

**Oracle® Communications  
EAGLE LSMS**

**System Health Check Guide**

Release 13.2 and later

**E91139 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 LSMS release 13.2 or higher.

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

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## 2 Health Check Overview

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

- a. Receives LNP data from Number Portability Administration Center (NPAC).
- b. Enables customers to enter locally provisioned data such as Override Global Title Translation (OGTT) data.
- c. Forwards all NPAC and locally provisioned data to up to eight ELAP systems.

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

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### 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:


<b>LSMS USERS</b>		
<b>login</b>	<b>MPS A password</b>	<b>MPS B password</b>
lsmsmgr		
lsmsadm		
root		
mysql dbroot user		
admusr		

## 4 LSMS Health Check

### 4.1 System Status

These steps can be performed on any of the LSMS 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"/>	<b>MPS X:</b> Login as admusr	login: admusr password: <admusr_password>
2. <input type="checkbox"/>	<b>MPS X:</b> Record the TPD version	\$ getPlatRev 7.4.0.0.0_88.37.0
3. <input type="checkbox"/>	<b>MPS X:</b> Verify that the time difference between servers is 30 seconds or less.	\$ sudo date ; sudo c\lock Tue Sep 12 18:49:26 EDT 2017 Tue 12 Sep 2017 06:49:55 PM EDT -0.234883 seconds
4. <input type="checkbox"/>	<b>MPS X:</b> Verify that the ntp server is in sync Delay should be less than 30 seconds Output is in milliseconds	\$ ntpq -p remote refid st t when poll reach delay offset jitter ===== ntpserver1 .LCL. 1 u 423 1024 377 0.368 -395022 1876.89 lsmssec-heartbeat-a 192.168.1.1 14 u 513 1024 0 50.483 -16087. 0.000 lsmssec-heartbeat-b 192.168.1.1 14 u 54 1024 0 107.601 -16110. 0.000
5. <input type="checkbox"/>	<b>MPS X:</b> Record the last reboot occurred	\$ uptime 18:56:18 up 5 days, 2:24, 1 user, load average: 1.11, 0.86, 0.70 Note: A server reboot is recommended after every 180 days.
6. <input type="checkbox"/>	<b>MPS X:</b> Record the LSMS release number from rpm query.	\$ rpm -qi TKLClsms Name :TKLClsms Relocations: (not relocatable) Version : 13.43.0 Vendor: Tekelec Release : 13.2.1.0.0_132.21.0 Build Date: Mon 28 Aug 2017 05:19:53 PM EDT

		<p>Install Date: Sat 02 Sep 2017 04:01:10 AM EDT    Build Host: coach-12.tekelec.com</p> <p>Group    : TKLC/Application                    Source RPM: TKLClsms-13.43.0-13.2.1.0.0_132.21.0.src.rpm</p> <p>Size     : 215874493                          License:  TEKELEC 2004-2017</p> <p>Signature : (none)</p> <p>Packager  : &lt;Open Systems&gt;</p> <p>URL      : http://www.tekelec.com/</p> <p>Summary   : Oracle Communications LSMS Package</p> <p>Description :</p> <p>This is the Oracle Communications LSMS Package. The package installs LSMS software.</p> <p>Local Service Management System (LSMS) is a secure and reliable Local Number Portability (LNP) system.</p>
7. <input type="checkbox"/>	<p><b>MPS X:</b> 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><b>MPS X:</b> 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. Incase 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>9. <input type="checkbox"/></p>	<p><b>MPS X:</b> Record the last lines of alarm log</p>	<pre>\$ sudo tail -40 /var/TKLC/log/lsms/alarm/LsmsAlarm.log.0912</pre> <pre>ALARM LOG &lt;&lt; 20170912185911 &gt;&gt;</pre> <pre>[4100:LSMS] lsmssec: Minor Platform Alarm (50000004001C2000): Device Interface Warning, Platform Health Check Failure, NTP Offset Check Failure, NTP Stratum Check Failure, NTP Source Server Is Not Able To Provide Correct Time</pre> <pre>ALARM LOG &lt;&lt; 20170912185946 &gt;&gt;</pre> <pre>[4100:LSMS] Minor Platform Alarm (5000000000002200): Server NTP Daemon Not Synchronized, Device Interface Warning</pre> <pre>ALARM LOG &lt;&lt; 20170912185946 &gt;&gt;</pre> <pre>[4100:LSMS] lsmssec: Minor Platform Alarm (5000000400182000): Device Interface Warning, NTP Offset Check Failure, NTP Stratum Check Failure, NTP Source Server Is Not Able To Provide Correct Time</pre> <pre>ALARM LOG &lt;&lt; 20170912190016 &gt;&gt;</pre> <pre>[4100:LSMS] Minor Platform Alarm (5000000000042200): Server NTP Daemon Not Synchronized, Device Interface Warning, Platform Health Check Failure</pre>
<p>10. <input type="checkbox"/></p>	<p><b>MPS X:</b> Record the last lines of messages log</p>	<pre>\$ sudo tail -40 /var/log/messages</pre> <pre>Sep 12 19:00:16 lsmspri sudo: lsmsadm : TTY=unknown ; PWD=/usr/TKLC/lms/bin ; USER=root ; COMMAND=/usr/TKLC/lms/tools/pass_fetch pass1</pre> <pre>Sep 12 19:00:40 lsmspri sudo: lsmsadm : TTY=unknown ; PWD=/usr/TKLC/lms/bin ; USER=root ; COMMAND=/usr/TKLC/lms/tools/pass_fetch pass1</pre>

<p>11. <input type="checkbox"/></p>	<p><b>MPS X:</b> 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  Using volume group(s) on command line.  --- Volume group --- VG Name          vgroot System ID Format           lvm2 Metadata Areas   1 Metadata Sequence No 104 VG Access        read/write VG Status        resizable MAX LV           0 Cur LV          11 Open LV          11 Max PV           0 Cur PV          1 Act PV           1 VG Size          446.72 GiB PE Size          32.00 MiB Total PE         14295 Alloc PE / Size  13055 / 407.97 GiB Free PE / Size   1240 / 38.75 GiB VG UUID          AlsBKN-nqKn-kUZD-0K0X-Nz54-r293-eybHI1  --- Logical volume --- LV Path          /dev/vgroot/plat_root LV Name          plat_root VG Name          vgroot LV UUID          CaxkPU-1vWU-JAFH-BF0r-u4at-xwXL-RjZ4J3 LV Write Access  read/write LV Creation host, time localhost.localdomain, 2017-09-02 02:47:32 -0400 LV Status        available # open           1 LV Size          1.00 GiB Current LE       32 </pre>
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		<pre> 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           6pB5XH-juQq-fMns-sL7k-b4eX-Dh21-xyUOpd LV Write Access   read/write LV Creation host, time localhost.localdomain, 2017-09-02 02:47:33 -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           BLSR5N-NDAv-xW7n-S4nI-cPg6-PMLl-LPijvc LV Write Access   read/write LV Creation host, time localhost.localdomain, 2017-09-02 02:47:33 -0400 LV Status         available # open            1 LV Size           1.00 GiB Current LE        32 </pre>
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		<pre> 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            b39mVM-YaBW-e7Iy-zwxM-8UkZ-k45K-9RQ17s LV Write Access    read/write LV Creation host, time localhost.localdomain, 2017-09-02 02:47:34 -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            6TZ2wy-10QR-HnTu-2bzC-ECta-S5a2-8xTMI0 LV Write Access    read/write LV Creation host, time localhost.localdomain, 2017-09-02 02:47:35 -0400 LV Status          available # open             1 LV Size            1.00 GiB Current LE         32 </pre>
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		<pre> 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           YTz4gK-LstQ-RS7R-DPth-RoZF-fnRF-0vuq0G LV Write Access    read/write LV Creation host, time localhost.localdomain, 2017-09-02 02:47:36 -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/lsms_root LV Name           lsms_root VG Name           vgroot LV UUID           aXq7eJ-OV53-OMP0-Cxss-oSCi-kImQ-fS3Hbh LV Write Access    read/write LV Creation host, time lsmspri, 2017-09-02 03:59:01 -0400 LV Status          available # open            1 LV Size           4.00 GiB Current LE        128 </pre>
--	--	--

		<pre> Segments          1 Allocation        inherit Read ahead sectors auto                   - currently set to 256 Block device      253:6  --- Logical volume --- LV Path           /dev/vgroot/lsms_external LV Name          lsms_external VG Name          vgroot LV UUID          REF15A-ShrB-0GJW-MRRf-ZNJ8-pnsq-POsO6d LV Write Access   read/write LV Creation host, time lsmspri, 2017-09-02 03:59:02 -0400 LV Status         available # open           1 LV Size          2.00 GiB Current LE       64 Segments         1 Allocation        inherit Read ahead sectors auto                   - currently set to 256 Block device      253:7  --- Logical volume --- LV Path           /dev/vgroot/lsms_logs LV Name          lsms_logs VG Name          vgroot LV UUID          Vklv59-Zaf1-qh7k-Qw2Y-4AeE-NIem-PTpfsq LV Write Access   read/write LV Creation host, time lsmspri, 2017-09-02 03:59:03 -0400 LV Status         available # open           1 LV Size          36.00 GiB Current LE       1152 </pre>
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		<pre> Segments          1 Allocation         inherit Read ahead sectors auto - currently set to 256 Block device       253:8  --- Logical volume --- LV Path            /dev/vgroot/lsms_db LV Name            lsms_db VG Name            vgroot LV UUID            BfF1te-Cc3o-9orz-Vruk-xr9P-xBzA-DZzYLE LV Write Access    read/write LV Creation host, time lsmspri, 2017-09-02 03:59:07 -0400 LV Status          available # open             1 LV Size            213.00 GiB Current LE         6816 Segments          1 Allocation         inherit Read ahead sectors auto - currently set to 256 Block device       253:9  --- Logical volume --- LV Path            /dev/vgroot/lsms_free LV Name            lsms_free VG Name            vgroot LV UUID            aZgNdR-31YF-jTwe-pBFW-3Ma0-zjAz-RT3ZAu LV Write Access    read/write LV Creation host, time lsmspri, 2017-09-02 03:59:32 -0400 LV Status          available # open             1 LV Size            140.00 GiB Current LE         4480 </pre>
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		<pre> Segments          1 Allocation        inherit Read ahead sectors auto - currently set to 256 Block device      253:10  --- Physical volumes --- PV Name           /dev/md2 PV UUID           3RMk1T-fj6y-nETi-T7jU-HdTc-tXnX-Pd26dn PV Status         allocatable Total PE / Free PE 14295 / 1240 </pre>
12. <input type="checkbox"/>	<p><b>MPS X:</b> 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:   8059380  7423640  635740   32356   470128   4574864 -/+ buffers/cache: 2378648 5680732 Swap:  2064380   26764   2037616 </pre>
13. <input type="checkbox"/>	<p><b>MPS X:</b> 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 286M 640M 31% / tmpfs           3.9G  0 3.9G  0% /dev/shm /dev/md1        244M  40M 192M 17% /boot /dev/mapper/vgroot-plat_tmp                 976M 1.3M 924M  1% /tmp /dev/mapper/vgroot-plat_usr                 3.9G 2.2G 1.5G 60% /usr /dev/mapper/vgroot-plat_var                 976M 330M 596M 36% /var /dev/mapper/vgroot-plat_var_tklc                 3.9G 2.5G 1.3G 67% /var/TKLC /dev/mapper/vgroot-lsms_root                 3.9G  8.2M 3.7G  1% /var/TKLC/lsms /dev/mapper/vgroot-lsms_db                 210G  8.5G 191G  5% /var/TKLC/lsms/db </pre>



		<pre> /dev/mapper/vgroot-lsms_external                 2.0G 3.0M 1.9G 1% /var/TKLC/lms/external /dev/mapper/vgroot-lsms_free                 138G 3.2G 128G 3% /var/TKLC/lms/free /dev/mapper/vgroot-lsms_logs                 36G 634M 33G 2% /var/TKLC/lms/logs </pre>
14. <input type="checkbox"/>	<p><b>MPS X:</b> Verify disk mirroring configuration and RAID status</p>	<pre> \$ cat /proc/mdstat Personalities : [raid1] md1 : active raid1 sdb2[1] sda2[0]       262080 blocks super 1.0 [2/2] [UU]  md2 : active raid1 sda1[0] sdb1[1]       468447232 blocks super 1.1 [2/2] [UU]       bitmap: 3/4 pages [12KB], 65536KB chunk  unused devices: &lt;none&gt; </pre>
15. <input type="checkbox"/>	<p><b>MPS X:</b> 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 / 512 bytes I/O size (minimum/optimal): 512 bytes / 512 bytes Disk identifier: 0x000c8e91     Device Boot      Start         End      Blocks   Id  System /dev/sda1            1         58336   468578304   fd  Linux raid autodetect /dev/sda2 *        58336         58369     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 / 512 bytes I/O size (minimum/optimal): 512 bytes / 512 bytes </pre>

		<p>Disk identifier: 0x000e5bf1</p> <pre> Device Boot      Start         End      Blocks   Id  System /dev/sdb1            1      58336   468578304  fd  Linux raid autodetect /dev/sdb2 *        58336      58369     262144  fd  Linux raid autodetect </pre>
<p>16. <input type="checkbox"/></p>	<p><b>MPS X:</b> 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- 642.15.1.el6prere17.4.0.0_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 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   098   098   000   Old_age     Always -         2   9 Power_On_Hours            0x0032   100   100   000   Old_age     Always -        28524  12 Power_Cycle_Count        0x0032   100   100   000   Old_age     Always -         70 170 Unknown_Attribute       0x0033   099   099   010   Pre-fail    Always -         0 171 Unknown_Attribute       0x0032   100   100   000   Old_age     Always -         4 172 Unknown_Attribute       0x0032   100   100   000   Old_age     Always -         0 174 Unknown_Attribute       0x0032   100   100   000   Old_age     Always -         56 175 Program_Fail_Count_Chip 0x0033   100   100   010   Pre-fail    Always -        661521629813 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 </pre>

		<p>190 Airflow_Temperature_Cel 0x0022 086 083 000 Old_age Always - 14 (Min/Max 13/17)</p> <p>192 Power-Off_Retract_Count 0x0032 100 100 000 Old_age Always - 56</p> <p>194 Temperature_Celsius 0x0022 100 100 000 Old_age Always - 14</p> <p>197 Current_Pending_Sector 0x0032 100 100 000 Old_age Always - 0</p> <p>199 UDMA_CRC_Error_Count 0x003e 100 100 000 Old_age Always - 0</p> <p>225 Load_Cycle_Count 0x0032 100 100 000 Old_age Always - 4728030</p> <p>226 Load-in_Time 0x0032 100 100 000 Old_age Always - 65535</p> <p>227 Torq-amp_Count 0x0032 100 100 000 Old_age Always - 4294967295</p> <p>228 Power-off_Retract_Count 0x0032 100 100 000 Old_age Always - 65535</p> <p>232 Available_Reservd_Space 0x0033 099 099 010 Pre-fail Always - 0</p> <p>233 Media_Wearout_Indicator 0x0032 088 088 000 Old_age Always - 0</p> <p>234 Unknown_Attribute 0x0032 100 100 000 Old_age Always - 0</p> <p>241 Total_LBAs_Written 0x0032 100 100 000 Old_age Always - 4728030</p> <p>242 Total_LBAs_Read 0x0032 100 100 000 Old_age Always - 3782315</p> <p>SMART Error Log Version: 1 No Errors Logged</p> <p><b>Note:</b> If any error is observed record the error and contact My Oracle Support.</p>
17. <input type="checkbox"/>	<p><b>MPS X:</b> Start Disk Integrity Check</p>	<pre>\$ sudo smartctl -t short /dev/sda</pre> <p>smartctl 5.43 2012-06-30 r3573 [x86_64-linux-2.6.32-642.15.1.el6prere]7.4.0.0.0_88.37.0.x86_64] (local build)</p> <p>Copyright (C) 2002-12 by Bruce Allen, <a href="http://smartmontools.sourceforge.net">http://smartmontools.sourceforge.net</a></p>

		<pre> === 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 Tue Sep 12 19:09:27 2017  Use smartctl -X to abort test. </pre>
18. <input type="checkbox"/>	<p><b>MPS X:</b> Verify and record Disk Integrity Check results</p>	<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_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 Short offline    Completed without error   00%    28524      -  <b>Note:</b> Record if any error is reported and contact My Oracle Support. </pre>
19. <input type="checkbox"/>	<p><b>MPS X:</b> 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 -    4728040  242 Total_LBAs_Read      0x0032  100  100  000  Old_age  Always -    3782494  Num Test_Description      Status          Remaining  LifeTime(hours) LBA_of_first_error  SPAN MIN_LBA MAX_LBA CURRENT_TEST_STATUS  <b>Note:</b> 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 </pre>

		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
20. <input type="checkbox"/>	<b>MPS X:</b> Disk integrity step on second HDD	Repeat steps from <b>Error! Reference source not found.</b> to REF _Ref480550515 \r \h 19 for <b>"/dev/sdb"</b> disk drive.
21. <input type="checkbox"/>	<b>MPS X:</b> Repeat the procedure for mate LSMS	Repeat steps from 1 to 20 on mate LSMS server.

## 4.2 System Configuration

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

S T E P #	Steps To Be Completed	Expected output/command to be executed
1. <input type="checkbox"/>	<b>MPS X:</b> Login as admusr	<b>login: admusr</b> <b>password: &lt;admusr_password&gt;</b>
2. <input type="checkbox"/>	<b>MPS X:</b> Record /etc/hosts configuration	\$ cat /etc/hosts  127.0.0.1 localhost localhost4 localhost4.localdomain4 ::1 localhost localhost6 localhost6.localdomain6 192.168.1.1 lsmspri-heartbeat-a heartbeat-a 192.168.1.2 lsmssec-heartbeat-a mate-heartbeat-a ntppeerA mate 192.168.2.1 lsmspri-heartbeat-b heartbeat-b hasync-1a 192.168.2.2 lsmssec-heartbeat-b mate-heartbeat-b ntppeerB hasync-1b mate-ha 192.168.3.1 lsmspri-backup backup 192.168.4.1 lsmssec-backup mate-backup 192.168.3.2 backupserver-lsmspri backupserver 192.168.4.2 backupserver-lsmssec mate-backupserver 10.248.11.122 lsmspri lsmspri-ems ems lsmspri-app app lsmspri-npac npac 10.248.11.123 lsmssec lsmssec-ems mate-ems lsmssec-app mate-app lsmssec- npac mate-npac 10.248.11.124 lsmsactive-app lsmsactive 10.248.13.17 ntpserver1
3. <input type="checkbox"/>	<b>MPS X:</b> Verify and Record IPs configured on each interface	\$ ifconfig -a  bond0 Link encap:Ethernet HWaddr 00:00:17:0F:2D:36 inet addr:192.168.1.1 Bcast:192.168.1.255 Mask:255.255.255.0

		<pre> inet6 addr: fe80::200:17ff:fe0f:2d36/64 Scope:Link UP BROADCAST RUNNING MASTER MULTICAST MTU:1500 Metric:1 RX packets:40906546 errors:0 dropped:0 overruns:0 frame:0 TX packets:45125575 errors:0 dropped:0 overruns:0 carrier:0 collisions:0 txqueuelen:0 RX bytes:6104529725 (5.6 GiB) TX bytes:15266072489 (14.2 GiB)  bond0.2 Link encap:Ethernet HWaddr 00:00:17:0F:2D:36 inet addr:192.168.2.1 Bcast:192.168.2.255 Mask:255.255.255.0 inet6 addr: fe80::200:17ff:fe0f:2d36/64 Scope:Link UP BROADCAST RUNNING MULTICAST MTU:1500 Metric:1 RX packets:30552973 errors:0 dropped:0 overruns:0 frame:0 TX packets:30178620 errors:0 dropped:0 overruns:0 carrier:0 collisions:0 txqueuelen:0 RX bytes:4477305241 (4.1 GiB) TX bytes:2765906476 (2.5 GiB)  bond1 Link encap:Ethernet HWaddr 42:E1:3E:F8:6C:A6 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 A6:57:A4:45:D8:C6 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 CE:1E:89:16:5D:02 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)  eth0 Link encap:Ethernet HWaddr 00:00:17:0F:2D:34 inet addr:10.248.11.122 Bcast:192.168.61.255 Mask:255.255.255.0 inet6 addr: fd66:f550:5939:b:200:17ff:fe0f:2d34/64 Scope:Global inet6 addr: fe80::200:17ff:fe0f:2d34/64 Scope:Link UP BROADCAST RUNNING MULTICAST MTU:1500 Metric:1 RX packets:4803345 errors:0 dropped:0 overruns:0 frame:0 TX packets:4822838 errors:2377 dropped:0 overruns:0 carrier:2377 collisions:53965 txqueuelen:1000 RX bytes:3614293501 (3.3 GiB) TX bytes:1682375735 (1.5 GiB) Memory:fdee0000-fdeffff  eth1 Link encap:Ethernet HWaddr 00:00:17:0F:2D:35 inet addr:192.168.3.1 Bcast:192.168.3.255 Mask:255.255.255.0 inet6 addr: fe80::200:17ff:fe0f:2d35/64 Scope:Link UP BROADCAST RUNNING MULTICAST MTU:1500 Metric:1 RX packets:8780 errors:0 dropped:0 overruns:0 frame:0 TX packets:8815 errors:0 dropped:0 overruns:0 carrier:0 </pre>
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		<pre> collisions:0 txqueuelen:1000 RX bytes:980056 (957.0 KiB) TX bytes:987006 (963.8 KiB) Memory:fde60000-fde7ffff  eth2  Link encap:Ethernet HWaddr 00:00:17:0F:2D:36 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:fdfe0000-fdffffff  eth3  Link encap:Ethernet HWaddr 00:00:17:0F:2D:36 UP BROADCAST RUNNING SLAVE MULTICAST MTU:1500 Metric:1 RX packets:40906546 errors:0 dropped:0 overruns:0 frame:0 TX packets:45125575 errors:0 dropped:0 overruns:0 carrier:0 collisions:0 txqueuelen:1000 RX bytes:6104529725 (5.6 GiB) TX bytes:15266072489 (14.2 GiB) 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:8557266 errors:0 dropped:0 overruns:0 frame:0 TX packets:8557266 errors:0 dropped:0 overruns:0 carrier:0 collisions:0 txqueuelen:0 RX bytes:690513650 (658.5 MiB) TX bytes:690513650 (658.5 MiB) </pre>
4. <input type="checkbox"/>	<p><b>MPS X:</b> Record features settings Note: This command will be run only on ACTIVE server</p>	<pre> \$ lsmsdb -c features N AFT N ALARM_FILTERING N ALT_SPID 98 BINLOGS_THRESHOLD N CANADA_SPID_RECOVERY N COMMAND_CLASS 0 DEFAULT_PASSWORD_TIMEOUT N EDR Y ENHANCED_FILTERS N ERROR_CODES_FOR_ACTIONS N ERROR_CODES_FOR_NON_ACTIONS Y HSOP_BUNDLING Y HTTP Y HTTPS N INACTIVITY_TIMEOUT N LOGIN_MSG N LOG_EAGLE_SUCCESS_RESP 16 MAX_EAGLES 32 MAX_SPIDS 8 MAX_USERS N MYSQL_PORT N NANC_3_2_ENHANCEMENTS N NANC_3_3_FEATURE_SET 900 NPAC_HEARTBEAT_QUIET_PERIOD_TIMEOUT 100000 NPAC_HEARTBEAT_QUIET_PERIOD_TIMEOUT_CANADA </pre>

		<pre> 3 NPAC_HEARTBEAT_RETRY_NUMBER 60 NPAC_HEARTBEAT_TIMEOUT 60 NPAC_RECOVERY_PERIOD Y QUERY_SERVER N REPORT_GEN 0 REPORT_GEN_QUERY_ACTIVE Y RESYNCDDB_QUERY_SERVER Y SERVDI_ENABLED N SERVICE_PROV_TYPE N SNMP Y SNMP_ALARM_FEED N SPID_SECURITY N SURV_OK_TRAP N SV_TYPE N SWIM_RECOVERY 15 SYSTEM_INACTIVITY_TIMEOUT N WSMSC N WSMSC_TO_EAGLE </pre>
<p>5. <input type="checkbox"/></p>	<p><b>MPS X:</b> Record the DB Counts Note: This command will be run only on ACTIVE server</p>	<pre> \$ !smsdb -c counts 0 ..... CanadaDB.NumberPoolBlock 2 ..... CanadaDB.ServiceProvLRN 0 ..... CanadaDB.ServiceProvNPA_NXX 0 ..... CanadaDB.ServiceProvNPA_NXX_X 406 ..... CanadaDB.ServiceProvNetwork 48,915,526 .... CanadaDB.SubscriptionVersion  0 ..... MidAtlanticDB.NumberPoolBlock 0 ..... MidAtlanticDB.ServiceProvLRN 0 ..... MidAtlanticDB.ServiceProvNPA_NXX 0 ..... MidAtlanticDB.ServiceProvNPA_NXX_X 1 ..... MidAtlanticDB.ServiceProvNetwork 11,100 ..... MidAtlanticDB.SubscriptionVersion  0 ..... NortheastDB.NumberPoolBlock 0 ..... NortheastDB.ServiceProvLRN 0 ..... NortheastDB.ServiceProvNPA_NXX 0 ..... NortheastDB.ServiceProvNPA_NXX_X 0 ..... NortheastDB.ServiceProvNetwork 0 ..... NortheastDB.SubscriptionVersion  1 ..... ReplTestDB.ReplTestTbl  1 ..... ResyncDB.LastTimestamp 2,043,494 ..... ResyncDB.ResyncRecord 0 ..... ResyncDB.ResyncRecordModel 1,168,305 ..... ResyncDB.resync1 875,189 ..... ResyncDB.resync2  0 ..... SoutheastDB.NumberPoolBlock </pre>



		0 ..... SoutheastDB.ServiceProvLRN 0 ..... SoutheastDB.ServiceProvNPA_NXX 0 ..... SoutheastDB.ServiceProvNPA_NXX_X 0 ..... SoutheastDB.ServiceProvNetwork 11 ..... SoutheastDB.SubscriptionVersion  0 ..... SouthwestDB.NumberPoolBlock 0 ..... SouthwestDB.ServiceProvLRN 0 ..... SouthwestDB.ServiceProvNPA_NXX 0 ..... SouthwestDB.ServiceProvNPA_NXX_X 0 ..... SouthwestDB.ServiceProvNetwork 0 ..... SouthwestDB.SubscriptionVersion  0 ..... WestCoastDB.NumberPoolBlock 0 ..... WestCoastDB.ServiceProvLRN 0 ..... WestCoastDB.ServiceProvNPA_NXX 0 ..... WestCoastDB.ServiceProvNPA_NXX_X 0 ..... WestCoastDB.ServiceProvNetwork 0 ..... WestCoastDB.SubscriptionVersion  0 ..... WesternDB.NumberPoolBlock 0 ..... WesternDB.ServiceProvLRN 0 ..... WesternDB.ServiceProvNPA_NXX 0 ..... WesternDB.ServiceProvNPA_NXX_X 0 ..... WesternDB.ServiceProvNetwork 0 ..... WesternDB.SubscriptionVersion  2,043,342 ..... logDB.TransactionLog  0 ..... noreplDB.EbdaProcessList 0 ..... noreplDB.ServdiProcessList  4 ..... performance_schema.accounts 0 ..... performance_schema.cond_instances 0 ..... performance_schema.events_stages_current 0 ..... performance_schema.events_stages_history 0 ..... performance_schema.events_stages_history_long 432 ..... performance_schema.events_stages_summary_by_account_by_event_name 324 ..... performance_schema.events_stages_summary_by_host_by_event_name 2,160 ..... performance_schema.events_stages_summary_by_thread_by_event_name 324 ..... performance_schema.events_stages_summary_by_user_by_event_name 108 ..... performance_schema.events_stages_summary_global_by_event_name 18 ..... performance_schema.events_statements_current 0 ..... performance_schema.events_statements_history 0 ..... performance_schema.events_statements_history_long 660 ..... performance_schema.events_statements_summary_by_account_by_event_name
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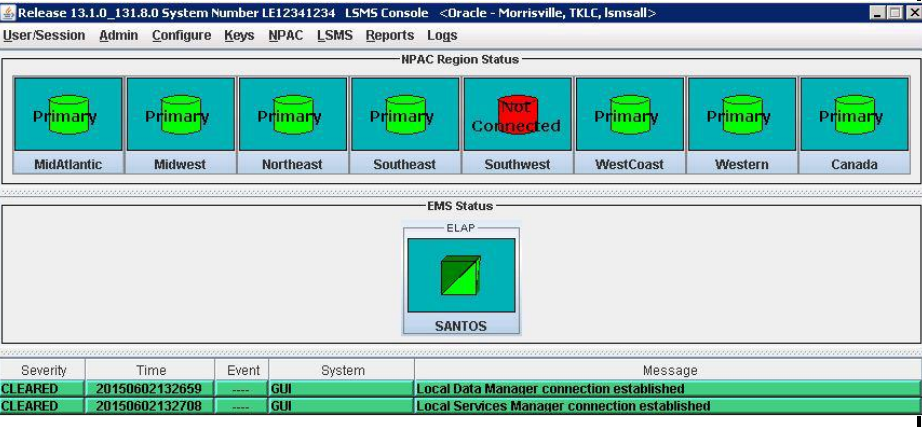
		<p>440 ..... performance_schema.events_statements_summary_by_digest  495 .....  performance_schema.events_statements_summary_by_host_by_event_name  3,300 .....  performance_schema.events_statements_summary_by_thread_by_event_name  495 .....  performance_schema.events_statements_summary_by_user_by_event_name  165 .....  performance_schema.events_statements_summary_global_by_event_name  0 ..... performance_schema.events_waits_current  0 ..... performance_schema.events_waits_history  0 ..... performance_schema.events_waits_history_long  876 .....  performance_schema.events_waits_summary_by_account_by_event_name  657 ..... performance_schema.events_waits_summary_by_host_by_event_name  460 ..... performance_schema.events_waits_summary_by_instance  4,380 .....  performance_schema.events_waits_summary_by_thread_by_event_name  657 ..... performance_schema.events_waits_summary_by_user_by_event_name  219 ..... performance_schema.events_waits_summary_global_by_event_name  460 ..... performance_schema.file_instances  43 ..... performance_schema.file_summary_by_event_name  460 ..... performance_schema.file_summary_by_instance  1 ..... performance_schema.host_cache  3 ..... performance_schema.hosts  0 ..... performance_schema.mutex_instances  178 ..... performance_schema.objects_summary_global_by_type  5 ..... performance_schema.performance_timers  0 ..... performance_schema.rwlock_instances  82 ..... performance_schema.session_account_connect_attrs  93 ..... performance_schema.session_connect_attrs  1 ..... performance_schema.setup_actors  12 ..... performance_schema.setup_consumers  495 ..... performance_schema.setup_instruments  4 ..... performance_schema.setup_objects  4 ..... performance_schema.setup_timers  0 ..... performance_schema.socket_instances  3 ..... performance_schema.socket_summary_by_event_name  0 ..... performance_schema.socket_summary_by_instance  391 ..... performance_schema.table_io_waits_summary_by_index_usage  178 ..... performance_schema.table_io_waits_summary_by_table  178 ..... performance_schema.table_lock_waits_summary_by_table  20 ..... performance_schema.threads  3 ..... performance_schema.users</p> <p>0 ..... supDB.AlarmFilter  55 ..... supDB.AlarmInfo  745 ..... supDB.Authorization  10 ..... supDB.CanadaNpacMeasurements  1,000 ..... supDB.CanadaPrivateKey  1,000 ..... supDB.CanadaPublicKey  97 ..... supDB.DbConfig  0 ..... supDB.DefaultGtt  12 ..... supDB.ELAP21EagleMeasurements</p>
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		<pre> 1 ..... supDB.EmsInterface 1 ..... supDB.GttGroup 1 ..... supDB.GttGroupSpid 2 ..... supDB.LsmsServiceProvider 6 ..... supDB.LsmsUser 0 ..... supDB.LsmsUserSpid 1 ..... supDB.MidAtlanticNpacMeasurements 1,000 ..... supDB.MidAtlanticPrivateKey 1,000 ..... supDB.MidAtlanticPublicKey 0 ..... supDB.MidwestNpacMeasurements 0 ..... supDB.MidwestPrivateKey 0 ..... supDB.MidwestPublicKey 0 ..... supDB.NortheastNpacMeasurements 0 ..... supDB.NortheastPrivateKey 0 ..... supDB.NortheastPublicKey 0 ..... supDB.NpaSplit 0 ..... supDB.NpacMeasurementsModel 8 ..... supDB.NpacRegion 0 ..... supDB.OverrideGtt 0 ..... supDB.PrivateKeyModel 0 ..... supDB.PublicKeyModel 0 ..... supDB.STPAEagleMeasurements 20 ..... supDB.SoutheastNpacMeasurements 1,000 ..... supDB.SoutheastPrivateKey 1,000 ..... supDB.SoutheastPublicKey 0 ..... supDB.SouthwestNpacMeasurements 0 ..... supDB.SouthwestPrivateKey 0 ..... supDB.SouthwestPublicKey 1 ..... supDB.TnFilter 0 ..... supDB.WestCoastNpacMeasurements 0 ..... supDB.WestCoastPrivateKey 0 ..... supDB.WestCoastPublicKey 0 ..... supDB.WesternNpacMeasurements 0 ..... supDB.WesternPrivateKey 0 ..... supDB.WesternPublicKey 0 ..... supDB.snmpGrpCfg 0 ..... supDB.snmpNmsCfg 0 ..... supDB.snmpUserCfg 1 ..... supDB.snmpVerMode 1 ..... supDB.snmpViewCfg </pre>
6. <input type="checkbox"/>	<p><b>MPS X:</b>  Verify operational status of LSMS software  Note: This command will be run only on ACTIVE server</p>	<pre> \$ sudo sentry status sending status command..  LSMS Sentry Status -----  sentryd started: Thu Sep 7 05:35:07 2017 Current activity mode: ACTIVE Debug is not enabled  Process   PID   Status   StartTS   LastPingTS   NumR   Comment ----- </pre>

		<pre> osisk6      7820  running  20170907053523  ---  1  No Comment Specified lsmslogd    7826  running  20170907053512  ---  1  No Comment Specified rmtpmgr     7837  running  20170907053514  20170913153214  1  No Comment Specified rmtpagent   8177  running  20170907053514  ---  1  No Comment Specified lsman       25914 running  20170907083254  20170913153210  3 /usr/TKLC/lsms/bin/lsman supman      8181  running  20170907053517  20170913153212  1 /usr/TKLC/lsms/bin/supman reportman   7885  running  20170907053512  20170913153213  1 /usr/TKLC/lsms/bin/reportman apache      5576  running  20170907053508  ---  0  No Comment Specified N MidAtlantic 16092 running  20170907053810  20170913153206  2  PRIMARY NPAC: Not Associated RMTP failure times:0 0 0 N Northeast  9101  running  20170907053529  20170913153206  1  PRIMARY NPAC: Not Associated RMTP failure times:0 0 0 N Southeast 13487 running  20170911055923  20170913153206  4  PRIMARY NPAC: Not Associated RMTP failure times:0 0 0 N Southwest  9252  running  20170907053530  20170913153206  1  PRIMARY NPAC: Not Associated RMTP failure times:0 0 0 N Western    9281  running  20170907053530  20170913153206  1  PRIMARY NPAC: Not Associated RMTP failure times:0 0 0 N WestCoast  9285  running  20170907053530  20170913153206  1  PRIMARY NPAC: Not Associated RMTP failure times:0 0 0 N Canada     ---  stopped  ---  ---  1  PRIMARY NPAC: Not Associated RMTP failure times:0 0 0 E ELAP21     8475  running  20170907053520  20170913153213  1 VIP=DOWN Pending=0% lmgrd       8004  running  20170907053512  ---  1  No Comment Specified  Wed Sep 13 15:32:14 2017 Command Complete. </pre>
7. <input type="checkbox"/>	<p><b>MPS X:</b> Verify sup status of LSMS software Note: This command will be run only on ACTIVE server</p>	<pre> \$ cd /usr/TKLC/lsms/bin \$ sudo sup status supman      :  MEM : 522748 kbytes  PCPU : 0.0 % lsman       :  MEM : 670004 kbytes  PCPU : 0.0 % reportman   :  MEM : 967300 kbytes  PCPU : 0.0 % </pre>
8. <input type="checkbox"/>	<p><b>MPS X:</b> Verify HA status</p>	<pre> \$ hastatus; ssh mate hastatus ACTIVE </pre>

		STANDBY
9. <input type="checkbox"/>	<b>MPS X:</b> Verify that MySQL replication is working	<pre># tail /var/TKLC/lms/logs/dbreplMon.log</pre> <p>If MySQL replication is functioning correctly then the following output will be observed, make sure that at least the last line of your output matches the lines below.</p> <pre>Wed Sep 13 15:52:27 2017 All tests passed on ACTIVE Wed Sep 13 15:53:30 2017 All tests passed on ACTIVE Wed Sep 13 15:54:32 2017 All tests passed on ACTIVE Wed Sep 13 15:55:34 2017 All tests passed on ACTIVE Wed Sep 13 15:56:35 2017 All tests passed on ACTIVE Wed Sep 13 15:57:37 2017 All tests passed on ACTIVE Wed Sep 13 15:58:39 2017 All tests passed on ACTIVE Wed Sep 13 15:59:40 2017 All tests passed on ACTIVE Wed Sep 13 16:00:42 2017 All tests passed on ACTIVE Wed Sep 13 16:01:44 2017 All tests passed on ACTIVE</pre>
10. <input type="checkbox"/>	<b>MPS X:</b> Record /etc/passwd file	<pre>\$ cat /etc/passwd</pre> <pre>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 rpc:x:32:32:Rpcbind Daemon:/var/cache/rpcbind:/sbin/nologin admusr:x:4996:4996:Platform remote admin user:/home/admusr:/bin/bash 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 sasauth:x:499:76:Sasauthd user:/var/empty/sasauth:/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:/bin/false hids:x:4995:4995:HIDS admin user:/home/hids:/sbin/nologin dhcpcd: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</pre>

		<pre>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 dbadm:x:1001:1007::/var/TKLC/lsm/dbadm:/bin/bash lsmadm:x:1002:1001::/var/TKLC/lsm/lsmadm:/bin/bash lsmall:x:1005:1001::/var/TKLC/lsm/lsmall:/bin/bash lsmuext:x:1007:1001::/var/TKLC/lsm/lsmuext:/bin/bash lsmuser:x:1003:1001::/var/TKLC/lsm/lsmuser:/bin/bash lsmview:x:1004:1001::/var/TKLC/lsm/lsmview:/bin/bash lsmmgr:x:5011:5011::/usr/TKLC/plat/etc/home.platcfg/lsmmgr:/usr/TKLC/plat/bin/platcfg mysql:x:497:449:MySQL server:/var/lib/mysql:/bin/bash</pre>
11. <input type="checkbox"/>	<p><b>MPS X:</b> Verify backups are being taken properly on NAS</p>	<pre>\$ ssh root@backupserver # ls /volumes/LVstorage/logs_lsmspri/ 00-Aug29_23:55 current  # ls /volumes/LVstorage/db/ 00-Aug29_23:55 current  # ls /volumes/LVstorage/logs_lsmsec/ 00-Aug29_23:55 current  # ls /volumes/LVstorage/lsmspri 00-Aug29_23:55 current  # ls /volumes/LVstorage/lsmsec 00-Aug29_23:55 current</pre>
12. <input type="checkbox"/>	<p><b>MPS X:</b> Gather application log files</p>	<pre>\$ sudo saveLogs -n &lt;numberof days&gt; \$ sudo saveLogs -n 7</pre> <p>Size of final tar file will be 9.7602 MB.</p> <p>Do you want to continue with this logs size ?[Y N] Y</p> <p>Logs Captured Successfully. Tar of logs placed at : /var/TKLC/lsm/free/saveLogs/logsCapture_lsmspri_20170913154421.tar.bz2 GUI Notification sent.</p>
13. <input type="checkbox"/>	<p><b>MPS X:</b> Gather system log files</p>	<pre>\$ sudo /usr/TKLC/plat/sbin/saveLogs_plat</pre> <p>Logs will be save in /tmp directory /tmp/saveLogs_plat.lsmspri.13563.tar.bz2</p>
14. <input type="checkbox"/>	<p><b>MPS X:</b> Login to lsm GUI and verify NPAC and ELAP are connected.</p>	<p>Note: Connected NPAC regions and ELAP will be displayed in <b>Green</b> while not connected will be displayed in <b>Red</b> with status.</p>

		 
15. <input type="checkbox"/>	<p><b>MPS X:</b> Verify LSMS Query server connectivity NOTE: This should be run only from Active server</p>	<pre> \$ /usr/TKLC/lsmstools/lsmstools -c queryservers  /usr/TKLC/lsmstools/lsmstools: Query Server Feature is not enabled. ---OR--- cs2-bss2 (&lt;LSMS Query Server IP&gt;) Connected ---OR--- cs2-bss2 (&lt;LSMS Query Server IP&gt;) Disconnected Verify replication is working on Query server. Login into Query Servers's as root user and run following command.  # cd /opt/mysql/mysql/bin # mysql -u root -p Enter password:&lt;password&gt; mysql&gt; SHOW SLAVE STATUS \G;       Relay_Master_Log_File: mysql-bin.000056       Slave_IO_Running: Yes       Slave_SQL_Running: Yes </pre> <p>Note: Verify Slave IO Running and Slave SQL running status. If this is not Yes contact My oracle Support.</p> <pre>mysql&gt; exit;</pre>
16. <input type="checkbox"/>	<p><b>MPS X:</b> Repeat the procedure for mate LSMS</p>	<p>Run steps 1 to 15 on mate server unless stated that step can be run only on active server.</p>

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## 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.