

Oracle® Communications
EAGLE LNP Application Processor
System Health Check Guide
Release 10.1 and later
E91143 Revision 1

October 2017

ORACLE®

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Refer to Appendix 5 for instructions on accessing My Oracle Support.

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1 Introduction

1.1 Purpose and Scope

This document describes the Oracle recommended methods and procedures to evaluate the health of the setup. This document is intended for use for systems running on ELAP release 10.1 or higher.

This document is intended for EAGLE engineering, integration, documentation, technical services, and any craft person who has completed ELAP training and is familiar with ELAP interface.

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

1.2 Acronyms

This section lists terms and acronyms specific to this document.

Table 1. Acronyms

Acronym/Term	Definition
OC-LSMS	Oracle Communication Local Service Management System
MPS	Multi-Purpose Server
OC-ELAP	Oracle Communications EAGLE LNP Application Processor
RTDB	Realtime Database
TPD	Tekelec Platform Distribution

1.3 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 1A for every command within the step that the technician should check to keep track of the progress of the procedure

Each step has a checkbox 1B for every command within the step that the technician should check to keep track of the progress of the procedure

The title box describes the operations to be performed during that +step

Each command that the technician is to enter is in 9 point Lucida Consile font

Output displayed only for reference actual output may differ

1A <input type="checkbox"/>	1B <input type="checkbox"/>	MPS 1A: Verify date	\$ date Mon Jul 17 11:48:24 EDT 2017
--------------------------------	--------------------------------	------------------------	---

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

2 Health Check Overview

An ELAP system is a pair of MPS servers (an A and a B node). One MPS server running ELAP is referred to as ELAP A, while the mate MPS server running ELAP is referred to as ELAP B. The two MPS servers running ELAP at each EAGLE location have exactly the same software installed. The main functions of ELAP are:

- a. Accept and store data provisioned by the customer from LSMS over the provisioning network.
- b. Update and reload provisioning data to the EAGLE Service Module cards.

Therefore, a mated pair of ELAP systems consists of an A and a B node. This document describes how to conduct the health check of the ELAP software on one system, that system consisting of two MPS servers (A and B).

3 Pre-Health Check Requirements

- User shall have the access to the server on which health check is to be performed via Securelink, VPN and/or via Modem or a PC with null modem cable for connection to serial port.
- User shall be able to log into the web GUI, such as a PC with Internet Explorer, or via lynx text GUI.
- User shall have the terminal capture enabled to allow review of the output.
- User shall have the passwords for the following users as mentioned in table below:

User	Password
elapconfig	
elapdev	
admusr	

4 ELAP Health Check

4.1 System Status

These steps can be performed on any of the ELAP configurations as mentioned in section 2. For mated pairs, commands should be run on both of the servers.

S T E P #	Steps To Be Completed	Expected output/command to be executed
1. <input type="checkbox"/>	MPS X: Login as admusr	login: admusr password: <admusr_password>
2. <input type="checkbox"/>	MPS X: Record the TPD version	\$ getPlatRev 7.4.0.0.0_88.37.0
3. <input type="checkbox"/>	MPS X: Verify that the time difference between servers is 30 seconds or less.	\$ sudo date ; sudo clock Mon Jul 17 11:48:24 EDT 2017 Mon Jul 17 2017 11:48:25 AM EDT -0.031459 seconds
4. <input type="checkbox"/>	MPS X: Verify that the ntp server is in sync Delay should be less than 30 seconds	\$ ntpq -p remote refid st t when poll reach delay offset jitter =====
5. <input type="checkbox"/>	MPS X: Record the last reboot occurred	\$ uptime 04:54:34 up 7 days, 4:31, 2 users, load average: 0.60, 0.53, 0.46 Note: A server reboot is recommended after every 180 days.
6. <input type="checkbox"/>	MPS X: Record the ELAP release number from rpm query.	\$ rpm -qi TKLCelap Name : TKLCelap Relocations: (not relocatable) Version : 5.0.34 Vendor: Tekelec Release : 10.1.1.0.0_101.11.0 Build Date: Tue 30 May 2017 04:55:43 PM EDT Install Date: Sun 09 Jul 2017 12:22:00 AM EDT Build Host: coach-2.tekelec.com Group : Development/Build Source RPM: TKLCelap-5.0.34-10.1.1.0.0_101.11.0.src.rpm Size : 148893295 License: TEKELEC 2016 Signature : (none) Packager : <@tekelec.com>

		<p>URL : http://www.tekelec.com/</p> <p>Summary : Oracle Communications ELAP Package</p> <p>Description :</p> <p>This is the Oracle Communications EAGLE LNP Application Processor(ELAP) package.</p> <p>The package installs ELAP software. Eagle LNP Application Processor (ELAP) provides REALLY INCREDIBLE Database (RIDB). ELAP provides the LNP feature.</p>
<p>7. <input type="checkbox"/></p>	<p>MPS X: Verify system health check</p>	<pre>\$ sudo syscheck 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 Note: Incase one or more modules FAILED, rerun the command with verbose option like: \$ sudo syscheck -v Record the output and contact My Oracle Support.</pre>
<p>8. <input type="checkbox"/></p>	<p>MPS X: Verify all current banner header messages</p>	<pre>\$ manageBannerInfo -l</pre> <p>There are currently no BannerInfo messages for this side in the database.</p> <p>Note: Incase there are any alarms record those alarmsand contact My Oracle Support.</p>

<p>9. <input type="checkbox"/></p>	<p>MPS X: Retrieve alarm status from alarm manager.</p>	<pre>\$ alarmMgr --alarmStatus</pre> <p>Note: No output will be displayed if there are no alarms on the system. In case any output is observed record the output. Sample alarms are displayed below:</p> <pre>\$ alarmMgr --alarmStatus</pre> <pre>SEQ: 17272594 UPTIME: 14280330 BIRTH: 1356031430 TYPE: SET ALARM: TKSPLATMA1 tpdFanError 1.3.6.1.4.1.323.5.3.18.3.1.2.1</pre>
<p>10. <input type="checkbox"/></p>	<p>MPS X: Record the last lines of alarm log</p>	<pre>\$ tail -40 /var/TKLC/elap/logs/alarm.log</pre> <pre>2017-07-09 01:55:54 - ***** Beginning Alarm Log ***** 2017-07-09 01:55:54 - ELAP HSOPD S Critical Application 1 2017-07-09 01:55:55 - ELAP SysCheck S Major Platform 10000000 2017-07-09 01:55:55 - ELAP SysCheck S Minor Platform 800000 2017-07-09 01:56:15 - ELAP SysCheck S Minor Platform 8000 2017-07-09 01:56:55 - ELAP SysCheck C Major Platform 10000000 2017-07-09 01:57:15 - ELAP SysCheck C Minor Platform 800000 2017-07-09 01:57:15 - ELAP SysCheck C Minor Platform 8000 2017-07-09 06:00:08 - ELAP SysCheck S Minor Application 400</pre>
<p>11. <input type="checkbox"/></p>	<p>MPS X: Record the last lines of messages log</p>	<pre>\$ tail -40 /var/log/messages</pre> <pre>Jul 16 05:05:17 Floater-3 sudo: admusr : TTY=pts/0 ; PWD=/home/admusr ; USER=root ; COMMAND=/usr/TKLC/plat/bin/syscheck</pre>
<p>12. <input type="checkbox"/></p>	<p>MPS X: Verify the attributes of volume groups</p> <p>If the output does not contain the “logical volume” sections, contact My Oracle Support so that corrective procedures can be scheduled to be performed.</p>	<pre>\$ sudo vgdisplay -v</pre> <p>Using volume group(s) on command line.</p> <p>Finding all volume groups.</p> <pre>--- Volume group --- VG Name vgroot System ID Format lvm2 Metadata Areas 1 Metadata Sequence No 11 VG Access read/write VG Status resizable MAX LV 0</pre>

	<pre> Cur LV 10 Open LV 10 Max PV 0 Cur PV 1 Act PV 1 VG Size 421.72 GiB PE Size 32.00 MiB Total PE 13495 Alloc PE / Size 13495 / 421.72 GiB Free PE / Size 0 / 0 VG UUID bbQuIP-N9cX-YVuL-z0xM-NBr8-0dp9-lDn2dh --- Logical volume --- LV Path /dev/vgroot/plat_root LV Name plat_root VG Name vgroot LV UUID f1kOH1-s6uR-ysLF-Mntz-rqQx-xO2s-TIWBfF LV Write Access read/write LV Creation host, time localhost.localdomain, 2017-07-06 06:25:55 -0400 LV Status available # open 1 LV Size 1.00 GiB Current LE 32 Segments 1 Allocation inherit Read ahead sectors auto - currently set to 256 Block device 253:0 --- Logical volume --- LV Path /dev/vgroot/plat_swap LV Name plat_swap VG Name vgroot LV UUID eNEyUC-cPjb-QbTV-DBEy-bnel-2dDE-lJ2VEQ </pre>
--	--

	<pre> LV Write Access read/write LV Creation host, time localhost.localdomain, 2017-07-06 06:26:02 -0400 LV Status available # open 1 LV Size 1.97 GiB Current LE 63 Segments 1 Allocation inherit Read ahead sectors auto - currently set to 256 Block device 253:1 --- Logical volume --- LV Path /dev/vgroot/plat_var LV Name plat_var VG Name vgroot LV UUID 35bndK-qnKE-ivWF-GiRN-Lin0-LU95-IFA90F LV Write Access read/write LV Creation host, time localhost.localdomain, 2017-07-06 06:26:02 -0400 LV Status available # open 1 LV Size 1.00 GiB Current LE 32 Segments 1 Allocation inherit Read ahead sectors auto - currently set to 256 Block device 253:2 --- Logical volume --- LV Path /dev/vgroot/plat_usr LV Name plat_usr VG Name vgroot LV UUID 7RcNIIt-ZNq2-Qu4E-u8v4-KNot-VKEg-SnU2Jy </pre>
--	---

		<pre> LV Write Access read/write LV Creation host, time localhost.localdomain, 2017-07-06 06:26:03 -0400 LV Status available # open 1 LV Size 4.00 GiB Current LE 128 Segments 1 Allocation inherit Read ahead sectors auto - currently set to 256 Block device 253:3 --- Logical volume --- LV Path /dev/vgroot/plat_tmp LV Name plat_tmp VG Name vgroot LV UUID F0kpF2-m8Ot-5MX5-uHjA-Rx9i-8ecV-GrKx0C LV Write Access read/write LV Creation host, time localhost.localdomain, 2017-07-06 06:26:05 -0400 LV Status available # open 1 LV Size 1.00 GiB Current LE 32 Segments 1 Allocation inherit Read ahead sectors auto - currently set to 256 Block device 253:4 --- Logical volume --- LV Path /dev/vgroot/plat_var_tklc LV Name plat_var_tklc VG Name vgroot LV UUID m19HiK-aFdN-z5ca-5hxj-pPdo-6sOe-JaZPwl </pre>
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		<pre> LV Write Access read/write LV Creation host, time localhost.localdomain, 2017-07-06 06:26:05 -0400 LV Status available # open 1 LV Size 4.00 GiB Current LE 128 Segments 1 Allocation inherit Read ahead sectors auto - currently set to 256 Block device 253:5 --- Logical volume --- LV Path /dev/vgroot/elaproot LV Name elaproot VG Name vgroot LV UUID nPvjp8-33DY-nmCF-JgDh-ZT5i-6fC9-lpVIZD LV Write Access read/write LV Creation host, time Floater-3, 2017-07-09 00:18:35 -0400 LV Status available # open 1 LV Size 4.00 GiB Current LE 128 Segments 1 Allocation inherit Read ahead sectors auto - currently set to 256 Block device 253:6 --- Logical volume --- LV Path /dev/vgroot/logs LV Name logs VG Name vgroot LV UUID 5XmB7X-J5pa-hogf-Yrje-nBw9-1DJq-gUzx8c </pre>
--	--	--

	<pre> LV Write Access read/write LV Creation host, time Floater-3, 2017-07-09 00:18:36 -0400 LV Status available # open 1 LV Size 40.00 GiB Current LE 1280 Segments 1 Allocation inherit Read ahead sectors auto - currently set to 256 Block device 253:7 --- Logical volume --- LV Path /dev/vgroot/drbdmeta LV Name drbdmeta VG Name vgroot LV UUID F6b5aT-71C6-xZdF-gFFt-cLc7-MV7J-f9dy14 LV Write Access read/write LV Creation host, time Floater-3, 2017-07-09 00:18:40 -0400 LV Status available # open 1 LV Size 128.00 MiB Current LE 4 Segments 1 Allocation inherit Read ahead sectors auto - currently set to 256 Block device 253:8 --- Logical volume --- LV Path /dev/vgroot/free LV Name free VG Name vgroot LV UUID gc2k36-n4BR-7mv4-Dhoz-2nHy-TV0m-dNDTSr </pre>
--	--

	<pre> LV Write Access read/write LV Creation host, time Floater-3, 2017-07-09 00:18:40 -0400 LV Status available # open 1 LV Size 364.62 GiB Current LE 11668 Segments 1 Allocation inherit Read ahead sectors auto - currently set to 256 Block device 253:9 --- Physical volumes --- PV Name /dev/md3 PV UUID zpOxNw-1d08-TjEk-HYsA-Vemr-6QfL-MeJNdB PV Status allocatable Total PE / Free PE 13495 / 0 --- Volume group --- VG Name vgdrbd0 System ID Format lvm2 Metadata Areas 1 Metadata Sequence No 31 VG Access read/write VG Status resizable MAX LV 0 Cur LV 2 Open LV 2 Max PV 0 Cur PV 1 Act PV 1 VG Size 24.98 GiB PE Size 4.00 MiB </pre>
--	---

	<p>Total PE 6395</p> <p>Alloc PE / Size 2176 / 8.50 GiB</p> <p>Free PE / Size 4219 / 16.48 GiB</p> <p>VG UUID YrVNMc-HE9D-T2Uf-jk1P-OZFF-AGT8-ZUz1cE</p> <p>--- Logical volume ---</p> <p>LV Path /dev/vgdrbd0/mysql</p> <p>LV Name mysql</p> <p>VG Name vgdrbd0</p> <p>LV UUID JUKTmb-2aKy-5jFP-fxEI-v1O3-8e6N-jNWeOS</p> <p>LV Write Access read/write</p> <p>LV Creation host, time Floater-3, 2017-07-09 00:21:55 -0400</p> <p>LV Status available</p> <p># open 1</p> <p>LV Size 6.00 GiB</p> <p>Current LE 1536</p> <p>Segments 1</p> <p>Allocation inherit</p> <p>Read ahead sectors auto</p> <p>- currently set to 256</p> <p>Block device 253:10</p> <p>--- Logical volume ---</p> <p>LV Path /dev/vgdrbd0/lnpdb</p> <p>LV Name lnpdb</p> <p>VG Name vgdrbd0</p> <p>LV UUID wqAHer-OGKO-kzcM-x3Dr-2HDF-9bcj-tTvGOV</p> <p>LV Write Access read/write</p> <p>LV Creation host, time Floater-3, 2017-07-09 00:21:55 -0400</p> <p>LV Status available</p> <p># open 1</p> <p>LV Size 2.50 GiB</p> <p>Current LE 640</p> <p>Segments 1</p>
--	---

		<pre> Allocation inherit Read ahead sectors auto - currently set to 256 Block device 253:11 --- Physical volumes --- PV Name /dev/drbd0 PV UUID HeXD0i-m2aa-Ds3w-SaPd-hocO-0GWe-PyHYyG PV Status allocatable Total PE / Free PE 6395 / 4219 </pre>
13. <input type="checkbox"/>	<p>MPS X: Record the total amount of free and used physical and swap memory in the system.</p>	<pre> \$ free total used free shared buffers cached Mem: 8059508 4914216 3145292 17020 967576 1589512 -/+ buffers/cache: 2357128 5702380 Swap: 2064380 0 2064380 </pre>
14. <input type="checkbox"/>	<p>MPS X: Verify db filesystem use is less than 90%. Note any other filesystem at 80% or higher use. Output will vary for each server.</p>	<pre> \$ df -h Filesystem Size Used Avail Use% Mounted on /dev/mapper/vgroot-plat_root 976M 293M 633M 32% / tmpfs 3.9G 0 3.9G 0% /dev/shm /dev/md1 244M 49M 183M 22% /boot /dev/mapper/vgroot-plat_tmp 976M 1.9M 923M 1% /tmp /dev/mapper/vgroot-plat_usr 3.9G 2.0G 1.7G 55% /usr /dev/mapper/vgroot-plat_var 976M 248M 678M 27% /var /dev/mapper/vgroot-plat_var_tklc 3.9G 1.3G 2.4G 35% /var/TKLC /dev/mapper/vgroot-elaproot 3.9G 195M 3.5G 6% /usr/TKLC/elap /dev/mapper/vgroot-free 359G 71M 341G 1% /var/TKLC/elap/free /dev/mapper/vgroot-logs </pre>

		<pre> 40G 50M 38G 1% /var/TKLC/elap/logs /dev/sdc1 1.1G 1.1G 7.4M 100% /media/sdc1 /dev/mapper/vgdrbd0-mysql 6.0G 251M 5.4G 5% /var/TKLC/elap/drbd/mysql </pre>
15. <input type="checkbox"/>	<p>MPS X: Verify disk mirroring configuration and RAID status</p>	<pre> \$ cat /proc/mdstat Personalities : [raid1] md1 : active raid1 sdb3[1] sda3[0] 262080 blocks super 1.0 [2/2] [UU] md2 : active raid1 sda2[0] sdb2[1] 26198016 blocks super 1.1 [2/2] [UU] bitmap: 0/1 pages [0KB], 65536KB chunk md3 : active raid1 sda1[0] sdb1[1] 442224640 blocks super 1.1 [2/2] [UU] bitmap: 3/4 pages [12KB], 65536KB chunk unused devices: <none> </pre>
16. <input type="checkbox"/>	<p>MPS X: Record the hard drive and partition size</p>	<pre> \$ sudo fdisk -l /dev/sd[a-z] Disk /dev/sda: 480.1 GB, 480103981056 bytes 255 heads, 63 sectors/track, 58369 cylinders Units = cylinders of 16065 * 512 = 8225280 bytes Sector size (logical/physical): 512 bytes / 4096 bytes I/O size (minimum/optimal): 4096 bytes / 4096 bytes Disk identifier: 0x000e7573 Device Boot Start End Blocks Id System /dev/sda1 1 55071 442355712 fd Linux raid autodetect /dev/sda2 55071 58335 26214400 fd Linux raid autodetect /dev/sda3 * 58335 58368 262144 fd Linux raid autodetect Disk /dev/sdb: 480.1 GB, 480103981056 bytes 255 heads, 63 sectors/track, 58369 cylinders </pre>

		<p>Units = cylinders of 16065 * 512 = 8225280 bytes</p> <p>Sector size (logical/physical): 512 bytes / 4096 bytes</p> <p>I/O size (minimum/optimal): 4096 bytes / 4096 bytes</p> <p>Disk identifier: 0x000116f6</p> <table border="1"> <thead> <tr> <th>Device</th> <th>Boot</th> <th>Start</th> <th>End</th> <th>Blocks</th> <th>Id</th> <th>System</th> </tr> </thead> <tbody> <tr> <td>/dev/sdb1</td> <td></td> <td>1</td> <td>55071</td> <td>442355712</td> <td>fd</td> <td>Linux raid autodetect</td> </tr> <tr> <td>/dev/sdb2</td> <td></td> <td>55071</td> <td>58335</td> <td>26214400</td> <td>fd</td> <td>Linux raid autodetect</td> </tr> <tr> <td>/dev/sdb3</td> <td>*</td> <td>58335</td> <td>58368</td> <td>262144</td> <td>fd</td> <td>Linux raid autodetect</td> </tr> </tbody> </table> <p>Disk /dev/sdc: 2013 MB, 2013265920 bytes</p> <p>256 heads, 63 sectors/track, 243 cylinders</p> <p>Units = cylinders of 16128 * 512 = 8257536 bytes</p> <p>Sector size (logical/physical): 512 bytes / 512 bytes</p> <p>I/O size (minimum/optimal): 512 bytes / 512 bytes</p> <p>Disk identifier: 0x488965c1</p> <table border="1"> <thead> <tr> <th>Device</th> <th>Boot</th> <th>Start</th> <th>End</th> <th>Blocks</th> <th>Id</th> <th>System</th> </tr> </thead> <tbody> <tr> <td>/dev/sdc1</td> <td>*</td> <td>1</td> <td>133</td> <td>1072480+</td> <td>b</td> <td>W95 FAT32</td> </tr> </tbody> </table>	Device	Boot	Start	End	Blocks	Id	System	/dev/sdb1		1	55071	442355712	fd	Linux raid autodetect	/dev/sdb2		55071	58335	26214400	fd	Linux raid autodetect	/dev/sdb3	*	58335	58368	262144	fd	Linux raid autodetect	Device	Boot	Start	End	Blocks	Id	System	/dev/sdc1	*	1	133	1072480+	b	W95 FAT32
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/dev/sdc1	*	1	133	1072480+	b	W95 FAT32																																						
17. <input type="checkbox"/>	<p>MPS X: Verify smartctl output</p>	<pre>\$ sudo smartctl -A -l error /dev/sda smartctl 5.43 2012-06-30 r3573 [x86_64-linux-2.6.32-573.26.1.el6prere17.0.3.0.0_86.46.0.x86_64] (local build) Copyright (C) 2002-12 by Bruce Allen, http://smartmontools.sourceforge.net === START OF READ SMART DATA SECTION === SMART Attributes Data Structure revision number: 1 Vendor Specific SMART Attributes with Thresholds: ID# ATTRIBUTE_NAME FLAG VALUE WORST THRESH TYPE UPDATED WHEN_FAILED RAW_VALUE 5 Reallocated_Sector_Ct 0x0032 100 100 000 Old_age Always - 0 9 Power_On_Hours 0x0032 100 100 000 Old_age Always - 6936 12 Power_Cycle_Count 0x0032 100 100 000 Old_age Always - 24</pre>																																										

		170 Unknown_Attribute	0x0033	100	100	010	Pre-fail	Always
		- 0						
		171 Unknown_Attribute	0x0032	100	100	000	Old_age	Always
		- 0						
		172 Unknown_Attribute	0x0032	100	100	000	Old_age	Always
		- 0						
		174 Unknown_Attribute	0x0032	100	100	000	Old_age	Always
		- 20						
		175 Program_Fail_Count_Chip	0x0033	100	100	010	Pre-fail	Always
		- 180519371374						
		183 Runtime_Bad_Block	0x0032	100	100	000	Old_age	Always
		- 0						
		184 End-to-End_Error	0x0033	100	100	090	Pre-fail	Always
		- 0						
		187 Reported_Uncorrect	0x0032	100	100	000	Old_age	Always
		- 0						
		190 Airflow_Temperature_Cel	0x0022	081	071	000	Old_age	Always
		- 19 (Min/Max 13/32)						
		192 Power-Off_Retract_Count	0x0032	100	100	000	Old_age	Always
		- 20						
		194 Temperature_Celsius	0x0022	100	100	000	Old_age	Always
		- 30						
		197 Current_Pending_Sector	0x0032	100	100	000	Old_age	Always
		- 0						
		199 UDMA_CRC_Error_Count	0x003e	100	100	000	Old_age	Always
		- 0						
		225 Load_Cycle_Count	0x0032	100	100	000	Old_age	Always
		- 554362						
		226 Load-in_Time	0x0032	100	100	000	Old_age	Always
		- 1699						
		227 Torq-amp_Count	0x0032	100	100	000	Old_age	Always
		- 74						
		228 Power-off_Retract_Count	0x0032	100	100	000	Old_age	Always
		- 415883						
		232 Available_Reservd_Space	0x0033	100	100	010	Pre-fail	Always
		- 0						
		233 Media_Wearout_Indicator	0x0032	099	099	000	Old_age	Always
		- 0						
		234 Unknown_Attribute	0x0032	100	100	000	Old_age	Always
		- 0						

		<pre> 241 Total_LBAs_Written 0x0032 100 100 000 Old_age Always - 554362 242 Total_LBAs_Read 0x0032 100 100 000 Old_age Always - 1654705 SMART Error Log Version: 1 No Errors Logged Note: If any error is observed record the error and contact My Oracle Support.</pre>
18. <input type="checkbox"/>	MPS X: Start Disk Integrity Check	<pre> \$ sudo smartctl -t short /dev/sda smartctl 5.43 2012-06-30 r3573 [x86_64-linux-2.6.32- 642.15.1.el6prere17.4.0.0.0_88.37.0.x86_64] (local build) Copyright (C) 2002-12 by Bruce Allen, http://smartmontools.sourceforge.net === START OF OFFLINE IMMEDIATE AND SELF-TEST SECTION === Sending command: "Execute SMART Short self-test routine immediately in off-line mode". Drive command "Execute SMART Short self-test routine immediately in off-line mode" successful. Testing has begun. Please wait 1 minutes for test to complete. Test will complete after Thu Aug 17 03:49:25 2017 Use smartctl -X to abort test.</pre>
19. <input type="checkbox"/>	MPS X: Verify and record Disk Integrity Check results	<pre> \$ sleep 60; sudo smartctl -l selftest /dev/sda smartctl 5.43 2012-06-30 r3573 [x86_64-linux-2.6.32- 642.15.1.el6prere17.4.0.0.0_88.37.0.x86_64] (local build) Copyright (C) 2002-12 by Bruce Allen, http://smartmontools.sourceforge.net === START OF READ SMART DATA SECTION === SMART Self-test log structure revision number 1 Num Test_Description Status Remaining LifeTime(hours) LBA_of_first_error # 1 Vendor (0xd0) Completed without error 00% 48283 -</pre>

		<pre># 2 Vendor (0xf0) Completed without error 00% 48283 - # 3 Offline Completed without error 00% 48283 - # 4 Reserved (0x28) Completed without error 00% 47639 - # 5 Vendor (0x9a) Completed without error 00% 47421 - # 6 Reserved (0x2a) Completed without error 00% 19961 - # 7 Reserved (0x32) Completed without error 00% 19942 -</pre> <p>Note: Record if any error is reported and contact My Oracle Support.</p>
20. <input type="checkbox"/>	<p>MPS X: Record any hard disk sector error</p>	<pre>\$ sudo smartctl -a /dev/sda grep -i LBA 241 Total_LBAs_Written 0x0032 100 100 000 Old_age Always - 554366 242 Total_LBAs_Read 0x0032 100 100 000 Old_age Always - 1654885</pre> <pre>Num Test_Description Status Remaining LifeTime(hours) LBA_of_first_error SPAN MIN_LBA MAX_LBA CURRENT_TEST_STATUS</pre> <p>Note: No error should be observed in case any error is observed output will be like as mentioned below, record the output and contact My Oracle Support</p> <pre>40 51 a0 11 8e 57 e0 Error: UNC 160 sectors at LBA = 0x00578e11 = 538001 40 51 a8 11 8e 57 e0 Error: UNC 168 sectors at LBA = 0x00578e11 = 538001</pre> <pre>Num Test_Description Status Remaining LifeTime(hours) LBA_of_first_error</pre> <p>If UNC errors are found, execute following command: \$ sudo smartctl -a /dev/sda</p>
21. <input type="checkbox"/>	<p>MPS X: Disk integrity step on second HDD</p>	<p>Repeat steps from 17 to 20 for "/dev/sdb" disk drive.</p>
22. <input type="checkbox"/>	<p>MPS X: Repeat the procedure for mate ELAP</p>	<p>Repeat steps from 1 to 21 on mate ELAP server.</p>

4.2 System Configuration

These steps can be performed on ELAP system. For mated pairs, commands should be run on both of the servers. Assuming, MPS A is ACTIVE.

S T E P #	Steps To Be Completed	Expected output/command to be executed
1. <input type="checkbox"/>	MPS X: Login as elapdev	login: elapdev password: <elapdev_password>
2. <input type="checkbox"/>	MPS X: Record and verify the system configuration Select Option 1 from elapconfig menu.	<pre> \$ sudo su - elapconfig MPS Side A: hostname: ELAP21 hostid: f80a150f Platform Version: 7.0.3.0.0_86.46.0 Software Version: ELAP 10.1.0.0.0_101.10.0 Wed Jul 19 17:10:30 IST 2017 /-----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>

		<pre> ELAP A Provisioning Network IP Address = 10.248.15.21 ELAP B Provisioning Network IP Address = 10.248.15.22 Provisioning Network Netmask = 255.255.255.0 Provisioning Network Default Router = 10.248.15.1 Provisioning VIP = 10.248.15.23 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 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 = Asia/Kolkata Press return to continue... </pre>
<p>3. <input type="checkbox"/></p>	<p>MPS X: Record and verify the ntp configuration Select Option 7 from elapconfig menu and then Option 1 from ELAP Configure NTP Server Menu.</p>	<pre> \$ sudo su - elapconfig MPS Side A: hostname: ELAP21 hostid: f80a150f Platform Version: 7.0.3.0.0_86.46.0 Software Version: ELAP 10.1.0.0.0_101.10.0 Wed Jul 19 17:10:49 IST 2017 /-----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: 7 </pre>

		<pre> Verifying connectivity with mate... MPS Side A: hostname: ELAP21 hostid: f80a150f Platform Version: 7.0.3.0.0_86.46.0 Software Version: ELAP 10.1.0.0.0_101.10.0 Wed Jul 19 17:41:32 IST 2017 /-----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 10.248.13.17 Press return to continue... </pre>
4. <input type="checkbox"/>	MPS X: Exit from elapconfig menu	<pre> MPS Side A: hostname: ELAP21 hostid: f80a150f Platform Version: 7.0.3.0.0_86.46.0 Software Version: ELAP 10.1.0.0.0_101.10.0 Wed Jul 19 17:42:45 IST 2017 /-----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>

		<pre> MPS Side A: hostname: ELAP21 hostid: f80a150f Platform Version: 7.0.3.0.0_86.46.0 Software Version: ELAP 10.1.0.0.0_101.10.0 Wed Jul 19 17:42:54 IST 2017 /-----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 [elapdev@ELAP21 ~]\$ </pre>
5. <input type="checkbox"/>	<p>MPS X: Record /etc/hosts configuration</p>	<pre> \$ cat /etc/hosts # # Do not modify this file by hand. Refer to Tekelec Configuration # documentation. # # The order of the aliases in this file is significant # to the installation process. # 127.0.0.1 localhost localhost Floater-3-prova-bkup mate-provb-bkup 192.168.120.100 dsmm-a 192.168.121.100 dsmb-a 192.168.120.200 dsmm-b 192.168.121.200 dsmb-b 169.254.1.200 mate sync-b hasync-1a 169.254.1.100 sync-a hasync-1b 192.168.123.100 dsmvip-a 192.168.123.200 dsmvip-b 169.254.1.201 mate-ipdptp0 server_ppp0 169.254.1.202 mate-ppp client_ppp0 169.254.1.101 Floater-3-ipdptp0 server_ppp1 169.254.1.102 Floater-3-ppp client_ppp1 169.254.1.1 switch1A 169.254.1.2 switch1B 10.75.124.247 ntpserver1 10.75.141.107 Floater-3 prova-ip 10.75.141.108 mate-prov provb-ip Floater-4 10.75.141.109 prov-vip </pre>

<p>6. <input type="checkbox"/></p>	<p>MPS X: Verify and Record IPs configured on each interface</p>	<pre> \$ ifconfig -a bond0 Link encap:Ethernet HWaddr 00:00:17:0E:A6:9F inet6 addr: fe80::200:17ff:fe0e:a69f/64 Scope:Link UP BROADCAST RUNNING MASTER MULTICAST MTU:1500 Metric:1 RX packets:1929134 errors:0 dropped:0 overruns:0 frame:0 TX packets:19001949 errors:0 dropped:0 overruns:0 carrier:0 collisions:0 txqueuelen:0 RX bytes:144187191 (137.5 MiB) TX bytes:28087840989 (26.1 GiB) bond0.1 Link encap:Ethernet HWaddr 00:00:17:0E:A6:9F inet addr:169.254.1.100 Bcast:169.254.1.255 Mask:255.255.255.0 inet6 addr: fe80::200:17ff:fe0e:a69f/64 Scope:Link UP BROADCAST RUNNING MULTICAST MTU:1500 Metric:1 RX packets:1916373 errors:0 dropped:0 overruns:0 frame:0 TX packets:1366320 errors:0 dropped:0 overruns:0 carrier:0 collisions:0 txqueuelen:0 RX bytes:116466961 (111.0 MiB) TX bytes:26923908883 (25.0 GiB) bond0.3 Link encap:Ethernet HWaddr 00:00:17:0E:A6:9F inet addr:192.168.121.100 Bcast:192.168.121.255 Mask:255.255.255.0 inet6 addr: fe80::200:17ff:fe0e:a69f/64 Scope:Link UP BROADCAST RUNNING MULTICAST MTU:1500 Metric:1 RX packets:12253 errors:0 dropped:0 overruns:0 frame:0 TX packets:12246 errors:0 dropped:0 overruns:0 carrier:0 collisions:0 txqueuelen:0 RX bytes:685938 (669.8 KiB) TX bytes:681040 (665.0 KiB) bond1 Link encap:Ethernet HWaddr B2:69:BB:E5:71:36 BROADCAST MASTER MULTICAST MTU:1500 Metric:1 RX packets:0 errors:0 dropped:0 overruns:0 frame:0 TX packets:0 errors:0 dropped:0 overruns:0 carrier:0 collisions:0 txqueuelen:0 RX bytes:0 (0.0 b) TX bytes:0 (0.0 b) bond2 Link encap:Ethernet HWaddr 7E:7E:C9:9E:5E:FA BROADCAST MASTER MULTICAST MTU:1500 Metric:1 RX packets:0 errors:0 dropped:0 overruns:0 frame:0 TX packets:0 errors:0 dropped:0 overruns:0 carrier:0 collisions:0 txqueuelen:0 RX bytes:0 (0.0 b) TX bytes:0 (0.0 b) bond3 Link encap:Ethernet HWaddr EE:AC:C5:EC:28:BE BROADCAST MASTER MULTICAST MTU:1500 Metric:1 RX packets:0 errors:0 dropped:0 overruns:0 frame:0 TX packets:0 errors:0 dropped:0 overruns:0 carrier:0 collisions:0 txqueuelen:0 RX bytes:0 (0.0 b) TX bytes:0 (0.0 b) eth01 Link encap:Ethernet HWaddr 00:00:17:0E:A6:A1 inet addr:10.75.141.47 Bcast:10.75.141.127 Mask:255.255.255.128 inet6 addr: 2606:b400:605:b917:200:17ff:fe0e:a6a1/64 Scope:Global inet6 addr: fe80::200:17ff:fe0e:a6a1/64 Scope:Link UP BROADCAST RUNNING MULTICAST MTU:1500 Metric:1 </pre>
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		<pre> RX packets:8390156 errors:0 dropped:0 overruns:0 frame:0 TX packets:7898637 errors:0 dropped:0 overruns:0 carrier:0 collisions:0 txqueuelen:1000 RX bytes:1310423076 (1.2 GiB) TX bytes:724420390 (690.8 MiB) Memory:fdee0000-fdeffff eth02 Link encap:Ethernet HWaddr 00:00:17:0E:A6:A0 inet addr:192.168.120.100 Bcast:192.168.120.255 Mask:255.255.255.0 inet6 addr: fe80::200:17ff:fe0e:a6a0/64 Scope:Link UP BROADCAST RUNNING MULTICAST MTU:1500 Metric:1 RX packets:12250 errors:0 dropped:0 overruns:0 frame:0 TX packets:12255 errors:0 dropped:0 overruns:0 carrier:0 collisions:0 txqueuelen:1000 RX bytes:857300 (837.2 KiB) TX bytes:681418 (665.4 KiB) Memory:fde60000-fde7ffff eth03 Link encap:Ethernet HWaddr 00:00:17:0E:A6:9F UP BROADCAST RUNNING SLAVE MULTICAST MTU:1500 Metric:1 RX packets:1929134 errors:0 dropped:0 overruns:0 frame:0 TX packets:19001949 errors:0 dropped:0 overruns:0 carrier:0 collisions:0 txqueuelen:1000 RX bytes:144187191 (137.5 MiB) TX bytes:28087840989 (26.1 GiB) Memory:fdfe0000-fdffffff eth04 Link encap:Ethernet HWaddr 00:00:17:0E:A6:9F UP BROADCAST SLAVE MULTICAST MTU:1500 Metric:1 RX packets:0 errors:0 dropped:0 overruns:0 frame:0 TX packets:0 errors:0 dropped:0 overruns:0 carrier:0 collisions:0 txqueuelen:1000 RX bytes:0 (0.0 b) TX bytes:0 (0.0 b) Memory:fdf60000-fdf7ffff lo Link encap:Local Loopback inet addr:127.0.0.1 Mask:255.0.0.0 inet6 addr: ::1/128 Scope:Host UP LOOPBACK RUNNING MTU:65536 Metric:1 RX packets:1605595 errors:0 dropped:0 overruns:0 frame:0 TX packets:1605595 errors:0 dropped:0 overruns:0 carrier:0 collisions:0 txqueuelen:0 RX bytes:106538690 (101.6 MiB) TX bytes:106538690 (101.6 MiB) lo:1 Link encap:Local Loopback inet addr:192.168.123.100 Mask:255.255.255.0 UP LOOPBACK RUNNING MTU:65536 Metric:1 </pre>
7. <input type="checkbox"/>	MPS X: Record EuiDB settings	<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 "60" "EBDAD_LSMS_PORT" is set to "1030" "max_concurrent_user_logins" is set to "1" "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 "Floater-3" "ELAP_RELEASE" is set to "10.1.1" "ELAP_LOGGING_REMOTE_USERNAME" is set to "" </pre>

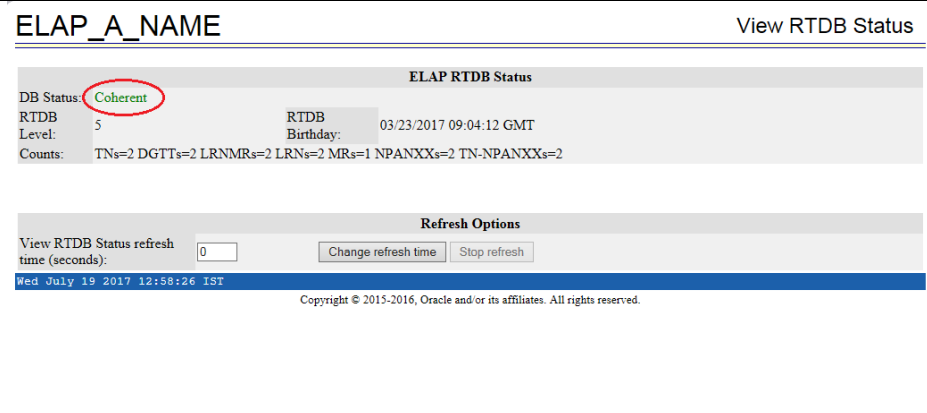
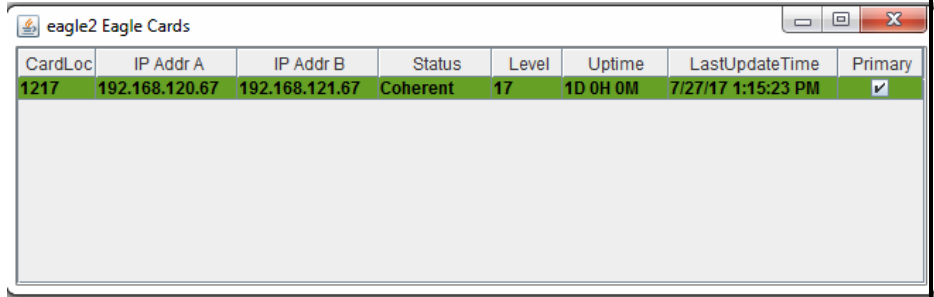
		<p>"ELAP_A_SYNCH_NETWORK_ADDRESS" is set to "169.254.1.100"</p> <p>"AUTO_RTDB_BKUP_FILEPATH" is set to "/var/TKLC/elap/free/backup/"</p> <p>"HTTP_ENABLED" is set to "No"</p> <p>"ELAP_A_PRETTY_NAME" is set to "ELAP_A_NAME"</p> <p>"AUTO_RTDB_BKUP_FILES_TO_MANTAIN" is set to "5"</p> <p>"session_idle_timeout" is set to "10"</p> <p>"ELAP_B_PROV_NETWORK_IP_ADDRESS" is set to "10.75.141.108"</p> <p>"EXINIT_DEBUG_LEVEL" is set to "OFF"</p> <p>"SNAPPER_ROLLBACK_INTERVAL" is set to "900"</p> <p>"EBDAD_DEBUG_LEVEL" is set to "OFF"</p> <p>"MAINT_DEBUG_NUM_LOGS" is set to "5"</p> <p>"RIDB_LV_PATH" is set to "/dev/vgdrbd0"</p> <p>"PROV_DEBUG_NUM_LOGS" is set to "5"</p> <p>"LNPTRANS_LOG_DAYS" is set to "7"</p> <p>"EXINIT_DEBUG_NUM_LOGS" is set to "5"</p> <p>"ELAP_A_HTTP_PORT" is set to "80"</p> <p>"EXINIT_ERROR_NUM_LOGS" is set to "5"</p> <p>"logon_msg" is set to "NOTICE: This is a private computer system. Unauthorized access or use may lead to prosecution."</p> <p>"ELAP_B_HTTPS_PORT" is set to "443"</p> <p>"ELAP_B_NAME" is set to "Floater-4"</p> <p>"AUTO_RTDB_BKUP_TIME" is set to "6:00"</p> <p>"EBDAD_GS_PORT" is set to "9692"</p> <p>"LNP_LRN_QTY" is set to "150000"</p> <p>"BACKUP_FILE_DIR" is set to "/var/TKLC/elap/free/backup"</p> <p>"ELAP_LOGGING_EXPORT" is set to "DISABLED"</p> <p>"AUTO_RTDB_BKUP_FREQUENCY" is set to "1"</p> <p>"PROVISIONING_NETWORK_NETMASK" is set to "255.255.255.0"</p> <p>"ELAP_LOGGING_REMOTE_SFTP_PATH" is set to ""</p> <p>"ELAP_B_SYNCH_NETWORK_ADDRESS" is set to "169.254.1.200"</p> <p>"ELAP_A_HTTPS_PORT" is set to "443"</p> <p>"ELAP_A_DSM_MAIN_NETWORK_ADDRESS" is set to "192.168.120.100"</p> <p>"ELAP_A_SUEXEC_HTTPS_PORT" is set to "8002"</p> <p>"ELAP_A_GS_BANNER_PORT" is set to "8473"</p> <p>"ELAP_B_DSM_BACKUP_NETWORK_ADDRESS" is set to "192.168.121.200"</p> <p>"MAINT_DEBUG_LEVEL" is set to "OFF"</p> <p>"DOWNLOAD_FILE_DIR" is set to "/var/TKLC/elap/free/backup"</p> <p>"euidb_version" is set to "3"</p> <p>"LNP_NPANXX_QTY" is set to "300000"</p> <p>"LSMS_PROVISIONING" is set to "OFF"</p> <p>"ELAP_LOGGING_TIME_FORMAT" is set to "UTC"</p> <p>"MAINT_ERROR_NUM_LOGS" is set to "5"</p> <p>"UI_IP_AUTHORIZATION_ENABLED" is set to "FALSE"</p> <p>"ELAP_LOGGING_REMOTE_IP_ADDRESS" is set to ""</p> <p>"AUTO_RTDB_BKUP_DELETE_OPTION" is set to "y"</p> <p>"HSOPD_ERROR_NUM_LOGS" is set to "5"</p> <p>"TRPD_ERROR_NUM_LOGS" is set to "5"</p> <p>"apache_403_error_message" is set to "NOTICE: This workstation is not authorized to access the GUI."</p> <p>"EBDAD_ERROR_NUM_LOGS" is set to "5"</p> <p>"max_account_inactivity" is set to "0"</p> <p>"HSOPD_DEBUG_LEVEL" is set to "OFF"</p> <p>"TRPD_DEBUG_NUM_LOGS" is set to "5"</p> <p>"ELAP_LOGGING_REMOTE_PASSWORD" is set to ""</p>
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		<p>"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 "ELAP_B_NAME" "HSOPD_LSMS_PROVISIONING_PORT" is set to "7483" "ELAP_RIDB_RELEASE" is set to "10.0.0" "SNAPPER_LOG_LEVEL" is set to "4" "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 "10.75.141.107" "CNF_QTY_THRESHOLD_PERC" is set to "90" "MATE_MPS_HTTP_PORT" is set to "80" "passwd_reuse_limit" is set to "12" "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 "10.75.141.109" "TRPD_DEBUG_LEVEL" is set to "OFF" "RTDB_AUDIT" is set to "ON" "LNP_TN_QTY" is set to "96000000" "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 "on" "LNP_MR_QTY" is set to "2000000" "RTDBA_NUM_LOGS" is set to "5" "PROVISIONING_NETWORK_DEFAULT_ROUTER" is set to "10.75.141.1" "RIDB_LV_NAME" is set to "lnpdb" "ELAP_A_SUEXEC_HTTP_PORT" is set to "8001" "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 "3" "BULK_DOWNLOAD" is set to "ON"</p>
8. <input type="checkbox"/>	<p>MPS X: Verify lnpdb logical volume</p>	<pre>\$ su - admusr \$ Password:<admusr_password> \$ sudo lvs LV VG Attr LSize Pool Origin Data% Meta% Move Log Cpy%/Sync Convert lnpdb vgdrbd0 owi-aos--k 2.50g mysql vgdrbd0 -wi-ao---k 6.00g rollbacksnap vgdrbd0 sri-a-s--- 2.50g lnpdb 0.00 drbdmeta vgroot -wi-ao---- 128.00m elaproot vgroot -wi-ao---- 4.00g free vgroot -wi-ao---- 196.97g logs vgroot -wi-ao---- 40.00g plat_root vgroot -wi-ao---- 1.00g</pre>

		<pre> plat_swap vgroot -wi-ao---- 1.97g plat_tmp vgroot -wi-ao---- 1.00g plat_usr vgroot -wi-ao---- 4.00g plat_var vgroot -wi-ao---- 1.00g plat_var_tklc vgroot -wi-ao---- 4.00g \$ exit </pre>
9. <input type="checkbox"/>	<p>MPS X: Verify operational status of ELAP software</p>	<pre> \$ service Elap status ~~ /etc/init.d/Elap status ~~ ----- process hsopd is running. process ebdad is running. process maint is running. process prov is running. process trpd is running. ----- ELAP application is running </pre>
10. <input type="checkbox"/>	<p>MPS X: Verify HA status</p>	<pre> \$ hastatus; ssh mate hastatus ACTIVE STANDBY </pre>
11. <input type="checkbox"/>	<p>MPS X: Record cron file configuration</p>	<pre> \$ cat /etc/cron.d/TS.EXAP # # Task Scheduler cron file for EXAP # # WARNING: This file is automatically generated. Do not manually edit it. # SHELL=/bin/bash MAILTO="" # BEGTYPE=ELAPLOGGING # ID=LOGSRMCP, Action="/usr/TKLC/elap/bin/removeCompressLogs", Sched="daily,1,00:01" 01 00 * * * elapdev /usr/TKLC/elap/bin/removeCompressLogs # ID=LOGSSFTP, Action="/usr/TKLC/elap/bin/transferLogsToRemote", Sched="hourly,1,00" 00 * * * * elapdev /usr/TKLC/elap/bin/transferLogsToRemote # ENDTYPE # BEGTYPE=AUTOBKPNOTCFD # ID=1, Action="/usr/TKLC/elap/bin/raiseAlarmAutoBkpNotConfigd.pl", Sched="minutely,5" */5 * * * * elapdev /usr/TKLC/elap/bin/raiseAlarmAutoBkpNotConfigd.pl # ENDTYPE # BEGTYPE=AUTO_RTDB_BCKP # ID=1, Action="/usr/TKLC/elap/bin/autoBackupRtdb.sh", Sched="daily,1,06:00" 00 06 * * * elapdev /usr/TKLC/elap/bin/autoBackupRtdb.sh # ENDTYPE # BEGTYPE=HTTPSDISABLE </pre>

		<pre># ID=1, Action="/usr/TKLC/elap/bin/raiseBnrMsgHttpsDisable.pl", Sched="hourly,12,00" 00 */12 * * * elapdev /usr/TKLC/elap/bin/raiseBnrMsgHttpsDisable.pl # ENDTYPE</pre>
12. <input type="checkbox"/>	<p>MPS X: Record /etc/passwd file</p>	<pre>\$ cat /etc/passwd root:x:0:0:root:/root:/bin/bash bin:x:1:1:bin:/bin:/sbin/nologin daemon:x:2:2:daemon:/sbin:/sbin/nologin adm:x:3:4:adm:/var/adm:/sbin/nologin lp:x:4:7:lp:/var/spool/lpd:/sbin/nologin sync:x:5:0:sync:/sbin:/bin/sync shutdown:x:6:0:shutdown:/sbin:/sbin/shutdown halt:x:7:0:halt:/sbin:/sbin/halt mail:x:8:12:mail:/var/spool/mail:/sbin/nologin uucp:x:10:14:uucp:/var/spool/uucp:/sbin/nologin operator:x:11:0:operator:/root:/sbin/nologin games:x:12:100:games:/usr/games:/sbin/nologin gopher:x:13:30:gopher:/var/gopher:/sbin/nologin ftp:x:14:50:FTP User:/var/ftp:/sbin/nologin nobody:x:99:99:Nobody:/:/sbin/nologin dbus:x:81:81:System message bus:/:/sbin/nologin admusr:x:4996:4996:Platform remote admin user:/home/admusr:/bin/bash rpc:x:32:32:Rpcbind Daemon:/var/cache/rpcbind:/sbin/nologin nscd:x:28:28:NSCD Daemon:/:/sbin/nologin vcsa:x:69:69:virtual console memory owner:/dev:/sbin/nologin apache:x:48:48:Apache:/var/www:/sbin/nologin sshd:x:74:74:Privilege-separated SSH:/var/empty/sshd:/sbin/nologin ntp:x:38:38:/:etc/ntp:/sbin/nologin saslauth:x:499:76:Saslauthd user:/var/empty/saslauth:/sbin/nologin postfix:x:89:89:/:var/spool/postfix:/sbin/nologin platcfg:x:5000:5000:Platform Configuration User:/home/platcfg:/usr/TKLC/plat/bin/platcfg tpdProvd:x:5010:5010:TPD Provisioning Daemon:/home/tpdProvd:/usr/bin/false syscheck:x:71:71:System Health Check User:/home/syscheck:/usr/TKLC/plat/bin/run_syscheck hids:x:4995:4995:HIDS admin user:/home/hids:/sbin/nologin dhcpd:x:177:177:DHCP server:/:/sbin/nologin nslcd:x:65:55:LDAP Client User:/:/sbin/nologin rtkit:x:498:450:RealtimeKit:/proc:/sbin/nologin rpcuser:x:29:29:RPC Service User:/var/lib/nfs:/sbin/nologin nfsnobody:x:65534:65534:Anonymous NFS User:/var/lib/nfs:/sbin/nologin named:x:25:25:Named:/var/named:/sbin/nologin tcpdump:x:72:72:/:/sbin/nologin mysql:x:497:449:MySQL server:/var/TKLC/elap/db:/bin/bash elapdev:x:3000:6001:elapdev user:/home/elapall:/bin/bash elap:x:3006:6001:elap no login user:/home/elapall:/sbin/nologin elapconfig:x:3002:6001:elapconfig user:/home/elapconfig:/home/elapconfig/runrunUI appuser:x:3004:6002:appuser user for viewing log files from the GUI:/usr/TKLC/elap/logs:/bin/rbash</pre>
13. <input type="checkbox"/>	<p>MPS X: Backup the EuiDB</p>	<pre>\$ sudo su - elapconfig</pre>

		<pre> MPS Side A: hostname: ELAP21 hostid: f80a150f Platform Version: 7.0.3.0.0_86.46.0 Software Version: ELAP 10.1.0.0.0_101.10.0 Wed Jul 19 17:45:25 IST 2017 /-----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 MPS Side A: hostname: ELAP21 hostid: f80a150f Platform Version: 7.0.3.0.0_86.46.0 Software Version: ELAP 10.1.0.0.0_101.10.0 Wed Jul 19 17:45:28 IST 2017 /-----ELAP Platform Menu-----\ /-----\ 1 Initiate Upgrade ----- 2 Reboot MPS ----- 3 MySQL Backup ----- 4 RTDB Backup ----- 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_ELAP21_20170719174539.tar"... Connecting to local MySQL server... Getting read lock... Tarring the NPDB... Backup Complete... Disconnecting from local MySQL server... </pre>
14. <input type="checkbox"/>	MPS X: Verify backups are being taken properly	<pre> \$ ls -ltrh /var/TKLC/appl/free/npdbBackup_ELAP21_20170719174539.tar -rw-r----- 1 root root 220K Jul 19 12:05 /var/TKLC/appl/free/npdbBackup_ELAP21_20170719174539.tar </pre>
15. <input type="checkbox"/>	MPS X: Gather application log files	<pre> \$ sudo saveLogs -all Logs will be save in /var/TKLC/elap/free/ directory \$ ls -ltrh /var/TKLC/elap/free/ </pre>

		-rw-r----- 1 elapdev elap 2.6M Jul 18 17:13 /var/TKLC/elap/free/logsCapture_ELAP21_20170718171310.tar.bz2
16. <input type="checkbox"/>	MPS X: Gather system log files	\$ su - admusr \$ Password: <admusr_password> \$ sudo /usr/TKLC/plat/sbin/save_logs_plat Logs will be save in /tmp directory /tmp/save_logs_plat.Natal-A.10689.tar.bz2 \$ exit
17. <input type="checkbox"/>	MPS X: Verify RTDB status from GUI. From GUI select "RTDB->View RTDB status" Verify that RTDB status on ELAP is coherent which indicates that LSMS and ELAP are in sync.	 The screenshot shows the 'ELAP RTDB Status' web interface. At the top right is a link 'View RTDB Status'. Below it, the 'ELAP RTDB Status' section shows 'DB Status: Coherent' (circled in red), 'RTDB Level: 5', and 'RTDB Birthday: 03/23/2017 09:04:12 GMT'. There are also 'Counts' for various metrics. Below this is a 'Refresh Options' section with a 'View RTDB Status refresh time (seconds):' input field set to 0, and buttons for 'Change refresh time' and 'Stop refresh'. The footer shows the date 'Wed July 19 2017 12:58:26 IST' and a copyright notice for Oracle.
18. <input type="checkbox"/>	MPS X: Verify DMS DB levels matched and DB status is coherent on all STP cards From ELAP GUI banner, click on notepad icon beside EAGLE.	 The screenshot shows a window titled 'eagle2 Eagle Cards'. It contains a table with columns: CardLoc, IP Addr A, IP Addr B, Status, Level, Uptime, LastUpdateTime, and Primary. The first row is highlighted in green and shows CardLoc 1217, IP Addr A 192.168.120.67, IP Addr B 192.168.121.67, Status Coherent, Level 17, Uptime 1D 0H 0M, LastUpdateTime 7/27/17 1:15:23 PM, and Primary checked.
19. <input type="checkbox"/>	MPS X: Verify DB status on DSM cards and that their provisioning system is taking updates	Login to EAGLE and run command: rept-stat-db:display=all Command Accepted - Processing eagle2 17-07-27 13:54:12 EST EAGLE 46.6.0.0-71.5.0 rept-stat-db:display=all Command entered at terminal #2. ; eagle2 17-07-27 13:53:49 EST EAGLE 46.6.0.0-71.5.0 eagle2 17-07-27 13:54:12 EST EAGLE 46.6.0.0-71.5.0 DATABASE STATUS: >> OK <<al #2. TDM 1114 (STDBY) TDM 1116 (ACTV) C LEVEL TIME LAST BACKUP C LEVEL TIME LAST BACKUP ----- FD BKUP Y 54 17-07-24 12:43:00 EST Y 54 17-07-24 12:43:00 EST

		<pre> FD CRNT Y 111 Y 111 GTT DB 4 4 MCAP 1113 MCAP 1115 0 ----- RD BKUP - - - - - USB BKP - - - - - NOTICE: This is a private computer system. CARD/APPL LOC C T LEVEL TIME LAST UPDATE EXCEPTION ----- IPSG 1102 - - - - - CCS7ITU 1103 - - - - - EROUTE 1104 - - - - - IPS 1105 - - - - - OAM-RMV 1113 - - - - - TDM-CRNT 1114 Y N 111 17-07-26 16:01:42 - TDM-BKUP 1114 Y - 54 17-07-21 13:14:02 DIFF LEVEL OAM-RMV 1115 - - - - - OAM-USB 1115 - - - - - TDM-CRNT 1116 Y N 111 17-07-26 16:01:42 - TDM-BKUP 1116 Y - 54 17-07-21 13:14:02 DIFF LEVEL CCS7ITU 1201 Y N 111 17-07-26 16:01:42 - ATMANSI 1202 - - - - - ATMITU 1203 - - - - - CCS7ITU 1204 Y N 111 17-07-26 16:01:42 - CCS7ITU 1205 - - - - - CCS7ITU 1207 - - - - - ATMITU 1216 - - - - - VSCCP 1217 Y N 111 17-07-26 16:01:42 - ELAP A (ACTV) C BIRTHDATE LEVEL EXCEPTION ----- RTDB Y 17-03-23 14:34:12 17 - RTDB-EAGLE 17-03-23 14:34:12 17 - ELAP B (STDBY) C BIRTHDATE LEVEL EXCEPTION ----- RTDB Y 17-03-23 14:34:12 17 - RTDB-EAGLE 17-03-23 14:34:12 17 - EAGLE RTDB REPORT CARD/APPL LOC C BIRTHDATE LEVEL EXCEPTION IN- SRVC ----- VSCCP 1217 Y 17-03-23 09:04:12 17 - 1d 1h 50m ; </pre>
20. <input type="checkbox"/>	MPS X: Verify alarms present on STP cards	Run following command on EAGLE to check alarms rept-stat-alm Command Accepted - Processing

```

eagle2 17-07-27 13:55:19 EST EAGLE 46.6.0.0-71.5.0
rept-stat-alm
Command entered at terminal #2.
;

eagle2 17-07-27 13:55:20 EST EAGLE 46.6.0.0-71.5.0
ALARM TRANSFER= RMC
ALARM MODE CRIT= AUDIBLE MAJR= AUDIBLE MINR=
AUDIBLE
ALARM FRAME 1 CRIT= 11 MAJR= 36 MINR= 19
ALARM FRAME 2 CRIT= 0 MAJR= 0 MINR= 0
ALARM FRAME 3 CRIT= 0 MAJR= 0 MINR= 0
ALARM FRAME 4 CRIT= 0 MAJR= 0 MINR= 0
ALARM FRAME 5 CRIT= 0 MAJR= 0 MINR= 0
ALARM FRAME 6 CRIT= 0 MAJR= 0 MINR= 0
PERM. INH. ALARMS CRIT= 0 MAJR= 0 MINR= 0
TEMP. INH. ALARMS CRIT= 0 MAJR= 0 MINR= 0
TIMED INH. ALARMS CRIT= 0 MAJR= 0 MINR= 0
ACTIVE ALARMS CRIT= 11 MAJR= 36 MINR= 19
TOTAL ALARMS CRIT= 11 MAJR= 36 MINR= 19

Command Completed.
;

```

5 My Oracle Support

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

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

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

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

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