

**Oracle® Communications  
EAGLE LNP Application Processor**

**Full Upgrade Guide**

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**ORACLE®**

Oracle Communications EAGLE LNP Application Processor Full Upgrade Guide, Release 10.1

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

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## 1. INTRODUCTION

### 1.1 Purpose and Scope

This document is designed to detail the steps necessary for full upgrade of the ELAP 10. 0 to ELAP 10. 1.x on the E5-APP-B-01/02 cards.

This work is intended to be non-intrusive to the signaling network traffic and is to be performed within the limits of a normally scheduled maintenance window unless otherwise stated.

It will be necessary to halt the provisioning activity during the execution of the procedures outlined herein while a full database backup is being taken. Normal provisioning can resume once the Full upgrade has completed. For any issues incurred in executing any part of this document, follow the contact/escalation list.

The individual executing this procedure must be experienced and well proficient with the following platforms and technologies.

- Unix/Linux Admin
- VI Editor
- IP Networking

If you do not have these skills or if you are not completely comfortable working in a Unix or Linux system environment



**STOP - DO NOT PROCEED**

## 1.2 References

- [1] *Formal Peer Review, PD001866, latest version*
- [2] *Work Instruction Template, TM005023, latest version*
- [3] *TPD Initial Product Manufacture User's Guide, 909-2229-001, Latest revision, Tekelec*
- [4] *ELAP on E5-APP-B Network Interconnect Technical Reference*

## 1.3 Acronyms

Acronym	Description
BIOS	Basic Input Output System
DB	Database
E5-APP-B/E5APPB	Eagle5 Application Card class B cpu/board
IPM	Initial Product Manufacture
MPS	Multi-Purpose Server
OCELAP	Oracle communication EAGLE LNP Application Processor
RIDB	Range Indexed Database
SM	Service Module (i.e. DSM and/or SMXG)
SMXG	Service Module 4 or 8 GB (Eagle card)
TPD	Tekelec Platform Distribution

**Table 1: Acronyms**

## 1.4 Log Files

Upgrade commands executed during an installation are logged in `/var/TKLC/log/upgrade/upgrade.log`. This log file is automatically initiated when upgrade software is invoked. This log file is rolled every time an upgrade is initiated. A total of up to five upgrade log files are stored on the server.

The upgrade wrapper script, `ugwrap`, logs its actions also to `/var/TKLC/log/upgrade/ugwrap.log`. This log file is rolled every time `ugwrap` is initiated. A total of up to five `ugwrap` log files are stored on the server.

The technician running the procedure is responsible for enabling screen logging within the chosen connectivity application.

## 1.5 Definitions

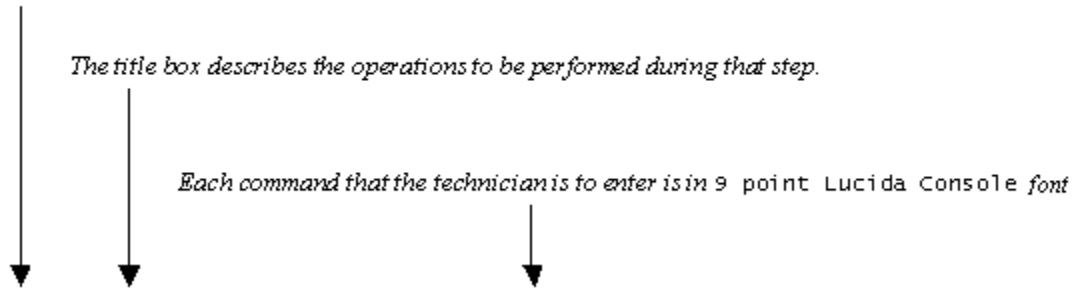
Term	Definition
Active ELAP	The ELAP site that is currently used for provisioning through HSOP.
Standby ELAP	The ELAP site that is NOT currently used for provisioning through HSOP.
System health Check	Procedure used to determine the health and status of the ELAP server, typically performed using the TPD <code>syscheck</code> utility.

**Table 2: Definitions**

## 1.6 Terminology

Multiple servers may be involved with the procedures in this manual. Therefore, most steps in the written procedures begin with the name or type of server to which the step applies. For example:

*Each step has a checkbox for every command within the step that the technician should check to keep track of the progress of the procedure.*



1	MPS A: Verify all materials required are present	Materials are listed in Material List (Section 1.7)
---	--	---

Figure 1. Example of a step that indicates the server on which it needs to be executed

1.	A	B	MPS X: Insert USB.	Insert media in USB drive
	<input type="checkbox"/>	<input type="checkbox"/>		

Figure 2. Example of a step that needs to be executed on both MPS A and MPS B servers

## 1.7 Required Materials

**Note: Make sure that the LSMS is already migrated to LSMS 13.2 before performing the ELAP migration from ELAP 10.0 to 10.1.x.**

- Two (2) target-release TPD USBs.
- Two (2) target-release ELAP USBs or a target release ELAP ISO file.
- A terminal and null modem cable to establish a serial connection.
- Identify if the ELAP pair is connected to the DSM Cards, or a mixture of DSM and SMXG Cards.

Write down the Eagle Cards type.

Type of Eagle Cards: \_\_\_\_\_

- System configuration information like NTP Server IP, Provisional IPs etc.

Write down the system configuration information.

Provisionable IPs: \_\_\_\_\_

VIP: \_\_\_\_\_

Provisionable Gateway: \_\_\_\_\_

NTP Server IPs: \_\_\_\_\_

Other IPs required: \_\_\_\_\_



- Passwords for users on the local system:

<b>ELAP USERS</b>		
<b>login</b>	<b>MPS A password</b>	<b>MPS B password</b>
elapconfig		
elapdev		
syscheck		
root		
elapall (needed for GUI access)		
mysql(EuiDB) root user		
admusr		

**Table 3: User Password Table**

1.8E5APPB Server (Rear)

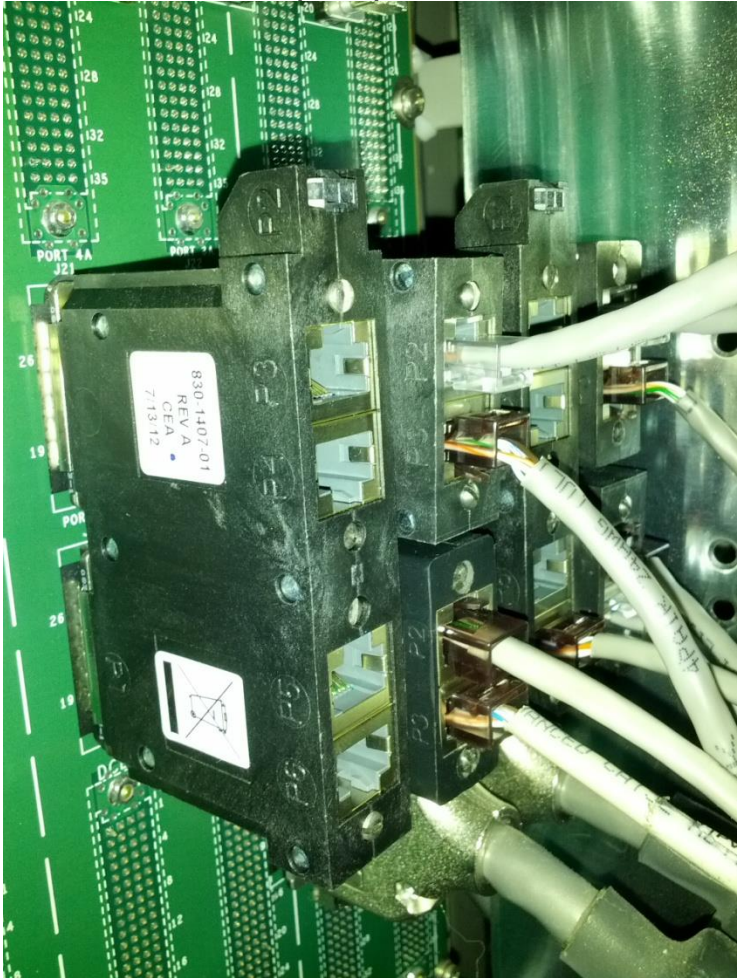


Figure 3. E5-APP-B Server (Rear)

**Note:** If any additional detail about serial and network connectivity information is required, refer to the Interconnect Diagram [4].

### 1.9 Telco T5C-24GT Switch (Front)

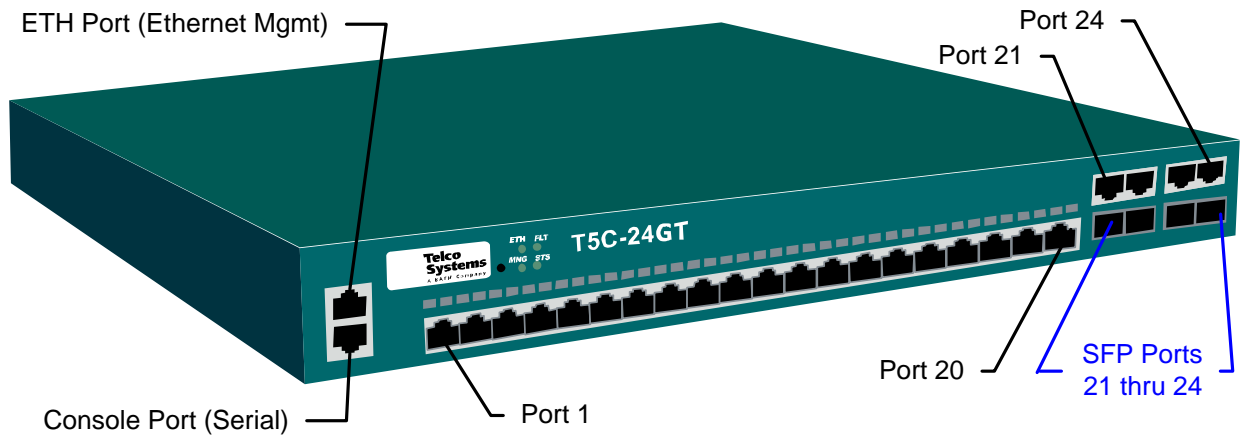


Figure 4. Telco Switch

**Note:** If any additional detail about network connectivity information is required, refer to the Interconnect Diagram [4].

### 1.10 Fallback

If for any reason a fallback to the original configuration is required, the procedure will be to re-IPM the server and install the old ELAP version.

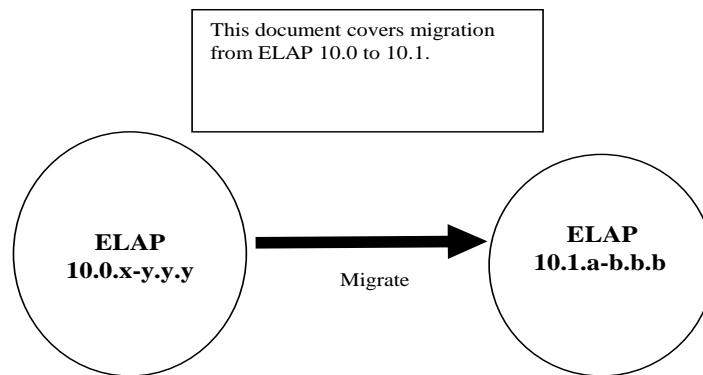
## 2. FULL UPGRADE PROCEDURES

This document defines the step-by-step actions performed to execute a software Full upgrade to ELAP 10.1.x.

The ELAP application can be installed, or full upgraded based on the table below.

**Table 4 Install-Full upgrade paths for E5APPB-02**

<b>TPD Release for IPM</b>	<b>ELAP Initial Installation Release</b>
7.0.x.0.0-86.40.0 or later	10.1.x
<b>Upgrade Source Release</b>	<b>Upgrade Destination Release</b>
10.0	10.1.x



The following table illustrates the progression of the Full upgrade 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 2.1.1 and 2.1.2 are to be executed in the order they are listed.

### 2.1 Upgrade Timeline for ELAP Procedure Execution Order

#### 2.1.1 Preparation phase

**Table 5: Timeline table for Full upgrade preparation**

ELAP A				ELAP B		
Procedure	Task	A	Task Start time (min)	B	Task	Procedure
	**Before Maintenance Window**					
Procedure 1	Setting Up Upgrade Environment	10	0			
			10	10	Setting Up Upgrade Environment	Procedure 1
Procedure 2	Capture E5APPB Current Configuration	15	20			

Procedure 3	Pre-upgrade health check	10	35			
			45	10	Pre-upgrade health check	Procedure 3

## 2.1.2 Maintenance Window Tasks

**Table 6: Timeline table for Full upgrade of ELAP**

LSMS			
Procedure	Task	Time	Task Start time (min)
2.7Appendix C	Disconnect NPAC fromLSMS	5	0
Procedure 4	*LSMS Servdi Backup	90	95

\*LSMS Servdi backup time will vary according to the data on LSMS. This has to be done simultaneously while IPMing the ELAP servers.

ELAP A				ELAP B		
Procedure	Task	A	Task Start time (min)	B	Task	Procedure
Procedure 5	Backup EuiDB	5	5			
Procedure 6	Disconnect ELAP from LSMS	5	10			
			15	45	IPM MPS server with TPD 7.0.x	Procedure 7
			60	10	Pre-install configuration	Procedure 8
			70	30	ELAP installation steps	Procedure 9
			100	10	Configure Network for Backup transfer	Procedure 10
Procedure 14	Transfer backup to local B	5	110			
Procedure 7	IPM MPS server with TPD 7.0.x	45	115			
Procedure 8	Pre-install configuration	10	160			
Procedure 9	ELAP installation steps	30	170			
Procedure 11	*Configure NTP server	5	200			
Procedure 12	Initial Network Configuration	5	205			
Procedure 13	Verify Configurations	5	210			
			215	5	Transfer backup to local A	Procedure 14
Procedure 15	Restore EuiDB	5	220			
Procedure 16	SSH key exchange between ELAP and LSMS	5	225			
Procedure 17	Repoint LSMS to ELAP VIP	15	230			
Procedure 18	Transfer Servdi Image To ELAP	5	245			
Procedure 19	Restore Servdi	15	250			
2.7Appendix D	Connect NPAC to LSMS	5	265			
Procedure 20	Post Upgrade Syscheck	5	270	5	Post Upgrade Syscheck	Procedure 20
Procedure 21	Accept The Upgrade	5	275	5	Accept The Upgrade	Procedure 21

**\* After ELAP installation, switch configuration is done before configuring NTP server and initial configuration, it will take an extra 30 minutes to configure the switches. Follow ELAP Incremental Upgrade/Installation guide E76230, Procedure 8 (CGBU\_018976) for switch configuration steps.**

## 2.2 Pre Full Upgrade Steps

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 **FULL UPGRADE ASSISTANCE**.

### Procedure 1 SETTING UP UPGRADE ENVIRONMENT

S T E P #	A	B	This procedure sets up the Full upgrade environment. Estimated time: 5 minutes	
1.	<input type="checkbox"/>	<input type="checkbox"/>	<b>E5APPB MPS X:</b> Login as root to MPS	SSH to MPS IP: login: <b>root</b> password: <b>&lt;E5APPB_root_password&gt;</b>
2.	<input type="checkbox"/>	<input type="checkbox"/>	<b>E5APPB MPS X:</b> Start capture file.	Start a capture file using IsoConsole, or by starting a local screen session and capturing its output .
3.	<input type="checkbox"/>	<input type="checkbox"/>	<b>E5APPB MPS X:</b> Access mate MPS via serial console	<b># minicom mate</b>
4.	<input type="checkbox"/>	<input type="checkbox"/>	<b>E5APPB mate MPS:</b> Login as root.	console login: <b>root</b> password: <b>&lt;E5APPB_root_password&gt;</b>

**This procedure is complete!**

### Procedure 2 CAPTURING E5-APP-B CURRENT CONFIGURATIONS

S T E P #	This procedure captures the existing configuration on the server that runs on the source release. Estimated time: 5 minutes	
1.	<b>MPS A:</b> Log in as elapconfig.	<b># su – elapconfig</b>
2.	<b>MPS A:</b> A successful configuration file setup results in the display of the ELAP Configuration Menu and its associated header information.  Select option 1 to display the ELAP configuration.	<pre> /-----ELAP Configuration Menu-----\ /-----\   1   Display Configuration                   ----- -----    2   Configure Network Interfaces Menu      ----- -----    3   Set Time Zone                           ----- -----    4   Exchange Secure Shell Keys             ----- -----    5   Change Password                         ----- -----    6   Platform Menu                          ----- -----    7   Configure NTP Server                     ----- -----  </pre>

		<pre>   8   Mate Disaster Recovery    -----    e   Exit   \-----/  Enter Choice: 1         </pre>
<p>3. <input type="checkbox"/></p>	<p><b>MPS A:</b> Configuration information is displayed. Capture and record all information displayed in this output</p>	<pre> ELAP A Provisioning Network IP Address = 10.248.15.17 ELAP B Provisioning Network IP Address = 10.248.15.18 Provisioning Network Netmask           = 255.255.255.0 Provisioning Network Default Router    = 10.248.15.1 Provisioning VIP                        = 10.248.15.19 ELAP A Sync Network Address            = 169.254.1.100 ELAP B Sync Network Address            = 169.254.1.200 ELAP A Main DSM Network Address        = 192.168.120.100 ELAP B Main DSM Network Address        = 192.168.120.200 ELAP A Backup DSM Network Address      = 192.168.121.100 ELAP B Backup DSM Network Address      = 192.168.121.200 ELAP A HTTP Port                       = 80 ELAP B HTTP Port                       = 80 ELAP A HTTP SuExec Port                = 8001 ELAP B HTTP SuExec Port                = 8001 ELAP A Banner Connection Port          = 8473 ELAP B Banner Connection Port          = 8473 ELAP A Static NAT Address              = Not configured ELAP B Static NAT Address              = Not configured ELAP A LSMS Connection Port            = Not configured ELAP B LSMS Connection Port            = Not configured ELAP A EBDA Connection Port            = Not configured ELAP B EBDA Connection Port            = Not configured Time Zone                              = America/New_York         </pre>
<p>4. <input type="checkbox"/></p>	<p><b>Full upgrade Procedure:</b> Record the configuration data.</p>	<p>Record the configuration data paying particular attention to the highlighted items in the sample output above.</p>
<p>5. <input type="checkbox"/></p>	<p><b>MPS A:</b> Press Return to continue.</p>	<p>Press return to continue...&lt;return&gt;</p>



<p>6. <input type="checkbox"/></p>	<p><b>MPS A:</b> The ELAP Configuration Menu is displayed. Select option 7 to configure the NTP Server.</p>	<pre> /-----ELAP Configuration Menu-----\ /-----\   1   Display Configuration    -----    2   Configure Network Interfaces Menu    -----    3   Set Time Zone    -----    4   Exchange Secure Shell Keys    -----    5   Change Password    -----    6   Platform Menu    -----    7   Configure NTP Server    -----    8   Mate Disaster Recovery    -----    e   Exit   \-----/ </pre> <p>Enter Choice: 7</p>
<p>7. <input type="checkbox"/></p>	<p><b>MPS A:</b> The ELAP NTP Server Menu is displayed. Select option 1 to display the External NTP Server (if configured).</p>	<pre> /-----ELAP Configure NTP Server Menu-\ /-----\   1   Display External NTP Server    -----    2   Add External NTP Server    -----    3   Remove External NTP Server    -----    e   Exit   \-----/ </pre> <p>Enter Choice: 1</p>
<p>8. <input type="checkbox"/></p>	<p><b>MPS A:</b> Record the NTP server information (if configured).</p>	<pre> ntpserver1 &lt;IpAddress 1&gt; ntpserver2 &lt;IpAddress 2&gt;  Press return to continue...&lt;return&gt;  If no NTP server is configured, the output will be as below:  There are no External NTP Servers.  Press return to continue...&lt;return&gt;  Note: NTP is mandatory for ELAP 10.1 and higher releases so if no NTP is configured; it is required to get an NTP server IP ready before proceeding for full upgrade. </pre>
<p>9. <input type="checkbox"/></p>	<p><b>MPS A:</b> Select e to exit</p>	<pre> /-----ELAP Configure NTP Server Menu-\ /-----\   1   Display External NTP Server    -----    2   Add External NTP Server    -----    3   Remove External NTP Server    -----  </pre>

		<pre>  e   Exit   \-----/  Enter Choice: e</pre>
10. <input type="checkbox"/>	<b>MPS A:</b> Select e to exit	<pre>/-----ELAP Configuration Menu-----\ /-----\   1   Display Configuration    -----    2   Configure Network Interfaces Menu    -----    3   Set Time Zone    -----    4   Exchange Secure Shell Keys    -----    5   Change Password    -----    6   Platform Menu    -----    7   Configure NTP Server    -----    8   Mate Disaster Recovery    -----    e   Exit   \-----/  Enter Choice: e</pre>
11. <input type="checkbox"/>	<b>MPS A:</b> Write down the current ELAP release	<pre># rpm -qi TKLCelap Release      : 10.1.0.0.0_101.8.0  # uiEdit   grep ELAP_RELEASE "ELAP_RELEASE" is set to "10.1.0"</pre>
12. <input type="checkbox"/>	<b>MPS A:</b> Capture the ELAP_PRETTY_NAME on ELAP 10.0 if configured.	<pre># uiEdit   grep PRETTY_NAME "ELAP_A_PRETTY_NAME" is set to "ELAP_A_NAME" "ELAP_B_PRETTY_NAME" is set to "ELAP_B_NAME"</pre>
13. <input type="checkbox"/>	<b>MPS A:</b> Capture the entire uiEdit output for reference if required later.  The example output to the right has been truncated to fit this page.	<pre># uiEdit "LNP_ENABLED" is set to "TRUE" "Alarms_Purged_Nb_Days" is set to "30" "new_user_default_groups" is set to "readonly" "max_passwd_age" is set to "0" "EBDAD_LSMS_PORT" is set to "1030" "max_concurrent_user_logins" is set to "99" "ELAP_A_DSM_LPBK_NETWORK_ADDRESS" is set to "192.168.123.100" "max_concurrent_logins" is set to "20" "ELAP_A_NAME" is set to "Crete-A" "ELAP_RELEASE" is set to "10.0.1" "ELAP_LOGGING_REMOTE_USERNAME" is set to "" "ELAP_A_SYNCH_NETWORK_ADDRESS" is set to "169.254.1.100" "AUTO_RTDB_BKUP_FILEPATH" is set to "/var/TKLC/elap/free/backup/" "HTTP_ENABLED" is set to "Yes" "ELAP_A_PRETTY_NAME" is set to "CRETE_A" "AUTO_RTDB_BKUP_FILES_TO_MANTAIN" is set to "5" "session_idle_timeout" is set to "0" "ELAP_B_PROV_NETWORK_IP_ADDRESS" is set to "192.168.61.179" "EXINIT_DEBUG_LEVEL" is set to "OFF" "SNAPPER_ROLLBACK_INTERVAL" is set to "900" "EBDAD_DEBUG_LEVEL" is set to "OFF" "MAINT_DEBUG_NUM_LOGS" is set to "5"</pre>

	<pre> "RTDB_LV_PATH" is set to "/dev/vgdrbd0" "PROV_DEBUG_NUM_LOGS" is set to "5" "LNPTRANS_LOG_DAYS" is set to "7" "EXINIT_DEBUG_NUM_LOGS" is set to "5" "ELAP_A_HTTP_PORT" is set to "80" "EXINIT_ERROR_NUM_LOGS" is set to "5" "logon_msg" is set to "NOTICE: This is a private computer system. Unauthorized access or use may lead to prosecution." "ELAP_B_HTTPS_PORT" is set to "443" "ELAP_B_NAME" is set to "Crete-B" "AUTO_RTDB_BKUP_TIME" is set to "6:00" "EBDAD_GS_PORT" is set to "9692" "LNP_LRN_QTY" is set to "200000" "BACKUP_FILE_DIR" is set to "/var/TKLC/elap/free/backup" "ELAP_LOGGING_EXPORT" is set to "DISABLED" "AUTO_RTDB_BKUP_FREQUENCY" is set to "1" "PROVISIONING_NETWORK_NETMASK" is set to "255.255.255.0" "ELAP_LOGGING_REMOTE_SFTP_PATH" is set to "" "ELAP_B_SYNCH_NETWORK_ADDRESS" is set to "169.254.1.200" "ELAP_A_HTTPS_PORT" is set to "443" "ELAP_A_DSM_MAIN_NETWORK_ADDRESS" is set to "192.168.120.100" "ELAP_A_SUEXEC_HTTPS_PORT" is set to "8002" "ELAP_A_GS_BANNER_PORT" is set to "8473" "ELAP_B_DSM_BACKUP_NETWORK_ADDRESS" is set to "192.168.121.200" "MAINT_DEBUG_LEVEL" is set to "OFF" "DOWNLOAD_FILE_DIR" is set to "/var/TKLC/elap/free/backup" "euiddb_version" is set to "3" "LNP_NPANXX_QTY" is set to "350000" "LSMS_PROVISIONING" is set to "NO" "ELAP_LOGGING_TIME_FORMAT" is set to "UTC" "MAINT_ERROR_NUM_LOGS" is set to "5" "UI_IP_AUTHORIZATION_ENABLED" is set to "FALSE" "ELAP_LOGGING_REMOTE_IP_ADDRESS" is set to "" "AUTO_RTDB_BKUP_DELETE_OPTION" is set to "y" "HSOPD_ERROR_NUM_LOGS" is set to "5" "TRPD_ERROR_NUM_LOGS" is set to "5" "apache_403_error_message" is set to "NOTICE: This workstation is not authorized to access the GUI." "EBDAD_ERROR_NUM_LOGS" is set to "5" "min_passwd_len" is set to "6" "max_account_inactivity" is set to "0" "HSOPD_DEBUG_LEVEL" is set to "OFF" "TRPD_DEBUG_NUM_LOGS" is set to "5" "ELAP_LOGGING_REMOTE_PASSWORD" is set to "" "ELAP_B_HTTP_PORT" is set to "80" "MATE_MPS_HTTPS_PORT" is set to "443" "EBDAD_DEBUG_NUM_LOGS" is set to "5" "ELAP_B_PRETTY_NAME" is set to "CRETE_B" "HSOPD_LSMS_PROVISIONING_PORT" is set to "7483" "ELAP_RTDB_RELEASE" is set to "9.0.0" "SNAPPER_LOG_LEVEL" is set to "0" "AUTO_RTDB_BKUP_TYPE" is set to "local_mate" "PROV_ERROR_NUM_LOGS" is set to "5" "ELAP_A_PROV_NETWORK_IP_ADDRESS" is set to "192.168.61.178" "CNF_QTY_THRESHOLD_PERC" is set to "90" "MATE_MPS_HTTP_PORT" is set to "80" "passwd_reuse_limit" is set to "99" "apache_403_error_message_default" is set to "NOTICE: This workstation is not authorized to access the GUI." "HTTPS_ENABLED" is set to "Yes" "HSOPD_DEBUG_NUM_LOGS" is set to "5" "ELAP_B_DSM_MAIN_NETWORK_ADDRESS" is set to "192.168.120.200" "LOCAL_PROVISIONING_VIP" is set to "192.168.61.114" "TRPD_DEBUG_LEVEL" is set to "OFF" "RTDB_AUDIT" is set to "ON" "VIEW_STATUS_REFRESH" is set to "0" "LNP_TN_QTY" is set to "384000000" "ELAP_B_GS_BANNER_PORT" is set to "8473" "PROV_DEBUG_LEVEL" is set to "OFF" "RELOAD_FLOW_CONTROL_TIME" is set to "200" "passwd_complexity_checking" is set to "off" "LNP_MR_QTY" is set to "2000000" "RTDBA_NUM_LOGS" is set to "5" </pre>
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		<pre>"RIDB_LV_NAME" is set to "lnpdb" "ELAP_A_SUEXEC_HTTP_PORT" is set to "8001" "PROVISIONING_NETWORK_DEFAULT_ROUTER" is set to "192.168.61.250" "ELAP_B_SUEXEC_HTTPS_PORT" is set to "8002" "LNP_LRNMR_QTY" is set to "2000000" "ELAP_LOGGING_ENHANCEMENTS_FEATURE" is set to "OFF" "ELAP_A_DSM_BACKUP_NETWORK_ADDRESS" is set to "192.168.121.100" "HSOPD_GS_PORT" is set to "9691" "ELAP_B_SUEXEC_HTTP_PORT" is set to "8001" "ELAP_B_DSM_LPBK_NETWORK_ADDRESS" is set to "192.168.123.200" "max_failed_logins" is set to "99" "BULK_DOWNLOAD" is set to "OFF"</pre>
--	--	--

**This procedure is complete!**


**Procedure 3 PRE-UPGRADE HEALTH CHECK**

STEP #	A	B	This procedure determines the health of the MPS before beginning the Full upgrade. This procedure should be done 1 week before scheduled Full upgrade and repeated the day of the Full upgrade  Estimated time: 5 minutes	
1.	<input type="checkbox"/>	<input type="checkbox"/>	<b>MPS X:</b> Validate date, time and time zone to ensure accuracy.	<pre># date Fri May 20 07:05:41 EDT 2016</pre>
2.	<input type="checkbox"/>	<input type="checkbox"/>	<b>MPS X:</b> Execute syscheck.	<pre># syscheck Running modules in class disk... OK Running modules in class net... OK Running modules in class proc... OK Running modules in class system... OK Running modules in class hardware... OK The log is available at: --&gt;/opt/TKLCplat/log/syscheck/fail_log</pre>
3.	<input type="checkbox"/>	<input type="checkbox"/>	<b>MPS X:</b> Check for any alarms on the server	<pre>[elapdev@ E5APP-B-a ~]\$ manageBannerInfo -l <b>There are currently no BannerInfo messages for this side in the database.</b></pre>
4.	<input type="checkbox"/>	<input type="checkbox"/>	<b>MPS X:</b> Obtain the host id for logging purposes.	<pre>[elapdev@ E5APP-B-a ~]\$ hostid a8c0b23d</pre>
5.	<input type="checkbox"/>	<input type="checkbox"/>	<b>MPS X:</b> Obtain the uptime of the system for logging purposes.	<pre>[elapdev@ E5APP-B-a ~]\$ uptime 03:29:12 up 46 days, 20:00, 5 users, load average: 0.16, 0.24, 0.27</pre>
6.	<input type="checkbox"/>	<input type="checkbox"/>	Repeat on the day of the scheduled Full upgrade	All Health Checks should be repeated the day of the Full upgrade. If any problems are encountered, resolve before proceeding further.

**This procedure is complete!**

## 2.3 Data Backup before Full upgrade

### Procedure 4 LSMS SERVDI BACKUP

1.	<p><b>LSMS:</b> Login to Active LSMS server as root user.</p>	<pre>login: root Password: &lt;root_password&gt;</pre>
2.	<p>Change the user to lsmsadm.</p>	<pre># su -lsmsadm</pre>
3.	<p>Enable the servdi feature</p>	<pre>lsmsadm@lsmspri ~]\$ dbcfginternal SERVDI_ENABLED Y</pre> <p>Note: The SERVDI feature will not be available within a GUI instance until the GUI is restarted.</p> <p>Update complete</p>
4.	<p>Verify that servdi feature has been enabled.</p>	<pre>lsmsadm@lsmspri ~]# lsmsdb -c features   grep "SERVDI_ENABLED" Y SERVDI_ENABLED</pre>
5.	<p><b>LSMS:</b> Log in to the LSMS GUI as a member of the permission group that is authorized to perform this operation</p>	

<p>6.</p>	<p>Select the LSMS icon. Right click on LSMS icon LSMS-&gt; LNP Database Synchronization -&gt; ELAP Reload via DB image</p>	
<p>7.</p>	<p>Click on generate image</p>	

**This procedure is complete!**

**Procedure 5 BACKUP EUIDB**

This section lists the procedures, in order, that must be performed to backup the system prior to Full upgrade

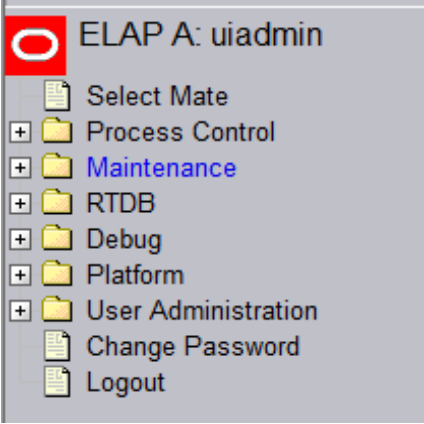
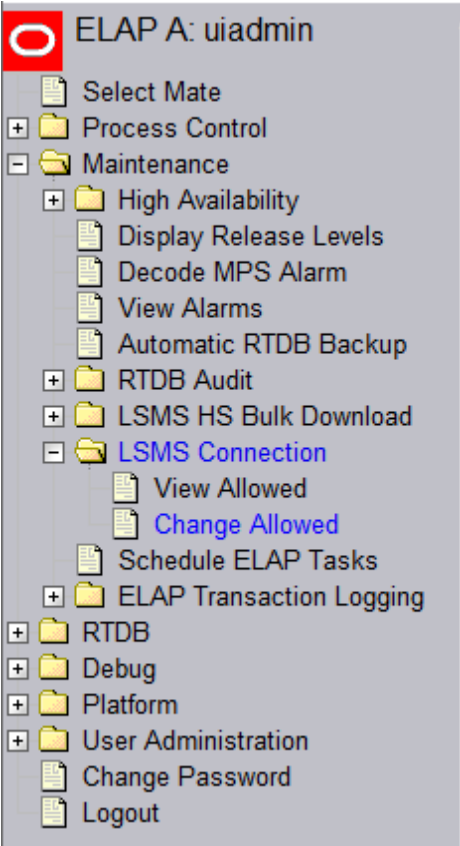
<b>S T E P #</b>	This procedure backs up the EuiDB.  <b>Note: Estimated time of completion is 5 minutes.</b> Check off (✓) each step as it is completed. Boxes have been provided for this purpose under each step number.  Should this procedure fail, Contact Oracle technical services and ask for <b>FULL UPGRADE ASSISTANCE</b> .	
1. <input type="checkbox"/>	<b>Active ELAP:</b> Login to the Active ELAP server as user “elapdev”.	E5APP-B-b login: <b>elapdev</b> Password:*****  <b>[elapdev@E5APP-B-b elapdev]#</b>
2. <input type="checkbox"/>	<b>Active ELAP:</b> Stop the ELAP Application	<pre>[elapdev@E5APP-B-b ~]\$ /etc/init.d/Elap stop ~~ /etc/init.d/Elap stop ~~ All processes are dead ELAP-Application stopped successfully. [elapdev@E5APP-B-b ~]\$</pre>
3. <input type="checkbox"/>	<b>Active ELAP:</b> Switch user to root.	<b>\$su</b> Password: <root_password>
4. <input type="checkbox"/>	<b>Active ELAP:</b> Switch user to elapconfig.	<b>\$su - elapconfig</b>
5. <input type="checkbox"/>	<b>Active ELAP:</b> Login as “ <b>elapconfig</b> ” to start the ELAP Configuration utility.  Select option “6” and press enter.	<pre>/-----ELAP Configuration Menu-----\ /-----\   1   Display Configuration             -----    2   Configure Network Interfaces Menu    -----    3   Set Time Zone                      -----    4   Exchange Secure Shell Keys         -----    5   Change Password                    -----    6   Platform Menu                      -----    7   Configure NTP Server                -----    8   Mate Disaster Recovery             -----    e   Exit                               \-----/  Enter Choice:6</pre>
6. <input type="checkbox"/>	<b>Active ELAP:</b> 1) Select “ <b>5</b> ” and press return to start the MySQL Backup.  2) Select “ <b>Y</b> ” when prompted and press return.	<pre>/-----ELAP Platform Menu-\ /-----\   1   Initiate Upgrade                   -----    2   Reboot MPS                         -----    3   MySQL Backup                       -----    4   RTDB Backup                         ----- </pre>

		<pre>   e   Exit \-----/  Enter Choice: 3  Are you sure you want to back up the MySQL database on MPS A? [N]: Y Backup will be saved as "/var/TKLC/appl/free/npdbBackup_E5APP-B- a_20020118123143.tar"... Connecting to local MySQL server... Getting read lock... Tarring the NPDB... Backup Complete... Disconnecting from local MySQL server...                 </pre>
<p>7. <input type="checkbox"/></p>	<p><b>Active ELAP:</b> Select "e" and press Enter to exit the Platform Menu.</p>	<pre> /-----ELAP Platform Menu-----\ \-----/   1   Initiate Upgrade  ----- -----    2   Reboot MPS  ----- -----    3   MySQL Backup  ----- -----    4   RTDB Backup  ----- -----    e   Exit \-----/  Enter Choice: e                 </pre>
<p>8. <input type="checkbox"/></p>	<p><b>Active ELAP:</b> Select "e" and press Enter to exit the ELAP Configuration Menu.</p>	<pre> /-----ELAP Configuration Menu-----\ \-----/   1   Display Configuration  ----- -----    2   Configure Network Interfaces Menu  ----- -----    3   Set Time Zone  ----- -----    4   Exchange Secure Shell Keys  ----- -----    5   Change Password  ----- -----    6   Platform Menu  ----- -----    7   Configure NTP Server  ----- -----    8   Mate Disaster Recovery  ----- -----    e   Exit \-----/  Enter Choice: e                 </pre>
<p>9. <input type="checkbox"/></p>	<p><b>Active ELAP:</b> Re-start the ELAP Application for Active ELAP.</p>	<pre> [root@E5APP-B-b ~]# /etc/init.d/Elap start  ~~ /etc/init.d/Elap start ~~ "ELAP_RELEASE" is set to "10.1.0" ELAP application start Successful.                 </pre>

**This procedure is complete!**



**Procedure 6 DISCONNECT ELAP FROM LSMS**

<p><b>S</b> <b>T</b> <b>E</b> <b>P</b> <b>#</b></p>	<p>This procedure provides instructions to stop LSMS connection.</p> <p>Check off (✓) each step as it is completed. Boxes have been provided for this purpose under each step number.</p> <p>IF THIS PROCEDURE FAILS, CONTACT ORACLE TECHNICAL SERVICES AND ASK FOR UPGRADE ASSISTANCE.</p>	
<p>1. <input type="checkbox"/></p>	<p><b>Active ELAP GUI:</b> Login as uiadmin using the default password.</p> <p>*Note ELAP Version may differ than example image shown.</p>	
<p>2. <input type="checkbox"/></p>	<p><b>Active ELAP GUI:</b></p> <p>1) Expand the “Maintenance → LSMS Connection” folder.</p> <p>2) Select the “Change Allowed” link.</p>	
<p>3. <input type="checkbox"/></p>	<p><b>Active ELAP GUI:</b></p>	

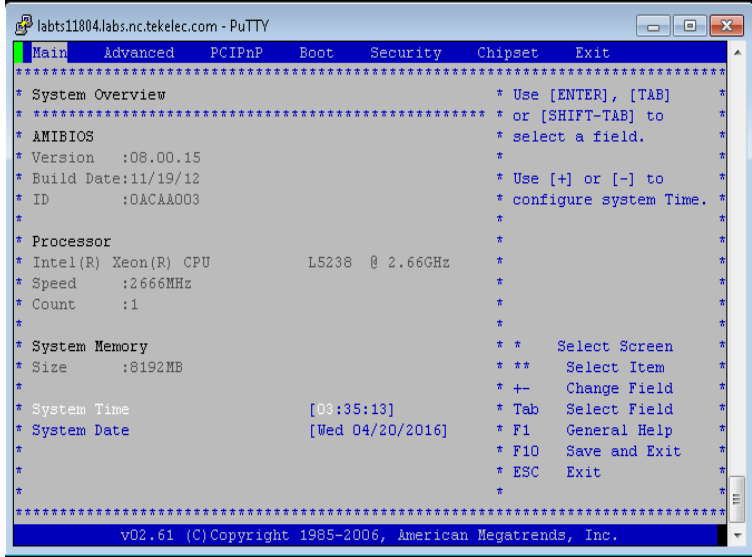
<input type="checkbox"/>	<p>In the right panel, click on the “Disable LSMS Connection” button.</p>	
4. <input type="checkbox"/>	<p><b>ELAP A GUI:</b></p> <p>A message indicating that the LSMS Connection is now Enabled should appear in the right panel.</p>	

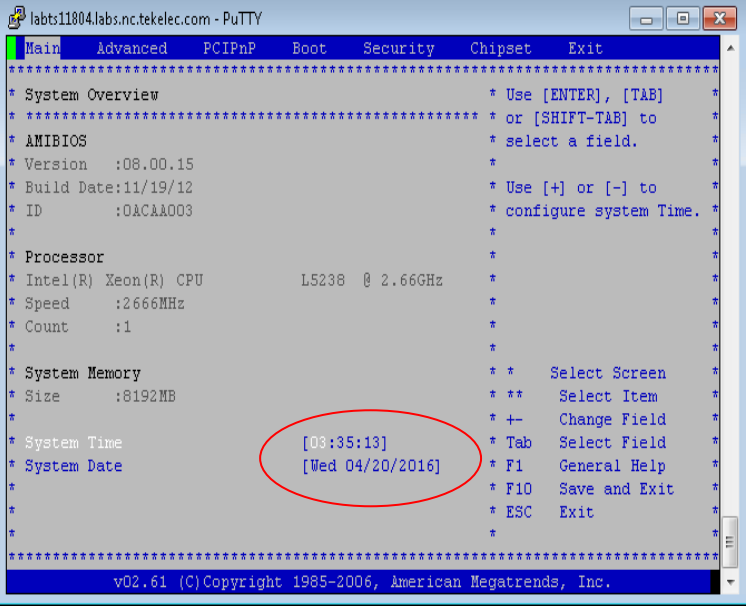
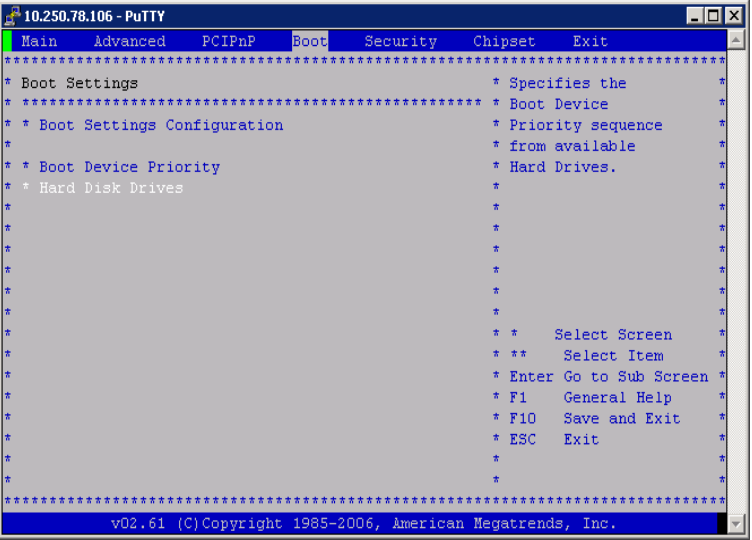
**This procedure is complete!**

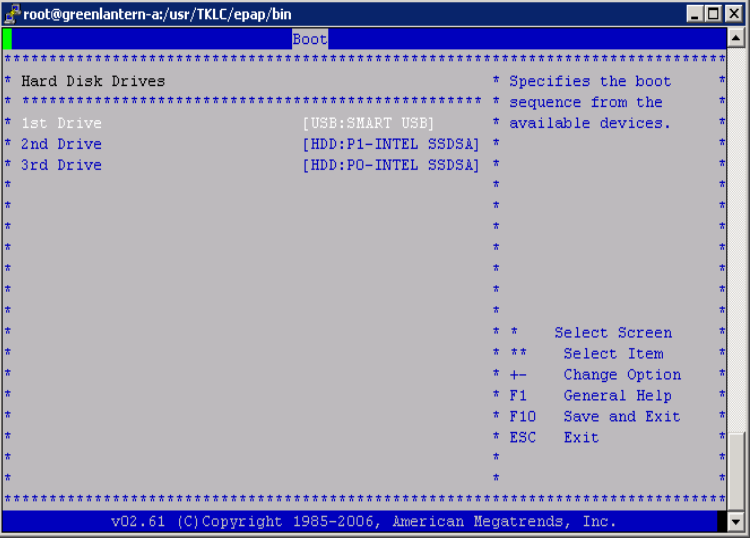
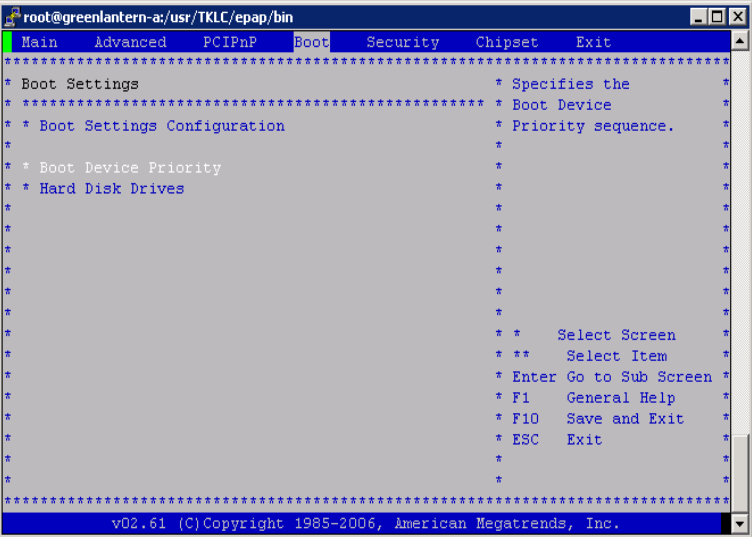
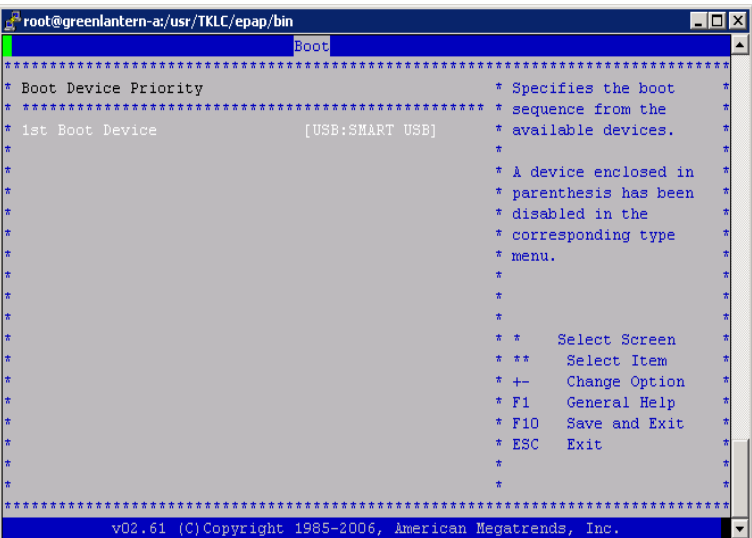
## 2.4 IPM and ELAP 10.1.x Installation

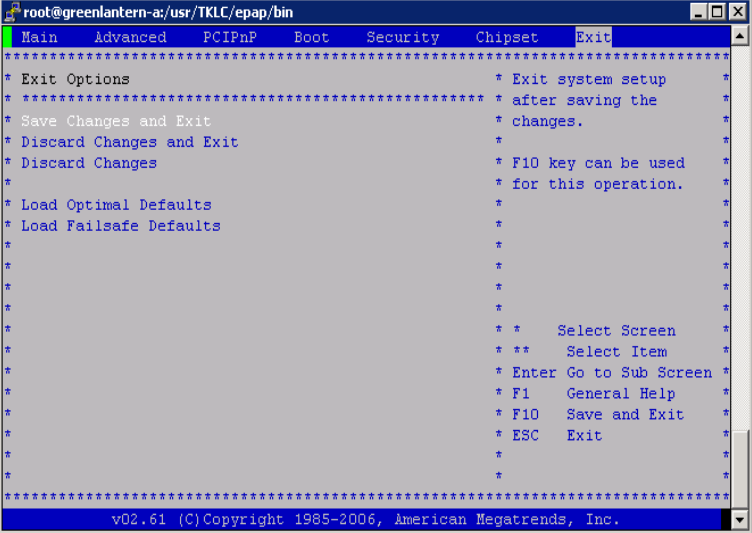
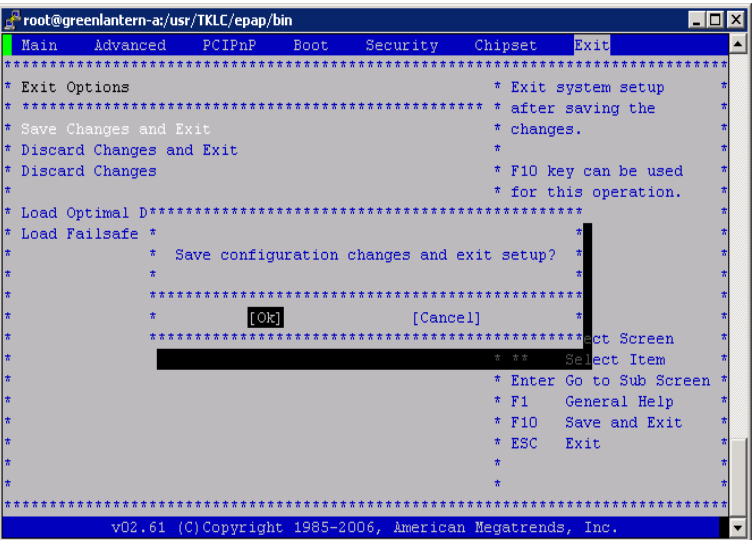
### Procedure 7 IPM MPS SERVER WITH TPD 7.0.X

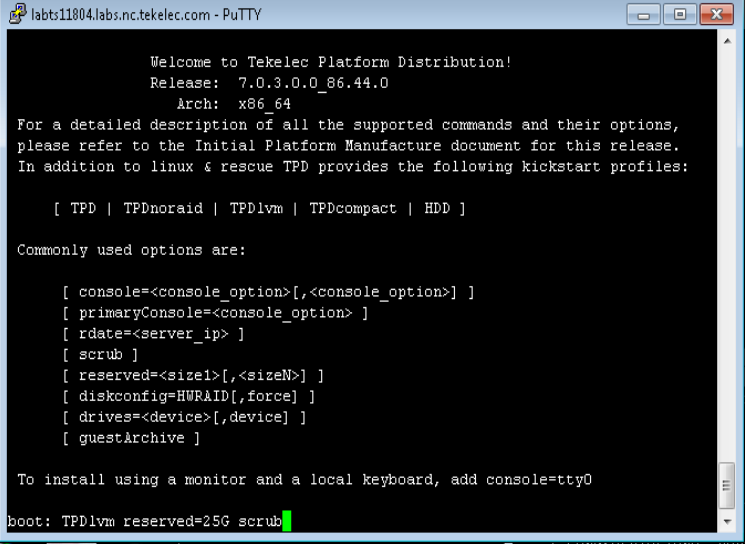
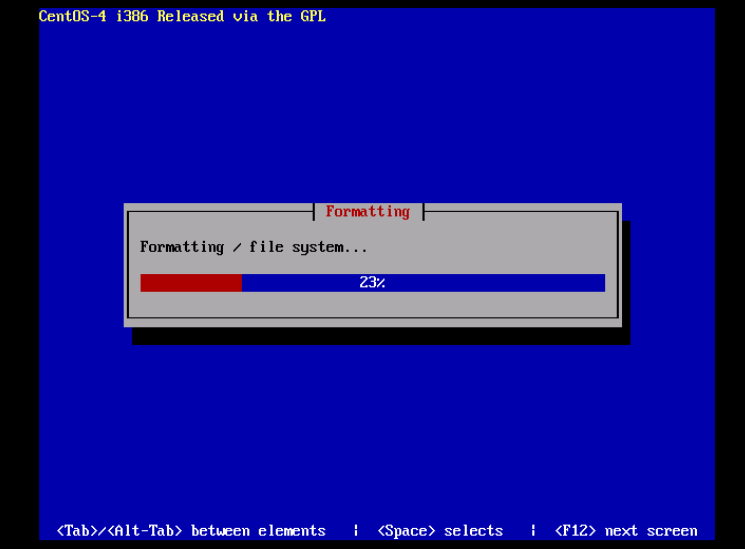
STEP #	A	B	<p>This procedure will install TPD.</p> <p><b>Note: Estimated time of completion is 45 minutes.</b></p> <p>Check off (✓) each step as it is completed. Boxes have been provided for this purpose under each step number.</p> <p>Should this procedure fail, Contact Oracle technical services and ask for <b>FULL UPGRADE ASSISTANCE</b>.</p>
1.	<input type="checkbox"/>	<input type="checkbox"/>	<p><b>MPS X:</b> Insert TPD 7.0.xUSB media into the USB port (E5-APP-B).</p>
2.	<input type="checkbox"/>	<input type="checkbox"/>	<p><b>MPS X:</b> If necessary, log in to the server as the user “root”.</p>
3.	<input type="checkbox"/>	<input type="checkbox"/>	<p><b>MPS X:</b> Reboot server.</p>
4.	<input type="checkbox"/>	<input type="checkbox"/>	<p><b>MPS X:</b> Press ‘del’ key to enter the BIOS when the system starts up after reboot (Use ‘F4’ key in case of Remote keyboard).</p>

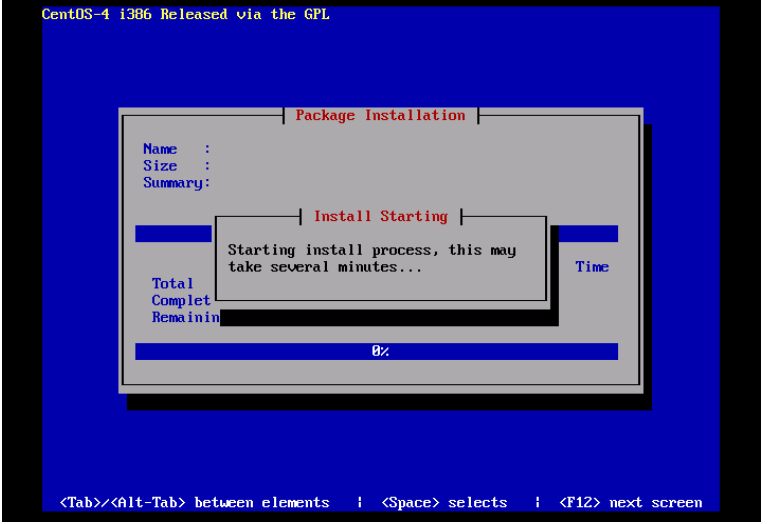
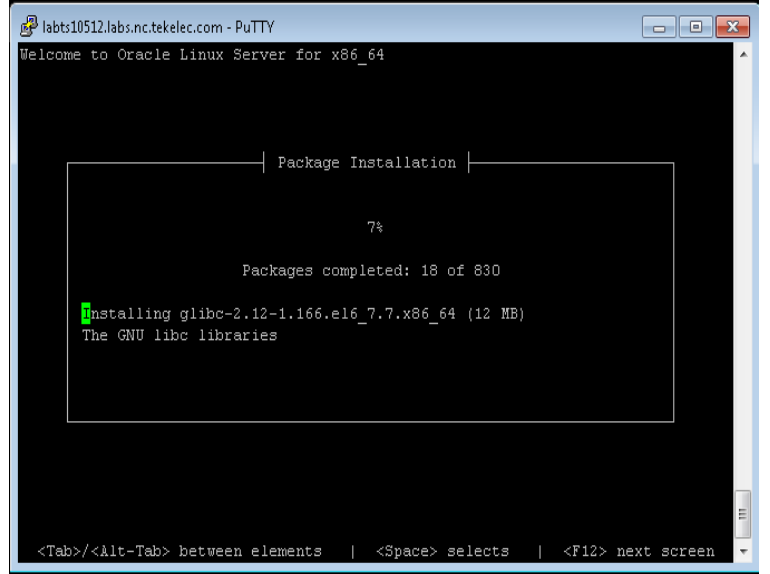


<p>5.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<p><b>MPS X:</b> Set the System Time and Date to UTC time. Press 'Enter' key to select the various fields (hh/mm/ss) of system time and system date (mm/dd/yyyy).  Use UP or DOWN arrow keys to select between System Time and System Date.</p>	 <p>The screenshot shows the BIOS 'System Overview' screen. The 'System Time' field is set to [03:35:13] and the 'System Date' field is set to [Wed 04/20/2016]. Both fields are circled in red. The screen also displays system information such as Processor (Intel(R) Xeon(R) CPU L5238 @ 2.66GHz) and System Memory (8192MB).</p>
<p>6.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<p><b>MPS X:</b> Select <i>Boot</i> → <i>Hard Disk Drives</i> option.</p>	 <p>The screenshot shows the BIOS 'Boot Settings Configuration' screen. The 'Boot Device Priority' section is visible, listing 'Hard Disk Drives' as the primary boot device. The screen also shows navigation instructions like 'F1 General Help' and 'F10 Save and Exit'.</p>
<p>7.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<p><b>MPS X:</b> Press 'Enter' key and select USB as the 1<sup>st</sup> Drive.</p>	

			 <p>A screenshot of the BIOS boot menu. The title bar reads "root@greenlantern-a:/usr/TKLC/epap/bin". The main window has a title bar "Boot" and a scrollable list of options. The list includes "Hard Disk Drives" with sub-options for "1st Drive", "2nd Drive", and "3rd Drive", each with a corresponding drive type in brackets: [USB:SMART USB], [HDD:P1-INTEL SSDSA], and [HDD:PO-INTEL SSDSA]. At the bottom, there are navigation instructions: "Select Screen", "Select Item", "Change Option", "General Help", "Save and Exit", and "Exit". The footer reads "v02.61 (C) Copyright 1985-2006, American Megatrends, Inc."</p>
8.	<input type="checkbox"/>	<input type="checkbox"/>	<p><b>MPS X:</b> Press 'Esc' key and select Boot Device Priority.</p>  <p>A screenshot of the BIOS boot menu, similar to the first one, but with a top menu bar containing "Main", "Advanced", "PCIPnP", "Boot", "Security", "Chipset", and "Exit". The main window title is "Boot". The list of options includes "Boot Settings", "Boot Settings Configuration", "Boot Device Priority", and "Hard Disk Drives". Navigation instructions at the bottom include "Enter Go to Sub Screen". The footer is the same as the first screenshot.</p>
9.	<input type="checkbox"/>	<input type="checkbox"/>	<p><b>MPS X:</b> Verify that the 1<sup>st</sup> Boot Device is set to USB.</p>  <p>A screenshot of the BIOS boot menu, similar to the second one. The main window title is "Boot". The list of options includes "Boot Device Priority" and "1st Boot Device", which is set to "[USB:SMART USB]". There is a warning message: "A device enclosed in parenthesis has been disabled in the corresponding type menu." Navigation instructions and the footer are consistent with the previous screenshots.</p>

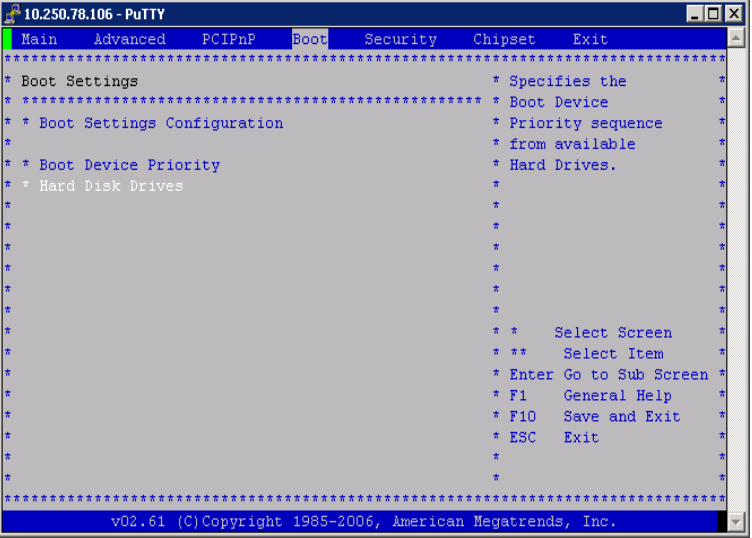
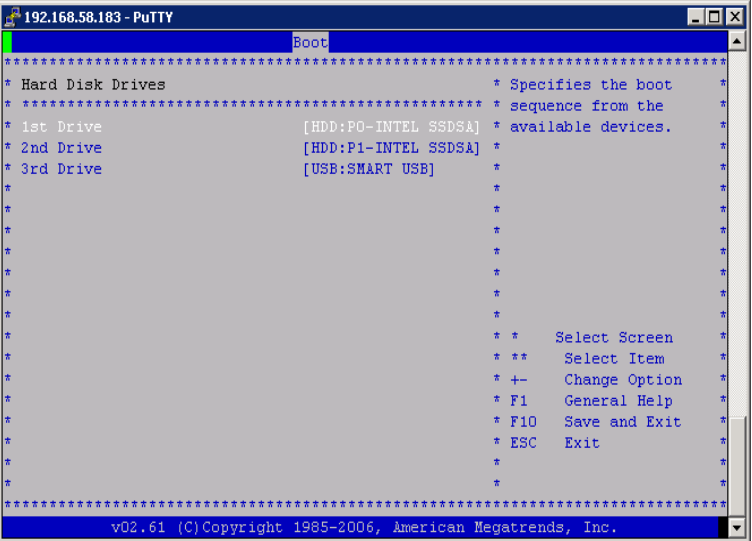
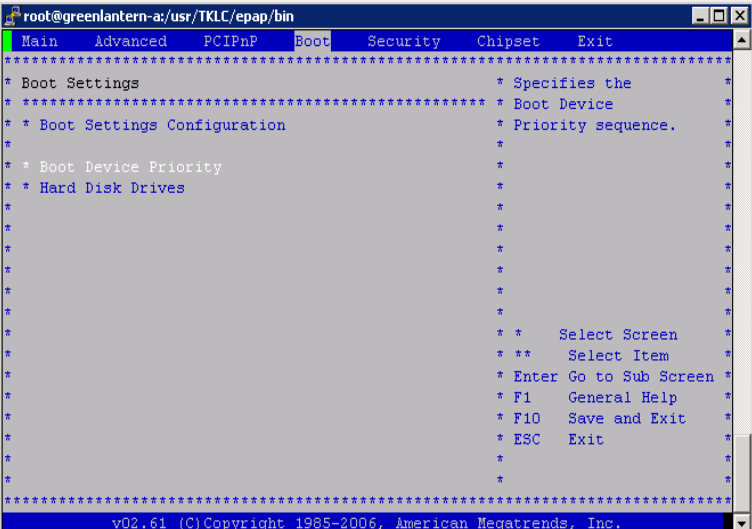
<p>10.</p>	<input type="checkbox"/>	<input type="checkbox"/> <p><b>MPS X:</b> Press 'Esc' key and select <i>Exit</i> → <i>Save Changes and Exit</i> option.</p>	
<p>11.</p>	<input type="checkbox"/>	<input type="checkbox"/> <p><b>MPS X:</b> Select [OK] to save the configuration changes.  The server will reboot and TPD boot prompt will appear.</p>	
<p>12.</p>	<input type="checkbox"/>	<input type="checkbox"/> <p><b>MPS X:</b> Start the IPM process by entering the TPD command at the boot prompt.  <b>WARNING: You must add the "reserved=25G" parameter at the TPD boot prompt. Failure to TPD using this parameter will require this procedure to be</b></p>	<p><b>boot: TPD vm reserved=25G scrub</b></p>

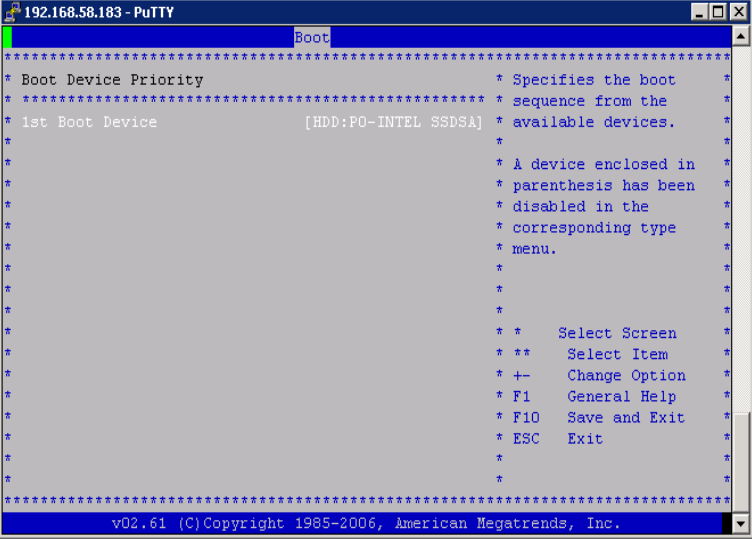
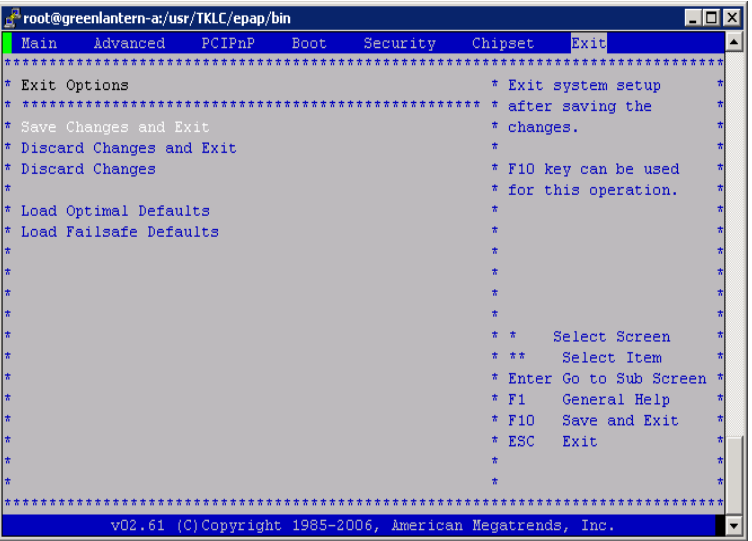
		<p><b>repeated!!!</b></p>	
<p>13.</p>	<input type="checkbox"/>	<p><b>MPS X:</b> After a few seconds, additional messages will begin scrolling by on the screen as the Linux kernel boots, and then the drive formatting and file system creation steps will begin.</p>	
<p>14.</p>	<input type="checkbox"/>	<p><b>MPS X:</b> Once the drive formatting and file system creation steps are complete, the screen at right will appear indicating that the package installation step is about to begin.</p>	

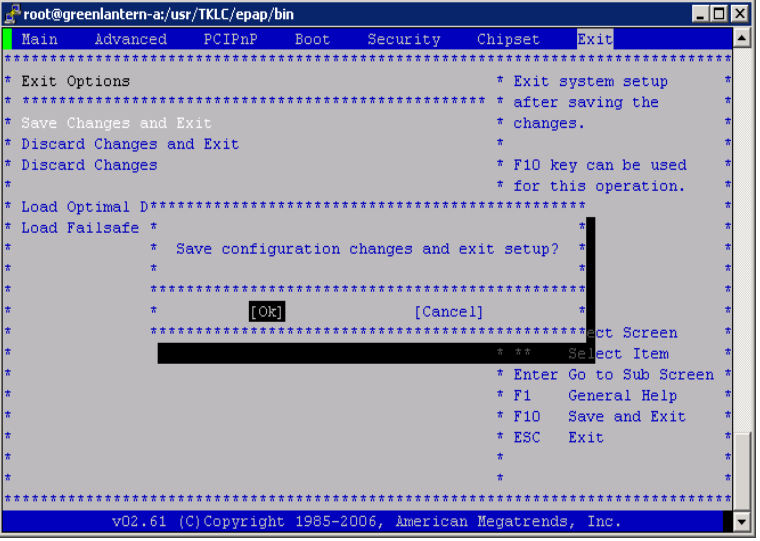
				
15.	<input type="checkbox"/>	<input type="checkbox"/>	<p><b>MPS X:</b></p> <p>After a few minutes, you will see a screen similar to that at right, showing the status of the package installation step. For each package, there will be a status bar at the top indicating how much of the package has been installed, with a cumulative status bar at the bottom indicating how many packages remain. In the middle, you will see text statistics indicating the total number of packages, the number of packages installed, the number remaining, and current and projected time estimates.</p>	
16.	<input type="checkbox"/>	<input type="checkbox"/>	<p><b>MPS X:</b></p> <p>Once all the packages have been successfully installed, the screen at right will appear letting you know the installation process is complete.</p>	



				
17.	<input type="checkbox"/>	<input type="checkbox"/>	<p><b>MPS X:</b>          Press 'del' key to enter the BIOS when the system starts up after reboot.          (Use 'F4' key in case of Remote keyboard).</p>	
18.	<input type="checkbox"/>	<input type="checkbox"/>	<p><b>MPS X:</b>          Select <i>Boot</i> → <i>Hard Disk Drives</i> option</p>	

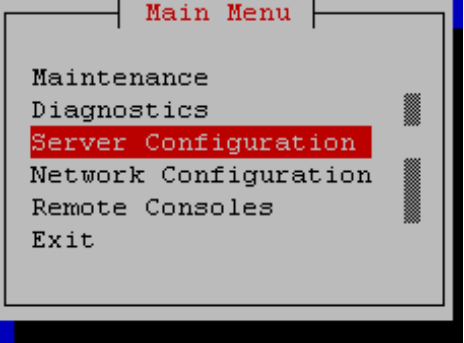
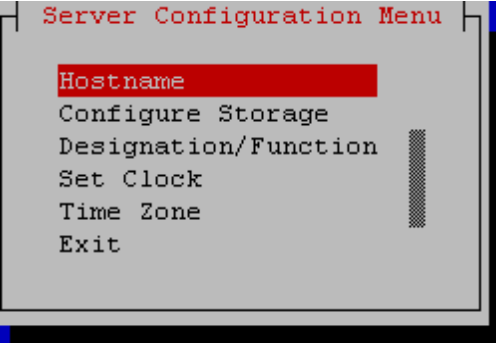
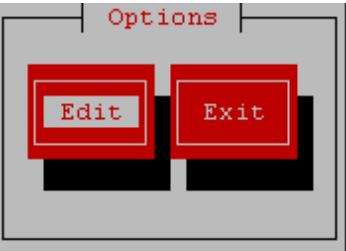
				
<p>19.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<p><b>MPS X:</b> Press 'Enter' key and select HDD:P0 as the 1<sup>st</sup> Drive</p>	
<p>20.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<p><b>MPS X:</b> Press 'Esc' key and select Boot Device Priority</p>	

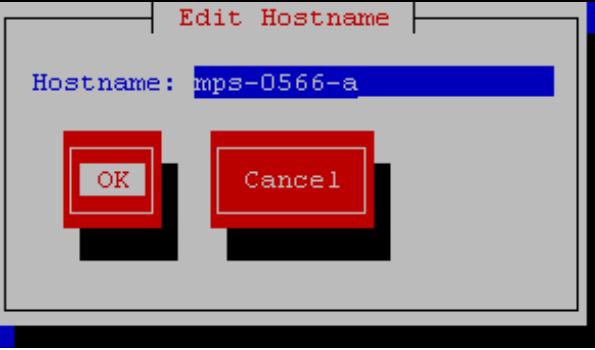
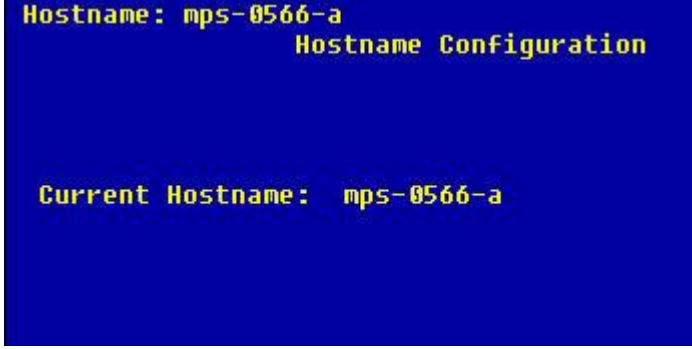
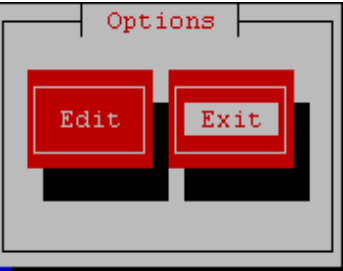
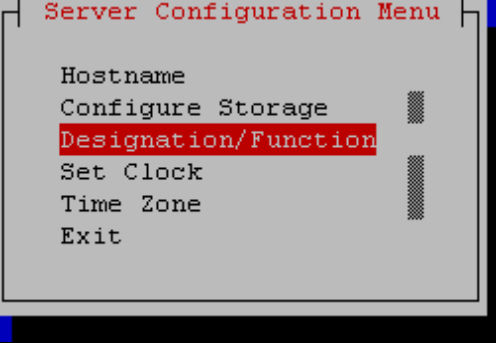
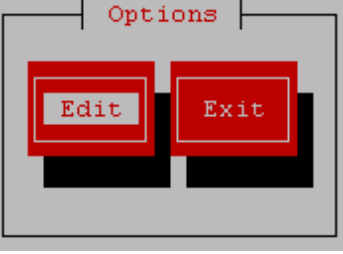
<p>21.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<p><b>MPS X:</b> Verify that the 1<sup>st</sup> Boot Device is set to HDD:P0.</p>	 <p>The screenshot shows a terminal window titled '192.168.58.183 - PuTTY' with the BIOS 'Boot' menu. The menu lists 'Boot Device Priority' and '1st Boot Device' which is currently set to '[HDD:P0-INTEL SSDSA]'. Navigation instructions like 'Select Screen', 'Select Item', 'Change Option', 'General Help', 'Save and Exit', and 'Exit' are visible at the bottom.</p>
<p>22.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<p><b>MPS X:</b> Press 'Esc' key and select <i>Exit</i> → <i>Save Changes and Exit</i> option</p>	 <p>The screenshot shows the BIOS 'Exit' menu. The 'Exit' menu items are: 'Exit Options', 'Save Changes and Exit', 'Discard Changes and Exit', 'Discard Changes', 'Load Optimal Defaults', and 'Load Failsafe Defaults'. The 'Save Changes and Exit' option is highlighted. Navigation instructions are visible at the bottom.</p>
<p>23.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<p><b>MPS X:</b> Select [OK] to save the configuration changes. The server will reboot.  Remove the TPD USB media from the USB port.</p>	Empty space for the 23rd row

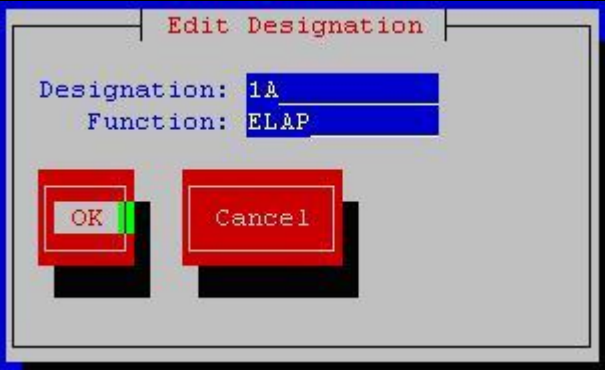
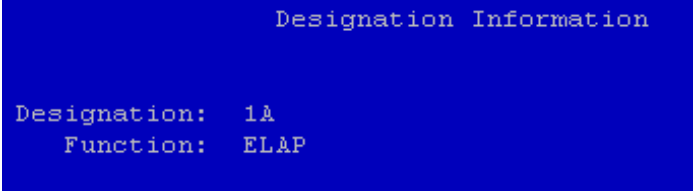
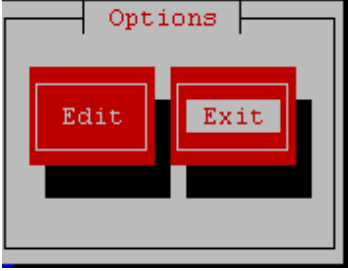
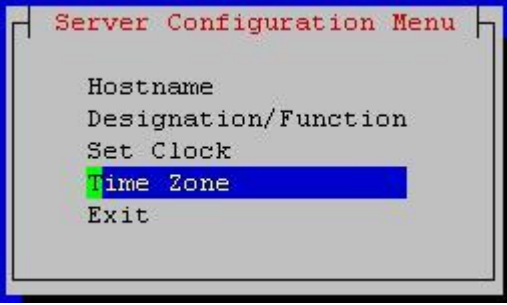
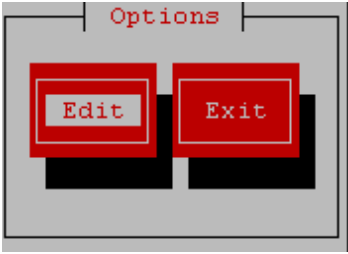
				
24.	<input type="checkbox"/>	<input type="checkbox"/>	<p><b>MPS X:</b> Log in to the server as the user “root”</p>	<pre>console login: root password: &lt;root_password&gt;</pre>
25.	<input type="checkbox"/>	<input type="checkbox"/>	<p><b>MPS X:</b> Perform a syscheck.</p> <p>Inspect the output and ensure that no errors are present. If an error is present contact My Oracle Support for guidance.</p>	<pre># syscheck Running modules in class net... OK Running modules in class hardware... OK Running modules in class disk... OK Running modules in class system... OK Running modules in class proc... OK  LOG LOCATION: /var/TKLC/log/syscheck/fail_log #</pre>
26.	<input type="checkbox"/>	<input type="checkbox"/>	<p><b>MPS X:</b></p> <p>Verify that the platform revision is same as the TPD USB or ISO used.</p>	<pre># getPlatRev 7.0.3.0.0-86.x.0</pre> <p>If there is any failure during IPM or the platform revision is not correct, repeat this procedure to IPM again. If the same issue persists after the second attempt, contact Oracle technical services and ask for FULL UPGRADE ASSISTANCE.</p>

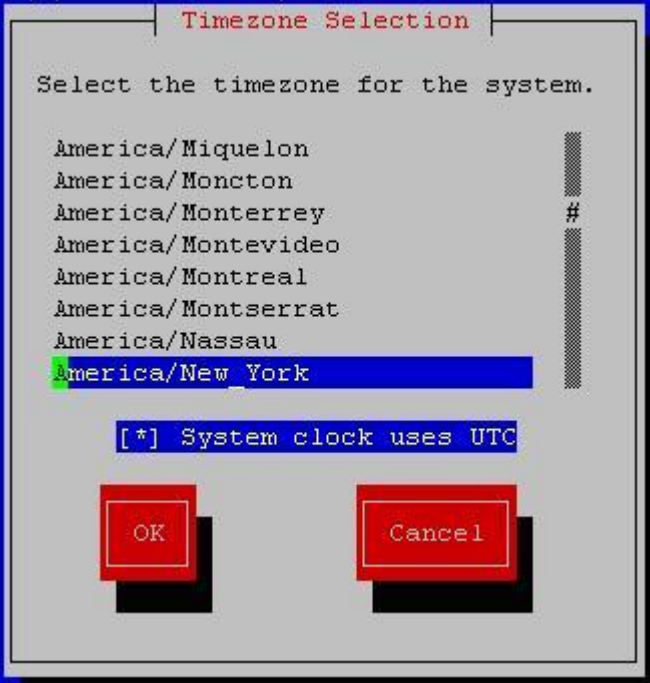
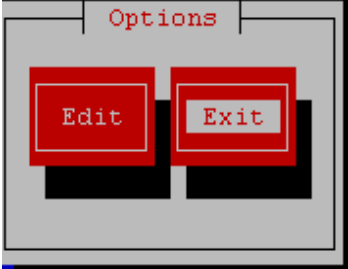
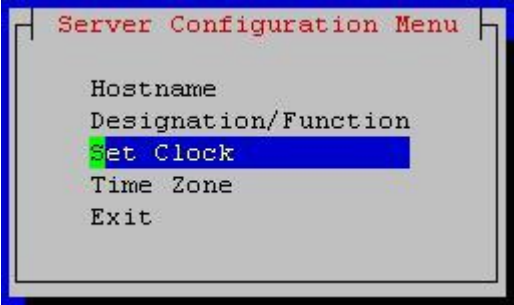
**This procedure is complete!**

**Procedure 8 PRE INSTALL CONFIGURATION**

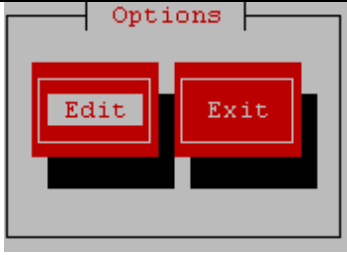
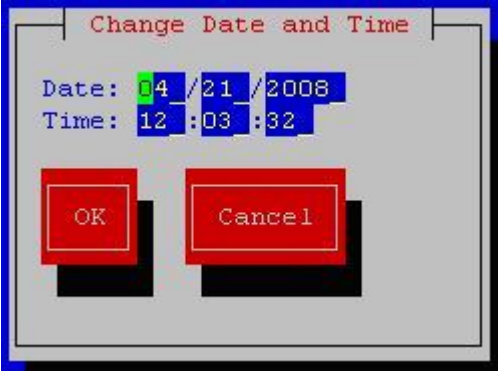
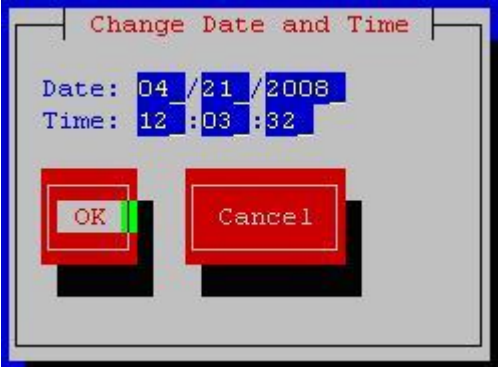
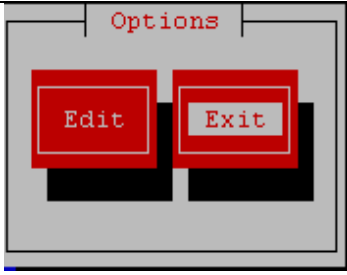
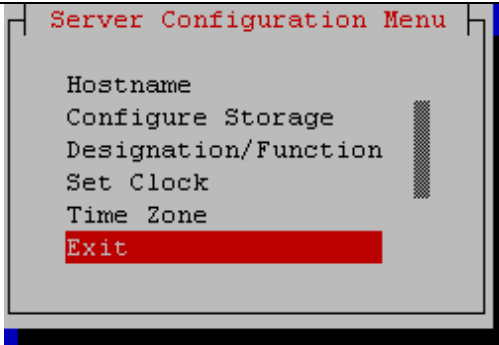
STEP #	A	B	<p>This procedure will perform the initial configuration required for ELAP installation.</p> <p><b>Note:</b> Estimated time of completion is 15 minutes.</p> <p>Check off (✓) each step as it is completed. Boxes have been provided for this purpose under each step number.</p> <p>Should this procedure fail, Contact Oracle technical services and ask for <b>FULL UPGRADE ASSISTANCE</b>.</p>
1.	<input type="checkbox"/>	<input type="checkbox"/>	<p><b>MPS X:</b> log in to the server console as the user “root”</p> <p><b>console login: root</b> <b>password: &lt;root_password&gt;</b></p>
2.	<input type="checkbox"/>	<input type="checkbox"/>	<p><b>MPS X:</b></p> <p>Switch user to platcfg.</p> <p>Select “Server Configuration” Menu</p> <p><b># su - platcfg</b></p> 
3.	<input type="checkbox"/>	<input type="checkbox"/>	<p><b>MPS X:</b></p> <p>Select “Hostname” Menu</p> 
4.	<input type="checkbox"/>	<input type="checkbox"/>	<p><b>MPS X:</b></p> <p>1) Select “Edit” from the options dialogue box.</p> <p>2) Set the hostname</p> 

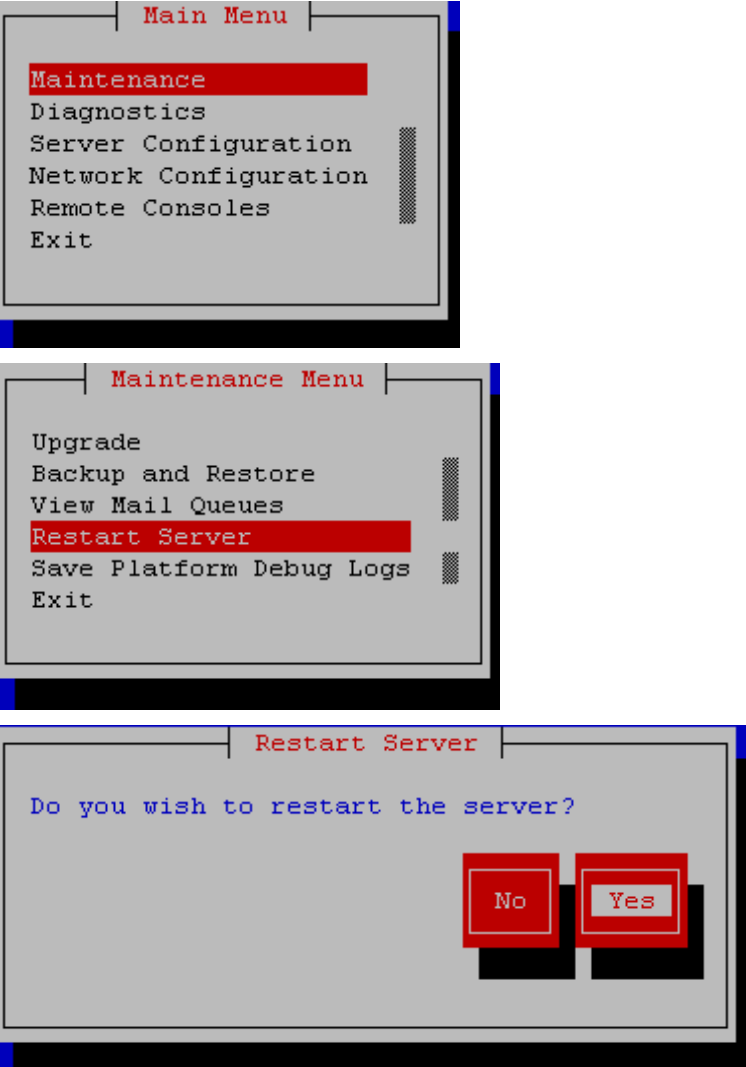
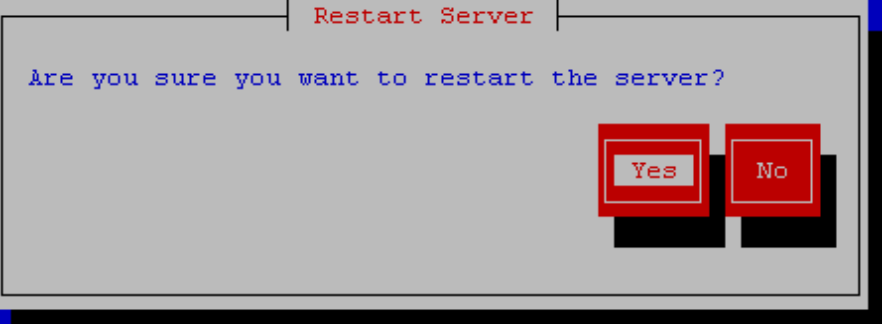
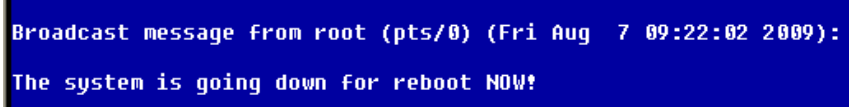
			
5.	<input type="checkbox"/>	<input type="checkbox"/> <p><b>MPS X:</b> Verify that the Hostname is correct then select and press “Exit”.</p> <p>Otherwise repeat the step above.</p>	 
6.	<input type="checkbox"/>	<input type="checkbox"/> <p><b>MPS X:</b> Select “Designation/Function” Menu</p>	
7.	<input type="checkbox"/>	<input type="checkbox"/> <p><b>MPS X:</b> 1) Select “Edit” from the options dialogue box.  2) Set the Designation as “1A” on Server</p>	

		<p>A and as “1B” on Server B, Function as “ELAP” and press “OK”.</p> <p><b>NOTE:</b></p> <p>Designation and Function should be entered in UPPERCASE.</p>	
<p>8. <input type="checkbox"/></p>	<p><input type="checkbox"/></p>	<p><b>MPS X:</b></p> <p>Verify that the Designation and Hostname information is correct then select and press “Exit”.</p> <p>Otherwise repeat the step above.</p>	 
<p>9. <input type="checkbox"/></p>	<p><input type="checkbox"/></p>	<p><b>MPS X:</b> Using the arrow keys navigate to the “Time Zone” menu and press Enter.</p> <p>Select the “Edit” button and press Enter.</p>	 

<p>10.</p>	<p><input type="checkbox"/></p> <p><input type="checkbox"/></p>	<p><b>MPS X:</b> Using the arrow keys navigate to the appropriate “Time Zone” selection. Ensure that it is highlighted.</p> <p>Ensure the “System clock uses UTC” is set. If it is not set use the “Tab” key to highlight it and press the “Space Bar”.</p> <p>Once the appropriate time zone is highlighted press the “Tab” key to highlight the “OK” button and press Enter.</p> <p>Using the “Tab” or arrow keys highlight the “Exit” button and press Enter.</p>	 <p>The screenshot shows a terminal window titled "Timezone Selection". The text reads: "Select the timezone for the system." Below this is a list of timezones: America/Miquelon, America/Moncton, America/Monterrey, America/Montevidео, America/Montreal, America/Montserrat, America/Nassau, and America/New_York. The "America/New_York" option is highlighted with a blue bar. Below the list is a checkbox labeled "[*] System clock uses UTC", which is also highlighted with a blue bar. At the bottom are two red buttons labeled "OK" and "Cancel".</p>  <p>The screenshot shows a terminal window titled "Options". It contains two red buttons labeled "Edit" and "Exit".</p>
<p>11.</p>	<p><input type="checkbox"/></p> <p><input type="checkbox"/></p>	<p><b>MPS X:</b> Using the arrow keys navigate to the appropriate “Set Clock” menu and press Enter.</p> <p>Using the “Tab” key highlight the “Edit” button and press Enter.</p>	 <p>The screenshot shows a terminal window titled "Server Configuration Menu". The menu items are: Hostname, Designation/Function, Set Clock, Time Zone, and Exit. The "Set Clock" option is highlighted with a blue bar.</p>



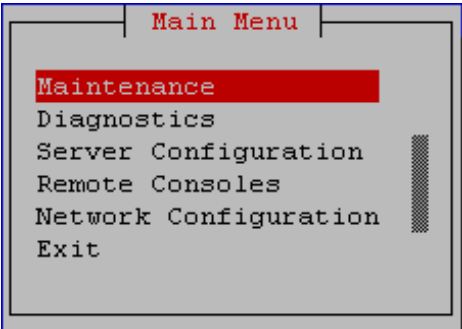
				
12.	<input type="checkbox"/>	<input type="checkbox"/>	<p><b>MPS X:</b> If the date and time is not same as the current date and time, set them using the “Tab” key to cycle between the fields.</p> <p>Using the “Tab” key navigate to the “OK” button and press Enter.</p>	 
13.	<input type="checkbox"/>	<input type="checkbox"/>	<p><b>MPS X:</b> Using the “Tab” key navigate to the “Exit” button and press Enter.</p>	
14.	<input type="checkbox"/>	<input type="checkbox"/>	<p><b>MPS X:</b> Exit the platcfg menu</p>	

<p>15.</p>	<p><input type="checkbox"/></p>	<p><input type="checkbox"/></p>	<p><b>MPS X:</b> Select the menu options as indicated in the screen captures to the right in order to restart the server.</p>	 
<p>16.</p>	<p><input type="checkbox"/></p>	<p><input type="checkbox"/></p>	<p><b>MPS X:</b> The system should reboot.</p>	
<p>17.</p>	<p><input type="checkbox"/></p>	<p><input type="checkbox"/></p>	<p><b>MPS X:</b> Log in to the server as the user</p>	<pre>console login: root password: &lt;root_password&gt;</pre>

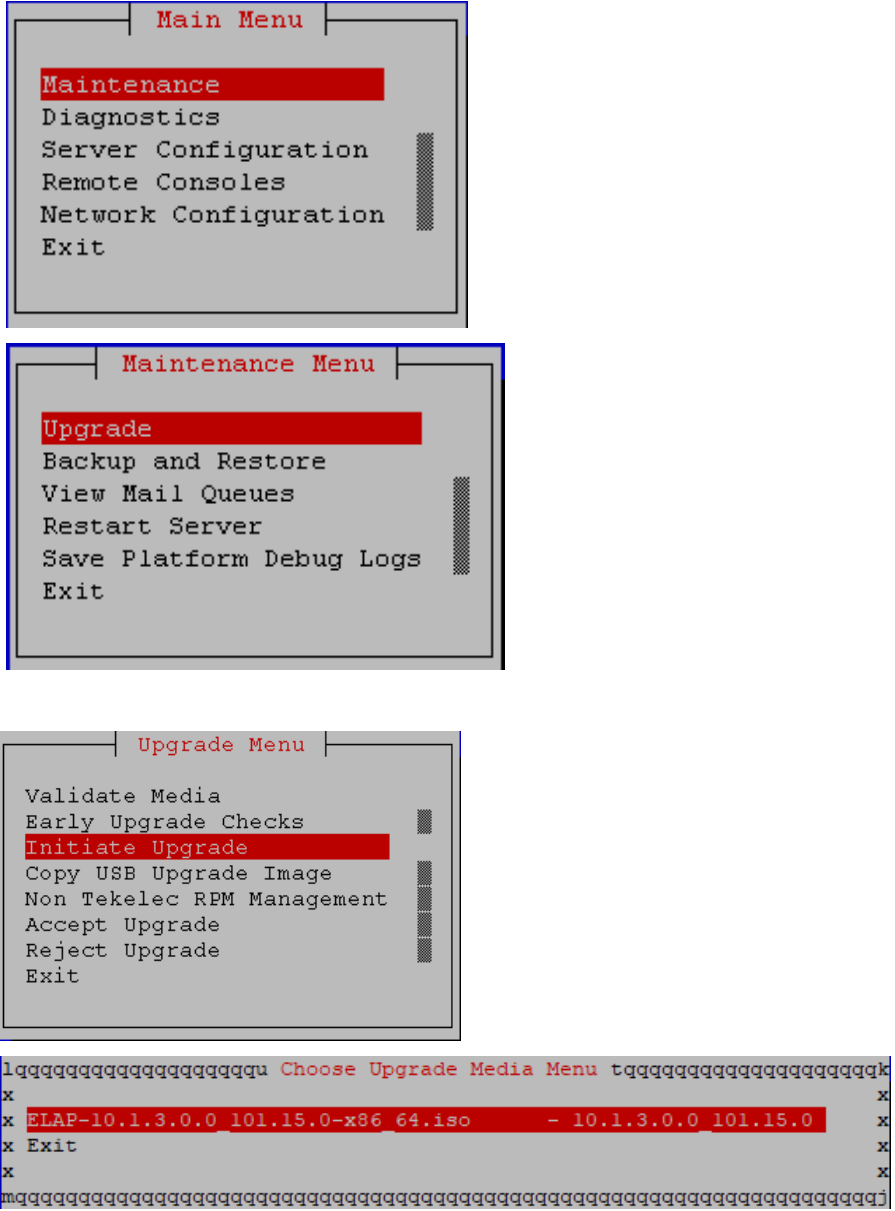
			“root”	
18.	<input type="checkbox"/>	<input type="checkbox"/>	<p><b>MPS X:</b> Perform syscheck.</p> <p>Inspect the output and ensure that no errors are present. If an error is present contact Oracle Customer Care for guidance.</p>	<pre># syscheck Running modules in class net...      OK Running modules in class hardware... OK Running modules in class disk...    OK Running modules in class system...  OK Running modules in class proc...    OK  LOG LOCATION: /var/TKLC/log/syscheck/fail_log #</pre>

**This procedure is complete!**

**Procedure 9 INSTALL THE ELAP APPLICATION**

STEP #	A	B	<p>This procedure will install the ELAP application on the server.</p> <p><b>Note: Estimated time of completion is 30 minutes.</b></p> <p>Check off (✓) each step as it is completed. Boxes have been provided for this purpose under each step number.</p> <p>Should this procedure fail, Contact Oracle technical services and ask for <b>FULL UPGRADE ASSISTANCE.</b></p>
1.	<input type="checkbox"/>	<input type="checkbox"/>	<p><b>MPS X:</b> log in to the server as the user “root”</p> <p><b>console login: root</b> <b>password: &lt;root_password&gt;</b></p>
2.	<input type="checkbox"/>	<input type="checkbox"/>	<p><b>MPS X:</b></p> <p>Copy ELAP 10.1 ISO using Appendix A</p> <p>Or transfer an ELAP 10.1 ISO image to /var/TKLC/upgrade directory.</p> <p><b>NOTE:</b> Transfer of ELAP ISO is possible only if the IP is configured via platcfg.</p> <p>Use any of the following methods to put ELAP 10.1 ISO image on the ELAP server.</p> <ol style="list-style-type: none"> <li>Perform ISO image generation from USB media using 2.7Appendix A.</li> <li>Copy ISO to /var/TKLC/upgrade directory. Note: To execute this step, the provisional IP of the ELAP server must be set via platcfg menu following steps in Procedure 10.</li> </ol>
3.	<input type="checkbox"/>	<input type="checkbox"/>	<p><b>MPS X:</b></p> <p>Validate ELAP ISO using Appendix B.</p> <p>Refer section 2.7Appendix B to validate iso image</p>
4.	<input type="checkbox"/>	<input type="checkbox"/>	<p><b>MPS X:</b></p> <p>Run the command “su -platcfg”.</p> <p>Use the “Arrow” and the [ENTER] keys to navigate the Menu options as shown to choose the upgrade media.</p> <pre># su - platcfg</pre>  <p>The screenshot shows a terminal window titled "Main Menu" with a list of options: Maintenance (highlighted in red), Diagnostics, Server Configuration, Remote Consoles, Network Configuration, and Exit. A vertical cursor is positioned to the right of the list.</p>

			<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <p style="text-align: center; color: red;">Maintenance Menu</p> <pre> Upgrade Backup and Restore View Mail Queues Restart Server Save Platform Debug Logs Exit                     </pre> </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <p style="text-align: center; color: red;">Upgrade Menu</p> <pre> Validate Media Early Upgrade Checks Initiate Upgrade Copy USB Upgrade Image Non Tekelec RPM Management Exit                     </pre> </div> <p>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</p> <p>If the Early Upgrade Checks fail due to the ongoing syncing of raid mirrors, then proceed to the next step to ignore the disk mirroring before the ELAP installation.</p> <p>Contact My Oracle Support following the instructions on or the instructions on the 2.7Appendix E, if the early upgrade checks fail due to any other reason.</p>
5.	<input type="checkbox"/>	<input type="checkbox"/>	<p><b>MPS X:</b></p> <p>Exit the platcfg menu and change to root user</p> <pre>\$ su - root Password: &lt;root_password&gt;</pre>
6.	<input type="checkbox"/>	<input type="checkbox"/>	<p><b>MPS X:</b></p> <p>Ignore disk mirroring before EPAP installation</p> <pre># echo "IGNORE_EARLY_CHECKS=1" &gt; /var/TKLC/log/upgrade/tmp_upgrade.conf  verify: # cat /var/TKLC/log/upgrade/tmp_upgrade.conf IGNORE_EARLY_CHECKS=1</pre>
7.	<input type="checkbox"/>	<input type="checkbox"/>	<p><b>MPS X:</b></p> <p>Initiate the</p> <pre># su - platcfg</pre>

		<p>upgrade</p> <p>Run the command "su -placfg".</p> <p>Use the "Arrow" and the [ENTER] keys to navigate the Menu options as shown to choose the upgrade media.</p>	 <pre> Main Menu ----- Maintenance Diagnostics Server Configuration Remote Consoles Network Configuration Exit  Maintenance Menu ----- Upgrade Backup and Restore View Mail Queues Restart Server Save Platform Debug Logs Exit  Upgrade Menu ----- Validate Media Early Upgrade Checks Initiate Upgrade Copy USB Upgrade Image Non Tekelec RPM Management Accept Upgrade Reject Upgrade Exit  lqqqqqqqqqqqqqqqqqqqqqq Choose Upgrade Media Menu tqqqqqqqqqqqqqqqqqqqqqq x x ELAP-10.1.3.0.0 101.15.0-x86 64.iso - 10.1.3.0.0 101.15.0 x x Exit x x x mqqq </pre>
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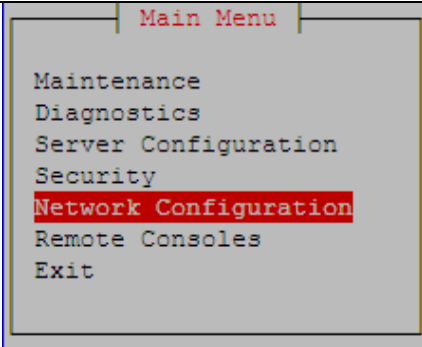
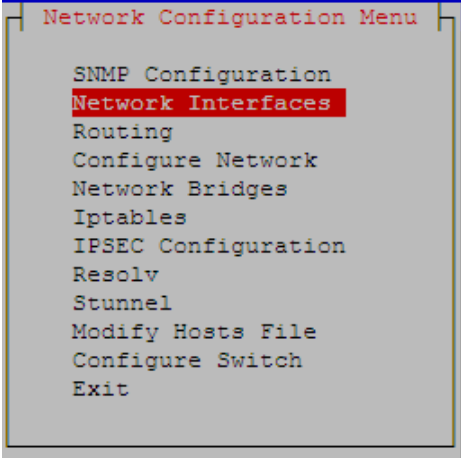
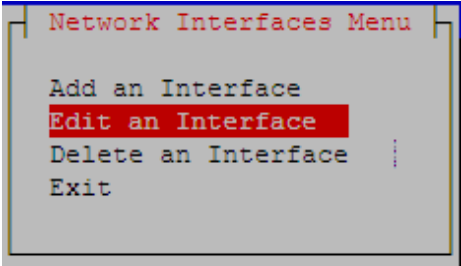
<p>8.</p>	<p><input type="checkbox"/></p>	<p><input type="checkbox"/></p> <p><b>MPS X:</b></p> <p>Select the proper upgrade media and press [ENTER]</p> <p>Many informational messages will come across the terminal screen as the installation proceeds.</p> <p>Finally, after successful completion of ELAP install, the server should reboot and login prompt should appear.</p>	<pre> alues from database: 1005:DbSession.C:159:The thread is not attached to a session. n. (Logger.C:199) 2016-05-30 22:26:42 [140310608566048] INFO - Error loading log configuration from om database: 1005:DbSession.C:159:The thread is not attached to a session. (Logger.C:262) 2016-05-30 22:26:42 [140310608566048] WARN - 1001:DbSession.C:126:Database Error: r: Can't connect to local MySQL server through socket '/var/lib/mysql/mysql.sock ' (2) (exqueue.C:352) ExQueue started. Starting TKLCeSappb: [ OK ] Checking network config files: [ OK ] Starting smartd: [ OK ] Daemon is not running... AlarmMgr daemon is not running, delaying by 1 minute TPDhpDiskStatus stop/pre-start, process 4465 TKLChwmgmtcli stop/pre-start, process s 4449  Oracle Linux Server release 6.7 Kernel 2.6.32-573.18.1.el6prere17.0.3.0.0_86.44.0.x86_64 on an x86_64  devloan-01 login: █         </pre> <p>(output truncated for display purpose) login:</p>
<p>9.</p>	<p><input type="checkbox"/></p>	<p><input type="checkbox"/></p> <p><b>MPS X:</b></p> <p>Login as root user.</p>	<pre> login: root Password : &lt;root_password&gt;         </pre>
<p>10.</p>	<p><input type="checkbox"/></p>	<p><input type="checkbox"/></p> <p><b>MPS X:</b></p> <p>Verify that installation is complete and no error occurred during installation.</p>	<pre> # grep "Upgrade returned success" /var/TKLC/log/upgrade/upgrade.log 1463147805::Upgrade returned success! #  # grep -i error /var/TKLC/log/upgrade/upgrade.log  Check the output of the upgrade log, contact the Technical Assistance Center following the instructions on the 2.7Appendix E, if the output contains any errors beside the following: Variable and RPMs that might contain the word error in them Example:  1461121117:: U&gt; perl-Class-ErrorHandler-0.04-10.1.0.0.0_101.4.0.noarch 1461121127::perl-Class-ErrorHandler 1467008173::myisamchk: error: File '/var/TKLC/appl/drbd/mysql/data/*/*.MYI' doesn't exist 1467008173::myisamchk: error: File '/var/TKLC/appl/drbd/mysql/data/*/*.MYI' doesn't exist 1467008173::myisamchk: error: 140 when opening MyISAM-table '/var/TKLC/appl/db/appconfig/mysql/columns_priv.MYI' 1467008173::myisamchk: error: 140 when opening MyISAM-table '/var/TKLC/appl/db/appconfig/mysql/db.MYI' 1467008173::myisamchk: error: 140 when opening MyISAM-table '/var/TKLC/appl/db/appconfig/mysql/event.MYI'         </pre>

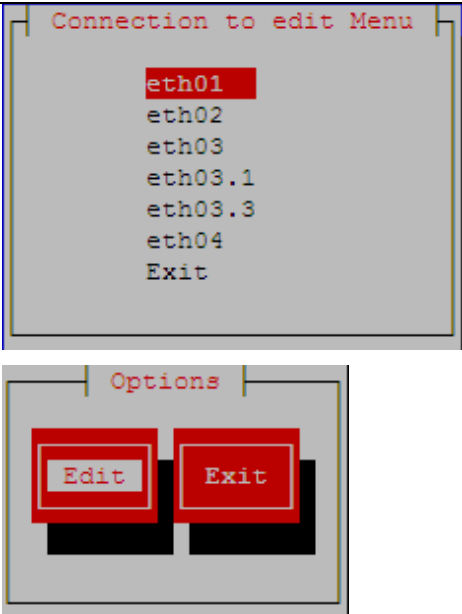
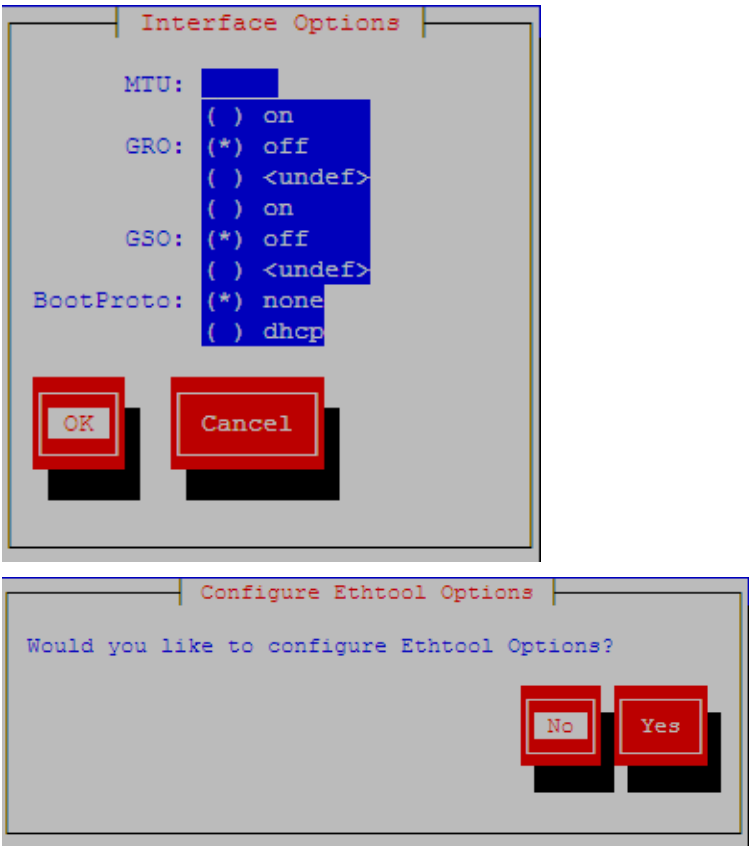
			##### Several other errors related to myisamchk are also observed that needs to be ignored. All those messages are expected, and therefore aren't considered errors.
11.	<input type="checkbox"/>	<input type="checkbox"/>	<p><b>MPS X:</b> Verify ELAP release.</p> <pre># rpm -qi TKLCelap</pre> <p>Name : TKLCelap Relocations: (not relocatable)  Version : 5.0.38 Vendor: Tekelec  Release : 10.1.3.0.0_101.15.0 Build Date: Mon 15 Oct 2018 03:52:15 PM EDT  Install Date: Tue 13 Nov 2018 06:04:39 AM EST Build Host: coach-15.tekelec.com  Group : Development/Build Source RPM: TKLCelap-5.0.38-10.1.3.0.0_101.15.0.src.rpm  Size : 148858276 License: TEKELEC 2018  Signature : (none)  Packager : &lt;@tekelec.com&gt;  URL : http://www.tekelec.com/  Summary : Oracle Communications ELAP Package  Description :</p> <p>This is the Oracle Communications EAGLE LNP Application Processor(ELAP) package.  The package installs ELAP software. Eagle LNP Application Processor (ELAP) provides REALLY INCREDIBLE Database (RIDB). ELAP provides the LNP feature.</p>

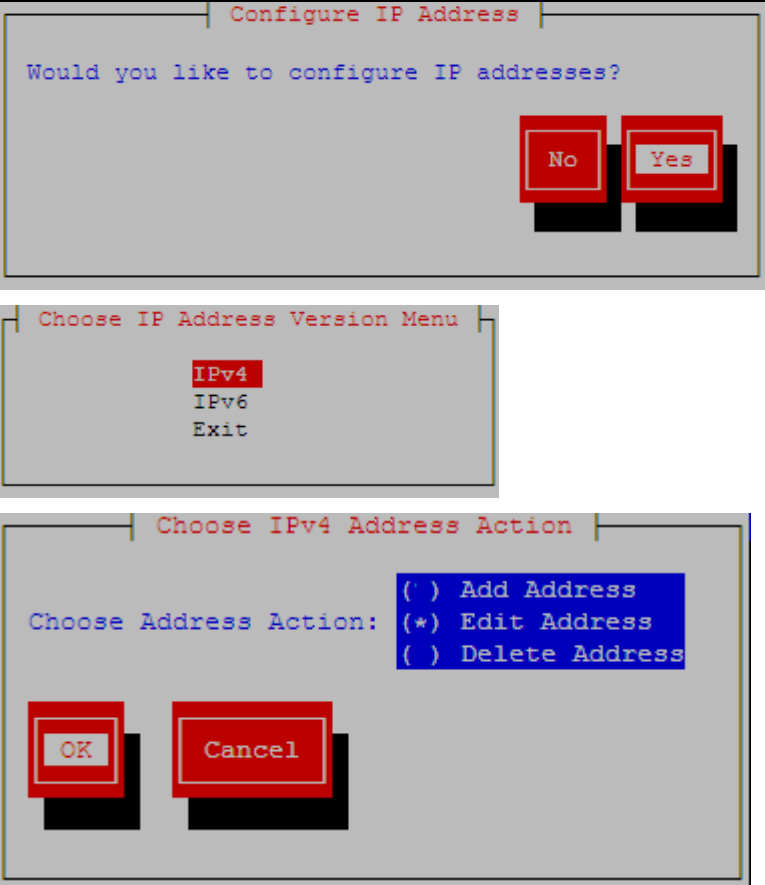
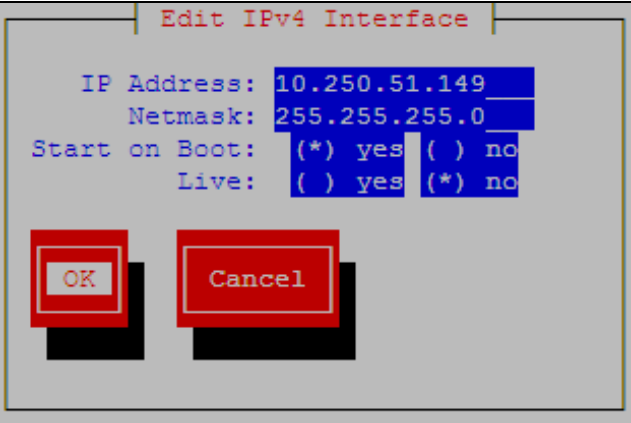
**This procedure is complete!**

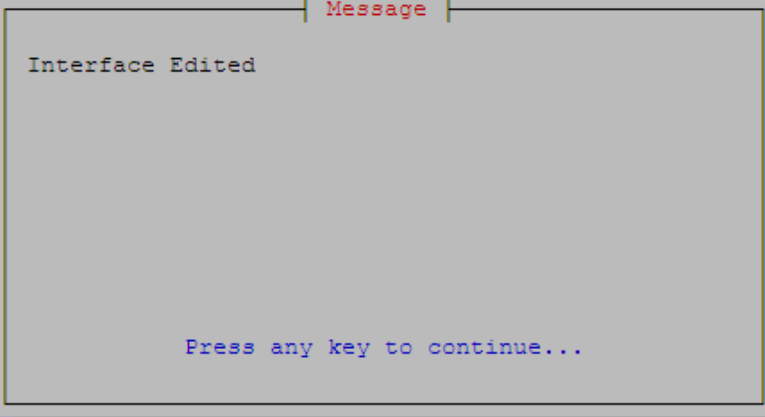
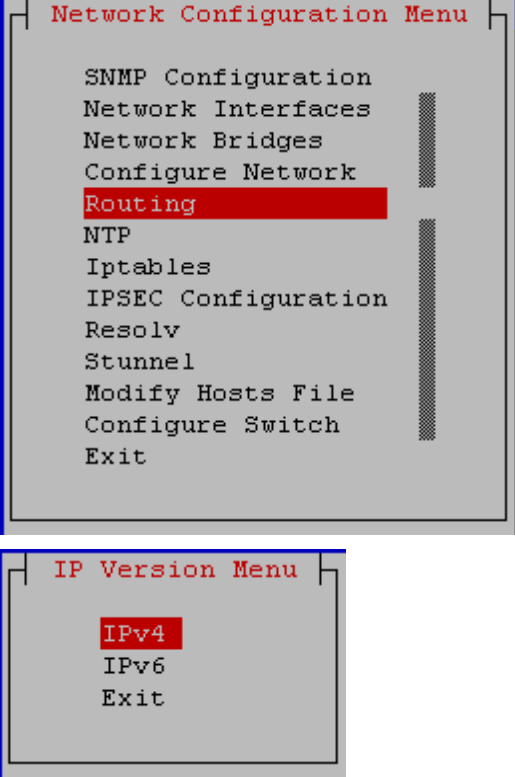


**Procedure 10 CONFIGURE NETWORK INTERFACE USING PLATCFG UTILITY**

S T E P #	B	This procedure configures the network interfaces and makes the E5APPB servers accessible to the network. Estimated time: 5 minutes	
1.	<input type="checkbox"/>	<b>MPS B:</b> Login as admusr.	Login: <b>admusr</b> Password: <admusr_password>
2.	<input type="checkbox"/>	<b>MPS B:</b> Login to platcfg utility	<b>\$ sudo su - platcfg</b>
3.	<input type="checkbox"/>	<b>MPS B:</b> Configure Network Interface	 <pre> Main Menu ----- Maintenance Diagnostics Server Configuration Security <b>Network Configuration</b> Remote Consoles Exit                 </pre>  <pre> Network Configuration Menu ----- SNMP Configuration <b>Network Interfaces</b> Routing Configure Network Network Bridges Iptables IPSEC Configuration Resolv Stunnel Modify Hosts File Configure Switch Exit                 </pre>  <pre> Network Interfaces Menu ----- Add an Interface <b>Edit an Interface</b> Delete an Interface Exit                 </pre>

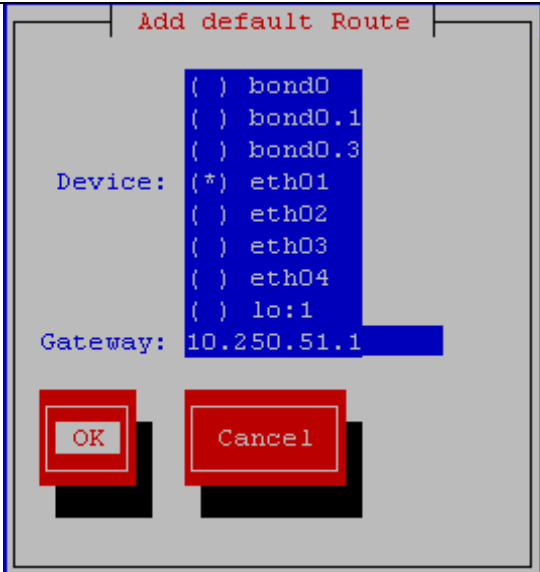
			
4.	<input type="checkbox"/>	<b>MPS B:</b> Select Interface Options	

			 <p>The first screenshot, titled "Configure IP Address", asks "Would you like to configure IP addresses?" and features "No" and "Yes" buttons. The second screenshot, titled "Choose IP Address Version Menu", lists "IPv4", "IPv6", and "Exit" as options. The third screenshot, titled "Choose IPv4 Address Action", lists "Add Address", "Edit Address", and "Delete Address" as actions, with "OK" and "Cancel" buttons at the bottom.</p>
<p>5.</p>	<p><input type="checkbox"/></p>	<p><b>MPS B:</b> Input the Interface Address</p>	 <p>The screenshot titled "Edit IPv4 Interface" shows the following configuration: IP Address: 10.250.51.149, Netmask: 255.255.255.0, Start on Boot: (* yes) ( ) no, and Live: ( ) yes (*) no. "OK" and "Cancel" buttons are located at the bottom.</p>

			 <p>select "Exit" until you exit from the platcfg utility.</p>
6.	<input type="checkbox"/>	<b>MPS B:</b> Configure default route.	

The image displays three sequential screenshots from a network configuration utility:


- IPv4 Static Routes:** A window titled "IPv4 Static Routes" showing a table of routes. The table has columns for Interface, Type, Address, Netmask, and Gateway. A single route is listed for interface eth01 with a default type and gateway 10.250.51.1. "Edit" and "Exit" buttons are visible in the top right.
- IPv4 Route Action Menu:** A window titled "IPv4 Route Action Menu" with a list of options: "Add Route" (highlighted), "Edit Route", "Delete Route", "Policy Based Routing", and "Exit".
- Add Route:** A dialog window titled "Add Route" with the text "Type: (\*) default ( ) net ( ) host". The "default" option is selected. "OK" and "Cancel" buttons are at the bottom.



The screenshot shows a terminal window titled "Add default Route". It displays a list of network devices for selection:

```
( ) bond0
( ) bond0.1
( ) bond0.3
Device: (*) eth01
( ) eth02
( ) eth03
( ) eth04
( ) lo:1
Gateway: 10.250.51.1
```

Below the list are two buttons: "OK" and "Cancel".



The second screenshot shows a terminal message box with the text "Route Added" and a prompt "Press any key to continue..." with a green cursor.

Select "Exit" until you exit from the platcfg utility.

## 2.5 Initial Configuration on E5APPB

This procedure sets the ELAP initial configuration parameters and prepares the new MPS-A and MPS-B servers for network access.

If exiting switches are used then the provisioning should be stopped at this point to avoid data loss. The anticipated down time for provisioning is expected to last approximately 5 hours.

**Note:** After IPM , switch configuration should be done before initial configuration. Follow ELAP Incremental Upgrade/Installation guide E76230, Procedure 8 (CGBU\_018976) for switch configuration steps.

**Procedure 11 CONFIGURE NTP SERVERS**

<p>S T E P #</p>	<p>This procedure configures the NTP server setting for both servers. <b>Note: Estimated time of completion is 5 minutes.</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 Oracle technical services and ask for <b>FULL UPGRADE ASSISTANCE</b>.</p>	
<p>1. <input type="checkbox"/></p>	<p><b>MPS A:</b> Switch user to elapconfig.</p>	<p><b># su - elapconfig</b></p>
<p>2. <input type="checkbox"/></p>	<p><b>MPS A:</b> Press Return to continue.</p>	<p>Caution: This is the first login of the text user interface. Please review the following checklist before continuing. Failure to enter complete and accurate information at this time will have unpredictable results.</p> <ol style="list-style-type: none"> <li>1. The mate MPS servers (MPS A and MPS B) must be powered on.</li> <li>2. "Initial Platform Manufacture" for the mate MPS servers must be complete.</li> <li>3. The sync network between the mate MPS servers must be operational.</li> <li>4. You must have the correct password for the elapdev user on the mate MPS server.</li> </ol> <p>Press return to continue...</p>
<p>3. <input type="checkbox"/></p>	<p><b>MPS A:</b> Enter elapdev and root password when prompted.</p>	<pre> Password of elapdev: Could not get authorized keys file from remote (mate). Maybe it does not exist. Continuing... ssh is working correctly. Password of root: Could not get authorized keys file from remote (mate). Maybe it does not exist. Continuing... ssh is working correctly. Password of admusr: Could not get authorized keys file from remote (mate). Maybe it does not exist. Continuing... ssh is working correctly. Password of root: ssh is working correctly. Performing DRBD configuration. Creating the DB Data directory. Moving DB files to the DRBD Volume. Changing ownership to mysql. Updating my.cnf. Restarting mysql. Building the initial database on side A. Checking if EuiDB database exists: No preexisting EuiDB database was detected. Creating EuiDB database. Creating Alarms database. Creating Ulog database. Creating EuiDB, Alarms and Ulog tables. FIPS integrity verification test failed. FIPS integrity verification test failed. /bin/chmod: cannot access `/var/TKLC/elap/drbd/mysql/data/EuiDB': No such file or directory                     </pre>
<p>4. <input type="checkbox"/></p>	<p><b>MPS A:</b> Select choice 7, Configure NTP Server Menu.</p>	<pre> /-----ELAP Configuration Menu-----\  ----- -----    1   Display Configuration    ----- -----    2   Configure Network Interfaces Menu    ----- -----    3   Set Time Zone                       </pre>

		<pre> 4   Exchange Secure Shell keys 5   Change Password 6   Platform Menu 7   Configure NTP Server 8   Mate Disaster Recovery e   Exit -----/ Enter Choice: 7 </pre>
<p>5. <input type="checkbox"/></p>	<p><b>MPS A:</b> The Configure NTP Server Menu is displayed. Select choice 2, Add External NTP Server.</p>	<pre> /-----ELAP Configure NTP Server Menu-\   -----     1   Display External NTP Server   -----     2   Add External NTP Server   -----     3   Remove External NTP Server   -----     e   Exit   -----   /-----/ Enter Choice: 2  Are you sure you wish to add new NTP Server? [N]: Y Enter the ELAP NTP Server IP Address: &lt;NTP_server_IP_Addr&gt;  External NTP Server [&lt;NTP_server_IP_Addr&gt;] has been added.  Press return to continue... </pre>
<p>6. <input type="checkbox"/></p>	<p><b>MPS A:</b> The ELAP Configure NTP Server Menu is displayed. Enter choice 1, Display External NTP Server.</p>	<pre> /-----ELAP Configure NTP Server Menu-\   -----     1   Display External NTP Server   -----     2   Add External NTP Server   -----     3   Remove External NTP Server   -----     e   Exit   -----   /-----/ Enter Choice: 1  ntpserver1      &lt;NTP_server_IP_Addr&gt;  Press return to continue... </pre>
<p>7. <input type="checkbox"/></p>	<p><b>MPS A:</b> The ELAP Configure NTP Server Menu is displayed. Select choice, Exit. Otherwise, if more NTP servers are to be added, then repeat steps 1 to 6</p>	<pre> /-----ELAP Configure NTP Server Menu-\   -----     1   Display External NTP Server   -----     2   Add External NTP Server   -----     3   Remove External NTP Server   -----     e   Exit   -----   /-----/ Enter Choice: e </pre>
<p>8. <input type="checkbox"/></p>	<p><b>MPS A:</b> Run the following command.</p>	<pre> # ntpq -p       remote      refid      st t when poll reach  delay offset jitter ===== </pre>



		<pre>===== ntpserver1 .INIT.          16 - - 512  0  0.000 0.000  0.000  Make sure that delay and offset is zero. If delay and offset is not zero, follow step 9. Otherwise skip step 9.</pre>
9. <input type="checkbox"/>	<b>MPS A: Run the following command.</b>	<pre># service ntpd stop Shutting down ntpd: [ OK ]  # /usr/sbin/ntpdate ntpserver1 20 Apr 01:56:45 ntpdate[23597]: no servers can be used, exiting  # service ntpd start Starting ntpd: [ OK ]</pre>

**This procedure is complete!**

**Procedure 12 INITIAL NETWORK CONFIGURATION**

S T E P #	<p>This procedure configures the network interfaces and makes the E5APPB servers accessible to the network.</p> <p><b>Note: Estimated time of completion is 10 minutes.</b></p> <p>Check off (✓) each step as it is completed. Boxes have been provided for this purpose under each step number.</p> <p>Should this procedure fail, Contact Oracle technical services and ask for <b>FULL UPGRADE ASSISTANCE</b>.</p>	
1. <input type="checkbox"/>	<b>MPS A:</b> Login to serial console as root.	<pre>login: root Password: &lt;root_password&gt;</pre>
2. <input type="checkbox"/>	<b>MPS A:</b> Switch user to elapconfig.	<pre># su - elapconfig</pre>
3. <input type="checkbox"/>	<b>MPS A:</b> The ELAP Configuration Menu is displayed. Select choice 2, Configure Network Interfaces Menu.	<pre>/-----ELAP Configuration Menu-----\ /-----\   1   Display Configuration                    2   Configure Network Interfaces Menu       3   Set Time Zone                           4   Exchange Secure Shell Keys             5   Change Password                         6   Platform Menu                           7   Configure NTP Server                     8   Mate Disaster Recovery                  e   Exit                                  \-----/  Enter Choice: 2</pre>
4. <input type="checkbox"/>	<b>MPS A:</b> Configure Network Interfaces Menu is displayed. Select choice 1, Configure Provisioning Network	<pre>/-----Configure Network Interfaces Menu-\ /-----\   1   Configure Provisioning Network         ----- </pre>

	Menu.	<pre> 2   Configure DSM Network ----- 3   Configure Forwarded Ports ----- 4   Configure Static NAT Addresses ----- e   Exit \-----/  Enter Choice: 1         </pre>
5.	<p><b>MPS A:</b></p> <input type="checkbox"/> Enter the IP addresses, subnet mask, default gateway and Virtual IP address when prompted.	<pre> Verifying connectivity with mate... ELAP A provisioning network IP Address [192.168.61.104]: ELAP B provisioning network IP Address [192.168.61.105]: ELAP provisioning network netmask [255.255.255.0]: ELAP provisioning network default router: ELAP local provisioning virtual IP Address [192.168.61.100]:  Please wait, this may take a while...         </pre>
6.	<p><b>MPS A:</b></p> <input type="checkbox"/> Select option e to exit.	<pre> /-----Configure Network Interfaces Menu-----\ /-----\   1   Configure Provisioning Network    -----    2   Configure Sync Network    -----    3   Configure DSM Network    -----    4   Configure Backup Provisioning Network    -----    5   Configure Forwarded Ports    -----    6   Configure Static NAT Addresses    -----    7   Configure Provisioning VIP Addresses    -----    e   Exit   \-----/  Enter Choice: e         </pre>
7.	<p><b>MPS A:</b> Select option e to completely exit the menu.</p> <input type="checkbox"/>	<pre> /-----ELAP Configuration Menu-----\ /-----\   1   Display Configuration    -----    2   Configure Network Interfaces Menu    -----    3   Set Time Zone    -----    4   Exchange Secure Shell Keys    -----    5   Change Password    -----    6   Platform Menu    -----    7   Configure NTP Server    -----    8   Mate Disaster Recovery    -----    e   Exit   \-----/  Enter Choice: e  *Note if this menu is not exited properly root will not be         </pre>

		disabled
--	--	----------

**This procedure is complete!**

**Procedure 13 VERIFY CONFIGURATIONS**

S T E P #	<p>This procedure verifies the E5APPB configurations.</p> <p><b>Note: Estimated time of completion is 5 minutes.</b></p> <p>Check off (✓) each step as it is completed. Boxes have been provided for this purpose under each step number.</p> <p>Should this procedure fail, Contact Oracle technical services and ask for <b>FULL UPGRADE ASSISTANCE</b>.</p>	
1. <input type="checkbox"/>	<p><b>MPS A:</b></p> <p>Login to serial console as root.</p>	<p>Login: <b>root</b> Password: <b>&lt;root_password&gt;</b></p>
2. <input type="checkbox"/>	<p><b>MPS A:</b></p> <p>Switch user to elapconfig.</p>	<p><b># su - elapconfig</b></p>
3. <input type="checkbox"/>	<p><b>MPS A:</b></p> <p>Enter option 1 to display the current configuration.</p>	<pre> /-----ELAP Configuration Menu-----\ /-----\   1   Display Configuration    -----    2   Configure Network Interfaces Menu    -----    3   Set Time Zone    -----    4   Exchange Secure Shell Keys    -----    5   Change Password    -----    6   Platform Menu    -----    7   Configure NTP Server    -----    8   Mate Disaster Recovery    -----    e   Exit   \-----/  Enter Choice: 1                     </pre>
4. <input type="checkbox"/>	<p><b>MPS A:</b></p> <p>Verify the configuration data with the data recorded earlier</p> <p>Press Return to continue.</p>	<pre> ELAP A Provisioning Network IP Address = 192.168.59.9 ELAP B Provisioning Network IP Address = 192.168.59.10 Provisioning Network Netmask           = 255.255.255.0 Provisioning Network Default Router     = 192.168.59.250 Provisioning VIP                         = 192.168.59.22 ELAP A Sync Network Address             = 169.254.1.100 ELAP B Sync Network Address             = 169.254.1.200 ELAP A Main DSM Network Address         = 192.168.120.100 ELAP B Main DSM Network Address         = 192.168.120.200 ELAP A Backup DSM Network Address       = 192.168.121.100                     </pre>

		<pre> ELAP B Backup DSM Network Address = 192.168.121.200 ELAP A HTTP Port = 80 ELAP B HTTP Port = 80 ELAP A HTTPS Port = 443 ELAP B HTTPS Port = 443 ELAP A Banner Connection Port = 8473 ELAP B Banner Connection Port = 8473 ELAP A Static NAT Address = Not configured ELAP B Static NAT Address = Not configured ELAP A LSMS Connection Port = 7483 ELAP B LSMS Connection Port = 7483 ELAP A EBDA Connection Port = 1030 ELAP B EBDA Connection Port = 1030 Time Zone = America/New_York  Press return to continue... ...&lt;return&gt;         </pre>
<p>5. <input type="checkbox"/></p>	<p><b>MPS A:</b> Enter option e to Exit.</p>	<pre> /-----ELAP Configuration Menu-----\ /-----\   1   Display Configuration    -----    2   Configure Network Interfaces Menu    -----    3   Set Time Zone    -----    4   Exchange Secure Shell Keys    -----    5   Change Password    -----    6   Platform Menu    -----    7   Configure NTP Server    -----    8   Mate Disaster Recovery    -----    e   Exit   \-----/  Enter Choice: e  *Note if this menu is not exited properly root access via ssh will not be disabled         </pre>

**This procedure is complete!**

## 2.6 Data Migration

This section lists the procedures, in order, that must be performed to bring the E5APPB ELAP into service.

### Procedure 14 TRANSFER DATABASES TO MATE

Note: If the backups are transferred to a remote server then it is recommended that the remote server has at least 100Mbps network bandwidth and 100G diskspace.

<p>S T E P</p>	<p>A</p>	<p>B</p>	<p>This procedure transfers the database backup from the one ELAP to the E5APPB ELAP or remote server. Estimated time: 30-60 minutes</p>
----------------------------	----------	----------	--

#			
1.	<input type="checkbox"/>	<input type="checkbox"/>	<p><b>MPS X:</b> Login as elapdev.</p> <p>login: <b>elapdev</b> Password: <b>&lt;epapdev_password&gt;</b></p>
2.	<input type="checkbox"/>	<input type="checkbox"/>	<p><b>MPS X:</b> Verify Connectivity with the E5APPB card. If the E5APPB card cannot be pinged, verify the network connectivity.</p> <p><b>\$ ping &lt;E5APPB IP&gt; -c 3</b></p> <pre>PING 192.168.3.2 (192.168.3.2) 56(84) bytes of data. 64 bytes from mate (192.168.3.2): icmp_seq=0 ttl=64 time=0.118 ms 64 bytes from mate (192.168.3.2): icmp_seq=1 ttl=64 time=0.102 ms 64 bytes from mate (192.168.3.2): icmp_seq=2 ttl=64 time=0.120 ms  --- mate ping statistics --- 3 packets transmitted, 3 received, 0% packet loss, time 2001ms rtt min/avg/max/mdev = 0.102/0.113/0.120/0.011 ms, pipe 2</pre>
3.	<input type="checkbox"/>	<input type="checkbox"/>	<p><b>MPS X:</b> Change directory to the /var/TKLC/epap/free directory</p> <p><b>\$ cd /var/TKLC/elap/free</b></p>
4.	<input type="checkbox"/>	<input type="checkbox"/>	<p><b>MPS X:</b> List the EuiDB Backup File in this directory.</p> <pre>#ls -l npdbBackup* npdbBackup_XXXXX-a_XXXXXXXXX.tar</pre>
5.	<input type="checkbox"/>	<input type="checkbox"/>	<p><b>MPS X:</b> Copy the EuiDB Backup File to mate E5APPB card.</p> <pre><b>\$ scp -p npdbBackup_XXXXX-a_XXXXXXXXX.tar elapdev@&lt;E5APPB A IP&gt;:/var/TKLC/elap/free</b></pre> <p><b>Or</b></p> <pre><b>\$ sftp elapdev@&lt;E5APPB A IP&gt;</b> Connecting to &lt;E5APPB A IP&gt;... The authenticity of host '&lt;E5APPB A IP&gt;' can't be established. DSA key fingerprint is 58:a5:7e:1b:ca:fd:1d:fa:99:f2:01:16:79:d8:b4:24. Are you sure you want to continue connecting (yes/no)? yes Warning: Permanently added '&lt;E5APPB A IP&gt;' (DSA) to the list of known hosts. elapdev&lt;E5APPB A IP&gt;'s password: sftp&gt; cd /var/TKLC/elap/free sftp&gt; put <b>npdbBackup_XXXXX-a_XXXXXXXXX.tar</b> Uploading <b>npdbBackup_XXXXX-a_XXXXXXXXX.tar</b> to <b>npdbBackup_XXXXX-a_XXXXXXXXX.tar</b> sftp&gt; bye</pre>

**This procedure is complete!**

### Procedure 15 RESTORE EUIDB

Now that the Databases have been copied over, it's time to restore the Databases and start the ELAP application.

**Note: HA status of ELAP servers should be Active and Standby . If HA status is not Active/Standby, contact the My Oracle Support by following the instructions in [Appendix E](#).**

<p><b>S</b></p> <p>This procedure migrates the EuiDB database to the E5APPB.</p> <p><b>T</b></p> <p><b>Note: Estimated time of completion is 15 minutes.</b></p> <p><b>E</b></p> <p>Check off (✓) each step as it is completed. Boxes have been provided for this purpose under each step number.</p> <p><b>P</b></p> <p>Should this procedure fail, Contact Oracle technical services and ask for <b>FULL UPGRADE ASSISTANCE</b>.</p> <p><b>#</b></p>		
<p>1.</p> <p><input type="checkbox"/></p>	<p><b>Active ELAP:</b></p> <p>Login as elapdev.</p>	<pre>login: elapdev Password: &lt;elapdev_password&gt;</pre>
<p>2.</p> <p><input type="checkbox"/></p>	<p><b>Active ELAP:</b></p> <p>Verify that the DB Backup file has been transferred over.</p>	<pre>\$ cd /var/TKLC/elap/free \$ ls -l npdbBackup_XXXXX-a_XXXXXXXXX.tar</pre>
<p>3.</p> <p><input type="checkbox"/></p>	<p><b>Active ELAP:</b></p> <p>Restore EuiDB</p> <p>Euidb_migration.pl script takes two arguments, first is the EuiDB backup filename and second is the source release from where ELAP is migrating.</p> <p>Restore Output is displayed.</p>	<pre>\$ /usr/TKLC/elap/bin/Euidb_migration.pl npdbBackup_XXXXX-a_XXXXXXXXX.tar 10 Success.  Please check /usr/TKLC/elap/logs/Euidb_migration.log for more details.  Contact the Technical Assistance Center following the instructions on the 2.7Appendix E, if the output contains any errors beside the following: Example:  mchk: error: 140 when opening MyISAM-table '/var/TKLC/appl/drbd/mysql/data/mysql/proxies_priv.MYT' myisamchk: error: 140 when opening MyISAM-table '/var/TKLC/appl/drbd/mysql/data/mysql/servers.MYT' myisamchk: error: 140 when opening MyISAM-table '/var/TKLC/appl/drbd/mysql/data/mysql/servers.MYT' myisamchk: error: 140 when opening MyISAM-table '/var/TKLC/appl/drbd/mysql/data/mysql/tables_priv.MYT' myisamchk: error: 140 when opening MyISAM-table '/var/TKLC/appl/drbd/mysql/data/mysql/tables_priv.MYT' . . .</pre>

		<pre>##### Several other errors related to myisamchk are also observed that needs to be ignored. All those messages are expected, and therefore aren't considered errors.</pre>
<p>4. <input type="checkbox"/></p>	<p><b>Active ELAP:</b> Reset IP Addresses. <b>Login to elapconfig</b></p>	<p>Re-Set the IP addresses using elapconfig. (for Prov and NTP if used). <b>\$ sudo su - elapconfig</b></p>
<p>5. <input type="checkbox"/></p>	<p><b>Active ELAP:</b> The ELAP Configuration Menu is displayed. Select option 2 to enter the Network Interfaces Menu.</p>	<pre>/-----ELAP Configuration Menu-----\ /-----\   1   Display Configuration    -----    2   Configure Network Interfaces Menu    -----    3   Set Time Zone    -----    4   Exchange Secure Shell Keys    -----    5   Change Password    -----    6   Platform Menu    -----    7   Configure NTP Server    -----    8   Mate Disaster Recovery    -----    e   Exit   \-----/  Enter Choice: 2</pre>
<p>6. <input type="checkbox"/></p>	<p><b>Active ELAP:</b> The Configure Network Interfaces Menu is displayed. Select option 1 to configure the provisioning network.</p>	<pre>/-----Configure Network Interfaces Menu-\ /-----\   1   Configure Provisioning Network    -----    2   Configure DSM Network    -----    3   Configure Forwarded Ports    -----    4   Configure Static NAT Addresses    -----    e   Exit   \-----/  Enter Choice: 1</pre>
<p>7. <input type="checkbox"/></p>	<p><b>Active ELAP:</b> Enter the IP addresses, subnet mask, default gateway and Virtual IP address when prompted.  (Note: If the IP addresses, subnet mask, default gateway and Virtual IP are same as previously entered, can avoid entering them</p>	<pre>Verifying connectivity with mate... ELAP A provisioning network IP Address [192.168.61.104]: 192.168.61.136 ELAP B provisioning network IP Address [192.168.61.105]: 192.168.61.137 ELAP provisioning network netmask [255.255.255.0]: 255.255.255.0 ELAP provisioning network default router: 192.168.61.250 ELAP local provisioning virtual IP Address [192.168.61.100]: 192.168.61.166</pre>

	again by just pressing enter key).	Please wait, this may take a while...
8. <input type="checkbox"/>	<b>Active ELAP:</b> Select option e to exit.	<pre> /-----Configure Network Interfaces Menu-----\ /-----\   1   Configure Provisioning Network    -----    2   Configure Sync Network    -----    3   Configure DSM Network    -----    4   Configure Backup Provisioning Network    -----    5   Configure Forwarded Ports    -----    6   Configure Static NAT Addresses    -----    7   Configure Provisioning VIP Addresses    -----    e   Exit   \-----/  Enter Choice: e         </pre>
9. <input type="checkbox"/>	<b>Active ELAP:</b> If configured, change "Pretty Name" to change the name on the ELAP GUI.	<pre> \$ uiEdit   grep -i PRETTY_NAME "ELAP_A_PRETTY_NAME" is set to "ELAP_A_NAME" "ELAP_B_PRETTY_NAME" is set to "ELAP_B_NAME" For e.g., # uiEdit ELAP_B_PRETTY_NAME Santos-B # uiEdit ELAP_A_PRETTY_NAME Santos-A  \$ uiEdit   grep -i PRETTY_NAME "ELAP_A_PRETTY_NAME" is set to "Santos-A" "ELAP_B_PRETTY_NAME" is set to "Santos-B"         </pre>
10. <input type="checkbox"/>	<b>Active ELAP:</b> Switch user to elapconfig and verify the configurations.	Verify the configurations using the Procedure 13.

**This procedure is complete!**



**Procedure 16 SSH KEY EXCHANGE BETWEEN THE ELAP AND LSMS**

<p><b>S</b> <b>T</b> <b>E</b> <b>P</b> <b>#</b></p>	<p>This procedure exchanges SSH keys between the ELAP and LSMS.</p> <p><b>Note: Estimated time of completion is 15 minutes.</b></p> <p>Check off (✓) each step as it is completed. Boxes have been provided for this purpose under each step number.</p> <p>Should this procedure fail, Contact Oracle technical services and ask for <b>FULL UPGRADE ASSISTANCE</b>.</p>	
<p>1. <input type="checkbox"/></p>	<p><b>Active ELAP:</b> Login as root.</p>	<pre>login: root Password: &lt;root_password&gt;</pre>
<p>2. <input type="checkbox"/></p>	<p><b>Active ELAP:</b> Switch user to elapconfig.</p>	<pre># su - elapconfig</pre>
<p>3. <input type="checkbox"/></p>	<p><b>Active ELAP:</b> The ELAP Configuration Menu is displayed.</p> <p>Select option 4 to Exchange Secure Shell Keys.</p>	<pre>/-----ELAP Configuration Menu-----\ /-----\   1   Display Configuration    ----- -----    2   Configure Network Interfaces Menu    ----- -----    3   Set Time Zone    ----- -----    4   Exchange Secure Shell Keys    ----- -----    5   Change Password    ----- -----    6   Platform Menu    ----- -----    7   Configure NTP Server    ----- -----    8   Mate Disaster Recovery    ----- -----    e   Exit   \-----/</pre> <p>Enter Choice: 4</p>
<p>4. <input type="checkbox"/></p>	<p><b>Active ELAP:</b> The Exchange Secure Shell Keys Menu is displayed.</p> <p>Select option 4 to Exchange Keys with LSMS.</p>	<pre>/-----Exchange Secure Shell Keys Menu-----\ /-----\   1   Exchange Keys with Mate    ----- -----    2   Exchange Keys with Remote    ----- -----    3   Exchange Keys with Mate as Root User    ----- -----    4   Exchange Keys with LSMS    ----- -----    e   Exit   \-----/</pre> <p>Enter Choice:4</p>
<p>5. <input type="checkbox"/></p>	<p><b>Active ELAP:</b> Exchange SSH keys with the LSMS A</p>	<p><b>Note:</b> SSH keys will first be exchanged between the MPS A and LSMS A servers. The user will be prompted for the password again and SSH keys will be exchanged between the MPS B and LSMS A servers.</p>

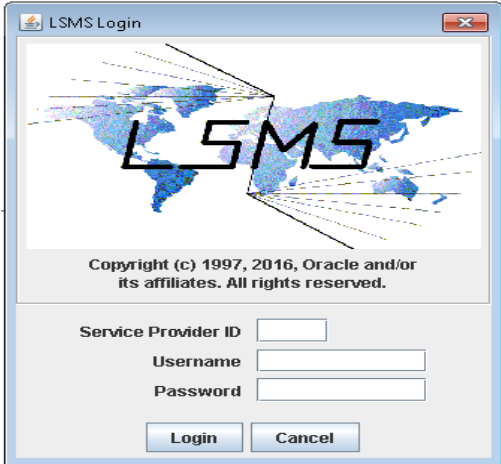

	<p>(<b>host lsmspri</b>) server.</p> <p>Enter “Y” and press Enter.</p> <p>Enter the <b>LSMS A (host lsmspri)</b> IP address and press Enter.</p> <p>Enter the LSMS “lsmsadm” user password and press Enter.</p> <p>Verify that keys were exchanged successfully for MPS A and <b>LSMS A</b>.</p> <p>Enter the LSMS “lsmsadm” user password and press Enter.</p> <p>Verify that keys were exchanged successfully for MPS B and <b>LSMS A</b>.</p>	<p>Are you sure you wish to exchange keys with LSMS? [N]:Y</p> <p>LSMS IP Address: &lt;LSMS A IP&gt;</p> <p>The server does not know of &lt;LSMS A IP&gt;. will just exchange host keys for the name given! Password of lsmsadm:*****</p> <p>Could not get authorized keys file from remote (&lt;LSMS A IP&gt;). Maybe it does not exist. Continuing... The server does not know of &lt;LSMS A IP&gt;. will just exchange host keys for the name given! <b>ssh is working correctly.</b></p> <p>The server does not know of &lt;LSMS A IP&gt;. will just exchange host keys for the name given! Password of lsmsadm: *****</p> <p>The server does not know of 192.168.60.70. will just exchange host keys for the name given! <b>ssh is working correctly.</b></p>
<p>6. <input type="checkbox"/></p>	<p><b>Active ELAP:</b> The Exchange Secure Shell Keys Menu is displayed.</p> <p>Select option 4 to Exchange Keys with LSMS.</p>	<pre> /-----Exchange Secure Shell Keys Menu-----\ /-----\   1   Exchange Keys with Mate    -----    2   Exchange Keys with Remote    -----    3   Exchange Keys with Mate as Root User    -----    4   Exchange Keys with LSMS    -----    e   Exit   \-----/ </pre> <p>Enter Choice:4</p>
<p>7. <input type="checkbox"/></p>	<p><b>Active ELAP:</b> Exchange SSH keys with the <b>LSMS B (host lsmssec)</b> server.</p> <p>Enter “Y” and press</p>	<p><b>Note:</b> SSH keys will first be exchanged between the MPS A and <b>LSMS B</b> servers. The user will be prompted for the password again and SSH keys will be exchanged between the MPS B and <b>LSMS B</b> servers.</p> <p>Are you sure you wish to exchange keys with LSMS? [N]:Y</p>

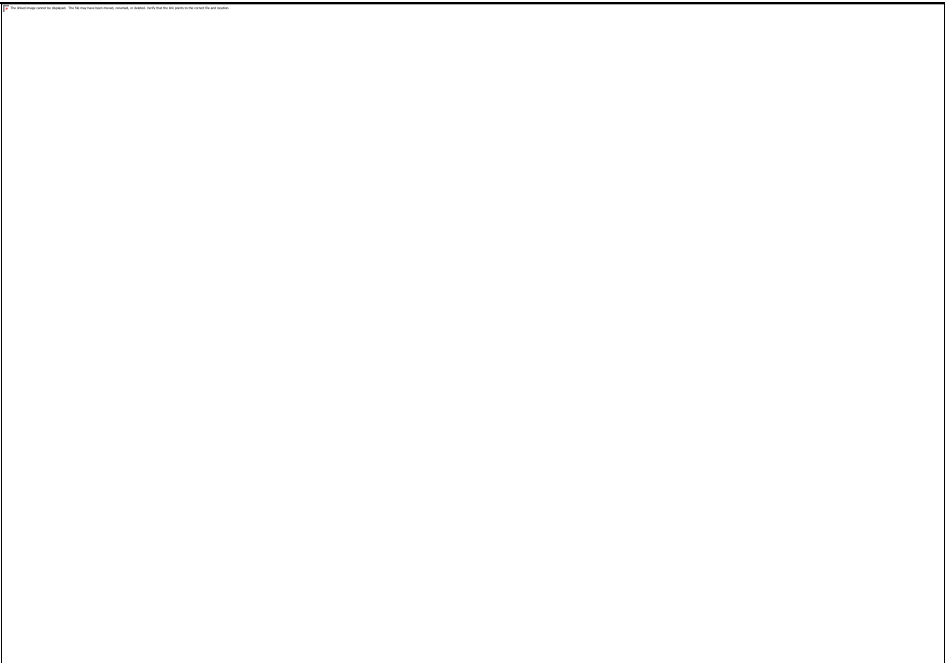
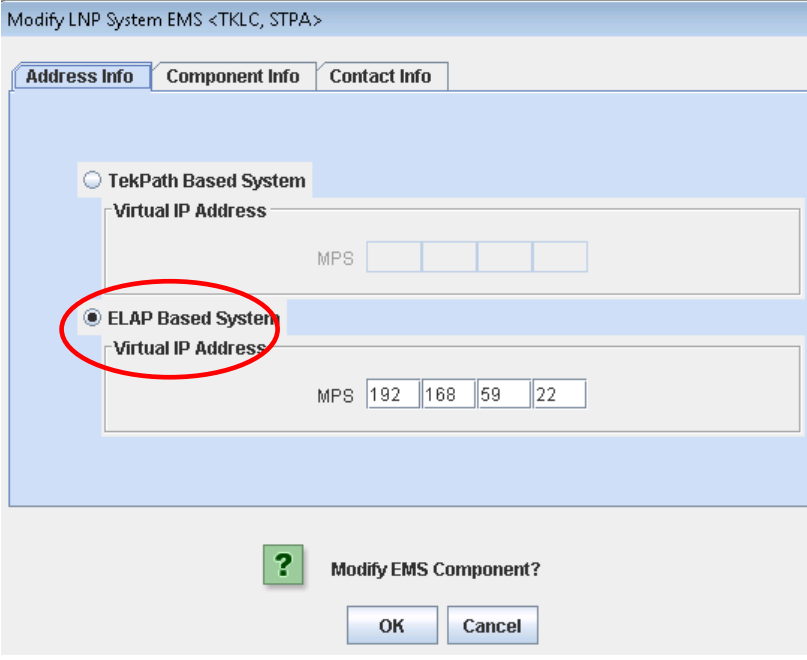
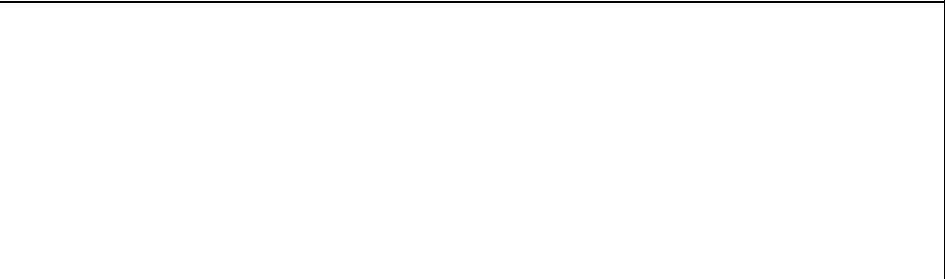
	<p>Enter.</p> <p>Enter the <b>LSMS B (host lsmssec)</b> IP address and press Enter.</p> <p>Enter the LSMS “lsmsadm” user password and press Enter.</p> <p>Verify that keys were exchanged successfully for <b>MPS A and LSMS B.</b></p> <p>Enter the LSMS “lsmsadm” user password and press Enter.</p> <p>Verify that keys were exchanged successfully for <b>MPS B and LSMS B.</b></p>	<p>LSMS IP Address: &lt;LSMS B IP&gt;</p> <p>The server does not know of &lt;LSMS B IP&gt;. Will just exchange host keys for the name given! Password of lsmsadm:*****</p> <p>Could not get authorized keys file from remote (&lt;LSMS B IP&gt;). Maybe it does not exist. Continuing... The server does not know of &lt;LSMS B IP&gt;. Will just exchange host keys for the name given! ssh is working correctly.</p> <p>The server does not know of &lt;LSMS B IP&gt;. Will just exchange host keys for the name given! Password of lsmsadm: *****</p> <p>The server does not know of &lt;LSMS B IP&gt;. Will just exchange host keys for the name given! ssh is working correctly.</p>
<p>8. <input type="checkbox"/></p>	<p><b>Active ELAP:</b> Exit the “Exchange Secure Shell Keys” Menu.</p> <p>Select “e” and press Enter.</p>	<pre> /-----Exchange Secure Shell Keys Menu-----\ /-----\   1   Exchange Keys with Mate    -----    2   Exchange Keys with Remote    -----    3   Exchange Keys with Mate as Root User    -----    4   Exchange Keys with LSMS    -----    e   Exit   \-----\ </pre> <p>Enter Choice: e</p>
<p>9. <input type="checkbox"/></p>	<p><b>Active ELAP:</b> Select option e to exit.</p>	<pre> /-----Configure Network Interfaces Menu-----\ /-----\   1   Configure Provisioning Network    -----    2   Configure Sync Network    -----    3   Configure DSM Network    -----    4   Configure Backup Provisioning Network    -----    5   Configure Forwarded Ports    -----    6   Configure Static NAT Addresses    -----    7   Configure Provisioning VIP Addresses   </pre>

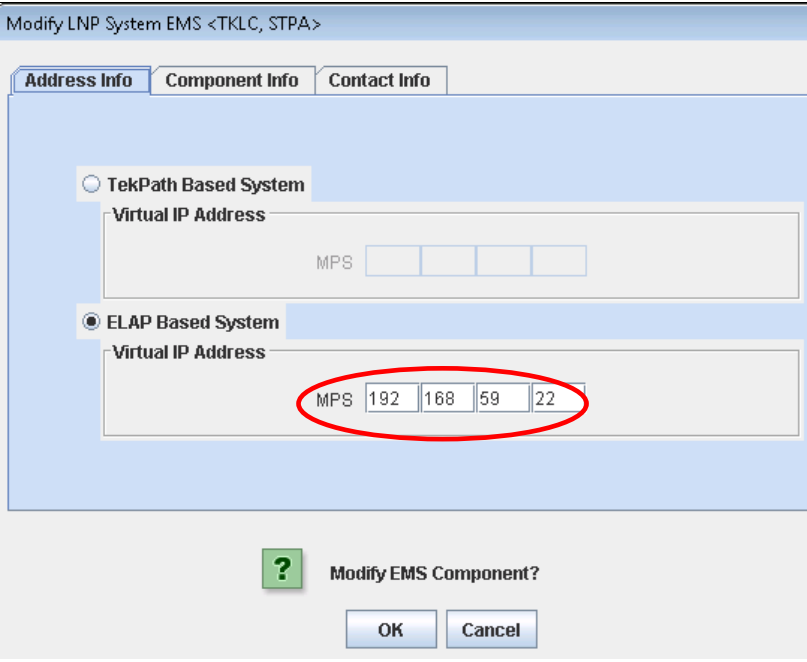
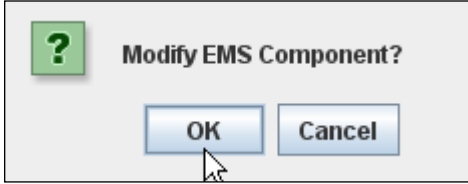
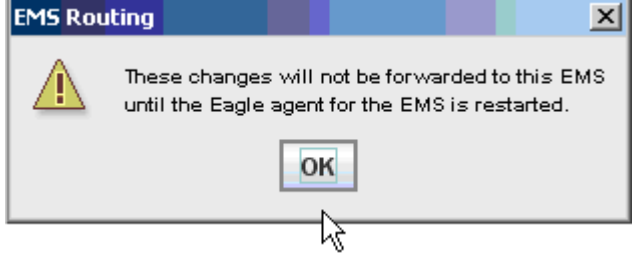
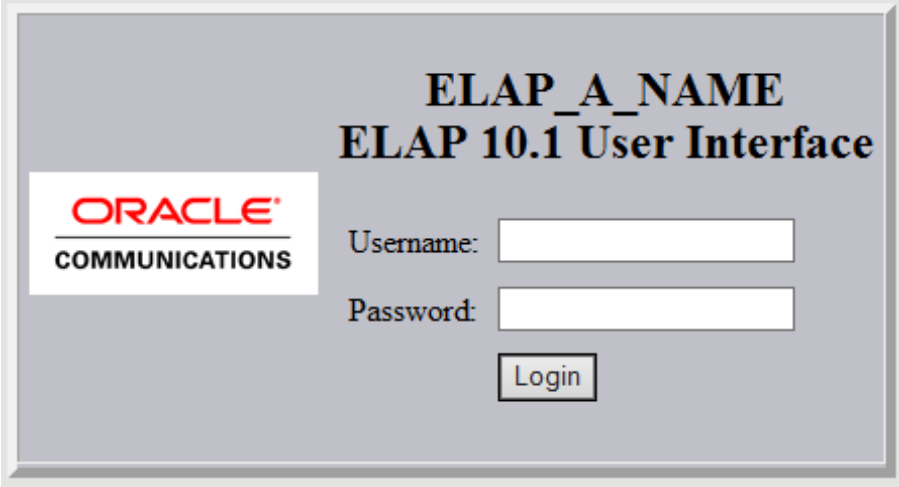
		<pre>  ----- -----    e   Exit   \-----/ </pre> <p>Enter Choice: e</p>
<p>10. <input type="checkbox"/></p>	<p><b>Active ELAP:</b> Select option e to exit.</p>	<pre> /-----ELAP Configuration Menu-----\ /----- -----    1   Display Configuration    ----- -----    2   Configure Network Interfaces Menu    ----- -----    3   Set Time Zone    ----- -----    4   Exchange Secure Shell Keys    ----- -----    5   Change Password    ----- -----    6   Platform Menu    ----- -----    7   Configure NTP Server    ----- -----    8   Mate Disaster Recovery    ----- -----    e   Exit   \-----/ </pre> <p>Enter Choice: e</p>

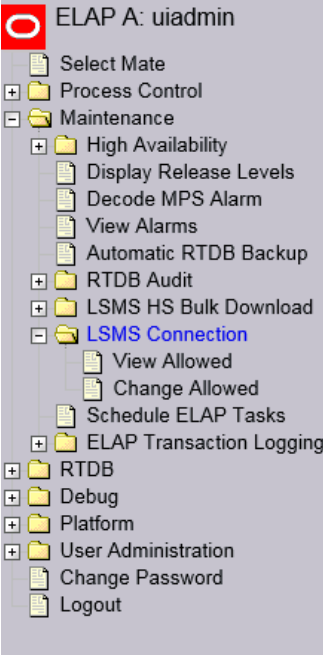
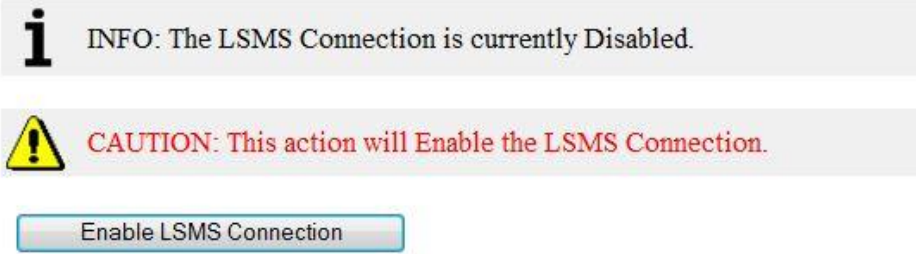

**This procedure is complete!**

**Procedure 17 RE-POINT LSMS TO ELAP VIP**

<p><b>S</b> <b>T</b> <b>E</b> <b>P</b> <b>#</b></p>	<p>This procedure points the LSMS to the ELAP VIP.</p> <p><b>Note: Estimated time of completion is 15 minutes.</b></p> <p>Check off (✓) each step as it is completed. Boxes have been provided for this purpose under each step number.</p> <p>Should this procedure fail, Contact Oracle technical services and ask for <b>FULL UPGRADE ASSISTANCE</b>.</p>
<p>1. <input type="checkbox"/></p>	<p><b>LSMS:</b> Log in to the LSMS GUI as a member of the permission group that is authorized to perform this operation</p> 
<p>2. <input type="checkbox"/></p>	<p><b>LSMS:</b> Select the EMS being fully upgraded to 10.1.</p> 

<p>3. <input type="checkbox"/></p>	<p><b>LSMS:</b> Navigate to the following Menu selection:</p> <p><b>Configure</b> → <b>LNP System</b> → <b>EMS</b> → <b>Modify</b></p> <p><b>Note: EMS modification is only needed when there is a change in the VIP IP.</b></p>	
<p>4. <input type="checkbox"/></p>	<p><b>LSMS:</b> Select the <b>ELAP-Based System “Virtual IP Address”</b> radio button.</p>	
<p>5. <input type="checkbox"/></p>	<p><b>LSMS:</b> Enter the <b>Virtual IP Address</b> for the MPS as configured.</p>	

		
<p>6. <input type="checkbox"/></p>	<p><b>LSMS:</b> Confirm the modification by clicking <b>OK</b>.</p>	
<p>7. <input type="checkbox"/></p>	<p><b>LSMS:</b> Confirm by clicking <b>“OK”</b>.</p>	
<p>8. <input type="checkbox"/></p>	<p><b>Active ELAP GUI:</b> Using the new Virtual IP address (VIP) configured in step [5] of Procedure 13, login to Active ELAP.</p>	
<p>9. <input type="checkbox"/></p>	<p><b>Active ELAP GUI:</b> 1) Expand the “Maintenance →</p>	

	<p>LSMS Connection” folder.</p> <p>2) Select the “Change Allowed” link.</p>	 <p>ELAP A: uiadmin</p> <ul style="list-style-type: none"> <li>Select Mate</li> <li>Process Control</li> <li>Maintenance             <ul style="list-style-type: none"> <li>High Availability                 <ul style="list-style-type: none"> <li>Display Release Levels</li> <li>Decode MPS Alarm</li> <li>View Alarms</li> <li>Automatic RTDB Backup</li> </ul> </li> <li>RTDB Audit</li> <li>LSMS HS Bulk Download</li> <li><b>LSMS Connection</b> <ul style="list-style-type: none"> <li>View Allowed</li> <li>Change Allowed</li> <li>Schedule ELAP Tasks</li> </ul> </li> <li>ELAP Transaction Logging</li> </ul> </li> <li>RTDB</li> <li>Debug</li> <li>Platform</li> <li>User Administration             <ul style="list-style-type: none"> <li>Change Password</li> <li>Logout</li> </ul> </li> </ul>
<p>10.</p> <p><input type="checkbox"/></p>	<p><b>Active ELAP GUI:</b></p> <p>In the right panel, click on the “Enable LSMS Connection” button.</p>	 <p><b>i</b> INFO: The LSMS Connection is currently Disabled.</p> <p><b>!</b> CAUTION: This action will Enable the LSMS Connection.</p> <p>Enable LSMS Connection</p>
<p>11.</p> <p><input type="checkbox"/></p>	<p><b>ELAP A GUI:</b></p> <p>A message indicating that the LSMS Connection is now Enabled should appear in the right panel.</p>	 <p><b>✓</b> SUCCESS: The LSMS Connection is now Enabled.</p>
<p>12.</p> <p><input type="checkbox"/></p>	<p><b>LSMS:</b></p> <p>Login to the LSMS CLI as the “lsmsadm” user.</p>	
<p>13.</p> <p><input type="checkbox"/></p>	<p><b>LSMS:</b></p> <p>Login to the LSMS CLI as the “lsmsadm” user.</p>	<pre> lsmsadm@&lt;ISMS IP&gt;'s password: Last login: wed Jul  9 18:40:24 2008 from 10.25.150.101 [lsmsadm@lsmspri ~]\$                     </pre>
<p>14.</p> <p><input type="checkbox"/></p>	<p><b>LSMS:</b></p> <p>Execute an “eagle status” command to verify the current</p>	<pre> [lsmsadm@lsmspri ~]\$ eagle status CLLI Pid State Resync Conn A Conn B EBDA Debug Queue Memory CPU Timestamp                     </pre>



	status of the CLLI (EMS site being fully upgraded to 10.1).	ELAP21 32269 A_ACTIVE COMPLETE ACTIVE --- IDLE OFF 0 % 500 M 0.0 % 17:42:59 STPA 15565 NONE_ACTIVE NO_CONNECTION DOWN --- IDLE OFF 0 % 500 M 0.0 % 17:43:00
15.	<input type="checkbox"/> <b>LSMS:</b> Execute an “ <b>eagle stop</b> ” command using the CLLI of the EMS site being migrated to 10.x.	[lmsadm@lmspri ~]\$ <b>eagle stop ELAP21</b>  eagle: Stopping...  eagle: eagleagent ELAP21 stopped at wed Apr 27 17:43:25 2016
16.	<input type="checkbox"/> <b>LSMS:</b> Execute an “ <b>eagle start</b> ” command using the CLLI of the EMS site being fully upgraded to 10.1.	[lmsadm@lmspri ~]\$ <b>eagle start ELAP21</b>  eagle: starting...  eagle: eagleagent ELAP21 started at wed Apr 27 17:43:48 2016
17.	<input type="checkbox"/> <b>LSMS:</b> 1) Execute an “ <b>eagle status</b> ” command using the CLLI of the EMS site being fully upgraded to 10.1.  2) Verify that the “ <b>State</b> ” and the “ <b>Connection VIP</b> ” reflect the values shown to the right.	[lmsadm@lmspri ~]\$ <b>eagle status ELAP21</b>  eagleagent: CLLI = ELAP21 Pid = 3110 State = A_ACTIVE Resync = COMPLETE Connection VIP = ACTIVE EBDA = IDLE Debug logging = OFF Pending queue = 385 of 2000000 bytes (0%) Keepalive timestamp = wed Apr 27 17:45:19 IST 2016 Virtual memory = 500308 K bytes CPU usage = 2.0 %

**This procedure is complete!**

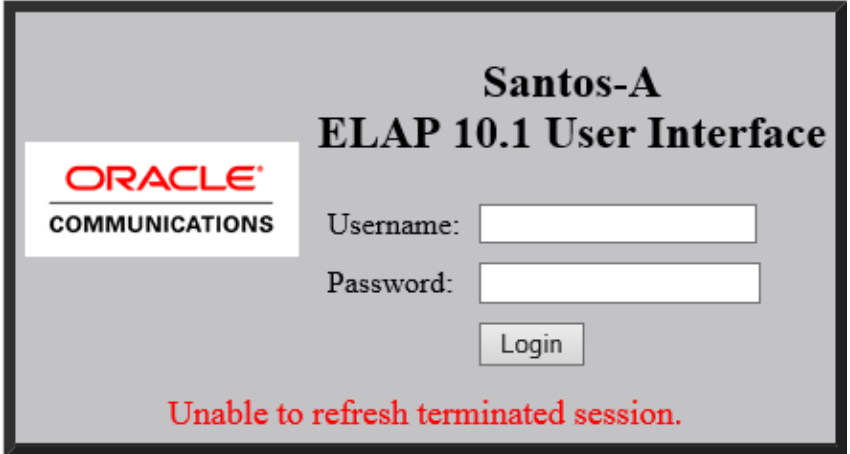
**Procedure 18 TRANSFER SERVDI BACKUP TO ELAP**

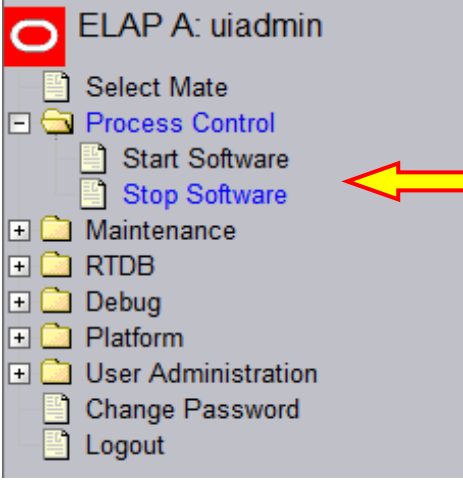
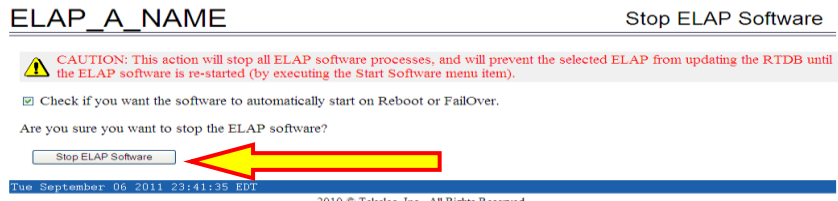

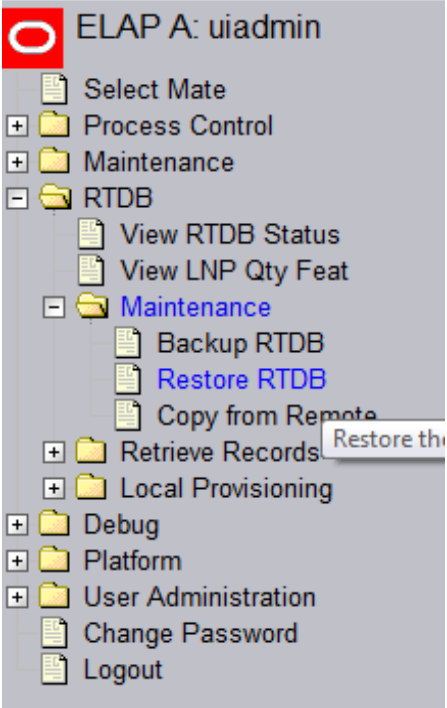
S T E P #	This procedure transfers the servdi backup from the LSMS to the E5APPB ELAP. Estimated time: 5 minutes	
1. <input type="checkbox"/>	<b>LSMS Standby Server:</b> Login as root.	Login: <b>root</b> Password: <b>&lt;root_password&gt;</b>
2. <input type="checkbox"/>	<b>LSMS Standby Server:</b> Change directory to the /var/TKLC/lms/free/data/servdi directory	\$ cd /var/TKLC/lms/free/data/servdi
3. <input type="checkbox"/>	<b>LSMS Standby Server:</b> List the servdi Backup File in	#ls -l servdiDownload* servdiDownload_STPA_20160226115322.gz

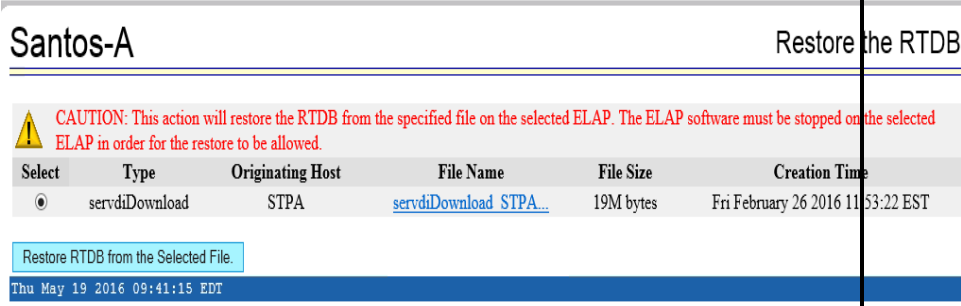
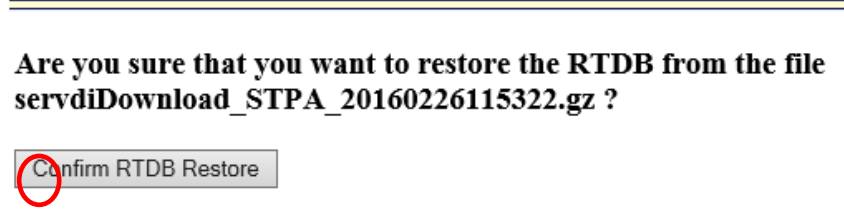
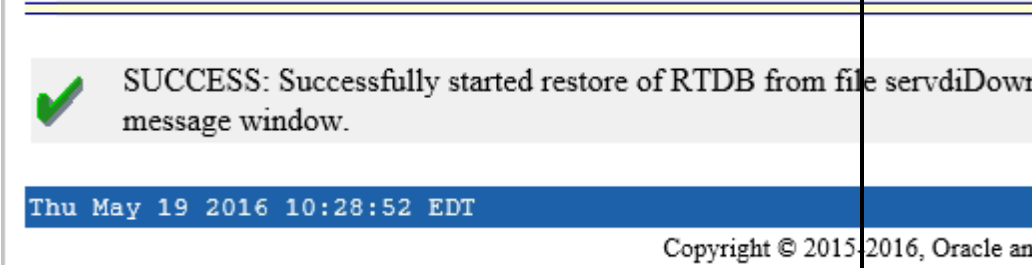

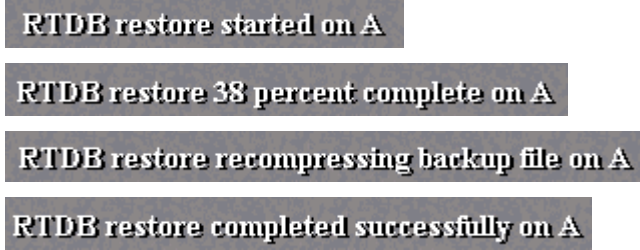
<p>4. <input type="checkbox"/></p>	<p>this directory.</p> <p><b>LSMS Standby Server:</b> Copy the servdi Backup File to local E5APPB card.</p>	<pre># scp -p servdiDownload_STPA_20160226115322.gz elapdev@&lt;E5APPB A IP&gt;:/var/TKLC/elap/free/backup  Or  # sftp elapdev@&lt;E5APPB A IP&gt; Connecting to &lt;E5APPB A IP&gt;... The authenticity of host '&lt;E5APPB A IP&gt;' can't be established. DSA key fingerprint is 58:a5:7e:1b:ca:fd:fa:99:f2:01:16:79:d8:b4:24. Are you sure you want to continue connecting (yes/no)? yes Warning: Permanently added '&lt;E5APPB A IP&gt;' (DSA) to the list of known hosts. elapdev@&lt;E5APPB A IP&gt;'s password: sftp&gt; cd /var/TKLC/elap/free/backup sftp&gt; put servdiDownload_STPA_20160226115322.gz Uploading servdiDownload_STPA_20160226115322.gz to servdiDownload_STPA_20160226115322.gz sftp&gt; bye</pre>
<p>5.</p>		

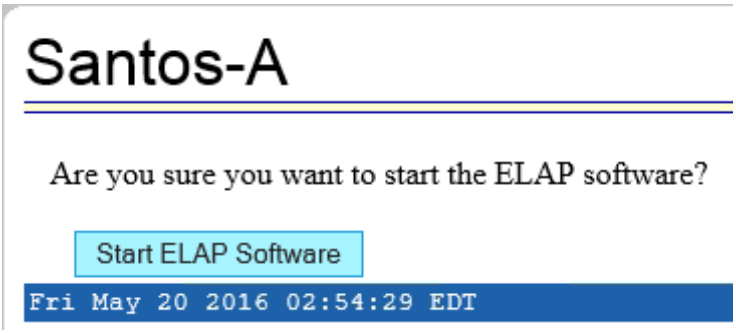
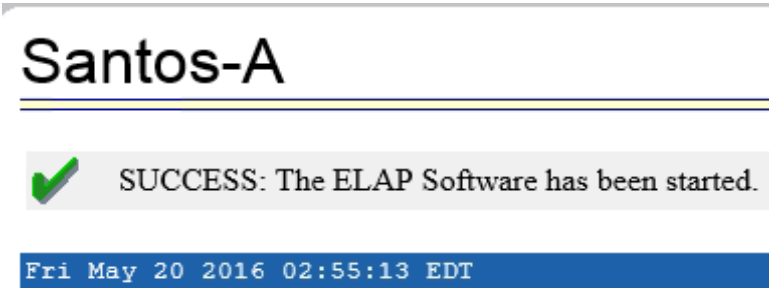
**This procedure is complete!**

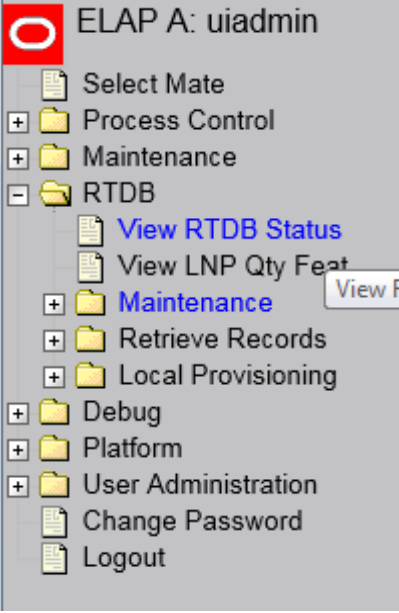
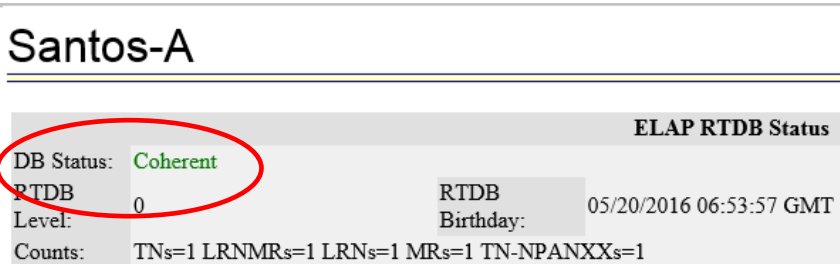
**Procedure 19 RESTORE SERVDI BACKUP**

<p><b>S</b> <b>T</b> <b>E</b> <b>P</b> <b>#</b></p>	<p>This procedure restores the SERVDI Backup to the ELAP.</p> <p><b>Note: Estimated time of completion is 30 minutes.</b></p> <p>Check off (✓) each step as it is completed. Boxes have been provided for this purpose under each step number.</p> <p>Should this procedure fail, Contact Oracle technical services and ask for <b>FULL UPGRADE ASSISTANCE</b>.</p>	
<p>1. <input type="checkbox"/></p>	<p><b>Active ELAP GUI:</b></p> <p>Using the new Virtual IP address (VIP) configured in step [5] of Procedure 13, login to Active ELAP.</p>	
<p>2. <input type="checkbox"/></p>	<p><b>Active ELAP GUI:</b></p> <p>1) Expand the “Process Control” folder.</p> <p>2) Select the “Stop Software” link.</p>	

		
<p>3. <input type="checkbox"/></p>	<p><b>Active ELAP GUI:</b></p> <p>In the right panel, click on the “Stop ELAP Software” button.</p>	
<p>4. <input type="checkbox"/></p>	<p><b>ELAP A GUI:</b></p> <p>A message indicating that the ELAP software has been successfully halted should appear in the right panel.</p>	
<p>5. <input type="checkbox"/></p>	<p><b>ELAP-A GUI:</b></p> <ol style="list-style-type: none"> <li>1) Expand the “RTDB” folder.</li> <li>2) Expand the “Maintenance” sub-folder.</li> <li>3) Select the “Restore RTDB” link.</li> </ol>	

<p>6. <input type="checkbox"/></p>	<p><b>ELAP-A GUI:</b></p> <p>1) Select the database file radio button.</p> <p>2) Click on the “Restore RTDB from the Selected File” button.</p>	
<p>7. <input type="checkbox"/></p>	<p><b>ELAP A GUI:</b></p> <p>Click on the “Confirm RTDB Restore” button.</p>	
<p>8. <input type="checkbox"/></p>	<p><b>ELAP A GUI:</b></p> <p>A message showing that the RTDB Restore has been successfully started should appear in the right frame.</p>	
<p>9. <input type="checkbox"/></p>	<p><b>ELAP A GUI:</b></p> <p>The GUI banner should begin displaying the message shown to the right.</p>	
<p>10. <input type="checkbox"/></p>	<p><b>ELAP A GUI:</b></p> <p>The messages shown to the right display the stages of the RTDB Restore.</p> <p>Monitor these messages in the GUI banner as the process progresses.</p>	
<p>11. <input type="checkbox"/></p>	<p><b>ELAP A:</b></p> <p>The banner messages may alternatively be viewed from the command line using the “manageBannerInfo” command.</p>	<pre>[elapdev@E5APP-B-a ~]\$ manageBannerInfo -l ID: RESTORE_RTDB_STATUS SIDE: A MSG: RTDB restore 51 percent complete SetTime: 2016-05-19 10:29:13 clearTime: 0000-00-00 00:00:00 [elapdev@E5APP-B-a ~]\$</pre>

	<p><b>NOTE:</b> <i>During this transitory state, access to the ELAP-A GUI may terminate unexpectedly. If sustained GUI access is problematic at this time, you may monitor these messages from the ELAP-A command line.</i></p>	
<p>12. <input type="checkbox"/></p>	<p><b>ELAP A:</b> If monitoring from the ELAP-A command line, the messages shown to the right display the stages of the RTDB Restore.</p>	<p>MSG: RTDB restore started MSG: RTDB restore 13 percent complete MSG: RTDB restore completed successfully MSG: RTDB restore recompressing backup file There are currently no BannerInfo messages for this side in the database.</p>
<p>13. <input type="checkbox"/></p>	<p><b>ELAP A GUI:</b> 1) Expand the “Process Control” folder.  2) Select the “Start Software” link.</p>	
<p>14. <input type="checkbox"/></p>	<p><b>ELAP A GUI:</b> In the right panel, click on the “Start ELAP Software” button.</p>	
<p>15. <input type="checkbox"/></p>	<p><b>ELAP A GUI:</b> A message indicating that the ELAP software has been successfully started should appear in the right panel.</p>	

<p>16.</p> <p><input type="checkbox"/></p>	<p><b>ELAP A GUI:</b></p> <p>1) Expand the “RTDB” folder.</p> <p>2) Select the “View RTDB Status” link.</p>	
<p>17.</p> <p><input type="checkbox"/></p>	<p><b>ELAP A GUI:</b></p> <p>Verify the “DB Status” and the “RTDB Level” shown in the right panel.</p>	
<p>18.</p> <p><input type="checkbox"/></p>	<p><b>ELAP A GUI:</b></p> <p>Record the “DB Status” and the “RTDB Level” shown in the previous STEP.</p>	<p>DB Status = _____</p> <p>RTDB Level = _____</p>

**This procedure is complete!**

**Procedure 20 POST FULL UPGRADE SYSCHECK**

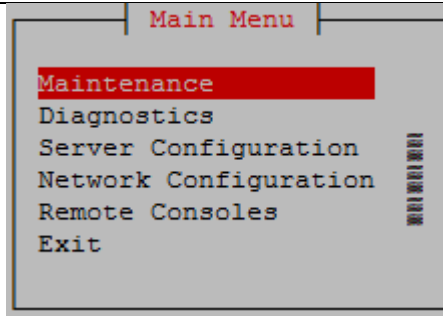
<p>S</p> <p>T</p> <p>E</p> <p>P</p> <p>#</p>	<p>This procedure runs an initial system check to validate the software install and system readiness.</p> <p><b>Note: Estimated time of completion is 5 minutes.</b></p> <p>Check off (✓) each step as it is completed. Boxes have been provided for this purpose under each step number.</p> <p>Should this procedure fail, Contact Oracle technical services and ask for <b>FULL UPGRADE ASSISTANCE</b>.</p>	
<p>1.</p> <p><input type="checkbox"/></p>	<p><b>MPS A:</b></p> <p>Login as root.</p>	<p>login: <b>root</b></p> <p>Password: <b>&lt;root_password&gt;</b></p>
<p>2.</p> <p><input type="checkbox"/></p>	<p><b>MPS A:</b></p> <p>Issue the command to retrieve the system status</p>	<p><b># syscheck</b></p>

<p>3. <input type="checkbox"/></p>	<p><b>MPS A:</b> The syscheck response is displayed. Verify all components are “OK” on the mate ELAP <b>NOTE:</b> Investigate the cause of any failure in the syscheck response. Correct the issue or contact Support for resolution before proceeding.</p>	<pre>Running modules in class disk... OK Running modules in class hardware... OK Running modules in class net... OK Running modules in class proc... OK Running modules in class services... OK Running modules in class system... OK Running modules in class upgrade... OK LOG LOCATION: /var/TKLC/log/syscheck/fail_log</pre>
<p>4. <input type="checkbox"/></p>	<p><b>MPS A:</b> Issue the command to retrieve the system status on the mate ELAP</p>	<pre># ssh syscheck@mate</pre>
<p>5. <input type="checkbox"/></p>	<p><b>MPS A:</b> The syscheck response is displayed. Verify all components are “OK” on the mate ELAP</p>	<pre>Running modules in class disk... OK Running modules in class hardware... OK Running modules in class net... OK Running modules in class proc... OK Running modules in class services... OK Running modules in class system... OK Running modules in class upgrade... OK LOG LOCATION: /var/TKLC/log/syscheck/fail_log</pre>

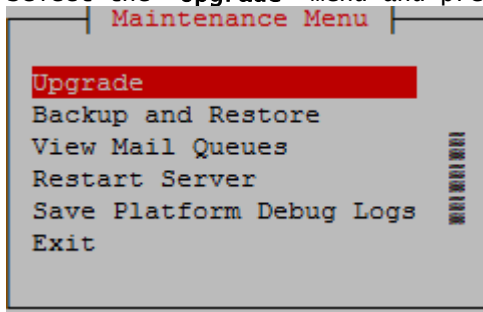
**This procedure is complete!**

**Procedure 21 ACCEPT THE UPGRADE**

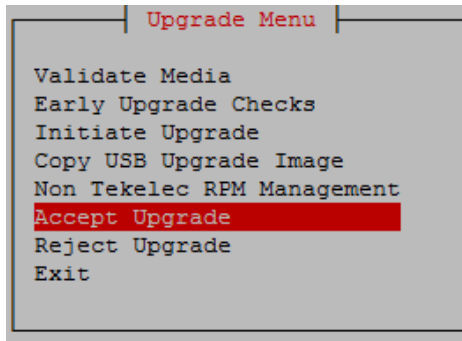
STEP #	A	B	This procedure will accept the upgrade. Estimated time: 5 minutes	
1.	<input type="checkbox"/>	<input type="checkbox"/>	<b>MPS X:</b> Log in to the server as the user “root”.	Login: <b>root</b> Password: <b>&lt;root_password&gt;</b>
2.	<input type="checkbox"/>	<input type="checkbox"/>	<b>MPS X:</b> Start platcfg utility.	<b># su - platcfg</b>
3.	<input type="checkbox"/>	<input type="checkbox"/>	<b>MPS X:</b> Accept Upgrade	On the “Main Menu”, select <b>Maintenance</b> and press <b>[ENTER]</b> .



Select the “Upgrade” menu and press [ENTER].

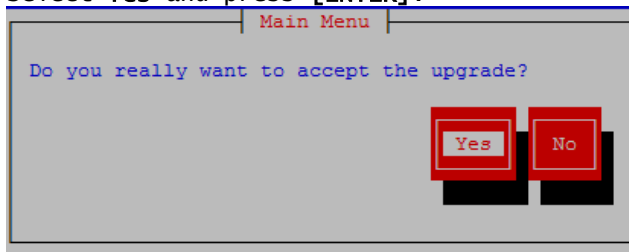


Select the “Accept Upgrade” menu and press [ENTER].



Note: The “Reject Upgrade” menu is also available after the ELAP installation. However, this option should not be used after the first installation of application. It should be used in subsequent upgrades to return to a previous application release.

Select **Yes** and press [ENTER].





			<pre>Called with options: --accept Loading Backout::BackoutType::RPM Accepting Upgrade Executing common accept tasks Setting POST_UPGRADE_ACTION to ACCEPT in upgrade info. Cleaning backout directory. Clearing Upgrade Accept/Reject alarm. Cleaning message from MOTD. Removing SWAP /dev/mapper/vgroot-plat_swap from fstab. Removed 1 swap entries from fstab</pre> <pre>-----+ Message +----- The accept has completed.  Press any key to continue... █</pre>
--	--	--	---

**This procedure is complete!**

## 2.7 SM Migration

### Procedure 22 SM CARDS - CABLE MIGRATION AND DB RELOAD

S T E P #	<p>This procedure initializes the SM cards to the RTDB databases on the E5APPB cards.</p> <p><b>Note: Estimated time of completion is 45 minutes.</b></p> <p>Check off (✓) each step as it is completed. Boxes have been provided for this purpose under each step number.</p> <p>Should this procedure fail, Contact Oracle technical services and ask for <b>MIGRATION ASSISTANCE</b>.</p>	
1. <input type="checkbox"/>	<p><b>Eagle: Replace DSM with SMXG</b></p> <p>Replace all the DSM cards with SMXG cards.</p>	
2. <input type="checkbox"/>	<p><b>Eagle STP connected to ELAP servers:</b> Login to the Eagle STP.</p>	<pre>login:uid=&lt;Eagle_STP_username&gt; password: &lt;Eagle_STP_username_password&gt;</pre> <p>Note. Password is not displayed.</p>
3. <input type="checkbox"/>	<p><b>Eagle STP connected to ELAP servers:</b> Change IP link for both A and B port for the new SMxG card.</p> <p><b>Note:</b> This step should be done for all new SMxG cards, where xxxx is the location of a SM card.</p>	<pre>inh-card:loc=XXXX chg-ip-lnk:auto=yes:port=a:loc=XXXX chg-ip-lnk:auto=yes:port=b:loc=XXXX alw-card:loc=XXXX</pre> <p>(where xxxx is the location of a replaced SM card)</p>

<p>4. <input type="checkbox"/></p>	<p><b>Eagle STP connected to ELAP servers:</b> Issue the command to display card status.</p> <p>Repeat this step until the SM cards have been reloaded but wait until the cards go IS-NR before modifying IP link of another card.</p>	<pre> rept-stat-card:loc=XXXX (Where XXXX is the location of a replaced SM card in step [3])  tekelecstp 02-02-12 22:25:24 EST EAGLE5 44.0.0-64.30.0 CARD VERSION TYPE GPL PST SST AST 1101 036-055-018 DSM SCCPHC IS-NR Active ----- ALARM STATUS = * 0021 Clock A for card failed, Clock B normal BLIXP GPL version = 134-055-000 IMT BUS A = Conn IMT BUS B = Conn CURRENT TEMPERATURE = 36C ( 97F) PEAK TEMPERATURE: = 38C (101F) [02-02-11 23:00] SCCP % OCCUP = 0% SCCP SM DATA TYPE = ELAP  Command Completed. ;                     </pre>
<p>5. <input type="checkbox"/></p>	<p><b>Eagle STP connected to ELAP servers:</b> Change IP link for the rest of SM cards.</p>	<p>Repeat steps [3] and [4] for the rest of SM cards which were replaced for DSM cards.</p>
<p>6. <input type="checkbox"/></p>	<p><b>Eagle STP connected to ELAP servers:</b> Verify no other RTDB reload alarms are present on the Eagle.</p>	<pre> rept-stat-trb1                     </pre>
<p>7. <input type="checkbox"/></p>	<p><b>Eagle STP connected to ELAP servers:</b> Response to trouble command is displayed.</p> <p>Output can vary depending of EAGLE STP status.</p>	<pre> cdsitu 13-02-11 15:32:46 EDT EAGLE5 44.0.0-64.30.0 Searching devices for alarms... ;  cdsitu 13-02-11 15:32:46 EDT EAGLE5 44.0.0-64.30.0 SEQN UAM AL DEVICE ELEMENT TROUBLE TEXT 7721.0048 * TERMINAL 1 Terminal failed 9492.0048I * TERMINAL 2 Terminal failed 5088.0002 * GPL SYSTEM BPDPCM Card is not running approved GPL * 0100.0444 * CARD 1108 VSCCP RTDB database is inconsistent 0100.0448 * CARD 1108 VSCCP RTDB database incoherent ** 0100.0451 ** CARD 1108 VSCCP RTDB reload required Command Completed. ;                     </pre>
<p>8. <input type="checkbox"/></p>	<p><b>Eagle STP connected to ELAP servers:</b> Verify Databases</p> <p>Output is displayed</p> <p>Verify the Current Database levels to the level of the database restored on the E5APPB</p>	<pre> rept-stat-db:display=all:db=mps Command Accepted - Processing  cdsitu 13-02-11 15:56:50 EDT EAGLE5 44.0.0-64.30.0 rept-stat-db:display=all:db=mps Command entered at terminal #14. ;  cdsitu 13-02-11 15:56:50 EDT EAGLE5 44.0.0-64.30.0 ELAP A ( STDBY ) C BIRTHDATE LEVEL EXCEPTION ----- PDB 13-01-16 13:04:04 2013160                     </pre>

	<p>The new database level on E5APPB can be found using the GUI RTBD→View RTDB Status.</p>	<pre> RTDB          Y  13-01-16 13:04:04      2013160      - RTDB-EAGLE    13-01-16 13:07:34      2013160      -                  ELAP B ( ACTV )                 C  BIRTHDATE          LEVEL          EXCEPTION ----- PDB           13-01-16 13:04:04      2013160      - RTDB          Y  13-01-16 13:04:04      2013160      - RTDB-EAGLE    13-01-16 13:07:34      2013160      -  CARD/APPL  LOC  C  EAGLE RTDB REPORT                 BIRTHDATE          LEVEL          EXCEPTI                 ON    IN-SRVC ----- VSCCP      1103 Y  13-01-16 13:07:34      2013160      -                 26d 2h 21m VSCCP      1105 Y  13-01-16 13:07:34      2013160      -                 26d 2h 22m                     </pre>
<p>9. <input type="checkbox"/></p>	<p><b>Eagle STP connected to ELAP servers:</b> Issue the command to display SCCP status.</p>	<p style="text-align: center;"><b>rept-stat-sccp</b></p>
<p>10. <input type="checkbox"/></p>	<p><b>Eagle STP connected to ELAP servers:</b> Response to SCCP status command is displayed.</p> <p>Note card location of all SM cards:</p> <p>SM _____</p> <p>SM _____</p> <p>SM _____</p> <p>SM _____</p> <p>SM _____</p>	<pre> tekelecstp xx-03-09 19:47:19 EST Re1 XX.X.X SCCP SUBSYSTEM REPORT IS-NR          Active ----- SCCP Cards Configured= 4  Cards IS-NR= 4  Capacity Threshold = 60% CARD  VERSION          PST          SST          AST          MSU ----- NR      1103          XXX-XXX-XXX  IS- Active  DB_DIFF          29%          4% NR      1105          XXX-XXX-XXX  IS- Active  DB_DIFF          33%          5% NR      1111          XXX-XXX-XXX  IS- Active  DB_DIFF          39%          6% ----- SCCP Service Average MSU Capacity = 33%  Average CPU Capacity = 5% Command Completed. ;                     </pre>
<p>11. <input type="checkbox"/></p>	<p><b>Eagle STP connected to ELAP servers:</b> Issue the initialize card command for 1 SM card.</p> <p><b>Note:</b> This step should be done for 1 SM card, where xxxx is the location of a SM card.</p>	<p style="text-align: center;"><b>init-card:loc=XXXX</b></p> <p>(where XXXX is the location of a SM card recorded in step [10])</p>
<p>12. <input type="checkbox"/></p>	<p><b>Eagle STP connected to ELAP servers:</b> Response to the initialize command is displayed.</p>	<pre> tekelecstp YY-MM-DD hh:mm:ss EST PPP XX.x.x-YY.y.y * 0261.0013 * CARD XXXX Card is isolated from the system ; tekelecstp YY-MM-DD hh:mm:ss EST PPP XX.x.x-YY.y.y 5038.0014 CARD XXXX Card is present ;                     </pre>
<p>13. <input type="checkbox"/></p>	<p><b>Eagle STP connected to ELAP servers:</b> Monitor the</p>	<p>Repeat steps [6] to [10] as necessary to monitor the progress of the SM card being reinitialized and until it</p>

	<p>progress of SM card being reinitialized</p>	<p>is in normal state (IS-NR).</p>
<p>14. <input type="checkbox"/></p>	<p><b>Eagle STP connected to ELAP servers:</b> Issue the initialize card command for the rest of SM cards.</p>	<p>Repeat steps [11] to [13] for the rest of SMxG cards in 4 batches (booting 1/4 of the cards at a single time).</p> <p>Note: This step should be done for each SMxG card, where xxxx is the location of each SM card from steps [10], repeat this step until all SM cards have been reloaded but wait until the cards go IS-NR before initializing other set of cards.</p>
<p>15. <input type="checkbox"/></p>	<p><b>Eagle STP connected to ELAP servers:</b> Verify MPS Database</p> <p>Output is displayed.</p> <p>Verify the Current Database levels on SM cards matches with the level of the database restored on the E5APPB.</p> <p>The new database level on E5APPB can be found using the GUI RTBD→View RTDB Status.</p>	<pre>rept-stat-db:display=all:db=mps Command Accepted - Processing cdsitu 13-02-11 15:56:50 EDT EAGLE5 44.0.0-64.30.0 rept-stat-db:display=all:db=mps Command entered at terminal #14. ;  cdsitu 13-02-11 15:56:50 EDT EAGLE5 44.0.0-64.30.0 ELAP A ( STDBY )   C  BIRTHDATE          LEVEL          EXCEPTION ----- PDB          13-01-16 13:04:04      18918      - RTDB         Y 13-01-16 13:04:04      18918      - RTDB-EAGLE   13-01-16 13:07:34      18918      -  ELAP B ( ACTV )   C  BIRTHDATE          LEVEL          EXCEPTION ----- PDB          13-01-16 13:04:04      18918      - RTDB         Y 13-01-16 13:04:04      18918      - RTDB-EAGLE   13-01-16 13:07:34      18918      -  EAGLE RTDB REPORT CARD/APPL  LOC  C  BIRTHDATE  REPORT  LEVEL  EXCEPTI ----- VSCCP     1103 Y 13-01-16 13:07:34 18918 -            26d 2h 21m VSCCP     1105 Y 13-01-16 13:07:34 18918 -            26d 2h 22m ; </pre>
<p>16. <input type="checkbox"/></p>	<p><b>Eagle STP connected to ELAP servers:</b> Issue the command to display SCCP status.</p>	<pre>rept-stat-sccp </pre>
<p>17. <input type="checkbox"/></p>	<p><b>Eagle STP connected to ELAP servers:</b> Response to SCCP status command is displayed.</p>	<pre>tekelecstp xx-03-09 19:47:19 EST Re1 xx.X.X SCCP SUBSYSTEM REPORT IS-NR Active ----- SCCP Cards Configured= 4 Cards IS-NR= 4 Capacity Threshold = 60% CARD  VERSION  PST  SST  AST  MSU  USAGE  CPU  USAGE ----- 1103  XXX-XXX-XXX IS-NR Active ----- 29% 4% 1105  XXX-XXX-XXX IS-NR Active ----- 33% 5% 1111  XXX-XXX-XXX IS-NR Active ----- 39% 6% ----- SCCP Service Average MSU Capacity = 33% Average CPU Capacity = 5% Command Completed. ; </pre>

<p>18. <input type="checkbox"/></p>	<p><b>Eagle STP connected to ELAP servers:</b> Verify no other RTDB reload alarms are present on the Eagle.</p>	<p style="text-align: center;"><b>rept-stat-trb1</b></p>
<p>19. <input type="checkbox"/></p>	<p><b>Eagle STP connected to ELAP servers:</b> Response to trouble command is displayed.  Output can vary depending of EAGLE STP status.</p>	<pre> cdsitu 13-02-11 15:32:46 EDT EAGLE5 44.0.0-64.30.0 Searching devices for alarms... ;  cdsitu 13-02-11 15:32:46 EDT EAGLE5 44.0.0-64.30.0 SEQN UAM AL DEVICE ELEMENT TROUBLE TEXT 7721.0048 * TERMINAL 1 Terminal failed 9492.0048I * TERMINAL 2 Terminal failed 5088.0002 * GPL SYSTEM BPDCM Card is not running approved GPL Command Completed. ;                     </pre>

**This procedure is complete!**

## APPENDIX A. ISO IMAGE COPY FROM USB MEDIA

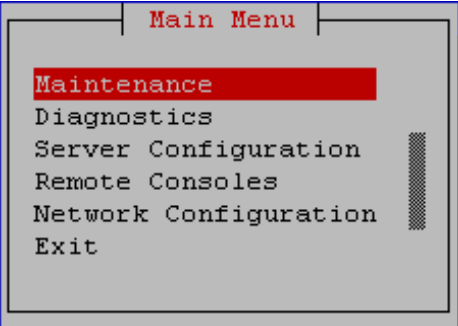
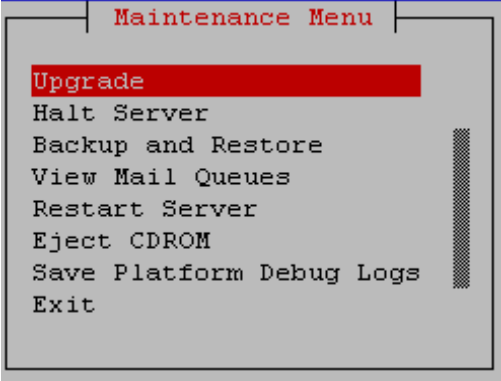
**Assumption: The USB media contains the desired ELAP ISO.**

<b>S T E P #</b>	<p>This procedure provides instructions to copy an ISO image from an USB media.</p> <p>Check off (✓) each step as it is completed. Boxes have been provided for this purpose under each step number.</p> <p>IF THIS PROCEDURE FAILS, CONTACT ORACLE TECHNICAL SERVICES AND ASK FOR UPGRADE ASSISTANCE.</p>	
1. <input type="checkbox"/>	<b>MPS X:</b> Insert USB.	Insert media in USB drive
2. <input type="checkbox"/>	<b>MPS X:</b> Log in to the server as the “admusr” user.	<pre>[hostname] consolelogin: admusr password: &lt;admusr_password&gt;</pre>
3. <input type="checkbox"/>	<b>MPS X:</b> Run syscheck to make sure there is no error.	<p>Execute the following command:</p> <pre># syscheck</pre> <p>The output should look like:</p> <pre>[root@hostname ~]# syscheck Running modules in class proc...      OK Running modules in class services...  OK Running modules in class system...    OK Running modules in class disk...      OK Running modules in class hardware...  OK Running modules in class net...       OK LOG LOCATION: /var/TKLC/log/syscheck/fail_log</pre>
4. <input type="checkbox"/>	<b>MPS X:</b> Verify ISO image doesn't already exist.	<p>Execute the following command to perform directory listing:</p> <pre># ls -al /var/TKLC/upgrade</pre> <p>The output should look like:</p> <pre>[root@hostname ~]# ls -al /var/TKLC/upgrade total 16 dr-xr-xr-x  2 root root 4096 Oct 22 16:31 . dr-xr-xr-x 21 root root 4096 Oct 18 13:40 ..</pre> <p>If an ISO image exists, remove it by executing the following command:</p> <pre># rm -f /var/TKLC/upgrade/&lt;ISO image&gt;</pre>
5. <input type="checkbox"/>	<b>MPS X:</b> Delete unwanted ISOs from USB media.	<p>Execute the following command to create a directory to mount the USB media:</p> <pre># sudo mkdir -p /mnt/usb</pre> <p>Execute the following command to get the USB drive name:</p> <pre># sudo fdisk -l  grep FAT</pre> <p>The output should look like:</p> <pre>/dev/sdc1 *          1          812          831472        6 FAT16</pre> <p>Execute the following command to mount the USB media using the USB drive name from the output above:</p> <pre># sudo mount /dev/sdc1 /mnt/usb</pre> <p>Execute the following command to perform directory listing and verify the file name format is as expected:</p> <pre># sudo ls -al /mnt/usb</pre> <p>The output should look like:</p>

		<pre>[root@hostname ~]# # ls -al /mnt/usb total 629400 dr-xr-xr-x  2 root root    4096 Oct 16 13:33 . dr-xr-xr-x 22 root root    4096 Oct 16 13:55 .. -rw-r--r--  1 root root 643852288 Oct 15 15:37 872-2558-101-10.0.0_100.1.0-ELAP-x86_64.iso</pre> <p>Only one ISO file should be listed, if additional files are listed, execute the following command to remove unwanted ELAP ISOs:</p> <pre># sudo rm -f /mnt/usb/&lt;ISO_NAME&gt;.iso</pre> <p>For e.g.,</p> <pre># sudo rm -f /mnt/usb/872-2558-101-10.0.0_100.1.0-ELAP-x86_64.iso</pre> <p>Execute the following command to unmount the USB media:</p> <pre># sudo umount /mnt/usb</pre>
6.	<b>MPS X:</b> Verify space exists for ISO.	<p>Execute the following command to verify the available disk space:</p> <pre># df -h /var/TKLC</pre> <p>The output should look like:</p> <pre>[root@hostname ~]# df -h /var/TKLC Filesystem      Size  Used Avail Use% Mounted on /dev/md8         4.0G   89M  3.7G   3% /var/TKLC</pre> <p>Verify that there is at least 620M in the Avail column. If not, clean up files until there is space available.</p> <p><b>CAUTION:</b> Make sure you know what files you can remove safely before cleaning up. It is recommended that you only clean up files in the /var/TKLC/upgrade directory as this is a platform owned directory that should only contain ISO images. This directory should not be expected to contain images for any length of time as they can get purged. Contact Technical Services beforehand if removing files other than the /var/TKLC/upgrade directory as removing files is dangerous.</p>
7.	<b>MPS X:</b> Copy iso from mounted path to the destination path.	<p>Execute the following command to copy ISO:</p> <pre>\$ sudo cp /mnt/usb/&lt;xyz.iso&gt; /var/TKLC/upgrade/</pre>
8.	<b>MPS X:</b> Verify ISO image exists.	<p>Execute the following command to perform directory listing:</p> <pre># ls -al /var/TKLC/upgrade</pre> <p>The output should look like:</p> <pre>[root@hostname ~]# ls -al /var/TKLC/upgrade total 16 dr-xr-xr-x  2 root root 4096 Oct 22 16:31 . dr-xr-xr-x 21 root root 4096 Oct 18 13:40 .. -rw-r--r--  1 root root 643852288 Oct 15 15:37 872-2558-101-10.0.0_100.1.0-ELAP-x86_64.iso</pre> <p>Repeat this procedure from step 5 if ELAP ISO file is not as expected.</p>
9.	<b>MPS X:</b> Unmount media and Logout from server.	<p>Execute the following command to unmount the USB media once iso copy is complete:</p> <pre>\$ sudo umount /mnt/usb</pre> <p>Logout from the server by executing the following command:</p> <pre># logout</pre>
10.	<b>MPS X:</b> Remove USB media.	Remove media from USB drive.

**This procedure is complete!**

## APPENDIX B. VALIDATE ISO IMAGE

<p><b>S</b> <b>T</b> <b>E</b> <b>P</b> <b>#</b></p>	<p>This procedure provides instructions to copy an ISO image from an USB media.</p> <p>Check off (✓) each step as it is completed. Boxes have been provided for this purpose under each step number.</p> <p>IF THIS PROCEDURE FAILS, CONTACT ORACLE TECHNICAL SERVICES AND ASK FOR UPGRADE ASSISTANCE.</p>	
<p>1. <input type="checkbox"/></p>	<p><b>MPS X:</b> Log in to the server as the “root” user.</p>	<p><b>[hostname] consolelogin: root</b> <b>password: password</b></p>
<p>2. <input type="checkbox"/></p>	<p><b>MPS X:</b> Start platcfg utility by logging in as user “platcfg”.</p>	<p>Execute the following command to change the user: <b># su - platcfg</b></p>
<p>3. <input type="checkbox"/></p>	<p><b>MPS X:</b> Select the Maintenance submenu.</p>	<p>On the Main Menu of the Platform Configuration Utility, select <b>Maintenance</b> and press <b>[ENTER]</b>.</p> 
<p>4. <input type="checkbox"/></p>	<p><b>MPS X:</b> Select the Upgrade submenu.</p>	<p>Select the <b>Upgrade menu</b> and press <b>[ENTER]</b>.</p> 
<p>5. <input type="checkbox"/></p>	<p><b>MPS X:</b> Select Validate Media submenu.</p>	<p>Select the <b>Validate Media menu</b> and press <b>[ENTER]</b>.</p>





### APPENDIX C. DISCONNECT NPAC FROM LSMS

<b>S T E P #</b>	This procedure disconnects NPAC from E5APPB LSMS. Estimated time: 5 minutes	
1. <input type="checkbox"/>	<b>LSMS Active server:</b> Log in to the server as the user "lsmsadm".	Login: <code>lsmsadm</code> Password: <code>&lt;lsmsadm_password&gt;</code>
2. <input type="checkbox"/>	<b>LSMS Active server:</b> Stop all connected NPAC regions	Execute the following command to list the active NPAC regions <pre> \$ dbnames -n all -a Canada CanadaDB MidAtlantic MidAtlanticDB Midwest MidwestDB Northeast NortheastDB Southeast SoutheastDB Southwest SouthwestDB WestCoast WestCoastDB Western WesternDB                 </pre> Note: The above output shall vary depending on LSMS configuration.  Execute the following command to stop an NPAC region. <pre> \$ lsms stop &lt;region name&gt;                 </pre> Checking if npacagent is running....Yes.  Stopping npacagent.... OK.  npacagent stopped: Wed Jan 2 05:52:42 2014  Command complete.  Execute the above command for all active regions.

**This procedure is complete!**

## APPENDIX D. CONNECT NPAC TO LSMS

<b>S T E P #</b>	This procedure connects NPAC to E5APPB LSMS. Estimated time: 5 minutes	
1. <input type="checkbox"/>	<b>LSMS Active server:</b> Log in to the server as the user "lsmsadm".	Login: <code>lsmsadm</code> Password: <code>&lt;lsmsadm_password&gt;</code>
2. <input type="checkbox"/>	<b>LSMS Active server:</b> Start all NPAC regions	Execute the following command to list the NPAC regions <pre>\$ dbnames -n all -a Canada CanadaDB MidAtlantic MidAtlanticDB Midwest MidwestDB Northeast NortheastDB Southeast SoutheastDB Southwest SouthwestDB WestCoast WestCoastDB Western WesternDB Note: The above output shall vary depending on LSMS configuration.</pre> Execute the following command to start an NPAC region. <pre>\$ lsms start &lt;region name&gt;</pre> <pre>Checking if npacagent is already running....No Starting npacagent.... Verifying....OK. npacagent started: Thu Jul 13 05:18:35 2017  Command complete. Execute the above command for all NPAC regions.</pre>

**This procedure is complete!**

## APPENDIX E. MY ORACLE SUPPORT



**CAUTION:** Use only the guide downloaded from the Oracle Technology Network (OTN) (<http://www.oracle.com/technetwork/indexes/documentation/oracle-comms-tekelec-2136003.html>).

Before upgrading your system, access the **My Oracle Support** web portal (<https://support.oracle.com>) 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. **If installing for an Oracle customer on a customer site, obtain the customer's Support Identifier (SI) before requesting assistance.**

**Web portal (preferred option):** My Oracle Support (MOS) (<https://support.oracle.com/>)

**Phone:** Contact your local Oracle Global Customer Support Center (<http://www.oracle.com/support/contact.html>)

Make the following selections on the Support telephone menu:

1. Select '2' for New Service Request
2. Select '3' for Hardware, Networking and Solaris Operating System Support
3. Select '1' for Technical Issues and when talking to the agent, please indicate that you are an existing Tekelec customer