IP>,bond0:1,<Node B- NetMask>,<Node B
   Default route>,1B
   vip,<Virtual IP>,bond0:2,<VIP Netmask>
   ntpserver1,<NTP Server IP>
   timezone,America/New_York
   ```

   For Example:

   ```
   host,Santos-A,10.75.141.64,bond0:1,255.255.255.0,10.75.141.1,1A
   host,Santos-B,10.75.141.65,bond0:1,255.255.255.0,10.75.141.1,1B
   vip,10.75.141.66,bond0:2,255.255.255.0
   ntpserver1,10.250.32.10
   timezone,America/New_York
   ```

   > **Note:**
   >
   > Upto 3 NTP servers can be added in bulkconfig file NTP servers should have names ntpserver1, ntpserver2 and ntpserver3 respectively.

   This procedure is complete.

Pre-Install Configuration on Node A

This procedure provides instructions to perform pre-configuration for an initial install of the application.
IF THIS PROCEDURE FAILS, CONTACT MY ORACLE SUPPORT AND ASK FOR ASSISTANCE.

1. Connect to the Server.

   If not already connected, connect to the E5-APP-B card via the serial port.
   For connecting the E5-APP-B B card, disconnect the console cable from the serial port on the E5-APP-B A card's adapter. The cable should be disconnected at the point where it connects to the serial port labeled `S1` on the E5-APP-B A cards' adapter and use it for serial access. **Cable part numbers - 830-1220-xx**

2. Log in as `admusr` user. If not already logged in, then login as `admusr`:

```
[hostname] consolelogin:   admusr
password:     password
```

3. Start `platcfg` utility.

```
$ sudo su - platcfg
```

4. Navigate to the **Server Configuration** screen.

   Select **Server Configuration** and press [ENTER].

```
+------+ Main Menu +-------+
|                          |
| Maintenance           ^ |
| Diagnostics           : |
| Server Configuration  # |
| Security              : |
| Remote Consoles       : |
| Network Configuration : |
| Exit                  v |
|                          |
+--------------------------+
```

5. Navigate to the **Hostname** screen.

   Select **Hostname** and press [ENTER].

```
++ Server Configuration Menu ++
|                             |
|   Hostname             ^  |
|   Designation/Function #  |
|   Configure Storage    :  |
|   Set Clock            :  |
|   Time Zone            :  |
|   Exit                 v  |
|                             |
+-----------------------------+
```

6. Select **Edit** to edit the hostname.

   Select **Edit** and press [ENTER].

```
+----+ Options +-----+
|                    |
| +------+ +------+  |
| | Edit | | Exit |  |
| +------+ +------+  |
|                    |
|                    |
+--------------------+
```

7. Enter the hostname and press ok.

   Delete the default entry and enter the Hostname as mps-xxxx-a where xxxx is the last 4 digits of server serial number. Press **OK** when done.

```
+--------+ Edit Hostname +---------+
|                                  |
| Hostname: OSORNA-A             |
|                                  |
|   +----+   +--------+           |
|   | OK |   | Cancel |           |
|   +----+   +--------+           |
|                                  |
|                                  |
+----------------------------------+
```

While connected to the serial console, some console output might come when the user is using the serial console to configure the EEDB. Those serial output are harmless and can be ignored.

8. Exit Back to the Server Configuration Menu.

   Select **EXIT** to exit back to the **Server Configuration** Menu. Verify that the hostname has been properly set.

```
Copyright (C) 2003, 2016, Oracle and/or its affiliates. Al+----+ Options +-----+
 Hostname: OSORNA-A                                         |                    |
                    Hostname Configuration                  | +------+ +------+  |
                                                            | | Edit | | Exit |  |
                                                            | +------+ +------+  |
                                                            |                    |
                                                            |                    |
   Current Hostname:  OSORNA-A                              +--------------------+
```

9. Navigate to the **Designation/Function** menu option.

   Select **Designation/Function** and press [ENTER].

```
++ Server Configuration Menu ++
|                              |
|   Hostname            ^     |
|   Designation/Function   :  |
|   Configure Storage      #  |
|   Set Clock              :  |
|   Time Zone              :  |
|   Exit                   v  |
|                              |
+------------------------------+
```

10. Enter the designation.

    Enter the appriopriate designation in the Designation field (Note: the designation must be capitalized).
    Select **OK** and press [ENTER].

```
+-------+ Edit Designation +--------+
|                                   |
| Designation: 1A_____         |
|    Function:  _____        |
|                                   |
| +----+    +--------+              |
| | OK |    | Cancel |              |
| +----+    +--------+              |
|                                   |
|                                   |
+-----------------------------------+
```

11. Enter the Designation press Exit.

```
Copyright (C) 2003, 2016, Oracle and/or its affiliates. Al+----+ Options +-----+
 Hostname: OSORNA-A                                         |                    |
                    Designation Information                 | +------+ +------+  |
                                                            | | Edit | | Exit |  |
                                                            | +------+ +------+  |
   Designation:  1A                                         |                    |
      Function:                                             |                    |
```

12. Select **Set Clock** Menu.

```
++ Server Configuration Menu ++
|                              |
|   Hostname            ^      |
|   Designation/Function :     |
|   Configure Storage   :      |
|   Set Clock           #      |
|   Time Zone           :      |
|   Exit                v      |
|                              |
+------------------------------+
```

13. Select **Edit** from the options dialogue box. Using an NTP source, set the Date/Time to be correct for the Eastern Time zone (GMT -5) and press OK.

> **✎ Note:**
>
> All systems default to Eastern time post IPM. It is important to set the time for the Eastern Time zone at this time

```
+----+ Options +-----+
|                    |
| +------+ +------+  |
| | Edit | | Exit |  |
| +------+ +------+  |
|                    |
|                    |
|                    |
+--------------------+
```

```
+--+ Change Date and Time +--+
|                            |
| Date: 01_/02_/2017_        |
| Time: 20_:06_:12_          |
|                            |
| +----+    +--------+       |
| | OK |    | Cancel |       |
| +----+    +--------+       |
|                            |
|                            |
+----------------------------+
```

14. Verify that the Date and Time is correct then select and press **Exit**.

```
              Time Configuration



Current Date: 01/02/2017
Current Time: 20:01:12
```

```
+----+ Options +-----+
|                    |
| +------+ +------+  |
| | Edit | | Exit |  |
| +------+ +------+  |
|                    |
|                    |
|                    |
+--------------------+
```

15. Exit from platcfg menu.

Select **EXIT** until the platcfg menu is closed and the command line is displayed.

16. Reboot the Server.

```
$ sudo reboot
```
Procedure is complete.

Pre-Install Configuration on Node B

This procedure provides instructions to perform pre-configuration for an initial install of the application.
IF THIS PROCEDURE FAILS, CONTACT MY ORACLE SUPPORT AND ASK FOR ASSISTANCE.

1. Connect to the Server.

   If not already connected, connect to the E5-APP-B card via the serial port.
   For connecting the E5-APP-B B card, disconnect the console cable from the serial port on the E5-APP-B A card's adapter. The cable should be disconnected at the point where it connects to the serial port labeled `S1` on the E5-APP-B A cards' adapter and use it for serial access. **Cable part numbers - 830-1220-xx**

2. Log in as `admusr` user. If not already logged in, then login as `admusr`:

   ```
   [hostname] consolelogin:  admusr
   password:   password
   ```

3. Start `platcfg` utility.

   ```
   $ sudo su - platcfg
   ```

4. Navigate to the **Server Configuration** screen.

   Select **Server Configuration** and press [ENTER].

   ```
   +------+ Main Menu +-------+
   |                          |
   | Maintenance          ^   |
   | Diagnostics          :   |
   | Server Configuration #   |
   | Security             :   |
   | Remote Consoles      :   |
   | Network Configuration :  |
   | Exit                 v   |
   |                          |
   +--------------------------+
   ```

5. Navigate to the **Hostname** screen.

   Select **Hostname** and press [ENTER].

   ```
   ++ Server Configuration Menu ++
   |                              |
   |   Hostname           ^       |
   |   Designation/Function #     |
   |   Configure Storage  :       |
   |   Set Clock          :       |
   |   Time Zone          :       |
   |   Exit               v       |
   |                              |
   +------------------------------+
   ```

6. Select **Edit** to edit the hostname.

   Select **Edit** and press [ENTER].

```
+----+ Options +-----+
|                    |
| +------+ +------+  |
| | Edit | | Exit |  |
| +------+ +------+  |
|                    |
|                    |
+--------------------+
```

7. Enter the hostname and press ok.

    Delete the default entry and enter the Hostname as mps-xxxx-a where xxxx is the last 4 digits of server serial number. Press **OK** when done.

```
+--------+ Edit Hostname +---------+
|                                  |
| Hostname: OSORNA-B               |
|                                  |
|    +----+   +--------+           |
|    | OK |   | Cancel |           |
|    +----+   +--------+           |
|                                  |
|                                  |
+----------------------------------+
```

While connected to the serial console, some console output might come when the user is using the serial console to configure the EEDB. Those serial output are harmless and can be ignored.

8. Exit Back to the Server Configuration Menu.

    Select **EXIT** to exit back to the **Server Configuration** Menu. Verify that the hostname has been properly set.

```
Copyright (C) 2003, 2016, Oracle and/or its affiliates. Al+----+ Options +-----+
 Hostname: OSORNA-B                                        |                    |
                  Hostname Configuration                   | +------+ +------+  |
                                                           | | Edit | | Exit |  |
                                                           | +------+ +------+  |
                                                           |                    |
                                                           |                    |
  Current Hostname:  OSORNA-B                               +--------------------+
```

9. Navigate to the **Designation/Function** menu option.

    Select **Designation/Function** and press [ENTER].

```
++ Server Configuration Menu ++
|                             |
|   Hostname           ^      |
|   Designation/Function  :   |
|   Configure Storage  #      |
|   Set Clock          :      |
|   Time Zone          :      |
|   Exit               v      |
|                             |
+-----------------------------+
```

10. Enter the designation.

    Enter the appriopriate designation in the Designation field (Note: the designation must be capitalized).
    Select **OK** and press [ENTER].

```
+-------+ Edit Designation +--------+
|                                   |
| Designation: 1B_____         |
|     Function: _____         |
|                                   |
| +----+   +--------+               |
| | OK |   | Cancel |               |
| +----+   +--------+               |
|                                   |
|                                   |
+-----------------------------------+
```

11. Enter the Designation press Exit.

```
Copyright (C) 2003, 2016, Oracle and/or its affiliates. Al+----+ Options +-----+
 Hostname: OSORNA-B                                        |                     |
                  Designation Information                  | +------+ +------+   |
                                                           | | Edit | | Exit |   |
                                                           | +------+ +------+   |
  Designation:  1B                                         |                     |
     Function:                                             |                     |
```

12. Select **Set Clock** Menu.

```
++ Server Configuration Menu ++
|                             |
|   Hostname           ^      |
|   Designation/Function :    |
|   Configure Storage  :      |
|   Set Clock          #      |
|   Time Zone          :      |
|   Exit               v      |
|                             |
+-----------------------------+
```

13. Select **Edit** from the options dialogue box. Using an NTP source, set the Date/
Time to be correct for the Eastern Time zone (GMT -5) and press OK.

> **Note:**
>
> All systems default to Eastern time post IPM. It is important to set the
> time for the Eastern Time zone at this time

```
+----+ Options +-----+
|                    |
| +------+ +------+  |
| | Edit | | Exit |  |
| +------+ +------+  |
|                    |
|                    |
+--------------------+
```

```
+--+ Change Date and Time +--+
|                            |
| Date: 01_/02_/2017_        |
| Time: 20_:06_:12_          |
|                            |
| +----+   +--------+        |
| | OK |   | Cancel |        |
| +----+   +--------+        |
|                            |
|                            |
+----------------------------+
```

14. Verify that the Date and Time is correct then select and press **Exit**.

```
                Time Configuration




Current Date: 01/02/2017
Current Time: 20:01:12
```

```
+----+ Options +-----+
|                    |
| +------+ +------+  |
| | Edit | | Exit |  |
| +------+ +------+  |
|                    |
|                    |
+--------------------+
```

15. Exit from platcfg menu.

    Select **EXIT** until the platcfg menu is closed and the command line is displayed.

16. Reboot the Server.

    ```
    $ sudo reboot
    ```
    Procedure is complete.

Install Application on Node A

This procedure installs the application on the server.
IF THIS PROCEDURE FAILS, CONTACT MY ORACLE SUPPORT AND ASK FOR
ASSISTANCE.

1. **MPS A**: Copy the EEDB ISO on 1A.

   Refer ISO Image download from Oracle Software Delivery Cloud to download the
   EEDB ISO and copy EEDB 46.8 ISO to `/var/TKLC/upgrade` directory.

2. Create a terminal window log into MPS A.

   If not already connected, connect to the E5-APP-B card via the serial port.

   For connecting the E5-APP-B A card, disconnect the console cable from the serial
   port on the E5-APP-B B card's adapter. The cable should be disconnected at the
   point where it connects to the serial port labeled `S1` on the E5-APP-B B card's
   adapter and use it for serial access. **Cable part numbers - 830-1220-xx**

3. **MPS A**: Login prompt is displayed.

   ```
   <hostname> console login:
   ```

> **✎ Note:**
>
> Hit enter if no login prompt is displayed.

4. **MPS A**: log in as `admusr` user.

```
<hostname> consolelogin:  admusr
password:    password
```

5. **MPS A**: Validate ISO file.

   Validate ISO file using Validate Upgrade Media.

6. **MPS A**: Start `platcfg` utility.
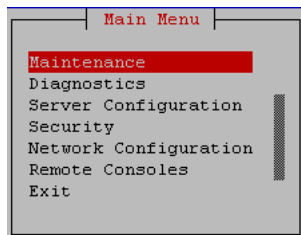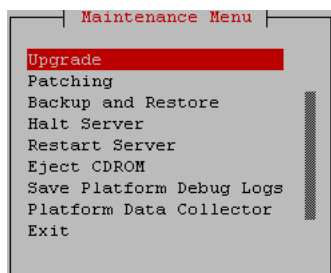
   ```
   $ sudo su - platcfg
   ```

7. **MPS A**: Navigate to the **Upgrade** menu.

   The platcfg **Main Menu** appears.
   On the **Main Menu**, select **Maintenance** and press [ENTER].
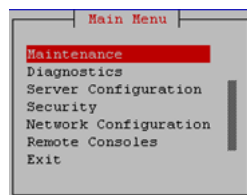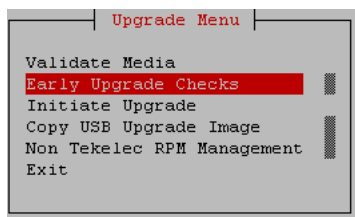

   Select the **Upgrade** menu and press [ENTER].
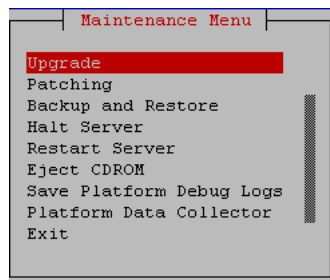
8. **MPS A**: Select **Early Upgrade Checks**.

   Select the **Early Upgrade Checks** menu to verify that the system is ready for upgrade.
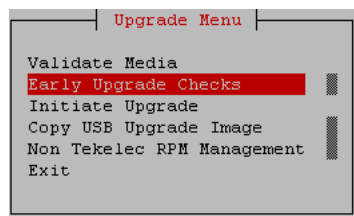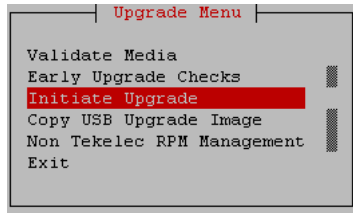
If the Early Upgrade Checks fail due to the ongoing syncing of raid mirrors, then wait until the resync is completed and run the Early Upgrade Checks again.

Contact My Oracle Support following the instructions on the front page if the early upgrade checks fail due to any other reason.

9. **MPS A**: Navigate to the **Initiate Upgrade** menu.

Select the **Initiate Upgrade** menu and press [ENTER].
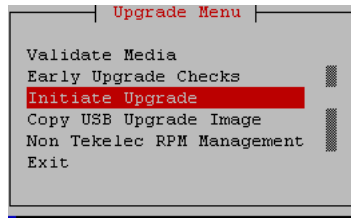
10. **MPS A**: Select the Upgrade Media.

The screen displays a message that it is searching for upgrade media. When the upgrade media is found, an Upgrade Media selection menu appears similar-to the example below.
Select the desired upgrade media and press [ENTER].
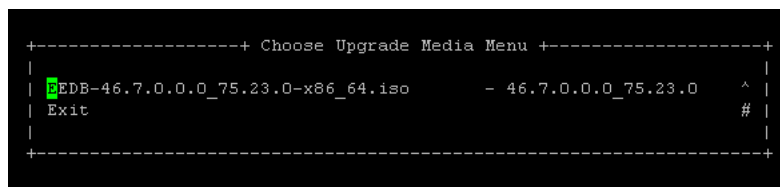
11. **MPS A**: Upgrade proceeds.

The screen displays the output like following, indicating that the upgrade software is first running the upgrade checks, and then proceeding with the upgrade.

12. **MPS A**: Upgrade proceeds.

Many informational messages appear on the terminal screen as the upgrade proceeds. The messages are not shown here for clarity sake.
When installation is complete, the server reboots.

13. **MPS A**: Upgrade completed.

After the final reboot, the screen displays the login prompt as in the example below.

```
Authorized uses only. All activity may be monitored and reported.
1542751724: Upstart Job alarmMgr: started
#####################


1542751724: Upstart Job tpdProvd: started
#####################


1542751724: Upstart Job syscheck: started
```

```
####################

1542751725: Upstart Job ntdMgr: started
####################
```

14. **MPS A**: log in as `admusr` user.

```
[hostname] consolelogin:  admusr
password:   password
```

15. **MPS A**: Check the Upgrade log.

Examine the upgrade logs in the directory `/var/TKLC/log/upgrade` and verify that no errors and warnings were reported.
`$ grep -i error /var/TKLC/log/upgrade/upgrade.log`

Check the output of the upgrade log, Contact My Oracle Support following the instructions on the front page or the instructions on the My Oracle Support (MOS), if the output contains any errors beside the following:

```
1542696235::Bringing up interface bond0:  /etc/sysconfig/network-
scripts/ifup-eth: line 141: echo: write error: Permission denied
1542696235::error in ifcfg-bond0:1: didn't specify device or ipaddr
1542696235::error in ifcfg-bond0:2: already seen ipaddr in ifcfg-
bond0:1.
```

`$ grep -i warning /var/TKLC/log/upgrade/upgrade.log`

Examine the output of the above command to determine if any warnings were reported.

Contact My Oracle Support following the instructions on the front page or the instructions on the My Oracle Support (MOS), if the output contains any warnings beside the following:

```
1542695599::WARNING: /usr/TKLC/plat/etc/alarms/alarms.xml has been
updated...reparsing xml...
1542695670::warning:    erase unlink of /etc/ssm/hwmgmtd.conf
failed: No such file or directory
1542695672::kexec-tools                  #warning: /etc/kdump.conf
created as /etc/kdump.conf.rpmnew
1542695778::setup
################################################warning: /etc/
shadow created as /etc/shadow.rpmnew
1542695794::ca-certificates
################warning: /etc/pki/tls/certs/ca-bundle.crt created
as /etc/pki/tls/certs/ca-bundle.crt.rpmnew
1542695843::WARNING: This capability is not defined
in the default capabilities.
1542695843::WARNING: Nor is it defined in the current
hardware ID's capabilities.
1542695843::WARNING:  CAPABILITY: service_hp-asrd_disabled
1542695843::WARNING: HARDWARE ID: E5APPB
1542695915::WARNING: This capability is not defined
in the default capabilities.
```

```
1542695916::WARNING: Nor is it defined in the current
hardware ID's capabilities.
1542695916::WARNING:  CAPABILITY: service__disabled
1542695916::WARNING: HARDWARE ID: E5APPB
1542696000::cloud-init                  warning: /etc/cloud/
cloud.cfg created as /etc/cloud/cloud.cfg.rpmnew
```

16. **MPS A**: Check that the upgrade completed successfully.

    ```
    $ grep "Upgrade returned success" /var/TKLC/log/upgrade/
    upgrade.log
    ```

17. **MPS A**: Check that the upgrade completed successfully.

    Verify that the message Upgrade returned success! is displayed. If it is
    not, contact My Oracle Support following the instructions on the front page or the
    instructions on the My Oracle Support (MOS).
    1399367207:: Upgrade returned success!

    Install Procedure is complete.

Install Application on Node B

This procedure installs the application on the server.
IF THIS PROCEDURE FAILS, CONTACT MY ORACLE SUPPORTAND ASK FOR
ASSISTANCE.

1. **MPS B**: Install 1B.

   Refer ISO Image download from Oracle Software Delivery Cloud to download the
   EEDB ISO and copy EEDB 46.8 ISO to /var/TKLC/upgrade directory.

2. Create a terminal window log into MPS B.

   If not already connected, connect to the E5-APP-B card via the serial port.

   For connecting the E5-APP-B B card, disconnect the console cable from the serial
   port on the E5-APP-B A card's adapter. The cable should be disconnected at the
   point where it connects to the serial port labeled S1 on the E5-APP-B A card's
   adapter and use it for serial access. **Cable part numbers - 830-1220-xx**

3. **MPS B**: Login prompt is displayed.

   ```
   <hostname> console login:
   ```

   > ✎ **Note:**
   >
   > Hit enter if no login prompt is displayed.

4. **MPS B**: log in as admusr user.

   ```
   <hostname> consolelogin:  admusr
   password:   password
   ```

5. **MPS X**: Validate ISO file.

   Validate ISO file using Validate Upgrade Media.

6. **MPS B**: Start platcfg utility.

```
$ sudo su - platcfg
```

7. **MPS B**: Navigate to the **Upgrade** menu.

The platcfg **Main Menu** appears.
On the **Main Menu**, select **Maintenance** and press [ENTER].

```
┌────────┤ Main Menu ├────────┐
│                             │
│ Maintenance                 │
│ Diagnostics                 │
│ Server Configuration        │
│ Security                    │
│ Network Configuration       │
│ Remote Consoles             │
│ Exit                        │
│                             │
└─────────────────────────────┘
```

Select the **Upgrade** menu and press [ENTER].

```
┌─────┤ Maintenance Menu ├─────┐
│                              │
│ Upgrade                      │
│ Patching                     │
│ Backup and Restore           │
│ Halt Server                  │
│ Restart Server               │
│ Eject CDROM                  │
│ Save Platform Debug Logs     │
│ Platform Data Collector      │
│ Exit                         │
│                              │
└──────────────────────────────┘
```

8. **MPS A**: Select **Early Upgrade Checks**.

Select the **Early Upgrade Checks** menu to verify that the system is ready for upgrade.

```
┌──────┤ Upgrade Menu ├──────┐
│                            │
│ Validate Media             │
│ Early Upgrade Checks       │
│ Initiate Upgrade           │
│ Copy USB Upgrade Image     │
│ Non Tekelec RPM Management  │
│ Exit                       │
│                            │
└────────────────────────────┘
```

If the Early Upgrade Checks fail due to the ongoing syncing of raid mirrors, then wait until the resync is completed and run the Early Upgrade Checks again.

Contact My Oracle Support following the instructions on the front page or the instructions on the Appendix G, if the early upgrade checks fail due to any other reason.

9. **MPS A**: Navigate to the **Initiate Upgrade** menu.

Select the **Initiate Upgrade** menu and press [ENTER].

10. **MPS B**: Select the Upgrade Media.

   The screen displays a message that it is searching for upgrade media. When the upgrade media is found, an Upgrade Media selection menu appears similar-to the example below.
   Select the desired upgrade media and press [ENTER].
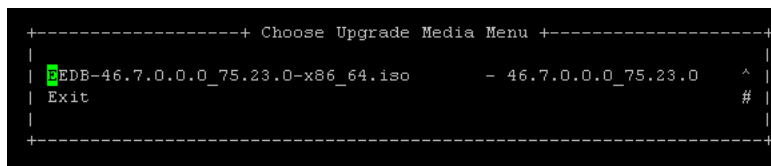
11. **MPS B**: Upgrade proceeds.

   The screen displays the following, indicating that the upgrade software is first validating the media, and then proceeding with the upgrade.

12. **MPS B**: Upgrade proceeds.

   Many informational messages appear on the terminal screen as the upgrade proceeds. The messages are not shown here for clarity sake.
   When installation is complete, the server reboots.

13. **MPS B**: Upgrade completed.

   After the final reboot, the screen displays the login prompt as in the example below.

```
Authorized uses only. All activity may be monitored and reported.
1542751724: Upstart Job alarmMgr: started
####################


1542751724: Upstart Job tpdProvd: started
####################


1542751724: Upstart Job syscheck: started
####################


1542751725: Upstart Job ntdMgr: started
####################
```

14. **MPS B**: log in as `admusr` user.

```
[hostname] consolelogin:  admusr
password:    password
```

15. **MPS B**: Check the Upgrade log.

Examine the upgrade logs in the directory `/var/TKLC/log/upgrade` and verify that no errors and warnings were reported.

`$ grep -i error /var/TKLC/log/upgrade/upgrade.log`

Check the output of the upgrade log, Contact My Oracle Support following the instructions on the front page or the instructions on the My Oracle Support (MOS), if the output contains any errors beside the following:

```
1542696235::Bringing up interface bond0:  /etc/sysconfig/network-
scripts/ifup-eth: line 141: echo: write error: Permission denied
1542696235::error in ifcfg-bond0:1: didn't specify device or ipaddr
1542696235::error in ifcfg-bond0:2: already seen ipaddr in ifcfg-
bond0:1.
```

`$ grep -i warning /var/TKLC/log/upgrade/upgrade.log`

Examine the output of the above command to determine if any warnings were reported.

Contact My Oracle Support following the instructions on the front page or the instructions on the My Oracle Support (MOS), if the output contains any warnings beside the following:

```
1542695599::WARNING: /usr/TKLC/plat/etc/alarms/alarms.xml has been
updated...reparsing xml...
1542695670::warning:    erase unlink of /etc/ssm/hwmgmtd.conf
failed: No such file or directory
1542695672::kexec-tools                    #warning: /etc/kdump.conf
created as /etc/kdump.conf.rpmnew
1542695778::setup
###############################################warning: /etc/
shadow created as /etc/shadow.rpmnew
1542695794::ca-certificates
###############warning: /etc/pki/tls/certs/ca-bundle.crt created
as /etc/pki/tls/certs/ca-bundle.crt.rpmnew
1542695843::WARNING: This capability is not defined
in the default capabilities.
1542695843::WARNING: Nor is it defined in the current
hardware ID's capabilities.
1542695843::WARNING:  CAPABILITY: service_hp-asrd_disabled
1542695843::WARNING: HARDWARE ID: E5APPB
1542695915::WARNING: This capability is not defined
in the default capabilities.
1542695916::WARNING: Nor is it defined in the current
hardware ID's capabilities.
1542695916::WARNING:  CAPABILITY: service__disabled
1542695916::WARNING: HARDWARE ID: E5APPB
```

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```
1542696000::cloud-init                    warning: /etc/cloud/
cloud.cfg created as /etc/cloud/cloud.cfg.rpmnew
```

16. **MPS B**: Check that the upgrade completed successfully.

    ```
    $ grep "Upgrade returned success" /var/TKLC/log/upgrade/
    upgrade.log
    ```

17. **MPS B**: Check that the upgrade completed successfully.

    Verify that the message `Upgrade returned success!` is displayed. If it is not, contact My Oracle Support following the instructions on the front page or the instructions on the My Oracle Support (MOS).
    ```
    1399367207:: Upgrade returned success!
    ```

    Install Procedure is complete.

Generic Procedure

ISO Image download from Oracle Software Delivery Cloud

This procedure provides instructions to download an ISO image from OSDC and copy to the required server.
IF THIS PROCEDURE FAILS, CONTACT MY ORACLE SUPPORT AND ASK FOR UPGRADE ASSISTANCE.

1. MPS X: Log in to the server as the `admusr` user.

   ```
   [hostname] consolelogin: admusr
   password: <admusr_password>
   ```

2. MPS X: Verify ISO image doesn't already exist.

   Execute the following command to perform directory listing:

   ```
   $ ls –alrt /var/TKLC/upgrade
   ```

   The output should look like as follows (There is no ISO present in following example):

   ```
   [admusr@Osorna-B-PDBonly ~]$ ls -alrt /var/TKLC/upgrade/
   total 12
   drwxrwxr-x.  3 root admgrp 4096 Feb 19 21:43 .
   dr-xr-xr-x. 22 root root   4096 Jun 15  2018 ..
   ```

   If an ISO image exists, remove it by executing the following command:

   ```
   $ rm –f /var/TKLC/upgrade/<ISO image>
   ```

3. Download the ISO image from OSDC (Oracle Software Delivery Cloud).

4. Copy the ISO from source path to destination path.

> **Note:**
>
> Skip this step if same ISO is already present on destination folder.

Copy the ISO image from source path to destination path using `scp/ftp` command.

Execute the following command on destination server:

```
$ sudo scp <source_username>@<source_server_IP>:/<source_path>/
xyz.iso
        /var/TKLC/upgrade
```

Password: <enter source userpassword>

OR,

Execute the following command on source server:

```
$ scp /<source_path>/<xyz.iso>
        admusr@<destination_server_IP>:/var/TKLC/upgrade
```

Password: <Enter admusr password>

5. MPS X: Verify ISO image copied on destination path.

Execute the following command to perform directory listing:
`$ ls –alrt /var/TKLC/upgrade`

The output should look like:

```
[admusr@hostname ~]$ ls -alrt /var/TKLC/upgrade
total 684816
drwxr-xr-x.  2 root sys         4096 Mar 20  2018 patch
drwxrwxr-x.  3 root admgrp      4096 Jun 15 18:09 .
-rw-r-----   1 root root   701235200 Nov 21 18:12
EEDB-46.7.0.0.0_75.24.0-x86_64.iso
dr-xr-xr-x. 21 root root         4096 Nov 21 18:37 ..
```

Repeat this procedure from step 1 if `EEDB ISO` file is not as expected.

6. MPS X: Validate ISO file.

Validate ISO file using Validate Upgrade Media.
This procedure is complete.

Validate Upgrade Media

This procedure is used to execute a validation of the Upgrade Media (typically an ISO image) separately from executing an upgrade. The upgrade process automatically validates the upgrade media. However, sometime the user may wish to perform just a validation before proceeding with upgrade, thus the reason for this separate process. Validation could be performed on MPS A or B, however, this procedure specifies MPS X for simplicity.

This procedure provides instructions to perform a validation of the upgrade media on the MPS X server. This procedure assumes that the E5-APP-B card IPM procedure has been executed and the user has an EEDB Upgrade ISO image available.

IF THIS PROCEDURE FAILS, CONTACT MY ORACLE SUPPORT AND **ASK FOR UPGRADE ASSISTANCE**.

1. **MPS X**: If necessary, log in to the server as the user `admusr`. If not already logged in to the MPS server, then login as user `admusr`.

   ```
   <hostname> console login:  admusr
   password:    <password>
   ```

2. **MPS X**: Execute the `platcfg` menu.

   ```
   $ sudo su - platcfg
   ```

3. **MPS X**: Select the **Maintenance** submenu.

   The platcfg **Main Menu** appears.
   On the **Main Menu**, select **Maintenance** and press [ENTER].
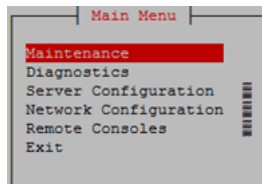
4. **MPS X**: Select the **Upgrade** submenu and press [ENTER].
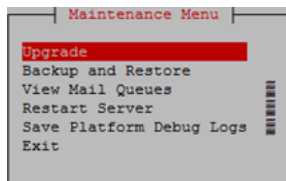
5. **MPS X**: Select the **Validate Media** selection and press [ENTER].
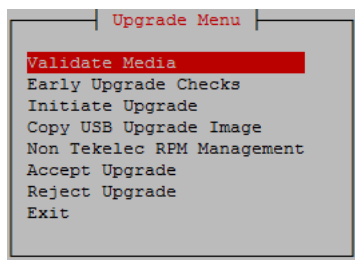
6. **MPS X**: Output from the Validate Media selection.

   The screen will display a message that it is searching for upgrade media. Once the upgrade media is found, an Upgrade Media selection menu will be displayed similar to the example shown below.

If the upgrade media is not found, follow to copy the ISO Image download from Oracle Software Delivery Cloud upgrade ISO.

Select the upgrade media or ISO image. There should only be one selection available, as shown in the example below. If there is more than one selection available, contact My Oracle Support following the instructions on the front page or the instructions on the My Oracle Support (MOS).

```
lqqqqqqqqqqqqqqqqqqu Choose Upgrade Media Menu tqqqqqqqqqqqqqqqqqqqqk
x                                                                   x
x /dev/sr0                                – CDROM                   x
x EEDB-46.7.0.0.0_75.24.0-x86_64.iso      – 46.7.0.0.0_75.24.0      x
x Exit                                                              x
x                                                                   x
mqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqj
```

7. **MPS X**: View the Validation results.

   The results of the validation will be displayed, similar to the example below. Press the [ENTER] key to continue.

```
##########################################################
##########################################################
##########################################################
##########################################################
##########################################################
##########################################################
##########################################################
#########################################
UMVT Validate Utility v2.3.4, (c)Tekelec, May 2014
Validating /var/TKLC/upgrade/EEDB-46.7.0.0.0_75.24.0-x86_64.iso
Date&Time: 2018-11-29 11:24:50
Volume ID: 46.7.0.0.0_75.24.0
Part Number: N/A
Version: 46.7.0.0.0_75.24.0
Disc Label: EEDB
Disc description: EEDB
The media validation is complete, the result is: PASS

CDROM is Valid


PRESS ANY KEY TO RETURN TO THE PLATCFG MENU.
```

8. **MPS X**: Select the **Exit** option.

   Select the **Exit** option, and keep selecting the Exit option, until you reach the command line prompt or you return to another menu that you wish to use. Media Validation is complete. Return to the procedure that you came here from.

IPM MPS Server with TPD 7.6.X

> **Note:**
>
> Both the MPS-A and MPS-B servers can be IPM'ed at the same time.

This procedure will IPM the E5-APP-B Server.

IF THIS PROCEDURE FAILS, CONTACT MY ORACLE SUPPORT AND **ASK FOR UPGRADE ASSISTANCE**.

1. **MPS X**: Insert TPD 7.6.x USB media into the USB port (E5-APP-B).

> **✎ Note:**
>
> Refer Copy ISO image in USB to copy the ISO in USB.
> Reboot server.
>
> ```
> # reboot
> ```

2. **MPS X**: Press del key to enter the BIOS, set System Time to GMT time, and System Date.

3. **MPS X**: Select **Boot** → **Hard Disk Drives** option.
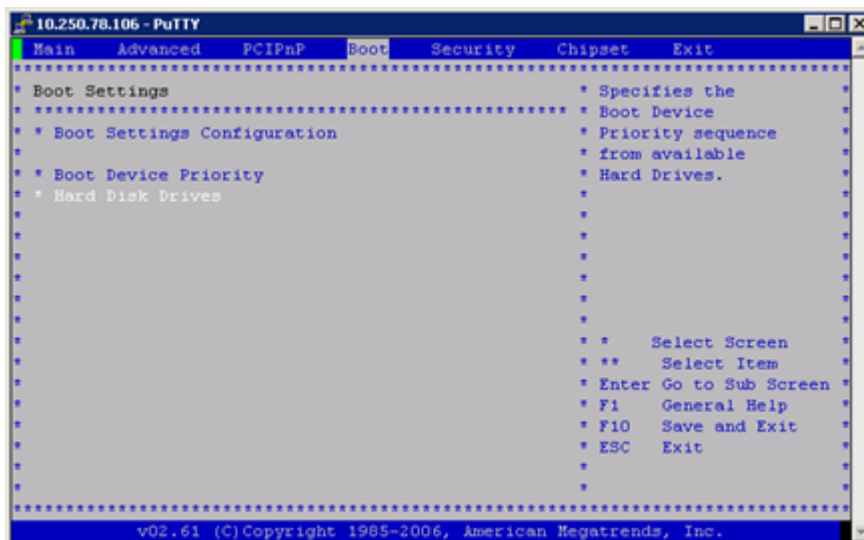
4. **MPS X**: Press Enter key and select USB as the 1st Drive.

```
remo
```
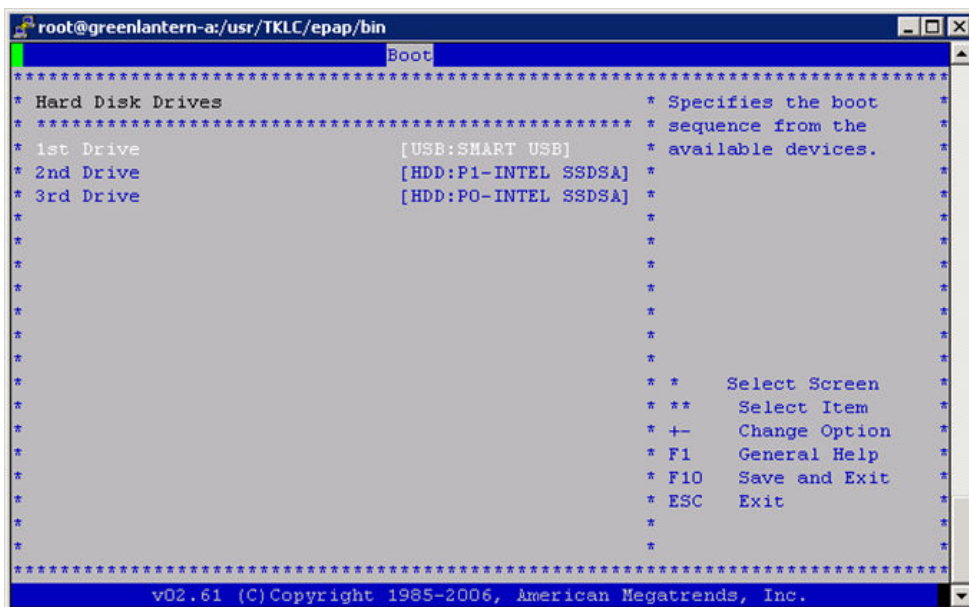
5. **MPS X**: Press Esc key and select **Boot Device Priority**.

6. **MPS X**: Verify that the 1st Boot Device is set to USB.
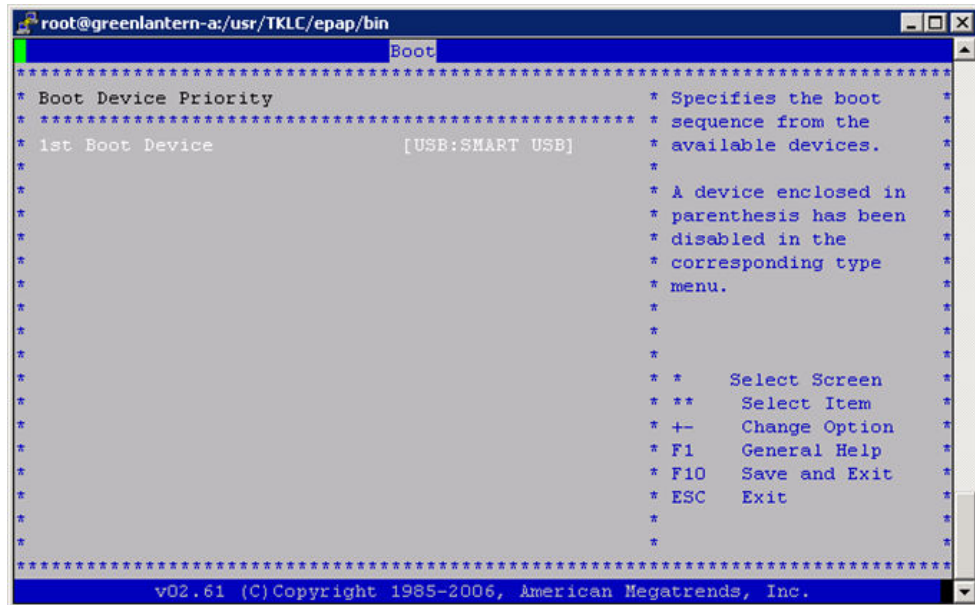
7. **MPS X**: Press Esc key and select **Exit** → **Save Changes and Exit** option.
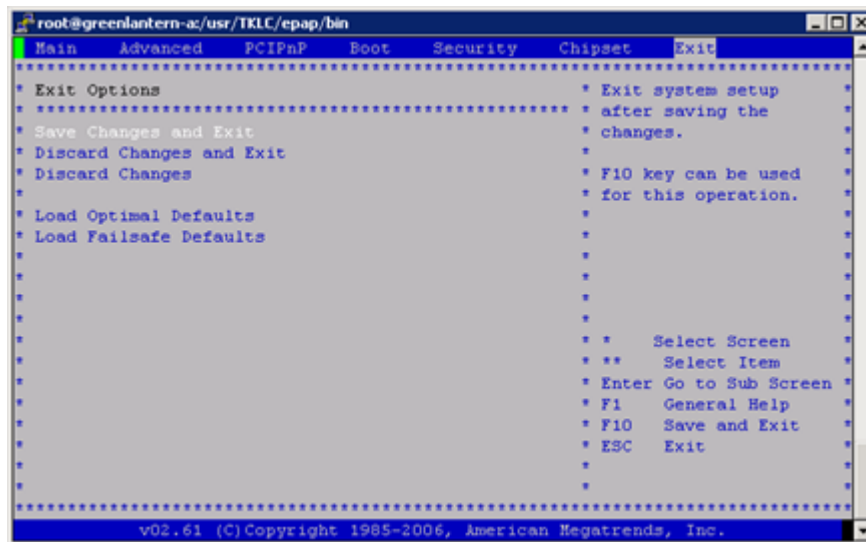
8. **MPS X**: Select [OK] to save the configuration changes.

   The server will reboot and TPD boot prompt will appear.
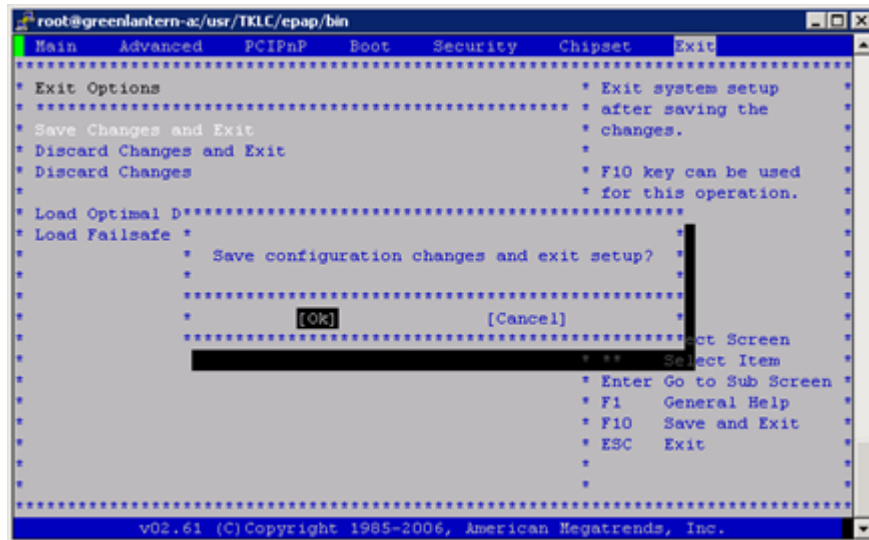
9. **MPS X**: Start the IPM process by entering the `TPDlvm` command at the boot prompt.
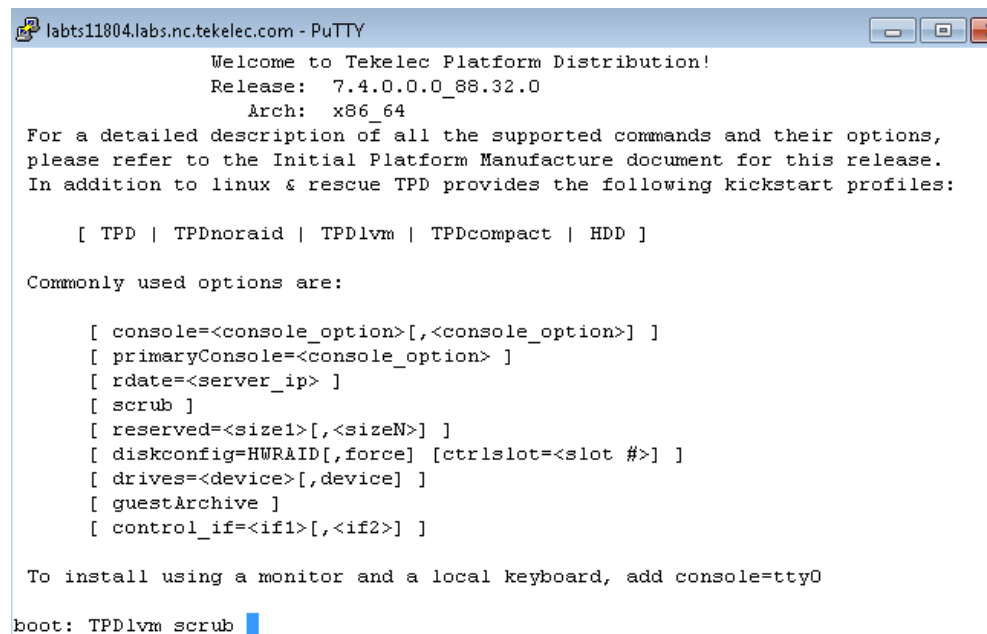
10. **MPS X**: After a few seconds, additional messages will begin scrolling by on the screen as the Linux kernel boots, and then the drive formatting and file system creation steps will begin.
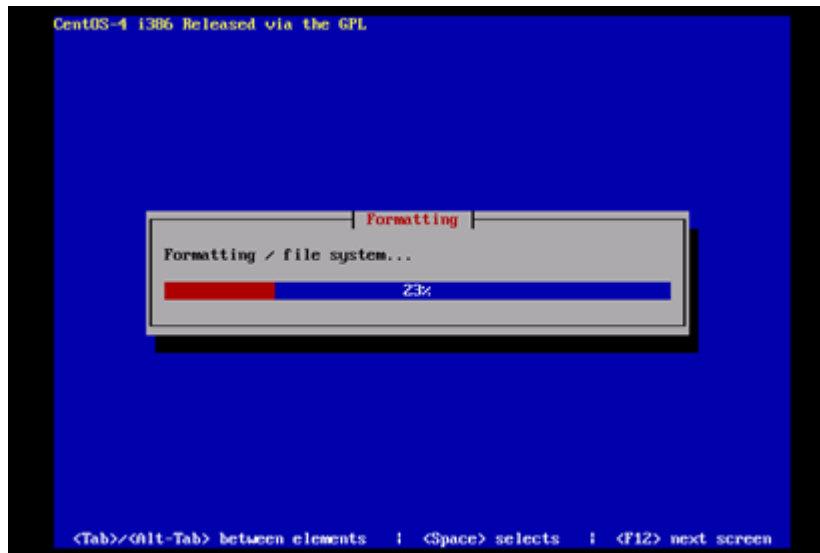
11. **MPS X**: Once the drive formatting and file system creation steps are complete, the screen at right will appear indicating that the package installation step is about to begin.
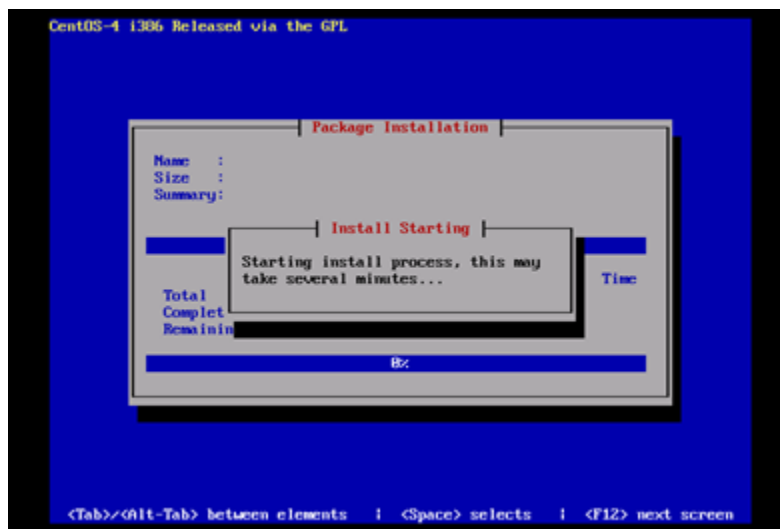
12. **MPS X**: After a few minutes, you will see a screen similar to that at right, showing the status of the package installation step. For each package, there will be a status bar at the top indicating how much of the package has been installed, with a cumulative status bar at the bottom indicating how many packages remain. In the middle, you will see text statistics indicating the total number of packages, the number of packages installed, the number remaining, and current and projected time estimates.

13. **MPS X**: Once all the packages have been successfully installed, the screen at right will appear letting you know the installation process is complete.

    On E5-APP-B server remove the installation media (USB) and press <ENTER> to reboot the system and continue with the next step.

14. **MPS X**: Press del key to enter the BIOS, set correct System Time in GMT and System Date.

15. **MPS X**: Select **Boot** → **Hard Disk Drives** option

16. **MPS X**: Press Enter key and select **HDD:P0** as the 1st Drive

17. **MPS X**: Press Esc key and select **Boot Device Priority**

18. **MPS X**: Verify that the **1st Boot Device** is set to HDD:P0.

19. **MPS X**: Press Esc key and select **Exit** → **Save Changes and Exit** option.
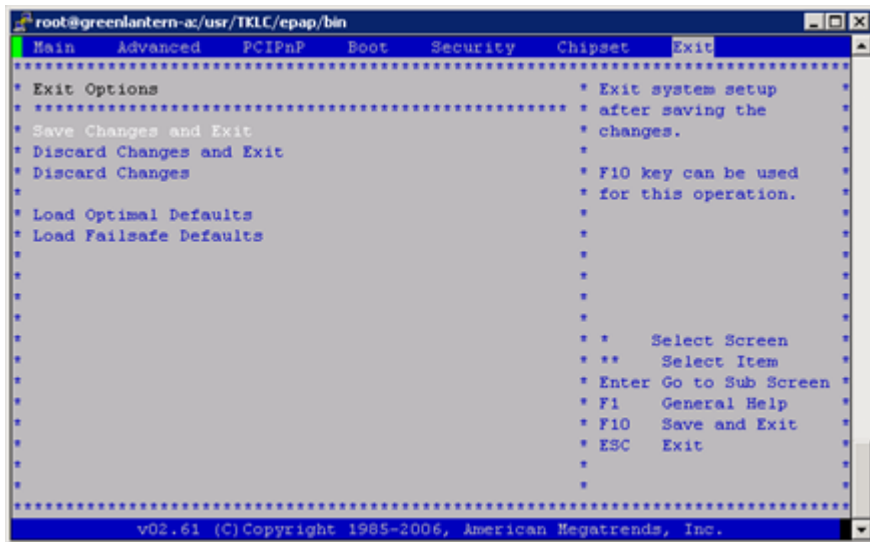
20. **MPS X**: Select [OK] to save the configuration changes. The server will reboot. Remove USB media from USB drive.
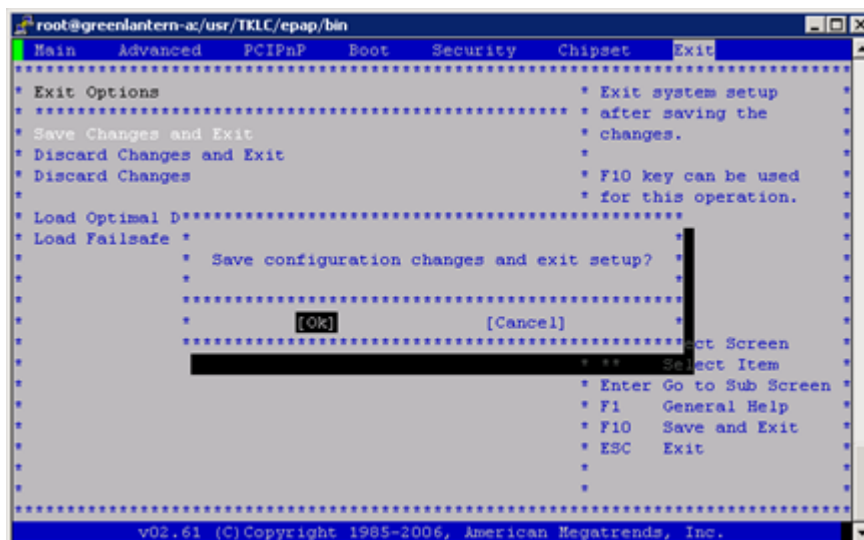
21. **MPS X**: Log in to the server as the user `admusr`.

    ```
    console login:  admusr
    password:    <admusr_password>
    ```

22. **MPS X**: Verify that the platform revision is same as the TPD DVD or ISO used.

    ```
    $ getPlatRev
     7.6.x.0.0-y.z.0
    ```

23. **MPS X**: Verify the system date.

    ```
    $ date -u Wed Mar
          21 11:04:54 UTC 2018
    ```

    Verify that the output time matches the time set in step 14. If mismatch is found, then Refer to Appendix G for instructions on accessing My Oracle Support.

    Return to the procedure that you came here from.

Perform System Health Check

This procedure performs a system health check on any MPS server.
IF THIS PROCEDURE FAILS, CONTACT MY ORACLE SUPPORT AND **ASK FOR UPGRADE ASSISTANCE.**

1. **MPS X:** If necessary, log in to the server as the user `admusr`. If not already logged in to the MPS server, then login as user `admusr`.

    ```
    <hostname> console login:  admusr
    password:    <password>
    ```

2. **MPS X**: Execute the platcfg menu.

    ```
    $ sudo su - platcfg
    ```

3. **MPS X**: Select the **Diagnostics** submenu.

The platcfg **Main Menu** appears.
On the **Main Menu**, select **Diagnostics** and press **[ENTER]**.
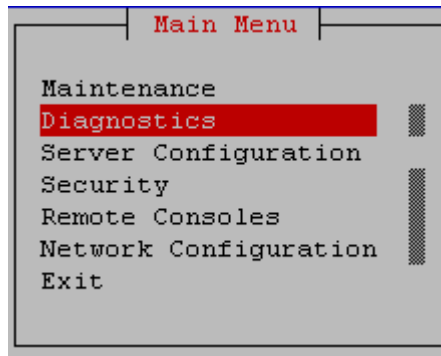
4. Select the **Online Diagnostics** submenu. Select the **Online Diagnostics** submenu and press **[ENTER]**.
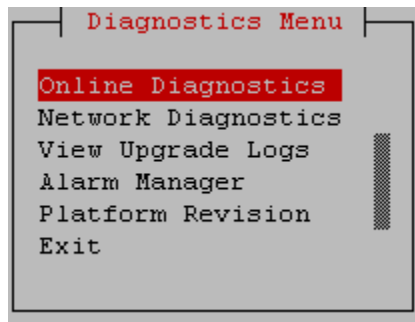
5. Select the **Non Verbose** option and press [ENTER].
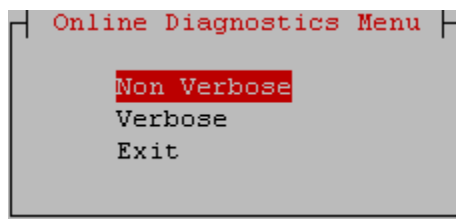
6. Examine the output of the Online Diagnostics

```
Copyright (C) 2003, 2018, Oracle and/or its affiliates. All rights reserved.
 Hostname: waffle-a
                         Online Diagnostics Output
Running modules in class disk...
                               OK
Running modules in class hardware...
                               OK
Running modules in class net...
                               OK
Running modules in class proc...
                               OK
Running modules in class system...
                               OK
Running modules in class upgrade...
                               OK



         lqqqqqqqqqk lqqqqqqqqqqk lqqqqqk lqqqqqqqqk lqqqqqqqk
         x Forward x x Backward x x Top x x Bottom x x Exit x
         mqqqqqqqqqj mqqqqqqqqqqj mqqqqqj mqqqqqqqqj mqqqqqqqj
```

Exit from the above menu.

If the System Check was successful, return to the procedure that you came here from.

If the Server Disk Space Shortage Error was there in the output, proceed to step 7 to clean up the / directory.

If any other failures were detected by System Check, contact My Oracle Support following the instructions on the front page or the instructions on My Oracle Support (MOS).

7. Server clean-up to create space using the following command:

```
$ df –h /var/TKLC
```
The output may look like:

```
[admusr@hostname ~]$ df –h /var/TKLC
Filesystem            Size  Used Avail Use% Mounted on
/dev/mapper/vgroot-plat_var_tklc
                      3.9G  2.2G  1.5G  60% /var/TKLC
```

Verify that there is at least 600M in the Avail column. If not, clean up files until there is space available.

> ⚠ **WARNING:**
>
> Make sure you know what files you can remove safely before cleaning up. It is recommended that you only clean up files in the /var/TKLC/ upgrade directory as this is a platform owned directory that should only contain ISO images. This directory should not be expected to contain images for any length of time as they can get purged.

Also, execute the following command to check space in /lib/module directory.

```
$ df -h /lib/modules
```

```
[admusr@hostname ~]$ df -h /lib/modules
Filesystem              Size  Used Avail Use% Mounted on
/dev/mapper/vgroot-plat_root
                        976M  397M  529M  43% /
```

Verify that the `Use%` column does not exceed the value 80%.

Media Validation is complete. Return to the procedure that you came here from.

Configure Network Interface Using platcfg Utility

This procedure configures the network interfaces and makes the E5APPB servers accessible to the network.

IF THIS PROCEDURE FAILS, CONTACT MY ORACLE SUPPORT AND **ASK FOR UPGRADE ASSISTANCE.**

1. MPS X: If necessary, log in to the server as the user `admusr`.

    If not already logged in to the MPS server, then login as user `admusr`.

    ```
    <hostname> console login:  admusr
    password:    <password>
    ```

2. MPS X: Execute the `platcfg` menu.

    ```
    $ sudo su - platcfg
    ```

3. MPS X: configure **Network Interfaces**
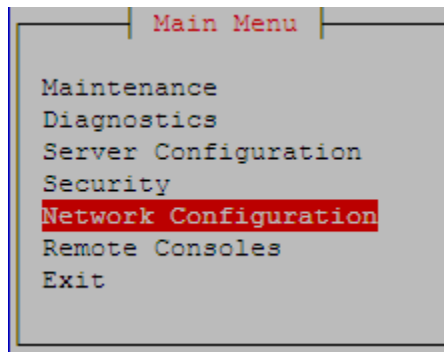
Network Configuration Menu

SNMP Configuration
Network Interfaces
Routing
Configure Network
Network Bridges
Iptables
IPSEC Configuration
Resolv
Stunnel
Modify Hosts File
Configure Switch
Exit

Network Interfaces Menu

Add an Interface
Edit an Interface
Delete an Interface
Exit

Connection to edit Menu

eth01
eth02
eth03
eth04
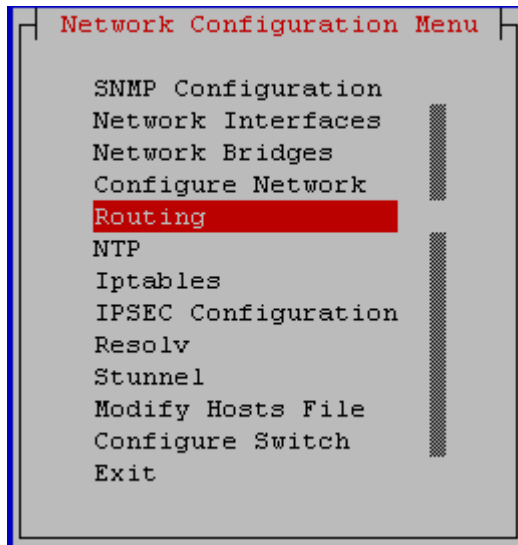Exit

Options

Edit   Exit

4. Select **Interface options**.
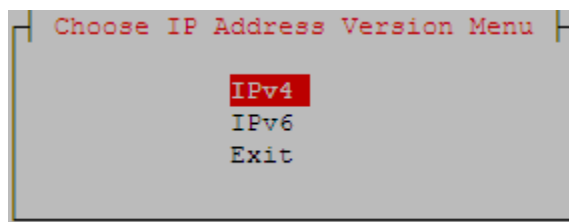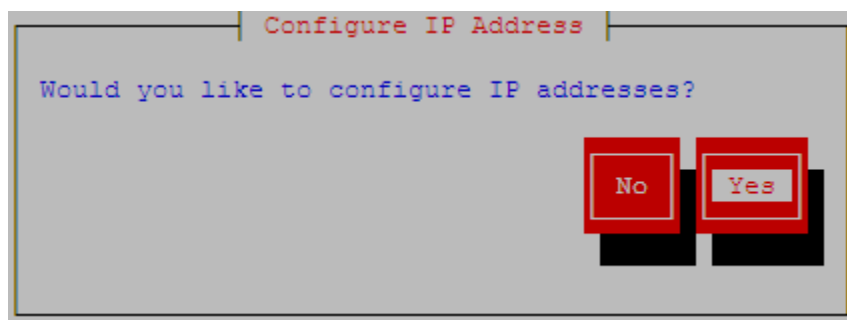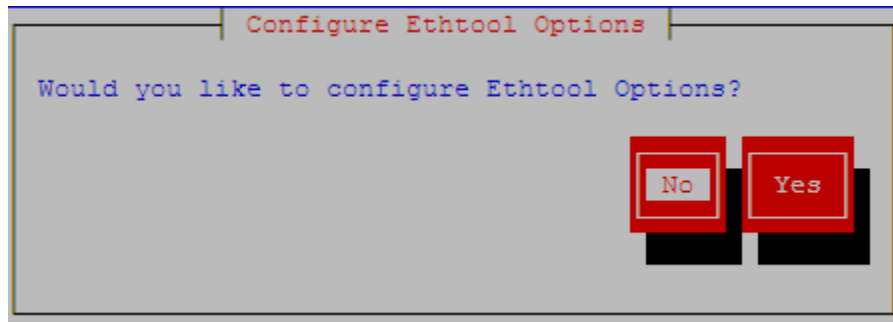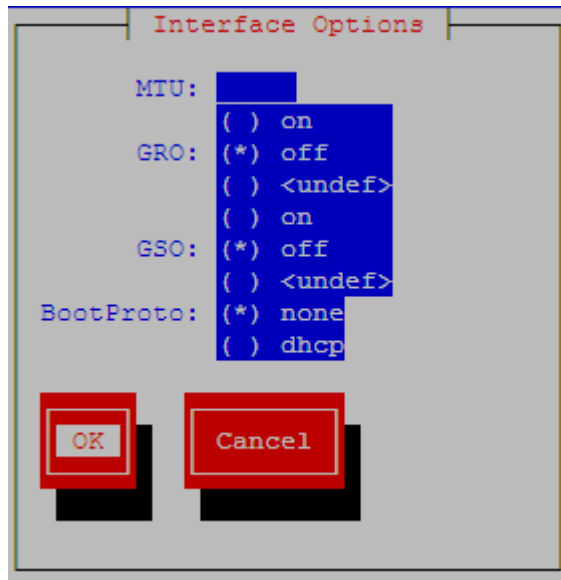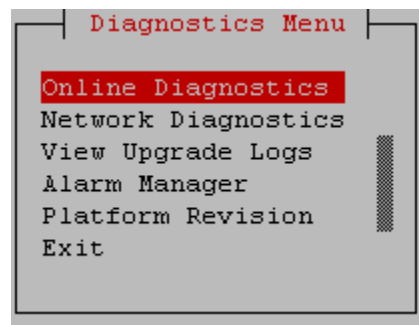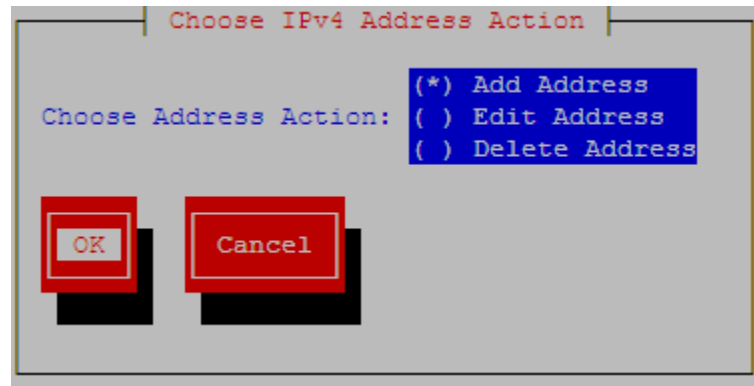
5. Input the IP Address and Netmask.

   Select **Exit** until you reach the network configuration menu.
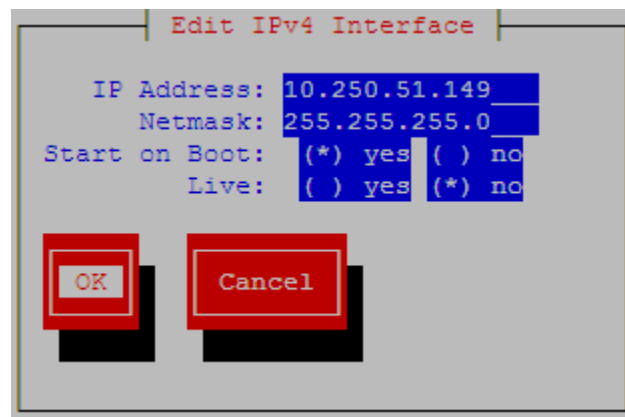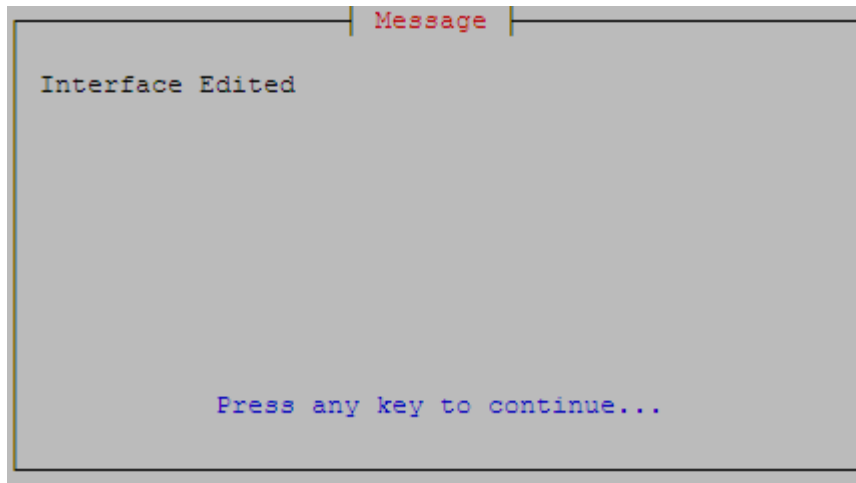
6. Configure **Routing**.

   Select **Exit** until you exit from the platcfg utility.
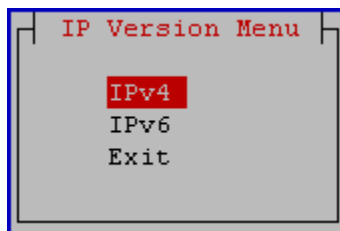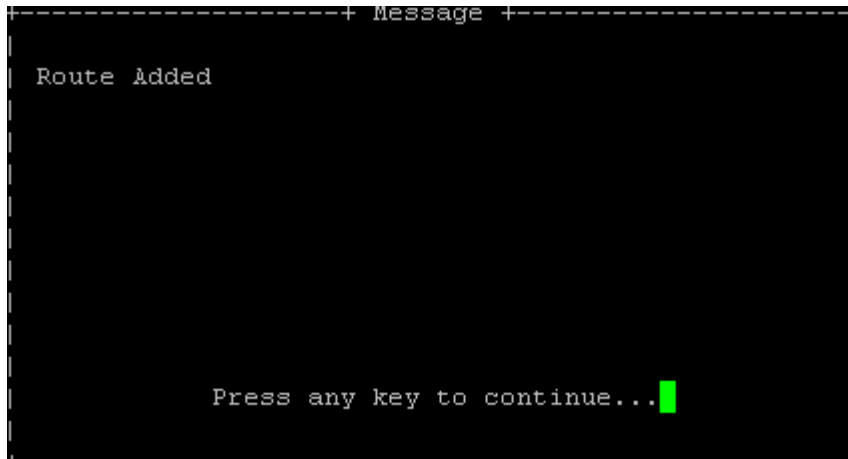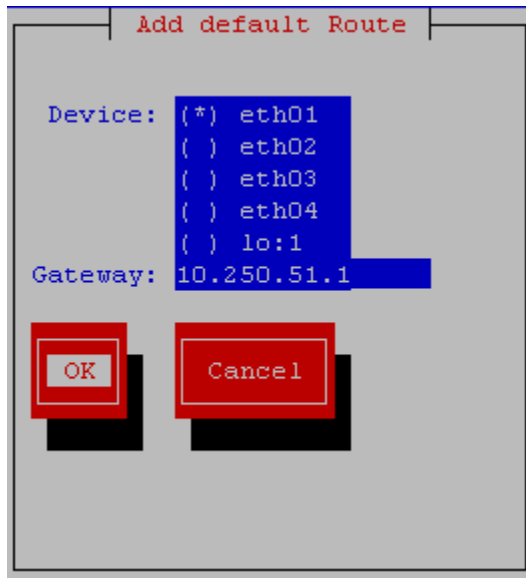
This procedure is complete.

Copy ISO image in USB

This procedure provides instructions to copy an ISO to USB.
If this procedure fails, contact My Oracle Support and ask for upgrade assistance.

1. MPS X: Log in to the server as the `admusr` user.

```
[hostname] consolelogin: admusr
password: <admusr_password>
```

2. MPS X: Verify ISO image present at directory.

3. Execute the following command to perform directory listing:

```
$ cd /var/TKLC/upgrade
$ ls -alrt
```

The output should look like as follows (There is no ISO present in following example):

```
[admusr@waffle-a upgrade]$ ls -arlt
total 695312
drwxr-xr-x.  2 root sys         4096 Mar 20  2018 patch
dr-xr-xr-x. 21 root root        4096 Nov 20 02:57 ..
-r--r-----   1 root root   711983104 Dec  5 12:25
TPD.install-7.6.0.0.0_88.54.0-OracleLinux6.9-x86_64.iso
drwxrwxr-x.  3 root admgrp      4096 Dec  5 12:26
```

4. MPS X: Copy ISO to the USB.

```
$ sudo dd if=/var/TKLC/upgrade/TPD.install-7.6.0.0.0_88.54.0-
OracleLinux6.9-x86_64.iso of=/dev/sdc
1390592+0 records in
1390592+0 records out
711983104 bytes (712 MB) copied, 111.797 s, 6.4 MB/s
```

This procedure is complete.

F

Upgrading Source Release 46.5.1.10.0 to Target Release 46.5.1.20.0 (46.9.1.20.0)

This procedure upgrades the EAGLE Software Release 46.5.1.10.0 to the Release 46.5.1.20.0 (46.9.1.20.0).

The only EPM-A cards that are allowed to be operational in the EAGLE prior to upgrading to the Release 46.5.1.20.0 are the E5-ENET-A cards running the IPSG application. In addition, other A cards, that is, the cards that contain the BLIXP flash GPL must be removed from the machine prior to the upgrade.

Release 46.9.1.20.0 is used to perform chg-gpl only. The release should not be used for a fresh installation.

1. Disable the security feature.

   > **Note:**
   >
   > To turn off both SSH and SFTP, refer to EAGLE's Database Administration – System Management User's Guide, Section A.4.

2. Migrate IPSM, MCPM, and OAM to the VxWorks 6.9 GPL versions.

3. Upgrade to EAGLE 46.5.1.20.0 by referring to EAGLE Software Upgrade Guide for 46.x.

4. Re-enable the security feature.

   > **Note:**
   >
   > Refer to EAGLE's Database Administration – System Management User's Guide, Section A.4.

5. Migrate the E5-ENET-A cards to the SLIC cards.

   a. Flash SLIC (to be used in 4-Port IPSG locations) to BLSL932.

   b. Consolidate two E5-ENET-A cards into one SLIC card.

6. At this point, all of the E5-ENET-A cards have been removed from the EAGLE node.

7. Prepare a USB with the 46.9.1.20.0 upgrade GPLs to run the `chg-gpl` command.

8. Run the `chg-gpl:gpl=oamhc69:ver-147.5.11` command.

9. Run the `init-card:appl=oam` command.

   The OAM displays the release label 46.9.1.20.0-77.5.11.

10. At this point, the EAGLE node is running Release 46.9.1.20.0. The only supported upgrade path from 46.9.1.20.0 will be to Release 47.0.0.0.0.

G

Customer Sign Off

Sign-Off Record

*** Please review this entire document. ***

This is to certify that all steps required for the upgrade successfully completed without failure.

Sign your name, showing approval of this procedure, and fax this page and the above completed matrix to Oracle CGBU, **My Oracle Support** web portal (**https://support.oracle.com**).

Customer: Company Name: _____
Date: _____

Site: Location: _____

[Include serial number, which was recorded in Procedure 1, Step15.]

Customer: (Print) _____ Phone:_____

Fax: _____

Start Date: _____ Completion Date: _____

This procedure has been approved by the undersigned. Any deviations from this procedure must be approved by both Oracle CGBU and the customer representative. A copy of this page will be given to the customer for their records. The SWOPS supervisor will also maintain a signed copy of this completion for future reference.

Oracle Signature: _____ Date: _____

Customer Signature: _____ Date: _____