# Oracle® Communications EAGLE

**Software Upgrade Guide** 

Releases 47.1

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Oracle Communications EAGLE Software Upgrade Guide, Release 47.1

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Before upgrading your system, access the My Oracle Support web portal (<a href="https://support.oracle.com">https://support.oracle.com</a>) and review any Knowledge Alerts that may be related to the System Health Check or the Upgrade.

Before beginning this procedure, contact My Oracle Support and inform them of your upgrade plans. Refer to Appendix I for instructions on accessing My Oracle Support.

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#### 1. INTRODUCTION

#### 1.1 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 Communications EAGLE 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 or references for the software upgrade of peripheral equipment.

Note: To see the list of cards supported by EAGLE Release 47.1, see Hardware Reference Guide.

#### 1.2 References

#### 1.2.1 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

#### 1.2.2 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.

- [4] EAGLE Hardware Field Baseline, CGBU ENG 24 1893, latest revision, Tekelec.
- [5] TEKELEC Acronym Guide, CGBU ENG 24 1732, current revision
- [6] Tekelec Eagle Eng Release Mapping web page, http://devtools.nc.tekelec.com/cgi-bin/eng\_eag.cgi, Tekelec.
- [7] Tekelec CSR-PR Reports By Build, <a href="http://devtools.nc.tekelec.com/cgi-bin/release-desc.cgi">http://devtools.nc.tekelec.com/cgi-bin/release-desc.cgi</a>
- [8] Tekelec Tekpedia web page, <a href="http://tekpedia.ssz.tekelec.com/tekpedia/index.php/Methods\_to\_correct\_distributed\_network\_database\_(DDB)\_in\_consistencies">http://tekpedia.ssz.tekelec.com/tekpedia/index.php/Methods\_to\_correct\_distributed\_network\_database\_(DDB)\_in\_consistencies</a>, Tekelec.
- [9] EAGLE 45.0 Product Functional Specification PF005994, latest version, GSS Product Management.
- [10] EAGLE 45.1 Product Functional Specification PF006147, latest version, GSS Product Management.
- [11] EAGLE 46.0 Product Functional Specification PF006165, latest version, GSS Product Management.
- [12] EAGLE 46.6 Product Functional Specification CGBU\_025773, latest version, GSS Product Management.

## 1.3 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 I 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.

#### 1.4 Database Version Number

To determine the correct database version numbers for the EAGLE® release, refer to the appropriate internal release-mapping web tool. Appendix I 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.

## 1.5 Acronyms and Terminology

Table 1. Acronyms

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	
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	

For additional Acronyms; refer to internal references [5] in section 1.2.2

Table 2. Terminology

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	<b>EAGLE:</b> 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.		
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			
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 <b>not</b> 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 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

#### 1.6 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.2 for 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 I 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

8. Remove all the non-provisioned cards from the system prior to upgrade.

## 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.

Figure 1 - Upgrade Process shows the general steps for all processes of performing a software upgrade, from hardware inventory to final upgrade health check.

Figure 1 - Upgrade Process

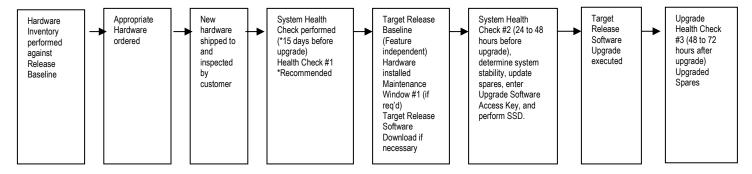


Table 4 contains a checklist of the steps required to successfully complete the upgrade process.

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		
Software Upgrade Session 1 completed		
Health Check #3 performed.		[1]
Software Upgrade Session 2 completed		

Table 4. Upgrade Tasks to be 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.

Table 5. Phases of Upgrade Execution shows 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 5. Phases of Upgrade Execution** 

Release Displayed	Phase Indicator <sup>1</sup>	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

<sup>&</sup>lt;sup>1</sup> Over the evolution of the upgrade process, Phase 1 is considered an error state.

#### 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.

## 3.1 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 I 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.)
- 8. The Rollback Source Release GPL RMD. For more information about downloading the rollback source release GPL, see Target Release Software Download

The following table lists the source release and the respective OAMHC69 GPL version to be used for the rollback to the source release:

Source Release	OAMHC69 GPL Version
46.6.0.0.0-73.18.0	45.18.0
46.6.2.0.0-73.26.0	45.26.0
46.6.3.0.0-73.28.1	45.28.0
46.6.4.0.0-73.30.0	45.30.0
46.6.5.0.0-73.31.1	45.31.0
46.7.0.0.0-75.27.0	45.27.0
46.7.1.0.0-75.29.0	45.29.0
46.7.2.0.0-75.30.0	45.30.0
46.7.4.0.0-75.32.1	45.32.0
46.7.5.0.0-75.36.0	45.36.0
46.7.5.1.0-75.36.33	45.36.33
46.7.6.0.0-75.37.0	45.37.0
46.7.7.0.0-75.38.0	45.38.0
46.8.0.0.0-75.18.17	45.18.17
46.8.1.0.0-75.18.18	45.18.18
46.8.2.0.0-75.18.19	45.18.19
46.9.0.0.0-76.28.0	45.28.0
46.9.1.0.0-76.39.0	45.39.0
46.9.2.0.0-76.41.0	45.41.0

46.9.3.0.0-76.45.0	45.45.0
46.9.4.0.0-76.47.0	45.47.0
46.9.5.0.0-76.48.0	45.48.0
46.9.1.20.0-77.5.11	45.5.11
47.0.0.0.0-79.13.0	45.13.0
47.0.0.1.0-79.13.19	45.13.19

**Note:** After upgrade completion, the DB level must not be changed on the destination release. If the DB level is changed, then the MTP cards will not be able to crossload the DDB from other network cards because of the difference in the DB level and the cards get stuck in the DDL\_HUNT state. This causes the rollback failures.

## 3.2 Upgrade Preparation Overview

The activities listed in Table 6 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.

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

Table 6. Upgrade Readiness Activities

## 3.3 Pre-Upgrade Overview

The pre-upgrade procedures, shown in Table 7, may be optionally executed prior to entering the maintenance window. All of these activities are completed during Session 1.

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

# 3.4 Upgrade Execution Overview

The procedures, shown in Table 8, are executed in the maintenance window.

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

**Table 8. Upgrade Execution Overview** 

The procedures, shown in Table 9. Post Upgrade Overview

, are executed in the maintenance window.

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	Intrusive
Post-upgrade	Hhour + 3	Flashing Cards	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

**Table 9. Post Upgrade Overview** 

## 3.5 Backout Procedure Overview

The procedures, shown in Table 10. Backout Procedure Overview, are executed in the maintenance window.

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

**Table 10. Backout Procedure Overview** 

#### 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).

## 4.1 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 Target Release Software Download before the upgrade. Before the target release installation, the spare equipment inventory should be as shown in Table 11 and Table 12.

Table 11. 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 12. 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
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 Table 13 and Table 14.

**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 13. 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 14. 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

### 4.2 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 necessary 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.

Note: All upgrades from Eagle Release 46.9.0.0.0-76.28.0 to Release 46.9.1 or 46.9.2 would be intra-release upgrade due to addition of new GPLs.

#### 5. Software Upgrade Procedure

Call the Oracle support hotlines [see Appendix I] 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 I]. 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.

**Note**: EAGLE Release 47.0 does not support the DEIR feature. Therefore, do not upgrade to EAGLE 47.0 in case you are using this functionality. The DEIR support is going to be available in future releases.

## \*\*\*\* 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.

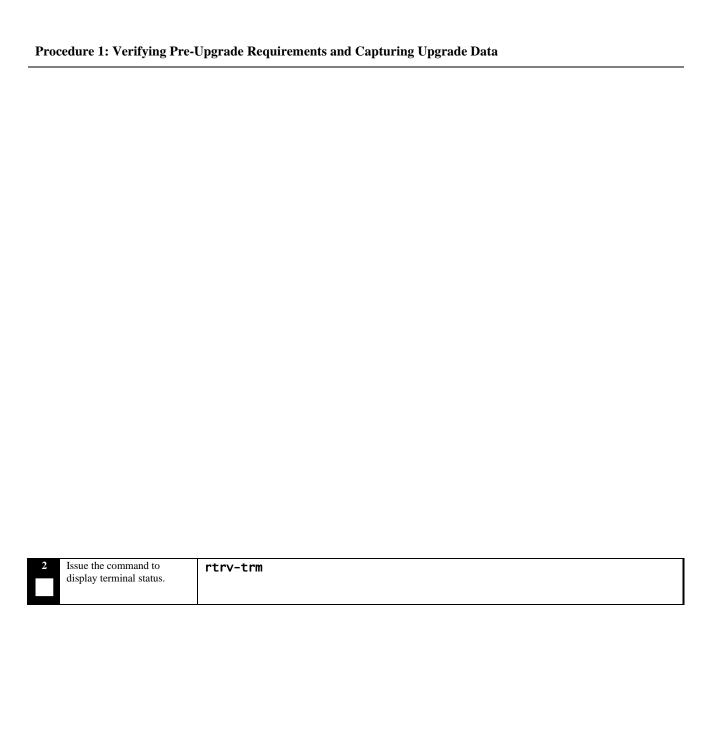
# 5.1 Software Upgrade Execution – Session 1

## Procedure 1: Verifying Pre-Upgrade Requirements and Capturing Upgrade Data

S	This procedure verifies that all pre-upgrade requirements have been met.		
T E	Check off $(\sqrt{t})$ each step as it is completed. Boxes have been provided for this purpose under each step number.		
P #	Should THIS PROCEDURE FAIL, Contact the Oracle support hotlines [see Appendix I] AND ASK FOR UPGRADE ASSISTANCE.		
	Complete pre-upgrade tasks		

## **Table 15. Pre-Upgrade Requirements**

√	Tasks to be completed prior to upgrade execution				
	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.				
	<b>Note</b> : 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.				
	<b>Note</b> : 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.				
	Verify all the network cards are on latest bootloaders (see <u>Procedure 19</u> ).				
	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]				
	Collect the list of cards on VxWorks 6.4				



Procedure 1: Verifying Pre-Upgrade Requirements and Capturing Upgrade Data

	- vernying i re	
3	Response to retrieve	eaglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x.x.x-YY.y.y rtrv-trm
	terminal command is	Command entered at terminal #10.
	displayed.	:
		eaglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x.x.x-YY.y.y
	D 14	TRM TYPE COMM FC TMOUT MXINV DURAL
_	Record the terminals in the	1 OAP 19200 -7-E-1 SW 30 5 00:01:00 2 KSR 9600 -7-E-1 SW 30 5 00:01:00
	TRM column that have	2 KSR 9600 -7-E-1 SW 30 5 00:01:00
	TYPE of PRINTER <sup>2</sup> . Also	3 NONE 9600 -7-E-1 SW 30 5 00:01:00 4 NONE 9600 -7-E-1 SW 30 5 00:01:00
	record the terminal being	5 NONE 9600 -7-E-1 SW 30 5 00:01:00
	used to enter commands (the	6 NONE 9600 -7-E-1 SW 30 5 00:01:00
	user terminal) <sup>3</sup> Or terminals	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
	used by external	8 NONE 9600 -7-E-1 SW 30 5 00:01:00
	applications that issue	9 OAP 19200 -7-E-1 SW 30 5 00:01:00
	commands to the EAGLE.	10 KSR 9600 -7-E-1 SW 30 5 00:01:00
	In this example, terminal 12	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
	is a printer, terminal 10 is	13 VT320 9600 -7-E-1 SW 30 5 00:01:00
	the user terminal, and	14 NONE 9600 -7-E-1 SW 30 5 00:01:00
	terminal 2 is KSR.	15 NONE 9600 -7-E-1 SW 30 5 00:01:00
	Contrara 2	16 NONE 9600 -7-E-1 SW 30 5 00:01:00
ıu	Capture2	TRM TRAF LINK SA SYS PU DB
		2 NO NO NO NO NO
		3 NO NO NO NO NO
ш	USER3	4 NO NO NO NO NO
	USER	5 NO NO NO NO NO NO
	Ext. Application:	6 NO NO NO NO NO NO 7 NO
ш	Ext. Application.	8 NO NO NO NO NO NO
	<del></del>	9 YES YES YES YES YES
	See recommendation #1 &	10 YES YES YES YES YES
	#6 in section 1.6	11 NO NO NO NO NO NO 12 YES YES YES YES YES
	5 500 110	12 YES YES YES YES YES YES 13 YES YES YES YES YES YES
	If <b>not</b> echoing to the printer	14 NO NO NO NO NO NO
	or KSR, go to step 8.	15 NO NO NO NO NO NO
	, 5	16 NO NO NO NO NO
	Record the initial output	;
	group configurations for the	USER
	user's and capture terminals.	03LK
	Also, record the user's	TMOUT
	TMOUT value.	
		CAP
	77.1	
4	Echo command input to	act-echo:trm=P
	capture terminal.	(Where the value for <b>P</b> is one of the printer/KSR terminal port numbers recorded in Step 3)
لي	If the capture terminal is the	
	user terminal go to step 8.	
5	Response to activate	eaglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x.x.x-YY.y.y
اصًا	command is displayed.	act-echo:trm=P
╽Ш╽	communa is displayed.	Command entered at terminal #10.
6	If capture terminal's output	chg-trm:trm=P:all=yes <sup>5</sup>
	groups are not all set to	(P is the terminal port that is specified in step 4)
	YES, issue the change	
	terminal command.	and acts W MM DD bhammaca TTTT DDD WWw. www. W W W W
7	Response to change terminal	eaglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x.x.x-YY.y.y chg-trm:trm=P:all=yes
	command is displayed.	Command entered at terminal #10.
╽┻╽		1

<sup>&</sup>lt;sup>2</sup> Terminals with type equal to KSR as well as type equal to printer, which are configured, need to be recorded. Terminal being used to capture cannot be a Telnet terminal, see recommendation #6 in section 1.6

<sup>&</sup>lt;sup>3</sup> The user terminal cannot be a Telnet terminal, see recommendation #6 in section 1.6.

<sup>&</sup>lt;sup>4</sup> If an external application is connected via a Telnet terminal on an IPSM card, see recommendation #6 in section 1.7.
<sup>5</sup> If the system displays continuous UAMs and the source of the UAMs are known issues, turn off the associated output groups to limit the information sent to printer\KSR terminal port.

**Procedure 1: Verifying Pre-Upgrade Requirements and Capturing Upgrade Data** 

9 10	If the output group and timeout on the user terminal are not set correctly, issue the command to change terminal timeout and display groups.  Response to change terminal command is displayed.  Issue the command to display the system features	chg- trm:trm=USER:all=no:sa=yes:sys=yes:db=yes:dbg=yes:card=yes:tmout= 0 (Where the value of USER is the user terminal number shown in Step3)  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. ; rtrv-feat
11	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
12	Issue the command to display the FAK features.	rtrv-ctrl-feat
13	Response to retrieve command is displayed.	eaglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x.x.x.x-YY.y.y The following features have been permanently enabled:  Feature Name Partnum Status Quantity The following features have been permanently enabled:  Feature Name Partnum Status Quantity FEATURE_A XXXXXXXXX on FEATURE_B XXXXXXXXXX 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.
14	Issue the command to display the system serial number.	rtrv-serial-num
15	Response to retrieve command is displayed.  Record the system serial number as shown:  SN: Additionally, record in Appendix E.  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.
16	Issue the command to retrieve records from the event log.	rtrv-log:dir=bkwd:edate=YYMMDD:etime=HHMMSS:snum=XXXX:enum=YYYY:num=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.)

**Procedure 1: Verifying Pre-Upgrade Requirements and Capturing Upgrade Data** 

17	Response to retrieve command is displayed.	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
	Determine if the report termination reason meets the pass/fail criteria in Table 17.	****06-09-19 10:49:46**** 1426.0311
18	Repeat steps 16-17 for all sets of UAMs listed in Table 16.	

Table 16. 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
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

<sup>\* -</sup> For the description of these UAMs, see External Reference [2]

Table 17. Retrieve Log Termination Pass/Fail Criteria:

Termination Reason	Pass/Fail	Comment
- no records found within specified range	Pass	
- X records displayed (where <b>x</b> is less then NUM.)	Pass	
- max. or num= count reached	Further Analysis Required	See Appendix, D.2

# **Procedure 2: Backing Up the Database**

S	This procedure backs up the active current database to the fixed disk and the removable media. This procedure is		
Ť	required to retain changes made by this upgrade process and match the distributed network database.		
E P	Check off $()$ each step as it is completed. Boxes have been provided for this purpose under each step number.		
#	SHOULD THIS PROCEDURE FAIL, CONTACT My Oracle Support AND ASK FOR UPGRADE ASSISTANCE.		
1	Issue the command to	nont stat db	
	display database status.	rept-stat-db	
2	Response from the	eaglestp_YY-MM-DD hh:mm:ss_TTTT_PPP_XX.x.x.x.x-YY.y.y	
	command is displayed.	DATABASE STATUS: >> OK << TDM 1114 ( STDBY) TDM 1116 ( ACTV ) C LEVEL TIME LAST BACKUP C LEVEL TIME LAST BACKUP	
	Look in the columns labeled 'C' and 'LEVEL' output by this command.	FD BKUP Y XXXX YY-MM-DD HH:MM:SS TTTT Y XXXX YY-MM-DD HH:MM:SS TTTT Y XXXX MCAP 1113 MCAP 1115	
	Verify entries in column 'C' show 'Y' which indicates coherence.	RD BKUP Y XXXX YY-MM-DD HH:MM:SS TTTT Y XXXX YY-MM-DD HH:MM:SS TTTT USB BKP	
	Verify both 'FD CRNT' Levels are equal.		
3	Issue the command to back up the database.	chg-db:action=backup	
4	Response to backup command is displayed.	eaglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x.x.x-YY.y.y 5042.1114    CARD 1115    Database BACKUP started	
	Command execution time: approximately 4 – 20 minutes, longer for large	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. ;	
	databases.	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	
		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. ;	
5	Insert the RMD containing the source release into the drive slot of the ACTIVE MASP card.	Wait for the RMD to be detected by the system.	
6	Issue the Change-Database command to back up the database to RMD.	chg-db:action=backup:dest=remove	
7	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. ;	
		<pre>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 ;</pre>	
		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 ;	

# **Procedure 2: Backing Up the Database**

8	Issue the command to copy the GPLs to RMD.	copy-gpl
9	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;
10	Issue the command to report database status.	rept-stat-db
	Response to database status command is displayed. Check that all DB levels	eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y  DATABASE STATUS: >> OK <<
	are the same.	FD CRNT Y XXX  MCAP 1113   RD BKUP Y XXX YY-MM-DD hh:mm:SS TTTT  USB BKP
12	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 Section 1.3	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x-YY.yy.y           GPL Auditing ON         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           GGGGGG2 1113
14	Remove the Source- Release RMD.	Store the RMD in a safe location.

## **Procedure 3: Updating the Source-Release Spare Fixed Disk**

S T	This procedure backs up the active current database to the spare fixed disk to ensure that a valid recovery spare is available.		
E P	Check off $()$ each step as it is completed. Boxes have been provided for this purpose under each step number.		
#	SHOULD THIS PROCEDUI	RE FAIL, CONTACT My Oracle Support AND ASK FOR UPGRADE ASSISTANCE.	
1	Issue the report card status command.	rept-stat-card:appl=oam	
2	Response to the card status command is displayed.	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	
	Record the card locations of both MASPs as well as the part number of the E5-MASP:	Command Completed.	
	Act E5-MASP		
	p/n		
	Stby E5-MASP		
2	p/n		
	Place spare E5-MASP in system. <sup>6</sup>	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).	
	Record the part number for the spare E5-TDM:	Remove the standby E5-MASP card determined in step 2.  Insert the spare E5-MASP card.	
	p/n	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 the report status command for the standby MASP.	rept-stat-card:loc=xxxx:mode=full (Where xxxx is the STBY MASP slot from step 2 above)	
5	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 ESMCAP 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 = 33C ( 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.	

 $<sup>^6</sup>$  The spare E5-MASP should be the one verified by upgrade Health Check #2, see section 1.2.1 ref [1].

**Procedure 3: Updating the Source-Release Spare Fixed Disk** 

6	Issue the command to retrieve GPL versions.	rtrv-gpl	
7	Response from the retrieve command is displayed.	eaglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x.x.x-YY.y.y GPL Auditing ON	
0	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.	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	
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.	
9	Response to the repair command is displayed.	<pre>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. ;</pre>	
	Wait for the 'repair complete' message to display and the MASP returns to in-service.	<pre>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.</pre>	
10	Place original standby 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 original standby E5-MASP card.	
		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.  Wait for the original standby E5-MASP to come up in standby mode and system returns to duplex mode.	

## **Procedure 4: Verifying All Databases**

S T E P #	This procedure verifies that all databases are coherent and at the same level, which includes current and backup partitions on both fixed disks.  Check off (1) each step as it is completed. Boxes have been provided for this purpose under each step number.  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.	eaglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x.x.x-YY.y.y  DATABASE STATUS: >> OK <<	
0 0	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.	RD BKUP Y 1	
	If the STDBY databases are not coherent or not at the correct level, repeat Procedure 3, step 8.	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	
	Verify that the MPS databases are coherent.	RTDB Y YY-MM-DD hh:mm:ss ZZZZZZZ = RTDB-EAGLE YY-MM-DD hh:mm:ss ZZZZZZZZ = 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;	

# **Procedure 5: Initializing MASPs to Run on Target-Release GPLs**

S	This procedure loads the target-release GPL to both MASPs. This procedure requires that both MASPs be rebooted		
T E	(one at a time) and verified as running the target-release GPLs.		
<b>P</b> #	Check off $()$ each step as it is completed. Boxes have been provided for this purpose under each step number.		
#	SHOULD THIS PROCEDURE FAIL, CONTACT My Oracle Support AND ASK FOR UPGRADE ASSISTANCE.		
	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 section 4.2.)	
2	Inhibit the standby MASP	INH-CARD:LOC=XXXX	
		(Where <i>XXXX</i> is the location of the standby MASP slot recorded in Procedure 3, Step 2)	
3	Response to the inhibit command is displayed  Verify UAM 514 is displayed.	eaglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x.x.x-YY.y.y Card is inhibited. ;	
	verify OAM 314 is displayed.	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.	
4	Issue the report card status command.	rept-stat-card:appl=oam	
5	Response to the card status command is displayed.	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	
	Verify that standby MASP is OSS-MT-DSBLD.		
	For this sample output, 1113 is standby and 1115 is Active.		
6	Download target-release flash	INIT-FLASH:LOC=XXXX:CODE=TRIAL	
	to the standby MASP.	(Where <i>XXXX</i> is the location used in the previous command)	
7	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.	
8	Retrieve the GPLs running on	REPT-STAT-GPL:LOC=XXXX	
	the card location.	(Where XXXX is the location used in the previous command)	

**Procedure 5: Initializing MASPs to Run on Target-Release GPLs** 

10 11 12	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.  Run the target-release GPL on the standby MASP  Response to allow-card command is shown.  Retrieve status of the MASPs	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.  ;  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)  eaglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x.x.x-YY.y.y Card has been allowed.  ;  REPT-STAT-GPL:GPL=OAMHC69
13	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 16.	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. ;
14	Retrieve GPL status of the standby MASP.	REPT-STAT-GPL:LOC=XXXX  (Where XXXX is the location of the standby MASP slot recorded in Procedure 3, Step 2)
15	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.
16	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 Procedure 3, Step 2)
17	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 ;
18	Issue the command to log back in to the system.	LOGIN: UID=XXXXXX (Where XXXXXX is a valid login ID)

Procedure 5: Initializing MASPs to Run on Target-Release GPLs

19	Response to login command is displayed.	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 <i>UU</i> .
	Ignore any login failure message.	? Login failures since last successful LOGIN Last successful LOGIN was on port ? on ??-??-?? @ ??:??:??
	Verify the Upgrade Phase in Banner <sup>7</sup> .	
20	Echo command input to capture terminal.	ACT-ECHO:TRM=P (Where P is the terminal port number specified in Procedure 1, Step 3)
21	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 <i>P</i> .
22	Issue the card status to verify the location of the active MASP slot	REPT-STAT-CARD:APPL=OAM
23	Response to the card status command is displayed.	eaglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x.x.x-YY.y.y CARD VERSION TYPE GPL PST SST AST
	Circle the status of both E5-MASPs:	1113 XXX-XXX E5MCAP OAMHC IS-NR ACTIVE 1115 XXX-XXX-XXX E5MCAP OAMHC IS-NR Standby Command Completed.
	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.	
24	Inhibit the standby MASP	INH-CARD: LOC=XXXX
		(Where <i>XXXX</i> is the location of the standby MASP identified in the previous command)
25	Response to the inhibit command is displayed	eaglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x.x-YY.y.y Card is inhibited. ;
	Verify UAM 514 is displayed.	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.
26	Download target release flash to the standby MASP.	INIT-FLASH:LOC=XXXX:CODE=TRIAL
	to the standoy MASI.	(Where XXXX is the location of the standby MASP used in the previous command)

<sup>&</sup>lt;sup>7</sup> Phase number is not displayed at this point for incremental upgrades. See section 1.5 for a definition of incremental upgrade and section 1.4 for a definition of database versioning. Database versioning between releases is determined in Procedure 7, step 2.

Procedure 5: Initializing MASPs to Run on Target-Release GPLs

28	Response to flash initialization is shown.  Retrieve the GPLs running on the card location.	eaglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.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.  REPT-STAT-GPL:LOC=XXXX (Where XXXX is the location of the standby MASP slot used in the previous command)
30	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.  Run the target release GPL on the standby MASP	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. ;  ALW-CARD:LOC=XXXX:CODE=INACTIVEPRTN (target release on the inactive partition)
31	Response to allow card command is shown.	(Where XXXX is the location of the standby MASP used in the previous command)  eaglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x.x.x-YY.y.y Card has been allowed.
32	Issue the command to display the status of the MASPs' GPL	REPT-STAT-GPL:GPL=OAMHC69
33	Response from the retrieve command is displayed.	eaglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x.x.x-YY.y.y GPL Auditing ON
	Verify that the GPL versions that are displayed in the "RUNNING" column are correct; see section 1.3	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.
34	If GPLs are not correct, do the following:	<ol> <li>Repeat Step 2 - 33.</li> <li>Contact My Oracle Support.</li> </ol>

**Procedure 5: Initializing MASPs to Run on Target-Release GPLs** 

35	Issue the command to display the version of the Flash GPL running on card 1113.	REPT-STAT-CARD:LOC=1113:MODE=FULL	
36	Response from the retrieve command is displayed.  Record version of BLMCAP running on E5-MASP.	eaglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x.x.x-YY.y.y CARD VERSION TYPE GPL PST SST 1113 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	AST 
	GPL Version:	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	
	Note: For upgrade to release 46.6 & later, UAM 0225, "CARD running outdated Flash GPL" is displayed in Alarm Status.	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.	
37	Repeat steps 35 – 36, for location 1115.		

# **Procedure 6: Verifying the Target Release and Software Access Key**

S	This procedure verifies that the Upgrade Software Access Key has been entered.  Check off (√) each step as it is completed. Boxes have been provided for this purpose under each step number.  SHOULD THIS PROCEDURE FAIL, CONTACT My Oracle Support AND ASK FOR UPGRADE ASSISTANCE.		
Ē			
P #			
1	Validate the Software Access Key with the upgrade target release.	ACT-UPGRADE:ACTION=CHKREL:SRC=FIXED	
	Response from the software validation.	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. ;	
	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.	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.	
	If either the upgrade target release is incorrect or the Software Access Key is invalid STOP the upgrade and contact My Oracle Support.	Validate Release data on ramdisk.  Eagle Release successfully validated.  Command Complete: Upgrade action completed successfully;	

## **5.20AM Conversion**

#### **Procedure 7: Verifying all Databases**

S T E	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.				
P	Check off $()$ each step as it	is completed. Boxes have been provided for this purpose under each step number.			
#	NOTE: Refer to Section higher.	n B.2 to configure the Card Set network conversion method for target release 46.0 and			
	SHOULD THIS PROCEDUI	RE FAIL, CONTACT My Oracle Support AND ASK FOR UPGRADE ASSISTANCE.			
1	Issue the command to display database status during upgrades.	ACT-UPGRADE:ACTION=DBSTATUS			
2	Response to the command is displayed.	DATABASE STATUS: >> OK << TDM 1114 ( STDBY) TDM 1116 ( ACTV ) C LEVEL TIME LAST BACKUP C LEVEL TIME LAST BACKUP			
	Look in the columns labeled 'C', 'T', and 'LEVEL' output by this	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 1115			
П	command.  Verify entries in column	RD BKUP USB BKP			
	'C' show 'Y', which indicates coherence or '-'.	CARD/APPL LOC C T LEVEL TIME LAST UPDATE VERSION STATUS OAM-RMV 1113			
	Verify column 'T' shows 'N' for both CRNT databases, which indicates that those databases are not	TDM-CRNT			
	or if target release is on the inactive partition, the database level is "1".	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			
	Verify all entries in the database 'Level' column marked as 'XXX' are the same.	TDM-BKUP 1114 Y - 1			
	Verify that the version numbers displayed are correct. <sup>8</sup>				
3	Issue the command to retrieve the upgrade configuration	rtrv-upgrade-config			
4	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			
	If target rlease is 46.0 or 45.x, verify that SAK is	Number of SERVICE Sets: X Number of LINK Sets: Y			
	set	Command Completed. ;			
	The Threshold Type will be GROUP or SET.	<b>Note:</b> Refer to B.2 to configure the Card Set network conversion method.			

<sup>&</sup>lt;sup>8</sup> See section 1.4 to verify the database versions. If the database versions are the same for the TDMs as well as the RMD, the phase indicator is not displayed until after Procedure 8, step 1.

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 section 1.6 before executing this procedure.

 $\mathbf{E}$ 

Check off  $(\sqrt{})$  each step as it is completed. Boxes have been provided for this purpose under each step number.

P #

If the upgrade execution terminates before successfully completing, see recommendation #7 in 1.6

SHOULD THIS PROCEDURE FAIL, CONTACT My Oracle Support and ASK FOR UPGRADE ASSISTANCE.

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.

Table 18. Act Upgrade Command Actions lists the actions completed by the command.

Appendix D contains messages illustrative of the output of upgrade during this series of operations.

If the threshold type is set to SET in Procedure 7, Step 4 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.

If the threshold type is set to GROUP in Procedure 7, Step 4, issue the following command:

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

**Note**: Threshold type GROUP is not a valid option for 46.9 or later releases, and therefore, the Act-upgrade:action=convertstp:src=fixed:thres=75 command is not valid for Release 46.9 and later.

**Table 18. Act Upgrade Command Actions** 

	Fixed workspace
A	OAM based measurements are inhibited.
В	N/A
С	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.9
Н	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.

<sup>&</sup>lt;sup>9</sup> Proceed to step 3 to log back into the system and restart output capture.

2	Command is displayed.	eaglestp YY-MM-DD hh:mm:ss EST Rel XX.x.x-XX.x.x Upg Phase 0 act-upgrade:action=convertstp:thres= <i>XX</i> Command entered at terminal #10.
	Note the banners transitions from Phase 0 to Phase 3.  For incremental upgrade, see footnote 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:
	Completion notice of successful upgrade. If upgrade does not complete successfully, see recommendation #7 in section 1.6	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 Appendix D (D.1) 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 for assistance in executing Appendix D (D.2).
3	After item G in step 1, issue the command to log back in to the system.	LOGIN: UID=XXXXXX (Where XXXXXXX is a valid login ID)
4	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 Procedure 1, Step 3)
6	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. ;

<sup>&</sup>lt;sup>10</sup> 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.

7	Issue the command to display database status during upgrades.	ACT-UPGRADE:ACTION=DBSTATUS
8	Response from the command is displayed.	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) C LEVEL TIME LAST BACKUP C LEVEL TIME LAST BACKUP
	Look in the columns labeled 'C', 'LEVEL' and 'VERSION STATUS' output by this command.	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 MCAP 1113 MCAP 1115
	Verify entries in column 'C'	RD BKUP USB BKP
ľ	show 'Y' which indicates coherence or '-'.	CARD/APPL LOC C T LEVEL TIME LAST UPDATE VERSION STATUS
	Verify both 'FD CRNT' Levels are equal.	OAM-RMV 1113
	Verify 'VERSION STATUS' shows NORMAL in the active partition group. NOTE: this will not occur until step 2 above is completed.	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
9	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 Section 1.3.	eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.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 ISM GLSHC IS-NR Active         1105 XXX-XXX-XXX LIMDSO SS7ML IS-NR Active         1111 XXX-XXX-XXX IPSM IPSHC OOS-MT Isolated         1113 XXX-XXX-XXX IPSM IPSHC OOS-MT Isolated         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 LIMDSO SS7ML IS-NR Active         1201 XXX-XXX-XXX LIMDSO SS7ML IS-NR Active         1202 XXX-XXX-XXX LIMDSO SS7ML IS-NR Active         1203 XXX-XXX-XXX LIMDSO SS7ML IS-NR Active         1204 XXX-XXX-XXX LIMDSO SS7ML IS-NR Active         1204 XXX-XXX-XXX LIMDSO SS7ML IS-NR Active         1205 XXX-XXX-XXX DCM SS7IPGW IS-NR Active         1207 XXX-XXXX XXX DCM SS7IPGW IS-NR Active         1207 XXX-XXX-XXX DCM SS7IP

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" column are correct; see Section 1.3	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           GGGGGG1 1114 XXX-XXX-XXX XXX-XXX-XXX XXX-XXX-XXX           GGGGGG1 1116 XXX-XXX-XXX XXX-XXX-XXX           GGGGGG1 1113
13	Execute Procedure64 to come out of the upgrade.	GGGGGG6 1113;

# 5.3 Completion of Session 1

#### Note:

- Migration to VxWorks6.9 would be done automatically during the upgrade. If any card is not migrated automatically to VxWorks6.9, then follow the procedure mentioned in Appendix G.
- If you are upgrading from Release 46.9.3 to Release 47.0 and LNP capacity is greater than 504M, then corresponding part numbers should be enabled via the enable-ctrl-feat command; otherwise, SCCP cards would go into the IS-ANR state.



# 5.4 Upgrade Session 2

### **Procedure 9. Verifying Upgrade Session 2 Requirements**

S T E P	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.  Check off ( $$ ) each step as it is completed. Boxes have been provided for this purpose under each step number.	
	SHOULD THIS PROCEDURE FAIL, CONTACT My Oracle Support AND ASK FOR UPGRADE ASSISTANCE.	
	Complete pre-upgrade session 2 tasks	All tasks in Table 19 must be completed before continuing.

### **Table 19. Upgrade Session 2 Requirements**

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

# **Procedure 10: Upgrading Removable medias**

S T E P #	This procedure describes how to update source-release removable media to the target release. See recommendation #2 in section 1.6.  Check off ( √ ) each step as it is completed. Boxes have been provided for this purpose under each step number.  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 section 1.6	act-echo:trm=P (Where the value for P is one of the printer/KSR terminal port numbers recorded in Procedure 1, 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.
3	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)
4	Response to change terminal command is displayed.	<pre>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. ;</pre>
5	If the measurements platform is enabled <sup>11</sup> go to step 9. Otherwise, issue the command to retrieve measurement status.	rtrv-meas-sched
6	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	<pre>eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y COLLECT</pre>
7	Step 9. Issue the command to turn off measurement collection.	chg-meas:collect=off
8	Response to the change command is displayed.	<pre>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 ;</pre>

<sup>11</sup> If enabled, the measurements platform feature is displayed in Procedure 1, Step 11.

# **Procedure 10: Upgrading Removable medias**

9	Issue measurement report command.	rept-meas:type=systot:enttype=stp
10	Response to the command is displayed.	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
	If command fails, reattempt in five minutes until it completes, See Table 20.	Command entered at terminal #xx.;
11	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 20.	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. ;
13	Issue measurement report command.	rept-meas:type=mtcdth:enttype=stp
	Response to the command is displayed.  If command fails, reattempt in five minutes until it completes, See Table 20.  If no source cartridges need	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. ;
Ш	upgrading, go to next procedure.	
15	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.
16	Issue the command to format the RMD.	format-disk:type=system:force=yes
17	Response to format command is displayed.	<pre>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. ;</pre>
	If the format should fail, first repeat Step 16, then contact My Oracle Support.	<pre>eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y Format-disk of system removable cartridge completed. ;</pre>

Table 20. 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

# **Procedure 10: Upgrading Removable medias**

18	Issue the command to copy the GPLs to the target-release RMD.	copy-gp1
19	Response to copy command is displayed.	<pre>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 ;</pre>
20	Issue the command to backup the target-release database to the RMD.	chg-db:action=backup:dest=remove
21	Response to backup command is displayed.	<pre>eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y 5035.1114</pre>
22	Remove the target-release RMD from the drive slot and store it in a safe place.	
23	If upgrading more RMDs, repeat step 15-22.	

# **Procedure 11: Backing Up Fixed Disk**

S T E P #	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.  Check off ( √ ) each step as it is completed. Boxes have been provided for this purpose under each step number.  SHOULD THIS PROCEDURE FAIL, CONTACT My Oracle Support AND ASK FOR UPGRADE ASSISTANCE.	
1	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

# Procedure 12: Migrate the ATMITU or ATMANSI (E5-ATM-B) Cards Running VxWorks 6.4 GPL to VxWorks 6.9 GPL

S	Note: Run this procedure if the target release is 46.9.0 and later			
T E P #	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.			
	Check off ( $\sqrt{}$ ) each step as it is completed. Boxes have been provided for this purpose under each step number.			
	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		
2	Response to the card status	eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y		
	command is displayed.	CARD VERSION TYPE GPL PST SST AST		
		XXXX XXX-XXX LIMATM ATMHC IS-NR Active		
		XXXX XXX-XXX LIMATM ATMHC IS-NR Active Command Completed.		
		;		
3	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.)		
4	Response to the status command is displayed.	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x-YY.yy.y  GPL CARD RUNNING APPROVED TRIAL		
	If the "ALM" indictor is displayed for the card's flash image, continue. If card is running BLMCAP, continue. Otherwise repeat step 3 for next LIMATM or LIME1ATM-type card in list.	ATMHC XXXX XXX-XXX-XXX XXX-XXX XXX-XXX XXZ-XXX  ZZZZZZ ZZZ-ZZZ ALM YYY-YYY-YYY YYY-YYY  Command Completed. ;		
5	Issue command to cancel the	DACT-SLK:LOC=XXXX:LINK= <link name=""/>		
	links on the card.	(Where <i>XXXX</i> is the location of the LIMATM or LIME1ATM-type card used in the previous step.)		
6	Issue command to inhibit the	INH-CARD:LOC=XXXX		
	card.	(Where <i>XXXX</i> is the location of the LIMATM or LIME1ATM-type card use in previous command.)		
7	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. ;		
	If the ALM indication was	<pre>eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y Command Completed. ;</pre>		
	displayed in step 4, continue. Otherwise, go to step 12.	Note: Wait for the card to boot and return to the IMT bus.		

Procedure~12: Migrate~the~ATMITU~or~ATMANSI~(E5-ATM-B)~Cards~Running~VxWorks~6.4~GPL~to~VxWorks~6.9~GPL

8	Issue command to download	INIT-FLASH:LOC=XXXX:CODE=APPR:GPL=BLMCAP
╙	approved flash image.	(Where XXXX is the location of the LIMATM or LIME1ATM-type card used in previous command.)
9	Response to flash initialization is shown.	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x-YY.y.y FLASH Memory Download for card xxxx started
	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 completed.
	If card is running BLDC32, go to step 12. Otherwise, continue.	; 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 the card to boot and return to the IMT bus.
10	Issue command to activate the flash image	ACT-FLASH: LOC=XXXX
Ш	nasn mage	(Where XXXX is the location of the LIMATM or LIME1ATM-type card use in previous command.)
11	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.
12	Issue flash command to	INIT-FLASH:LOC=XXXX:MODE=RPLCEBL:BITS=64
	download the bootloader image.	(Where <i>XXXX</i> is the location of the LIMATM or LIME1ATM-type card use in previous command.)
13	Response to flash command is shown.	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x-YY.y.y BOOTLOADER change for card XXXX SUCCESSFUL. ;
	If either response is displayed, then proceed to the next step.	<pre>eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y Command Completed. ;</pre>
	then proceed to the new step.	OR
		If the bootloader was succesfully downloaded previously:
		eaglestp 17-01-20 12:19:04 MST EAGLE XX.x.x.xYY.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. :
14	Download target-release flash	INIT-FLASH:LOC=XXXX:CODE=APPR:GPL=BLDC32
	to the LIMATM or LIME1ATM-type card.	(Where <i>XXXX</i> is the location used in the previous command.)
15	Response to flash initialization is shown.	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x-YY.y.y FLASH Memory Download for card xxxx started.
	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 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 the card to boot and return to the IMT bus.
16	Issue command to activate the	ACT-FLASH:1oc=XXXX
Ш	flash image.	(Where XXXX is the location of the LIMATM or LIME1ATM-type card used in the previous command.)

# Procedure 12: Migrate the ATMITU or ATMANSI (E5-ATM-B) Cards Running VxWorks 6.4 GPL to VxWorks 6.9 GPL

17	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.
18	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.)
19	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. ;
20	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.)
21	Response to GPL status command.	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x-YY.y.y GPL Auditing ON GPL CARD RUNNING APPROVED TRIAL
	Verify that LIMATM or LIME1ATM-type card is BLDC32 GPL.	ATMHC69 XXXX XXX-XXX-XXX XXX-XXX-XXX XXX-XXX-X
22	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.)
23	Issue command to report the status of the LIMATM or LIME1ATM-type cards.	REPT-STAT-CARD:APPL=ATMITU OR REPT-STAT-CARD:APPL=ATMANSI
24	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. ;
25	If this is the last card listed in Step 2, continue to next procedure. Otherwise, repeat Steps 3 - 24 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.	

Procedure 13: Migrate the E5-E1T1-B Cards Running VxWorks 6.4 GPL to VxWorks 6.9 GPL

S T E P #	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.  Check off ( √ ) each step as it is completed. Boxes have been provided for this purpose under each step number.  SHOULD THIS PROCEDURE FAIL, CONTACT My Oracle Support AND ASK FOR UPGRADE ASSISTANCE.  If the source release was 46.7.x and later, issue the LIME1 or LIMT1 card status command.  REPT-STAT-CARD:APPL=SS7ANSI OR REPT-STAT-CARD:APPL=CCS7ITU		
2	Otherwise, continue to next procedure.  Response to the card status	eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y	
	command is displayed.	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. :	
3	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)	
4	Response to the status command is displayed.	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  ZZZZZZ ZZZ-ZZZ-ZZZ ALM YYY-YYY-YYY YYY-YYY	
	If the "ALM" indictor is displayed for the card's flash image, continue. If card is running BLMCAP, continue. Otherwise repeat step 3 for next LIME1 card in list.	Command Completed.	
5	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.)	
6	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.)	
7	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.	
8	If the ALM indication was displayed in step 4, continue. Otherwise, go to step 12. Issue command to download	Note: Wait for the card to boot and return to the IMT bus.  INIT-FLASH: LOC=XXXX: CODE=APPR: GPL=BLMCAP	
	approved flash image.	(Where <i>XXXX</i> is the location of the LIME1 or LIMT1 E5-E1T1-B card used in the previous command.)	

Procedure 13: Migrate the E5-E1T1-B Cards Running VxWorks 6.4 GPL to VxWorks 6.9 GPL

9	Response to flash initialization is shown.	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x-YY.y.y FLASH Memory Download for card xxxx started.
	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 completed.
	If card is running BLDC32, go to step 12. Otherwise, continue.	; eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y 8003.0004 * GPL SYSTEM ZZZZZZZ Card is running non-activated GPL ;
		Note: Wait for the card to boot and return to the IMT bus.
10	Issue command to activate the	ACT-FLASH: LOC=XXXX
ш	flash image	(Where XXXX is the location of the LIME1 or LIMT1 E5-E1T1-B card used in previous command.)
111	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.
12	Issue flash command to	INIT-FLASH:LOC=XXXX:MODE=RPLCEBL:BITS=64
	download the bootloader image.	(Where <i>XXXX</i> is the location of the LIME1 or LIMT1 E5-E1T1-B card used in the previous command.)
13	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. ;
	If either response is displayed, then proceed to the next step.	<pre>eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y Command Completed. ;</pre>
		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. ;
14	Download target-release flash	INIT-FLASH:LOC=XXXX:CODE=APPR:GPL=BLDC32
ш	to the LIME1 or LIMT1 E5- E1T1-B card.	(Where <i>XXXX</i> is the location used in the previous command.)
15	Response to flash initialization is shown.	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x-YY.y.y FLASH Memory Download for card xxxx started.
H	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 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 the card to boot and return to the IMT bus.
16	Issue command to activate the	ACT-FLASH: Toc=XXXX
	flash image.	(Where XXXX is the location of the LIME1 or LIMT1 E5-E1T1-B card used in the previous command.)

Procedure 13: Migrate the E5-E1T1-B Cards Running VxWorks 6.4 GPL to VxWorks 6.9 GPL

17	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. :
18	Issue the allow command to reload the LIME1 or LIMT1 E5-E1T1-B card.	ALW-CARD: LOC=XXXX  (Where XXX is the location of the card used in the previous command.)
19	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. ;
20	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.)
21	Response to GPL status command.	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y GPL Auditing ON
Ħ	Verify that LIME1 or LIMT1 card is BLDC32 GPL.	GPL CARD RUNNING APPROVED TRIAL SS7HC69 XXXX XXX-XXX-XXX XXX-XXX XXX-XXX-XXX BLDC32 YYY-YYY-YYY YYY-YYY YYY-YYY-YYY Command Completed.
22	Issue command to activate the links.	ACT-SLK:LOC=XXXX:LINK= <link name=""/> (Where XXXX is the location of LIME1 or LIMT1 card in Step 3.)
23	Issue command to report the status of the LIME1 or LIMT1 cards.	REPT-STAT-CARD:APPL=SS7ANSI OR REPT-STAT-CARD:APPL=CCS7ITU
24	Response to the status command.	eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
	Verify that LIME1 or LIMT1 cards have returned to IS-NR.	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.
25	If this is the last card listed in Step 2, continue to next procedure. Otherwise, repeat Steps 3 - 24 for the next card listed in Step 2.	,
	Note: Wait till this flashed LIME1 or LIMT1 E5-E1T1-B card to complete reloading before proceeding to next step.	

Procedure 14: CCS7ITU or SS7ANSI Application is Provisioned on SLIC Card, Migrate the Same to VxWorks6.9

S	Note: Run this procedure if the target release is 46.9.0 and later					
T E P #	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.  Check off ( √ ) each step as it is completed. Boxes have been provided for this purpose under each step number.					
	SHOULD THIS PROCEDURE FAIL, CONTACT My Oracle Support AND ASK FOR UPGRADE ASSISTANCE.					
	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				
2	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. :				
3	For each card with type equal to LIME1 or LIMT1 listed above, issue the GPL status command.	REPT-STAT-GPL:LOC=XXXX  (Where XXXX is the location of a a LIME1 or LIMT1 SLIC card slot listed in previous step.)				
4	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 BLSLC32 ZZZ-ZZZ ALM YYY-YYY-YYY YYY-YYY-YYY  Command Completed.				
5	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.)				
6	Issue command to inhibit the card.	INH-CARD: LOC=XXXX  (Where XXXX is the location of the LIME1 or LIMT1 SLIC card.)				
7	Response to the inhibit command is displayed.  If the ALM indication was	<pre>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. ;</pre>				
0	displayed in step 4, continue. Otherwise, go to step 12.  Issue command to download	Note: Wait for the card to boot and return to the IMT bus.				
8	approved flash image.	INIT-FLASH:LOC=XXXX:CODE=APPR  (Where XXXX is the location of the LIME1 or LIMT1 SLIC card used in the previous command.)				
9	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 the card to boot and return to the IMT bus.					

10	Issue command to activate the	ACT-FLASH:LOC=XXXX
	flash image	(Where XXXX is the location of the LIME1 or LIMT1 SLIC card used in previous command.)
11	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.
	Command is displayed.	; 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. ;
12	Issue update bootloader	INIT-FLASH:LOC=XXXX:MODE=RPLCEBL:BITS=64
	command.	(Where $\mathbf{XXXX}$ is the location of the LIME1 or LIMT1 SLIC card used in previous command.)
13	Issue flash command to	INIT-FLASH:LOC=XXXX:CODE=APPR:GPL=BLSL932
	download target-release flash to the LIME1 or LIMT1 SLIC card.	(Where XXXX is the location used in previous command.)
14	Response to flash initialization is shown.	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.Y-YY.y.y FLASH Memory Download for card xxxx started. ;
		eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.Y-YY.y.y FLASH Memory Download for card xxxx completed. ;
	Verify UAM 0004 is displayed.	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x-YY.y.y * 8003.0004 * GPL SYSTEM BLSL932 Card is running non-activated GPL ;
		Note: Wait for the card to boot and return to the IMT bus.
15	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 previous command.)
16	Response to the activate	eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y FLASH Memory Activation for card XXXX Started.
╚	command is displayed.	; 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 allow command to	ALW-CARD:LOC=XXXX
	reload the LIME1 or LIMT1 SLIC card.	(Where XXXX is the location used in previous command.)
18	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. ;
19	Issue command to report GPL status.	REPT-STAT-GPL:LOC=XXXX
20	Response to GPL status command.	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y GPL Auditing ON
	Verify that LIME1 or LIMT1	GPL CARD RUNNING APPROVED TRIAL SS7HC69 XXXX XXX-XXX-XXX XXX-XXXX XXX-XXX BLSL932 YYY-YYY-YYY YYY-YYY YYY-YYY-YYY
	SLIC card is running BLSL932 GPL.	Command Completed.
21	Issue command to activate the links.	ACT-SLK:LOC=XXXX:LINK= <link name=""/>
		(Where XXXX is the location of LIME1 or LIMT1 card in Step 3.)
22	Issue command to report the status of the LIME1 or LIMT1 cards.	REPT-STAT-CARD:APPL=SS7ANSI OR REPT-STAT-CARD:APPL=CCS7ITU

23	Response to the status	eagles	tp YY-MM-DD h	h:mm:ss EST	PPP XX.x.x	.x.x-YY.y.y		
	command.	CARD	VERSION	TYPE	GPL	PST	SST	AST
		XXXX	XXX-XXX-XXX	LIME1	SS7I	HC IS-NR	Act	
	Verify that LIME1 or LIMT1	XXXX	XXX-XXX-XXX	LIME1	SS7I	HC IS-NR	Act	ive
	cards have returned to IS-NR.	Comman;	d Completed.					
24	If this is the last card listed in	eagles	tp YY-MM-DD h	h:mm:ss EST	PPP XX.x.x	.x.x-YY.y.y		
	Step 2, continue to next procedure. Otherwise, repeat Steps 3 - 23 for the next card listed in Step 2.	CARD XXXX XXXX	VERSION XXX-XXX-XXX XXX-XXX-XXX		GPL SS7HC SS7HC	PST IS-NR IS-NR	SST Active Active	AST 
	Note: Wait till this flashed LIME1 or LIMT1 card to complete reloading before proceeding to next step.	Comman ;	d Completed.					

Procedure 15: Migrate the E5ENET EPMB Cards Running VxWorks 6.4 GPL to VxWorks 6.9 GPL

E This procedure flashes the E5ENET EPMB cards to load new VxWorks 6.9 flash images. For SLIC card the IPSG or IPSG32 application, use the next procedure. Execute the below procedure for every E5ENE card present in the system.				
Check off ( $\sqrt{}$ ) each step as it is completed. Boxes have been provided for this purpose under each step number.	This procedure flashes the E5ENET EPMB cards to load new VxWorks 6.9 flash images. For SLIC cards running the IPSG or IPSG32 application, use the next procedure. Execute the below procedure for every E5ENET EPMB card present in the system.			
	Check off ( $$ ) each step as it is completed. Boxes have been provided for this purpose under each step number.			
SHOULD THIS PROCEDURE FAIL, CONTACT My Oracle Support AND ASK FOR UPGRADE ASSISTANCE.				
If the source release was 46.7.x and later, issue the E5ENET card status command.  Otherwise, continue to next procedure.  REPT-STAT-CARD: APPL=IPSG	REPT-STAT-CARD:APPL=IPSG			
2 Response to the card status eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y				
command is displayed. CARD VERSION TYPE GPL PST SST	AST			
XXXX XXX-XXX E5ENET IPSG IS-NR Active				
XXXX XXX-XXX ESENET IPSG IS-NR Active				
XXXX XXX-XXX E5ENET IPSG32 IS-NR Active  Command Completed.				
Command Completed.				
3 For each E5ENET-type card REPT-STAT-GPL:LOC=XXXX				
listed above, issue the GPL status command. (Where <i>XXXX</i> is the location of an E5ENET card slot listed in the previous step.)				
4 Response to the status command is displayed.  eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x-YY.yy.y  GPL CARD RUNNING APPROVED TRIAL				
IPSG XXXX XXX-XXX XXX-XXX XXX-XXXX-XXX	XX			
If the "ALM" indictor is displayed for the card's flash	XX			
image, continue. If card is running BLMCAP, continue. Otherwise repeat step 3 for the next E5ENET card in list.				
5 Issue command to cancel the DACT-SLK:LOC=XXXX:LINK= <link name=""/>				
links on the card.  (Where <i>XXXX</i> is the location of the E5ENET card used in the previous step.)				
6 Issue command to inhibit the INH-CARD: LOC=XXXX				
card.  (Where <i>XXXX</i> is the location of E5ENET card used in the previous command.)				
Response to the inhibit  eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y Card has been inhibited.				
command is displayed. ; eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y Command Completed.				
if the ALM indication was displayed in step 4, continue.  Otherwise, go to step 12.  Characteristics is in the ALM indication was displayed in step 4, continue.  Note: Wait for the card to boot and return to the IMT bus.				
8 Issue command to download approved flash image.  INIT-FLASH:LOC=XXXX:CODE=APPR:GPL=BLMCAP				
(Where <i>XXXX</i> is the location of the E5ENET card used in the previous command.)				

9	Response to flash initialization is shown.	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y FLASH Memory Download for card xxxx started.
	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 completed.
	If card is running BLDC32, go to step 10. Otherwise, continue.	; 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 the card to boot and return to the IMT bus.
10	Issue command to activate the	ACT-FLASH: LOC=XXXX
	flash image	(Where XXXX is the location of the E5ENET card used in the previous command.)
11	Response to the activate	eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.xYY.y.y FLASH Memory Activation for card XXXX Started.
	command is displayed.	l :
		eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y FLASH Activation for card XXXX Completed. ;
12	Issue flash command to	INIT-FLASH:LOC=XXXX:MODE=RPLCEBL:BITS=64
	download the bootloader image.	(Where <i>XXXX</i> is the location of the E5ENET card used in the previous command.)
13	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. ;
	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 Command Completed. ;
	then proceed to the next step.	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. ;
14	Download target-release flash	INIT-FLASH:LOC=XXXX:CODE=APPR:GPL=BLDC32
	to the E5ENET card.	(Where <i>XXXX</i> is the location used in the previous command.)
15	Response to flash initialization is shown.	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y FLASH Memory Download for card xxxx started.
H	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 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 the card to boot and return to the IMT bus.
16	Issue command to activate the	ACT-FLASH: loc=XXXX
	flash image.	(Where YYYV is the location of the ESENET and used in the previous command.)
17	Response to the activate	(Where XXXX's the location of the E5ENET card used in the previous command.)  eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
	command is displayed.	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 allow command to	ALW-CARD:LOC=XXXX
	reload the E5ENET card.	(Where <b>XXXX</b> is the location of the card used in the previous command.)
		(where we is the focation of the card used in the previous command.)

1						
19	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. ;				
20	Retrieve status of the E5ENET card if present in the system.	REPT-STAT-GPL:LOC=XXXX  (Where XXXX is the location of the card used in the previous command.)				
21	Response to GPL status command.	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x-YY.y.y GPL Auditing ON				
	Verify that E5ENET card is BLDC32 GPL.	GPL CARD RUNNING APPROVED TRIAL ISPG69 XXXX XXX-XXX-XXX XXX-XXX-XXX ISPG932 XXXX XXX-XXX-XXX XXX-XXX-XXX BLDC32 YYY-YYY-YYY YYY-YYY-YYY-YYY-YYY  Command Completed. :				
<sup>22</sup>	Issue command to activate the links.	ACT-SLK:LOC=XXXX:LINK= <link name=""/> (Where XXXX is the location of the E5ENET card in Step 5.)				
23	Issue command to report the status of the E5ENET cards.	REPT-STAT-CARD:APPL=IPSG				
24	Response to the status	eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.YY.y.y				
	command.	CARD VERSION TYPE GPL PST SST AST				
	Verify that E5ENET cards have returned to IS-NR.	XXXX XXX-XXX-XXX E5ENET IPSG IS-NR Active XXXX XXX-XXX-XXX E5ENET IPSG IS-NR Active XXXX XXX-XXX-XXX E5ENET IPSG32 IS-NR Active Command Completed.				
25	If this is the last card listed in Step 2, continue to next procedure. Otherwise, repeat Steps 3 - 24 for the next card listed in Step 2.  Note: Wait till this flashed E5ENET card to complete reloading before proceeding to next step.					

# Procedure 16: IPSG Application is Provisioned on SLIC Card, Migrate the Same to VxWorks6.9

S	Note: Run this procedure if the target release is 46.9.0 and later						
T E P		ne SLIC card running IPSG or IPSG32 application to Vxworks6.9 from VxWorks6.4. for every E5ENET application running on SLIC in the system.					
#	Check off ( $\sqrt{\ }$ ) each step as it is completed. Boxes have been provided for this purpose under each step number.						
	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 E5ENET card status command. Otherwise, continue to next procedure.	REPT-STAT-CARD:APPL=IPSG					
2	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 IPSG IS-NR Active XXXX XXX-XXX-XXX SLIC IPSG IS-NR Active XXXX XXX-XXX-XXX SLIC IPSG32 IS-NR Active Command Completed. ;					
3	For each card with type equal to E5ENET listed above, issue the GPL status command.	REPT-STAT-GPL:LOC=XXXX  (Where XXXX is the location of an E5ENET SLIC card slot listed in the previous step.)					
4	Response to the GPL status command is displayed.	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x-YY.yy.y  GPL CARD RUNNING APPROVED TRIAL  IPSG XXXX XXX-XXX-XXX XXX-XXX-XXX  IPSG32 XXXX XXX-XXX-XXX XXX-XXX-XXX  XXX-XXX-X					
	If the ALM indictor is displayed for the card's flash image, continue. If card is running BLSLC32, continue.	BLSLC32 ZZZ-ZZZ-ZZZ ALM YYY-YYY-YYY YYY-YYYY Command Completed.					
5	Issue command to cancel the links on the card.	DACT-SLK:LOC=XXXX:LINK= <link name=""/> (Where XXXX is the location of an E5ENET SLIC card used in the previous step.)					
6	Issue command to inhibit the card.	INH-CARD: LOC=XXXX (Where XXXX is the location of an E5ENET SLIC card.)					
7	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. ;					
	If the ALM indication was displayed in step 4, continue.	<pre>eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y Command Completed. ;</pre>					
8	Otherwise, go to step 12.  Issue command to download	Note: Wait for the card to boot and return to the IMT bus.					
ů	approved flash image.	INIT-FLASH: LOC=XXXX: CODE=APPR  (Where XXXX is the location of the E5ENET SLIC card used in the previous command.)					
9	Response to flash initialization is shown.	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. ;					
H	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 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 the card to boot and return to the IMT bus.					

10	Issue command to activate the	ACT-FLASH: LOC=XXXX
	flash image	(Where XXXX is the location of the E5ENET SLIC card used in previous command.)
111	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.
	1 3	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. ;
12	Issue update bootloader command.	INIT-FLASH:LOC=XXXX:MODE=RPLCEBL:BITS=64
╚		(Where XXXX is the location of the E5ENET SLIC card used in previous command.)
13	Issue flash command to	INIT-FLASH:LOC=XXXX:CODE=APPR:GPL=BLSL932
Ш	download target-release flash to the E5ENET SLIC card.	(Where XXXX is the location used in the previous command.)
14	Response to flash initialization is shown.	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. :
	Verify UAM 0004 is displayed.	éaglestp 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 the card to boot and return to the IMT bus.
15	Issue command to activate the flash image.	ACT-FLASH: LOC=XXXX
		(Where XXXX is the location of the E5ENET SLIC card used in previous command.)
16	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 allow command to	ALW-CARD:LOC=XXXX
	reload the E5ENET SLIC card.	(Where XXXX is the location used in previous command.)
18	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. ;
19	Issue command to report GPL status.	REPT-STAT-GPL:LOC=XXXX
20	Response to GPL status command.	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x-YY.y.y GPL Auditing ON
	Verify that E5ENET SLIC card is running BLSL932 GPL.	GPL CARD RUNNING APPROVED TRIAL IPSG69 XXXX XXX-XXX-XXX XXX-XXX-XXX IPSG932 XXXX XXX-XXX-XXX XXX-XXX-XXX BLSL932 YYY-YYY-YYY YYY-YYY-YYY
		Command Completed.
21	Issue command to activate the links.	ACT-SLK:LOC=XXXX:LINK= <link name=""/>
		(Where XXXX is the location of E5ENET card in Step 5.)
22	Issue command to report the status of the E5ENET cards.	REPT-STAT-CARD:APPL=IPSG

23	Response to the status command.  Verify that E5ENET 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 SLIC IPSG IS-NR Active XXXX XXX-XXX-XXX SLIC IPSG IS-NR Active XXXX XXX-XXX-XXX SLIC IPSG32 IS-NR Active Command Completed. ;
24	If this is the last card listed in Step 2, continue to next procedure. Otherwise, repeat Steps 3 - 23 for the next card listed in Step 2.	
	Note: Wait till this flashed E5ENET card to complete reloading before proceeding to next step.	

Procedure 17: Migrate the STC E5-EPMB Cards Running VxWorks 6.4 GPL to VxWorks 6.9 GPL

S	Note: Run this procedure if the target release is 46.9.0 and later						
T	Total this procedure if the target release is 1612.0 and later						
E P #	This procedure flashes the STC E5-EPMB cards to load new VxWorks 6.9 flash images. For SLIC cards running the ERTHC application, use the next procedure. Execute the below procedure for every STC E5-EPMB card present in the system.						
	Check off ( $\sqrt{}$ ) each step as it is completed. Boxes have been provided for this purpose under each step number.						
	SHOULD THIS PROCEDURE FAIL	., CONTACT My Oracle Support AND ASK FOR UPGRADE ASSISTANCE.					
	If the source release was 46.7.x and later, issue the STC card status command. Otherwise, continue to next procedure.	REPT-STAT-CARD:APPL=ERTHC					
2	Response to the card status	eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y					
ΙП	command is displayed.	CARD VERSION TYPE GPL PST SST AST					
		XXXX XXX-XXX STC ERTHC IS-NR Active					
		XXXX XXX-XXX STC ERTHC IS-NR Active					
		Command Completed.					
3	For each STC-type card listed	REPT-STAT-GPL:LOC=XXXX					
	above, issue the GPL status command.	(Where <i>XXXX</i> is the location of an STC card slot listed in the previous step.)					
4	Response to the status	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x-YY.yy.y					
	command is displayed.	GPL CARD RUNNING APPROVED TRIAL					
		ERTHC XXXX XXX-XXX-XXX XXX-XXX-XXX					
	If the "ALM" indictor is displayed for the card's flash image, continue. If card is running BLMCAP, continue. Otherwise repeat step 3 for the next STC card in list.	ZZZZZZ ZZZ-ZZZ-ZZZ ALM YYY-YYY-YYY YYY-YYY Command Completed.					
5	Issue command to cancel the	DACT-SLK:LOC=XXXX:LINK= <link name=""/>					
	links on the card.	(Where <i>XXXX</i> is the location of the E5ENET card used in the previous step.)					
6	Issue command to inhibit the card.	INH-CARD:LOC=XXXX					
		(Where <i>XXXX</i> is the location of the STC card used in the previous command.)					
7	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. ;					
	If the AIM in diagram	eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y Command Completed. ;					
	If the ALM indication was displayed in step 4, continue. Otherwise, go to step 12.	Note: Wait for the card to boot and return to the IMT bus.					
8	Issue command to download approved flash image.	INIT-FLASH:LOC=XXXX:CODE=APPR:GPL=BLMCAP					
		(Where <i>XXXX</i> is the location of the STC card used in the previous command.)					
9	Response to flash initialization is shown.	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y FLASH Memory Download for card xxxx started. ;					
		I ·					

	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 completed. :
	If card is running BLDC32, go to step 10. Otherwise, continue.	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 ;
10	T to do a d	Note: Wait for the card to boot and return to the IMT bus.  ACT-FLASH: LOC=XXXX
	Issue command to activate the flash image	(Where XXXX is the location of the STC card used in the previous command.)
11	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.
12	Issue flash command to	INIT-FLASH:LOC=XXXX:MODE=RPLCEBL:BITS=64
	download the bootloader image.	(Where <i>XXXX</i> is the location of the STC card used in the previous command.)
13	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. ;
	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 Command Completed. ;
	and proceed to the new step.	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.
14	Download target-release flash	INIT-FLASH:LOC=XXXX:CODE=APPR:GPL=BLDC32
Ш	to the STC card.	(Where <i>XXXX</i> is the location used in the previous command.)
15	Response to flash initialization is shown.	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y FLASH Memory Download for card xxxx started. ;
	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 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: Weit for the eard to beet and return to the IMT bus
16	Issue command to activate the	Note: Wait for the card to boot and return to the IMT bus.  ACT-FLASH: Toc=XXXX
	flash image.	(Where XXXX is the location of the STC card used in the previous command.)
17	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. ;
18	Issue the allow command to reload the STC card.	ALW-CARD: LOC=XXXX
	Teloau tile STC card.	(Where XXX is the location of the card used in the previous command.)
19	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. ;

20	Retrieve status of the STC card	REPT-S	TAT-GPL:LC	C=XXXX				
	if present in the system.	(Where <i>XXXX</i> is the location of the card used in the previous command.)						
21	Response to GPL status command.		eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x-YY.y.y GPL Auditing ON					
	Verify that STC card is BLDC32 GPL.	GPL ERTHC69 BLDC32		RUNNIN XXX-XX YYY-YYY	X-XXX	APPROVED XXX-XXX-XX YYY-YYY YYY	TRIAL XX XXX-XXX-XX Y-YYY-YYY	хх
		Command .	Completed.					
22	Issue command to activate the	ACT-SL	K:LOC=XXXX	K:LINK=	LINK NAM	E>		
	links.	(Where X	XXX is the locat	ion of the S	ΓC card in Ste <sub>l</sub>	5.)		
23	Issue command to report the status of the STC cards.	REPT-S	TAT-CARD:	APPL=ER	НС			
24	Response to the status command.	eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y						
		CARD	VERSION	TYPE	GPL	PST	SST	AST
	Verify that STC cards have	xxxx	XXX-XXX-XXX	STC	ERTHC	IS-NR	Active	
	returned to IS-NR.	xxxx	XXX-XXX-XXX	STC	ERTHC	IS-NR	Active	
		Command ;	Completed.					
25	If this is the last card listed in Step 2, continue to next procedure. Otherwise, repeat Steps 3 - 24 for the next card listed in Step 2.  Note: Wait till this flashed STC card to complete reloading before proceeding to next step.							

Procedure 18: ERTHC Application is Provisioned on SLIC Card, Migrate the Same to VxWorks6.9

S T	Note: Run this procedure if th	e target release is 46.9.0 and later				
E P		This procedure is to migrate the SLIC card running ERTHC application to Vxworks6.9 from VxWorks6.4. Execute the below procedure for every STC application running on SLIC in the system.				
#	Check off ( $$ ) each step as it is completed. Boxes have been provided for this purpose under each step number.					
	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 STC card status command. Otherwise, continue to next procedure.	REPT-STAT-CARD: APPL=EROUTE				
2	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 ERTHC IS-NR Active XXXX XXX-XXX-XXX SLIC ERTHC IS-NR Active  Command Completed.				
3	For each card with type equal to STC listed above, issue the GPL status command.	REPT-STAT-GPL:LOC=XXXX  (Where XXXX is the location of an STC SLIC card slot listed in the previous step.)				
4	Response to the GPL status command is displayed.	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x-YY.yy.y  GPL CARD RUNNING APPROVED TRIAL				
	If the ALM indictor is displayed for the card's flash image, continue. If card is running BLSLC32, continue.	ERTHC XXXX XXX-XXX-XXX XXX-XXX-XXX XXX-XXXX  BLSLC32 ZZZ-ZZZ-ZZZ ALM YYY-YYY-YYY YYY-YYY  Command Completed.				
5	Issue command to cancel the links on the card.	DACT-SLK:LOC=XXXX:LINK= <link name=""/> (Where XXXX is the location of an STC SLIC card used in the previous step.)				
6	Issue command to inhibit the card.	INH-CARD: LOC=XXXX  (Where XXXX is the location of an STC SLIC card.)				
7	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. ;				
8	If the ALM indication was displayed in step 4, continue. Otherwise, go to step 12. Issue command to download	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.  INIT-FLASH:LOC=XXXX:CODE=APPR				
9	approved flash image.	(Where XXXX is the location of the STC card used in the previous command.)  eaglestp YY-MM-DD_hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y Upg Phase 3				
	Response to flash initialization is shown.	FLASH Memory Download for card xxxx started.				
	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 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 ;				

		N. Wite a leaf of Dame
		Note: Wait for the card to boot and return to the IMT bus.
10	Issue command to activate the	ACT-FLASH:LOC=XXXX
	flash image	(Where XXXX is the location of the STC card used in previous command.)
11	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.
	commune is displayed.	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.
12	Issue update bootloader	INIT-FLASH:LOC=XXXX:MODE=RPLCEBL:BITS=64
	command.	(Where XXXX is the location of the STC SLIC card used in previous command.)
13	Issue flash command to	INIT-FLASH:LOC=XXXX:CODE=APPR:GPL=BLSL932
	download target-release flash to the STC SLIC card.	(Where XXXX is the location used in the previous command.)
14	Response to flash initialization is shown.	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.
	Verify UAM 0004 is displayed.	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 the card to boot and return to the IMT bus.
15	Issue command to activate the flash image.	ACT-FLASH: LOC=XXXX
		(Where XXXX is the location of the STC SLIC card used in previous command.)
16	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 allow command to	ÅLW-CARD:LOC=XXXX
	reload the STC card.	(Where XXXX is the location used in previous command.)
18	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. ;
19	Issue command to report GPL status.	REPT-STAT-GPL:LOC=XXXX
20	Response to GPL status	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y GPL Auditing ON
╙	command.  Verify that STC card is running	GPL CARD RUNNING APPROVED TRIAL ERTHC69 XXXX XXX-XXX-XXX XXX-XXX
	BLSL932 GPL.	BLSL932 YYY-YYY YYY-YYY YYY-YYY  Command Completed.
21	Issue command to activate the	; ACT-SLK:LOC=XXXX:LINK= <link name=""/>
	links.	ACT SERVEDO-VOVALETING NAME/
		(Where XXXX is the location of STC card in Step 5.)
22	Issue command to report the status of the STC cards.	REPT-STAT-CARD: APPL=ERTHC
23	Response to the status	eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
	command.	CARD VERSION TYPE GPL PST SST AST
		XXXX XXX-XXX-XXX SLIC ERTHC IS-NR Active

	Verify that STC cards have returned to IS-NR.	Commar	XXX-XXX-XXX	SLIC	ERTHC	IS-NR	Active	
24	If this is the last card listed in Step 2, continue to next procedure. Otherwise, repeat Steps 3 - 23 for the next card listed in Step 2.  Note: Wait till this flashed STC card to complete reloading before proceeding to next step.							

# Procedure 19: Verify the latest boot loader on card and update if older.

S	Note: Run this procedure if the target release is 46.8.0 and later				
T E P #	This procedure is to identify and update the bootloader of all network cards.  Check off ( √ ) each step as it is completed. Boxes have been provided for this purpose under each step number.				
	SHOULD THIS PROCEDURE FAIL	., CONTACT My Oracle Support AND ASK FOR UPGRADE ASSISTANCE.			
1	Issue command to check bootloader on a card.	REPT-STAT-CARD:LOC=XXXX:MODE=FULL			
2	Response to the card status command is displayed.	(Where XXXX is the location of the card.)   eaglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x.x.x.x-YY.y.y upg Phase 3			
3	For SLIC cards, the Bootloader VERSION =2 and for EPM-B cards the Bootloader VERSION =4 is the latest boot loader.	If it's not the case, then proceed to the next step.			
4	Issue command to inhibit the card.	INH-CARD: LOC=XXXX  (Where XXXX is the location of the card.)			
5	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.
6	Issue update bootloader	INIT-FLASH:LOC=XXXX:MODE=RPLCEBL:BITS=64
	command.	(where XXXX is the location of the card used in previous command.)
7	Issue the command to allow card.	ALW-CARD:LOC=XXXX Where XXXX is the location for the card.
8	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. ;
		<pre>eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y Command Completed. ;</pre>

# **Procedure 20: Upgrading Spare MASPs**

S T E	This procedure describes how to upgrade your spare MASPsto the target release.  Check off ( √ ) each step as it is completed. Boxes have been provided for this purpose under each step number.  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. ;				
3	Issue the command to inhibit standby MASP.	INH-CARD: LOC=XXXX  (Where XXXX is the location for the Standby MASP in the previous steps.)				
4	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.				
5	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.				
7	Issue command to report the GPLs running on the card location.  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.	REPT-STAT-GPL:LOC=XXXX  (Where XXXX is the location for the Standby MASP recorded Step 2.)  eaglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x.x.x-YY.y.y GPL CARD RUNNING APPROVED TRIAL GGGGGG XXXX BLMCAP YYY-YYY-YYY ALM XXX-XXX-XXX YYY-YYY-YYY  Command Completed.;				
8	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.)				
9	Response to flash initialization is shown.	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				

	Verify UAM 0004 is	FLASH Memory Download for card xxxx completed.
<b>│</b> └	displayed.	; eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x-YY.y.y
	If the target release is 46.6 or	8003.0004 * GPL SYSTEM ZZZZZZZ Card is running non-activated GPL
	higher and the card is running BLMCAP, continue.	;
	Otherwise, go to step 18.	Note: Wait for card to boot and return to the IMT bus.
10	Issu command to activate the	ACT-FLASH: loc=XXXX
11	flash on standby MASP	(Where XXXX is the location of the standby MASP used in the previous command)
	Response to the activate	eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.v.v
	command is displayed.	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.
12	Issue flash command to download the bootloader image.	NIT-FLASH:LOC=XXXX:MODE=RPLCEBL:BITS=32
		(Where XXXX is the location of the standby MASP slot used in the previous command.)
13	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.
14	Issue command to download	INIT-FLASH:LOC=XXXX:CODE=APPR:GPL=BLDC32
	approved BLDC32 flash image.	(Where XXXX is the location used in the previous command)
15	Response to flash initialization is shown.	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y FLASH Memory Download for card xxxx started. ;
	W 'C WANGOOM'	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y FLASH Memory Download for card xxxx completed.
_	Verify UAM 0004 is displayed.	; eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y 8003.0004 * GPL SYSTEM <b>BLDC32</b> Card is running non-activated GPL
		;  Note: Wait for card to boot and return to the IMT bus.
16	Retrieve the GPLs running on the card location.	REPT-STAT-GPL:LOC=XXXX
	the card location.	(Where XXXX is the location used in the previous command)
17	Response to the GPL status command is displayed.	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 XXX-XXX-XXX
"	Verify that card is running BLDC32 GPL.	Command Completed.
18	Activate the flash on standby	ACT-FLASH: Toc=XXXX
	MASP	(Where XXXX is the location of the standby MASP used in the previous command)
19	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 <i>XXXX</i> 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. ;
20	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.
21	Issue the command to allow card.	ALW-CARD: LOC=XXXX
	caru.	Where XXXX is the location for the Standby MASP.
22	Response to the command is displayed.	eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x-YY.y.y Card has been allowed.

		;
		<pre>eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y Command Completed. ;</pre>
23	Issue the command to display MASP status.	REPT-STAT-CARD: APPL=OAM
24	Response to the card status command is displayed.  Verify the MASP cards are running the same version of the OAM application GPL.  Remove the target release	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 TTTTT GGGG IS-NR ACTIVE 1115 XXX-XXX-XXX TTTTT GGGG IS-NR STANDBY Command Completed. ;
	USB from the drive slot on the standby E5-MASP.	
26	Issue the command to display security log status.	REPT-STAT-SECULOG
27	Response to the command is displayed.	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. ;
	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 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
		13:39:39 13:43:10 14:07:59
27	Issue the command to copy the security log from the standby disk to FTA area.	COPY-SECULOG:SLOG=STB:DFILE=UPGP15.SPR
28	Response to copy seculog command is displayed.	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 ;
	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-YY.y.y 0468.0177 SECULOG 111X Security log exception cleared ;
29	Issue the command to display the FTA directory.	DISP-FTA-DIR
30	Response to display directory command is displayed.	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
31	If there are any files that need to be saved, they need to be removed via a file transfer.  Issue the command to delete	FILENAME YYMMDDS.log YYMMDDa.log M60_lnp.csv 3 File(s) 21093376 bytes free  FILENGTH LAST MODIFIED LBA 99-01-03 10:18:44 388769 99-01-03 10:19:20 393770 99-01-03 13:10:38 398771 3 File(s) 21093376 bytes free
	ALL files in the transfer area.	
32	Response to the delete command is displayed.	<pre>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. ;</pre>
33	Repeat Steps 27-28.	
34	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)
	•	(

35	Response to the copy-disk command is displayed.  Note: user terminal port may be automatically logged out.  Wait for the card reload to complete.	<pre>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 ;</pre>
36	If the disk copy fails repeat steps 34-35.	<ol> <li>Repeat Steps 34-35.</li> <li>If second attempt fails, contact My Oracle Support.</li> </ol>
37	If the measurements platform is enabled then go next procedure. Otherwise, if Procedure 10 Steps 7 & 8 were executed, issue the command to turn the measurements collection on.	CHG-MEAS: COLLECT=ON
38	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

S	This procedure describe	es how to upgrade your spare HIPR2 cards.	
T E	Check off ( $$ ) each step as in	t is completed. Boxes have been provided for this purpose under each step number.	
P	SHOULD THIS PROCEDURE FAIL, CONTACT My Oracle Support AND ASK FOR UPGRADE ASSISTANCE.		
#	SHOULD THIS PROCEDURE FAIL, CONTACT MY Oracle Support AND ASK FOR UPGRADE ASSISTANCE.		
1	Issue the command to	rept-stat-mux	
	display imt bus status.		
2	Response to the MUX status command is	eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y CARD TYPE PST SST AST BITRATE	
ш	displayed.	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.	
3	Issue the command to display imt bus status.	rept-stat-imt	
	display filit bus status.		
4	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 rept-stat-imt	
	command is displayed.	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	
	Verify that both imt buses are IS-NR.	A IS-NR Active ALARM STATUS = No Alarms.	
	If either bus is not IS-NR	IMT PST SST AST	
	Stop this procedure and contact My Oracle	B IS-NR Active ALARM STATUS = No Alarms.	
	Support.	Command Completed. ;	
5	Issue the command to	init-mux:bus=b:hs=no	
	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.		
6	Otherwise go to step 11. Response to the above	eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y	
	command is displayed.	init-mux:bus=b:hs=no Command entered at terminal #10.	
		;	
		<pre>eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y Command Completed. ;</pre>	
7	Issue the command to	rept-stat-mux	
	display imt bus status.		
8	Response to the MUX	eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y CARD TYPE PST SST AST BITRATE	
	status command is displayed.	1109 HIPR2 IS-NR Active HIGH 1110 HIPR2 IS-NR Active LOW	
		1209 HIPR2 IS-NR ACTIVE HIGH	
		1309 HIPR2 IS-NR ACTIVE HIGH	
		1310 HIPR2 IS-NR Active LOW Command Completed.	
		;	

9	Issue the command to display imt bus status.	rept-stat-imt
10	Response to the card status command is displayed.	<pre>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. ;</pre>
	Verify that both imt buses are IS-NR.	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.
	If either bus is not IS-NR Stop this procedure and contact My Oracle Support.	IMT PST SST AST B IS-NR Active ALARM STATUS = No Alarms. Command Completed. ;
11	Issue the command to inhibit IMT bus-B.	inh-imt:bus=b
12	Response to the command is displayed.	<pre>eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y Inhibit IMT Bus B command issued ;</pre>
		eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y 8687.0098
13	Swap spare HIPR2 cards with those on the IMT B- bus. (i.e. location 1110, 1210)	
14	Issue the command to allow IMT bus-B.	alw-imt:bus=b
15	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
16	Issue the command to display imt bus status.	rept-stat-mux
17	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 HIGH         1109 HIPR2 IS-NR Active HIGH         1210 HIPR2 IS-NR Active LOW         1209 HIPR2 IS-NR Active HIGH         1210 HIPR2 IS-NR Active LOW         1309 HIPR2 IS-NR Active LOW         1310 HIPR2 IS-NR Active LOW         Command Completed.
18	Issue the command to display imt bus status.	rept-stat-imt

	10 0	part IIII K2 cards
19	Response to the card status command is displayed.	<pre>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. ;</pre>
	Verify that both imt buses are IS-NR.  If either bus is not IS-NR Stop this procedure and contact My Oracle	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.
	Support.	Command Completed.
20	Issue the card status command to identify the MUX cards in the system.	rept-stat-gpl:gpl=hipr2
21	Response to the command is displayed.	eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y GPL Auditing ON
	Record the CARD locations for all MUX cards in the system not running the APPROVED version of the GPL.	APPL CARD RUNNING APPROVED TRIAL HIPR2 XX09 XXX-XXX-XXX XXX-XXX-XXX XXX-XXX-XXX HIPR2 XX10 YYY-YYYY ALM XXX-XXX-XXX XXX-XXX-XXX HIPR2 XX10 YYY-YYYY ALM XXX-XXX-XXX XXX-XXX-XXX HIPR2 XX10 YYY-YYYY ALM XXX-XXX-XXX XXX-XXX-XXX HIPR2 XX09 XXX-XXX-XXX XXX-XXX-XXX HIPR2 XX10 YYY-YYY-YYY ALM XXX-XXX-XXX XXX-XXX-XXX HIPR2 XX10 YYY-YYY-YYY ALM XXX-XXX-XXX XXX-XXX-XXX HIPR2 XX10 YYY-YYY-YYY ALM XXX-XXX-XXX XXX-XXX-XXX Command Completed.
22	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.)  Use the following command at the time of flashing only 1 card: init-flash:loc=xx10:code=appr:gpl=hipr2
23	Response to the flash initialization is shown.	<pre>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. ;</pre>
		<pre>eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y FLASH Memory Download for card XX10 Started. ;</pre>
		eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y FLASH Memory Download for card XX10 Completed. ;
24	Enter the command to initialize the current bus.	init-mux:bus=b
25	Response to the initialization command is displayed.	eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.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
26	Issue the command to display imt bus status.	rept-stat-mux

	10 0	pare in it was cares
27	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 1310 HIPR2 IS-NR ACTIVE HIGH 1310 HIPR2 IS-NR ACTIVE HIGH 1310 HIPR2 IS-NR ACTIVE HIGH Command Completed.
28	Issue the command to display imt bus status.	rept-stat-imt
29	Response to the card status command is displayed.	<pre>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. ;</pre>
	Verify that both imt buses are IS-NR.	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.
	If either bus is not IS-NR Stop this procedure and contact My Oracle Support.	<pre>IMT PST SST AST B IS-NR Active ALARM STATUS = No Alarms. Command Completed. ;</pre>
30	Issue the command to activate the flash on a MUX card flashed in step 22.	act-flash:sloc=1110:eloc=xx10:gpl=hipr2 (Where XX is a last shelf number with spare MUX being flashed)  Use the following command at the time of flashing only 1 card: act-flash:loc=xx10:gpl=hipr2
31	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.
32	Issue the command to display the HIPR2 card GPL status.	rept-stat-gpl:gpl=hipr2
33	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 HIPR2 XX10 XXX-XXX-XXX XXX-XXX-XXX HIPR2 XX09 XXX-XXX-XXX XXX-XXX-XXX HIPR2 XX10 XXX-XXX-XXX XXX-XXX-XXX HIPR2 XX10 XXX-XXX-XXX XXX-XXX-XXX HIPR2 XX09 XXX-XXX-XXX XXX-XXX-XXX HIPR2 XX10 XXX-XXX-XXX XXX-XXX-XXX Command Completed.

34	Repeat steps 1-33 until all	
	spare HIPR2 cards have been flashed.	

### **Procedure 22: Verifying All Databases**

G	7 Di		
S	This procedure verifies the databases on the fixed disk and the removable media.		
E	Check off $()$ each step	as it is completed. Boxes have been provided for this purpose under each step number.	
<b>P</b> #	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	
2	Response to the command is displayed.	eaglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x.x.x-YY.y.y  DATABASE STATUS: >> OK <<	
	Look in the columns labeled 'C,' 'T', and 'LEVEL' output by this command.	FD BKUP Y YYY-MM-DD hh:mm:ss TTTT Y YYY YY-MM-DD hh:mm:ss TTTT FD CRNT Y XXX MCAP 1113 MCAP 1115	
	Verify entries in column 'C' show 'Y', which	RD BKUP Y YYY YY-MM-DD hh:mm:ss TTTT USB BKP	
-	indicates coherence.	CARD/APPL LOC C T LEVEL TIME LAST UPDATE EXCEPTION	
	Verify entries in column 'T' show 'N' (except the E5-MDAL), which indicates that the database is not in transition.	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     -       VSCCP     1107     Y     N     XXX     06-04-19     12:13:02     -       VSCCP     1111     Y     N     XXX     06-04-19     12:13:02     -	
	Verify all entries in the database LEVEL column are the same. LEVEL is a value, which varies depending on the	OAM-RW 1113	
	system.	E5MDAL 1117 Y - YYY 06-04-18 16:11:18 DIFF LEVEL EPAP A ( ACTV )	
	If the STDBY databases	C BIRTHDATE LEVEL EXCEPTION	
	are not coherent or not at the correct level, repeat Procedure 3, step 8.	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	
	Verify that the MPS databases are coherent.	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	
3	When the command completes, remove the target-release RMD from the drive slot.	Store the RMD in a safe location.	

### **Procedure 23: Session 2 Completion**

~			
S	This procedure resumes	This procedure resumes measurement collection.	
T			
E	Check off (1) each sten	as it is completed. Boxes have been provided for this purpose under each step number.	
P	Check off (v) each step	as it is completed. Boxes have been provided for this purpose under each step number.	
_			
#	SHOULD THIS PROCEDUI	RE FAIL, CONTACT My Oracle Support AND ASK FOR UPGRADE ASSISTANCE.	
1	Issue status command for	REPT-STAT-TRBL	
	troubles.		
2	Response to command is	eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y	
	displayed.	SEON UAM AL DEVICE ELEMENT TROUBLE TEXT	
	displayed.	0329.0048 * TERMINAL 15 Terminal failed	
		0330.0048 * TERMINAL 16 Terminal failed	
	ISTIAM 0002 :	0006.0002 * GPL SYSTEM XXXX Card is not running approved GPL	
	If UAM 0002 is present where <i>XXXX</i> is a flash	0331.0176 * SECULOG 1116 Stdby security log-upload required	
ш		0332.0308 *C SYSTEM Node isolated due to SLK failures	
	GPL (i.e. BLMCAP or	Command Completed.	
	BLIXP), record it below:	,	
	If any GPL is recorded		
	contact My Oracle Support		
	and report the GPL alarm.		

→ This concludes SESSION TWO ←

#### 6. RECOVERY PROCEDURES

Before executing any of these procedures, contact My Oracle Support at Oracle Support Contacts Global Directory [see Appendix I.] 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.

#### 6.1 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 <a href="My Oracle Support">My Oracle Support</a> at Oracle Support Contacts Global Directory

#### 6.2 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 Procedure 30 through Procedure 34.

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 (Section 6.2 procedure 30 through procedure 34)
- Follow the normal recovery procedure A, B or C

#### Procedure 24: Revert IPS (ENET-B) cards on VxWorks6.4

S T E P	Execute the below procedure Check off ( $$ ) each step as it is con	ne IPSM cards to VxWorks6.4. e for every IPSM card present in the system.  In pleted. Boxes have been provided for this purpose under each step number.  ILL, 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
2	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. ;
3	For each card listed above, issue the GPL status commend.	REPT-STAT-GPL:LOC=XXXX (Where XXXX is the location of the IPSM card)
4	Response to the GPL status command is displayed.  If card is running BLDC32, go to next step.	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-X
	go to next step. Otherwise repeat Step 3 for	· ·

	next IPSM card listed in	
	Step 2.	
5	Issue command to inhibit the	INH-CARD:LOC=XXXX
	card.	(MI WWW. 4 1 4 C4 IDOM 1 1 1 1 1 1)
		(Where <i>XXXX</i> is the location of the IPSM card use in previous command.)
6	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. ;
		<pre>eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.xYY.y.y Command Completed. ;</pre>
		Note: Wait for the card to boot and return to the IMT bus.
7	Download target-release	INIT-FLASH:LOC=XXXX:CODE=APPR:GPL=BLMCAP
	flash to the IPSM card.	(Where <i>XXXX</i> is the location used in the previous command)
8	Response to flash initialization is shown.	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y FLASH Memory Download for card xxxx started. ;
	Verify UAM 0004 is	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x-YY.y.y FLASH Memory Download for card xxxx completed.
	displayed.	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 ;
		<b>Note:</b> Wait for card to boot and return to the IMT bus.
9	Issue command to activate the flash image,	ACT-FLASH: loc=XXXX
10	Response to the activate	(Where XXXX is the location of the IPSM card used in the previous command)  eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
	command is displayed.	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 allow command to	ALW-CARD:LOC=XXXX
	reload the IPSM card	(Where XXXX is the location of the IPSM card used in the previous command)
12	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. ;
13	Issue command to report the GPLs running on the IPSM	REPT-STAT-GPL:LOC=XXXX
	card.	(Where XXXX is the location of the IPSM card used in the previous command)
14	Response to GPL status	
	command.	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.YY.y.y GPL Auditing ON
<b> </b>		GPL CARD RUNNING APPROVED TRIAL IPSHC XXXX XXX-XXX-XXX XXX-XXX XXX-XXX
	Verify that IPSM card is	BLMCAP YYY-YYY YYY-YYY YYY-YYY
	running BLMCAP flash GPL.	Command Completed.
15	If this is the last card listed in Step 2, continue to next procedure. Otherwise, repeat Steps 3 - 14 for the next card listed in Step 2.	<b>Note:</b> Wait till this flashed IPSM card to complete reloading before proceeding to next step.

Procedure 25: Revert IPSM application running on SLIC to VxWorks6.4

S	This procedure reverts the SI	LIC card running the IPS application to VxWorks6.4.
T	Execute the below procedure for every SLIC card with IPS application present in the system.	
E P	Check off ( $\sqrt{\ }$ ) each step as it is con	npleted. Boxes have been provided for this purpose under each step number.
#	SHOULD THIS PROCEDURE FA	IL, 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.
3	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 the IPSM/SLIC card slot listed in previous step.)
4	Response to the card status command is displayed.  If card is running BLSL932, go to next step Otherwise repeat Step 3 for next SLIC card listed in Step	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-X
5	Issue command to inhibit the card.	INH-CARD: LOC=XXXX  (Where XXXX is the location of the IPSM/SLIC card)
6	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.
7	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)
8	Response to flash initialization is shown.  Verify UAM 0004 is displayed.	<pre>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 ;</pre>
		Note: Wait for card to boot and return to the IMT bus.

Procedure 25: Revert IPSM application running on SLIC to VxWorks6.4

9	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.)
10	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. ;
11	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.)
12	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. ;
13	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.)
14	Response to GPL status command.	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y GPL Auditing ON
	Verify that IPSM/SLIC card is running BLSLC32 flash GPL.	GPL CARD RUNNING APPROVED TRIAL IPSHC XXXX XXX-XXX-XXX XXX-XXX XXX-XXX-XXX BLSLC32 YYY-YYY XXX-XXX YYY-YYY-YYY  Command Completed. ;
15	If this is last card listed in Step 2, continue to next procedure. Otherwise, repeat Steps 3-Step 14 for the next card listed in Step2.	<b>Note:</b> Wait till this flashed IPSM/SLIC card to complete reloading before proceeding to next step.

#### Procedure 26: Revert MCPM cards on VxWorks6.4

S	This procedure is to revert the MCPM cards to VxWorks6.4.		
T E		e for every MCPM card present in the system.	
<b>P</b> #	Check off ( √ ) each step as it is completed. Boxes have been provided for this purpose under each step number.		
		IL, CONTACT My Oracle Support AND ASK FOR UPGRADE ASSISTANCE.	
	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-XXXX MCPM MCPHC IS-NR Active XXXX XXX-XXX-XXX MCPM MCPHC IS-NR Active Command Completed. ;	
3	For each card listed above, issue the GPL status commend.	REPT-STAT-GPL:LOC=XXXX (Where XXXX is the location of the MCPM card)	
4	Response to the card status command is displayed.	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-X	
	If card is running BLDC32, go to next step. Otherwise repeat Step 3 for next MCPM card listed in step 2.	Command Completed. ;	
5	Issue command to inhibit the card.	INH-CARD: LOC=XXXX  (Where XXXX is the location of the MCP card use in previous command.)	
6	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.	
7	Download target-release	INIT-FLASH:LOC=XXXX:CODE=APPR:GPL=BLMCAP	
	flash to the MCPM card.	(Where <i>XXXX</i> is the location used in the previous command)	
8 🗆	Response to flash initialization is shown.  Verify UAM 0004 is	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.	
	displayed.	<pre>eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y</pre>	
9	Issue command to activate the flash image.	ACT-FLASH: loc=XXXX	
	the masti image.	(Where XXXX is the location of the MCPM card used in the previous command)	

#### Procedure 26: Revert MCPM cards on VxWorks6.4

10	Response to the activate command is displayed.	<pre>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. ;</pre>
11	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)
12	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. ;
13	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.	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y GPL Auditing ON
	Verify that MCPM card is running BLMCAP flash GPL.	GPL CARD RUNNING APPROVED TRIAL MCPHC XXXX XXX-XXX XXX-XXX XXX-XXX BLMCAP YYY-YYY XXX-XXX-XXX YYY-YYY-YYY  Command Completed. ;
15	If this is the last card listed in Step 2, continue to next procedure.  Otherwise, repeat Steps 3 - 14 for the next card listed in Step 2.	<b>Note:</b> Wait till this flashed MCPM card to complete reloading before proceeding to next step.

# Procedure 27: Revert MCPM application running on SLIC card to VxWorks6.4

S T		e SLIC card with MCPM application to VxWorks6.4. e for every SLIC card running the MCP application present in the system.	
E P	Check off ( $$ ) each step as it is con	apleted. Boxes have been provided for this purpose under each step number.	
#	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.	
3	For each MCPM/SLIC card listed above, issue the GPL status commend.	REPT-STAT-GPL:LOC=XXXX  (Where XXXX is the location of the MCPM/SLIC card slot listed in previous step.)card)	
4 	Response to the card status command is displayed.  If card is running BLSL932, go to next step	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-X	
	Otherwise repeat Step 3 for next card in above list in step 2.	;	
5	Issue command to inhibit the card.	INH-CARD: LOC=XXXX  (Where XXXX is the location of the MCPM/SLIC card used in the previous command).	
	Response to the inhibit command is displayed	<pre>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.</pre>	
		; Note: Wait for the card to boot and return to the IMT bus.	
7	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.)	
8	Response to flash initialization is shown.	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.	
	Verify UAM 0004 is displayed.	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.	
9	Issue command to activate	ACT_ELASH• loc_VVV	
Ĺ	the flash image.	ACT-FLASH: loc=XXXX  (Where XXXX is the location of the MCPM card used in the previous command)	

# Procedure 27: Revert MCPM application running on SLIC card to VxWorks6.4

	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. ;
11	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. ;
13	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.)
14	Response to GPL status command.	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y GPL Auditing ON
	Verify that MCPM/SLIC card is running BLSLC32 flash GPL.	GPL CARD RUNNING APPROVED TRIAL MCPHC XXXX XXX-XXX-XXX XXX-XXX-XXX BLSLC32 YYY-YYY XXX-XXX-XXX YYY-YYY-YYY  Command Completed. ;
15	If this is last card listed in Step 2, continue to next procedure. Otherwise, repeat Steps 3-Step 14 for the next card listed in Step 2.	<b>Note:</b> Wait till this flashed MCPM/SLIC card to complete reloading before proceeding to next step.

#### Procedure 28: Revert the MASP card to VxWorks6.4

S	This procedure is to revert the MASP cards to VxWorks6.4.	
T E	Check off ( $$ ) each step as it is completed. Boxes have been provided for this purpose under each step number.	
<b>P</b> #	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
2	Response to the card status command is displayed.	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y CARD VERSION TYPE GPL PST SST AST
	Record the MASP in the standby role:	1113 XXX-XXX-XXX E5MCAP OAMHC IS-NR Active 1115 XXX-XXX E5MCAP OAMHC IS-NR Standby Command Completed.
	Standby: 1113 or 1115	,
3	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.)
4	Response from the retrieve command is displayed.	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
	Verify that card is running the BLDC32 flash GPL.	BLDC32 YYY-YYY YYY-YYY YYY-YYY-YYY  Command Completed. ;
5	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.)
6	Response to the inhibit command is displayed	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y Card is inhibited. ;
	Verify UAM 514 is displayed.	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.
7	Issue pass command to enable the Shell command.	PASS:LOC=XXXX:SHELLCMD="-enable"  (Where XXXX is the location of the Standby MASP)
8	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 ;
9	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)
10	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 ;

Procedure 28: Revert the MASP card to VxWorks6.4

11	Issue flash command to download the bootloader	INIT-FLASH:LOC=XXXX:MODE=RPLCEBL:BITS=32
	image.	(Where XXXX is the location of the Standby MASP slot used in the previous command.)
12	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. ;
		<pre>eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x-YY.y.y Command Completed. ;</pre>
13	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)
14	Response to flash initialization is shown.	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x-YY.y.y FLASH Memory Download for card xxxx started. ;
	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 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.
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)
16	Response to the GPL status command is displayed.	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
	Verify that card is running BLMCAP GPL.	BLMCAP YYY-YYY+ YYY-YYY YYY-YYYY  Command Completed.
17	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)
18	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.
19	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)
20	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.
21	Issue command to report the status of the Standby MASP.	REPT-STAT-CARD: 10C=XXXX

Procedure 28: Revert the MASP card to VxWorks6.4

	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.
23	If this is the first pass through this procedure, issue command to boot the active MASP.	INIT-CARD: LOC= YYYY  (Where YYYY is the location of the active MASP.)
24	Otherwise, go to Step 29.  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 ;
25	Issue the command to log back in to the system.	LOGIN: UID=XXXXXX (Where XXXXXXX is a valid login ID)
26	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 <i>UU</i> . ;
	Ignore any login failure message.	? Login failures since last successful LOGIN Last successful LOGIN was on port ? on ??-??-?? @ ??:??:??
27	Echo command input to capture terminal.	ACT-ECHO:TRM=P  (Where P is the terminal port number specified in Procedure 1, Step 3)
28	Response to print capture command is displayed.	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 <i>P</i> . ;
	Repeat Steps $1 - 22$ for the formerly active MASP.	
29	Issue the command to display the cards running with BLDC32 flash GPL	REPT-STAT-GPL:GPL=BLDC32
30	Response from the GPL status command is displayed.	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y GPL Auditing ON
	Verify that no cards are displayed.	GPL CARD RUNNING APPROVED TRIAL  Command Completed. ;

# **6.3 Recovery Procedure A**

#### **Procedure 29: Load and Run Source OAM**

S T E		Procedure in order to copy the BLMCAP GPLs from the source after performing procedures apprading with the fixed workspace.
P #	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 30 - 34 must be performed before this procedure.	
	Check off $()$ each step as it is	completed. Boxes have been provided for this purpose under each step number.
	SHOULD THIS PROCEDUR	E FAIL, CONTACT My Oracle Support AND ASK FOR UPGRADE ASSISTANCE.
		Oracle Support, execute this procedure: Procedure 30, Procedure 31, Procedure 32, Procedure 33(but not Procedure 34).
	If a USB drive is present in the system, remove it.	
	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
5	Response to rtrv-gpl command is displayed.	eaglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x.x.x-YY.y.y GPL Auditing ON
	Record the "REMOVE TRIAL" version:	GPL CARD RELEASE APPROVED TRIAL REMOVE TRIAL BLMCAP 1114 XXX-XXX-XXX XXX-XXX-XXX YYY-YYY-YYY XXX-XXX-
6	Issue the command to change the gpl.	<pre>chg-gpl:gpl=blmcap:ver=xxx-xxx-xxx   (Where xxx-xxx-xxx is the GPL version recorded in the previous step)</pre>
7	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 ;
8	Issue the report card status command.	rept-stat-card:appl=oam

#### **Procedure 29: Load and Run Source 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	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. ;
	Remove the source-release RMD from the drive slot.	Store RMD in a safe place.
	Repeat step 8 until the standby location is IS-NR in step 9	
12	Force a switchover by issuing initialize-card command.	init-card:loc=YYYY Where YYYY is the active MASP location recorded in step 9.
13	Issue the command to log in to the system.	login:uid=xxxxxx (Where XXXXXX is a valid login ID)
15	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
16	Issue the command to initialize both MASP cards.	init-card:appl=oam
17 	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 111X OAMHC Card is isolated from the system
	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 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: xxxxxxxxx;
18	Continue to procedure C if directed by the My Oracle Support. Otherwise verify the system with the EAGLE health check [1]. 13	

 $<sup>^{\</sup>rm 12}$  The Standby MASP may report IS-ANR (and the Standby TDM may report 00S-MT|Isolated.) If so, check LEDs on the card.

<sup>&</sup>lt;sup>13</sup> Command REPT-STAT-GPL:DISPLAY=ALL can be used to verify this step.

# **6.4 Recovery Procedure B**

S T E P #	Perform the recovery procedure if directed to do so by My Oracle Support when failure occurs in Procedure 8, Step 1, Item C throughProcedure 10.  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 Procedures 30 - 34 must be performed before this procedure.  Check off (√) each step as it is completed. Boxes have been provided for this purpose under each step number.  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 Procedure 31.  Issue the report card status	Only perform this procedure if directed by My Oracle Support.
	command.	rept-stat-card:appl=oam
3	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.  Remove USB drive from	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 ;
	system if present.	
5	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.
6	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

7	After the standby MASP is available, issue the	init-card:loc=XXXX
	command to initialize the active MASP.	(Where <i>XXXX</i> is the location of the ACTIVE MASP slot)
8	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: xxxxxxxxxx
		; 5038.0014 CARD XXXX OAMHC Card is present ASSY SN: XXXXXXXXXX;
9	Issue the command to log in to the system.	login:uid=XXXXXX (Where XXXXXXX is a valid login ID)
10 	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	Inhibit the standby MASP.	INH-CARD:LOC=XXXX
	<u> </u>	(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. ;
		<pre>eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y Command Completed. ;</pre>
13	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.
14	Issue the retrieve GPL command to verify source-release GPLs.	rtrv-gpl
15	Response to the retrieve command is displayed.	eaglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x.x.x-YY.y.y GPL Auditing OFF
	Verify that the GPL	APPL CARD RELEASE APPROVED TRIAL REMOVE TRIAL SS7ANSI 1114 XXX-XXX-XXX XXX-XXX-XXX XXX-XXX-XXX XXX-XXX-XXX SS7ANSI 1116
Ш	versions in REMOVE	ATMANSI 1114 XXX-XXX XXX-XXX XXX-XXX XXX-XXX XXX-XXX-XXX ATMANSI 1116
	TRIAL column and RELEASE column match	CCS7ITU 1114 XXX-XXX-XXX XXX-XXX-XXX XXX-XXX XXX-XXX
	those in Section 1.3 for	SS7GX25 1114 XXX-XXX-XXX XXX-XXXX XXX-XXXX XXX-XXXX
	"Source- Release GPLs."	SS7GX25 1116
	Example here has location 1114 as the Active MASP slot.	IMT 1116
16	Issue the command to	rtrv-meas-sched
	retrieve measurement setup.	

		using Spare E3-MASI
17	Response to retrieve command is displayed.  Record if collection is on or off:  ——————————————————————————————————	<pre>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) ;  chg-meas:collect=off</pre>
19	Response to the change command is displayed.	<pre>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 ;</pre>
20	Inhibit the standby MASP.	inh-card:loc=XXXX (Where XXXX is location of standby MASP)
21	Response to the command is displayed.	<pre>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. ;</pre>
22	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.)
23	Issue the command to initialize the flash memory.	init-flash:code=appr:loc=XXXX Where XXXX is the location for the Standby MASP.
24	Response to the init flash command is displayed.  Wait for the downloading to complete.	<pre>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. ;</pre>
26	Issue the command to activate the flash on the standby MASP.  Response to the activate command is displayed.	act-flash:loc=XXXX  (Where XXXX is the location for the Standby MASP.)  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. ;
27	Issue the command to allow card.	alw-card:loc=XXXX where XXXX is the location for the Standby MASP.

 $<sup>^{\</sup>rm 14}$  If executed, this step causes the database level to increment.

28	Response to the command is displayed.	<pre>eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y Card has been allowed. ;</pre>
		<pre>eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y Command Completed. ;</pre>
29	Issue the report card status command.	rept-stat-card:appl=oam
30	Response from the retrieve command is displayed.	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
	Verify that the standby MASP is running the upgrade source release GPL.	Command Completed.
31	Issue the command to display security log status.	rept-stat-seculog
32	Response to the command is displayed.  If the ENTRIES column	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.
	displays any value other than 0 for the Standby ROLE, proceed to the next step.	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
	Otherwise, go to step 40	13:39:39 13:43:10 14:07:59
33	Issue the command to copy the security log from the standby disk.	copy-seculog:slog=stb:dfile=upg.procC
34	Response to the copy security log command is displayed.	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 ;
	If this command fails, proceed to next step. Otherwise, go to Step 40.	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 ;
35	Issue the command to display the FTA directory.	disp-fta-dir
36	Response to the command is displayed.	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
Ë	If there are any files that need to be saved, they need to be removed via a file transfer	FILENAME YYMMDDs.log YYMMDDa.log M60_lnp.csv 3 File(s) 21093376 bytes free  LENGTH LAST MODIFIED LBA 2560256 99-01-03 10:18:44 388769 2560256 99-01-03 10:19:20 393770 99-01-03 13:10:38 398771
37	Issue the command to delete ALL files in the transfer area.	dlt-fta:all=yes
38	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. ;
39	Repeat Steps 31-34	

40	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)
41	Response to the copy-disk command is displayed.	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. ;
	Wait for the card reload to complete.  If this is the second time performing this step, go to	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 ;
	Step 49. Otherwise continue.	,
42	Issue the command to display card status.	rept-stat-card
43	Response to the card status command is displayed.	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.
	Verify that the GPL versions that are displayed in the "VERSION" column are correct; see Section 1.3.	; eaglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x.x.x.yy.yy 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 LIMDSO SS7ML IS-NR Active
	Record the location of the Standby MASP:	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
	MASP	1117 E5MDAL IS-NR Active 1201 XXX-XXX-XXX LIMDSO SS7ML IS-NR Active 1202 XXX-XXX-XXX LIMDSO 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 1218 XXX-XXX-XXX TSM GLSHC IS-NR Active
44	Inhibit the standby MASP.	inh-card:loc=XXXX
45	Response to the command is displayed.	(Where XXXX is location of standby MASP)  eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x-YY.y.y  Card has been inhibited. ;
		<pre>eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y Command Completed. ;</pre>
46	Replace the standby E5- MASP with the E5-MASP removed in step 5.	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.

47	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
48	Repeat steps 23 - 41.	After completing Step 41 the second time, continue to Step 49.
49	If steps 18 & 19 were executed, issue the command to turn the measurements collection on.	chg-meas:collect=on
50	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 ;
51	Execute Procedure 28.	
52	If this completes the recovery as directed by My Oracle Support, verify the system with the EAGLE health check [1]. Otherwise continue with Recovery Procedure C	If failure occurred prior to entering Phase 3, recovery is complete.

### Procedure 31: Full Fallback using Fixed Disk as OAM conversion workspace – Case 1

S T E P #	Perform the recovery procedure if directed to do so by My Oracle Support when failure occurs in Procedure 6 through Procedure 8, Step 1. Note, this procedure is done in lieu of Procedure 18 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 Procedures 30 - 34 must be performed before this procedure.  Check off (√) each step as it is completed. Boxes have been provided for this purpose under each step number.  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 Procedure 6 and Procedure 8, Step 1, Table 18, Item E.					
	Only perform this procedure if directed by My Oracle Support.					
	If present, remove the target- release media from the system.					
3	Issue the command to initialize both MASP cards.	init-card:appl=oam				
4	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 111X OAMHC Card is isolated from the system ASSY SN: xxxxxxxxx; ;				
	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 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: xxxxxxxxx;				
5	Execute Procedure 28.					

Procedure 32: Full Fallback using Fixed Disk as OAM conversion workspace – Case 2

S	Perform the recovery pro	ocedure if directed	d to do	so l	оу ]	My Oracle	e Su	pport when	failure oc	curs in Proced	ure 8, Step 1,
T E	Item F through Item I.	This procedure makes the partition with the source GPLs active on the Standby TDM.									
P	This procedure makes the partition with the source of Ls active on the standay 1DW.										
#	NOTE: If the source rele	NOTE: If the source release is 46.5 or prior, perform this procedure only when the MASPs are running the BLMCAP									
,,	flash image. Otherwise F									s are running a	e BENICI II
	Check off $()$ each step as it is	completed. Boxes have	ve been	provi	ided	for this purp	pose	under each ste	ep number.		
	SHOULD THIS PROCEDI	URE FAIL, CONTA	ACT <u>M</u>	y Oı	racl	e Support	AND	ASK FOR	<u>UPGRAD</u>	E ASSISTANC	<u>E</u> .
	When directed to by My If failure occurred between						and	l Procedure	8, Step 1,	Table 18, Iten	ı I.
	Remove USB drive from system if present.										
2	Issue the command to display database status during upgrades.	act-upgrade:	actio	on=	dbs	status					
3	Response to the command is		-MM-DD	hh	: mm	:ss TTTT	PPP	XX.x.x.x	.x-YY.y.y	Upg Phase X	
	displayed.	; DATABASE	STATUS	6: > (	> N	OT OK (DI	4S)	<< TDM	1 1116 <i>( )</i>	ACTIV )	
	Look at the status field and	C	LEVE	( S :L	T	IME LAST	BAC	KUP C	LEVEL	TIME LAST B	ACKUP
	Look at the status field and determine the loc of the									TIME LAST E	
	TDM marked "UPG 2".	FD BKUP Y	nnnr	ınn		-	-	Y	nnnnnn	YY-MM-DD hh:n	m:ss zzz
		FD CRNT Y	nnnr AP 111	inn .3					AP 1115		
								-			
		RD BKUP - USB BKP -				-	-	-	-	-	-
		CARD/APPL		C	T	LEVEL		TIME LAST	UPDATE	VERSION <b>STAT</b>	us
		OAM-RMV									
		TDM-CRNT	1114	Υ	Ν	nnnnnn		YY-MM-DD	hh:mm:ss	- ZZZ-ZZZ-ZZZ	UPG 2
		TDM-BKUP	1114	Υ	-	nnnnnn		YY-MM-DD	hh:mm:ss	ZZZ-ZZZ-ZZZ	UPG 2
		OAM-RMV	1115					-	-	-	
		OAM-USB	1115			_		-	-	-	NORMAL
		TDM-CRNT TDM-BKUP				nnnnnn nnnnnn				XXX-XXX-XXX XXX-XXX-XXX	
		I DM-BKOF	1110	1	_	1111111111111		T T - IVIIVI - DD	1111.111111.33	***-***-***	NORMAL
		INACTIVE P	ARTITI	ON	GRO	UP					
		CARD/APPL	LOC	C	Т	LEVEL		TIME LAST	UPDATE	VERSION STAT	US
			1111	-	-						NORMAL
		TDM-CRNT	1114	Y	-	nnnnnn		YY-MM-DD		XXX-XXX-XXX	NORMAL
		TDM-BKUP TDM-CRNT	1114 1116	Y N	_	nnnnnn 1		YY-MM-DD 00-00-00		XXX-XXX-XXX ZZZ-ZZZ-ZZZ	NORMAL NORMAL
		TDM-BKUP	1116		_	1		00-00-00		ZZZ-ZZZ-ZZZ	NORMAL
4	If the TDM marked in "UPG										
	2" is the active MASP										
╽╙	continue. Otherwise go to										
	step 9.										

Procedure 32: Full Fallback using Fixed Disk as OAM conversion workspace – Case 2

5	Issue the command to init active location.	init-card:loc= <i>YYYY</i>
		(Where YYYY is location of active MASP)
6	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
		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: xxxxxxxxx
7	Issue the command to log	; login:uid= <i>xxxxxx</i>
Ľ	back in to the system.	login: uru=xxxxxx
		(Where XXXXXX is a valid login ID)
8	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 10. ;
	Ignore any login failure message.	? Login failures since last successful LOGIN Last successful LOGIN was on port ? on ??-??-?? @ ??:??:??
9	Issue the command to	send-msg:ds=1:da=h'5d:f=h'47:loc= <i>YYYY</i>
	display active/inactive disk partitions.	(Where YYYY is location of active MASP)
10	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, Procedure 1, Step 6)	<pre>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</pre>
		<pre>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 ;</pre>
		<pre>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</pre>
11	Issue the command to swap	send-msg:ds=1:da=h'5d:f=h'48:loc= <i>YYYY</i>
	active/inactive disk partitions.	(Where YYYY is location of active MASP)

Procedure 32: Full Fallback using Fixed Disk as OAM conversion workspace – Case 2

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 Procedure 1, Step 6)	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  Orig Appl ID = H'0030  Func ID = H'0048  Violation Ind = H'0000  User Message sent to location YYYY.
Compare the values for the active_partitions and inactive_partitions with those in <b>step 10</b> . For the STANDBY OAM, the values for the active_partitions shown should equal those for the inactive_partitions shown in <b>step 10</b> , and vice-versa. For the ACTIVE OAM, both sets of values should be identical.	<pre>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</pre>
Inhibit the standby MASP.	inh-card:loc= <i>XXXX</i>
Response to the inhihit	(Where XXXX is the location for the Standby MASP.)  eaglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x.x.x-YY.y.y
command is displayed	Card is inhibited.
1 7	
Verify UAM 514 is displayed.	<pre>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 ;</pre>
	Note: Wait for the card to boot and return to the IMT bus.
Issue the command to	init-flash:code=appr:loc= <i>XXXX</i>
on the standby MASP. <sup>15</sup>	(Where XXXX is the location for the Standby MASP.)
Response to flash initialization is shown.	eaglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x.x.Y-YY.y.y FLASH Memory Download for card xxxx started. ;
	eaglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x.x.Y-YY.y.y FLASH Memory Download for card xxxx completed.
Verify UAM 0004 is displayed.	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 ;
	<b>Note:</b> Wait for card to boot and return to the IMT bus.
Issue the command to	act-flash:loc= <i>XXXX</i>
standby MASP.	(Where XXXX is the location for the Standby MASP.)
Response to the activate	eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
command is displayed.	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. ;
	Note: Look for the command response on a terminal with all output display groups set to yes (printer/ksr terminal port specified in Procedure 1, Step 6)  Compare the values for the active_partitions and inactive_partitions with those in step 10. For the STANDBY OAM, the values for the active_partitions shown should equal those for the inactive_partitions shown in step 10, and vice-versa. For the ACTIVE OAM, both sets of values should be identical.  Inhibit the standby MASP.  Response to the inhibit command is displayed  Verify UAM 514 is displayed.  Issue the command to initialize the flash memory on the standby MASP.¹¹⁵  Response to flash initialization is shown.  Verify UAM 0004 is displayed.

<sup>15</sup> The approved flash GPL is the source version.

Procedure 32: Full Fallback using Fixed Disk as OAM conversion workspace – Case 2

Issue the command to allow card.	alw-card:loc=XXXX
Card.	(Where XXXX is the location for the Standby MASP.)
Response to the command 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. ;
Determine the status of the GPLs running on the card	rept-stat-gpl:loc=XXXX
location.	(Where XXXX is the location for the Standby MASP.)
Response from the status command is displayed.	eaglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x.x.x-YY.y.y GPL Auditing ON
Verify the standby MASP is	GPL CARD RUNNING APPROVED TRIAL OAMHC 1115 134-074-000 BLMCAP 134-070-000 134-070-000
running the upgrade source release GPLs. Verify that no "ALM" indicator is displayed	
23 If the active MASP is not running the upgrade source	init-card:loc=XXXX
release GPL continue. Otherwise go to step 37.	(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: XXXXXXXXX
	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: XXXXXXXXX
Issue the command to log back in to the system.	login:uid=XXXXXX
26 Response to login commar is displayed.	(Where XXXXXX is a valid login ID) d eaglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x.x-YY.y.y User logged in on terminal 10.
Ignore any login failure message.	? Login failures since last successful LOGIN Last successful LOGIN was on port ? on ??-??-?? @ ??:??:??
Inhibit the standby MASP.	inh-card:loc=XXXX
28 Response to the inhibit	(Where XXXX is the location for the Standby MASP.)  eaglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x.x.x-YY.y.y
command is displayed	Card is inhibited.
Verify UAM 514 is displayed.	eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.xYY.y.y Upg Phase x  ** 5045.0514 ** CARD XXXX OAMHC Standby MASP is inhibited  ;
	<b>Note</b> : Wait for the card to boot and return to the IMT bus.
Issue the command to initialize the flash memory	init-flash:code=appr:loc=xxxx
on the standby MASP.	(Where XXXX is the location for the Standby MASP.)

Procedure 32: Full Fallback using Fixed Disk as OAM conversion workspace – Case 2

		•
30	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.
32	Issue the command to activate the flash on the standby MASP.  Response to the activate command is displayed.	act-flash:loc=XXXX  (Where XXXX is the location for the Standby MASP.)  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. ;
33	Issue the command to allow card.	alw-card:loc=XXXX (Where XXXX is the location for the Standby MASP.)
34	Response to the command is displayed.	<pre>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. ;</pre>
35	Determine the status of the	rept-stat-gpl:loc=XXXX
- 55	GPLs running on the card	1 ept-3 cat-gp1 : 10c=1/1/1/1
	location.	(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  Command Completed. ;
37	Execute Procedure 28.	

Procedure 33: Full Fallback using Fixed Disk as OAM conversion workspace – Case 3

S T E P #	Perform this recovery procedure if directed to do so by My Oracle Support when failure occurred between Procedure 8, Step 1, Table 18, Item J and Procedure 14 [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 Procedures 30 - 34 must be performed before this procedure.  Check off (√) each step as it is completed. Boxes have been provided for this purpose under each step number.  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 Procedure 8, Step 1, Table 18, Item J and Procedure 10 [End of Session 1].			
1	*** ATTENTION ***	Complete all steps from Procedure 4 to the end of Session 1 (Procedure 10).		
2	If this is an incremental upgrade (i.e. the SOURCE release equals the TARGET release, go to Procedure 4, Step 1.  ***********************************	Note: When executing Procedure 4 through Procedure 10 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).		
	system if present.			
3	Issue the command to display active/inactive disk partitions.	send-msg:ds=1:da=h'5d:f=h'47:loc= <i>YYYY</i> (Where <i>YYYY</i> is location of active MASP)		
4	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 Procedure 1, Step 6)	<pre>eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y Upgrade Phase  System Buffer sent has following attributes:     Msg Length = H'0010     Dest Card = H'00fb     Orig Subsys = H'0001</pre>		
5	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)		

Procedure 33: Full Fallback using Fixed Disk as OAM conversion workspace – Case 3

6	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 Procedure 1, Step 6)	<pre>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</pre>
	Compare the values for the active_partitions and inactive_partitions with those in <b>step 4</b> . For the STANDBY OAM, the values for the active_partitions shown should equal those for the inactive_partitions shown in <b>step 4</b> , and vice-versa. For the ACTIVE OAM, both sets of values should be identical.	<pre>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</pre>
7	Inhibit the standby MASP.	inh-card:loc=xxxx
		33. 33. 34. 7555.
		(Where XXXX is the location for the Standby MASP.)
8	Response to the inhibit	eaglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x.x.x-YY.y.y
	command is displayed	Card is inhibited. :
	Verify UAM 514 is displayed.	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	init-flash:code=trial:loc= <i>XXXX</i>
	initialize the flash memory on the standby MASP.	(Where XXXX is the location for the Standby MASP.)
10	Response to flash	eaglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x.x.x-YY.y.y FLASH Memory Download for card xxxx started.
	initialization is shown.	;
	Verify UAM 0004 is	<pre>eaglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x.x.x-YY.y.y FLASH Memory Download for card xxxx completed. ;</pre>
	displayed.	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.
11	Issue the command to activate the flash on the standby	act-flash:loc=XXXX
	MASP.	(Where XXXX is the location for the Standby MASP.)
12	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. :
		<pre>eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y FLASH Activation for card XXXX Completed. ;</pre>

Procedure 33: Full Fallback using Fixed Disk as OAM conversion workspace – Case 3

13	Issue the command to allow card.	alw-card:loc=XXXX
	caru.	(Where XXXX is the location for the Standby MASP.)
14	Response to the command is displayed.	<pre>eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y</pre>
15	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.)
16	Response from the status command is displayed.	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x-YY.yy.y  GPL Auditing ON
ш	Verify that the standby MASP is running the upgrade source release GPLs.	GPL CARD RUNNING APPROVED TRIAL OAMHC69 XXXX XXX-XXX-XXX YYY-YYY-YYY XXX-XXX-XX
17	Issue the command to init active location.	init-card:loc= <i>YYYYY</i>
		(Where YYYY is location of active MASP)
18	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: xxxxxxxxx
		; 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: xxxxxxxxx;
19	Issue the command to log back in to the system.	login:uid=xxxxxxx
		(Where XXXXXX is a valid login ID)
20	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 nn. ;
	Ignore any login failure message.	? Login failures since last successful LOGIN Last successful LOGIN was on port ? on ??-??-?? @ ??:??:??
21	Issue the command to display active/inactive disk partitions.	send-msg:ds=1:da=h'5d:f=h'47:loc= <i>XXXX</i>
	active/mactive disk partitions.	(Where XXXX is location of newly active MASP)
22	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 Procedure 1, Step 6)	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 Orig Subsys = H'0001 Orig Appl ID = H'0030 Func ID = H'0047 Violation Ind = H'0000 User Message sent to location YYYY. ;
	If the standby partition information is not displayed, wait for the standby MASP to return to service and repeat step 21.	<pre>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</pre>
		j

Procedure 33: Full Fallback using Fixed Disk as OAM conversion workspace – Case 3

23	Issue the command to swap	send-msg:ds=1:da=h'5d:f=h'48:loc= <i>xxxx</i>
	active/inactive disk partitions.	
24	Dagnonga to gommand	(Where XXXX is location of active MASP)  eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x-YY.yy.y
	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 Procedure 1, Step 6)	System Buffer sent has following attributes:  Msg Length = H'0010  Dest Card = H'00fb  Orig Subsys = H'0001  Orig Appl ID = H'0030  Func ID = H'0048  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
	Compare the values for the active_partitions and inactive_partitions with those in <b>step 22</b> . For the STANDBY OAM, the values for the active_partitions shown should equal those for the inactive_partitions shown in <b>step 22</b> , and vice-versa. For the ACTIVE OAM, both sets of values should be identical.	<pre>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</pre>
25	Inhibit the standby MASP.	inh-card:loc= <i>YYYY</i>
	innot all stander, in 151	(Where YYYY is the location for the Standby MASP.)
26	Response to the inhibit command is displayed	<pre>eaglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x.x.x-YY.y.y Card is inhibited. ;</pre>
	Verify UAM 514 is displayed.	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 ;
		<b>Note</b> : Wait for the card to boot and return to the IMT bus.
27	Issue the command to initialize the flash memory on	init-flash:code=appr:loc= <i>YYYY</i>
	the standby MASP.	(Where YYYY is the location for the Standby MASP.)
28	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.
	Verify UAM 0004 is displayed.	<pre>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 ;</pre>
		Note: Wait for card to boot and return to the IMT bus.
29	Issue the command to activate	act-flash:loc=YYYY
	the flash on the standby MASP.	(Where YYYY is the location for the Standby MASP.)
30	Response to the activate command is displayed.	<pre>eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y FLASH Memory Activation for card XXXX Started. ;</pre>
		<pre>eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y FLASH Activation for card XXXX Completed. ;</pre>

Procedure 33: Full Fallback using Fixed Disk as OAM conversion workspace – Case 3

release GPLs. Verify that no "ALM" indicator is displayed.  Insert the Rollback source release GPL media into the active MASP.  Issue the command to retrieve OAMHC69 application data.  Response to rtrv-gpl command is displayed.  Record the "REMOVE TRIAL" version:  GPL CARD RELEASE APPROVED TRIAL REMOVE TRIAL OAMHC69 1114 xxx-xxx-xxx xxx-xxx xxx-xxx yyy-yyy-yyy	31	Issue the command to allow card.	alw-card:loc= <i>YYYY</i>
card has been allowed.   card has been allowed.   caglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x.x-YY.y.y   command completed.   caglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x.x-YY.y.y   command is displayed.   command is displayed.   capture   c	Ш		(Where YYYY is the location for the Standby MASP.)
Command Completed.    Command Completed.   Command	32		Card has been allowed. ;
GPLs running on the card location.  GPLs running on the retrieve command is displayed.  Where XXXX is the location for the Standby MASP.)  aglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x.x.x.x-YY.y.y GPL Auditing ON GPL CARD RUNNING APPROVED TRIAL COMMICG9 XXXX XXX-XXX-XXXX XXX-XXXX-XXX XXX-XXX-XXX XXX-XXX-XXX-XXX XXX-XXX-XXX-XXX XXX-			Command Completed.
Response from the retrieve command is displayed.   Capt	33	GPLs running on the card	·
command is displayed.  Verify that the both MASP are running the upgrade source release GPLs. Verify that no "ALM" indicator is displayed.  Insert the Rollback source release GPLs. Merify that no "ALM" indicator is displayed.  Insert the Rollback source release GPL media into the active MASP.  Insert the Rollback source release GPL media into the active MASP.  36 Issue the command to retrieve OAMHC69 application data.  77 Response to ritry-gpl command is displayed.  Record the "REMOVE TRIAL" version:  GPL CARD RELEASE APPROVED TRIAL REMOVE TRIAL OAMHC69 1114 xxx-xxx-xxx xxx-xxx-xxx yyy-yyyy-yyyy xxx-xxx-	24		(Where XXXX is the location for the Standby MASP.)
Verify that the both MASP are release GPLs. Verify that no "BLDC32" XXXX XXX-XXXX XXX-XXXX XXX-XXXX-XXXX XXX-XXXX-XXX XXX-XXXX-XXXX XXX-XXXX-XXXX-XXXX-XXXX-XXXX-XXXX-XXX-XXXX	34	-	GPL Auditing ON
release GPLs. Verify that no "ALM" indicator is displayed.  Insert the Rollback source release GPL media into the active MASP.  36 Issue the command to retrieve OAMHC69 application data.  77 Response to rtrv-gpl command is displayed.  Record the "REMOVE TRIAL" version:			OAMHC69 XXXX XXX-XXX-XXX
release GPL media into the active MASP.  36 Issue the command to retrieve OAMHC69 application data.  77 Response to rtrv-gpl command is displayed.  Record the "REMOVE TRIAL" version:  88 Issue the command to change the gpl.  78 Response to change the gpl.  89 Response to change the gpl.  80 Issue the command to change the gpl.  80 Response to change the gpl.  80 Response to change the gpl.  80 Response to change the gpl.  81 Issue the command to change the gpl.  82 Response to change the gpl.  83 Response to change the gpl.  84 Issue the command to initialize both MASP cards.  15 Issue the command to log in to the system.  85 Issue the command to log in to the system.  86 Issue the command to log in to the system.  87 Issue the command to log in to the system.  88 Issue the command to log in to the system.  89 Issue the command to log in to the system.  80 Issue the command to log in to the system.  80 Issue the command to log in to the system.  80 Issue the command to log in to the system.		release GPLs. Verify that no	Command Completed.
OAMHC69 application data.  Response to rtrv-gpl command is displayed.  Record the "REMOVE TRIAL" version:  OAMHC69 1114 xxx-xxx-xxx xxx-xxx yyy-yyyy-yyyy xxx-  OAMHC69 1116 xxx-xxx-xxx xxx-xxx yyy-yyyy-yyyy xxx-  OAMHC69 1116 xxx-xxx-xxx xxx-xxx yyy-yyy-yyyy xxx-  (where xxx-xxx-xxx is the GPL version recorded in the previous steple command is displayed.  Response to chg-gpl command to initialize both MASP cards.  Response to chg-gpl command to initialize both MASP cards.  Issue the command to initialize both MASP cards.  Login:uid=xxxxxxx  (where xxxxxxx is a valid login ID)	35	release GPL media into the	Once inserted, allow time for the Rollback source-release GPL RMD to be detected by the system.
Record the "REMOVE TRIAL" version:  TRIAL" version:  GPL CARD RELEASE APPROVED TRIAL REMOVE TRIAL  OAMHC69 1114 xxx-xxx-xxx xxx-xxxx yyy-yyy-yyy xxx-  OAMHC69 1116 xxx-xxx-xxx xxx-xxxx yyy-yyy-yyy xxx-  OAMHC69 1116 xxx-xxx-xxx xxx-xxx yyy-yyy-yyy xxx-  is the command to change the gpl.  Response to chg-gpl command is displayed.  Response to chg-gpl command is displayed.  Response to chg-gpl command to linitalize both MASP cards.  Issue the command to log in to the system.  Login:uid=xxxxxxx  (Where xxxxxxx xxxx xxxx xxxx.xxx.xx.x.x.x.x.	36		rtrv-gpl:gpl=oamhc69
TRIAL OAMHC69 1114 xxx-xxx-xxx xxx-xxx yyy-yyy-yyy  OAMHC69 1116 xxx-xxx-xxx xxx-xxx yyy-yyy-yyy xxx-  OAMHC69 1116 xxx-xxx-xxx xxx-xxx yyy-yyy-yyy xxx-  issue the command to change the gpl.  Chg-gpl:gpl=oamhc69:ver=xxx-xxx xxx-xxx yyy-yyy-yyy xxx-  (where xxx-xxx-xxx is the GPL version recorded in the previous stepleted of the gpl.  Response to chg-gpl eaglestp YY-MM-DD hh:mm:ss TTTT PPP xx.x.x.x.x-YY.y.y oAMHC69 upload to 1116 completed of the gystem Release ID table upload to 1116 completed system Release ID table upload to 1114 completed initialize both MASP cards.  Issue the command to initialize both MASP cards.  Login:uid=xxxxxx  (where xxxxxxx is a valid login ID)	37		
OAMHC69 1116 xxx-xxx-xxx xxx-xxx yyy-yyy xxx- xxx-xxx;  i			TRIAL
Size the command to change the gpl.			
the gpl.  Response to chg-gpl command is displayed.  eaglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x.x.x.x-YY.y.y OAMHC69 upload to 1116 completed OAMHC69 upload to 1114 completed System Release ID table upload to 1116 completed System Re			
command is displayed.  eaglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x.x.x.x-YY.y.y OAMHC69 upload to 1116 completed OAMHC69 upload to 1114 completed System Release ID table upload to 1114 completed System Release ID table upload to 1114 completed initialize both MASP cards.  Issue the command to log in to the system.  Login:uid=xxxxxx  (where XXXXXX is a valid login ID)	38	Č.	chg-gpl:gpl=oamhc69:ver=xxx-xxx-xxx (Where xxx-xxx-xxx is the GPL version recorded in the previous step)
initialize both MASP cards.  Issue the command to log in to the system.  Login:uid=xxxxxx  (where xxxxxx is a valid login ID)	39		OAMHC69 upload to 1116 completed OAMHC69 upload to 1114 completed System Release ID table upload to 1116 completed System Release ID table upload to 1114 completed
to the system.  (Where XXXXXXX is a valid login ID)	40		init-card:appl=oam
	41	_	
command.	42	-	

Procedure 33: Full Fallback using Fixed Disk as OAM conversion workspace – Case 3

43	Response to the card status command is displayed.	eaglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x.x.x-YY.y.y CARD VERSION TYPE GPL PST SST AST
	Record which MASP is	1113 XXX-XXX-XXX E5MCAP OAMHC69 IS-NR Active
	Active and Standby.	1115 XXX-XXX-XXX E5MCAP OAMHC69 IS-NR Standby
	Record the card locations of the MASPs:	Command Completed.
	Act MASP	;
	Stby MASP <sup>16</sup>	
44	Remove the Rollback source release GPL media from the active MASP.	Store RMD in a safe place.
45	Wait for DUPLEX mode and repeat step 42 until the standby location is IS-NR in	
46	step 43.  Issue the upgrade activation	ACT-UPGRADE:ACTION=CONVERTSTP:SRC=FIXED
	command.	
47	Load standard TOAMHC69 GPL. Insert Source release media into the active MASP.	Once inserted, allow time for the Rollback source-release GPL RMD to be detected by the system.
	Note: Insert backup USB into PC and rename source release rollback patch GPL OAMHC69.elf to TOAMHC69.elf, and then insert the backup USB into Active MASP card.	
48	Issue the command to retrieve OAMHC69 application data.	rtrv-gpl:gpl=oamhc69
49	Response to rtrv-gpl command is displayed.	eaglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x.x.x-YY.y.y GPL Auditing ON
П	Record the "REMOVE TRIAL" version:	GPL CARD RELEASE APPROVED TRIAL REMOVE
		OAMHC69 1114 <b>xxx-xxx</b> xxx-xxx yyy-yyy-yyy
		OAMHC69 1116 <b>XXX-XXX</b> XXX-XXX YYY-YYY XXX-XXX;
50	Issue the command to change the gpl.	<pre>chg-gpl:gpl=oamhc69:ver=xxx-xxx-xxx   (Where xxx-xxx-xxx is the standard source GPL version)</pre>
51	Verify patch GPL is in APPROVED column	RTRV-GPL:GPL=OAMHC69
52	Response to chg-gpl command is displayed.	eaglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x.x.x-YY.y.y OAMHC69 upload to 1116 completed OAMHC69 upload to 1114 completed System Release ID table upload to 1116 completed System Release ID table upload to 1114 completed;

Procedure 33: Full Fallback using Fixed Disk as OAM conversion workspace – Case 3

53	Issue the command to initialize both MASP cards.	init-card:appl=oam
53	Issue the command to log in to the system.	Login:uid=xxxxxx (Where XXXXXX is a valid login ID)
54	Issue the report card status command.	rept-stat-card:appl=oam
55	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 CARD VERSION TYPE GPL PST SST  AST 1113 XXX-XXX-XXX E5MCAP OAMHC69 IS-NR Active 1115 XXX-XXX-XXX E5MCAP OAMHC69 IS-NR Standby Command Completed.
56	Continue to procedure C if directed by the My Oracle Support. Otherwise, verify the system with the EAGLE health check <sup>17</sup>	

<sup>17</sup> Command REPT-STAT-GPL:DISPLAY=ALL can be used to verify this step.

# **6.5 Recovery Procedure C**

## **Procedure 34: Fall Back Procedure for Network Cards**

S T E P	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         IPHC         IS-NR         Active            1103         XXX-XXX-XXX         TSM         GLSHC         IS-NR         Active            1105         XXX-XXX-XXX         DCM         IPGHC         IS-NR         Active            1109         XXX-XXX-XXX         HIPR         IS-NR         Active            1111         XXX-XXX-XXX         MCPM         MCPHC         IS-ANR         Active            1113         XXX-XXX-XXX         ESMCAP         OAMHC         IS-NR         Active            1114          ESTDM          IS-NR         Active
	X	1115   XXX-XXX-XXX   E5MCAP   OAMHC   IS-NR   Standby       1116     E5TDM     IS-NR   Active       1117     E5MDAL     IS-NR   Active     1201   XXX-XXX-XXX   LIMT1   S57HC   IS-NR   Active     1202   XXX-XXX-XXX   LIMT1   S57HC   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   .
3	Issue the card status command.	rept-stat-card:appl=mcp
4	Response to the card status command is displayed.  If any MCPM cards are displayed, continue to next step. Otherwise, go to Step 7.	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.
5	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.)
6	Response to the send message command is displayed.	<pre>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</pre>

## **Procedure 34: Fall Back Procedure for Network Cards**

7	Issue the upgrade activation command.	If the threshold type is set to SET in Procedure 7, Step 4 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 section 1.6)
8	Response to the upgrade command is displayed.  Completion notice of successful upgrade. If upgrade does not complete successfully, see recommendation # 7 in section 1.6	<pre>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 ;</pre>
9	Go to Procedure 8, Step 7.	Complete all steps from Procedure 8, Step 7 to the end of Procedure 8. Then perform Procedure 14 to complete the roll-back.

## 7. Procedures for cards that failed to complete successful flash during the database conversion

**Procedure 35: Restoring Flash-Based Service Cards** 

S T E P	This procedure restores Service Cards that are flash based. This group includes IPSHC, MCPHC, DEIRHC <sup>18</sup> , 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.)
2	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 Command Completed. ;
3	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 2)
4	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. ;
5	Issue the command to initialize the flash memory.	flash-card:code=appr:force=yes:loc=xxxx  NOTE: this command causes the card to boot.
6	Response to the flash card command is displayed.	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. ;
	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 Command Completed. ;
7	Issue the command to allow the card <sup>19</sup> if the card is provisioned.	alw-card:loc=XXXX (Where XXXX is the card location of the cards determined in Step2)  OR  alw-card:loc=XXXX:data=persist (Where XXXX is the location of an SCCP card determined in Step2)

 $<sup>^{18}</sup>$  EAGLE 47.0 does not support DEIR.  $^{19}$  Specifying the DATA=PERSIST parameter for SCCP application cards allows for warm restart if possible.

**Procedure 35: Restoring Flash-Based Service Cards** 

9	Response to the allow command is displayed. <sup>20</sup> Wait for the card to finish loading before proceeding (approximately 30 seconds).  Repeat Steps 3 – 8 for each card in the current group that has an alarm.	<pre>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. ;</pre>
10	Repeat steps 1-9 for each group of cards (VSCCP, ISP, MCP, EROUTE, SCCPHC, IPSHC, ERTHC, and SIPHC)	
111	Issue the command to display the card status.	rept-stat-card
12	Response to the command is displayed.  Verify that all Flash-Based	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
	Service cards are IS-NR and are running the Source-Release GPL versions, as per your reference list of GPLs	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         LIMDSO         SS7ML         IS-NR         Active            1109         XXX-XXX-XXX         HIPR         HIPR         IS-NR         Active
	For any such card that is not IS-NR or running the correct GPL, repeat Steps 3-4.	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 E5TDM IS-NR Active  1201 XXX-XXX-XXX LIMDSO SS7ML IS-NR Active  1202 XXX-XXX-XXX LIMDSO SS7ML IS-NR Active  1203 XXX-XXX-XXX LIMDSO SS7ML IS-NR Active  1204 XXX-XXX-XXX LIMDSO SS7ML IS-NR Active  1204 XXX-XXX-XXX LIMDSO SS7ML IS-NR Active  1204 COMMAND COMPleted.

 $<sup>^{20}</sup>$  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.

# **Procedure 36: Restoring Flash-Based Link Cards**

S T		HC, IPLHC, IPGHC, and ATMHC cards.
	This procedure updates each card with the source release GPLs.	
E P		
#		
1	Issue the command to display the GPL status.	rept-stat-gpl:gpl=YYYY
	display are 012 status.	(Where YYYY is one of the Flash-Based Link card types listed above.)
	Response to the command is displayed.	<pre>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. ;</pre>
	Record the CARD locations for all cards which have alarms:	<pre>eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y GPL Auditing ON</pre>
		APPL CARD RUNNING APPROVED TRIAL  XXXXXXXX 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  XXXXXXX 1211 XXX-XXX-XXX XXX-XXX-XXX  Command Completed.  ;
3	Issue command to display	rept-stat-card:loc=xxxx
	provisioned links.	(Where XXXX is a card in alarm from Step 2.)
4	Response displayed.	<pre>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. ;</pre>
	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         CARD VERSION TYPE APPL PST SST AST         XXXX XXX-XXXX XXXXXX XXXXXX IS-NR Active         ALARM STATUS = * 0021 Clock A for card failed, Clock B normal         XXXXXXX 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 B1 PST = OOS-MT LS=XXXX CLLI=         SLK B2 PST = IS-NR LS=XXXX CLLI=         SLK B2 PST = IS-NR LS=XXXX CLLI=         SLK B3 PST = IS-NR LS=XXXX CLLI=         Command Completed.
5	Issue the command to initialize the flash	flash-card:code=appr:force=yes:loc=XXXX
	memory.	NOTE: this command causes the card to boot.
6	Response to the flash card command is displayed.	<pre>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. ;</pre>
	Wait for command complete to indicate that the card is finished loading before proceeding.	<pre>eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y Command Completed. ;</pre>

# **Procedure 36: Restoring Flash-Based Link Cards**

7	Issue command to display provisioned links.	rept-stat-card:loc=XXXX
8	Response displayed.  Verify that the links that were IS-NR in Step 4 are IS-NR now.	<pre>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.x-YY.y.y CARD VERSION TYPE APPL PST SST AST XXXX XXX-XXX-XXX 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 IMT BUS B = Conn SLK A PST = IS-NR LS=XXXX CLLI= SLK B PST = 00S-MT LS=XXXX CLLI= Command Completed. ;</pre>
9	Repeat Steps 3 - 8 for each card in the group from Step 2 that has an alarm.	
10	Repeat Steps 1-9 for each Flash-Based Link card group (Refer to 1.3 Software Release Numbering to see list of GPLs.)	
111	Issue the command to display the GPL status.	rept-stat-card
12	Response to the command is displayed.	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.
_	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 3-8.	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 E5TDM IS-NR Active         1201 XXX-XXX-XXX LIMDSO S57ML IS-NR Active         1202 XXX-XXX-XXX LIMDSO S57ML IS-NR Active         1203 XXX-XXX-XXX LIMDSO STML IS-NR Active
		1204 XXX-XXX IPSM IPSHC IS-NR Active Command Completed.

# **Procedure 37: Restoring Mux Cards**

S T E P #		s each card with the source release GPLs. Mux cards include HIPR, and HIPR2 cards, 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 XXY-XXX-XXX YYYY XX09 XXX-XXX-XXX XXX-XXX-XXX XXX-XXX-XXX YYYY XX10 XXX-XXX-XXX XXX-XXX XXX-XXX-XXX XXX-XXX-XXX XXX-XXX-XXX XXX-XXX-XXX XXX-XXX-XXX XXX-XXX-XXX XXX-XXX-XXX XXX-XXX-XXX XXX-XXX-XXX XXX-XXX XXX-XXX XXX-XXX-XXX XXX-XXX XXX-
3	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.)
4	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
5	Repeat steps 1-4 for each Mux card type on the current bus.	NOTE: Steps 1-4 must be performed for all MUX card types on one bus before performing these steps for any MUX card types on the other bus.
6	Enter the command to initialize the current bus.	init-mux:bus= $x^{21}$ (Where $x = A$ or B, depending on current bus: xx09 is bus A; xx10 is bus B.)
7	Response to the initialization command is displayed.	<pre>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</pre>

<sup>&</sup>lt;sup>21</sup> Warning: Do not use the FORCE= parameter. Use of this parameter may result in network outage. Analysis of the alternate bus is required.

# **Procedure 37: Restoring Mux Cards**

9	Issue the command to activate the flash on the next MUX card on the current bus.  Response to the activate command is displayed.	<pre>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.)  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. ;</pre>
10	Repeat steps 8-9 for each MUX card on the current bus (A or B.)	
11	Repeat steps 3-10 for the second bus (A or B.)	
12	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.)
13	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 YYYY XX10 XXX-XXX-XXX XXX-XXX-XXX YYYY XX10 XXX-XXX-XXX XXX-XXX-XXX YYYY XX10 XXX-XXX-XXX XXX-XXX-XXX YYYY XX10 XXX-XXX-XXX XXX-XXX-XXX YYYY XX09 XXX-XXX-XXX XXX-XXX-XXX YYYY XX10 XXX-XXX-XXX XXX-XXX-XXX Command Completed.
14	Repeat steps 12-13 for all MUX card types.	

# APPENDIX A. UPGRADING FLASH-BASED GPL ON NON-IN-SERVICE AND UNPROVISIONED NETWORK CARDS

## **Procedure 38: Flashing Inactive Cards**

S T E P		nes any BLIXP, BLMCAP, BLDC64, BLSLC32, or BLSLC64 cards that are inhibited, with its target release GPLs. (See section 1.3 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 XXXXXX 1103 XXX-XXX-XXX XXXXXXX 1103 XXX-XXX-XXX XXXXXXX 1103 XXX-XXX-XXX XXXXXXX XXX-XXX-XXX XXXXXXX
3 4 —	Issue the status command for specific card  Response to the command is displayed.  If the PST for the card is	rept-stat-card:loc=XXXX  (Where XXXX is the card location recorded in the previous step.)  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
5	OOS-MT-DSBLD or the command is rejected with MTT error E2144 <sup>22</sup> , go to step 7.  Issue the command to inhibit card.	IMT BUS A = IMT BUS B = SCCP % OCCUP = 0% Command Completed.
6	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. ;
7	Issue the command to flash all GPLs on the card.	flash-card:code=appr:loc=xxx  NOTE: this command causes the card to boot.
8	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. ;
		<pre>eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y Command Completed. ;</pre>

 $<sup>^{\</sup>rm 22}$  E2144 Cmd Rej: Location invalid for hardware configuration

# **Procedure 38: Flashing Inactive Cards**

9	If steps 5 & 6 were executed, issue the command to allow card.	alw-card:loc=XXXX
10	Response to the command is displayed.	<pre>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. ;</pre>
11	Repeat Steps 3 – 10 for all cards recorded in step 2.	
12	Repeat Steps 1 – 11 for each group of Flash-Based cards (see section 1.3.)	

## Procedure 39: Flashing the E5-MASP to BLDC32 for Release 47.0.0.0

S These steps must be performed before building the E5-MASP SSD media to the Release that is on the This procedure flashes the E5-MASP to BLDC32 for Release 47.0.0.x.  E Check off (√) each step as it is completed. Boxes have been provided for this purpose under each step number.		MASP to BLDC32 for Release 47.0.0.x.
<b>P</b> #	SHOULD THIS PROCEDURE FAIL	., CONTACT My Oracle Support AND ASK FOR UPGRADE ASSISTANCE.
1	Install the Customer E5-MASP	Install the Customer E5-MASP in location 1113/1114 or 1115/1116 and verify that the initialization is successful.
	System Log In	Make sure the Terminal Interface cable has been installed on J25 (MMI 1) on the Control Shelf and is terminated into the COM port on a PC. Launch the ProComm terminal emulation program from the PC. Make sure the baud rate is set to 9600; the parity-databits-stopbit is set to E-7-1, and the direct connect-Com1 is selected.  Download the vt320.kbd file using the Keyboard Editor under the Options tab in ProComm. When the system is powered up, the Terminal display should indicate that Terminal 2 is enabled.  Log in to the system by clicking on the login button located at the bottom of the ProComm screen, or by entering the command:  login:uid=eagle password: eagle  The user will be prompted to enter a new password.  Enter the new password syst3m**9 and press Enter.  The user will be prompted to verify the new password. Re-enter the new password syst3m**9 and press Enter.  Verify that a successful login was executed.  Set up terminal access using the following commands:  Issue the command chg-secu-trm:trm=1:all=yes  Issue the command logout to log out of Terminal 2.  Move the serial cable on the backplane to Terminal 1.  Log in using the new password (syst3m**9)

**Procedure 39:** Flashing the E5-MASP to BLDC32 for Release 47.0.0.0

3	Identify the Standby E5-MASP	Issue the command rept-stat-db <enter> to identify the Standby E5-MASP</enter>
		tekelecstp 19-01-16 12:03:36 EST EAGLE 46.7.0.0.0-75.27.0  DATABASE STATUS: >> OK << TDM 1114 ( STDBY) TDM 1116 ( ACTV )  C LEVEL TIME LAST BACKUP C LEVEL TIME LAST BACKUP
4	Flash the Customer E5-MASP	Issue the command inh-card:loc=xxxx <enter></enter>
	to GPL BLDC32 using these commands:	xxxx is the slot location in the Eagle Control Shelf for the Standby E5-MASP.  If TDM (1114) is the Standby E5-MASP, inhibit loc=1113.  If TDM (1116) is the Standby E5-MASP, inhibit loc=1115.  Standby E5-MASP is inhibited.  • Issue the command init-flash:loc=xxxx: mode=rplcebl:bits=32
		BOOTLOADER change request sent to card xxxx.  BOOTLOADER change for card xxxx SUCCESSFUL.  Issue the command init-flash:loc=xxxx:code=appr:gpl=bldc32 <enter></enter>
		Flash memory download for card xxxx completed. E5-MASP will reboot when the flash download has completed.
		The card will reboot to load the new Approved GPL version  • After card has rebooted, issue the command act-flash:loc=xxxx <enter></enter>
		Flash Activation for card xxxx completed. Issue the command rept-stat-gpl:loc=xxxx <enter> and verify card is flashed to version 140-033-000.</enter>
		tekelecstp 22-11-08 15:41:56 EST EAGLE 46.5.0.0.0-70.37.1
		GPL CARD RUNNING APPROVED TRIAL bldc32 xxxx 140-033-000 140-033-000
		The Running GPL version is the same as the Approved GPL version, and there is no ALM or + indication displayed on the Standby E5-MASP.
5	Initialize the Standby E5-MASP	Enter the command alw-card:loc=xxxx to initialize the Standby E5-MASP. The Standby E5-MASP will initialize and no longer be inhibited. Card has been allowed.
6	Identify the ACTIVE E5-MASP.	Issue the command rept-stat-db <enter> to identify the ACTIVE E5-MASP.</enter>
		tekelecstp 19-01-16 12:03:36 EST EAGLE 46.7.0.0.0-75.27.0 DATABASE STATUS: >> OK << TDM 1114 ( STDBY) TDM 1116 ( ACTV ) C LEVEL TIME LAST BACKUP C LEVEL TIME LAST BACKUP

Procedure 39: Flashing the E5-MASP to BLDC32 for Release 47.0.0.0

7		Enter the command init-card:loc=xxxx.
╚		xxxx is now the location of the Active E5-MASP.  The Active E5-MASP will reboot and the Standby E5-MASP will now become the Active E5-MASP.
8	Log in to the new Active E5-MASP.	Use login:uid=eagle, password = syst3m**9.
9		Repeat Step 4 to flash the E5-MASP to the Approved version of bldc32. Repeat Step 5 to initialize the E5-MASP.
		The Standby E5-MASP will initialize and no longer be inhibited.
		Both E5-MASPs should be flashed with BLDC32 GPL.
10		Unseat the Customer E5-MASP from slots 1113/1114 or 1115/1116.
11		Remove the SSD from each E5-MASP and install the SW release using the Media Builder.
12		Re-install the SSD on the E5-MASP and reseat the E5-MASP in slots 1113/1114 or 1115/1116.  The E5-MASP will initialize and boot to the Recovery Console mode.
13		Select Option #4 (FLASH BLDC32 FROM APPROVED TDM FIXED DISK) <enter> to flash the E5-MASP.</enter>
		The E5-MASP will reboot to load the new flash image. When the E5-MASP reboots, it will switch over to the mate E5-MASP, which has booted to Recovery Console mode.
		Select Option #4 (FLASH BLDC32 FROM APPROVED TDM FIXED DISK) <enter> to flash the mate E5-MASP.</enter>
		The E5-MASP will reboot to load the new flash image. When the E5-MASP initializes, wait 12 minutes before logging in.
14	Login to the Customer E5- MASP	Login to the Customer E5-MASP using the following commands: uid=eagle – password = eagle
		Enter the new password – syst3m**9 Enter the new password again to confirm.
15	Set up terminal access.	Set up terminal access using the following commands:
		Issue the command chg-secu-trm:trm=1:all=yes
		Issue the command logout to log out of Terminal 2.  Move the serial cable on the backplane to Terminal 1.
		Log in using the new password (syst3m**9)
ш		

# Procedure 39: Flashing the E5-MASP to BLDC32 for Release 47.0.0.0

16	Activate the new flash	After login, issue the command act-flash:loc=1115 <enter> to activate the new flash on the first E5-MASP.  Issue the command act-flash:loc=1113 <enter> to activate the flash on the second E5-MASP.  Flash Activation for card xxxx completed.</enter></enter>
17	Verify each E5-MASP is flashed to approved version	Issue the command rept-stat-gpl:gpl=bldc32 <enter> and verify each E5-MASP is flashed to version 149-004-000.  If both E5-MASPs are flashed to the Approved version, then flash process is complete. tekelecstp 22-11-19 13:18:55 MST EAGLE 47.0.0.0.0-79.13.0  GPL Auditing ON GPL CARD RUNNING APPROVED TRIAL BLDC32 1113 149-004-000 149-004-000 149-004-000 BLDC32 1115 149-004-000 149-004-000 149-004-000</enter>

## APPENDIX B. PREPARATIONS FOR UPGRADE EXECUTION

## **B.1** 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

## Procedure 40: Download Target Software Release and Create USB Upgrade Media

S T E P	Check off $()$ each step as it is	ds the target software release and creates the USB upgrade media using a Windows PC.  completed. Boxes have been provided for this purpose under each step number.  E FAIL, CONTACT My Oracle Support AND ASK FOR UPGRADE ASSISTANCE.
	Using a PC running Windows 7 or later, download the target EAGLE Release from the Oracle Software Delivery Cloud (OSDC) to a local directory.  Step 2 only needs to be executed if the target EAGLE Release is 47.0 or later.	<ul> <li>Go to <a href="http://edelivery.oracle.com">http://edelivery.oracle.com</a></li> <li>Sign In</li> <li>Search for the target EAGLE software release</li> <li>Accept the Oracle Standard Terms and Restrictions</li> <li>Click on the link to the zip file for the target EAGLE software release</li> <li>Save the zip file to a local directory, for example C:\Users\Admin\Desktop\uusb_media</li> <li>Unzip the Vxxxxxxx-01.zip file that was downloaded to the same local directory.</li> <li>This will produce a <eagle number="" release="" software="" target="">.exe file.</eagle></li> </ul>
2	Using a PC running Windows 7 or later, download the rollback source release GPL from the Oracle Software Delivery Cloud (OSDC) to a local directory.	<ul> <li>Search for the Oracle Communications EAGLE Rollback Releases 4X.X.X.X download package</li> <li>Accept the Oracle Standard Terms and Restrictions</li> <li>Click on the link to the zip file for the rollback source release GPL</li> <li>Save the zip file to a local directory, for example         C:\Users\Admin\Desktop\uusb_media     </li> <li>Unzip the Vxxxxxxx-01.zip file that was downloaded to the same local directory.</li> <li>This will produce an oamhc69.elf file</li> </ul>

Procedure 40: Download Target Software Release and Create USB Upgrade Media

3	Open a command window	C:\Users\Admin>cd Desktop/uusb_media
	as Administrator: on	
	Window 7 go to Start ->	C:\Users\Admin\Desktop\uusb_media>
	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.	
4	Extract the downloaded	C:\Users\Admin\Desktop\uusb_media> <eagle release<="" software="" target="" td=""></eagle>
	release in the local	number>
	directory by entering the	Trainibet >
	name of the .exe file as	7.7° 977.000 G
	seen in step 1 and verify	7-Zip SFX 9.20 Copyright (c) 1999-2010 Igor Pavlov 2010-11-18
	that the directory contains	
	the following files:	Processing archive: C:\Users\Admin\Desktop\uusb_media\46.3.0.0.0-68.12.0.e
	The target release file 46.xx.xx.xx.xx-	Trocessing aremver et lesers/ramm/pesktop/auso_media/10.5.0.0.0 00.12.0.0
	6X.yy.yy.tar.gz, uusb.clf,	
	mkdosfs.exe, pvu.exe,	Extracting 46.3.0.0.0-68.12.0.tar.gz
	uusb.exe.	Extracting uusb.clf
		Extracting mkdosfs.exe
		Extracting pvu.exe
		Extracting uusb.exe
_	<b>70.1</b>	Everything is Ok
5	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.	
6	Insert EAGLE USB media	
	into a PC USB port.	
7	Goto Start -> Computer	
ابضا	and wait for USB drive to	
	be detected. Note its drive	
	letter.	

Procedure 40: Download Target Software Release and Create USB Upgrade Media

8	Enter uusb command with the release filename and drive of the USB media,	C:\Users\Admin\Desktop\uusb_media>uusb.exe 46.xx.xx.xx-68.yy.yy.tar.gz e:
	where 46.xx.xx.xx.xx-	Converight (a) 1003, 2014, Orgala and/or its affiliates. All rights reserved
	68.yy.yy.tar.gz is the name of the release file in the	Copyright (c) 1993, 2014, Oracle and/or its affiliates. All rights reserved.
	directory from step 3 and E: is the USB media drive	Upgrade Media Creator Utility v1_1_0
	letter from above step 6.	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></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
9	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.	
	Steps 10-13 only need to	
	be executed if the target	
	release is EAGLE 47.0 or later.	
10		
10	Prepare the EAGLE USB media to the source	Follow steps 1 to 19 of the Procedure 10 from the Upgrade Session 2 section.
	release.	

# Procedure 40: Download Target Software Release and Create USB Upgrade Media

11	Insert EAGLE USB media into a PC USB port.	
12	Go to Start > Computer and wait for the USB drive to be detected. Note its drive letter.	
	Open a command window as Administrator.	<ol> <li>On Windows 7, go to Start &gt; All Programs &gt; Accessories</li> <li>Right click on Command Prompt and select Run as Administrator</li> <li>On Windows 8 or 10, go to Start menu</li> <li>Type cmd.exe in the search box</li> <li>Right click on the Command Prompt and select Run as Administrator</li> <li>Change Directory to the path used in step 2</li> </ol>
15	Enter the copy command with the rollback release GPL filename and drive of the USB media, where oamhc69.elf is the name of the rollback release GPL file in the directory from step 2 and E: is the USB media drive letter from above step 12 and toamhc69.elf is the destination file name. Confirm that it is ok to overwrite existing file. 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 rollback to the target release should a rollback be required.	C:\Users\Admin\Desktop\uusb_media\copy oamhc69.elf e:\toamhc69.elf  Press Y to overwrite existing file.

## **Procedure 41: Download Target Release to Inactive Partition**

S	This procedure downloads the target release to inactive partition of the TDMs.	
T E P	Check off $()$ each step as it is completed. Boxes have been provided for this purpose under each step number.	
#	SHOULD THIS PROCEDU	RE FAIL, CONTACT My Oracle Support AND ASK FOR UPGRADE ASSISTANCE.
	Remove the thumb drives from the E5-MASPs.	
	If downloading the upgrade target release from an FTP server, continue, otherwise go to step 5.	
3	Issue the command to display the status of the IPSM cards.	rept-stat-card:appl=ips
4	Response from the command is displayed.	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;
	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.	
5	Issue the command to display database status of both TDM partitions.	act-upgrade:action=dbstatus

**Procedure 41: Download Target Release to Inactive Partition** 

6	Response to the command	eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y Upg Phase x
	is displayed.	DATABASE STATUS: >> OK <<
		TDM 1114 ( STDBY) TDM 1116 ( ACTV ) C LEVEL TIME LAST BACKUP C LEVEL TIME LAST BACKUP
	Record the card locations	
	of the MASPs:	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
		FD CRNT Y XXX YY-MM-DD hh:mm:ss TTTT Y XXX YY-MM-DD hh:mm:ss TTTT MCAP 1113 MCAP 1115
	Act MASP	MCAP 1113 MCAP 1113
		RD BKUP
	Stby MASP	USB BKP
		CARD/APPL LOC C T LEVEL TIME LAST UPDATE VERSION STATUS
	V:6-:6-:464-	
ΙШ	Verify if either of the inactive partitions has not	OAM-RMV 1113
	been formatted. Mark	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
	below. Example shows	OAM-RMV 1115
	that inactive partition of	OAM-USB 1115
	1116 not formatted.	TDM-CRNT 1116 Y N XXX YY-MM-DD hh:mm:ss XXX-XXX NORMAL TDM-BKUP 1116 Y - XXX YY-MM-DD hh:mm:ss XXX-XXX NORMAL
	If a database LEVEL,	INACTIVE PARTITION GROUP
	VERSION or STATUS is	CARD/APPL LOC C T LEVEL TIME LAST UPDATE VERSION STATUS
	displayed the inactive	TDM-CRNT 1114 Y - ZZZ YY-MM-DD hh:mm:ss ZZZ-ZZZ-ZZZ UPG 3
	partition has been	TDM-BKUP 1114 Y - ZZZ YY-MM-DD hh:mm:ss ZZZ-ZZZ-ZZZ UPG 3
	formatted.	TDM-CRNT 1116 TDM-BKUP 1116
	Disk formatted.	
	Disk ioimatteu.	;
	1114	
	1116	
7	If either of the inactive	
	partitions has not been	
ΙЧ	formatted continue.	
	If the target release is 46.2	
	or higher, continue.	
8	Otherwise go to Step 30.  Issue the command to	
0	retrieve measurement	rtrv-meas-sched
	setup.	
	setup.	
9	Response to retrieve	eaglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x.x.x-YY.y.y
	command is displayed.	COLLECT = off
$ \mathbf{L} $		SYSTOT-STP = (off)
	Record if collection is on	SYSTOT-TT = (off) COMP-LNKSET = (off)
	or off:	COMP-LINK = (Off)
		MTCD-STP = (on)
	TO GOLL DOT	MTCD-LINK = (on)
	If COLLECT=ON,	MTCD-LNKSET = (on)
	Continue to next step.	,
10	Otherwise, go to Step 12.  Issue the command to turn	sha wasay sallast aff
10	off measurement	chg-meas:collect=off
	collection. <sup>23</sup>	
	Concention.	
11	Response to the change	eaglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x.x.x-YY.y.y
	command is displayed.	CHG-MEAS: MASP A - COMPLTD
		<b>;</b>
12	Issue the command to	rept-stat-seculog
	display security log status.	Tepe Stat-Securoy
	* A A	

 $<sup>^{\</sup>rm 23}$  If executed, this step causes the database level to increment.

# **Procedure 41: Download Target Release to Inactive Partition**

13	Response to the command is displayed.	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.
	If the ENTRIES column displays any value other than 0 for the Standby ROLE, proceed to the next step.  Otherwise, go to step 20	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
14	Issue the command to copy the security log from the standby disk.	copy-seculog:slog=stb:dfile=upg.appB
15	Response to the copy security log command is displayed.	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 ;
	If this command fails, proceed 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 0468.0177 SECULOG 111X Security log exception cleared ;
16	Issue the command to display the FTA directory.	disp-fta-dir
17	Response to the command is displayed.	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
	If there are any files that need to be saved, they need to be removed via a file transfer.	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 ;
18	Issue the command to delete ALL files in the transfer area.	dlt-fta:all=yes
19	Response to the delete command is displayed.	<pre>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. ;</pre>
20	Issue the command to format the inactive partition of the standby MASP.	format-disk:prtngrp=inactive:type=fixed:force=yes:low=no
21	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. ;
22	Issue the command to display database status of both TDM partitions.	act-upgrade:action=dbstatus

**Procedure 41: Download Target Release to Inactive Partition** 

23	Response to the command is displayed.	eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y DATABASE STATUS: >> OK <<		
	1 5	TDM 1114 ( STDBY ) TDM 1116 ( ACTV ) C LEVEL TIME LAST BACKUP C LEVEL TIME LAST BACKUP		
	Verify the inactive partition of the standby has been formatted. And the active partition is valid.	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 1115 MCAP 1115		
П	If a database LEVEL, VERSION or STATUS is	USB BKP		
	displayed the inactive partition has been formatted.	OAM-RMV 1113		
Ш	If the database LEVEL of the active partition of the active and standby are not	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		
	the same stop the procedure and contact My	INACTIVE PARTITION GROUP  CARD/APPL LOC C T LEVEL TIME LAST UPDATE VERSION STATUS		
	Oracle Support [see Appendix I.]	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		
24	If the inactive partition of the active MASP has not been formatted continue, otherwise go to Step 30.	;		
25	Issue the command to boot the Active MASP recorded in Step 6.	init-card:loc=XXXX (Where the XXXX is the location of the active MASP record in a previous)		
26	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		
		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: xxxxxxxxx ;		
27	Issue the command to log back in to the system.	login:uid=XXXXXX (Where XXXXXX is a valid login ID)		
28	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 10. ;		
	Ignore any login failure message.	? Login failures since last successful LOGIN Last successful LOGIN was on port ? on ??-??-?? @ ??:??:??		
29	Repeat step 12 – 24.			
30	If downloading the upgrade target release from an FTP server, continue,	Once inserted, allow time for the upgrade media to be detected by the system.		
	Otherwise, insert upgrade media into drive slot and go to step 33.	For E5-MASP systems, the USB drive is inserted in the flush mounted USB port on the active E5-MASP.		

**Procedure 41: Download Target Release to Inactive Partition** 

31	Issue command to retrieve the FTP servers	rtrv-ftp-serv				
	provisioned on the system.					
32	Response to the command	eaglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x.x.x-YY.y.y				
	is displayed.	APP IPADDR LOGIN PRIO PATH				
ļШ	Verify that a software	DIST XXX.XX.XX aaaaaa Z aaaaaaaaaaaaaaaa				
	distribution, DIST, application server has been provisioned.	No entries found ;				
	If the DIST has not been provisioned, contact My Oracle Support for assistance.					
33	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				
		<pre>act-upgrade:action=getrel:release="xx.xx.xx-yy.yy.yy.tar.gz" src=usb (downloading from upgrade media)</pre>				
		(Where the 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).				
34	Response to the command is displayed.	eaglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x.x.x-YY.y.y Download release from zzzzzzzz ;				
	Command execution time:	<pre>eaglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x.x-YY.y.y Validate database release xx.xx.xx-yy.yy.yy.tar ;</pre>				
	approximately 20 – 30 minutes.	eaglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x.x.x-YY.y.y Copy database release to inactive partition				
	If the software release has been downloaded from the USB drive, disconnect the	; eaglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x.x.x-YY.y.y Eagle Release successfully downloaded				
	drive from the E5-MASP.	<pre>eaglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x.x.x-YY.y.y Command Complete : Upgrade action completed successfully ;</pre>				
35	Issue the command to display database status of both TDM partitions.	act-upgrade:action=dbstatus				

**Procedure 41: Download Target Release to Inactive Partition** 

36	Response to the command is displayed.	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x-YY.yy.y  DATABASE STATUS: >> OK <<
	Verify the inactive partitions of the active & standby have been downloaded with the target	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   RD BKUP
	release by confirming that database VERSION is the target version. C (coherency), LEVEL, and	USB BKP
	STATUS will be displayed as shown.	TDM-CRNT
		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
37	If step 10 was executed, issue the command to turn the measurements collection on. Otherwise go to the end of the procedure.	chg-meas:collect=on
38	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 ;

# **B.2** Configuring Card-Set Network Conversion Method.

Procedure 42: Preparation for Upgrade to use the Card-Set Network Conversion Method.

S T E P	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.  Check off (√) each step as it is completed. Boxes have been provided for this purpose under each step number.  SHOULD THIS PROCEDURE FAIL, CONTACT My Oracle Support AND ASK FOR UPGRADE ASSISTANCE.		
1	The system should be running the target release on MASPs of 46.0 or higher.	This procedure should be run AfterProcedure 30, Step 40 in E54339 OR Before Procedure 8 in this document.	
2	Issue the card status command to verify the target release GPL is running.	rept-stat-gpl:gpl=oamhc	
$\frac{3}{\Box}$	Response from the status command is displayed.	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x-YY.yy.y Upg Phase 0 GPL Auditing ON	
	Verify that the version of OAMHC GPL running is 46.0 or later.	APPL CARD RUNNING APPROVED TRIAL  OAMHC 1113 XXX-XXX-XXX ALM YYY-YYY-YYY	
4	Issue the command to retrieve the upgrade configuration	rtrv-upgrade-config	
5	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	
	If the Threshold Type has not already been changed to SET, it will be either GROUP or SYSTEM.	Configured Upgrade Threshold Type: GROUP  Command Completed. ;	
	If the SAK is not set, perform Appendix C.		
	<b>Note</b> : GROUP is no longer valid option for Release 46.9 and later, SET is the only option.		
6	Issue the command to change the upgrade configuration  Note: refer to 1.6, recommendation # 5 for the values of X and Y.		
7	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.	
8	Issue the command to retrieve the upgrade configuration	rtrv-upgrade-config	

<sup>&</sup>lt;sup>24</sup> Dashes are displayed until GPL auditing has initialized after the activity has been switched, which may take up to two minutes.

**Procedure 42: Preparation for Upgrade to use the Card-Set Network Conversion Method.** 

10	Response to the retrieve command is displayed.  Issue the command to report the card status.	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. ;  rept-stat-card
	is displayed.	CARD
12	Issue the upgrade	1216 134-076-000 DCM IPLC IS-NR Active 1217 134-076-000 DSM SCCPHC IS-NR Active 1301 134-076-000 LIMDSO S57ML IS-NR Active 1302 134-076-000 LIMDSO S57ML IS-NR Active 1303 134-076-000 LIMDSO S57ML IS-NR Active 1304 134-076-000 LIMDSO S57ML IS-NR Active 1305 134-076-000 LIMDSO S57ML IS-NR Active 1306 134-076-000 LIMDSO S57ML IS-NR Active 1307 134-076-000 LIMDSO S57ML IS-NR Active 1308 134-076-000 LIMDSO S57ML IS-NR Active 1308 134-076-000 LIMDSO S57ML IS-NR Active 1308 134-076-000 LIMDSO S57ML IS-NR Active 1310 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 1317 134-076-000 DSM SCCPHC IS-NR Active 1317 134-076-000 DSM SCCPHC IS-NR Active  Command Completed.
	activation command to create card sets.	act app. auctaction—c. caccocco

**Procedure 42: Preparation for Upgrade to use the Card-Set Network Conversion Method.** 

12	Desmana to the second	1	eaglestp YY-MM-DD hh:mm:ss TTTT_EAGLE XX.x.x-YY.yy.y Upg Phase x
13	Response to the command is displayed.		ACT-UPGRADE: Creating card set list
	Notice: the Create Set	;	Card set list created.
	command assigns cards to sets using an optimal		eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x-YY.yy.y Upg Phase x
	distribution, which		Card List: Group = MUX, Set = 1
	assumes that the system is stable. If the system's		CARD APPL LINKS TPS
	configuration is such that the distribution of the		1209 HIPR2 N/A N/A
	cards is not desirable,		1209 HIPR2 N/A N/A 1309 HIPR2 N/A N/A 1109 HIPR2 N/A N/A
	contact My Oracle Support for assistance when		MUX= 50%
	uncertain on how to alter the sets of cards.	;	
	Otherwise, continue to		eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x-YY.yy.y Upg Phase x
	next step if a change to the assignment of cards is		Card List: Group = MUX, Set = 2
	necessary.		CARD APPL LINKS TPS
			1210 HIPR2 N/A N/A
			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*
			1315 IPS N/A 0
			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%
			GLS= 30% 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
			1117 MCP N/A 0 1112 GLS N/A 0
			GLS= 50% IPS= 33%
			MCP= 50% SCCP= 50%
			3cci - 30%
I		,	

Procedure 42: Preparation for Upgrade to use the Card-Set Network Conversion Method.

Card List: Group = LINK, Set = 1			eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x-YY.yy.y Upg Phase x			
CARD APPL LINKS TPS  121 SS7 8 W/A 1213 SS7 1 W/A 1215 SS7 1 W/A 1302 SS7 1 N/A 1304 SS7 1 N/A 1306 SS7 1 N/A 1306 SS7 1 N/A 1310 IPGWY 1º N/A 1301 IPGWY 1º N/A 1301 IPGWY 1º N/A 1301 IPGWY 5/0% 1PLIM=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						
1201		=======================================				
1304   SS7   1   N/A     1306   SS7   1   N/A     1308   SS7   1   N/A     1308   SS7   1   N/A     1308   SS7   1   N/A     1408   SS7   1   N/A     1509   SS7   1   N/A     1509   SS7   1   N/A     1500   SS7   SW     1501   SS7   SW     1501   SS7   SW     1502   SS7   SW     1503   SS7   SW     1504   SS7   SW     1505   SS7   SW     1505   SS7   SW     1506   SS7   SW     1507   SS7   SW     1508   SS7   SW     1509   SS7   SW     1509   SS7   SW     1500						
1304   SS7   1   N/A     1306   SS7   1   N/A     1308   SS7   1   N/A     1308   SS7   1   N/A     1308   SS7   1   N/A     1408   SS7   1   N/A     1509   SS7   1   N/A     1509   SS7   1   N/A     1500   SS7   SW     1501   SS7   SW     1501   SS7   SW     1502   SS7   SW     1503   SS7   SW     1504   SS7   SW     1505   SS7   SW     1505   SS7   SW     1506   SS7   SW     1507   SS7   SW     1508   SS7   SW     1509   SS7   SW     1509   SS7   SW     1500			1201 SS7 8 N/A 1213 SS7 2 N/A			
1304   SS7   1   W/A     1306   SS7   1   W/A     1308   SS7   1   W/A     1308   SS7   1   W/A     1308   SS7   1   W/A     1408   SS7   1   W/A     1509   SS7   1   W/A     1609   SS7   1   W/A     1609   SS7   1   W/A     176WY 50%     17PL1M=100%     1857   SS7   SS7     1857   SS7   SS7     1858   SS7   SS7     1858   SS7   SS7     1859   SS7   SS7     1859   SS7   SS7     1850			1215 SS/ 1 N/A   1216			
1306			1302 SS7 1 N/A 1304 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 1307 SS7 1 N/A 1103 IPGWY 1° N/A 1103 IPLIM 0 N/A 1104 IPLIM 0 N/A 1104 IPLIM 0 N/A 1105 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.  If cards need to be moved to a different set, issue the command to change the upgrade configuration 15 Chg-upgrade-config:loc=XXXX:assignset=NV  (Where XXXX is the card to be moved and NV is the set it should move to.)			1306 SS7 1 N/A			
IPCMY= 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 1306 SS7 1 N/A 1307 SS7 1 N/A 1102 IPGWY 1* N/A 1103 IPLIM 0 N/A 1104 IPLIM 0 N/A 1105 IPLIM 0 N/A 1106 IPLIM 0 N/A  ATM= 0% IPCMY= 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  ichg-upgrade-config:loc=XXXX:assignset=NW  (Where XXXX is the card to be moved and NN is the set it should move to.)						
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 1305 SS7 1 N/A 1307 SS7 1 N/A 1102 IPCMY 1* N/A 1104 IPLIM 0 N/A 1104 IPLIM 0 N/A 1104 IPLIM 0 N/A  ATM= 0% IPCMY= 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  if cards need to be moved to a different set, issue the command to change the upgrade configuration <sup>25</sup> chg-upgrade-config:loc=XXXX:assignset=NW  (Where XXXX is the card to be moved and NN is the set it should move to.)			IPGWY= 50% IPLIM=100%			
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 1305 SS7 1 N/A 1305 SS7 1 N/A 1306 IPCMY 1* N/A 1102 IPCMY 1* N/A 1104 IPLIM 0 N/A 1104 IPLIM 0 N/A  ATM= 0% IPCMY= 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 ;  chg-upgrade-config:loc=XXXX:assignset=NW (Where XXXX is the card to be moved and NN is the set it should move to.)			:			
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 1305 SS7 1 N/A 1305 SS7 1 N/A 1306 SS7 1 N/A 1307 SS7 1 N/A 1308 IPIM 0 N/A 1109 IPEMY 1* N/A 1109 IPIM 0 N/A 1100 IPIM 0 N						
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 1305 SS7 1 N/A 1307 SS7 1 N/A 1308 IPLIM 0 N/A 1100 IPGWY 1* N/A 1101 IPLIM 0 N/A 1104 IPLIM 0 N/A 1104 IPLIM 0 N/A 1105 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 ; chg-upgrade-config:loc=XXXX:assignset=NN  (Where XXXX is the card to be moved and NN is the set it should move to.)						
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 1308 SS7 1 N/A 1309 SS7 1 N/A 1309 SS7 1 N/A 1300 SS7 1 N/A 1301 SS7 1 N/A 1301 SS7 1 N/A 1302 IPGWY 1* N/A 1303 IPLIM 0 N/A 1104 IPLIM 0 N/A 1104 IPLIM 0 N/A 1105 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 ; chg-upgrade-config:loc=XXXX:assignset=NW (Where XXXX is the card to be moved and NN is the set it should move to.)			=======================================			
1305 S57 1 N/A 1102 IPGWY 1* N/A 1103 IPLIM 0 N/A 1104 IPLIM 0 N/A 1105 IPGWY 50% 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 ; chg-upgrade-config:loc=xxxx:assignset=NN (Where XXXX is the card to be moved and NN is the set it should move to.)						
1305 S57 1 N/A 1102 IPGWY 1* N/A 1103 IPLIM 0 N/A 1104 IPLIM 0 N/A 1105 IPGWY 50% 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 ; chg-upgrade-config:loc=xxxx:assignset=NN (Where XXXX is the card to be moved and NN is the set it should move to.)			1212 SS7 5 N/A 1214 SS7 1 N/A			
1305 S57 1 N/A 1102 IPGWY 1* N/A 1103 IPLIM 0 N/A 1104 IPLIM 0 N/A 1105 IPGWY 50% 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 ; chg-upgrade-config:loc=xxxx:assignset=NN (Where XXXX is the card to be moved and NN is the set it should move to.)			1301 SS7 1 N/A 1303 SS7 1 N/A			
1102 IPGWY 1* N/A 1104 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  the command to change the upgrade configuration <sup>25</sup> (Where XXXX is the card to be moved and NN is the set it should move to.)			1 1303 SS/ 1 N/A			
TID4 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 ;  the cards need to be moved to a different set, issue the command to change the upgrade configuration configurati			1102 IPGWY 1* N/A			
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 ;  chg-upgrade-config:loc=xxxx:assignset=NN  (Where XXXX is the card to be moved and NN is the set it should move to.)			==** =: =: :/;:			
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 ; chg-upgrade-config:loc=xxxx:assignset=NN  (Where XXXX is the card to be moved and NN is the set it should move to.)						
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 ;  chg-upgrade-config:loc=xxxx:assignset=NN  (Where XXXX is the card to be moved and NN is the set it should move to.)			IPLIM= 0%			
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 ;  chg-upgrade-config:loc=xxxx:assignset=NN  (Where XXXX is the card to be moved and NN is the set it should move to.)			agglesta VV-MM-DD bhimmiss TTTT FACLE VV V VV VV V Upg Bhasa V			
eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x-YY.yy.y Upg Phase x  Command Complete: Upgrade action completed successfully;  If cards need to be moved to a different set, issue the command to change the upgrade configuration <sup>25</sup> (Where XXXX is the card to be moved and NN is the set it should move to.)			xxxx is unassigned. End of Card List display.			
Command Complete: Upgrade action completed successfully;  If cards need to be moved to a different set, issue the command to change the upgrade configuration <sup>25</sup> Chg-upgrade-config:loc=XXXX:assignset=NN  (Where XXXX is the card to be moved and NN is the set it should move to.)						
if cards need to be moved to a different set, issue the command to change the upgrade configuration <sup>25</sup> if cards need to be moved to a different set, issue the command to change the upgrade configuration <sup>25</sup> (Where XXXX is the card to be moved and NN is the set it should move to.)						
to a different set, issue the command to change the upgrade configuration <sup>25</sup> (Where <i>XXXX</i> is the card to be moved and <i>NN</i> is the set it should move to.)	14	If cards need to be moved	;			
upgrade configuration <sup>25</sup>		to a different set, issue the	cng-upgrade-contig:ioc=xxxx:assignset=NN			
1 15   D 4						
is displayed.  Response to the command is displayed.  Response to the command chg-upgrade-config:loc=xxxx:assignset=NN Command entered at terminal #tt.	15	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= <i>XXXX</i> :assignset= <i>NN</i> Command entered at terminal #tt.			
Command Completed.						
16 Issue the one of the act-upgrade:action=displaysets	16		act-upgrade:action=displaysets			
following commands to retrieve the card-set						
rtrv-upgrade-config:display=limsets rtrv-upgrade-config:display=srvsets						
T CI V-upgi ade-com 1g.d13p1ay-31 v3ec3			Tierv apprade com rgrarspray-sivsees			

<sup>&</sup>lt;sup>25</sup> 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.

**Procedure 42: Preparation for Upgrade to use the Card-Set Network Conversion Method.** 

17 Res	sponse to the retrieve	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x-YY.yy.y Upg Phase x
con	nmand is displayed.	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
		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
		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
		1316 IPS N/A 0 1317 SCCP N/A 1700*
		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%
	;	

Procedure 42: Preparation for Upgrade to use the Card-Set Network Conversion Method.

		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% ;
		<pre>eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x-YY.yy.y Upg Phase x Card List: Group = LINK, Set = 2</pre>
		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%
		<pre>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. ;</pre>
		eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x-YY.yy.y Upg Phase x
		Command Complete : Upgrade action completed successfully ;
18 □	Repeat steps 14 – 17 as cards need to be moved.	

## APPENDIX C. ENTERING UPGRADE SOFTWARE ACCESS KEY

## **Procedure 43: Validate Upgrade Software Access Key**

S T	This procedure will val	idate the Upgrade Software Access Key against the upgrade target release.
E P	The Upgrade Software later.	Access Key is used for releases 45.x and 46.0. It is no longer used for release 46.1 and
#	Check off $()$ each step as it	is completed. Boxes have been provided for this purpose under each step number.
	SHOULD THIS PROCEDUI	RE FAIL, CONTACT My Oracle Support AND ASK FOR UPGRADE ASSISTANCE.
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. <sup>26</sup> Skip this command for releases 46.1 and later.	chg-upgrade-config:sak=XXXXXXXXXX:src=fixed (Where XXXXXXXXXXXX is the Software Access Key.)
3	Response to command is displayed.	eaglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x.x.x-YY.y.y chg-upgrade-config:key=XXXXXXXXXXXXXI:src=zzzzz Command entered at terminal #6.;
	Verify the correct Upgrade target release is in the output.	<pre>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. ;</pre>

 $<sup>^{26}</sup>$  If SAK unavailable, contact  $\underline{\text{My Oracle Support}}.$ 

## APPENDIX D. SUPPLEMENTAL INFORMATION FOR PROCEDURE 8, STEP 2

## D.1 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 Procedure 8, step 2. 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 Procedure 8, step 2 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
      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.
```

## D.2 Determination and Recovery of DDL Hunt during Upgrade

## NOTE: The following section should be completed with the assistance of My Oracle Support.

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.

**Note:** After upgrade completion, the DB level must not be changed on the destination release. If the DB level is changed, then the MTP cards will not be able to crossload the DDB from other network cards because of the difference in the DB level and the cards get stuck in the DDL\_HUNT state. This causes the rollback failures.

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 external reference [8] in section 1.2.1 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. Table 21 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 21. Recovery from DDL Hunt by UAM.

UAM	Device	Condition	Recovery
0236 0200	SLK	Bouncing Link	A) Issue DDB checksum SEND-MSG per internal Ref. [8]
			B) Issue CANC-SLK to deactivate the affected link
0264 - 0269	SLK	Link Congestion	A) Issue DDB checksum SEND-MSG per internal Ref. [8]
			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 Ref. [8]
			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 Ref. [8]
			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 Ref. [8]
			B) Investigate the far-end and fix the far-end

i	N Lagua CANIC CLICAs also attracts the afficient start that
1	(i) Issue CANC-SLK to deactivate the affected link
1	 7 100de of the oblive to dedotivate the ancoted link

Note: If the front-end switches activity, device may return to previous state.

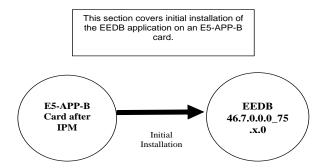
Discrepancy List

Date	Test	Description of Failures and/or Issues.	Resolution and Upgrade	Resolution
	Case	Description of Failures and/or Issues. Any CSRs / RMAs issued during Acceptance. Discrepancy	Resolution and Upgrade Center Engineer Responsible	Date:
	1			

### APPENDIX E. EEDB INSTALLATION

This section defines the step-by-step actions performed to execute EEDB software installation on E5-APP-B-02.

Figure 2: Initial EEDB Application Installation Path



## **E.1** Upgrade Overview

## **E.1.1** 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 22: 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)	
NTP2 IP (IPv4)	
NTP3 IP (IPv4)	
VIP	
Time Zone	

• Passwords for users on the local system:

**Table 23. EEDB User Password Table** 

EEDB USERS			
Login	Node A password	Node B password	
root			
eedbconfig			
admusr			

#### **E.1.2 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 Table 6 and Table 7 are to be executed in the order they are listed.

**Table 24. Installation Phases for EEDB** 

Phase	T	psed ime nutes)	Activity	Procedure
	This Step	Cum.		
Connectivity setup	15	15	Set up connectivity to the MPS Servers.	Upgrade Preparation
Pre-upgrade check	5	20	Verify requirements for install are met.	0
Configure the Network	5	25	Configure the Network using platefg on Node A	0
Configure the Network	5	30	Configure the Network using platefg on Node B	0
Create the bulkconfig file	5	35	Create the configuration file	0
Create the bulkconfig file	5	40	Create the configuration file	0
Pre-install health check	5	45	Run the syscheck utility to verify that all servers are operationally sound on Node A.	0
Pre-install health check	5	50	Run the syscheck utility to verify that all servers are operationally sound on Node B.	0
Configure Server Node A	5	55	Set hostname, designation and time.	0
Configure Server Node B	5	60	Set hostname, designation and time.	0
Install Servers	30	90	Install software on Node A and B	0, 0

# **E.1.3 Upgrade Preparation**

### Procedure 44: Setting up the upgrade environment for EEDB

S T	This procedure sets up	the upgrade environment. Windows are opened for both MPS servers.	
E P	NOTE: Call My Orac	le Support for assistance if modem access is the method use for upgrade.	
#	Check off $()$ each step as it is completed. Boxes have been provided for this purpose under each step number.		
	SHOULD THIS PROCEDU	JRE FAIL, CONTACT My Oracle Support AND ASK FOR UPGRADE ASSISTANCE.	
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. <b>Cable part numbers - 830-1220-xx</b>	
2	On the workstation, open one terminal window in preparation for establishing remote connections to the MPS servers.	Create a terminal window	
ω	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 ☐ c	Log into MPS A.	<pre><hostname> console login: admusr password: <password></password></hostname></pre>	
6	MPS A: Start screen Session.	Execute the following command to start screen and establish a console session with MPS A.  \$ screen -L	
<sup>7</sup>	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.	<pre><hostname> console login: admusr password: <password></password></hostname></pre>	

#### Procedure 44: Setting up the upgrade environment for EEDB

1	MPS B: Start screen Session.	Execute the following command to start screen and establish a console session with MPS B. <b>\$</b> screen -L
12	MPS A and B: Procedure Complete.	This procedure is complete.

Note: For the complete list of cards supported by EAGLE Release 47.0, see Hardware Reference Guide.

## **Procedure 45 Pre-upgrade requirements**

### **Procedure 45: Verify the Pre-Upgrade Requirements**

S	This procedure verifie	es that all pre-upgrade requirements have been met.	
T E P	NOTE: Call My Oracle Support for assistance if modem access is the method use for upgrade.		
#	Check off $()$ each step as i	t is completed. Boxes have been provided for this purpose under each step number.	
#	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 (Section E.1.1D.1E.1) are present.	
2	Verify the availability of passwords for MPS systems.	Refer to Table 23 for the list of users.	
3	Procedure Complete.	This procedure is complete.	
11 1			

### **E.1.4** Software Installation Procedures

## **Procedure 46 Create Configuration file on Node A**

#### Procedure 46: Create Configuration file on Node A

S	This procedure creates the EEDB configuration file.
T	
$\mathbf{E}$	NOTE: Call My Oracle Support for assistance if modem access is the method use for upgrade.
P	
	Check off $()$ each step as it is completed. Boxes have been provided for this purpose under each step number.
#	
	SHOULD THIS PROCEDURE FAIL, CONTACT My Oracle Support AND ASK FOR UPGRADE ASSISTANCE.

	IMPORTANT: Installation of the Operating System on an Oracle Application Server should be completed before starting installation procedure. Refer to 0 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"	<pre>\$ 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 ip="" server=""> 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.</ntp></vip></virtual></node></node></node></nodeb-hostname></node></node></node></nodea-hostname></pre>			
4	Procedure Complete.	This procedure is complete.			

## **Procedure 47 Create Configuration file on Node B**

### Procedure 47: Create Configuration file on Node B

S T	This procedure creates the EEDB configuration file.
E	NOTE: Call My Oracle Support for assistance if modem access is the method use for upgrade.
P	Check off $(\sqrt{t})$ each step as it is completed. Boxes have been provided for this purpose under each step number.
#	SHOULD THIS PROCEDURE FAIL, CONTACT My Oracle Support AND ASK FOR UPGRADE ASSISTANCE.

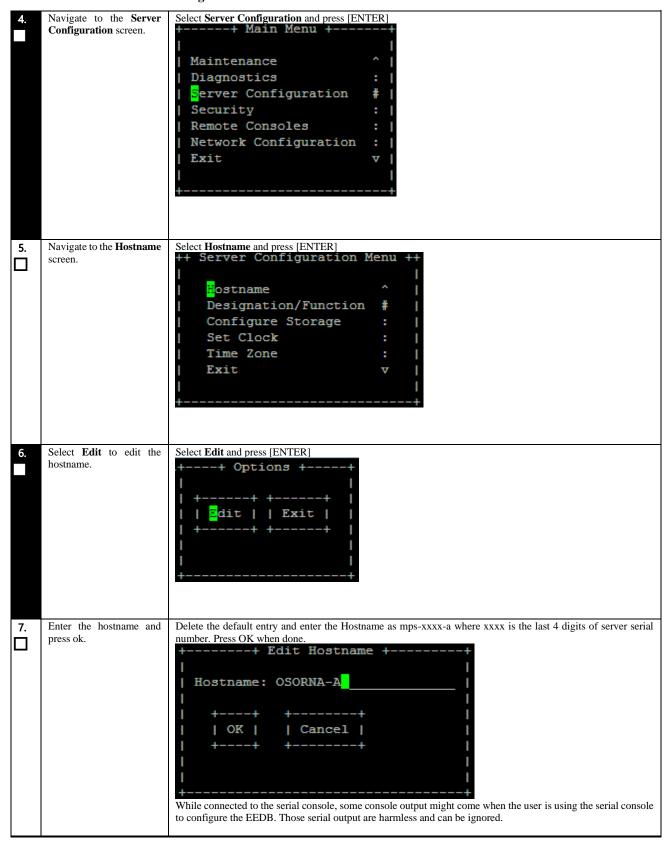
 $IMPORTANT: Installation of the Operating System on an Oracle Application Server should be completed before starting installation procedure. Refer to \ 0 for TPD installation.$ 

## **Procedure 47: Create Configuration file on Node B**

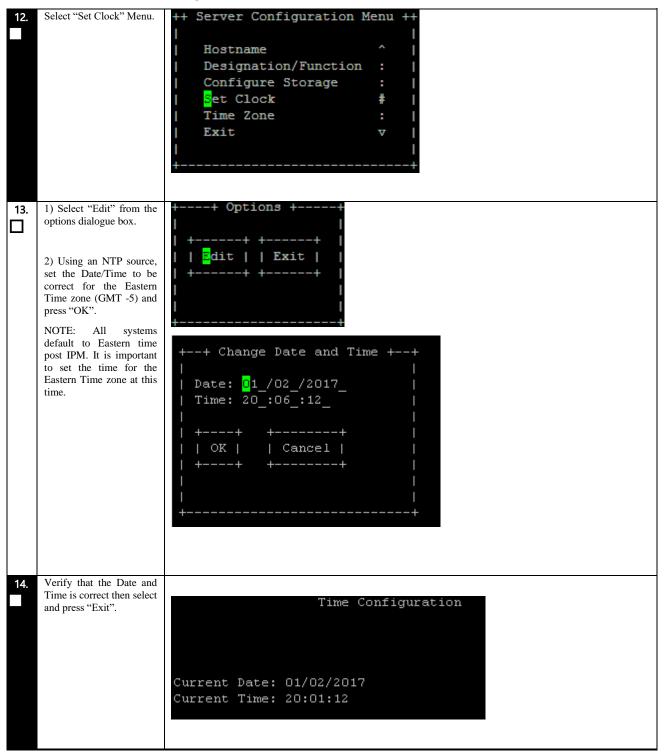
1	Log in as "admusr" user on Node B.	If not already logged in, then login as "admusr":  [hostname] consolelogin: admusr password: password
2	Switch super user to root.	\$ sudo su -
3	Create the file in root directory named as "bulkconfig"	<pre>\$ vim /root/bulkconfig  Content of file should be as follow: 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 ip="" server=""> 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.</ntp></vip></virtual></node></node></node></nodeb-hostname></node></node></node></nodea-hostname></pre>
4	Procedure Complete.	This procedure is complete.

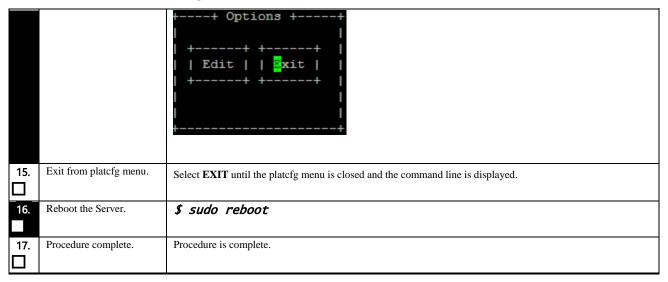
# **Procedure 48 Pre-Install Configuration on Node A**

S	This procedure provide	This procedure provides instructions to perform pre-configuration for an initial install of the application.	
T E	Check off $()$ each step as it is completed. Boxes have been provided for this purpose under each step number.		
Р	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	





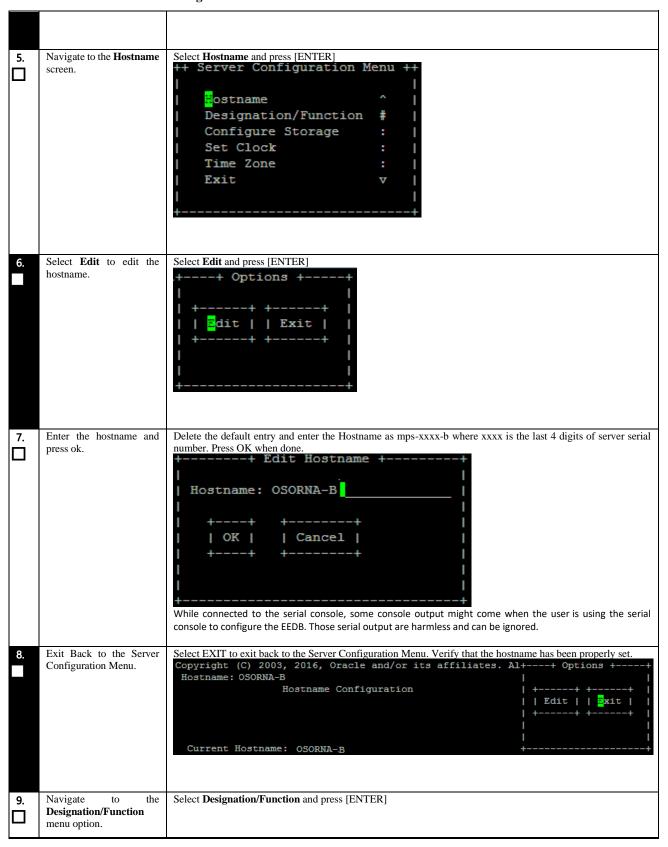




## Procedure 49 Pre-Install Configuration on Node B

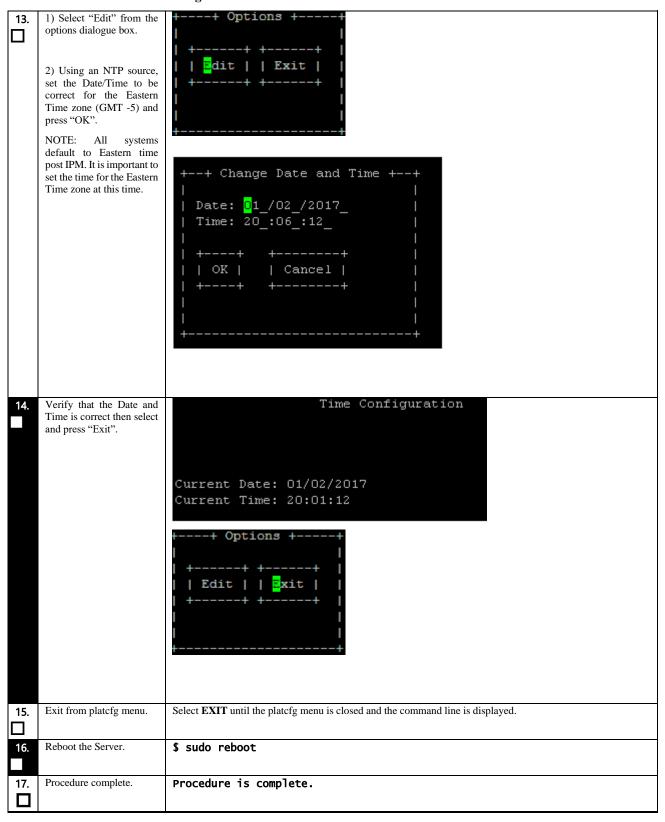
S	This procedure provide	es instructions to perform pre configuration for an initial install of the application.
Т	l	
Ε	Check off $(\checkmark)$ each step as it	is completed. Boxes have been provided for this purpose under each step number.
Р	IF THIS PROCEDURE FA	ILS, CONTACT MY ORACLE SUPPORTAND ASK 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

Procedure 49: Pre-Install Configuration on Node B



Procedure 49: Pre-Install Configuration on Node B

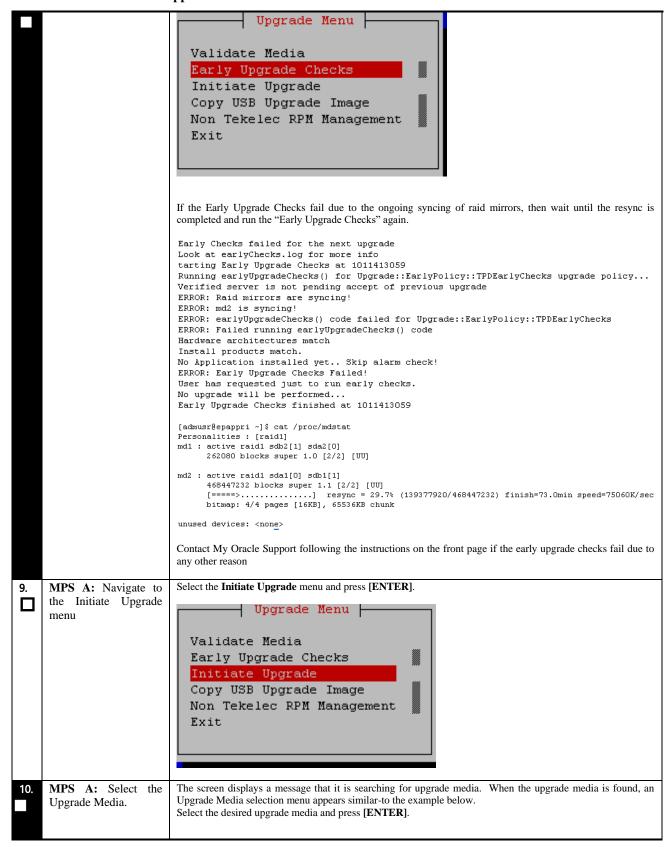




# **Procedure 50 Install Application on Node A**

## **Procedure 50: Install the Application on Node A**

S	This procedure installs	the application on the server.
T	ims procedure instans	the application on the server.
Ė	Check off $()$ each step as i	t is completed. Boxes have been provided for this purpose under each step number.
Р	IF THIS PROCEDURE FAI	ILS, CONTACT MY ORACLE SUPPORTAND ASK FOR ASSISTANCE.
#		
1.	MPS A: Copy the EEDB ISO on 1A.	Refer 00 to download the EEDB ISO and copy EEDB 46.8 ISO to /var/TKLC/upgrade directory.
2.	Create a terminal window	If not already connected, connect to the E5-APP-B card via the serial Port.
	and log into MPS A.	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. <b>Cable part numbers - 830-1220-xx</b>
3.	MPS A: Login prompt is	<pre><hostname> console login:</hostname></pre>
	displayed.	Note: Hit enter if no login prompt is displayed.
4.	MPS A: log in as	[hostname] consolelogin: admusr
	"admusr" user.	password: password
5.	MPS A: Validate ISO file.	Validate ISO file using <b>00.</b>
6. 	MPS A: Start platefg utility.	\$ sudo su - platcfg
7.	MPS A: Navigate to the Upgrade menu.	The platefg 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.



## **Procedure 50: Install the Application on Node A**

		++ Choose Upgrade Media Menu ++
		! <b>-</b>
		EDB-46.7.0.0.0_75.23.0-x86_64.iso - 46.7.0.0.0_75.23.0 ^     Exit #
		12,10
		++
11.	MPS A: Upgrade	The screen displays the output like following, indicating that the upgrade software is first running the upgrade
	proceeds.	checks, and then proceeding with the upgrade.
		No Application installed yet Skip alarm check!
		Verified all raid mirrors are synced.
		Early Upgrade Checks Have Passed!
		Early Upgrade Checks finished at 1447429031 Initializing upgrade information
		initializing approach information
12.	MPS A: Upgrade	Many informational messages appear on the terminal screen as the upgrade proceeds. The messages are not
	proceeds.	shown here for clarity sake.  When installation is complete, the server reboots.
		when histaliation is complete, the server reboots.
13.	MPS A: Upgrade	After the final reboot, the screen displays the login prompt as in the example below.
	completed.	
		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	[hostname] consolelogin: admusr
	"admusr" user.	password: password
15.	MPS A: Check the	Examine the upgrade logs in the directory /var/TKLC/log/upgrade and verify that no errors and warnings were reported.
	Upgrade log.	
		\$ 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 Appendix I, if the output contains any errors beside the following:
		the mediculous on the Appendix 1, 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 Appendix I, if
		the output contains any warnings beside the following:
-		and the second and th

## **Procedure 50: Install the Application on Node A**

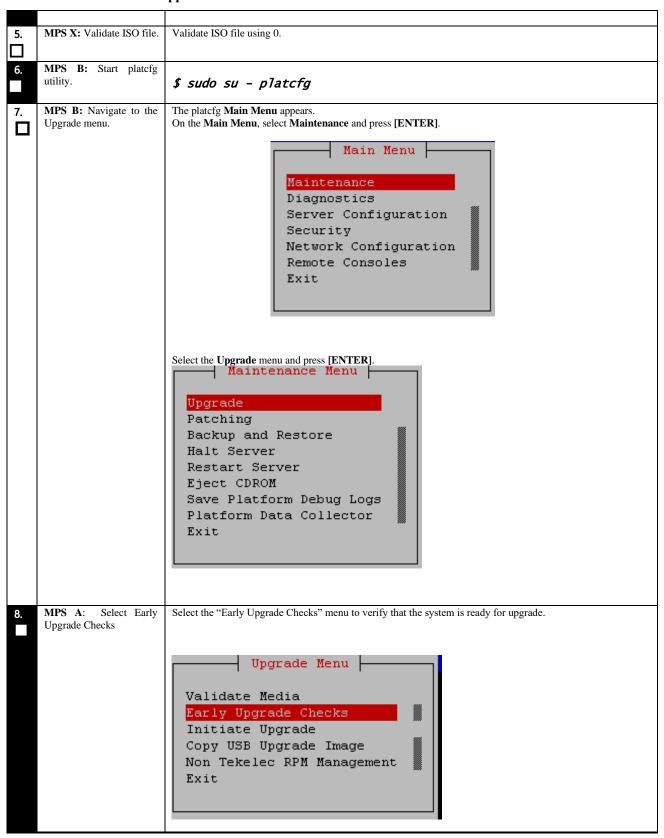
		1542695599::WARNING: /usr/TKLC/plat/etc/alarms/alarms.xml has been updatedreparsing xml
		1542695670::warning: erase unlink of /etc/ssm/hwmgmtd.conf failed: No
		such file or directory 1542695672::kexec-tools #warning: /etc/kdump.conf created as /etc/kdump.conf.rpmnew
		1542695778::setup ####################################
		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: servicedisabled 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 Appendix I.  1399367207:: Upgrade returned success!
18.	MPS A: Install Complete.	Install Procedure is complete.

# **Procedure 51 Install Application on Node B**

## **Procedure 51: Install the Application on Node B**

	TEL:	de confliction and de conse
S	Inis procedure installs	s the application on the server.
T E	Check off $(\sqrt{t})$ each step as it is completed. Boxes have been provided for this purpose under each step number.	
Р	IF THIS PROCEDURE FAILS, CONTACT MY ORACLE SUPPORTAND ASK FOR ASSISTANCE.	
#		
#		
1.	MPS B: Install 1B.	Refer 00 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. <b>Cable part numbers - 830-1220-xx</b>
3.	MPS B: Login prompt is displayed.	<pre><hostname> console login:</hostname></pre>
		Note: Hit enter if no login prompt is displayed.
4.	MPS B: log in as "admusr" user.	<pre><hostname> consolelogin: admusr password: password</hostname></pre>

Procedure 51: Install the Application on Node B



#### Procedure 51: Install the Application on Node B

```
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.
                               Early Checks failed for the next upgrade
                               Look at earlyChecks.log for more info
                               tarting Early Upgrade Checks at 1011413059
                               Running earlyUpgradeChecks() for Upgrade::EarlyPolicy::TPDEarlyChecks upgrade policy...
                               Verified server is not pending accept of previous upgrade
                               ERROR: Raid mirrors are syncing!
                               ERROR: md2 is syncing!
                               ERROR: earlyUpgradeChecks() code failed for Upgrade::EarlyPolicy::TPDEarlyChecks
                               ERROR: Failed running earlyUpgradeChecks() code
                               Hardware architectures match
                               Install products match.
                               No Application installed yet.. Skip alarm check!
                               ERROR: Early Upgrade Checks Failed!
                               User has requested just to run early checks.
                               No upgrade will be performed...
                               Early Upgrade Checks finished at 1011413059
                               [admusr@epappri ~] $ cat /proc/mdstat
                               Personalities : [raid1]
                               md1 : active raid1 sdb2[1] sda2[0]
                                     262080 blocks super 1.0 [2/2] [UU]
                               md2 : active raid1 sda1[0] sdb1[1]
                                     468447232 blocks super 1.1 [2/2] [UU] [====>......] resync = 29.7% (139377920/468447232) finish=73.0min speed=75060K/sec
                                     bitmap: 4/4 pages [16KB], 65536KB chunk
                               unused devices: <none>
                               Contact My Oracle Support following the instructions on the front page or the instructions on the Appendix I, if
                               the early upgrade checks fail due to any other reason.
      MPS A: Navigate to the
                               Select the Initiate Upgrade menu and press [ENTER].
     Initiate Upgrade menu
                                            ⊢ Upgrade Menu ⊦
                                  Validate Media
                                  Early Upgrade Checks
                                  Initiate Upgrade
                                  Copy USB Upgrade Image
                                  Non Tekelec RPM Management
                                  Exit
                               The screen displays a message that it is searching for upgrade media. When the upgrade media is found, an
     MPS
           B: Select
10.
      Upgrade Media.
                               Upgrade Media selection menu appears similar-to the example below.
                               Select the desired upgrade media and press [ENTER].
                                                   -----+ Choose Upgrade Media Menu +-
                                    EEDB-46.7.0.0.0 75.23.0-x86 64.iso
                                                                                         - 46.7.0.0.0 75.23.0
                                                                                                                         #
                                    Exit
     MPS
              B:
                               The screen displays the following, indicating that the upgrade software is first validating the media, and then
11.
                     Upgrade
     proceeds.
                               proceeding with the upgrade.
```

## **Procedure 51: Install the Application on Node B**

		No Application installed yet Skip alarm check!
		Verified all raid mirrors are synced.
		Early Upgrade Checks Have Passed!
		Early Upgrade Checks finished at 1447429031
		Initializing upgrade information
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	After the final reboot, the screen displays the login prompt as in the example below.
	completed.	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 Appendix I, 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 Appendix I, if the output contains any warnings beside the following: 1542695599::WARNING: /usr/TKLC/plat/etc/alarms/alarms.xml has been updatedreparsing 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 15426956778::setup ####################################
		1542695843::WARNING: Nor is it defined in the current hardware ID's capabilities.

## **Procedure 51: Install the Application on Node B**

	1	
		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: servicedisabled 1542695916::WARNING: HARDWARE ID: E5APPB 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 Appendix I.  1399367207:: Upgrade returned success!
18.	MPS B: Install Complete.	Install Procedure is complete.

### **E.1.5** Generic Procedure

## Procedure 52 ISO Image download from Oracle Software Delivery Cloud

## Procedure 52: ISO Image download from OSDC

S	This procedure provides	s instructions to download an ISO image from OSDC and copy to the required server.
T		
E	Check off $()$ each step as it is completed. Boxes have been provided for this purpose under each step number.	
P	IF THIS PROCEDURE FAILS, CONTACT MY ORACLE SUPPORT AND ASK FOR UPGRADE ASSISTANCE.	
#		
1.	MPS X: Log in to the server	[hostname] consolelogin: admusr
	as the "admusr" user.	password: <admusr_password></admusr_password>
2.	MPS X: Verify ISO image doesn't already exist.	Execute the following command to perform directory listing:  \$ 1s -a1rt /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:
		<pre>\$ rm -f /var/TKLC/upgrade/<iso image=""></iso></pre>
3.	Download the ISO image from OSDC.	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.

Procedure 52: ISO Image download from OSDC

		Copy the ISO image from source path to destination path using scp/ftp command.
		Execute the following command on destination server:
		<pre>\$ sudo scp <source_username>@<source_server_ip>:/<source_path>/xyz.iso /var/TKLC/upgrade</source_path></source_server_ip></source_username></pre>
		Password: <enter source="" userpassword=""></enter>
		OR,
		Execute the following command on source server:
		<pre>\$ scp /<source_path>/<xyz.iso> admusr@<destination_server_ip>:/var/TKLC/upgrade</destination_server_ip></xyz.iso></source_path></pre>
		Password: <enter admusr="" password=""></enter>
5.	<b>MPS X:</b> Verify ISO image copied on destination path.	Execute the following command to perform directory listing:  \$ 1s -a1rt /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 00.
7.	Procedure complete.	This procedure is complete.

## **Procedure 53 Validate Upgrade Media**

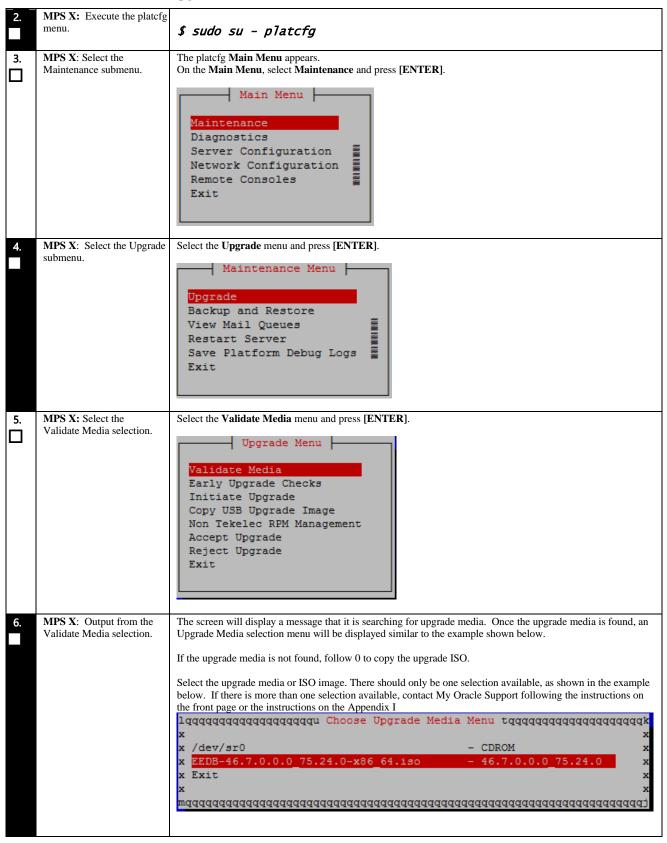
This procedure is used to execute a validation of the Upgrade Media (typically an ISO image) separately from executing an upgrade. The upgrade process automatically validates the upgrade media. However, sometime the user may wish to perform just a validation before proceeding with upgrade, thus the reason for this separate process.

Validation could be performed on MPS A or B, however, this procedure specifies MPS X for simplicity.

#### Procedure 53: Validate the Upgrade Media

S T E	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.	
P #	Check off ( $\sqrt{1}$ ) each step as it is completed. Boxes have been provided for this purpose under each step number.  IF THIS PROCEDURE FAILS, CONTACT MY ORACLE SUPPORT AND <b>ASK FOR UPGRADE ASSISTANCE</b> .	
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></password></hostname>	
	passworu: <passworu></passworu>	

Procedure 53: Validate the Upgrade Media



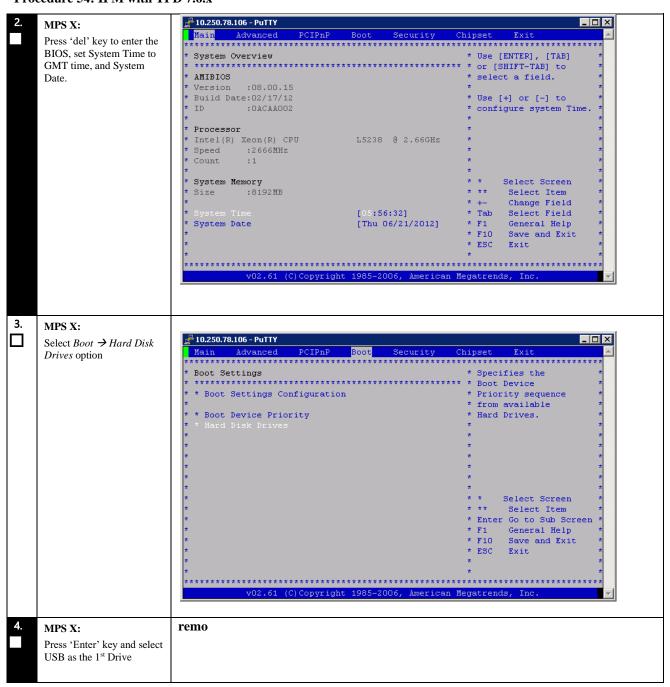
## **Procedure 53: Validate the Upgrade Media**

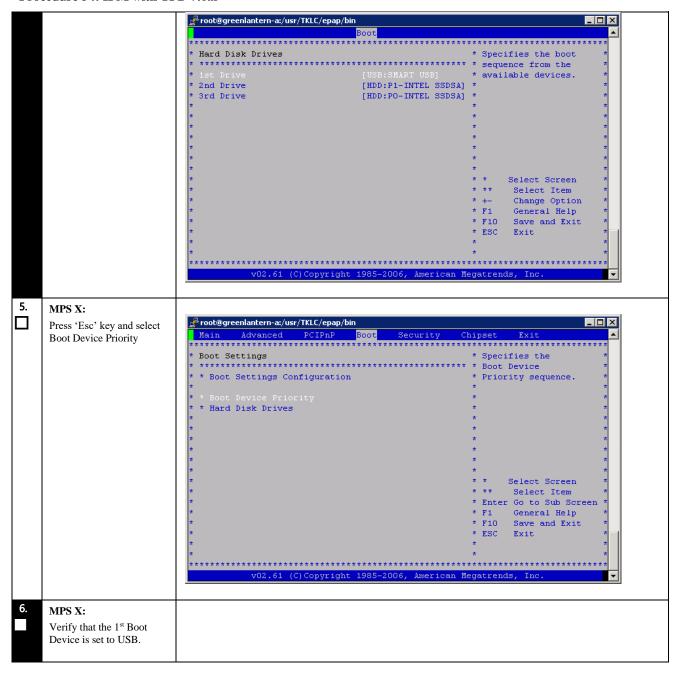
7.	MPS X: View the Validation results.	The results of the validation will be displayed, similar to the example below.  Press the "enter" key to continue.  ###################################
8.	<b>MPS X</b> : Select the Exit option.	Select the <b>Exit</b> option, and keep selecting the Exit option, until you reach the command line prompt or you return to another menu that you wish to use.
9.	MPS X: Procedure complete.	Media Validation is complete. Return to the procedure that you came here from.

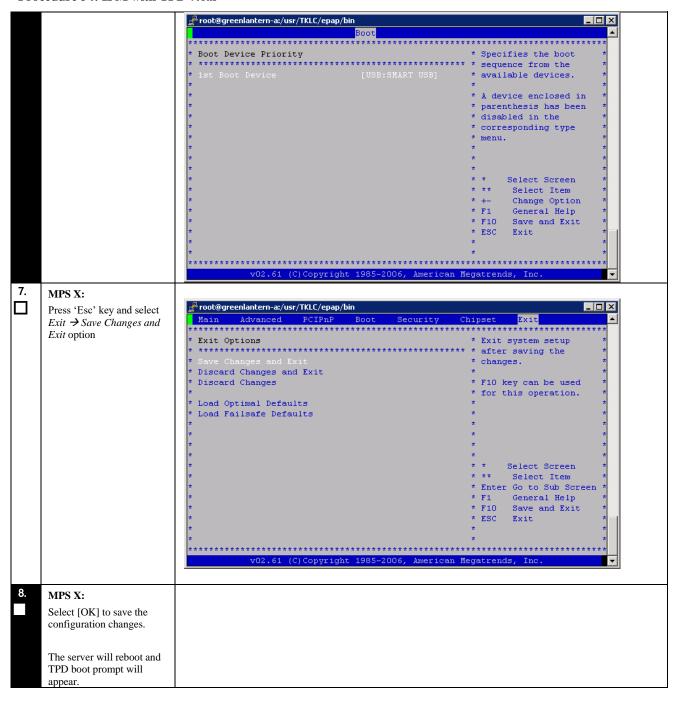
## **Procedure 54 IPM MPS Server with TPD 7.6.X**

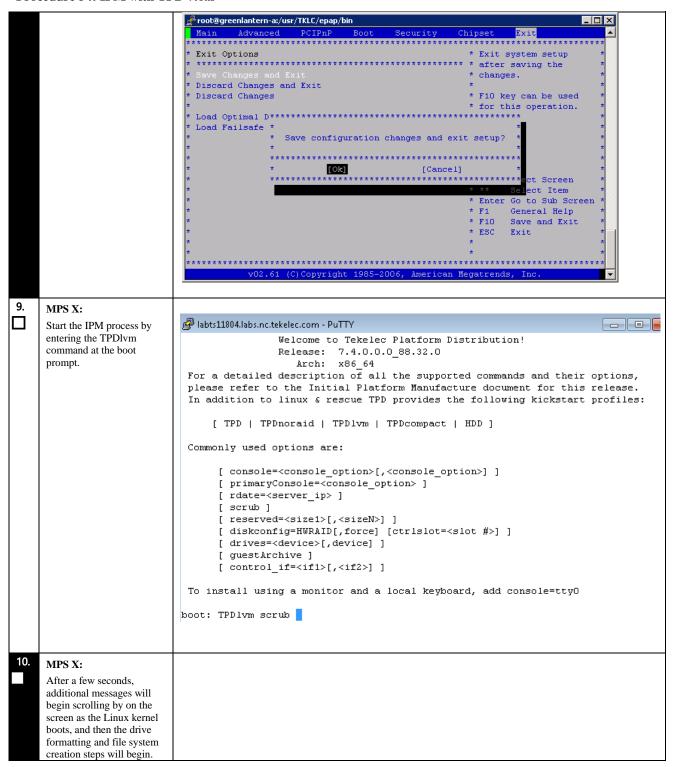
Note: Both the MPS-A and MPS-B servers can be IPM'ed at the same time.

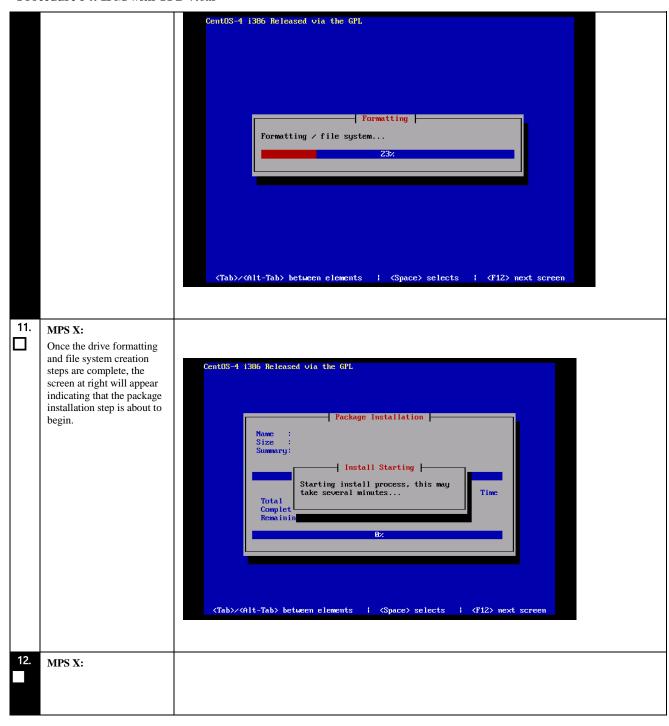
S	This procedure will IPM the E5-APP-B Server.		
T E	Check off $()$ each step as it is completed. Boxes have been provided for this purpose under each step number.		
Р	IF THIS PROCEDURE FAILS, CONTACT MY ORACLE SUPPORT AND ASK FOR UPGRADE ASSISTANCE.		
#			
1.	MPS X:	Reboot server	
П	Insert TPD 7.6.x USB media	# reboot	
_	into the USB port (E5-APP-		
	B).		
	Note: Refer 0 to copy the		
	ISO in USB.		

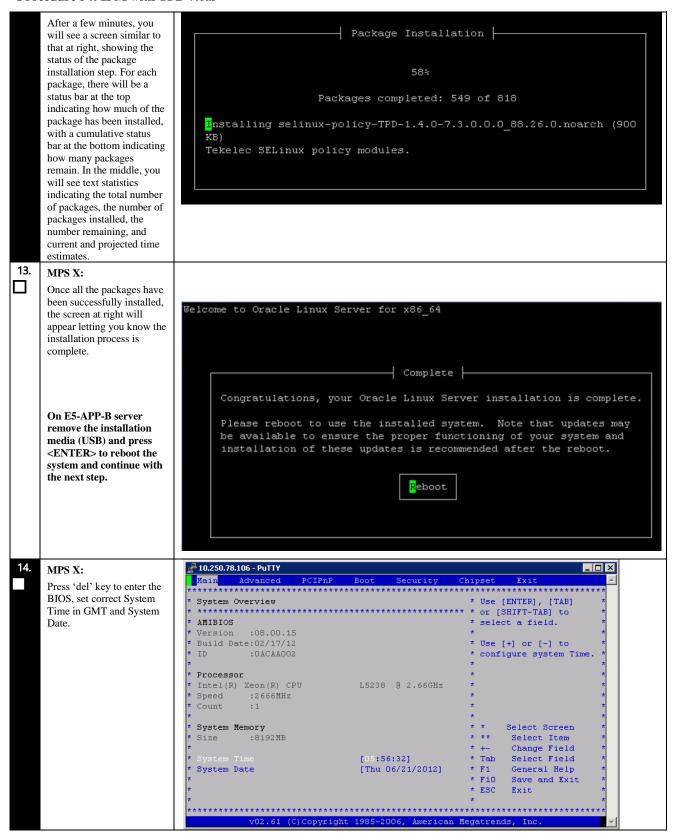


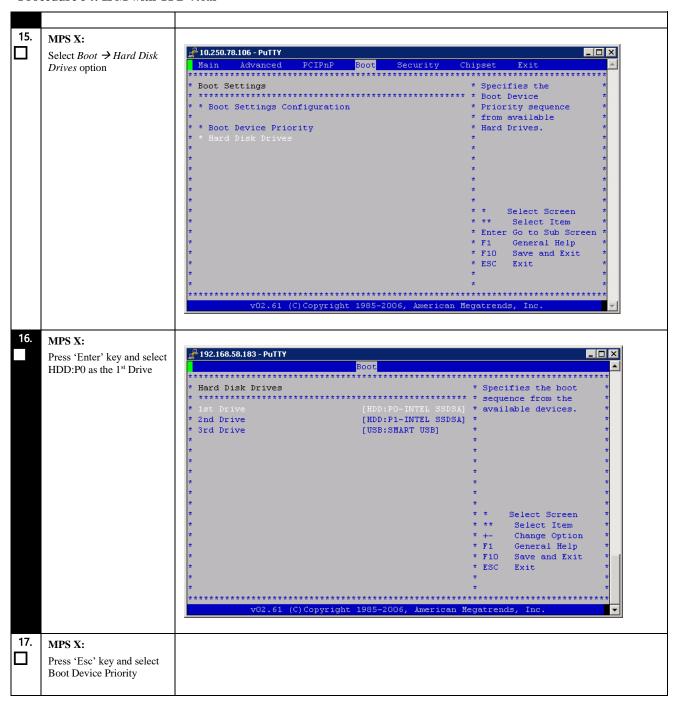


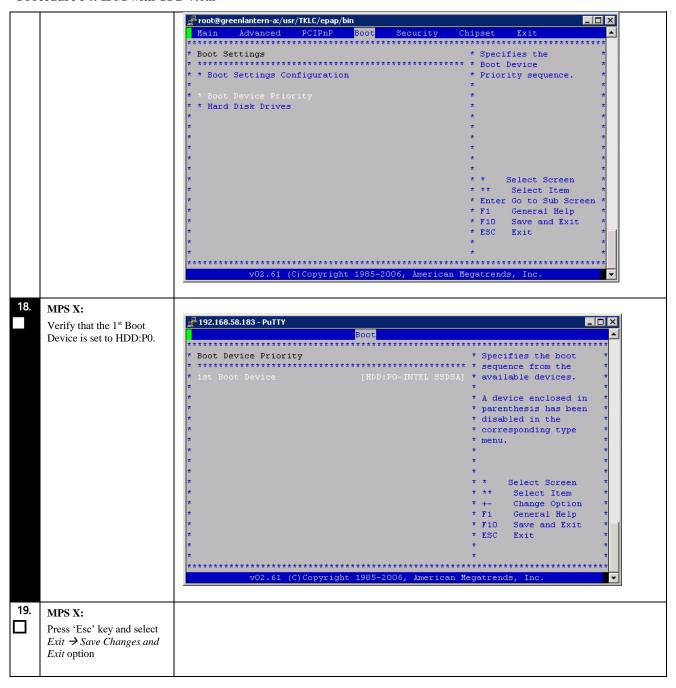


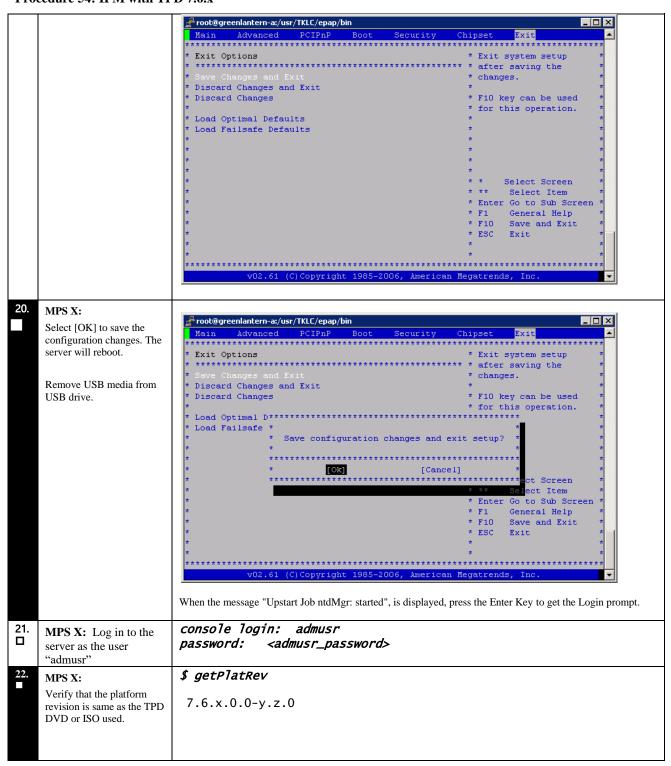












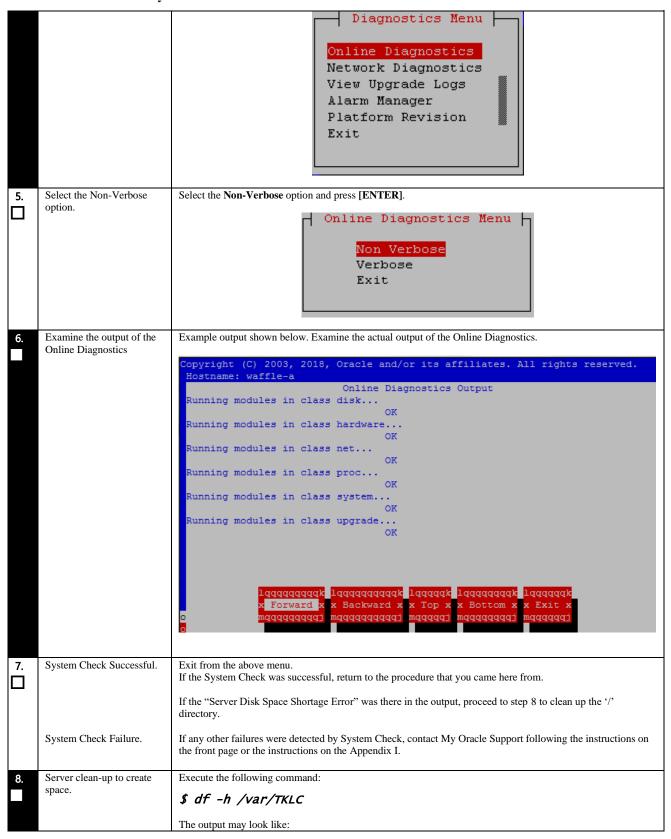
	SX:	\$ date -u
Veri	ify the system date.	Wed Mar 21 11:04:54 UTC 2018
		Verify that the output time matches the time set in step 14. If mismatch is found, then Refer to Appendix I for instructions on accessing My Oracle Support.
24. Proc	cedure complete.	Return to the procedure that you came here from.

# **Procedure 55 Perform System Health Check**

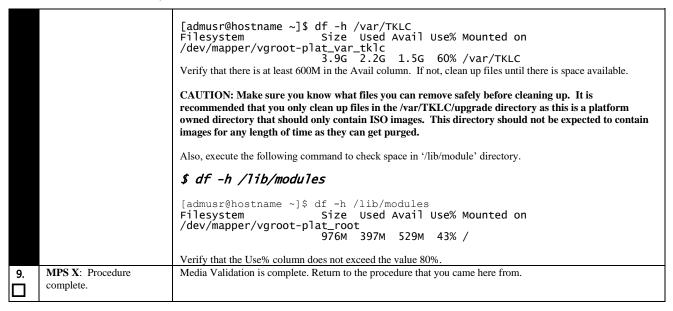
## **Procedure 55: Perform System Health Check**

S	This procedure performs a system health check on any MPS server.		
T E P #	Check off (√) each step as it is completed. Boxes have been provided for this purpose under each step number. IF THIS PROCEDURE FAILS, CONTACT MY ORACLE SUPPORT AND <b>ASK FOR</b> <u>UPGRADE ASSISTANCE</u> .		
1.	MPS X: If necessary, log in to the server as the user	If not already logged in to the MPS server, then login as user "admusr".	
	"admusr".	<pre><hostname> console login: admusr password: <password></password></hostname></pre>	
2.	MPS X: Execute the platcfg menu.	\$ sudo su - platcfg	
3.	MPS X: Select the Diagnostics submenu.	The platefg Main Menu appears. On the Main Menu, select Diagnostics and press [ENTER].  Main Menu  Maintenance  Diagnostics  Server Configuration  Security  Remote Consoles  Network Configuration  Exit	
4.	Select the Online Diagnostics submenu.	Select the Online Diagnostics submenu and press [ENTER].	

**Procedure 55: Perform System Health Check** 



#### **Procedure 55: Perform System Health Check**

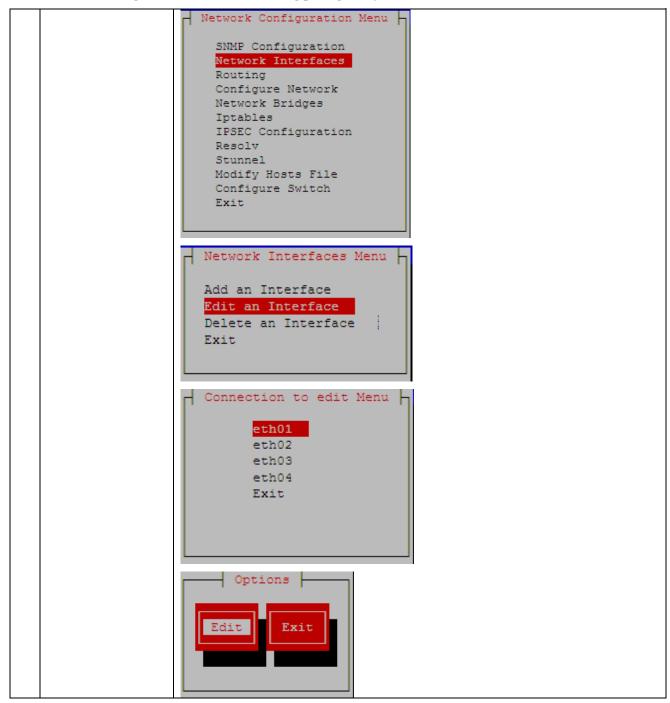


#### **Procedure 56 Configure Network Interface using platcfg utility**

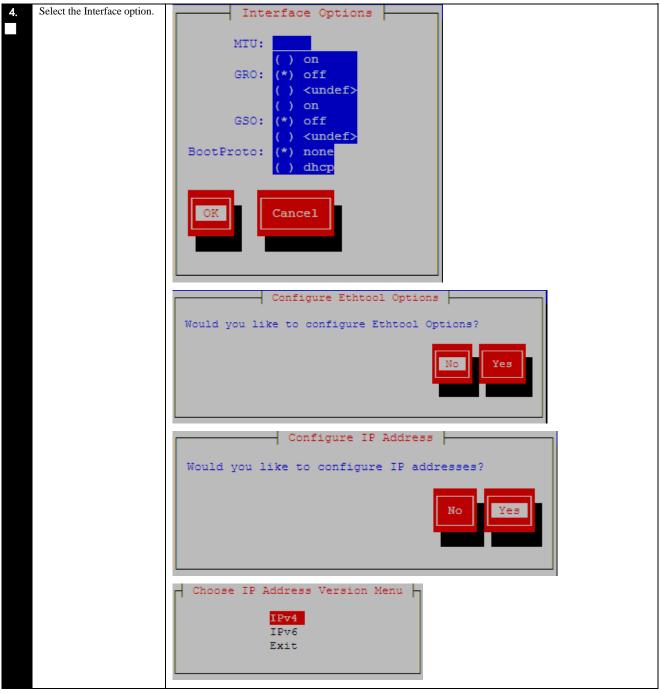
#### **Procedure 56: Configure Network Interface using platcfg utility**

S	This procedure configur	res the network interfaces and makes the E5APPB servers accessible to the network.	
Т			
E	Check off $()$ each step as it is completed. Boxes have been provided for this purpose under each step number.		
Р	IF THIS PROCEDURE FAIL	S, CONTACT MY ORACLE SUPPORT AND <b>ASK FOR <u>UPGRADE ASSISTANCE</u></b> .	
#			
1.	MPS X: If necessary, log in to the server as the user	If not already logged in to the MPS server, then login as user "admusr".	
Ш	"admusr".	<hostname> console login: admusr</hostname>	
		password: <password></password>	
	MDC V. Essents the state for		
2.	<b>MPS X:</b> Execute the platefg menu.	\$ sudo su - platcfg	
		Judo Su Pracery	
3.	MPS X: configure Network Interface.	Main Menu	
	Network interface.		
		Maintenance	
		Diagnostics Server Configuration	
		Security Security	
		Network Configuration	
		Remote Consoles	
		Exit	

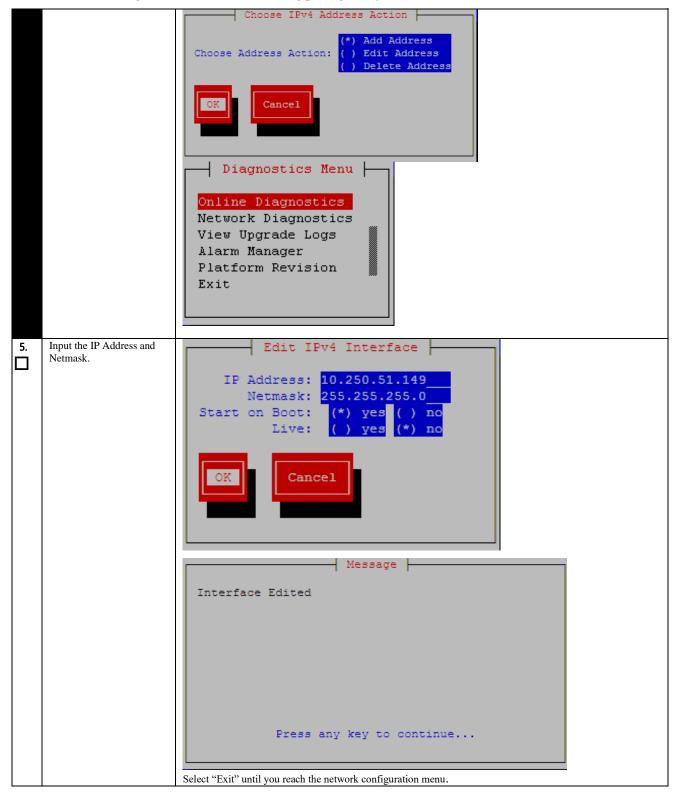
Procedure 56: Configure Network Interface using platcfg utility



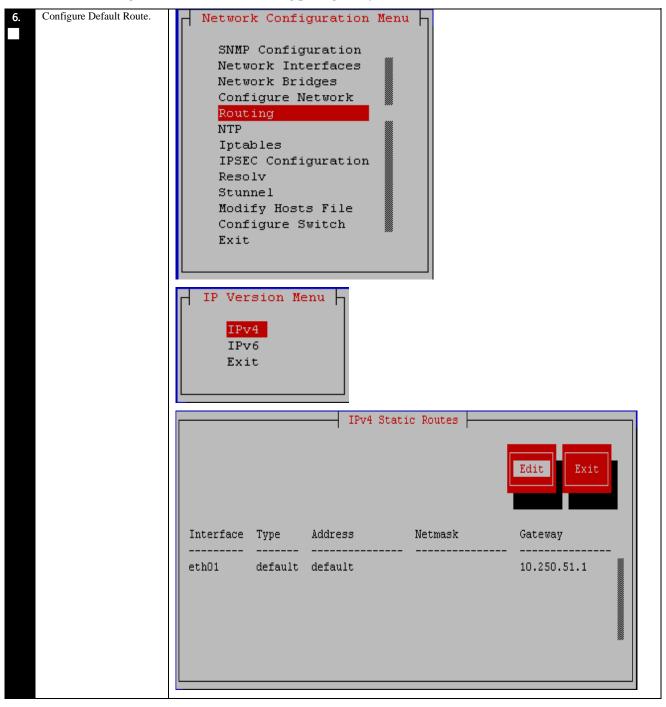
Procedure 56: Configure Network Interface using platcfg utility



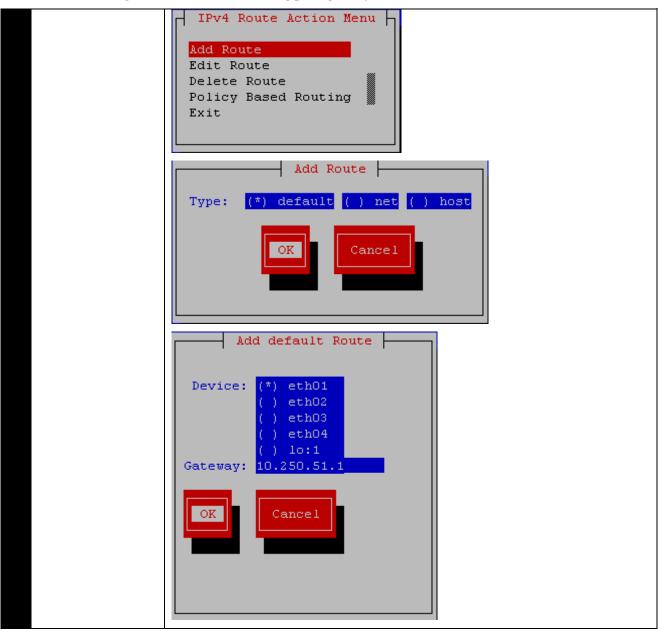
Procedure 56: Configure Network Interface using platcfg utility



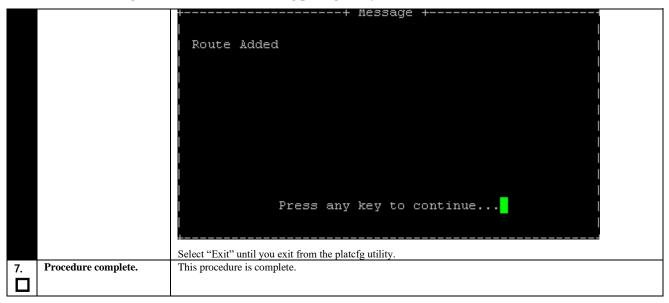
Procedure 56: Configure Network Interface using platcfg utility



**Procedure 56: Configure Network Interface using platcfg utility** 



Procedure 56: Configure Network Interface using platcfg utility



# **Procedure 57 Copy ISO image in USB**

# **Procedure 57: ISO Image download from OSDC**

S	This procedure provides instructions to copy an ISO to USB.				
Т	Check off $()$ each step as it is completed. Boxes have been provided for this purpose under each step number.				
E P	IF THIS PROCEDURE FAIL	IF THIS PROCEDURE FAILS, CONTACT MY ORACLE SUPPORT AND ASK FOR UPGRADE ASSISTANCE.			
#					
1.		MPS X: Log in to the server [hostname] consolelogin: admusr			
	as the "admusr" user.	password: <admusr_password></admusr_password>			
2.	MPS X: Verify ISO image present at directory.	age Execute the following command to perform directory listing:  \$ cd /var/TKLC/upgrade			
		\$ 1s -a1rt			
		The output should look like as follows (There is no ISO present in following example):			
		<pre>[admusr@waffle-a upgrade]\$ ls -arlt total 695312</pre>			
		drwxr-xr-x. 2 root sys 4096 Mar 20 2018 patch dr-xr-xr-x. 21 root root 4096 Nov 20 02:57			
		-rr 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			
3.	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			
4.	Procedure complete.	This procedure is complete.			

# APPENDIX F. UPGRADING SOURCE RELEASE 46.5.1.10.0 TO TARGET RELEASE 46.5.1.20.0 (46.9.1.20.0)

Procedure 58: Upgrading Source Release 46.5.1.10.0 to Target Release 46.5.1.20.0 (46.9.1.20.0)

S	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).			
Т	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			
E	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.		
Р	Check off $()$ each step as it is complete.	leted. Boxes have been provided for this purpose under each step number.		
#	· ·	NTACT MY ORACLE SUPPORT AND ASK FOR UPGRADE ASSISTANCE.		
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.			
	Flash SLIC (to be used in 4-Port IPSG locations) to BLSL932.			
	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 USB with the 46.9.1.20.0 upgrade GPLs to run the chg-gpl command.			
	Create the Removable Eagle STP USB by performing the following steps:			
	- Format the Removable Eagle STP USB.			
	- Download the 46.9.1.20 zip file from My Oracle Support (MOS), and copy the SYSREL.SYS and			

# Procedure 58: Upgrading Source Release 46.5.1.10.0 to Target Release 46.5.1.20.0 (46.9.1.20.0)

	toamhc69.elf files to the Removable Eagle STP USB.	
8.	Run the given command.	chg-gpl:gpl=oamhc69:ver-147.5.11
9.	Run the given command.	init-card:appl=oam
10.	The OAM displays the release label 46.9.1.20.0-77.5.11.	
11.	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.	

#### APPENDIX G. 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 Procedure 9 through Procedure 13. Otherwise, go to

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.

#### Procedure 59: Migrate the MASP cards running VxWorks 6.4 GPL to VxWorks 6.9 GPL

		ACD - DVD COO - 1 - 1 - VV VV - 1 - CO CL - 1			
S	This procedure flashes the MASPs to BLDC32 to load new VxWorks 6.9 flash images.				
T	Check off ( $\sqrt{}$ ) each step as it is completed. Boxes have been provided for this purpose under each step number.				
E	Check of ( ) each step as it is completed. Boxes have been provided for this purpose under each step number.				
P	SHOULD THIS PROCEDURE FAIL, CONTACT My Oracle Support AND ASK FOR UPGRADE ASSISTANCE.				
#					
1	Issue the card status to verify	REPT-STAT-CARD:APPL=OAM			
	the location of the				
	active/standby MASP slots				
2	D				
الصًا	Response to the card status command is displayed.	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y			
	command is displayed.	CARD VERSION TYPE GPL PST SST AST			
	Record the MASP in the	1113 XXX-XXX-XXX E5MCAP OAMHC IS-NR Active			
ı	standby role:	1115 XXX-XXX E5MCAP OAMHC IS-NR Standby Command Completed.			
		;			
	Standby: 1113 or 1115				
	F 4: 1				
	For this sample output, 1113 is				
3	active and 1115 is standby.  Report the GPLs running on	DEDT CTAT CDL LLOC WWW			
	the card location.	REPT-STAT-GPL:LOC=XXXX			
	the card location.	(Where <i>XXXX</i> is the location of the standby MASP slot display in the above step.)			
		eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x-YY.yy.y Upg Phase 3			
4	Response from the status	GPL CARD RUNNING APPROVED TRIAL			
Ш	command is displayed.	OAMHC XXXX XXX-XXX XXX-XXX XXX-XXX XXX-XXXX ZZZZZZ YYY-YYY ALM YYY-YYY YYY-YYY			
	Record the flash image running				
ļШ	on the standby MASP:	Command Completed.			
	BLMCAP or BLDC32	;			
	If the "ALM" indicator is				
	displayed for the card's flash				
	image, continue.				
	Or if the card is running				
	BLMCAP, continue.				
5	Otherwise, go to step 23.  Issue the command to inhibit	TAILL CARD LLOC-VVVV			
	the standby MASP.	INH-CARD: LOC=XXXX			
	and standoy 1411 tol .	(Where <i>XXXX</i> is the location of the standby MASP slot used in the previous command.)			
		(			

Procedure 59: Migrate the MASP cards running VxWorks 6.4 GPL to VxWorks 6.9 GPL

	edure 37. Wilgiate the Wildi	cards running vxworks 0.4 GPL to vxworks 0.9 GPL
6	Response to the inhibit command is displayed	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y Upg Phase 3 Card is inhibited. ;
	Verify UAM 514 is displayed.	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 ;
	If the "ALM" indication was displayed in step 4, continue. Otherwise, go to step 11.	Note: Wait for the card to boot and return to the IMT bus.
7	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.)
8	Response to flash initialization is shown.  Verify UAM 0004 is displayed.  If the card is running BLMCAP, continue. Otherwise, go to step 17.	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 ZZZZZZZ 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 on standby MASP	ACT-FLASH: loc=XXXX  (Where XXXX is the location of the standby MASP slot used in the previous command.)
10	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	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.)
12	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. :
13	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)
14	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 ;  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 used in the previous command)

Procedure 59: Migrate the MASP cards running VxWorks 6.4 GPL to VxWorks 6.9 GPL

16	Response to the GPL status command is displayed.	eaglestp YY-MM-DD h GPL CARD OAMHC XXXX	h:mm:ss TTTT EAGLE RUNNING	XX.x.x.x.x-YY.) APPROVED	/.y Upg Phase 3 TRIAL
	Verify that card is running	BLDC32	YYY-YYY-YYY+	YYY-YYY-YYY	xxx-xxx-xxx
17	BLDC32 GPL.  Issue command to activate the	Command Completed.			
1/	flash on standby MASP.	(Where XXXX is the location of	of the standby MASP used	in the previous com	mand)
18	Response to the activate command is displayed.	eaglestp YY-MM-DD h FLASH Memory Activa	h:mm:ss EST PPP XX.	x.x.x.x-YY.y.y	
Ц	command is displayed.	; eaglestp YY-MM-DD h FLASH Activation fo ;	h:mm:ss EST PPP XX. r card <i>XXXX</i> Complet	x.x.x.x-YY.y.y ed.	Upg Phase 3
19	Issue command to allow the standby MASP.	ALW-CARD: LOC=XXXX	she sheed the MACD	41	
20	Response to allow-card	(Where XXXX is the location of t	<u> </u>		
	command is shown.	Card has been allow	ed.		, iy opg i mase s
21	Issue command to report the status of the Standby MASP.	REPT-STAT-CARD:LOC=	XXXX: MODE=FULL		
ألي		(Where XXXX is the location of t	the standby MASP used in	the previous comma	nd.)
22	Response to the card's status report is displayed.	eaglestp YY-MM-DD hh:mm CARD VERSION XXXX XXX-XXX-XXX	:SS TTTT PPP XX.x. TYPE GPL E5MCAP OAMHC	X.X.X-YY.Y.Y Up PST IS-NR	og Phase 3 SST AST <b>Standby</b>
	Verify that the standby MASP is running the BLDC32 flash GPL.	ALARM STATUS BLDC32 GPL version IMT BUS A IMT BUS B MBD BIP STATUS MOTHER BOARD ID DBD STATUS DBD TYPE DBD MEMORY SIZE	= No Alarms. n = YYY-YYY-YYY = Conn = Conn = Valid = E5-MCAP = Valid = 1G ENET = 4096M		
		HW VERIFICATION CO CURRENT TEMPERATU PEAK TEMPERATURE: TROUBLE TEXT VER. IPLNK STATUS IPLNK IPADDR	ODE = RE = 33C ( 92F) = 37C ( 99F) =	[13-05-19 ( PST IS-NR	08:02]
23	If this is the first pass through	INIT-CARD: LOC=YYYY			
	this procedure, issue command to boot the active MASP.	(Where <i>YYYY</i> is the location of t	the active MASP)		
	Otherwise, continue to next procedure.				
24	Response to card initialization is shown.	eaglestp YY-MM-DD h Init Card command is	h:mm:ss TTTT EAGLE ssued to card YYYY	XX.x.x.x.yY.y	/.y Upg Phase 3
25	Issue the command to log back in to the system.	LOGIN: UID=XXXXXX (Where XXXXXXX is a valid login	n ID)		
26	Response to login command is displayed.	;	on terminal <i>UU</i> .		, ,
	Ignore any login failure message.	? Login failures since Last successful LOGIN	e last successful I was on port ? on ?	LOGIN ??-??-?? @ ??:	??:??
27	Echo command input to capture terminal.	ACT-ECHO:TRM=P			
		(Where $P$ is the terminal port num	mber specified in Procedur	re 1, Step 3)	

# Procedure 59: Migrate the MASP cards running VxWorks 6.4 GPL to VxWorks 6.9 GPL

28	Response to print capture command is displayed.	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 <i>P</i> . ;
	Repeat Steps 1 – 22 for the formerly active MASP.	

# Procedure 60: Migrate the MCPM cards running VxWorks 6.4 GPL to VxWorks 6.9 GPL

S T E P	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.  Check off ( √ ) each step as it is completed. Boxes have been provided for this purpose under each step number.		
	SHOULD THIS PROCEDURE FA	AIL, CONTACT My Oracle Support AND ASK FOR UPGRADE ASSISTANCE.	
	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.	
3	For each MCPM-type card listed above, issue the GPL status commend.	REPT-STAT-GPL:LOC=XXXX (Where XXXX is the location of a MCPM card slot listed in previous step.)	
4	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 3 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 ZZZZZZ ZZZ-ZZZ ALM YYY-YYY-YYY YYY-YYY Command Completed.	
5	Issue command to inhibit the card	INH-CARD: LOC=XXXX  (Where XXXX is the location of the MCPM card use in previous command.)	
6	Response to the inhibit command is displayed  If the "ALM" indication was displayed in step 4, continue.  Otherwise, go to step 11.	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.	
7	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.)	
8	Response to flash initialization is shown.  Verify UAM 0004 is displayed.  If card is running BLDC32, go to step 15. Otherwise, continue.	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.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 ZZZZZZZ Card is running non-activated GPL ;  Note: Wait for card to boot and return to the IMT bus.	

Procedure 60: Migrate the MCPM cards running VxWorks 6.4 GPL to VxWorks 6.9 GPL

0	T 1, 2	
9	Issue command to activate the flash image.	ACT-FLASH: LOC=XXXX
4.0		(Where XXXX is the location of the MCPM card use in previous command.)  eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.xYY.y.y
10	Response to the activate command is displayed.	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. ;
111	Issue flash command to download the bootloader	INIT-FLASH:LOC=XXXX:MODE=RPLCEBL:BITS=64
	image.	(Where <i>XXXX</i> is the location of the MCPM card use in 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. ;
	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 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 <i>XXXX</i> . Already running requested bootloader. ;
		eaglestp 17-01-20 12:19:04 MST EAGLE XX.x.x.x.x-YY.y.y Command Completed. ;
13	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)
14 	Response to flash initialization is shown.	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y FLASH Memory Download for card xxxx started. ;
П	Verify UAM 0004 is	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y FLASH Memory Download for card xxxx completed. ;
	displayed.	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y  * 8003.0004 * GPL SYSTEM <b>BLDC32</b> Card is running non-activated GPL ;
		Note: Wait for card to boot and return to the IMT bus.
15	Issue command to activate	ACT-FLASH: loc=XXXX
	the flash image.	(Where XXXX is the location of the MCPM card used in the previous command)
16	Response to the activate command is displayed.	eaglestp YY-MM-DD hh:mm:ss EST PPP XX.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-YY.y.y FLASH Activation for card XXXX Completed. ;
17	Issue the allow command to reload the MCPM card.	ALW-CARD: LOC=XXXX
18	Response to allow-card	(Where XXXX is the location of the card used in the previous command)
	command is shown.	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y Card has been allowed. ;
19	Retrieve status of the MCPM card if present in the system.	REPT-STAT-GPL:LOC=XXXX
20	D 257	(Where XXXX is the location of the card used in the previous command)
20	Response to GPL status command.	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y GPL Auditing ON

# Procedure 60: Migrate the MCPM cards running VxWorks 6.4 GPL to VxWorks 6.9 GPL

	Verify that MCPM card is BLDC32 GPL.	GPL CARD RUNNING APPROVED TRIAL MCPHC69 XXXX XXX-XXX-XXX XXX-XXXX-XXX XXX-XXX XXX-XXX-XXX BLDC32 YYY-YYY-YYY YYY-YYY YYY-YYY-YYY Command Completed.	
21	Issue command to report the status of the measurement system	REPT-STAT-MEAS	
22	Response to Measurement status command.	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	
	Verify that MCPM cards have returned to IS-NR	CARD VERSION TYPE PST SST AST XXXX P 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.	
23	If this is the last card listed in Step 2, continue to next procedure. Otherwise, repeat Steps 3-22 for the next card listed in Step2.	<b>Note:</b> Wait till this flashed MCPM card to complete reloading before procee next step.	ding to

Procedure 61: MCP application is provisioned on SLIC card, migrate the same to VxWorks6.9.

C	This propagation is to make the	the CLIC condemning MCD ambigation to V	
S T	This procedure is to migrate the SLIC card running MCP application to Vxworks6.9 from VxWorks6.4.		
E	Execute the below procedure for every MCPM application running on SLIC in the system.		
P	Check off ( $$ ) each step as it is completed. Boxes have been provided for this purpose under each step number.		
#	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. ;	
3	For each card with type equal	REPT-STAT-GPL:LOC=XXXX	
	to SLIC listed above, issue the GPL status commend.	(Where <i>XXXX</i> is the location of a MCPM/SLIC card slot listed in previous step.)	
4	Response to the GPL status command is displayed.  If the "ALM" indictor is	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-X	
	displayed for the card's flash image, continue.  If card is running BLSLC32, continue.  Otherwise repeat step 3 for next SLIC card in list.	Command Completed.	
5	Issue command to inhibit the	INH-CARD:LOC=XXXX	
	card	(Where <i>XXXX</i> is the location of the MCPM/SLIC card)	
6	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. ;	
	If the "ALM" indication was displayed in step 4, continue. Otherwise, go to step 11.	<pre>eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y Command Completed. ;</pre>	
		<b>Note</b> : Wait for the card to boot and return to the IMT bus.	
7	Issue command to	INIT-FLASH:LOC=XXXX:CODE=APPR	
	download approved flash image.	(Where <i>XXXX</i> is the location of the MCPM card use in previous command.)	
8	Response to flash initialization is shown.	<pre>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</pre>	
	Verify UAM 0004 is displayed.	FLASH Memory Download for card xxxx completed.  ; eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x-YY.y.y Upg Phase 3 8003.0004 * GPL SYSTEM ZZZZZZZ Card is running non-activated GPL	
	If card is running BLSL932, go to step 13. Otherwise, continue.	Note: Wait for card to boot and return to the IMT bus.	

Procedure 61: MCP application is provisioned on SLIC card, migrate the same to VxWorks6.9.

9	Issue command to activate	ACT-FLASH:LOC=XXXX
	the flash image.	(Where XXXX is the location of the MCPM card use in previous command.)
10	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	Issue flash command to download target-release flash	INIT-FLASH:LOC=XXXX:CODE=APPR:GPL=BLSL932
	to the MCPM card.	(Where <i>XXXX</i> is the location used in the previous command)
12	Response to flash initialization is shown.	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y FLASH Memory Download for card xxxx started. ;
	Verify UAM 0004 is	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y FLASH Memory Download for card xxxx completed.
	displayed.	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y  * 8003.0004 * GPL SYSTEM <b>BLSL932</b> Card is running non-activated GPL ;
		Note: Wait for card to boot and return to the IMT bus.
13	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)
14	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. ;
15	Issue the allow command to reload the MCPM card.	ALW-CARD: LOC=XXXX
16		(Where XXXX is the location of the card used in the previous command)
16 	Response to allow-card command is shown.	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x-YY.y.y Card has been allowed. ;
17	Issue command to report GPL status.	REPT-STAT-GPL:LOC=XXXX
18	Response to GPL status command.	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.YY.y.y GPL Auditing ON
	Verify that MCPM card is running BLSL932 GPL.	GPL CARD RUNNING APPROVED TRIAL MCPHC69 XXXX XXX-XXX-XXX XXX-XXXX XXX-XXX-XXX BLSL932 YYY-YYY YYY-YYY YYY-YYY  Command Completed.
19	Issue command to report the status of the measurement system	REPT-STAT-MEAS

Procedure 61: MCP application is provisioned on SLIC card, migrate the same to VxWorks6.9.

20	Response to Measurement status command.	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
	Verify that MCPM cards have returned to IS-NR	CARD VERSION TYPE PST SST AST XXXX P 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. ;
21	If this is last card listed in Step 2, continue to next procedure. Otherwise, repeat Steps 3-Step 18 for the next card listed in Step2.	<b>Note:</b> Wait till this flashed MCPM card to complete reloading before proceeding to next step.

# Procedure 62: Migrate the IPS (ENET-B) cards running VxWorks 6.4 GPL to VxWorks 6.9 GPL

S T E P	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.  Check off ( √ ) each step as it is completed. Boxes have been provided for this purpose under each step number.	
	SHOULD THIS PROCEDURE F	AIL, 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.
		;
3	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.)
4	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 3 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-X
5	Issue command to inhibit the card.	INH-CARD: LOC=XXXX  (Where XXXX is the location of the IPSM card use in previous command.)
6	Response to the inhibit command is displayed.  If the "ALM" indication was displayed in step 4, continue.  Otherwise, go to step 11.	<pre>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.</pre>
7	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.)

Procedure 62: Migrate the IPS (ENET-B) cards running VxWorks 6.4 GPL to VxWorks 6.9 GPL

8	Response to flash	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y FLASH Memory Download for card xxxx started.
	initialization is shown.  Verify UAM 0004 is	; eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.YY.y.y FLASH Memory Download for card xxxx completed.
	displayed.	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y
	If card is running BLDC32, go to step 15.	8003. <u>0004</u> * GPL SYSTEM <b>ZZZZZZZ</b> Card is running non-activated GPL ;
	Otherwise, continue.	Note: Wait for card to boot and return to the IMT bus.
9	Issue command to activate the flash image.	ACT-FLASH: loc=XXXX
	the mash image.	(Where XXXX is the location of the IPSM card use in previous command.)
10	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. ;
11	Issue flash command to download the bootloader	INIT-FLASH:LOC=XXXX:MODE=RPLCEBL:BITS=64
	image.	(Where <i>XXXX</i> is the location of the IPSM card use in previous command.)
12	Response to flash command is shown.	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x-YY.y.y BOOTLOADER change for card XXXX SUCCESSFUL. ;
	If either response is displayed, then proceed to the next step.	<pre>eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y     Command Completed. ;</pre>
		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.YY.y.y Command Completed.
13	Download target-release flash to the IPSM card.	INIT-FLASH:LOC=XXXX:CODE=APPR:GPL=BLDC32
		(Where <i>XXXX</i> is the location of the IPSM card use in previous command.)
14	Response to flash initialization is shown.	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.Y-YY.y.y FLASH Memory Download for card xxxx started.
П	Verify UAM 0004 is	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x-YY.y.y FLASH Memory Download for card xxxx completed.
	displayed.	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.
15	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)
16	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. ;

Procedure 62: Migrate the IPS (ENET-B) cards running VxWorks 6.4 GPL to VxWorks 6.9 GPL

17	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)
18	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. ;
19	Retrieve status of the IPSM card if present in the system.	REPT-STAT-GPL:LOC=XXXX
20	Response to GPL status command.	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y GPL Auditing ON
	Verify that IPSM card is running BLDC32 flash GPL.	GPL CARD RUNNING APPROVED TRIAL IPSHC69 XXXX XXX-XXX-XXX XXX-XXX-XXX XXX-XXX-X
21	If this is the last card listed in Step 2, continue to next procedure.  Otherwise, repeat Steps 3 - 20 for the next card listed in Step 2.	<b>Note:</b> Wait till this flashed IPSM card to complete reloading before proceeding to next step.

Procedure 63: IPS application is provisioned on SLIC card, migrate the same to VxWorks6.9

S		the SLIC card running IPS application to Vxworks6.9 from VxWorks6.4
T	Execute the below procedure	e for every SLIC card with IPS application, present in the system.
E P	Check off ( $$ ) each step as it is co	mpleted. Boxes have been provided for this purpose under each step number.
#	SHOULD THIS PROCEDURE FA	AIL, CONTACT My Oracle Support AND ASK FOR UPGRADE ASSISTANCE.
1	If the source release was 46.5	REPT-STAT-CARD:APPL=IPS
	or prior, issue the IPSM card	
	status command.	
	Otherwise, continue to next	
	procedure	
	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 SLIC IPSHC IS-NR Active
ш		Command Completed. ;
3	For each IPSM/SLIC card	DEDT STAT CDL II OC-VVVV
	listed above, issue the GPL	REPT-STAT-GPL:LOC=XXXX
	status commend.	(Where <i>XXXX</i> is the location of the IPSM/SLIC card slot listed in previous step.)
		•
4	Response to the GPL status	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x-YY.yy.y
	command is displayed.	GPL CARD RUNNING APPROVED TRIAL
	TO A WATER TO THE T	IPSHC XXXX XXX-XXX-XXX XXX-XXXX XXX-XXX-XXX  BLSLC32 ZZZ-ZZZZ ALM YYY-YYY-YYY YYY-YYY-YYY
	If the "ALM" indictor is displayed for the card's flash	Command Completed.
	image, continue.	Communic Compreted.
	If card is running BLSLC32,	
	continue.	
	Otherwise repeat step 3 for	
	next SLIC card in list.	
5	Issue command to inhibit the	INH-CARD:LOC=XXXX
	card.	
		(Where <i>XXXX</i> is the location of the IPSM/SLIC card slot listed in previous step.)
6	Response to the inhibit	eaglestn VV-MM-DD bhimmiss EST DDD VV V V V-VV V V
П	command is displayed.	eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y Card has been inhibited.
—	70.1 ((17.7m; 1)	;
	If the "ALM" indication was	eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
	displayed in step 4, continue. Otherwise, go to step 11.	Command Completed.
	Callel Wise, go to step 11.	;
		<b>Note</b> : Wait for the card to boot and return to the IMT bus.
7	Issue command to download	INIT-FLASH:LOC=XXXX:CODE=APPR
	approved flash image.	AND MANAX OF THE THOMAGOLD IN THE TOTAL CONTROL OF THE TOTAL CONTROL OT THE TOTAL CONTROL OF THE TOTAL CONTROL OF THE TOTAL CONTROL OT THE TOTAL CONTROL OF THE TOTAL CONTROL OF THE TOTAL CONTROL OT THE TOTAL CONTROL OF THE TOTAL CONTROL OF THE TOTAL CONTROL OT
		(Where <i>XXXX</i> is the location of the IPSM/SLIC card use in previous command.)

Procedure 63: IPS application is provisioned on SLIC card, migrate the same to VxWorks6.9

8	Response to flash initialization is shown.	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y FLASH Memory Download for card xxxx started.
	initialization is shown.	; eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y FLASH Memory Download for card xxxx completed.
	Verify UAM 0004 is displayed.	; eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y 8003.0004 * GPL SYSTEM ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
	If card is running BLSL932, go to step 13. Otherwise, continue.	Note: Wait for card to boot and return to the IMT bus.
9	Issue command to activate the flash image.	ACT-FLASH: loc=XXXX
10	Decrease to the activate	(Where XXXX is the location of the IPSM/SLIC card use in previous command.)  eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y
	Response to the activate command is displayed.	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.
		;
111	Issue flash command to download target-release flash	INIT-FLASH:LOC=XXXX:CODE=APPR:GPL=BLSL932
	to the IPSM/SLIC card.	(Where <i>XXXX</i> is the location used in the previous command)
12	Response to flash initialization is shown.	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y FLASH Memory Download for card xxxx started.
	Verify UAM 0004 is	; eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y FLASH Memory Download for card xxxx completed.
	displayed.	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y * 8003.0004 * GPL SYSTEM <b>BLSL932</b> Card is running non-activated GPL ;
		Note: Wait for card to boot and return to the IMT bus.
13	Issue command to activate	ACT-FLASH: loc=XXXX
	the flash image.	(Where XXXX is the location of the IPSM/SLIC card used in the previous command)
14	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. ;
15	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)
16	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. :
17	Issue command to report GPL status.	REPT-STAT-GPL:LOC=XXXX
18	Response to GPL status command.	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y GPL Auditing ON
	Verify that IPSM card is	GPL CARD RUNNING APPROVED TRIAL IPSHC69 XXXX XXX-XXX-XXX XXX-XXX-XXX BLSL932 YYY-YYY-YYY YYY-YYY YYY-YYY-YYY
	running BLSL932 GPL.	Command Completed. ;

# Procedure 63: IPS application is provisioned on SLIC card, migrate the same to VxWorks6.9

19	If this is last card listed in Step 2, continue to next procedure. Otherwise, repeat Steps 3-Step 18 for the next card listed in Step2.	<b>Note:</b> Wait till this flashed IPSM/SLIC card to complete reloading before proceeding to next step.	
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# **Procedure 64: Completing Upgrade/Return to Full-Function Mode**

S T	This procedure completes the upgrade and returns the system to full-function mode.  Verification of the GPL distribution is also performed.	
E P	Check off ( $\sqrt{\ }$ ) each step as it	t is completed. Boxes have been provided for this purpose under each step number.
#	SHOULD THIS PROCEDURE FAIL, CONTACT My Oracle Support AND ASK FOR UPGRADE ASSISTANCE.	
2	If system remains in upgrade mode, issue the command to initialize both MASPs. Otherwise, go to step 7. Response to the init command is displayed.	<pre>INIT-CARD:APPL=OAM  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.</pre>
3	Verify the banner display full-function mode after the MASPs boot. Issue the command to log back in to the system.	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 ;  LOGIN:UID=XXXXXX (Where XXXXXXX is a valid login ID)
4	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. ;
5	Issue the command to reactivate printer capture.	ACT-ECHO:TRM=P  (Where P is the terminal port number specified in Procedure 1, Step 4)
6	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. ;
7	Issue the command to display card status.	REPT-STAT-GPL:DISPLAY=ALL
8	Response to GPL status command is displayed.	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-XXXX *
	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.	BLDC32
9	Establish system status	See recommendation # 7 in Section 1.6
10	For upgrade to Rel 47.1 or rollback to Rel 47/46.9.x from Rel 47.1, If required convert the list of cards to	These steps can be used multiple times on different set of cards.  Sets will include the cards in the range mentioned in sloc and eloc parameters.

# **Procedure 64: Completing Upgrade/Return to Full-Function Mode**

	VxWorks 6.4 using steps below.	
11	Issue the command to download flash GPL in background on multiple cards.	init-flash:sloc=xxxx:eloc=xxxx:code=appr:mode=backgrnd:gpl=GPLname (Where XXXX is card location and GPLname is Flash GPL name.)
12	Issue the command to image select flash GPL on multiple cards.	init-flash:sloc=xxxx:eloc=xxxx:mode=imgselct:gpl=GPLname (Where XXXX is card location and GPLname is Flash GPL name.)
13	After cards are back on IMT Issue the command to activate the flash.	act-flash:sloc=xxxx:eloc=xxxx:gpl=GPLname  (Where XXXX is card location and GPLname is Flash GPL name.)

S T E P #	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.  Check off ( √ ) each step as it is completed. Boxes have been provided for this purpose under each step number.  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 10  If a source-release RMD is available and the target release was on the inactive partition, insert the RMD <sup>27</sup> , and continue  Otherwise go to step 23.	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
3	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 6.	<pre>eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y COLLECT</pre>
4	Issue the command to turn off measurement collection.	chg-meas:collect=off
5	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.

<sup>&</sup>lt;sup>27</sup> DO NOT use the source release RMD created in Procedure 2.

		<pre>eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y CHG-MEAS: MASP A - COMPLTD</pre>
6	Issue the command to format the RMD.	FORMAT-DISK:TYPE=SYSTEM:FORCE=YES
7	Response to format command is displayed.	<pre>eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x-YY.y.y Format-disk of system removable cartridge started. Extended processing required, please wait. ;</pre>
	If the format fails, first repeat the previous step, and then contact My Oracle Support.	<pre>eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y Format-disk of system removable cartridge completed. ;</pre>
8	Issue the command to copy the GPLs to the RMD.	COPY-GPL
9	Response to copy command is displayed.	<pre>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</pre>
10	Issue the command to report database status.	; REPT-STAT-DB
11	Response to database status command is displayed.	eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y  DATABASE STATUS: >> OK <<
	Check entries in 'C' should be coherent, which is indicated by a 'Y'.	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
	If all FD BKUP & FD CRNT entries in column 'LEVEL' are the same, go to step 16.	RD BKUP N 1 USB BKP
12	Issue the database command to backup the fixed disks.	CHG-DB:ACTION=BACKUP
13	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
		<pre>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</pre>
		BACKUP (FIXED): MASP A - Backup on active MASP to fixed disk complete.;
		<pre>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. ;</pre>
		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 ;			
		<pre>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 ;</pre>			
14	Issue the command to report database status.	rept-stat-db			
15 	Response to database status command is displayed.	eaglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x.x.x-YY.y.y DATABASE STATUS: >> OK <<			
	Check: entries in 'C' should be coherent, which is indicated by a 'Y'.	FD BKUP Y XXX YY-MM-DD hh:mm:ss TTTT Y XXX FD CRNT Y XXX MCAP 1113 MCAP 1115			
	Verify both 'FD CRNT' and 'FD BKUP' Levels are equal.	RD BKUP N 1 USB BKP			
16	Issue the database command to back up to the target-release RMD.	chg-db:action=backup:dest=remove			
17	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			
		<pre>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. ;</pre>			
		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. ;			
18	Issue the command to report database status.	rept-stat-db			
19 	Response to database status command is displayed.	eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x-YY.y.y  DATABASE STATUS: >> OK <<			
	Check entries in 'C' should be coherent, which is indicated by a 'Y'.	FD BKUP Y XXX YY-MM-DD hh:mm:ss TTTT Y XXX YY-MM-DD hh:mm:ss TTTT FD CRNT Y XXX MCAP 1113 MCAP 1115			
	•	RD BKUP Y XXX YY-MM-DD hh:mm:ss TTTT USB BKP			

20	Issue the command to display GPL status.	rtrv-gpl			
21	Response from the retrieve command is displayed.	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x-YY.yy.y GPL Auditing ON			
	Verify that the GPL versions that are displayed in the "RELEASE" and "REMOVE TRIAL" column are correct; see Section 1.3	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         XXX-XXX-XXX           GGGGGG1         1113			
22	Remove the target-release RMD from the drive slot.	Store the RMD in a safe location.			
23	If the system is configured for remote backups, issue the database command to backup to remote FTP server. Otherwise, go to step 25.	chg-db:action=backup:dest=server			
24	Response to backup command is displayed.	eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x.x.x.x-YY.y.y 5035.1114			
25	If steps 4 & 5 were executed, issue the command to turn the measurements collection on.	chg-meas:collect=on			
26	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. ;			
		<pre>eaglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x.x.x-YY.y.y     CHG-MEAS: MASP A - COMPLTD ;</pre>			

#### APPENDIX H. 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 (<a href="https://support.oracle.com">https://support.oracle.com</a>).

Customer: Company Name:	Dat	e:
Site: Location: [Include serial number, which	h was recorded in Procedure 1, Step15.]	
Customer: (Print)	Phone:	
Fax:		
Start Date:	Completion Date:	_
both Oracle CGBU and the customer re	ne undersigned. Any deviations from this procedure presentative. A copy of this page will be given to the lso maintain a signed copy of this completion for fut	e customer for their
Oracle Signature:	Date:	
Customer Signature:	Date:	

#### APPENDIX I.MY ORACLE SUPPORT

CAUTION: Use only the guide downloaded from the Oracle Technology Network (OTN) (<a href="http://www.oracle.com/technetwork/indexes/documentation/oracle-commstekelec-2136003.html">http://www.oracle.com/technetwork/indexes/documentation/oracle-commstekelec-2136003.html</a>).

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

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

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

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

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