Oracle® Communications
EAGLE LNP Application Processor

System Health Check Guide

Release 11.0

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ORACLE®

Oracle Communications EAGLE LNP Application Processor System Health Check Guide, Release 11.0

⚠ **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.**

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 ☐	1B ☐	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 funcitons 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. ☐	**MPS X:** Login as admusr	**login: admusr** **password: \<admusr_password\>**
2. ☐	**MPS X:** Record the TPD version	`$ getPlatRev` 7.4.0.0.0_88.37.0
3. ☐	**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. ☐ | **MPS X:**<br>Verify that the chrony server is in sync.<br>Delay should be less than 30 seconds. | ```
# chronyc ntpdata
Remote address   : 10.75.124.247 (0A4B7CF7)
Remote port      : 123
Local address    : 10.75.141.70 (0A4B8D46)
Leap status      : Normal
Version          : 4
Mode             : Server
Stratum          : 3
Poll interval    : 6 (64 seconds)
Precision        : -24 (0.000000060 seconds)
Root delay       : 0.065979 seconds
Root dispersion  : 0.111664 seconds
Reference ID     : 0A4B0008 ()
Reference time   : Thu Nov 23 05:47:18 2023
Offset           : +0.000003993 seconds
Peer delay       : 0.000072944 seconds
Peer dispersion  : 0.000000093 seconds
Response time    : 0.000078588 seconds
Jitter asymmetry: +0.00
NTP tests        : 111 111 1111
Interleaved      : No
Authenticated    : No
TX timestamping  : Kernel
RX timestamping  : Kernel
Total TX         : 831
Total RX         : 831
Total valid RX   : 831
``` |
| 5. ☐ | **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. |

		MPS X: Record the ELAP release number from rpm query.	[root@ITHACA-A ~]# rpm -qi TKLCelap
6.	☐		Name : TKLCelap
			Version : 5.0.66
			Release : 11.0.0.0.0_110.4.0
			Architecture: x86_64
			Install Date: Tue 12 Dec 2023 02:56:56 AM EST
			Group : Development/Build
			Size : 197639401
			License :▦TEKELEC 2018
			Signature : (none)
			Source RPM : TKLCelap-5.0.66-11.0.0.0.0_110.4.0.src.rpm
			Build Date : Thu 23 Nov 2023 07:53:49 AM EST
			Build Host : coach-14.tekelec.com
			Relocations : (not relocatable)
			Packager : <@tekelec.com>
			Vendor : Tekelec
			URL : http://www.tekelec.com/
			Summary : Oracle Communications ELAP Package
			Description :
			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.
7.	☐	MPS X: Verify system health check	$ 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.
8. ☐	**MPS X:** Verify all current banner header messages	`$ manageBannerInfo -l` There are currently no BannerInfo messages for this side in the database. Note: Incase there are any alarms record those alarmsand contact My Oracle Support.
9. ☐	**MPS X:** Retrieve alarm status from alarm manager.	`$ alarmMgr --alarmStatus` Note: No output will be displayed if there are no alarms on the system. Incase any output is observed record the output. Sample alarms are displayed below: `$ alarmMgr --alarmStatus` 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
10. ☐	**MPS X:** Record the last lines of alarm log	`$ tail -40 /var/TKLC/elap/logs/alarm.log` 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

11. ☐	**MPS X:** Record the last lines of messages log	`$ tail -40 /var/log/messages` Jul 16 05:05:17 Floater-3 sudo: admusr : TTY=pts/0 ; PWD=/home/admusr ; USER=root ; COMMAND=/usr/TKLC/plat/bin/syscheck	

12. ☐	**MPS X:**
	Verify the attributes of volume groups
	
	If the output does not contain the "logical volume" sections, contact My Oracle Support so that corrective procedures can be scheduled to be performed.
		`$ sudo vgdisplay -v`
		
		  Using volume group(s) on command line.
		
		  Finding all volume groups.
		
		[root@ITHACA-A ~]# vgdisplay -v
		
		--- 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
		
		Cur LV 10
		
		Open LV 10
		
		Max PV 0
		
		Cur PV 1
		
		Act PV 1
		
		VG Size 245.73 GiB
		
		PE Size 4.00 MiB
		
		Total PE 62908
		
		Alloc PE / Size 62908 / 245.73 GiB
		
		Free PE / Size 0 / 0
		
		VG UUID dgSFvl-mr7T-qv4v-bmSS-U2Qq-az3d-AlbBPp
		
		--- Logical volume ---
		
		LV Path /dev/vgroot/plat_var_tklc
		
		LV Name plat_var_tklc
		
		VG Name vgroot
		
		LV UUID xOHVMU-qlCY-iwgr-wm3D-36fP-6rWS-2bYRh8
		
		LV Write Access read/write	

LV Creation host, time localhost.localdomain, 2023-12-12 00:56:27 -0500

LV Status   available

open   1

LV Size   8.00 GiB

Current LE   2048

Segments   1

Allocation   inherit

Read ahead sectors   auto

- currently set to   8192

Block device   253:3

--- Logical volume ---

LV Path   /dev/vgroot/plat_tmp

LV Name   plat_tmp

VG Name   vgroot

LV UUID   Hv1Nxs-fIZx-MIik-Sdxv-LkUn-qJCw-p8vmg1

LV Write Access   read/write

LV Creation host, time localhost.localdomain, 2023-12-12 00:56:28 -0500

LV Status   available

open   1

LV Size   1.00 GiB

Current LE   256

Segments   1

Allocation   inherit

Read ahead sectors   auto

- currently set to   8192

Block device   253:4

--- Logical volume ---

LV Path   /dev/vgroot/plat_usr

LV Name   plat_usr

VG Name   vgroot

LV UUID   Nw2rTL-x6U8-mtVP-RtN5-bFmK-Pens-BIvOQ3

LV Write Access   read/write

LV Creation host, time localhost.localdomain, 2023-12-12 00:56:29 -0500

LV Status   available

open   1

LV Size   8.00 GiB

Current LE   2048

Segments   1

Allocation   inherit

Read ahead sectors   auto

- currently set to   8192

Block device   253:2

--- Logical volume ---

LV Path   /dev/vgroot/plat_var

LV Name   plat_var

VG Name   vgroot

LV UUID   oeAWS4-fDgM-eBu4-ijdK-BcyE-1bZi-ejqnJ0

LV Write Access   read/write

LV Creation host, time localhost.localdomain, 2023-12-12 00:56:30 -0500

LV Status   available

open   1

LV Size   2.00 GiB

Current LE   512

Segments   1

Allocation   inherit

Read ahead sectors   auto

- currently set to   8192

Block device   253:5

--- Logical volume ---

LV Path   /dev/vgroot/plat_swap

LV Name   plat_swap

VG Name   vgroot

LV UUID   BUSMc0-zKpC-9566-yRO0-x2cL-68uK-PN1P6i

LV Write Access   read/write

LV Creation host, time localhost.localdomain, 2023-12-12 00:56:31 -0500

LV Status   available

open   2

LV Size   1.95 GiB

Current LE   500

Segments   1

Allocation   inherit

Read ahead sectors   auto

- currently set to   8192

Block device   253:1

--- Logical volume ---

LV Path   /dev/vgroot/plat_root

LV Name   plat_root

VG Name   vgroot

LV UUID   uaWkoG-uXLg-Iwoh-kQEy-qedR-obJ5-wtBBuc

LV Write Access   read/write

LV Creation host, time localhost.localdomain, 2023-12-12 00:56:31 -0500

LV Status   available

open   1

LV Size   2.00 GiB

Current LE   512

Segments   1

Allocation   inherit

Read ahead sectors   auto

- currently set to   8192

Block device   253:0

--- Logical volume ---

LV Path   /dev/vgroot/elaproot

LV Name   elaproot

VG Name   vgroot

LV UUID   lPbpuh-zJ5E-4Zgf-mAAO-51RW-EnFI-XvY7J5

LV Write Access   read/write

LV Creation host, time ITHACA-A, 2023-12-12 02:46:57 -0500

LV Status   available

\# open   1

LV Size   4.00 GiB

Current LE   1024

Segments   1

Allocation   inherit

Read ahead sectors   auto

- currently set to   8192

Block device   253:6

--- Logical volume ---

LV Path   /dev/vgroot/logs

LV Name   logs

VG Name   vgroot

LV UUID   qctEIA-jBRX-s23u-E1oe-lO3w-yy5m-DGXaMA

LV Write Access   read/write

LV Creation host, time ITHACA-A, 2023-12-12 02:46:58 -0500

LV Status   available

\# open   1

LV Size   40.00 GiB

Current LE   10240

Segments   1

Allocation   inherit

Read ahead sectors   auto

- currently set to   8192

Block device   253:7

--- Logical volume ---

LV Path   /dev/vgroot/drbdmeta

LV Name   drbdmeta

VG Name   vgroot

LV UUID   PsHPy3-3bIa-WuU0-Qrg0-cQic-8ZRy-9cbDAu

LV Write Access   read/write

LV Creation host, time ITHACA-A, 2023-12-12 02:47:00 -0500

LV Status   available

open   1

LV Size   128.00 MiB

Current LE   32

Segments   1

Allocation   inherit

Read ahead sectors   auto

- currently set to   8192

Block device   253:8

--- Logical volume ---

LV Path   /dev/vgroot/free

LV Name   free

VG Name   vgroot

LV UUID   sfy2P9-Ebbg-qAW7-Ic6F-OnsO-Rxpp-VZd2f0

LV Write Access   read/write

LV Creation host, time ITHACA-A, 2023-12-12 02:47:00 -0500

LV Status   available

open   1

LV Size   <178.66 GiB

Current LE   45736

Segments   1

Allocation   inherit

Read ahead sectors   auto

- currently set to   8192

Block device   253:9

--- Physical volumes ---

PV Name   /dev/md2

PV UUID   aIf59X-mkP8-gY2P-OIno-vljS-DTIU-zVCTVf

PV Status   allocatable

Total PE / Free PE   62908 / 0

--- Volume group ---

VG Name   vgdrbd0

System ID

Format   lvm2

Metadata Areas   1

Metadata Sequence No 84

VG Access   read/write

VG Status   resizable

MAX LV   0

Cur LV   2

Open LV   1

Max PV   0

Cur PV   1

Act PV   1

VG Size   32.96 GiB

PE Size   4.00 MiB

Total PE   8439

Alloc PE / Size   2560 / 10.00 GiB

Free PE / Size   5879 / 22.96 GiB

VG UUID   9JdXH5-wt8m-hJxi-XymZ-AQUr-XjbJ-G0HxP3

--- Logical volume ---

LV Path   /dev/vgdrbd0/lnpdb

LV Name   lnpdb

VG Name   vgdrbd0

LV UUID   ch9age-tsEh-OoGt-7Mr4-lZvk-0f7w-1fldam

LV Write Access   read/write

LV Creation host, time ITHACA-A, 2023-12-12 02:56:50 -0500

LV Status   available

open   0

LV Size   4.00 GiB

Current LE   1024

Segments   1

Allocation   inherit

		Read ahead sectors auto
		- currently set to 256
		Block device 253:10
		--- Logical volume ---
		LV Path /dev/vgdrbd0/mysql
		LV Name mysql
		VG Name vgdrbd0
		LV UUID GQHdBb-1SBK-if8F-xxC5-cCcW-1dEB-0Hn6qI
		LV Write Access read/write
		LV Creation host, time ITHACA-A, 2023-12-12 02:56:50 -0500
		LV Status available
		# open 1
		LV Size 6.00 GiB
		Current LE 1536
		Segments 1
		Allocation inherit
		Read ahead sectors auto
		- currently set to 256
		Block device 253:11
		--- Physical volumes ---
		PV Name /dev/drbd0
		PV UUID sMe0Fc-6Tln-m2IZ-ShTt-iPV7-7thL-jqzQC2
		PV Status allocatable
		Total PE / Free PE 8439 / 5879
		[root@ITHACA-A ~]#
13. ☐	**MPS X:** Record the total amount of free and used physical and swap memory in the system.	```$ free``` total used free shared buffers cached Mem: 8059508 4914216 3145292 17020 967576 1589512 -/+ buffers/cache: 2357128 5702380

		Swap: 2064380 0 2064380

14. ☐	**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.
		```$ 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
		          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

15. ☐	**MPS X:**
	Verify disk mirroring configuration and RAID status
		```$ 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>

16. ☐	**MPS X:**
	Record the hard drive and partition size
		`$ 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
		
		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: 0x000116f6
		
		  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
		
		Disk /dev/sdc: 2013 MB, 2013265920 bytes
		
		256 heads, 63 sectors/track, 243 cylinders
		
		Units = cylinders of 16128 * 512 = 8257536 bytes

		Sector size (logical/physical): 512 bytes / 512 bytes
		I/O size (minimum/optimal): 512 bytes / 512 bytes
		Disk identifier: 0x488965c1
		Device Boot Start End Blocks Id System
		/dev/sdc1 * 1 133 1072480+ b W95 FAT32

17. ☐	**MPS X:**
	 Verify smartctl output
		`$ sudo smartctl -A -l error /dev/sda`
		
		 smartctl 5.43 2012-06-30 r3573 [x86_64-linux-2.6.32-573.26.1.el6prerel7.0.3.0.0_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
		
		 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
		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.
18. ☐	**MPS X:** Start Disk Integrity Check	`$ sudo smartctl -t short /dev/sda` smartctl 5.43 2012-06-30 r3573 [x86_64-linux-2.6.32-642.15.1.el6prerel7.4.0.0.0_88.37.0.x86_64] (local build)

<table>
<tr><td></td><td></td><td>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.</td></tr>
<tr><td>19. ☐</td><td>**MPS X:**
Verify and record Disk Integrity Check results</td><td>`$ sleep 60; sudo smartctl -l selftest /dev/sda`
smartctl 5.43 2012-06-30 r3573 [x86_64-linux-2.6.32-642.15.1.el6prerel7.4.0.0.0_88.37.0.x86_64] (local build)
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=== 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   -
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   -

Note: Record if any error is reported and contact My Oracle Support.</td></tr>
<tr><td>20. ☐</td><td>**MPS X:**
Record any hard disk sector error</td><td>`$ sudo smartctl -a /dev/sda | grep -i LBA`
241 Total_LBAs_Written   0x0032 100 100 000 Old_age Always - 554366</td></tr>
</table>

S T E P #	Steps To Be Completed	Expected output/command to be executed
		242 Total_LBAs_Read 0x0032 100 100 000 Old_age Always - 1654885
		Num Test_Description Status Remaining LifeTime(hours) LBA_of_first_error
		SPAN MIN_LBA MAX_LBA CURRENT_TEST_STATUS
		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
		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
		Num Test_Description Status Remaining LifeTime(hours) LBA_of_first_error
		If UNC errors are found, execute following command:
		$ sudo smartctl -a /dev/sda
21. ☐	**MPS X:** Disk integrity step on second HDD	Repeat steps from 17 to 20 for **"/dev/sdb"** disk drive.
22. ☐	**MPS X:** Repeat the procedure for mate ELAP	Repeat steps from 1 to 21 on mate ELAP server.

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. ☐	**MPS X:** Login as elapdev	login: elapdev password: <elapdev_password>
2. ☐	**MPS X:** Record and verify the system configuration	$ sudo su - elapconfig

| | | Select Option 1 from elapconfig menu. | ```
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


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...
``` |
| 3. ☐ | **MPS X:**<br><br>Record and verify the ntp configuration<br><br>Select Option 7 from elapconfig menu and then Option 1 from ELAP Configure NTP Server Menu. | ```
$ 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
```

Verifying connectivity with mate...

MPS Side A: hostname: ITHACA-A hostid: 4b0a118d
        Platform Version: 8.6.0.2.0_110.14.0
        Software Version: ELAP 11.0.0.0.0_110.4.0
        Wed Dec 20 06:44:37 EST 2023

```
/-----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

chronyserver1   10.75.124.247

		MPS X: Exit from elapconfig menu	``` 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 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 ~]$ ```
4. ☐			
5. ☐	MPS X: Record /etc/hosts configuration		`$ 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 loghost 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 chronyserver1 10.75.141.107 Floater-3 prova-ip 10.75.141.108 mate-prov provb-ip Floater-4 10.75.141.109 prov-vip	

6. ☐	**MPS X:**
	
	Verify and Record IPs configured on each interface
		`$ 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
                                        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-fdefffff
                              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

7. ☐	**MPS X:** Record EuiDB settings	`$ 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 "" "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 "No" "ELAP_A_PRETTY_NAME" is set to "ELAP_A_NAME" "AUTO_RTDB_BKUP_FILES_TO_MANTAIN" is set to "5" "session_idle_timeout" is set to "10" "ELAP_B_PROV_NETWORK_IP_ADDRESS" is set to "10.75.141.108" "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" "RIDB_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 "Floater-4" "AUTO_RTDB_BKUP_TIME" is set to "6:00" "EBDAD_GS_PORT" is set to "9692" "LNP_LRN_QTY" is set to "150000" "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" "euidb_version" is set to "3" "LNP_NPANXX_QTY" is set to "300000" "LSMS_PROVISIONING" is set to "OFF" "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" "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 "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"

8. ☐	**MPS X:**
	Verify lnpdb logical volume
		`$ 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
		 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`

9. ☐	**MPS X:** Verify operational status of ELAP software	`$ 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
10. ☐	**MPS X:** Verify HA status	`$ hastatus; ssh mate hastatus` ACTIVE STANDBY

11. ☐	**MPS X:**
	Record cron file configuration
		`$ 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/raiseAlarmAutoBkpNotConfgd.pl", Sched="minutely,5" */5 * * * * elapdev /usr/TKLC/elap/bin/raiseAlarmAutoBkpNotConfgd.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 # ID=1, Action="/usr/TKLC/elap/bin/raiseBnrMsgHttpsDisable.pl", Sched="hourly,12,00" 00 */12 * * * elapdev /usr/TKLC/elap/bin/raiseBnrMsgHttpsDisable.pl # ENDTYPE
12. ☐	**MPS X:** Record /etc/passwd file	`$ 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
| 13. ☐ | **MPS X:** Backup the EuiDB | ```
$ 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 17:45:25 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
``` |
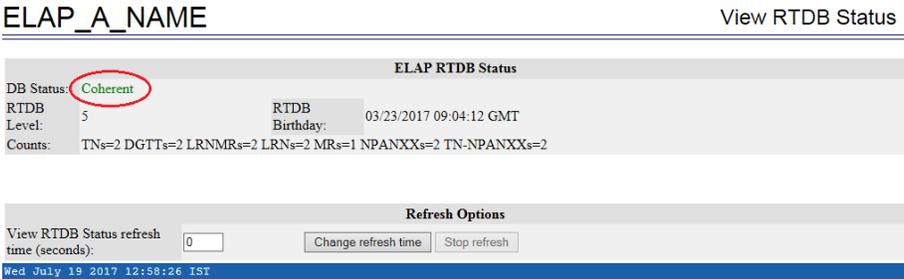
| | | ```
MPS Side A:  hostname: ELAP21  hostid: f80a150f
             Platform Version: 7.0.3.0.0_86.46.0
             Software Version: ELAP 10.1.0.0.0_101.10.0
             Wed Jul 19 17:45:28 IST 2017


  /-----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...
``` |
14. ☐	**MPS X:** Verify backups are being taken properly	`$ 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

15. ☐	**MPS X:**
	Gather application log files
		`$ sudo savelogs –all`
		
		Logs will be save in /var/TKLC/elap/free/ directory
		`$ ls -ltrh /var/TKLC/elap/free/`
		
		-rw-r----- 1 elapdev elap 2.6M Jul 18 17:13 /var/TKLC/elap/free/logsCapture_ELAP21_20170718171310.tar.bz2

16. ☐	**MPS X:**
	Gather system log files
		`$ su – admusr`
		
		`$ Password: <admusr_password>`
		
		`$ sudo /usr/TKLC/plat/sbin/savelogs_plat`
		
		Logs will be save in /tmp directory
		/tmp/savelogs_plat.Natal-A.10689.tar.bz2
		
		`$ exit`

17. ☐	**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.	ELAP_A_NAME View RTDB Status **ELAP RTDB Status** DB Status: Coherent RTDB Level: 5 RTDB Birthday: 03/23/2017 09:04:12 GMT Counts: TNs=2 DGTTs=2 LRNMRs=2 LRNs=2 MRs=1 NPANXXs=2 TN-NPANXXs=2 **Refresh Options** View RTDB Status refresh time (seconds): 0 Change refresh time Stop refresh Wed July 19 2017 12:58:26 IST Copyright © 2015-2016, Oracle and/or its affiliates. All rights reserved.

18. ☐	**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.	**eagle2 Eagle Cards** | CardLoc	IP Addr A	IP Addr B	Status	Level	Uptime	LastUpdateTime	Primary
---	---	---	---	---	---	---	---
1217	192.168.120.67	192.168.121.67	Coherent	17	1D 0H 0M	7/27/17 1:15:23 PM	✔	

19. ☐	**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 46.6.0.0.0-71.5.0
		   rept-stat-db:display=all
		   Command entered at terminal #2.
		;
		   eagle2 17-07-27 13:53:49 EST EAGLE 46.6.0.0.0-71.5.0
		   eagle2 17-07-27 13:54:12 EST EAGLE 46.6.0.0.0-71.5.0
		   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
		   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

                ;
```

20. ☐	**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 46.6.0.0.0-71.5.0
		  rept-stat-alm
		  Command entered at terminal #2.
		;
		
		  eagle2 17-07-27 13:55:20 EST EAGLE 46.6.0.0.0-71.5.0
		  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

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- For Hardware, Networking and Solaris Operating System Support, select **3**.

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