

**Oracle® Communications  
EAGLE**

System Healthcheck Procedure

Release 45.0 and later

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**ORACLE®**

Oracle Communications EAGLE System Healthcheck Procedure, Release 45.0 and later

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**CAUTION: Use only the Healthcheck procedure included in the Upgrade Kit.**

**Before upgrading any system, please access Oracle's Tekelec Customer Support site and review any Technical Service Bulletins (TSBs) that relate to this upgrade.**

Refer to Appendix A for instructions on accessing this site.

Contact Oracle's Tekelec Customer Care Center and inform them of your upgrade plans prior to beginning this or any upgrade procedure.

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## 1. INTRODUCTION

### 1.1 Purpose and Scope

This document describes Tekelec's recommended methods and procedures to be used to evaluate Site and STP data retrieved from in-service EAGLE STP. This document is intended for use for system running EAGLE releases 45.0 or later as well as system being upgrade to those releases. The intended audience for this document is EAGLE® Engineering, Documentation, Customer Service personnel and any craft person who has completed EAGLE® training and is familiar with the EAGLE® interface. The scope of this document is specifically to collect data to determine the health of an in-service EAGLE prior to a software upgrade or an extension shelf installation. In general, this document may be used for an instance where the health determination of the EAGLE is required (i.e. troubleshooting).

This document should be considered the next volume to 909-0656-001; see reference [2]. The former document covers Eagle releases 31.6 to 44.0, where this document starts at release 45.0 and will continue for future releases. The initial content of this document is equivalent to the last version of that previous document with the additions of updates to support Eagle Release 45.0. In release 45.0, the legacy GPSM/TDM hardware is no longer supported as the MASP, so this document does not have to support both hardware setup and removes complexity of several steps that had to support both platforms.

**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 Tekelec personnel.**

Analysis of data captured during this procedure is out of the scope of this document. Analysis of the data is covered in reference [1].

### 1.2 References

- [1] *Health Check Analysis Work Instruction*, WI005139, latest revision, Tekelec
- [2] *EAGLE 5 ISS Releases 31.6 and later System Healthcheck Document*, 909-0656-001, Revision P, Version 7.2, Tekelec
- [3] *TEKELEC Acronym Guide*, MS005077.doc, current revision

### 1.3 Acronyms

**Table 1. Acronyms**

<b>Acronym</b>	<b>Definition</b>
AST	Associate State for Maintenance
BITS	Building Integrated Timing System
DPC	Destination Point Code
DSM	Database Services Module
E5-OAM	Eagle 5 Operation, Admission, & Maintenance
E5-MASP	Dual-card HW assembly composed of E5-MCAP and E5-TDM
FOA	First Office Application
GPL	Generic Program Load
IMT	Interprocessor Message Transport
IS-ANR	In Service - Abnormal
IS-NR	In Service - Normal
KSR terminal	Keyboard Send Receive terminal
Legacy MASP	System using GPSM-II\TDM card set (obsolete in release 45.0)
MASP	Maintenance and Administration Subsystem Processor
MCP	Measurements Collector/Poller
PST	Primary State for Maintenance
SAK	Software Access Key
SCCP	Signaling Connection Control Part
UHC	Upgrade Health Check

For additional Acronyms; refer to internal references [3] in section 1.2

## 2. GENERAL DESCRIPTION

The health check is to be performed as directed to by software release upgrade procedures, extension shelf installation MOPs, or Customer Care Center personnel. It may also be utilized during FOA, hardware installations, or customer problem analysis. This document outlines a series of commands and procedures to be performed on the system. With each command, there is a description of the command, expected command output, and what problems may be detected with the command. If the desired goal/output is not obtained by executing the command, the Customer Care Center should be contacted to investigate the deficiencies. The entire set of commands should be executed each time in order to obtain a complete system status and configuration. Some of the commands may not be supported on all EAGLE releases, resulting in a command rejection. These rejected commands will not harm the system in any way and will be verified during the analysis of the captured data. The goal of this health check procedure is to be non-intrusive. Only spare equipment swap-out and the IMT bus testing are intrusive and should be executed during a maintenance window. The procedures that are intrusive are highlighted in the table in Section 2.3.

### 2.1 Recommendations for Performing Health Check

The commands in this document should be executed during periods of FOA, new software or hardware installations, upgrades, or customer problems.

#### 2.1.1 Frequency of Health Check

The frequency of executing these commands should be determined in upgrade execution procedures, extension shelf installation MOP, and the release FOA plan/strategy developed by Tekelec. For software upgrade, three health checks are executed. The recommended time frames of these checks are the following: two weeks prior (UHC1), forty-eight hours prior (UHC2), and seventy-two hours following an upgrade (UHC3). For extension shelf, one health check is executed prior to installation. The exact time is based on availability of personnel and scheduled maintenance windows.

#### 2.1.2 Data Capture

During the execution of this procedure, some method of data capture is necessary for proper analysis and for future reference. If a terminal emulation application is being used which supports capturing, the application should be enabled. A KSR or printer terminal may be selected as the capture terminal since output from the user terminal can be echoed to those terminal types. If no other method is available, input and output from the user terminal can be echoed to a configured printer. A capture file must be generated so a comparison can be made with other capture files from the same node to determine if any system degradation occurred between the two capture periods. Some of the procedures explicitly identify anomalies to be checked, if present, these occurrences should be noted. **After conclusion of the Health Check procedures the capture file and any notes are to be sent to Tekelec for review. If the Health Check is being performed in preparation for an upgrade, contact the Customer Care Center upon completion to verify that the upgrade can be performed after analysis of the capture file**

#### 2.1.3 Step Check-Off and Recording Configuration

All steps in this Health Check are to be initialed by the person performing the step. Blanks have been provided under each step number for recording the initials. Also certain steps request recording of data, which is specific to the configuration of the switch being checked.

**Note that the Health Check may take several hours to complete depending on the size of the system, the part number and version of MASPs in use, and user experience.**

## 2.2 Health Check Record

Each time the System Health Check has been completed, record the date, the reason for the health check (e.g., upgrade preparation, new installation, post-upgrade verification, etc.) and record which procedure passed/failed in Table 2.

**Table 2. Health Check Record**

DATE	Reason for running health check	List any procedures that failed (Procedure number and name)	Technician Signature
	Upgrade HC #1		
	Upgrade HC #2		
	Upgrade HC #3		
	Extension Shelf HC		

### 2.3 Health Check Type

The following table lists the procedures to be executed depending on the type of health check being performed.

**Table 3. Health Check Type Procedures**

Procedure	Non-Intrusive Upgrade (UHC1, UHC3)	Intrusive Upgrade (UHC2)	Extension Shelf, New Product
3.2 Health Check Preparation	√	√	√
3.3 General System Status	√	√	√
3.4 Report System Troubles	√	√	√
3.5 Verifying Database Status	√	√	n/a
3.6 Verifying GPLs	√	√	n/a
3.7 Retrieving Obituaries	√	√	√
3.8 Verifying STPLAN	√	√	n/a
3.9 Verify SCCP Load	√	√	n/a
3.10 Verifying LNP and LSMS	√	√	n/a
3.11 Verifying SEAS	√	√	n/a
3.12 Verifying optional features	√	√	√
3.13 Verifying IP Signaling Status	√	√	√
3.14 Verifying EROUTE	√	√	√
3.15 Verifying IMT Status	√	√	√
3.16 Retrieving Trouble Data	√	√	√
3.17 Verifying Clock Status	√	√	√
3.18 Verifying MPS (See note 1)	√	√	n/a
3.19 Verify Source Database and Enter Software Access Key	n/a	√	n/a
3.20 Verifying Fixed and Removable Media (Part 1)	n/a	√	n/a
3.21 Testing IMT Status	n/a	√	√
3.22 Verifying Fixed and Removable Media (Part 2)	n/a	√	n/a
3.23 Table Capacity Status	√	√	n/a
3.24 Health Check Conclusion	√	√	√

**Note 1:** Intrusive procedures are shaded.

### 3. PROCEDURES

#### 3.1 Pre-Health Check Requirements

##### Procedure 1. Verifying Pre-Health Check Requirements

<b>S T E P #</b>	This procedure verifies that all pre-healthcheck requirements have been met. Check off (✓) each step as it is completed. Boxes have been provided for this purpose under each step number. Should THIS PROCEDURE FAIL, Contact the Customer Care Center AND <b>ASK FOR HEALTHCHECK ASSISTANCE.</b>	
<b>1</b> <input type="checkbox"/>	Complete Pre-Health Check tasks	All applicable tasks in Table 4 must be completed before continuing.

**Table 4. Pre-Health Check Requirements**

✓	<b>Tasks to be completed prior to Health Check execution</b>	
	For Health Check #2 - Verify that on-site personnel are available.	
	For Health Check #2 – Verify that Upgrade media is on-site or Upgrade target release has been downloaded to disk.	
	Verify that all terminal and modem recourses are available for remote access.	

<b>2</b> <input type="checkbox"/>	Issue the command to display GPL status.	<b>REPT-STAT-GPL:GPL=EOAM</b>
<b>3</b> <input type="checkbox"/>	Response to GPL status command is displayed.	<pre> tekelecstp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x-YY.y.y GPL Auditing ON  GPL      CARD      RUNNING      APPROVED      TRIAL EOAM     1113       134-034-012  -----      -----  Command Completed.                 ;                     </pre>
<input type="checkbox"/>	If any card is displayed, this procedure <b>fails</b> . Otherwise, continue to next procedure.	



**Procedure 2. Health Check Preparation**

<b>5</b> <input type="checkbox"/>	Issue the command to change all terminal groups.	<b>chg-trm:trm=P:all=yes</b> <i>(Where P is the location of the capture terminal recorded in step 4)</i>
<b>6</b> <input type="checkbox"/>	Response to change terminal command is displayed.	tekelecstp YY-MM-DD hh:mm:ss EST PPP XX.x.x-YY.y.y chg-trm:trm=P:all=yes Command entered at terminal #X. ;  tekelecstp YY-MM-DD hh:mm:ss EST PPP XX.x.x-YY.y.y CHG-TRM: MASP A - COMPLTD ;
<b>7</b> <input type="checkbox"/>	Issue the command to activate capture.	<b>act-echo:trm=P</b> <i>(Where P is a capture terminal port that was selected in step 4)</i>
<b>8</b> <input type="checkbox"/> <input type="checkbox"/>	Response to activate command is displayed.  Verify that the capture terminal is correctly collecting data.	tekelecstp YY-MM-DD hh:mm:ss EST PPP XX.x.x-YY.y.y Scroll Area Output will be echoed to Terminal X. ; <b>(Caution: loss of output may occur if too many terminals are echoed)</b>
<b>9</b> <input type="checkbox"/>	If all terminal groups for the user terminal are not set to "NO" and method for capturing output is enabled, issue the command to change all terminal groups to "NO."	<b>chg-trm:trm=X:all=no:tmout=0:sa=yes:sys=yes:db=yes:card=yes</b> <i>(Where X is the location of the user's terminal recorded in step 4.)</i>
<b>10</b> <input type="checkbox"/>	Response to change terminal command is displayed.	tekelecstp YY-MM-DD hh:mm:ss EST PPP XX.x.x-YY.y.y chg-trm:trm=X:all=no Command entered at terminal #X. ;  tekelecstp 98-03-09 03:01:11 EST Re1 XX.X.X-YY.Y.Y CHG-TRM: MASP A - COMPLTD ;
<b>11</b> <input type="checkbox"/>	Issue the command to display optional features	<b>rtrv-feat</b>
<b>12</b> <input type="checkbox"/> <input type="checkbox"/>	Response to retrieve feature command is displayed.  Record the on/off status of the features in the following table.	tekelecstp YY-MM-DD hh:mm:ss EST PPP XX.x.x-YY.y.y EAGLE FEATURE LIST  GTT = on GWS = on NRT = off X25G = off LAN = on CRMD = off SEAS = off LFS = off MTPRS = off FAN = on DSTN5000 = off WNP = off CNCF = off TLNP = off SCCPCNV = off TCAPCNV = off IPISUP = off X252000 = off PLNP = off NCR = off ITUMTPRS = on SLSOCB = off EGTT = on VGTT = on MPC = on ITUDUPPC = on MEASPLAT = on TSCSYNC = off E5IS = off ;

**Note:** The following table lists all possible feature bits. Feature bits differ between releases, so one may appear in this table that will not exist on a particular EAGLE.

<b>GTT</b>	ON / OFF	<b>GWS</b>	ON / OFF	<b>NRT</b>	ON / OFF
<b>LAN</b>	ON / OFF	<b>CRMD</b>	ON / OFF	<b>LFS</b>	ON / OFF
<b>MTPRS</b>	ON / OFF	<b>FAN</b>	ON / OFF	<b>DSTN5000</b>	ON / OFF
<b>WNP</b>	ON / OFF	<b>CNCF</b>	ON / OFF	<b>TLNP</b>	ON / OFF
<b>SCCPCNV</b>	ON / OFF	<b>TCAPCNV</b>	ON / OFF	<b>IPISUP</b>	ON / OFF
<b>PLNP</b>	ON / OFF	<b>NCR</b>	ON / OFF	<b>ITUMTPRS</b>	ON / OFF
<b>SLSOCB</b>	ON / OFF	<b>EGTT</b>	ON / OFF	<b>VGTT</b>	ON / OFF
<b>MPC</b>	ON / OFF	<b>ITUDUPPC</b>	ON / OFF	<b>MEASPLAT</b>	ON / OFF
<b>TSCSYNC</b>	ON / OFF	<b>E5IS</b>	ON / OFF		

**Procedure 2. Health Check Preparation**

<p><b>13</b> <input type="checkbox"/></p>	<p>Issue the command to display feature keys that have been enabled.</p>	<p><b>rtrv-ctrl-feat</b></p>										
<p><b>14</b> <input type="checkbox"/></p>	<p>Response to the command is displayed.</p>	<pre>rtrv-ctrl-feat Command entered at terminal #x. ;</pre>										
<p><input type="checkbox"/></p>	<p>Record if LNP ported TN feature key and LNP ELAP Configuration is on and displayed as well as the current quantity<sup>1</sup>. Also record whether the EIR feature is on:</p> <p>LNP ported TN: <u>  ON / OFF  </u> Quantity: <u>                  </u> LNP ELAP Config: <u>  ON/OFF  </u> EIR: <u>          ON/OFF          </u></p>	<pre>tekelecstp YY-MM-DD hh:mm:ss EST PPP XX.x.x-YY.y.y The following features have been permanently enabled: Feature Name      Partnum  Status  Quantity TPS                89300101 on       100 EAGLE Product     893007201 on       ---- LNP ELAP Configuration 893010901 on       ---- LNP ported TNS    893011012 on     96000000 EIR                893012301 on       ----</pre> <p><b>The following features have been temporarily enabled:</b></p> <table border="1"> <thead> <tr> <th>Feature Name</th> <th>Partnum</th> <th>Status</th> <th>Quantity</th> <th>Trial Period</th> </tr> </thead> <tbody> <tr> <td colspan="5">Zero entries found.</td> </tr> </tbody> </table>	Feature Name	Partnum	Status	Quantity	Trial Period	Zero entries found.				
Feature Name	Partnum	Status	Quantity	Trial Period								
Zero entries found.												
<p><input type="checkbox"/></p>	<p>Record if TPS feature key Configuration is on and displayed as well as the current quantity. Also record whether any temporary TPS keys are displayed as enabled. Verify no temporary TPS keys are enabled.</p> <p>TPS Status: <u>  ON / OFF  </u> Quantity: <u>                  </u> Temporary TPS Enabled: <u>          YES/NO          </u></p>	<p>The following features have expired temporary keys:</p> <table border="1"> <thead> <tr> <th>Feature Name</th> <th>Partnum</th> </tr> </thead> <tbody> <tr> <td colspan="2">Zero entries found.</td> </tr> </tbody> </table>	Feature Name	Partnum	Zero entries found.							
Feature Name	Partnum											
Zero entries found.												
<p><b>15</b> <input type="checkbox"/></p>	<p>Issue the command to retrieve serial number for this node.</p>	<p><b>rtrv-serial-num</b></p>										
<p><b>16</b> <input type="checkbox"/></p>	<p>Response to retrieve command is displayed.</p>	<pre>tekelecstp YY-MM-DD hh:mm:ss EST PPP XX.x.x-YY.y.y System serial number = nt00001659  System serial number is locked. ;</pre>										
<p><b>17</b> <input type="checkbox"/></p>	<p>All steps in this procedure were completed.</p>											

<sup>1</sup> If feature access key outputs “off” for status or does not appear in output the feature is OFF.

### 3.3 General System Status

#### Procedure 3: Determining General System Status

<b>S T E P #</b>	<p><b>This procedure examines the general status of all cards in the system by reporting card and system status. Look for unexplained alarms, or other entities listed as 'other'. Any system entities listed as 'other' should be documented, investigated, and explained. Look for unexplained card PST and SST states (i.e. not IS-NR/Active).</b></p>
<b>1</b> <input type="checkbox"/>	<p>Issue the command to display IMT errors.</p> <p><b>rept-imt-lvl1:r=summary:sloc=1201:eloc=1115</b></p>
<b>2</b> <input type="checkbox"/>  <input type="checkbox"/>	<p>Response to IMT report command is displayed.</p> <p>If UHC2 is being executed, verify that large values are not displayed in any highlighted columns.</p> <pre> tekelecstp YY-MM-DD hh:mm:ss EST PPP XX.x.x-YY.y.y ===== SUMMARY REPORT: Totals accumulated from all requested cards  Count                                     Bus A Value   Bus B Value -----                                     - Transmit Packet                           0M             0M Transmit Byte                              0M             0M Receive Packet                             0M             0M Receive Byte                               0M             0M Receive Packet with CRC Error              0              0 Receive Packet with Format Error           0              0 Receive Packet with Invalid Length         0              0 Primary Control Receive Error              0              0 Primary Control Transmit Error             0              0 Primary Control Sanity Error               0              0 Violation Error                           0              0 CPU Receive FIFO Full                      0              0 IMT Receive FIFO Half Full                 0              0 CPU Receive FIFO Half Full                 0              0 DMA Terminal Count Interrupt               0              0 MSU Retransmitted                          0              0 MSU Safety Packet                          0              0 ASU Safety Packet                          0              0 TSU Safety Packet                          0              0 IMT Receive FIFO Full                       0              0 SSU Safety Packet                          0              0 ----- ;END OF REPORT                     </pre>
<b>3</b> <input type="checkbox"/>	<p>Issue the status command for the MUX cards.</p> <p><b>rept-stat-mux</b></p>
<b>4</b> <input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>	<p>Response to MUX status command is displayed.</p> <p>Verify that all cards are IS-NR.</p> <p>Record the types of MUX cards displayed (circle all that are applicable):</p> <p>HMUX  HIPR  HIPR2</p> <pre> tekelecstp YY-MM-DD hh:mm:ss EST PPP XX.x.x-YY.y.y CARD  TYPE    PST      SST      AST 1109  HMUX     IS-NR    Active   ----- 1110  HMUX     IS-NR    Active   ----- 1209  HMUX     IS-NR    Active   ----- 1210  HMUX     IS-NR    Active   ----- 1309  HIPR     IS-NR    Active   ----- 1310  HIPR     IS-NR    Active   ----- 2109  HIPR2    IS-NR    Active   ----- 2110  HIPR2    IS-NR    Active   -----                     </pre> <p>Command Completed.</p>
<b>5</b> <input type="checkbox"/>	<p>Issue the report IMT information command.</p> <p>Repeat for all MUX types recorded in Step 4.</p> <p><b>rept-imt-info:report=xxxerr</b></p> <p><i>(where report=hmuxerr if HMUX cards were detected in step 4; report=hiprerr if HIPR cards were detected in step 4; report=hipr2err is HIPR2 cards were detected in step 4.)</i></p>
<b>6</b> <input type="checkbox"/>	<p>Response to report IMT information command is displayed.</p> <p>Note: Output abridged for brevity, Actual output varies</p> <pre> tekelecstp YY-MM-DD hh:mm:ss EST PPP XX.x.x-YY.y.y XXXX Summary Report: Summed across all requested cards for each bucket  XXXX Hourly Bucket Statistics  ===== Bucket Low Speed Statistic                BUS A Value   BUS B Value -----                                     - XX    IMT Rx Packet CRC Error                0              0       IMT Rx Packet Format Error             0              0                     </pre>

Procedure 3: Determining General System Status

	<p>based on software release and card type.</p>	<pre> IMT Rx Violation Error      0      0 IMT Rx Command Error        0      0 IMT Rx FIFO Full            0      0 IMT Rx FIFO Half Full       0      0 IMT Tx FIFO Full            0      0 IMT Tx FIFO Half Full       1      0  High Speed Statistic        BUS A Value  BUS B Value ----- IMT Rx Packet CRC Error     0      0 IMT Rx Disparity Error      0      0 IMT Rx Sync Lost Error      0      0 IMT Rx Code Word Error      0      0 CPU Rx FIFO Full            0      0 CPU Rx FIFO Half Full       0      0 CPU Rx FIFO Empty Before SOM 0      0 CPU Rx FIFO Empty Before EOM 0      0 CPU Rx Packet SOM Before EOM 0      0 CPU Rx Packet CRC Error     0      0 DMA terminal count          0      0 CPU Tx Buffer EOB            0      0 CPU Tx Buffer Full           0      0 CPU Tx Buffer Half Full      9      9 IMT Bypass FIFO Full        0      0 IMT Bypass FIFO Half Full   0      0 IMT Rx FIFO Full            0      0 IMT Rx FIFO Half Full       0      0  Misc Speed Statistic        BUS A Value  BUS B Value ----- Shelf ID UART Framing Error  0      0 Shelf ID UART Overrun Error  0      0                     ;                 </pre>
<p><input type="checkbox"/> 7</p>	<p>Issue the command to clear IMT errors.</p>	<p><b>clr-imt-stats:all=yes</b></p>
<p><input type="checkbox"/> 8</p>	<p>Response to clear IMT stats command is displayed.</p>	<pre> tekelecstp YY-MM-DD hh:mm:ss EST PPP XX.X.X-YY.y.y clr-imt-stats:all=yes Command entered at terminal #X. ; Tekelecstp 98-03-09 14:09:41 EST Rel XX.X.X-x.x.x Clear IMT Statistics command(s) issued... ;                 </pre>
<p><input type="checkbox"/> 9</p>	<p>Issue the command to report system status.</p>	<p><b>rept-stat-sys</b></p>
<p><input type="checkbox"/> 10</p> <p>Response to system status command is displayed.</p> <p><input type="checkbox"/> Record the Software Release: REL. _____</p> <p><input type="checkbox"/> Record any card types that are not IS-NR.</p> <p><input type="checkbox"/> Investigate and record cards whose status cannot be explained. Card Type: _____ Card Type: _____</p> <p><input type="checkbox"/> Record the number of IS-NR SS7IPGW and IPGWI cards. Verify the IP System is not deploying both SS7IPGW and IPGWI Cards by ensuring either SS7IPGW or IPGWI has 0 cards IS-NR.</p> <p>SS7IPGW Cards: _____ IPGWI Cards: _____</p>		<pre> tekelecstp YY-MM-DD hh:mm:ss EST PPP XX.X.X-x.x.x MAINTENANCE STATUS REPORT Maintenance Baseline established. Routing Baseline established. SCCP Baseline established. ALARMS:      CRIT= 0      MAJR= X      MINR= X      INH= 0 OAM 1113     IS-NR      Standby      INH= 0 OAM 1115     IS-NR      Active       INH= 0 LIM CARD     IS-NR= X      Other=      INH= 0 X25 CARD     IS-NR= X      Other= X      INH= 0 SCCP CARD     IS-NR= X      Other= X      INH= 0 GLS CARD     IS-NR= X      Other= X      INH= 0 SLAN CARD     IS-NR= X      Other= X      INH= 0 SS7IPGW CARD IS-NR= X      Other= X      INH= 0 IPGWI CARD   IS-NR= X      Other= X      INH= 0 CLOCK        IS-NR= X      Other= X      INH= 0 IMT          IS-NR= X      Other= X SLK          IS-NR= XX     Other= X      INH= 0 DLK          IS-NR= X      Other= X      INH= 0 LINK SET     IS-NR= XX     Other= X      INH= 0 SS7 DPC     IS-NR= XX     Other= X X25 DPC     IS-NR= X      Other= X CLUST DPC   IS-NR= X      Other= X XLIST DPC   IS-NR= X      Other= X DPC SS      Actv = X      Other= X SEAS SS     IS-NR= X      Other= X SEAS X25    IS-NR= X      Other= X      INH= 0 LSMS SS     IS-NR= X      Other= X LSMS Q.3    IS-NR= X      Other= X      INH= 0 TERMINAL    IS-NR= X      Other= XX     INH= 0 Command Completed. ;                 </pre>
<p><input type="checkbox"/> 11</p>	<p>Issue the command to report signaling link status.</p>	<p><b>rept-stat-slk</b></p>

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<p>12</p> <p><input type="checkbox"/></p>	<p>Response to report signaling links status command is displayed.</p>	<pre> tekelecstp YY-MM-DD hh:mm:ss EST PPP XX.X.X-X.X.X SLK LSN CLLI PST SST AST 1201,A ls1 ----- IS-NR Avail ----- 1201,B ls4 ----- OOS-MT Unavail ----- 1202,A ls1 ----- IS-NR Avail ----- 1202,B ls1 ----- IS-NR Avail ----- 1203,A ls1 ----- IS-NR Avail ----- 1203,B ls2 ----- IS-NR Avail ----- 1204,A ls4 ----- IS-NR Avail ----- 1204,B ls3 ----- IS-NR Avail ----- 1205,A ls5 ----- IS-NR Avail ----- 1205,A1 ls5 ----- IS-NR Avail ----- 1205,A2 ls5 ----- IS-NR Avail ----- 1205,A3 ls5 ----- IS-NR Avail ----- 1205,B3 ls5 ----- IS-NR Avail ----- 1206,A ls6 ----- IS-NR Avail ----- 1206,B ls6 ----- IS-NR Avail ----- 1207,A ls7 ----- IS-NR Avail ----- 1207,B ls7 ----- IS-NR Avail ----- 1211,A ls11 ----- IS-NR Avail ----- 1211,B ls11 ----- IS-NR Avail ----- 1301,A ls1301i0 ----- IS-NR Avail ----- 1301,B ls1301i0 ----- IS-NR Avail ----- 1302,A ls1302i0 ----- IS-NR Avail ----- 1302,B ls1302i0 ----- IS-NR Avail ----- 1303,A ls1303i0 ----- IS-NR Avail ----- 1303,B ls1303i0 ----- IS-NR Avail ----- 1304,A ls1304i0 ----- IS-NR Avail ----- 1304,B ls1304i0 ----- IS-NR Avail ----- 1311,A ls1311i0 ----- IS-NR Avail ----- 1311,B ls1311i0 ----- IS-NR Avail ----- 1311,A1 ls1311i0 ----- IS-NR Avail ----- 1311,B1 ls1311i0 ----- IS-NR Avail -----  Command Completed. ;                     </pre>
<p>13</p> <p><input type="checkbox"/></p>	<p>Issue the command to retrieve card provisioning.</p>	<p><b>rtrv-card</b></p>

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<p>14</p> <p><input type="checkbox"/></p>	<p>Response to retrieve command is displayed.</p>	<pre> tekelecstp YY-MM-DD hh:mm:ss EST PPP XX.X.X-YY.Y.Y CARD TYPE APPL LSET NAME LINK SLC LSET NAME LINK SLC 1101 ENET IPSPG stpa220a A 0 sc4a224a B 0 sc1a221a A1 0 sc5a225a B1 0 sc2a222a A2 0 sc6a226a B2 0 sc3a223a A3 0 sc7a227a B3 0 stpa027i A4 0 sp1a028i B4 0 sc1a028i A5 0 sp2a029i B5 0 sc2a029i A6 0 sp3a030i B6 0 sc3a030i A7 0 sp4a031i B7 0  1102 TSM GLS 1103 DSM VSCCP 1105 ENET IPSPG stpa220a A 1 sc4a224a B 1 sc1a221a A1 1 sc5a225a B1 1 sc2a222a A2 1 sc6a226a B2 1 sc3a223a A3 1 sc7a227a B3 1 stpa027n A4 1 sp1a028n B4 1  1106 LIME1 CCS7ITU 1107 DCM IPGWI sc6a033i A 0 1108 MCPM MCP sc5a032i A 1 1111 ENET IPSPG lg1111a00 A 0 lg1111i01 A1 0 lg1111n02 A2 0 1112 ENET IPSPG lg1111a00 A 1 lg1111i01 A1 1 lg1111n02 A2 1  1113 E5-MCAP OAM 1114 TDM-A 1115 E5-MCAP OAM 1116 TDM-B 1117 MDAL 1201 ENET IPSPG stpa220a A 3 sc4a224a B 3 sc1a221a A1 3 sc5a225a B1 3 sc2a222a A2 3 sc6a226a B2 3 sc3a223a A3 3 sc7a227a B3 3 stpa027i A4 3 sp1a028i B4 3 sc1a028i A5 3 sp2a029i B5 3 sc2a029i A6 3 sp3a030i B6 3 sc3a030i A7 3 sp4a031i B7 3 stpa027n A8 3 sp1a028n B8 3 sc1a028n A9 3 sp2a029n B9 3 sc2a029n A10 3 sp3a030n B10 3 sc3a030n A11 3 sp4a031n B11 3  1202 DCM STPLAN 1203 LIMT1 SS7ANSI ls3307a00 A 0 ls3307a04 B 0 ls3307a00 A1 1 ls3307a04 B1 1 ls3307a00 A2 2 ls3307a04 B2 2 ls3307a00 A3 3 ls3307a04 B3 3 ls3307a08 A4 0 ls3307a12 B4 0 ls3307a08 A5 1 ls3307a12 B5 1 ls3307a08 A6 2 ls3307a12 B6 2 ls3307a08 A7 3 ls3307a12 B7 3 ls3307a16 A8 0 ls3307a20 B8 0 ls3307a16 A9 1 ls3307a20 B9 1 ls3307a16 A10 2 ls3307a20 B10 2 ls3307a16 A11 3 ls3307a20 B11 3 ls3307a24 A12 0 ls3307a28 B12 0 ls3307a24 A13 1 ls3307a28 B13 1 ls3307a24 A14 2 ls3307a28 B14 2 ls3307a24 A15 3 ls3307a28 B15 3  1205 DCM IPLIMI sc4a031i A 0 sc4a031n B 0 sc4a031i A1 1 sc4a031n B1 1 1206 DCM IPLIMI sc4a031i A 8 sc4a031n B 8 sc4a031i A1 9 sc4a031n B1 9 1207 LIMATM ATMANSI sc8a228a A 1 sc9a229a B 1 1208 ENET IPSPG lg2305a00 A 7 gr2305i01 A1 7 gr2305n02 A2 7  1211 ENET IPSPG stpa220a A 4 sc4a224a B 4 1212 MCPM MCP 1213 LIME1 CCS7ITU ls1213i00 A 0 lr1213i04 B 0 ls1213i01 A1 0 lr1213i05 B1 0 1215 ENET IPSPG lg1111a00 A 2 lg1111i01 A1 2 lg1111n02 A2 2 1216 ENET IPSPG lg1111a00 A 3 lg1111i01 A1 3 lg1111n02 A2 3  1217 DSM VSCCP                     </pre>
<p>15</p> <p><input type="checkbox"/></p>	<p>Issue the command to report card status.</p>	<p><b>rept-stat-card</b></p>

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<p><b>16</b> <input type="checkbox"/></p>	<p>Response to card status command is displayed.</p> <p>Look for the slot ID of any IS-ANR or OOS-MT status cards. Ensure that any cards in this state can be explained.</p> <p>Record the card locations of the MASP:</p> <p>Active MASP _____</p> <p>Standby MASP _____</p>	<pre> tekelecstp YY-MM-DD hh:mm:ss EST PPP XX.x.x-YY.y.y CARD VERSION TYPE GPL PST SST AST 1101 134-060-000 DCM IPGHC IS-NR Active ----- 1102 134-060-000 LIME1 SS7HC IS-NR Active ----- 1103 134-060-000 LIME1 SS7ML IS-NR Active ----- 1104 134-060-000 LIMDS0 SS7ML IS-NR Active ----- 1105 134-060-000 MCPM MCP IS-NR Active ----- 1106 134-060-000 LIMATM ATMANSI IS-NR Active ----- 1107 134-060-000 DCM IPGHC IS-NR Active ----- 1108 134-060-000 DSM SCCPHC IS-NR Active ----- 1109 134-060-000 HIPR HIPR IS-NR Active ----- 1109 134-060-000 HIPR HIPR IS-NR Active ----- 1111 ----- DSM VS CCP 00S-MT Isolated ----- 1112 134-060-000 TSM GLSHC IS-NR Active ----- 1113 134-060-000 E5MCPAM OAMHC IS-NR Standby ----- 1114 ----- E5TDM IS-NR Active ----- 1115 134-060-000 E5MCPAM OAMHC IS-NR Active ----- 1116 ----- E5TDM IS-NR Active ----- 1117 ----- E5MDAL IS-NR Active ----- 1201 134-060-000 DCM IPLIMI IS-NR Active ----- Command Completed. ;                     </pre>
<p><b>17</b> <input type="checkbox"/></p>	<p>Issue the command to report card status.</p>	<pre> <b>rept-stat-card:loc=XXXX:mode=full</b> <i>(where XXXX is the slot ID of any card that is IS-ANR or OOS-MT in step 16)</i>                     </pre>
<p><b>18</b> <input type="checkbox"/></p>	<p>Response to card status command is displayed.</p>	<pre> tekelecstp YY-MM-DD hh:mm:ss EST PPP XX.x.x-YY.y.y CARD VERSION TYPE APPL PST SST AST XXXX ----- LIMDS0 SS7ANSI 00S-MT Isolated ---- ALARM STATUS = ** 0013 Card is isolated from the system GPL version = ----- IMT BUS A = ----- IMT BUS B = ----- CLOCK A = ----- CLOCK B = ----- CLOCK I = ----- MBD BIP STATUS = ----- DB STATUS = ----- DBD MEMORY SIZE = ----- HW VERIFICATION CODE = ----- SLK A PST = 00S-MT LS=e3e4 CLLI=----- SLK B PST = 00S-MT LS=e3e4 CLLI=----- SNM TVG RESULT = 24 hr: -----, 5 min: ----- SLAN TVG RESULT = 24 hr: -----, 5 min: ----- SCCP TVG RESULT = 24 hr: -----, 5 min: ----- EROUTE TVG RESULT = 24 hr: -----, 5 min: ----- SENTINEL SOCKET A = INACTIVE Command Completed. ;                     </pre>
<p><b>19</b> <input type="checkbox"/></p>	<p>Repeat steps 17 – 18 for all cards that were IS-ANR or OOS-MT in step 16.</p>	
<p><b>20</b> <input type="checkbox"/></p>	<p>Issue the command to display the version of the GPLs running on the system.</p>	<pre> <b>rept-stat-gpl:display=all</b>                     </pre>

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<p>21</p> <p><input type="checkbox"/></p>	<p>Response to GPL status command.</p>	<pre> tekelecstp YY-MM-DD hh:mm:ss EST PPP XX.x.x-YY.y.y GPL Auditing ON  GPL Auditing ON  GPL      CARD      RUNNING      APPROVED      TRIAL ATMANSI  2101      134-060-000  134-060-000  134-060-000           BPHCAP      134-050-000  134-050-000  134-050-000 ATMANSI  2102      134-060-000  134-060-000  134-060-000           BPHCAP      134-050-000  134-050-000  134-050-000 OAMHC    1113      134-060-000  -----           BLMCAP      134-060-000  134-060-000  134-060-000 OAMHC    1115      134-060-000  -----           BLMCAP      134-060-000  134-060-000  134-060-000 VSCCP    1107      134-060-000  134-060-000  134-060-000           BPDCM      134-050-000  134-050-000  134-050-000 SS7ML    1201      134-060-000  134-060-000  134-060-000           BPMPPL      134-050-000  134-050-000  134-050-000 SS7ML    1205      134-060-000  134-060-000  134-060-000           BPMPPL      134-050-000  134-050-000  134-050-000 SS7ML    1206      134-060-000  134-060-000  134-060-000           BPMPPLT     134-050-000  134-050-000  134-050-000 SS7ML    1207      134-060-000  134-060-000  134-060-000           BPMPPLT     134-050-000  134-050-000  134-050-000 SS7ML    1302      134-060-000  134-060-000  134-060-000           BPMPPLT     134-050-000  134-050-000  134-050-000 SS7ML    1306      134-060-000  134-060-000  134-060-000           BPMPPLT     134-050-000  134-050-000  134-050-000 IPLIMI   xxxx      134-060-000  134-060-000  134-060-000           BPDCM      134-050-000  134-050-000  134-050-000 ATMITU   2103      134-060-000  134-060-000  134-060-000           BPHCAP      134-050-000  134-050-000  134-050-000 HIPR     1109      134-050-000  134-050-000  134-050-000 HIPR     1110      134-050-000  134-050-000  134-050-000 HIPR     1209      134-050-000  134-050-000  134-050-000 HIPR     1210      134-050-000  134-050-000  134-050-000 HIPR     1309      134-050-000  134-050-000  134-050-000 HIPR     1310      134-050-000  134-050-000  134-050-000 HIPR2    2109      134-050-000  134-050-000  134-050-000 HIPR2    2110      134-050-000  134-050-000  134-050-000 SS7HC    1202      134-060-000  134-060-000  134-060-000           BLIXP      134-060-000  134-060-000  134-060-000 SS7HC    1303      134-060-000  134-060-000  134-060-000           BLIXP      134-060-000  134-060-000  134-060-000 SS7HC    1311      134-060-000  134-060-000  134-060-000           BLIXP      134-060-000  134-060-000  134-060-000 GLSHC    1213      134-060-000  134-060-000  134-060-000           BLIXP      134-060-000  134-060-000  134-060-000 GLSHC    1214      134-060-000  134-060-000  134-060-000           BLIXP      134-060-000  134-060-000  134-060-000 IPLHC    1102      134-060-000  134-060-000  134-060-000           BLIXP      134-060-000  134-060-000  134-060-000 IPGHC    1101      134-060-000  134-060-000  134-060-000           BLIXP      134-060-000  134-060-000  134-060-000 SCCPHC   1111      134-060-000  134-060-000  134-060-000           BLIXP      134-060-000  134-060-000  134-060-000 IPSHC    1313      134-060-000  134-060-000  134-060-000           BLIXP      134-060-000  134-060-000  134-060-000 ATMHC    2105      134-060-000  134-060-000  134-060-000           BLIXP      134-060-000  134-060-000  134-060-000 IPSG     1103      134-060-000  134-060-000  134-060-000           BLIXP      134-060-000  134-060-000  134-060-000  Command Completed. ; </pre>
<p>22</p> <p><input type="checkbox"/></p>	<p>Issue the command to retrieve the shelves</p>	<pre> rtrv-shlf </pre>
<p>23</p> <p><input type="checkbox"/></p>	<p>Response to retrieve shelf command is displayed.</p>	<pre> tekelecstp YY-MM-DD hh:mm:ss EST PPP XX.x.x-YY.y.y SHELF DISPLAY FRAME SHELF      TYPE  1         1      CONTROL  1         2      EXTENSION ; </pre>
<p>24</p> <p><input type="checkbox"/></p>	<p>Issue the command to retrieve STP.</p>	<pre> rtrv-stp </pre>
<p>25</p> <p><input type="checkbox"/></p>	<p>Response to retrieve STP command is displayed.</p> <p>Note: output abridged for brevity. This output displays information for one frame only.</p>	<pre> tekelecstp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x-YY.y.y  Card Part Number Rev Serial Number Type DB GPL GPL Version --- Card Part Number Rev Serial Number Type DB APPL GPL Version --- 1101 870-2877-01 A 10207185540 IPSM 2048M IPSHC 134-060-000 1102 870-1873-02 B 10206515298 LIME1 512M SS7HC 134-060-000 </pre>

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		<pre> 1103 870-2212-03 E 10208195239 DCM 512M IPGHC 134-060-000 1104 870-2212-03 C 10206525734 DCM 512M IPGHC 134-060-000 1105 Empty 1106 Empty 1107 870-2212-05 D 10209497242 DCM 512M IPGHC 134-060-000 1108 870-2877-01 A 10207185522 IPSM 2048M IPSHC 134-060-000 1109 870-2872-01 B 10209127086 HIPR2 134-050-000 1110 870-2872-01 B 10209127094 HIPR2 134-050-000 1111 870-2860-01 A 10207155436 DSM 4096M SCCPHC 134-060-000 1112 Empty 1113 870-2903-01 L 10210107118 E5MCAP 4096M OAMHC 134-060-000 1114 TDM 1115 870-2903-01 C 10208225027 E5MCAP 4096M OAMHC 134-060-000 1116 TDM 1117 MDAL 1118 Empty  1201 870-2671-03 G 10208357153 LIME1 512M SS7HC 134-060-000 1202 Empty 1203 870-2198-01 G 10201322801 LIME1 - SS7ML 134-060-000 1204 870-2198-01 M 10203282262 LIME1 - SS7ML 134-060-000 1205 870-2198-01 M 10203282235 LIME1 - SS7ML 134-060-000 1206 870-2198-01 G 10201322679 LIME1 - SS7ML 134-060-000 1207 870-2198-01 G 10201322671 LIME1 - SS7ML 134-060-000 1208 870-2198-02 E 10205215697 LIME1 - SS7ML 134-060-000 1209 870-2872-01 B 10209135070 HIPR2 134-050-000 1210 870-2872-01 B 10209127084 HIPR2 134-050-000 1211 870-1873-02 D 10206405074 LIME1 512M SS7HC 134-060-000 1212 870-2198-01 G 10201322726 LIME1 - SS7ML 134-060-000 1213 870-1873-03 E 10207115436 LIME1 512M SS7HC 134-060-000 1214 870-2198-01 G 10201322686 LIME1 - SS7ML 134-060-000 1215 870-2198-01 G 10201383680 LIME1 - SS7ML 134-060-000 1216 870-1873-02 D 10206525679 LIMT1 512M SS7HC 134-060-000 1217 870-2212-03 C 10207015039 DCM 512M SLANHC 134-060-000 1218 870-2212-03 B 10206455188 DCM 512M SLANHC 134-060-000  1301 870-2212-02 A 10206375265 DCM 512M IPLHC 134-060-000 1302 870-1873-03 E 10207115428 LIME1 512M SS7HC 134-060-000 1303 870-2212-03 E 10208047126 DCM 512M IPLHC 134-060-000 1304 870-2212-05 D 10209517303 DCM 512M IPLHC 134-060-000 1305 870-2455-03 B 10206075107 LIME1ATM 4M ATMITU 134-060-000 1306 870-2212-03 F 10208327221 DCM 512M IPLHC 134-060-000 1307 870-2212-03 E 10208145062 DCM 512M IPGHC 134-060-000 1308 870-2212-02 A 10206375266 DCM 512M IPGHC 134-060-000 1309 870-2872-01 B 10209127088 HIPR2 134-060-000 1310 870-2872-01 12 10208345051 HIPR2 134-060-000 1311 870-2212-03 F 10208327196 DCM 512M IPLHC 134-060-000 1312 870-2212-02 A 10206355354 DCM 512M IPLHC 134-060-000 1313 Empty 1314 Empty 1315 870-1872-01 B 10207195504 LIME1ATM 512M ATMHC 134-060-000 1316 870-1873-01 A 10206145276 LIME1 512M SS7HC 134-060-000 1317 870-2212-03 E 10208115347 DCM 512M IPLHC 134-060-000 1318 870-2212-02 A 10206385236 DCM 512M IPLHC 134-060-000  Command Completed. </pre>
26	Issue the command to retrieve event log.	<pre> rtrv-log:dir=bkwd:num=100:mode=full:edate=yymmdd:type=alarm:slog=act (Where yymmdd is yesterday's date.) </pre>
27	Response to retrieve log command is displayed.  If report terminates without the "end of log reached" displayed, continue to next step. Otherwise, go to step 30.	<pre> tekelecstp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x-YY.y.y Card 1115; SYS REL= XX.X.X-YY.Y.Y; STP CLLI= tekelecstp; Timezone= EST  ****02-05-27 21:29:47**** 5119.0912 SYSTEM Dynamic database is now consistent ****02-05-27 21:19:47**** 9703.0911 ** SYSTEM Dynamic database is inconsistent Card 2304 ****02-05-27 21:09:42**** 9280.0912 SYSTEM Dynamic database is now consistent ****02-05-27 20:59:43**** 8850.0009 CARD 1115 OAMHC MASP became active ****02-05-27 19:56:21**** 6209.0106 IMT BUS B IMT Bus alarm cleared ****02-05-27 19:56:19**** 6208.0107 * IMT BUS B Minor IMT failure detected ****02-05-27 19:22:56**** 9829.0048 * TERMINAL 8 Terminal failed ****02-05-27 19:22:56**** 9828.0046 TERMINAL 7 Terminal enabled <b>UAM Report terminated - end of log reached</b> END OF LOG REPORT. </pre>

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<p>28 <input type="checkbox"/></p>	<p>Issue the command to retrieve the next set of events.</p>	<p><b>rtrv-log:next=500</b></p>
<p>29 <input type="checkbox"/></p>	<p>Response to retrieve log command is displayed.</p>	<pre>tekelecstp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x-YY.y.y Card 1115; SYS REL= XX.X.X-YY.Y.Y; STP CLLI= tekelecstp; Timezone= EST  8978.0106      IMT BUS B                IMT Bus alarm cleared ****02-05-27  15:02:01**** 8960.0107 *    IMT BUS B                Minor IMT failure detected ****02-05-27  13:59:06**** 6342.0912      SYSTEM                          Dynamic database is now consistent ****02-05-27  13:54:18**** 6152.0085      IP7CONN ipi2106b7m2pa            IP Connection Available ****02-05-27  13:54:18**** 6131.0536 *    IP7CONN ipi2106b7m2pa            IP Connection Excess Retransmits ****02-05-27  13:49:01**** ****02-05-27  00:58:37**** 8789.0311      DPC      2-047-2                  DPC is allowed ****02-05-27  00:58:37**** 8787.0314      DPC      2-047-2                  Route is allowed ****02-05-27  00:58:37**** 8786.0311      DPC      2-045-2                  DPC is allowed ****02-05-27  00:58:37**** 8785.0314      DPC      2-045-2                  Route is allowed UAM Report terminated - end of log reached END OF LOG REPORT.</pre>
<p><input type="checkbox"/></p>	<p>If report terminates without the “end of log reached” display, the command can be repeated.<sup>2</sup></p>	
<p>30 <input type="checkbox"/></p>	<p>Issue the command to retrieve the log for the standby.</p> <p>Repeat steps 28 – 29 until the “end of log reached” message displays.</p>	<p><b>rtrv-log:dir=bkwd:num=100:mode=full:edate=yymmdd:type=alarm:slog=stb</b> <i>(Where yymmdd is yesterday's date.)</i></p>
<p>31 <input type="checkbox"/></p>	<p>Issue the retrieve log command for the UIM log types.</p> <p>Repeat steps 28 – 29 until the “end of log reached” message displays.</p>	<p><b>rtrv-log:dir=bkwd:num=100:mode=full:edate=yymmdd:type=uim:slog=act</b> <i>(Where yymmdd is yesterday's date.)</i></p>
<p>32 <input type="checkbox"/></p>	<p>Issue the command to retrieve the STP power level.</p>	<p><b>rtrv-stp:display=power</b></p>
<p>33 <input type="checkbox"/></p>	<p>Response to retrieve power frame command is displayed.</p> <p>Note any of the power threshold numbers prefixed with a “+” sign.</p>	<pre>tekelecstp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x-YY.y.y        Power Threshold      Power Consumption Frame  (Amps)      (Watts)      (Amps)      (Watts) ----- CF00      45          2160          37.71       1810 EF00      40          1920          33.99       1631 EF01      35          1680          10.00        480 EF04      +30         +1440          14.06        675  Command Completed.</pre>
<p>34 <input type="checkbox"/></p>	<p>Issue the command to retrieve the threshold alarm levels.</p>	<p><b>rtrv-th-alm</b></p>

<sup>2</sup> The amount of alarms and UIMs during a 24-period can vary greatly depending on the size and how tightly configured and controlled the system is. Retrieving additional log entries may be beneficial.

Procedure 3: Determining General System Status

<p>35 <input type="checkbox"/></p>	<p>Response to retrieve threshold alarm command is displayed.</p>	<pre>tekelecstp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x-YY.y.y Thermal Alarm Level 1:          92% Thermal Alarm Level 2:          100% SCCP TPS Threshold:             80% SCCP Calculation Method:        N LNP TN DB Alarm Level 1:        80% LNP TN DB Alarm Level 2:        95% GTT SCCP Service Alarm Level 1: 10% GTT SCCP Service Alarm Level 2: 20% Non-GTT SCCP Service Alarm Level 1: 10% Non-GTT SCCP Service Alarm Level 2: 20% SCCP Service Alarm Level 1 Interval: 0 SCCP Service Alarm Level 2 Interval: 0 IMT Bus Combined Utilization Alarm Level 1: 70% IMT Bus Combined Utilization Alarm Level 2: 80% IMT Bus Congestion Alarm Level 1: 70% IMT Bus Congestion Alarm Level 2: 80% RTRV-TH-ALM: MASP B - COMPLTD. ;</pre>
<p>36 <input type="checkbox"/></p>	<p>Issue the command to retrieve the site ID.</p>	<pre>rtrv-sid</pre>
<p>37 <input type="checkbox"/></p>	<p>Response to retrieve command is displayed.</p>	<pre>tekelecstp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x-YY.y.y PCA          PCI          PCN          CLLI          PCTYPE 200-080-200  7-080-7      7-080-7-aa  tk1c9051301  ANSI               s-7-080-7      s-7-080-7-aa  CPCA 200-081-000  CPCI (INP) 7-082-0          s-7-082-0  CPCN (INP) 7-082-0-aa      7-082-0-bc      s-7-082-0-aa      s-7-082-0-bc  CPCA (GFLEX) 200-085-000  CPCI (GFLEX) 7-085-0          s-7-085-0  CPCN (GFLEX) 7-085-0-aa      7-085-0-bc      s-7-085-0-aa      s-7-085-0-bc  CPCA (MNP) 200-086-000  CPCI (MNP) 7-086-0          s-7-086-0  CPCN (MNP) 7-086-0-aa      7-086-0-bc      s-7-086-0-aa      s-7-086-0-bc ;</pre>
<p>38 <input type="checkbox"/></p>	<p>Issue the command to retrieve SCTP associations.</p>	<pre>rtrv-assoc</pre>
<p>39 <input type="checkbox"/></p>	<p>The response to the retrieve command is displayed.</p>	<pre>tekelecstp YY-MM-DD hh:mm:ss zzz P P P P P XX.x.x-YY.y.y           CARD  IPLNK           LOC  PORT  LINK  ADAPTER  LPORT  RPORT  OPEN  ALW ip1ma1103a2m2pa 1103 B A2 M2PA 2175 2163 YES YES ip1ma1103a3m2pa 1103 B A3 M2PA 2176 2164 YES YES ip1ma1103b2m2pa 1103 B B2 M2PA 2179 2167 YES YES ip1ma1103b3m2pa 1103 B B3 M2PA 2180 2168 YES YES ip1ma2116am2pa 2116 A A M2PA 3186 3166 YES YES ip1ma2116a1m2pa 2116 A A1 M2PA 3187 3167 YES YES ip1ma2116a2m2pa 2116 A A2 M2PA 3188 3168 YES YES ip1ma2116a3m2pa 2116 A A3 M2PA 3189 3169 YES YES ip1ma2116bm2pa 2116 B B M2PA 3190 3170 YES YES ip1ma2116b1m2pa 2116 B B1 M2PA 3191 3171 YES YES ip1ma2116b2m2pa 2116 B B2 M2PA 3192 3172 YES YES ip1ma2116b3m2pa 2116 B B3 M2PA 3193 3173 YES YES g1101asua400a 1101 A A SUA 7300 7300 YES YES g1101asua500a 1101 A A SUA 2400 2400 YES YES g1102asua400a 1102 A A SUA 2300 2300 YES YES g1102asua500a 1102 A A SUA 2400 2400 YES YES  IP Appl Sock/Assoc table is (16 of 4000) 1% full ;</pre>

Procedure 3: Determining General System Status

40	Issue the command to retrieve T1 ports.	<b>rtrv-t1</b>
41	The response to the retrieve command is displayed.	<pre> tekelecstp YY-MM-DD hh:mm:ss zzz P P P P P XX.x.x-YY.y.y T1 LOC  PORT  ENCODE  T1TSEL  FRAMING  LL  CHANBRD G  CHAN  ---- 1304  3      B8ZS   LINE    ESF      133  -----  CHAN  ---- 1304  4      B8ZS   LINE    ESF      133  -----  CHAN  ---- 2203  5      B8ZS   LINE    ESF      133  -----  CHAN  ---- 2203  6      B8ZS   LINE    ESF      133  -----  CHAN  ---- 2314  7      B8ZS   LINE    ESF      133  -----  CHAN  ---- 2314  8      B8ZS   LINE    ESF      133  -----  CHAN  ---- 3113  1      B8ZS   LINE    ESF      133  -----  CHAN  ---- 3113  2      B8ZS   LINE    ESF      133  -----  CHAN  ---- 3214  3      B8ZS   LINE    ESF      133  -----  CHAN  ---- 3214  4      B8ZS   LINE    ESF      133  -----  CHAN  ---- 3307  5      B8ZS   LINE    ESF      133  -----  CHAN  ---- 3307  6      B8ZS   LINE    ESF      133  -----  CHAN  ---- 4104  7      B8ZS   LINE    ESF      133  -----  CHAN  ---- 4104  8      B8ZS   LINE    ESF      133  -----  CHAN  ---- 1107  1      B8ZS   LINE    ESF      133  -----  CHAN  ---- 1107  2      B8ZS   LINE    ESF      133  -----  CHAN  ---- ;                     </pre>
42	Issue the command to retrieve T1 ports.	<b>rtrv-e1</b>
43	The response to the retrieve command is displayed.	<pre> tekelecstp YY-MM-DD hh:mm:ss zzz P P P P P XX.x.x-YY.y.y E1 LOC  PORT  CRC4  CAS  ENCODE  E1TSEL  SI  SN  CHANBRD G  LINK  MINSU 1203  1      ON    OFF  HDB3   LINE    0  0  -----  CHAN  ---- 1203  2      ON    OFF  HDB3   LINE    0  0  -----  CHAN  ---- 1203  3      ON    OFF  HDB3   LINE    0  0  -----  CHAN  ---- 1203  4      ON    OFF  HDB3   LINE    0  0  -----  CHAN  ---- 1207  2      ON    OFF  HDB3   LINE    0  0  -----  CHAN  ---- 1207  3      ON    OFF  HDB3   LINE    0  0  -----  CHAN  ---- 1208  3      ON    OFF  HDB3   LINE    0  0  -----  CHAN  ---- 1208  4      ON    OFF  HDB3   LINE    0  0  -----  CHAN  ---- ;                     </pre>
44	Issue the command to report IP TPS usage.	<b>rept-stat-iptps</b>
45	The response to the status command is displayed.	<pre> tekelecstp YY-MM-DD hh:mm:ss zzz P P P P P XX.x.x-YY.y.y IP TPS USAGE REPORT ----- THRESH  CONFIG          TPS    PEAK    PEAKTIMESTAMP ----- LSN 1s2206i00  100%    2400  TX:    0    109  10-03-05 10:41:51           RCV:    0     0  00-00-00 00:00:00 1s2206i01  100%    2400  TX:    0    84  10-03-05 10:41:51           RCV:    0     0  00-00-00 00:00:00 1s2206i02  100%    2400  TX:    0    85  10-03-05 10:41:51           RCV:    0     0  00-00-00 00:00:00 1s2206i03  100%    2400  TX:    0    84  10-03-05 10:41:51           RCV:    0     0  00-00-00 00:00:00 1g1111a00  100%   13280  TX:    0  2883 10-03-08 15:26:06           RCV:    0     0  00-00-00 00:00:00 1g2305a00  100%   13280  TX:    0    374 10-03-08 17:19:36           RCV:    0     0  00-00-00 00:00:00 1g1111i01  100%   13280  TX:    0  2883 10-03-08 15:14:06           RCV:    0     0  00-00-00 00:00:00 1g1315i00  100%    5000  TX:    0     9  10-03-12 20:10:36           RCV:    0     0  00-00-00 00:00:00 1g5315i00  100%    380   TX:    0     0  00-00-00 00:00:00           RCV:    0     0  00-00-00 00:00:00 1g1111n02  100%   13280  TX:    0  2883 10-03-08 15:19:06           RCV:    0     0  00-00-00 00:00:00 1g1316n00  100%    5000  TX:    0     9  10-03-12 20:10:36           RCV:    0     0  00-00-00 00:00:00 sc1a221a   100%    3200  TX:    1  2883 10-03-08 15:54:36           RCV:    0  2920 10-03-08 18:09:21 sc3a223a   100%    3200  TX:    1  2972 10-03-08 18:39:06           RCV:    0  2920 10-03-08 17:30:21 sc3a030i   100%    3200  TX:    1  2724 10-03-08 17:17:06           RCV:    0  2724 10-03-08 16:44:21 ----- Command Completed. ;                     </pre>

Procedure 3: Determining General System Status

<p>46 <input type="checkbox"/></p>	<p>Issue the command to generate a measurements report.</p>	<p><b>rept-meas:enttype=stp:type=mtcd</b></p>
<p>47a <input type="checkbox"/></p>	<p>If measurement collection is ON, the response to the report command is displayed.</p>	<pre>tekelecstp YY-MM-DD hh:mm:ss zzz P P P P P X X . x . x - Y Y . y . y TYPE OF REPORT: DAILY MAINTENANCE MEASUREMENTS ON STP REPORT PERIOD: LAST REPORT INTERVAL: YY-MM-DD, 00:00:00 THROUGH 23:59:59  STP-MTCD MEASUREMENTS  These measurements are from 10-03-15, 00:00:00 through 23:59:59. ORIGMSUS = 228575718, TRMDMSUS = 204657972, THRSWMSU = 167565746, MTPRESTS = 0, DTAMSULOST = 0, MSINVDPC = 0, MSINVSIO = 0, OMSINVDPC = 0, MSINVLNK = 0, MSINVSIF = 0, MSNACDPC = 78, MSINVS LC = 0, GTTPERFD = 72959128, GTTUNONS = 12096, GTTUNINT = 360, MSSCCPFL = 0, MSULOST1 = 0, MSULOST2 = 0, MSULOST3 = 0, MSULOST4 = 0, MSULOST5 = 0, DRDCLFLR = 4207376, DURLKOTG = 4207370, CRSYSAL = 486, MASYSAL = 23558, MISYSAL = 2863, XLXTSPACE = 0, XLXTELEI = 0, TTMAPPF = 0, MSUDSCRD = 0, QVSZMSG = 0, GFGTMATCH = 3888000, GFGTNOMCH = 0, GFGTNOLKUP = 0, MSUSCCPFLR = 0, MSSCCPDISC = 0, MSIDPNOMCH = 0, MSIDPMATCH = 0, MSULOST6 = 0, SCCLOOP = 0</pre> <p>;</p>
<p>47b <input type="checkbox"/></p>	<p>If measurement collection is OFF, the response to the report command is displayed.</p>	<pre>tekelecstp YY-MM-DD hh:mm:ss zzz P P P P P X X . x . x - Y Y . y . y TYPE OF REPORT: DAILY MAINTENANCE MEASUREMENTS ON STP REPORT PERIOD: LAST REPORT INTERVAL: YY-MM-DD, 00:00:00 THROUGH 23:59:59  STP-MTCD MEASUREMENTS  <b>Measurement data are not current.</b></pre> <p>;</p>
<p>48 <input type="checkbox"/></p>	<p>All steps in this procedure were completed.</p>	

### **3.4 Report System Troubles**

This procedure examines non-network system troubles that should be corrected. Some examples of non-network troubles are:

- Terminal Failed
- Card has bad A or B system clock
- Card is not running approved GPL
- LIM denied SCCP service
- IMT Bus A failed

If there are any non-network troubles, which cannot be resolved, they should be documented.

In some cases, non-network troubles may not be correctable. For example, a terminal port connected to a modem will report Terminal Failed if the modem is not dialed in.

The procedure will also examine the devices that have their alarms inhibited. In some cases, these alarm inhibits may need to be cleared.

Procedure 4: Reporting System Troubles

S T E P #	This procedure examines non-network system troubles that should be corrected (See examples above.)	
1 <input type="checkbox"/>	Issue the command to report trouble status.	<b>rept-stat-trbl:display=timestamp</b>
2 <input type="checkbox"/>	Response to trouble status command is displayed.  Record any non-network troubles.  Trouble _____	<pre> tekelecstp 98-03-09 14:09:29 EST Re1 XX.X.X Searching devices for alarms... ; tekelecstp 98-03-09 14:09:30 EST Re1 XX.X.X SEQN UAM AL DEVICE ELEMENT TROUBLE TEXT 5728.0048 * TERMINAL 14 Terminal failed           98-03-09 10:05:36 5729.0048 * TERMINAL 15 Terminal failed           98-03-09 10:05:36 5730.0155 * DLK 1107,A STPLAN connection unavailable           98-03-09 13:57:40 5731.0013 ** CARD 1214 SS7ANSI Card is isolated from the system           98-03-09 13:57:40 5604.0013 ** CARD 1111 SCCP Card is isolated from the system           98-03-09 13:57:40 5732.0236 ** SLK 1214,A lsn1214 REPT-LKF: not aligned           98-03-09 13:57:40 5733.0236 ** SLK 1214,B lsn1214 REPT-LKF: not aligned           98-03-09 13:57:40 5734.0236 ** SLK 1106,A lsnx1 REPT-LKF: not aligned           98-03-09 13:57:40 5735.0318 ** LSN lsn1214 REPT-LKSTO: link set prohibited           98-03-09 13:57:40 5736.0318 ** LSN lsnx1 REPT-LKSTO: link set prohibited           98-03-09 13:57:40 Command Completed. ; </pre>
3 <input type="checkbox"/>	Issue the command to report inhibited alarms	<b>rept-stat-alm:display=inhb</b>
4 <input type="checkbox"/>	Response to alarm status command is displayed.	<pre> tekelecstp 98-03-09 14:10:29 EST Re1 XX.X.X rept-stat-alm:display=inhb Command entered at terminal #4. ALARM TRANSFER= RMC ALARM MODE CRIT= AUDIBLE MAJR= AUDIBLE MINR= SILENT ALARM FRAME 1 CRIT= 2 MAJR= 4 MINR= 0 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 ALARM FRAME OAP CRIT= 0 MAJR= 0 MINR= 0 PERM. INH. ALARMS CRIT= 0 MAJR= 0 MINR= 0 TEMP. INH. ALARMS CRIT= 0 MAJR= 0 MINR= 0 ACTIVE ALARMS CRIT= 2 MAJR= 4 MINR= 0 TOTAL ALARMS CRIT= 2 MAJR= 4 MINR= 0  ALARM INHIBIT REPORT ----- DEVICE ELEMENT DURATION ALM INH LVL CUR ALM LVL ----- CARD 1101 PERM MINR MAJR+ Command Completed. ; </pre>
5 <input type="checkbox"/>	All steps in this procedure were completed.	

### 3.5 Verifying Database Status

#### Procedure 5: Verifying Database Status

STEP #	This procedure verifies that your database is coherent, not in transition and that all cards are running at the same database level.	
1	Perform this step only if on-site personnel are available. If no personnel are available then go to step 2.	Insert a current release system removable media into the system. For E5-MASP, insert a thumbdrive USB in the Active MASP's latched USB port.
2	Issue the command to report database status.	<code>rept-stat-db:display=all</code>
3	<p>Response to database command is displayed if running E5 MASP.</p> <p>(OAM-USB status is only shown for the active MASP)</p> <p>Examine the columns labeled C, T and LEVEL output by this command.</p> <p>All entries in C should be coherent which is indicated by a Y.</p> <p>Verify entries in column 'T' show 'N', which indicates that the database is not in transition except the OAM-RMV, OAM-USB, and TDM-BKUP, which show a dash.</p> <p>All entries in LEVEL are numeric values. All entries in this column should be the same value except TDM-BKUP, OAM-RMV and OAM-USB.</p>	<pre> tekelecstp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x-YY.y.y DATABASE STATUS: &gt;&gt; OK &lt;&lt; TDM 1114 ( STDBY) C LEVEL TIME LAST BACKUP C LEVEL TIME LAST BACKUP ----- FD BKUP Y YYY YY-MM-DD HH:MM:SS TTTT Y YYY YY-MM-DD HH:MM:SS TTTT FD CRNT Y XXX MCAPI 1113 MCAPI 1115 ----- RD BKUP - - - - Y ZZZ YY-MM-DD HH:MM:SS TTTT USB BKP - - - - - - - - ----- CARD/APPL LOC C T LEVEL TIME LAST UPDATE EXCEPTION ----- SCCP 1101 Y N XXX YY-MM-DD HH:MM:SS - SCCP 1102 Y N XXX YY-MM-DD HH:MM:SS - GLS 1103 Y N XXX YY-MM-DD HH:MM:SS - GLS 1104 Y N XXX YY-MM-DD HH:MM:SS - SS7GX25 1105 Y N XXX YY-MM-DD HH:MM:SS - STPLAN 1111 Y N XXX YY-MM-DD HH:MM:SS - OAM-RMV 1113 - - - - - - - TDM-CRNT 1114 Y N XXX YY-MM-DD HH:MM:SS - TDM-BKUP 1114 Y - YYY YY-MM-DD HH:MM:SS DIFF LEVEL OAM-RMV 1115 Y - ZZZ YY-MM-DD HH:MM:SS DIFF LEVEL OAM-USB 1115 - - - - - - - TDM-CRNT 1116 Y N XXX YY-MM-DD HH:MM:SS - TDM-BKUP 1116 Y - YYY YY-MM-DD HH:MM:SS DIFF LEVEL SS7ANSI 1201 Y N XXX YY-MM-DD HH:MM:SS - SS7ANSI 1202 Y N XXX YY-MM-DD HH:MM:SS - SS7ANSI 1203 Y N XXX YY-MM-DD HH:MM:SS - CCS7ITU 1211 Y N XXX YY-MM-DD HH:MM:SS - GLS 1218 Y N XXX YY-MM-DD HH:MM:SS -                     </pre>
4	Send a distributed network database (DDB) audit request to the active OAM.	<code>aud-data:type=ddb:display=all</code>

**Procedure 5: Verifying Database Status**

<p>5 <input type="checkbox"/></p>	<p>Response to the <b>aud-data</b> command is displayed.</p>	<pre> tekelecstp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x-YY.y.y DDB AUDIT REPORT SYSTEM STATUS: OK RESPONDING CARDS: 169 INCONSISTENT CARDS: (0) AUDIT START TIME: 18/06/2009 17:53:16 NON RESPONDING CARDS: (0) QUIET PERIOD: 500 ms  RTE      LINK SET  LINK      CM CARD  CM CLSTR  MATED APPL MTP GLOBL5 H'0a045208 H'020fb1c3 H'05dbdce5 H'00009b73 H'0000a398 ----- H'00000000           LOC=1201          IDLE PERIOD=711345          DDB UPDATES=218290  H'0a045208 H'020fb1c3 H'05dbdce5 H'00009b73 H'0000a398 ----- H'00000000           LOC=1203          IDLE PERIOD=711310          DDB UPDATES=265207  H'0a045208 H'020fb1c3 H'05dbdce5 H'00009b73 H'0000a398 ----- H'00000000           LOC=1205          IDLE PERIOD=711330          DDB UPDATES=303056  : : : H'0a045208 H'020fb1c3 H'05dbdce5 H'00009b73 H'0000a398 ----- H'00000000           LOC=6115          IDLE PERIOD=711520          DDB UPDATES=173933  H'0a045208 H'020fb1c3 H'05dbdce5 H'00009b73 H'0000a398 H'00f1f4c3 H'00000000           LOC=6117          IDLE PERIOD=711225          DDB UPDATES=75945  H'0a045208 H'020fb1c3 H'05dbdce5 H'00009b73 H'0000a398 ----- H'00000000           LOC=1101          IDLE PERIOD=711185          DDB UPDATES=202383  H'0a045208 H'020fb1c3 H'05dbdce5 H'00009b73 H'0000a398 ----- H'00000000           LOC=1111          IDLE PERIOD=711535          DDB UPDATES=168151           ;         </pre>
<p>6 <input type="checkbox"/></p>	<p>All steps in this procedure were completed.</p>	

### 3.6 Verifying GPLs

#### Procedure 6: Verifying GPLs

S T E P #	This procedure verifies that all GPLs are correctly distributed throughout the system, including fixed disks and removable media.	
1 <input type="checkbox"/>	Issue the command to display GPL status.	<b>rtrv-gpl</b>
2 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<p>Response to retrieve GPL command is displayed</p> <p>Verify that all GPLs in the APPROVED, TRIAL, and REMOVE TRIAL columns match those in the RELEASE column.</p> <p>Also verify that no GPL alarms exist. (Alarms are shown here as an example.)</p> <p>Verify that the removable media drive can be read and its GPL contents correspond to current Release GPLs.</p>	<pre>tekelecstp YY-MM-DD hh:mm:ss TTTT PTTTT XX.x.x-YY.y.y GPL Auditing ON  APPL      CARD  RELEASE      APPROVED      TRIAL      REMOVE TRIAL GPL       CARD  RELEASE      APPROVED      TRIAL      REMOVE TRIAL GLS      1114  134-060-000  134-060-000  134-060-000  134-060-000 GLS      1116  134-060-000  134-060-000  134-060-000  134-060-000 GLS      1115  ----- IMT      1114  134-060-000  134-060-000  134-060-000  134-060-000 IMT      1116  134-060-000  134-060-000  134-060-000  134-060-000 IMT      1115  ----- ATMANSI  1114  134-060-000  134-060-000  134-060-000  134-060-000 ATMANSI  1116  134-060-000  134-060-000  134-060-000  134-060-000 ATMANSI  1115  ----- BPHCAP   1114  134-050-000  134-050-000  134-050-000  134-050-000 BPHCAP   1116  134-050-000  134-050-000  134-050-000  134-050-000 BPHCAP   1115  ----- BPDCM    1114  134-050-000  134-049-000  ALM 134-050-000  134-050-000 BPDCM    1116  134-050-000  134-050-000  134-050-000  134-050-000 BPDCM    1115  ----- BLMCAP   1114  134-060-000  134-060-000  134-060-000  134-060-000 BLMCAP   1116  134-060-000  134-060-000  134-060-000  134-060-000 BLMCAP   1115  ----- OAMHC    1114  134-060-000  134-060-000  134-060-000  134-060-000 OAMHC    1116  134-060-000  134-060-000  134-060-000  134-060-000 OAMHC    1115  ----- HIPR2    1114  134-060-000  134-060-000  134-060-000  134-060-000 HIPR2    1116  134-060-000  134-060-000  134-060-000  134-060-000 HIPR2    1115  -----</pre> <p><i>{output abridged for brevity.}</i></p>
3 <input type="checkbox"/>	All steps in this procedure were completed.	

### 3.7 Retrieving Obituaries

#### Procedure 7: Retrieving Obituaries

<b>S T E P #</b>	<b>This procedure retrieves all recently logged obituaries. These obituaries describe the status of the system just before a processor restarted due to a hardware or software failure. The data includes a register and stack dump of the processor, card location, reporting module number, software code location, and class of the fault detected.</b>	
<b>1</b> <input type="checkbox"/>	Issue the command to retrieve obits from MASP A	<b>rtrv-obit:loc=1113</b>
<b>2</b> <input type="checkbox"/>	Response to retrieve obit command is displayed.	<pre> tekelecstp YY-MM-DD hh:mm:ss TTTT PTTTT XX.x.x-YY.y.y NOTICE: Only 1 obit(s) to retrieve in the log. ; tekelecstp 98-03-09 18:58:47 EST ReI XX.X.X ----- STH: Received a BOOT APPL-Obituary reply for restart Card 2203 Module ath_vxw.c Line 2837 Class 0001 Register Dump : EFL=00000000 CS =0000 EIP=00000000 SS =0000 EAX=00000000 ECX=00000000 EDX=00000000 EBX=00000000 ESP=00000000 EBP=00000000 ESI=00000000 EDI=00000000 DS =0000 ES =0000 FS =0000 GS =0000  Stack Dump : [SP+1E]=0000 [SP+16]=0000 [SP+0E]=0000 [SP+06]=0000 [SP+1C]=0000 [SP+14]=0000 [SP+0C]=0000 [SP+04]=0000 [SP+1A]=0000 [SP+12]=0000 [SP+0A]=0000 [SP+02]=0000 [SP+18]=0000 [SP+10]=0000 [SP+08]=0000 [SP+00]=0000  User Data Dump : 30 78 30 31 63 63 39 37 65 38 20 41 50 50 4c 20 0x01cc97e8.APPL. 57 61 74 63 68 64 6f 67 20 74 69 6d 65 6f 75 74 Watchdog.timeout 20 72 65 73 65 74 .res Report Date:02-01-01 Time:03:33:49 ----- ; </pre>
<b>3</b> <input type="checkbox"/>	Issue the command to retrieve obits from MASP B.	<b>rtrv-obit:loc=1115</b>
<b>4</b> <input type="checkbox"/>	Response to retrieve obit command is displayed.	<pre> tekelecstp YY-MM-DD hh:mm:ss TTTT PTTTT XX.x.x-YY.y.y NOTICE: Only 3 obit(s) to retrieve in the log. ; tekelecstp 98-03-09 18:58:56 EST ReI XX.X.X ----- STH: Received a BOOT APPL-Obituary reply for restart Card 2217 Module pvd1vm5g.c Line 2755 Class 0001 Register Dump : EFL=00000246 CS =0008 EIP=00410368 SS =0010 EAX=00000000 ECX=00000000 EDX=00000003 EBX=007f7490 ESP=00da064c EBP=00da0684 ESI=00da066c EDI=00da0680 DS =0010 ES =0010 FS =0010 GS =0010  Stack Dump : [SP+1E]=0000 [SP+16]=03c4 [SP+0E]=2d54 [SP+06]=0000 [SP+1C]=0000 [SP+14]=7552 [SP+0C]=3250 [SP+04]=0000 [SP+1A]=03c3 [SP+12]=0054 [SP+0A]=8d86 [SP+02]=007f [SP+18]=f1da [SP+10]=554f [SP+08]=4eb0 [SP+00]=7490  User Data Dump : 50 32 54 2d 4f 55 54 00 52 75 c4 03 da f1 c3 03 P2T-OUT.Ru..... 00 00 00 00 .... Report Date:02-01-01 Time:18:59:23 ----- ; </pre>
<b>5</b> <input type="checkbox"/>	All steps in this procedure were completed.	

### 3.8 Verifying STPLAN

**Procedure 8: Verifying STPLAN**

<b>S T E P #</b>	<p><b>Perform procedure only if LAN feature is on, see Procedure 2 , Step 12</b></p> <p><b>This procedure displays STPLAN status. Verify that all cards that should be in service show a state of IS-NR. Record cards that do not show the expected status.</b></p>	
<b>1</b> <input type="checkbox"/>	Issue the command to display SLAN status.	<b>rept-stat-slan</b>
<b>2</b> <input type="checkbox"/>	Response to STP LAN status command is displayed.	<pre> tekelecstp YY-MM-DD hh:mm:ss TTTT PTTTT XX.x.x-YY.y.y SLAN Subsystem Report OOS-MT Fault ----- SLAN Cards Configured= 1 Cards IS-NR= 1 CARD VERSION PST SST AST HOST EAGLE Cap Cap ----- 1107 XXX-XXX-XXX IS-NR Active ----- 0% 0% ----- AVERAGE USAGE per HOST CAPACITY = 0% AVERAGE USAGE per EAGLE CAPACITY = 0% CARDS DENIED SLAN SERVICE: 1101, 1102 Command Completed. </pre>
<b>3</b> <input type="checkbox"/>	All steps in this procedure were completed.	

### 3.9 Verify SCCP Load

#### Procedure 9: Verify SCCP Load

STEP #	<p><b>This procedure verifies that SCCP card loads are all below 40%. Verify that all cards that should be in service show PST - IS-NR. Record cards that do not show the expected status.</b></p>	
1	<p>Issue the command to display SCCP status.</p>	<p><b>rept-stat-sccp</b></p>
2	<p>Response to SCCP status command is displayed.</p> <p>Verify that the number in the column labeled MSU USAGE is below 40% for all cards. Record any card slots, which are above 40% for later use.</p> <p>SCCP _____                  SCCP _____                  SCCP _____</p> <p>E2374: SCCP not configured, displayed if no SCCP feature enabled.</p>	<pre> tekelecstp YY-MM-DD hh:mm:ss TTTT P PPPP XX.x.x-YY.y.y SCCP SUBSYSTEM REPORT IS-NR Active ----- SCCP ALARM STATUS = No Alarms GFLEX SERVICE REPORT IS-ANR Active ----- GFLEX ALARM STATUS = * 0527 Service abnormal MNP SERVICE REPORT IS-ANR Active ----- MNP ALARM STATUS = * 0527 Service abnormal INPQ SUBSYSTEM REPORT IS-NR Active ----- ASSUMING MATE'S LOAD INPQ: SSN STATUS = Allowed MATE SSN STATUS = Prohibited INP ALARM STATUS = No Alarms  SCCP Cards Configured= 3 Cards IS-NR= 3 System Daily Peak SCCP Load 1200 TPS 13-01-23 06:45:12 System Overall Peak SCCP Load 1200 TPS 13-01-23 06:45:12 System Total SCCP Capacity 2550 TPS (2550 max SCCP Capacity) System SCCP Capacity Calc. Method (N) System TPS Alarm Threshold 2040 TPS ( 80% System N SCCP Capacity)  CARD VERSION PST SST AST MSU CPU USAG Usage Usage ----- 1207 P XXX-XXX-XXX IS-NR Active ----- 37% 31% 1217 XXX-XXX-XXX IS-NR Active ----- 37% 8% 1315 XXX-XXX-XXX IS-NR Active ----- 37% 6% ----- SCCP Service Average MSU Capacity = 37% Average CPU Capacity = 15%  AVERAGE CPU USAGE PER SERVICE: GTT = 1% GFLEX = 1% MNP = 2% SMSMR = 2% IAR = 0% MTPRTD = 0% INPMR = 1% INPQ = 0%  TOTAL SERVICE STATISTICS:  SERVICE SUCCESS ERRORS FAIL REROUTE\ FORWARD RATIO WARNINGS TO GTT TOTAL GTT: 4025 0 0% - - 4025 GFLEX: 19184 0 0% 0 0 19184 MNP: 6378 0 0% 0 1600 7978 SMSMR: 0 0 0% 0 6450 6450 IAR: 0 0 0% 0 0 0 MTPRTD: 0 0 0% - - 0 INPMR: 4789 0 0% 0 0 4789 INPQ: 10427 0 0% 0 - 10427  Command Completed. ;                 </pre>
3	<p>Issue the command to display SCCP status.</p>	<p><b>rept-stat-sccp:mode=perf</b></p>
4	<p>Response to SCCP status command is displayed.</p>	<pre> tekelecstp YY-MM-DD hh:mm:ss TTTT P PPPP XX.x.x-YY.y.y SCCP SUBSYSTEM REPORT IS-NR Active ----- SCCP ALARM STATUS = No Alarms GFLEX SERVICE REPORT IS-ANR Active ----- GFLEX ALARM STATUS = * 0527 Service abnormal MNP SERVICE REPORT IS-ANR Active ----- MNP ALARM STATUS = * 0527 Service abnormal  SCCP Cards Configured= 3 Cards IS-NR= 3 System Daily Peak SCCP Load 1200 TPS 13-01-23 06:45:12 System Overall Peak SCCP Load 1200 TPS 13-01-23 06:45:12 System Total SCCP Capacity 2550 TPS (2550 max SCCP Capacity) System SCCP Capacity Calc. Method (N) System TPS Alarm Threshold 2040 TPS ( 80% System N SCCP Capacity)  TPS STATISTICS ===== CARD CPU TOTAL CLASS 0 CLASS 1 USAG Usage MSU RATE MESSAGING RATE MESSAGING RATE ----- 1207 32% 340 311 29 1217 8% 346 330 16                 </pre>

		<pre> 1315      6%      317      297      20 ----- AVERAGE MSU USAGE = 37% AVERAGE CPU USAGE = 15% TOTAL MSU RATE     = 1003  STATISTICS FOR PAST 30 SECONDS ===== TOTAL MSUS:      52737 TOTAL ERRORS:    0  HIGHEST 06 OVERALL DAILY PEAKS          LAST 06 DAILY PEAK SCCP LOADS ===== 1200  TPS 13-01-23 06:45:12          1200  TPS 13-01-23 06:45:12 1197  TPS 13-01-21 06:23:04          1186  TPS 13-01-22 23:49:55 1196  TPS 13-01-19 04:40:43          1197  TPS 13-01-21 06:23:04 1193  TPS 13-01-20 21:28:37          1193  TPS 13-01-20 21:28:37 1186  TPS 13-01-22 23:49:55          1196  TPS 13-01-19 04:40:43 1183  TPS 13-01-18 23:42:31          1183  TPS 13-01-18 23:42:31  Command Completed. ; </pre>
<p>5 <input type="checkbox"/></p>	<p>If the EPAP Data Split feature was on in Procedure 2, Step 14, issue the command to display Split Data status. Otherwise, go to step 8.</p>	<pre> rept-stat-sccp:data=dn ; </pre>
<p>6 <input type="checkbox"/></p>	<p>Response to Split Data status is displayed.</p>	<pre> tekelecstp YY-MM-DD hh:mm:ss TTTT PPPP  XX.x.x-YY.y.y SCCP DNSSUBSYSTEM REPORT IS-NR      Active  ----- SCCP ALARM STATUS      = No Alarms  SCCP Cards Configured= 1      Cards IS-NR= 1 System Daily Peak SCCP Load  0      TPS 13-04-26 10:44:18 System Overall Peak SCCP Load 0      TPS 00-00-00 00:00:00 System Total SCCP Capacity    5000   TPS (5000 max SCCP Capacity) System SCCP Capacity Calc. Method (N) System TPS Alarm Threshold    4000   TPS ( 80% System N SCCP Capacity)  CARD  VERSION      PST          SST          AST          MSU  CPU  DATA         USAGE      USAGE      TYPE ----- 1101 P 027-062-002 IS-NR      Active  -----      0%   5%  DN  AVERAGE MSU USAGE = 0% AVERAGE CPU USAGE = 5% TOTAL MSU RATE     = 0  Command Completed. ; </pre>
<p>7 <input type="checkbox"/></p>	<p>Repeat steps 5 – 6 for IMSI data.</p>	<pre> Repeat the status command specifying: data=imsi ; </pre>
<p>8 <input type="checkbox"/></p>	<p>All steps in this procedure were completed.</p>	

### 3.10 Verifying LNP and LSMS

#### Procedure 10: Verifying LNP and LSMS

STEP #	Perform procedure only if LNP feature is on, see Procedure 2, Steps 14
	<p>This procedure displays LNP subsystem and LSMS statuses. Ensure that all cards that should be in service show PST - IS-NR. Record cards that do not show the expected status.</p> <p>This procedure shall also evaluate the SCCP hardware to determine if an upgrade is valid.</p>
1	<p>Issue the command to display LNP status.</p> <p style="text-align: right;"><b>rept-stat-Tnp</b></p>
2	<p>Response to LNP status command is displayed.</p> <pre> tekelecstp YY-MM-DD hh:mm:ss TTTT PTTTT XX.x.x-YY.y.y LNP SUBSYSTEM REPORT IS-NR Active ----- ASSUMING MATE'S LOAD LNP Cards Configured=15 CARD PST SST GTT STATUS LNP STATUS CPU USAGE 1201 IS-NR Active ACT ACT ACT 1% 1208 IS-NR Active ACT ACT ACT 1% 1218 IS-NR Active ACT ACT ACT 1% 1301 IS-NR Active ACT ACT ACT 1% 1308 IS-NR Active ACT ACT ACT 0% 1318 IS-NR Active ACT ACT ACT 1% 2108 IS-NR Active ACT ACT ACT 1% 2118 IS-NR Active ACT ACT ACT 1% 2208 IS-NR Active ACT ACT ACT 1% 2218 IS-NR Active ACT ACT ACT 1% 2308 IS-NR Active ACT ACT ACT 1% 1101 IS-NR Active ACT ACT ACT 1% 1102 IS-NR Active ACT ACT ACT 1% 1103 IS-NR Active ACT ACT ACT 1% 1108 IS-NR Active ACT ACT ACT 1%  LNPQS: SSN STATUS = Allowed MATE SSN STATUS = Prohibited ACG: OVERLOAD LEVEL = 0 MIC USAGE = 0%  AVERAGE USAGE: GTT = 1% LNPMR = 1% LNPQS = 1% AVERAGE CPU USAGE = 1% TOTAL ERRORS: GTT: 0 out of 1603 LNPMR: 0 out of 38 LNPQS: 0 out of 5406 Command Completed.                     ;                 </pre>
□	<p>Verify that cards that are supposed to be in service are IS-NR.</p>
□	<p>Verify that there are no errors.</p>

Procedure 10: Verifying LNP and LSMS

<p><input type="checkbox"/> 3</p>	<p>Issue the command to display card status.</p>	<pre>rept-stat-card:mode=full:loc=XXXX (Where XXXX is the location of each SCCP card displayed in Procedure 3.10 Step 2)</pre>
<p><input type="checkbox"/> 4</p>	<p>Response to card status command is displayed.</p>	<pre>tekelecstp YY-MM-DD hh:mm:ss TTTT PTTTT XX.x.x-YY.y.y CARD VERSION TYPE GPL PST SST AST 1207 134-054-000 DSM VSCCP IS-NR Active ----- ALARM STATUS = No Alarms. BPDCM GPL version = 134-050-000 IMT BUS A = Conn IMT BUS B = Conn CLOCK A = Active CLOCK B = Idle CLOCK I = Idle MBD BIP STATUS = Valid MOTHER BOARD ID = DCM DBD STATUS = Valid DBD TYPE = MEM DBD MEMORY SIZE = 4096M HW VERIFICATION CODE = ---- SCCP % OCCUP = 37% APPLICATION SERVICING  SNM REQ STATUS = 24 hr: -----, 5 min: ---- TVG MFC INM REQ STATUS = 24 hr: -----, 5 min: ---- TVG MFC MTP3 REQ STATUS = 24 hr: -----, 5 min: ---- G-- G--  IPLNK STATUS IPLNK IPADDR STATUS PST A 192.168.120.1 UP IS-NR B 192.168.121.1 UP IS-NR  DSM IP CONNECTION PORT PST SST A IS-NR Active B IS-NR Active  Command Completed. ;</pre>
<p><input type="checkbox"/> 5</p>	<p>If LNP is ON as recorded in Procedure 2 Step 12 then issue the command to retrieve LNP options. Otherwise, go to next procedure.</p>	<pre>rtrv-lnpopts</pre>
<p><input type="checkbox"/> 6</p>	<p>Response to LNP options command is displayed.</p>	<pre>tekelecstp YY-MM-DD hh:mm:ss TTTT PTTTT XX.x.x-YY.y.y LNP OPTIONS ----- AMASLPID = 000000000 INCSLP = no AMATYPE = 000 AMAFEATID = 000 CIC = 0000 AUD = off SP = FRCSMPLX = no ADMHIPRI = no GTWYSTP = no ;</pre>
<p><input type="checkbox"/> 6</p>	<p>Record audit status: AUD: _____</p>	
<p><input type="checkbox"/> 6</p>	<p>If LNP auditing is on, go to next procedure.</p>	
<p><input type="checkbox"/> 7</p>	<p>If LNP ported TN is 48000000 or higher or the LNP ELAP Configuration feature key is ON, go to next procedure. Otherwise, issue the command to turn LNP Audit on.</p>	<pre>chg-lnpopts:aud=on</pre>
<p><input type="checkbox"/> 8</p>	<p>Response to LNP options command is displayed.</p>	<pre>tekelecstp YY-MM-DD hh:mm:ss TTTT PTTTT XX.x.x-YY.y.y CHG-LNPOPTS: MASP A - COMPLTD ;</pre>
<p><input type="checkbox"/> 9</p>	<p>For UHC#2, the LNP Audit must be allowed to run for at least 24 hours.</p>	<p><b>NOTE:</b> allow LNP auditing to run for at least 24 hours prior to upgrade.</p>
<p><input type="checkbox"/> 10</p>	<p>All steps in this procedure were completed.</p>	

### 3.11 Verifying SEAS

**Procedure 11: Verifying SEAS**

<b>S T E P #</b>	<p><b>Perform procedure only if SEAS feature is on, see Procedure 2, Step 12</b></p> <p><b>This procedure verifies that SEAS feature is available. Ensure that all interfaces that should be in service show PST - IS-NR. Record interfaces that do not show the expected status.</b></p>	
<p><b>1</b> <input type="checkbox"/></p>	Issue the command to display SEAS status.	<b>rept-stat-seas</b>
<p><b>2</b> <input type="checkbox"/></p> <p><input type="checkbox"/></p>	<p>Response to SEAS status command is displayed if SEAS over IP feature is turned on.</p> <p>Verify that all entries are "IS-NR" and there are no alarms.</p>	<pre> tekelecstp YY-MM-DD hh:mm:ss TTTT PTTTT XX.x.x-YY.y.y SEAS SYSTEM                PST          SST          AST ----- ALARM STATUS = No Alarms    IS-NR     Avail     ----- TERM   IPADDR              PORT     PST          SST          AST ----- 18     120.30.10.11         15      IS-NR     Active     ----- ALARM STATUS = No Alarms 40     128.30.15.12         16      IS-NR     Active     ----- ALARM STATUS = No Alarms                     </pre>
<p><b>3</b> <input type="checkbox"/></p>	All steps in this procedure were completed.	

### 3.12 Verifying optional features

#### Procedure 12: Verifying optional features

S T E P #	This procedure displays information on which optional features have been enabled.	
<input type="checkbox"/> 1	Issue the command to retrieve STP options.	<b>rtrv-stpopts</b>
<input type="checkbox"/> 2	Response to the command is displayed.  <input type="checkbox"/> Record whether the following options are turned on:  DSMAUD: ON / OFF / CCC  Note: DSMAUD only displayed with certain features enabled (e.g. GFLEX, INP, GPORT)	<pre> tekelecstp YY-MM-DD hh:mm:ss TTTT PTTTT XX.x.x-YY.y.y STP OPTIONS ----- MTP31CTL          1 MPLTI             yes MPLTCTDPCQ        3 MPLTST           10000 MTPXLQ            500 MTPXLET           0100 MTPXLOT           90% MTPDPCQ           5000 TFATFRPR          1000 MTPRSI            no MTPRSIT           5000 MPLPRST           yes MPT10ALT          30000 UIMRD             no SLSCNV            off CRITALMINH        no DISPACTALMS       no NPCFMTI           14-00-00-00 DSMAUD            ON RPTLNPMRSS        yes HMUXABUS          yes HMUXBBUS          yes HMUXTVG           on RANDSLS           off GR2878RGLBL      yes RSTRDEV           on                     ;                 </pre>
<input type="checkbox"/> 3	If E5IS feature is recorded as on in Procedure 2, Step 12 then issue the retrieve command. Otherwise, go to step 7.	<b>rtrv-eisopts</b>
<input type="checkbox"/> 4	Response to the command is displayed.  <input type="checkbox"/> Record the value of EISCOPY & FCMODE values:  EISCOPY: ON / OFF FCMODE: STC/OFF/FCOPY	<pre> tekelecstp YY-MM-DD hh:mm:ss TTTT PTTTT XX.x.x-YY.y.y EIS OPTIONS ----- EISCOPY = OFF FCMODE  = OFF                 </pre>
<input type="checkbox"/> 5	Issue the command to retrieve user-specified options for the IP networks used by the EAGLE.	<b>rtrv-netopts</b>
<input type="checkbox"/> 6	Response to the command is displayed.  <input type="checkbox"/> Record the value of PVN, PVNMASK, FCNA, FCNAMASK, FCNB and FCNBMASK.	<pre> tekelecstp YY-MM-DD hh:mm:ss TTTT PTTTT XX.x.x-YY.y.y NETWORK OPTIONS ----- PVN           = 172.20.48.0 PVNMASK       = 255.255.252.0 FCNA          = 172.21.48.0 FCNAMASK      = 255.255.254.0 FCNB          = 172.22.48.0 FCNBMASK      = 255.255.254.0                 </pre>
<input type="checkbox"/> 7	Issue the command to retrieve measurement options.	<b>rtrv-measopts</b>

Procedure 12: Verifying optional features

<p>8 <input type="checkbox"/></p>	<p>Response to the measurement options command is displayed.</p>	<pre>tekelecstp YY-MM-DD hh:mm:ss TTTT PTTTT XX.x.x-YY.y.y PLATFORMENABLE = on COLLECT15MIN   = off CLLIBASEDNAME  = off OAMHCMEAS     = off ----- SYSTOTSTP     = on SYSTOTTT      = on SYSTOTSTPLAN  = off COMPLINK      = on COMPLNKSET    = on COMPSCTPASOC  = off COMPSCTPCARD  = off COMPJA        = off GTWYSTP       = on GTWYLNKSET    = on GTWYORIGNI    = on GTWYORIGNINC  = on GTWYLSORIGNI  = on GTWYLSDESTNI  = on GTWYLSONISMT  = off NMSTP         = on NMLINK        = on NMLNKSET      = on AVLLINK       = on AVLSTPLAN    = on AVLDLINK      = off ;</pre>
<p>9 <input type="checkbox"/></p>	<p>Issue the command to retrieve user-specified options for the SCCP application.</p>	<pre>rtrv-sccopts</pre>
<p>10 <input type="checkbox"/></p>	<p>Response to the command is displayed.</p>	<pre>tekelecstp YY-MM-DD hh:mm:ss TTTT PTTTT XX.x.x-YY.y.y  SCCP OPTIONS ----- CLASS1SEQ           off CLEN                0 ACLEN               0 INTLUNKNAI         no SUBDFRN            off DFLTGTTMODE       CdPA MTPRGTT            off MTPRGTTFALLBK     mtproute UNQGTSEL           bestmatch DELCCPREFIX        pfxwcc GTTDIST           all ;</pre>
<p>11 <input type="checkbox"/></p>	<p>Issue the command to retrieve user-specified options for the GSM.</p>	<pre>rtrv-gsmopts</pre>
<p>12 <input type="checkbox"/></p>	<p>Response to the command is displayed.</p>	<pre>tekelecstp YY-MM-DD hh:mm:ss TTTT PTTTT XX.x.x-YY.y.y GSM OPTIONS ----- MULTCC           = NONE           MULTCC           = NONE DEFMAPVR        = 1  DEFMCC          = 911             DEFMNC           = NONE CCNC            = 1970           MCCMNC          = 911666 CCNC            = NONE           MCCMNC          = NONE  SRIDN           = TCAP           SRIDNNOTFOUND   = GTT CRPTT           = NONE           SRISMGTTRTG     = OFF MSRNDIG         = RNDN           MSRNNAI         = 1 MSRNNP          = 10            MSISDNTRUNC     = 0 SRFADDR         = 19705552222    SRFNAI          = 1 SRFNP           = 1             MSRNLN          = 30  SERVERPFX       = NONE           GSM2IS41        = NONE MIGRPFX        = SINGLE         IS412GSM        = NONE  SPORTTYPE       = NONE           DFLTRN          = NONE  EIRGRSP         = OFF           EIRRSPTYPE      = TYPE1 EIRIMSICHK      = OFF</pre>

Procedure 12: Verifying optional features

		<pre> ENCODECUG      = OFF          ENCODENPS      = ON ENCDNPSPTNONE = OFF          ENCDNPSDNNOTFOUND= OFF  G-Flex MLR OPTIONS : GFLEXMAPLAYERRTG = NONE  REGSS          = OFF  ACTSS      = OFF  DACTSS        = OFF INTSS          = OFF  AUTHFAILRPT = OFF  RSTDATA       = OFF PROCUNSTRQT    = OFF  RDYFORSM   = OFF  PURGMOBSS    = OFF SRILOC         = OFF;                 </pre>
<input type="checkbox"/>	13 Issue the command to retrieve user-specified options for IS41 GSM Migration.	<b>rtrv-sis41opts</b>
<input type="checkbox"/>	14 Response to the options command is displayed.	<pre> tekelecstp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x-YY.y.y IS41 OPTIONS ----- SMSREQBYPASS   = NO LOCREQDN       = SCCP IEC            = NONE NEC            = NONE RSPCGPARI      = FRMSG RSPCGPAPCP     = FRMSG RSPCDPARI      = FRMSG RSPCDPAPCP     = OFF RSPCGPANAI     = NONE RSPCGPANP      = NONE RSPCGPATT      = NONE MTPLOCREQNAI   = FRMSG RSPPARM        = TLIST RSPDIG         = RNDN RSPNON         = NONE RSPNP          = 2 RSPMIN         = HOMERN MSCMKTID       = 0 MSCSWITCH      = 0 ESNMFG         = 0 ESNSN          = 0 RSPDIGTYPE     = 6 LOCREQRMHRN    = NO TCAPSNAI       = FRMSG MTPLOCREQLEN   = 0 SPORTTYPE      = NONE DFLTRN         = NONE LOCREQRSPND    = OFF ;                 </pre>
<input type="checkbox"/>	15 If SNMP Feature was on in Procedure 2, Step 14 then issue the retrieve option command. Otherwise, go to step 19.	<b>rtrv-snmopts</b>
<input type="checkbox"/>	16 Response to the command is displayed.	<pre> tekelecstp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x-YY.y.y SNMP OPTIONS ----- SNMPUIM        on GETCOMM        public SETCOMM        private                 </pre>
<input type="checkbox"/>	17 Issue the retrieve IP Host command for SNMP.	<b>rtrv-snm-host</b>
<input type="checkbox"/>	18 Response to the retrieve command is displayed.	<pre> tekelecstp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x-YY.y.y IPADDR 10.241.14.62 HOST    dcmsnmptraphost1 CMDPORT 161 TRAPPORT 162 HB      60 TRAPCOMM public  IPADDR 10.241.14.61 HOST    dcmsnmptraphost2 CMDPORT 161 TRAPPORT 162 HB      60 TRAPCOMM public  SNMP HOST table is (2 of 2) 100% full                 </pre>
<input type="checkbox"/>	19 If SIP NP Feature was on in Procedure 2, Step 14 then issue the retrieve option command. Otherwise, go to step 23.	<b>rtrv-sipopts</b>

**Procedure 12: Verifying optional features**

<p>20 <input type="checkbox"/></p>	<p>Response to the command is displayed.</p>	<pre>tekelecstp YY-MM-DD hh:mm:ss TTTT PTTTT XX.x.x-YY.y.y INCLUDENPDI = on INCLUDERN = on NPRSPFMT = RNDN RNFMT = RN NPLKUPFAIL = 404 RNCONTEXT = Null</pre>
<p>21 <input type="checkbox"/></p>	<p>Issue the report SIP status command.</p>	<p><b>rept-stat-sip</b></p>
<p>22 <input type="checkbox"/></p>	<p>Response to the status command is displayed.</p>	<pre>tekelecstp YY-MM-DD hh:mm:ss TTTT PTTTT XX.x.x-YY.y.y SIP ALARM STATUS = ** 0625 SIP capacity normal, card(s) abnormal SIP Cards Configured= 3      Cards IS-NR= 1  CARD  VERSION      PST          SST          TPS    PTPS    PTIMESTAMP ----- 1101  004-061-004  IS-ANR      MPS Unav1    0       0       00-00-00 00:00:00 1103  004-062-000  IS-NR      Active       100     100     02-01-08 10:55:23 1105  -----      OOS-MT      Isolated     0       0       00-00-00 00:00:00 -----  TOTAL SERVICE STATISTICS: ----- SERVICE  SUCCESS  ERROR  WARNINGS  BYPASS  TOTAL SIPNP:    0        0      0         0       0</pre> <p>Command Completed</p>
<p>23 <input type="checkbox"/></p>	<p>All steps in this procedure were completed.</p>	

### 3.13 Verifying IP Signaling Status

**Procedure 13: Verifying IP Signaling Status**

S T E P #	<p><b>This procedure displays the status of IP Signaling connections and Application Servers. Verify that all IP Signaling connections and Application Servers that should be in service show a state of IS-NR. Record connections or Application Servers that do not show the expected status.</b></p>	
1 <input type="checkbox"/>	<p>Issue the command to display SCTP Association status.</p>	<p><b>rept-stat-assoc</b></p>
2 <input type="checkbox"/>	<p>Response to SCTP Association status command is displayed.</p> <p>Verify that all SCTP Associations that should be in service are IS-NR.</p>	<pre>tekelecstp YY-MM-DD hh:mm:ss TTTT PTTTT XX.x.x-YY.y.y ASSOCIATION      PST          SST ipgwa1           IS-NR       ASP-ACTIVE ipgwa2           IS-NR       ASP-ACTIVE iplima1          IS-NR       ESTABLISHED iplima2          IS-NR       ESTABLISHED Command Completed.</pre>
3 <input type="checkbox"/>	<p>Issue the command to display Application Server status.</p>	<p><b>rept-stat-as</b></p>
4 <input type="checkbox"/>	<p>Response to Application Server status command is displayed.</p> <p>Verify that all Application Servers that should be in service are IS-NR.</p>	<pre>tekelecstp YY-MM-DD hh:mm:ss TTTT PTTTT XX.x.x-YY.y.y AS              PST          SST ipgwas1        IS-NR       AS-ACTIVE ipgwas2        IS-NR       AS-ACTIVE Command Completed.</pre>
5 <input type="checkbox"/>	<p>All steps in this procedure were completed.</p>	

### 3.14 Verifying EROUTE

#### Procedure 14: Verifying EROUTE

S T E P #	<p><b>This procedure displays the status of the STC cards, and also displays any cards that are denied EROUTE service. Record cards that are denied EROUTE service.</b></p> <p><b>This procedure issues the “netstat” command to STC cards to determine if IP addresses have been associated with the card. Record cards that do not have IP addresses associated with them.</b></p>	
<b>1</b> <input type="checkbox"/>	Issue the command to display EROUTE status.	<b>rept-stat-mon:type=eroute</b>
<b>2</b> <input type="checkbox"/>  <input type="checkbox"/>	<p>Response to EROUTE status command is displayed.</p> <p>Verify that all cards listed are in IS-NR state.</p> <p>Note: if any cards are denied eroute service, the text “CARDS DENIED EROUTE SERVICE:” will be displayed followed by the card locations.</p>	<pre> tekelecstp YY-MM-DD hh:mm:ss TTTT PTTTT XX.x.x-YY.y.y EROUTE SUBSYSTEM REPORT IS-NR Active ----- STC Cards Configured= 7 Cards IS-NR= 7 EISCOPY BIT = ON System Threshold = 80% Total Capacity System Peak EROUTE Load: 8000 Buffers/Sec System Total EROUTE Capacity: 9600 Buffers/Sec  SYSTEM ALARM STATUS = No Alarms.  CARD  VERSION      PST          SST          AST          TVG  CPU                 USAGE  USAGE ----- 1205  236-024-005  IS-NR      Active      -----      35%  52% 1211  236-024-005  IS-NR      Active      -----      35%  52% 1303  236-024-005  IS-NR      Active      -----      35%  52% 1311  236-024-005  IS-NR      Active      -----      35%  52% 1313  236-024-005  IS-NR      Active      -----      35%  52% 2211  236-024-005  IS-NR      Active      -----      35%  52% 2213  236-024-005  IS-NR      Active      -----      35%  52% ----- EROUTE Service Average TVG Capacity = 35% Average CPU Capacity = 52%  Command Completed.                     ;                 </pre>

Procedure 14: Verifying EROUTE

<p><input type="checkbox"/> 3</p>	<p>Issue the command to display network status for the card.</p>	<p>Pass: loc=xxxx:cmd="netstat -i" (where XXXX is the slot ID of an STC card that is IS-NR in step 2 or step 4.)</p>
<p><input type="checkbox"/> 4</p> <p><input type="checkbox"/></p>	<p>Response to NETSTAT command is displayed.</p> <p>Verify both Port A (Seeq 0) and Port B (Seeq 1) of the STC card have an associated IP address.</p> <p>Note: For E5-ENET card, verify both Port A (GEI 2) and Port B (GEI 0) have associated IP addresses.</p>	<pre> tekelecstp YY-MM-DD hh:mm:ss TTTT PTTTT XX.x.x-YY.y.y PASS: Command sent to card ;  tekelecstp YY-MM-DD hh:mm:ss TTTT PTTTT XX.x.x-YY.y.y DPLend (unit number 0):   Flags: (0x863) UP BROADCAST ARP RUNNING 10MB HDX DIX   Type: ETHERNET_CSMACD   Internet address: 172.20.48.11   Broadcast address: 172.20.255.255   Netmask 0xffff0000 Subnetmask 0xffff0000   Ethernet address is 00:00:00:00:00:0b   Metric is 0   Maximum Transfer Unit size is 485   685002 packets received; 1 packets sent   0 multicast packets received   0 multicast packets sent   0 input errors; 0 output errors   0 collisions; 0 dropped seeq (unit number 1):   Flags: (0x78063) UP BROADCAST MULTICAST ARP RUNNING AUTONEG 100MB   Type: ETHERNET_CSMACD   Internet address: 192.168.178.96   Broadcast address: 192.168.178.255   Netmask 0xffffffff Subnetmask 0xffffffff   Ethernet address is 00:00:17:0c:24:e5   Metric is 0   Maximum Transfer Unit size is 1500   24158824 packets received; 1703911 packets sent   24158824 multicast packets received   1703904 multicast packets sent   0 input errors; 0 output errors   0 collisions; 0 dropped to (unit number 0):   Flags: (0x8069) UP LOOPBACK MULTICAST ARP RUNNING 10MB HDX DIX   Type: SOFTWARE_LOOPBACK   Internet address: 127.0.0.1   Netmask 0xff000000 Subnetmask 0xff000000   Metric is 0   Maximum Transfer Unit size is 32768   0 packets received; 0 packets sent   0 multicast packets received   0 multicast packets sent   0 input errors; 0 output errors   0 collisions; 0 dropped seeq (unit number 0):   Flags: (0x78063) UP BROADCAST MULTICAST ARP RUNNING AUTONEG 100MB   Type: ETHERNET_CSMACD   Internet address: 192.168.177.97   Broadcast address: 192.168.177.255   Netmask 0xffffffff Subnetmask 0xffffffff   Ethernet address is 00:00:17:0c:24:e4   Metric is 0   Maximum Transfer Unit size is 1500   26021319 packets received; 2389075 packets sent   26021156 multicast packets received   1703906 multicast packets sent   0 input errors; 0 output errors   0 collisions; 0 dropped ;  tekelecstp YY-MM-DD hh:mm:ss TTTT PTTTT XX.x.x-YY.y.y NETSTAT command complete         </pre>
<p><input type="checkbox"/> 5</p>	<p>Repeat steps 3 - 4 for all STC cards that are IS-NR in step 4.</p>	
<p><input type="checkbox"/> 6</p>	<p>All steps in this procedure were completed.</p>	

### 3.15 Verifying IMT Status

#### Procedure 15: Verifying IMT Status

S T E P #	This procedure verifies that the IMT Bus is free of errors. This procedure is run in correspondence with Procedure 3.	
1 <input type="checkbox"/>	Issue the command to display IMT errors.	<code>rept-imt-lvl1:sloc=1201:eloc=1115:r=summary</code>
2 <input type="checkbox"/>  <input type="checkbox"/>	Response to IMT report command is displayed.  Ensure that all highlighted columns contain zeroes.	<pre> tekelecstp YY-MM-DD hh:mm:ss TTTT P P P P P XX.x.x-YY.y.y ===== SUMMARY REPORT: Totals accumulated from all requested cards  Count                               Bus A Value      Bus B Value -----                               - Transmit Packet                      0M                0M Transmit Byte                         0M                0M Receive Packet                       0M                0M Receive Byte                          0M                0M Receive Packet with CRC Error         0                  0 Receive Packet with Format Error      0                  0 Receive Packet with Invalid Length   0                  0 Primary Control Receive Error        0                  0 Primary Control Transmit Error       0                  0 Primary Control Sanity Error         0                  0 Violation Error                      0                  0 CPU Receive FIFO Full                0                  0 IMT Receive FIFO Half Full           0                  0 CPU Receive FIFO Half Full           0                  0 DMA Terminal Count Interrupt         0                  0 MSU Retransmitted                    0                  0 MSU Safety Packet                    0                  0 ASU Safety Packet                    0                  0 TSU Safety Packet                    0                  0 IMT Receive FIFO Full                0                  0 SSU Safety Packet                    0                  0 ----- ;END OF REPORT ; </pre>
3 <input type="checkbox"/>	If non-zeros, the command to display IMT level 1 information.	<code>rept-imt-lvl1:sloc=1201:eloc=1115:r=full</code>
4 <input type="checkbox"/>	Response to MUX status command is displayed.  Note: Output abridged for brevity,	<pre> tekelecstp YY-MM-DD hh:mm:ss TTTT P P P P P XX.x.x-YY.y.y ===== FULL REPORT: Totals accumulated from all requested cards  Count                               Bus A Value      Bus B Value -----                               - Transmit Packet                      0M                0M Transmit Byte                         0M                0M Receive Packet                       0M                0M Receive Byte                          0M                0M Receive Packet with CRC Error         0                  0 Receive Packet with Format Error      0                  0 Receive Packet with Invalid Length   0                  0 Primary Control Receive Error        0                  0 Primary Control Transmit Error       0                  0 Primary Control Sanity Error         0                  0 Violation Error                      0                  0 CPU Receive FIFO Full                0                  0 IMT Receive FIFO Half Full           0                  0 CPU Receive FIFO Half Full           0                  0 DMA Terminal Count Interrupt         0                  0 MSU Retransmitted                    0                  0 MSU Safety Packet                    0                  0 ASU Safety Packet                    0                  0 TSU Safety Packet                    0                  0 IMT Receive FIFO Full                0                  0 SSU Safety Packet                    0                  0 ----- ;END OF REPORT ; </pre>
5 <input type="checkbox"/>	Issue the status command for the MUX cards	<code>rept-stat-mux</code>

Procedure 15: Verifying IMT Status

<p>6</p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p>	<p>Response to MUX status command is displayed.</p> <p>Verify that all cards are IS-NR.</p> <p>Record the types of MUX cards displayed (circle all that are applicable):</p> <p>HMUX    HIPR    HIPR2</p>	<pre>tekelecstp YY-MM-DD hh:mm:ss TTTT P P P P P XX.X.X-YY.Y.Y CARD  TYPE      PST      SST      AST 1109  HMUX        IS-NR    Active   ----- 1110  HMUX        IS-NR    Active   ----- 1209  HMUX        IS-NR    Active   ----- 1210  HMUX        IS-NR    Active   ----- 1309  HIPR         IS-NR    Active   ----- 1310  HIPR         IS-NR    Active   ----- 2109  HIPR2       IS-NR    Active   ----- 2110  HIPR2       IS-NR    Active   -----  Command Completed. ;</pre>
<p>7</p> <p><input type="checkbox"/></p>	<p>Issue the report IMT information command.</p> <p>Repeat for all MUX types recorded in Step 6.</p>	<pre>rept-imt-info:report=XXXXerr (Where report=hmuxerr if HMUX cards were detected in step 6; report=hiprerr if HIPR cards were detected in step 6; report=hipr2err is HIPR2 cards were detected in step 6.)</pre>
<p>8</p> <p><input type="checkbox"/></p>	<p>Response to report IMT information command is displayed.</p> <p>Note: Output abridged for brevity, Actual output varies based on software release and card type.</p>	<pre>tekelecstp YY-MM-DD hh:mm:ss TTTT P P P P P XX.X.X-YY.Y.Y XXXX Summary Report: Summed across all requested cards for each bucket XXXX Hourly Bucket Statistics  ===== Bucket Low Speed Statistic          BUS A Value  BUS B Value ----- XX  IMT Rx Packet CRC Error          0             0     IMT Rx Packet Format Error       0             0     IMT Rx Violation Error           0             0     IMT Rx Command Error             0             0     IMT Rx FIFO Full                 0             0     IMT Rx FIFO Half Full            0             0     IMT Tx FIFO Full                 0             0     IMT Tx FIFO Half Full            1             0  High Speed Statistic                BUS A Value  BUS B Value -----     IMT Rx Packet CRC Error          0             0     IMT Rx Disparity Error           0             0     IMT Rx Sync Lost Error           0             0     IMT Rx Code Word Error           0             0     CPU Rx FIFO Full                 0             0     CPU Rx FIFO Half Full            0             0     CPU Rx FIFO Empty Before SOM     0             0     CPU Rx FIFO Empty Before EOM     0             0     CPU Rx Packet SOM Before EOM     0             0     CPU Rx Packet CRC Error          0             0     DMA terminal count               0             0     CPU Tx Buffer EOB                 0             0     CPU Tx Buffer Full                0             0     CPU Tx Buffer Half Full           9             9     IMT Bypass FIFO Full             0             0     IMT Bypass FIFO Half Full        0             0     IMT Rx FIFO Full                 0             0     IMT Rx FIFO Half Full            0             0  Misc Speed Statistic                BUS A Value  BUS B Value ----- Shelf ID UART Framing Error         0             0 Shelf ID UART Overrun Error         0             0  ;</pre>
<p>9</p> <p><input type="checkbox"/></p>	<p>All steps in this procedure were completed.</p>	<p>;</p>

### 3.16 Retrieving Trouble Data

#### Procedure 16: Retrieving Trouble Data

<b>S T E P #</b>	<b>This procedure retrieves the most recently logged troubles.</b> <b>Estimated time for completion: 5 minutes</b>	
<b>1</b> <input type="checkbox"/>	Issue the command to retrieve troubles from MASP A.	<b>rtrv-trbl:loc=1113:num=15</b>
<b>2</b> <input type="checkbox"/>  <input type="checkbox"/>	Response to retrieve trouble command is displayed. Troubles shown here are only examples.  Note any unexplained troubles. (The troubles shown are examples only, actual troubles - if any - may differ.)	<pre> tekelecstp YY-MM-DD hh:mm:ss TTTT PTTTT XX.x.x-YY.y.y rtrv-trbl:loc=1113:num=15 Command entered at terminal #X. ; tekelecstp YY-MM-DD hh:mm:ss TTTT PTTTT XX.x.x-YY.y.y NOTICE: Only 2 trouble(s) to retrieve in the log. ; tekelecstp YY-MM-DD hh:mm:ss TTTT PTTTT XX.x.x-YY.y.y Card 1113 Module SCM_UTL0.C Line 4101 Class 01bc Severity 1 0f Report Date:YY-MM-DD Time:hh:mm:ss ; tekelecstp YY-MM-DD hh:mm:ss TTTT PTTTT XX.x.x-YY.y.y Card 1107 Module ED_ENET.C Line 437 Class 01c3 Severity 1 bc 5e 20 00 07 2d 12 00 d4 9b 00 00 00 .^..... Report Date:YY-MM-DD Time:hh:mm:ss ; </pre>
<b>3</b> <input type="checkbox"/>	Issue the command to retrieve troubles from MASP B.	<b>rtrv-trbl:loc=1115:num=15</b>
<b>4</b> <input type="checkbox"/>  <input type="checkbox"/>	Response to retrieve trouble command is displayed. Troubles shown here are only examples.  Note any unexplained troubles. (The troubles shown are examples only, actual troubles - if any - may differ.)	<pre> tekelecstp YY-MM-DD hh:mm:ss TTTT PTTTT XX.x.x-YY.y.y rtrv-trbl:loc=1115:num=15 Command entered at terminal #X. ; tekelecstp YY-MM-DD hh:mm:ss TTTT PTTTT XX.x.x-YY.y.y NOTICE: Only 1 trouble(s) to retrieve in the log. ; tekelecstp YY-MM-DD hh:mm:ss TTTT PTTTT XX.x.x-YY.y.y Card XXXX Module XXXXXXXX.C Line XXXX Class XXXX Severity X 0f Report Date:YY-MM-DD Time:hh:mm:ss ; tekelecstp YY-MM-DD hh:mm:ss TTTT PTTTT XX.x.x-YY.y.y 5876.1083 SYSTEM INFO REPT COND: system alive Report Date:YY-MM-DD Time:hh:mm:ss ; </pre>
<b>5</b> <input type="checkbox"/>	If the amount of output displayed on the capture terminal is excessive, then issue the command to change the terminal output groups. Otherwise, go to step 7.	<b>chg-trm:trm=P:all=no:sys=yes:sa=yes:db=yes</b> <i>(Where P is the location of the capture terminal used in Proc 1, Step 5.)</i>
<b>6</b> <input type="checkbox"/>	Response to change terminal command is displayed.	<pre> tekelecstp YY-MM-DD hh:mm:ss TTTT PTTTT XX.x.x-YY.y.y chg-trm:trm=P:all=no:sys=yes:sa=yes:db=yes Command entered at terminal #X. ; tekelecstp YY-MM-DD hh:mm:ss TTTT PTTTT XX.x.x-YY.y.y CHG-TRM: MASP A - COMPLTD ; </pre>
<b>7</b> <input type="checkbox"/>	All steps in this procedure were completed.	

### 3.17 Verifying Clock Status

#### Procedure 17: Verifying Clock Status

S T E P #	<p>This procedure verifies your system clock status. Specifically, the primary and secondary BITS clocks and the A and B clocks going to each card are examined. Both the Primary and Secondary BITS clocks should be good (IDLE or ACTIVE) on both the active and standby MASP. There should be no cards reporting a bad A clock and no cards reporting a bad B clock in step 2.</p>	
1	<p>Issue the command to report clock status.</p>	<pre>rept-stat-clk:mode=full</pre>
2	<p>Response to clock status command is displayed.</p> <p>Verify that both BITS clocks are either in IDLE or ACTIVE state on both ACTIVE and STANDBY MASP.</p> <p>All highlighted cards-with-bad-CLK values should equal zero.</p>	<pre>tekelecstp YY-MM-DD hh:mm:ss EST PPP XX.x.x-YY.y.y COMPOSITE PST SST AST SYSTEM CLOCK IS-NR Idle ----- ALARM STATUS = No Alarms. Primary Comp Clk 1114 (CLK A) IS-NR Active Primary Comp Clk 1116 (CLK B) IS-NR Active Secondary Comp Clk 1114 (CLK A) IS-NR Idle Secondary Comp Clk 1116 (CLK B) IS-NR Idle  Clock Using Bad CLK A 173 0 CLK B 2 0 CLK I 0 --  HIGH SPEED PST SST AST SYSTEM CLOCK IS-NR Active ----- ALARM STATUS = No Alarms. Primary HS Clk 1114 (HS CLK A) IS-NR Active Primary HS Clk 1116 (HS CLK B) IS-NR Active Secondary HS Clk 1114(HS CLK A) IS-NR Idle Secondary HS Clk 1116(HS CLK B) IS-NR Idle  HS CLK TYPE 1114 = RS422 HS CLK LINELEN 1114 = ----- HS CLK TYPE 1116 = RS422 HS CLK LINELEN 1116 = -----  Clock Using Bad HS CLK A 19 0 HS CLK B 0 0 HS CLK I 0 --  Cards with bad clock source: CARD CLK A CLK B HS CLK A HS CLK B -----</pre> <p>Command Completed.</p>
10	<p>Issue the command to retrieve the clock options.</p>	<pre>rtrv-clkopts</pre>
11	<p>Response to retrieve command is displayed.</p>	<pre>tekelecstp YY-MM-DD hh:mm:ss zone PPP XX.x.x-YY.y.y CLK OPTIONS ----- PRIMARY ----- HSCLKSRC rs422 HSCLKLL Tonghaul  SECONDARY ----- HSCLKSRC rs422 HSCLKLL Tonghaul</pre>
12	<p>All steps in this procedure were completed.</p>	

### 3.18 Verifying MPS

The purpose of this procedure is to determine the health of MPS.

#### Procedure 18: Verifying MPS

S T E P #	This procedure checks the status of the MPS.	
<input checked="" type="checkbox"/> 1	Issue the command to display MPS status.	<b>rept-stat-mps</b>
<input checked="" type="checkbox"/> 2	Response to MPS status command is displayed, if any of the features requires ELAP/EPAP.  If the MTT error 4102 is output go to step 5.	<pre> tekelecstp YY-MM-DD hh:mm:ss TTTT PTTTT XX.x.x-YY.y.y  MPS A       VERSION      PST          SST          AST       027-015-000  OOS-MT      Fault        ----- CRITICAL PLATFORM  ALARM DATA = No Alarms MAJOR   PLATFORM  ALARM DATA = h'0123456789ABCDEF MINOR   PLATFORM  ALARM DATA = h'0123456789ABCDEF CRITICAL APPLICATION ALARM DATA = No Alarms MAJOR   APPLICATION ALARM DATA = h'0123456789ABCDEF MINOR   APPLICATION ALARM DATA = No Alarms ALARM STATUS = ** 0371 Major Platform Failure(s)  MPS B       VERSION      PST          SST          AST       027-015-000  OOS-MT      Fault        ----- CRITICAL PLATFORM  ALARM DATA = No Alarms MAJOR   PLATFORM  ALARM DATA = No Alarms MINOR   PLATFORM  ALARM DATA = No Alarms CRITICAL APPLICATION ALARM DATA = h'0123456789ABCDEF MAJOR   APPLICATION ALARM DATA = h'0123456789ABCDEF MINOR   APPLICATION ALARM DATA = No Alarms ALARM STATUS = *C 0373 Critical Application Failure(s)  CARD  PST          SST          LNP STAT 1106 P IS-NR      Active      ACT 1201 IS-ANR      Active      SWDL 1205 OOS-MT-DSBLD Manual      ----- 1302 OOS-MT      Fault       ----- 1310 IS-ANR      Standby    SWDL  CARD 1106 ALARM STATUS = No Alarms CARD 1201 ALARM STATUS = No Alarms CARD 1205 ALARM STATUS = No Alarms CARD 1302 ALARM STATUS = ** 0013 Card is isolated from the system CARD 1310 ALARM STATUS = No Alarms  Command Completed.                     ;                 </pre>
<input checked="" type="checkbox"/> 3	If DSM Audit was recorded as being on in Procedure 3.12 Step 2, or is not displayed then go to step 5. Otherwise, if DSM Audit is off, then execute this step.  Issue the command to change STP options.	<b>chg-stpopts:dsmaud=on</b>
<input checked="" type="checkbox"/> 4	Response to the command is displayed	<pre> tekelecstp YY-MM-DD hh:mm:ss zzz PTTTT XX.x.x-YY.y.y CHG-STPOPTS: MASP B - COMPLTD                     ;                 </pre>
<input checked="" type="checkbox"/> 5	All steps in this procedure were completed.	

### 3.19 Verify Source Database and Enter Software Access Key

**Procedure 19: Verify Source Database and enter Software Access Key**

STEP #	<p>The purpose of this procedure is to determine the presence of unsupported or obsolete references in the system prior to doing an upgrade. And validate the Software Access Key necessary to perform the upgrade.</p> <p>This procedure requires the target release to have been downloaded to the fixed disk.<sup>3</sup></p> <p>This procedure verifies the presence of the following:</p> <ul style="list-style-type: none"> <li>• obsolete cards</li> <li>• network address conflicts with the PVN and FCN network address</li> </ul> <p><b>Note:</b> this procedure is intrusive meaning the target OAM application must be loaded temporarily to complete this procedure. To ensure accuracy, it is strongly suggested that data capture be active during this procedure because the information produced by this procedure will be used to guide the change of hardware or the modification of the database so potential issues don't effect successful complete of the upgrade.</p> <p>The Software Access Key (SAK) for the upgrade target release is required for this procedure.</p>
1	<p>Issue the upgrade command to display the database status.</p> <p><b>ACT-UPGRADE:ACTION=DBSTATUS</b></p>
2	<p>Response to the upgrade - database status command is displayed.</p> <p>Verify that the Inactive Partition Group database version displays the target release's version.</p> <pre> tekelecstp YY-MM-DD hh:mm:ss TTTT P P P P P XX.x.x-YY.y.y            VERSION      PST      SST      AST DATABASE STATUS: &gt;&gt; OK &lt;&lt;           TDM 1114 ( STDBY)          TDM 1116 ( ACTV )           C  LEVEL      TIME LAST BACKUP      C  LEVEL      TIME LAST BACKUP ----- FD BKUP Y  148913  12-10-09 04:49:11 GMT  Y  148913  12-10-09 04:49:11 GMT FD CRNT Y  148913                               Y  148913           MCAP 1113                               MCAP 1115           ----- RD BKUP -  -  -  -  -  -  -  -  -  -  -  - USB BKP -  -  -  -  -  -  -  -  -  -  -  -  CARD/APPL  LOC  C  T  LEVEL      TIME LAST UPDATE      VERSION STATUS ----- OAM-RMV    1113  -  -  -  -  -  -  -  - TDM-CRNT   1114  Y  N  148913  12-10-09 04:47:40  133-003-000  NORMAL TDM-BKUP   1114  Y  -  148913  12-10-09 04:47:40  133-003-000  NORMAL OAM-RMV    1115  -  -  -  -  -  -  - OAM-USB    1115  -  -  -  -  -  -  - TDM-CRNT   1116  Y  N  148913  12-10-09 04:47:40  133-003-000  NORMAL TDM-BKUP   1116  Y  -  148913  12-10-09 04:47:40  133-003-000  NORMAL  INACTIVE PARTITION GROUP CARD/APPL  LOC  C  T  LEVEL      TIME LAST UPDATE      VERSION STATUS ----- TDM-CRNT   1114  Y  -  1  00-00-00 00:00:00  135-000-000  NORMAL TDM-BKUP   1114  Y  -  1  00-00-00 00:00:00  135-000-000  NORMAL TDM-CRNT   1116  Y  -  1  00-00-00 00:00:00  135-000-000  NORMAL TDM-BKUP   1116  Y  -  1  00-00-00 00:00:00  135-000-000  NORMAL           ;                 </pre>
3	<p>Issue the card status to verify the location of the active MASP slot</p> <p><b>rept-stat-card:appl=oam</b></p>

<sup>3</sup> In the EAGLE Software Upgrade Procedure; see Appendix B: Target Release Software Download on how to download the software release to the fixed disk for the applicable target release.

**Procedure 19: Verify Source Database and enter Software Access Key**

<p><input type="checkbox"/> 4</p>	<p>Response to the card status command is displayed.</p> <p><input type="checkbox"/> Record the card locations of both MASP's and the running GPL:</p> <p>Act MASP _____</p> <p>Stby MASP _____</p> <p>MASP GPL: _____</p> <p>For this sample output, cards 1113/1114 are standby and 1115/1116 are active.</p>	<pre> tekelecstp YY-MM-DD hh:mm:ss TTTT PPPP XX.X.X-YY.Y.Y CARD  VERSION      TYPE  GPL  PST  SST  AST 1113  XXX-XXX-XXX  E5MCAP  OAMHC  IS-NR  Standby  ----- 1115  XXX-XXX-XXX  E5MCAP  OAMHC  IS-NR  Active   ----- </pre> <p>Command Completed.</p>
<p><input type="checkbox"/> 5</p>	<p>Inhibit the standby MASP</p>	<p><b>inh-card:loc=XXXX</b></p> <p>(Where XXXX is the location of the standby MASP slot recorded in step 4)</p>
<p><input type="checkbox"/> 6</p>	<p>Response to the inhibit command is displayed</p> <p><input type="checkbox"/> Verify UAM 514 is displayed.</p>	<pre> tekelecstp YY-MM-DD hh:mm:ss TTTT PPP XX.X.X-YY.Y.Y Card is inhibited. </pre> <p>;</p> <pre> tekelecstp YY-MM-DD hh:mm:ss TTTT PPP XX.X.X-YY.Y.Y ** 7991.0514 ** CARD xxxx OAMHC Standby MASP is inhibited </pre> <p>;</p> <p><b>Wait for card to boot and return to the IMT bus.</b></p>
<p><input type="checkbox"/> 7</p>	<p>Download target release flash to the standby MASP.</p>	<p><b>init-flash:loc=XXXX:code=trial</b></p> <p>(Where XXXX is the location of the standby MASP slot recorded in step 3)</p>
<p><input type="checkbox"/> 8</p>	<p>Response to flash initialization is shown.</p> <p><input type="checkbox"/> Verify UAM 0004 is displayed.</p>	<pre> tekelecstp YY-MM-DD hh:mm:ss TTTT PPP XX.X.X-YY.Y.Y FLASH Memory Download for card xxxx started. </pre> <p>;</p> <pre> tekelecstp YY-MM-DD hh:mm:ss TTTT PPP XX.X.X-YY.Y.Y FLASH Memory Download for card xxxx completed. </pre> <p>;</p> <pre> tekelecstp YY-MM-DD hh:mm:ss TTTT PPP XX.X.X-YY.Y.Y * 8003.0004 * GPL SYSTEM BLMCAP Card is running non-activated GPL </pre> <p>;</p> <p><b>Wait for card to boot and return to the IMT bus.</b></p>
<p><input type="checkbox"/> 9</p>	<p>Retrieve the GPLs running on the card location.</p>	<p><b>rept-stat-gpl:loc=XXXX</b></p> <p>(Where XXXX is the location of the standby MASP slot recorded in step 4)</p>
<p><input type="checkbox"/> 10</p>	<p>Response to the card status command is displayed.</p> <p>Repeat the previous step if a valid version of BLMCAP is not displayed.</p>	<pre> tekelecstp YY-MM-DD hh:mm:ss TTTT PPP XX.X.X-YY.Y.Y GPL      CARD  RUNNING  APPROVED  TRIAL OAMHC   1113  -----  -----  -----           BLMCAP  YYY-YYY-YYY ALM+  XXX-XXX-XXX  YYY-YYY-YYY </pre> <p>Command Completed.</p>
<p><input type="checkbox"/> 11</p>	<p>Run the target release GPL on the standby MASP</p>	<p><b>alw-card:loc=XXXX:code=inactiveprtn</b> (target release downloaded to inactive partition)</p> <p>(Where XXXX is the location of the standby MASP recorded in step 3)</p>

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<input type="checkbox"/>	12	Response to command is shown.	<pre>tekelecstp YY-MM-DD hh:mm:ss TTTT PPP XX.X.X-YY.Y.Y Card has been allowed. ;</pre>
<input type="checkbox"/>	13	Retrieve status of the MASPs	<pre>rept-stat-gpl:gp1=oamhc</pre>
<input type="checkbox"/>	14	Verify standby MASP running target release GPL. The standby MASP will display ALM to indicate that the card is not running the approved version GPL.	<pre>tekelecstp YY-MM-DD hh:mm:ss TTTT PPP XX.X.X-YY.Y.Y GPL Auditing ON  GPL      CARD      RUNNING      APPROVED      TRIAL OAMHC    1113      XXX-XXX-XXX  XXX-XXX-XXX OAMHC    1115      YYY-YYY-YYY ALM  XXX-XXX-XXX  Command Completed. ;</pre>
<input type="checkbox"/>	15	Perform an OAM role change by booting the active OAM.	<pre>init-card:Loc=xxxx</pre> <p>(Where <i>XXXX</i> is the location of the active MASP recorded in step 4)</p>
<input type="checkbox"/>	16	Response to card initialization is shown.	<pre>tekelecstp YY-MM-DD hh:mm:ss TTTT PPP XX.X.X-YY.Y.Y init-card:loc=xxxx Command entered at terminal #10. ; tekelecstp YY-MM-DD hh:mm:ss TTTT PPP XX.X.X-YY.Y.Y Init Card command issued to card xxxx ;</pre>
<input type="checkbox"/>	17	Issue command to log back in to the system.	<pre>login:uid=xxxxxx</pre> <p>(Where <i>xxxxxx</i> is a valid login ID)</p>
<input type="checkbox"/>	18	Response to login command is displayed.	<pre>tekelecstp YY-MM-DD hh:mm:ss TTTT PPTTT XX.X.X-YY.Y.Y Upg Phase 0 User logged in on terminal X</pre>
<input type="checkbox"/>	19	Issue the command to activate capture.	<pre>act-echo:trm=P</pre> <p>(Where <i>P</i> is a capture terminal port that was selected in Procedure 2, Step 4)</p>
<input type="checkbox"/>	20	Response to activate command is displayed.	<pre>tekelecstp YY-MM-DD hh:mm:ss TTTT PPP XX.X.X-YY.Y.Y Upg Phase 0 Scroll Area output will be echoed to Terminal X. ;</pre> <p>(<b>Caution:</b> loss of output may occur if too many terminals are echoed)</p>
<input type="checkbox"/>		Verify that the capture terminal is correctly collecting data.	
<input type="checkbox"/>	21	Issue the card status to verify the location of the active MASP slot	<pre>rept-stat-card:apl=oam</pre>
<input type="checkbox"/>	22	Response to the card status command is displayed.  Record the card locations of both MASPs:  Active MASP _____  Standby MASP _____  For this sample output, 1113 is the active and 1115 is standby.	<pre>tekelecstp YY-MM-DD hh:mm:ss TTTT PPTTT XX.X.X-YY.Y.Y Upg Phase 0 CARD  VERSION      TYPE  GPL      PST      SST      AST 1113  XXX-XXX-XXX  E5MCAP  OAMHC    IS-NR    Active  ----- 4 1115  XXX-XXX-XXX  E5MCAP  OAMHC    IS-NR    Standby -----  Command Completed. ;</pre>
<input type="checkbox"/>	23	Inhibit the standby MASP	<pre>inh-card:Loc=xxxx</pre> <p>(Where <i>XXXX</i> is the location of the standby MASP recorded in step 22)</p>

<sup>4</sup> Dashes are displayed until GPL auditing has initialized after the activity has been switched, which may take up to two minutes.

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<p><input type="checkbox"/> 24</p>	<p>Response to the inhibit command is displayed</p> <p><input type="checkbox"/> Verify UAM 514 is displayed.</p>	<pre>tekelecstp YY-MM-DD hh:mm:ss TTTT P P P P P XX.x.x-YY.yy.y Upg Phase 0 Card is inhibited. ; tekelecstp YY-MM-DD hh:mm:ss TTTT P P P P P XX.x.x-YY.yy.y Upg Phase 0 ** 7991.0514 ** CARD xxxx OAMHC Standby MASP is inhibited ; <b>Wait for card to boot and return to the IMT bus.</b></pre>
<p><input type="checkbox"/> 25</p>	<p>Download target release flash to the standby MASP.</p>	<pre><b>init-flash:loc=xxx:code=trial</b> (Where XXXX is the location of the standby MASP recorded in step 22)</pre>
<p><input type="checkbox"/> 26</p>	<p>Response to flash initialization is shown.</p> <p><input type="checkbox"/> Verify UAM 0004 is displayed.</p>	<pre>tekelecstp YY-MM-DD hh:mm:ss TTTT P P P P P XX.x.x-YY.yy.y Upg Phase 0 FLASH Memory Download for card xxxx started. ; tekelecstp YY-MM-DD hh:mm:ss TTTT P P P P P XX.x.x-YY.yy.y Upg Phase 0 FLASH Memory Download for card xxxx completed. ; tekelecstp YY-MM-DD hh:mm:ss TTTT P P P P P XX.x.x-YY.yy.y Upg Phase 0 * 8003.0004 * GPL SYSTEM BLMCAP Card is running non-activated GPL ; <b>Wait for card to boot and return to the IMT bus.</b></pre>
<p><input type="checkbox"/> 27</p>	<p>Retrieve the GPLs running on the card location.</p>	<pre><b>rept-stat-gpl:loc=XXXX</b> (Where XXXX is the location of the standby MASP slot recorded in step 22)</pre>
<p><input type="checkbox"/> 28</p>	<p>Response to the card status command is displayed.</p> <p>Repeat the previous step if valid version of BLMCAP is not displayed.</p>	<pre>tekelecstp YY-MM-DD hh:mm:ss TTTT P P P P P XX.x.x-YY.yy.y Upg Phase 0 GPL CARD RUNNING APPROVED TRIAL OAMHC 1113 ----- BLMCAP YYY-YYY-YYY ALM + XXX-XXX-XXX YYY-YYY-YYY Command Completed. ;</pre>
<p><input type="checkbox"/> 29</p>	<p>Run the target release GPL on the standby MASP</p>	<pre><b>alw-card:loc=xxx:code=inactiveprtn</b> (target release downloaded to inactive partition) (Where XXXX is the location of the standby MASP recorded in step 22)</pre>
<p><input type="checkbox"/> 30</p>	<p>Response to allow card command is shown.</p>	<pre>tekelecstp YY-MM-DD hh:mm:ss TTTT P P P P P XX.x.x-YY.yy.y Upg Phase 0 Card has been allowed. ;</pre>
<p><input type="checkbox"/> 31</p>	<p>Issue the card status command to verify the target release GPL is running.</p>	<pre><b>rept-stat-gpl:gpl=oamhc</b> (E5-MCAP OAM cards)</pre>
<p><input type="checkbox"/> 32</p>	<p>Response from the status command is displayed.</p> <p><input type="checkbox"/> Verify that the GPL versions that are displayed in the "RUNNING" indicate an ALM. The ALM means the running GPL doesn't match the "APPROVED" version. Verify that both OAM cards are running the same GPL version.</p> <p>If not running the correct versions contact the Customer Care Center.</p>	<pre>tekelecstp YY-MM-DD hh:mm:ss TTTT P P P P P XX.x.x-YY.yy.y Upg Phase 0 rept-stat-gpl:gpl=oam Command entered at terminal #10. ; tekelecstp YY-MM-DD hh:mm:ss TTTT P P P P P XX.x.x-YY.yy.y Upg Phase 0 GPL Auditing ON APPL CARD RUNNING APPROVED TRIAL OAMHC 1113 XXX-XXX-XXX ALM YYY-YYY-YYY ----- 5 OAMHC 1115 XXX-XXX-XXX ALM YYY-YYY-YYY ----- Command Completed. ;</pre>
<p><input type="checkbox"/> 33</p>	<p>Issue the command to report card status to determine the active MASP.</p>	<pre><b>rept-stat-card</b></pre>

<sup>5</sup> Dashes are displayed until GPL auditing has initialized after the activity has been switched, which may take up to two minutes.

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<p><input type="checkbox"/> 34</p>	<p>Typical response to a card status command.</p> <p><input type="checkbox"/> Determine if both MASP's are IS-NR. If not, pause 5 seconds and execute the previous step again.</p> <p><input type="checkbox"/> Otherwise, determine the active MASP by finding which area of shaded text reports 'active'. Record the active MASP location: - _____</p> <p>Note: any 'isolated' cards should be plugged into their slots if possible.</p>	<pre> tekelecstp YY-MM-DD hh:mm:ss TTTT P P P P P XX.X.X-YY.yy.y Upg Phase 0 CARD VERSION TYPE APPL PST SST AST 1101 022-115-000 LIMV35 SS7ANSI IS-NR Active ----- 1102 022-115-000 LIMV35 SS7ANSI IS-NR Active ----- 1103 022-115-000 MCPM MCP IS-NR Active ----- 1104 022-115-000 LIMDS0 SS7ANSI IS-NR Active ----- 1105 ----- MCPM MCP OOS-MT Isolated ----- 1106 022-112-000 LIMV35 SS7GX25 IS-NR Active ----- 1107 022-111-000 ACMENET STPLAN IS-ANR Active ----- 1108 022-115-000 ASM SCCP IS-NR Active ----- 1111 ----- ASM SCCP OOS-MT Isolated ----- 1112 022-115-000 ASM GLS IS-NR Active ----- 1113 XXX-XXX-XXX GPSP OAMHC IS-NR Active ----- 1114 ----- TDM ----- IS-NR Active ----- 1115 XXX-XXX-XXX GPSP OAMHC IS-NR Standby ----- 1116 ----- TDM ----- IS-NR Active ----- 1117 ----- MDAL ----- IS-NR Active ----- 1201 022-115-000 DCM IPLIM IS-NR Active ----- Command Completed.                     </pre>
<p><input type="checkbox"/> 35</p>	<p>Issue the Send Message command that performs checks for obsolete cards.</p>	<p><b>send-msg:loc=XXX:ds=1:da=h'1d:f=h'61</b> (where XXXX is the location of the active MASP)</p> <p>Note: It is important to enter the correct active MASP location determined in the previous step. Incorrect results could be displayed otherwise.</p>
<p><input type="checkbox"/> 36</p>	<p>Response to the Send Message command is displayed. Verify the output for the following checks:</p> <p><input type="checkbox"/> Verify the shaded text (shown) does not indicate any incorrect hardware is found. Unsupported/obsolete cards are indicated with ***. If obsolete cards are shown then this check fails until the target's baseline hardware is installed.</p> <p><input type="checkbox"/> Record the count of obsolete cards: _____</p>	<pre> tekelecstp YY-MM-DD hh:mm:ss TTTT P P P P P XX.X.X-YY.yy.y Upg Phase 0 System Buffer sent has following attributes : Msg Length = H'0010 Dest Card = H'00fa Orig Subsys = H'0001           Dest Subsys = H'0001 Orig Appl ID = H'0030         Dest Appl ID = H'001d Func ID = H'0061             Bus/Ret/Sut = H'0002 Violation Ind = H'0000 User Message sent to location 1113.                     </pre> <p>;</p> <pre> tekelecstp YY-MM-DD hh:mm:ss zzz P P P P P XX.X.X-YY.yy.y IMT Bus Check Started IMT Bus Check Completed Successfully.  Hardware Validation Test Started [EDCM Obsolescence Test for SIGTRAN(IP) application] [DSM-1G Obsolescence Test for IPS application] [TSM-256 Obsolescence Test for GLS application.]  *** EDCM card running the SIGTRAN(IP) application in slot 1105 obsolete. *** DSM-1G card running the IPS application in slot 1106 obsolete. *** TSM-256 card running the GLS application in slot 1107 obsolete.  Obsolete card's count = 3  Hardware Validation Test failed, Upgrade can not proceed.                     </pre>
<p><input type="checkbox"/> 37</p>	<p>Issue the Send Message command that checks for possible conflicts of IP addresses configured in the system.</p>	<p><b>send-msg:loc=XXX:ds=1:da=h'1d:f=h'63</b> (where XXXX is the location of the active MASP)</p> <p>Note: It is important to correctly enter the active MASP location determined in step 33. Otherwise, incorrect results could be displayed.</p>

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<p>38</p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p>	<p>Response to command is displayed.</p> <p>Verify that the Fast Copy network A or B address do <b>NOT</b> conflict with the Local IP Network address; <b>shaded error text</b> is <b>NOT</b> displayed. If conflicts are detected, this procedure fails until changes are made to the local IP network address.</p> <p>Verify if the Fast Copy network A or B address do <b>NOT</b> conflict with IP Route; <b>shaded error text</b> is <b>NOT</b> displayed. If conflicts are detected, this procedure fails until changes are made to the IP Route.</p> <p>Verify that the FC network A or B address conflict with the PVN Network address; <b>shaded error text</b> is <b>NOT</b> displayed. If conflicts are detected, this procedure fails until changes are made to the PVN.</p> <p>Verify that the IP Address Validation check passes. Verify that the <b>shaded error text</b> is <b>NOT</b> displayed. If check does not pass, this procedure fails until provisioning changes are made.</p>	<pre> tekelecstp YY-MM-DD hh:mm:ss zzz P P P P P XX.X.X-YY.yy.y Upg Phase 0 System Buffer sent has following attributes : Msg Length = H'001c Dest Card = H'00fa Orig Subsys = H'0001 Dest Subsys = H'0001 Orig Appl ID = H'0030 Dest Appl ID = H'001d Func ID = H'0063 Bus/Ret/Sut = H'0002 Violation Ind = H'0000 User Message sent to location XXXX. ;  tekelecstp YY-MM-DD hh:mm:ss zzz P P P P P XX.X.X-YY.yy.y Upg Phase 0  PVN and FC Network Conflict Validation Report PVN conflicts with the FC Network A PVN conflicts with the FC Network B End PVN and FC Network Conflict Validation Report  IP Route Conflict Validation Report Local IP network address on card loc=1102 matches Eagle PVN Local IP network address on card loc=1102 matches FC Network A Local IP network address on card loc=1102 matches FC Network B  Destination of IP Route on card loc=1102 matches Eagle PVN Destination of IP Route on card loc=1102 matches Eagle FC network A Destination of IP Route on card loc=1102 matches Eagle FC network B  End IP Route Conflict Validation Report.  tekelecstp YY-MM-DD hh:mm:ss zzz P P P P P XX.X.X-YY.yy.y Upg Phase 0 IP Address Validation Report Notice: Current Eagle PVN/PVNMASK violate target release provisioning rule Notice: PVN/FCN A IP addresses are same after upgrade Notice: PVN/FCN B IP addresses are same after upgrade Notice: PVN/IP Rte IP address on 1102 are same after upgrade Notice: FCN A/IP Rte IP address on 1102 are same after upgrade Notice: FCN B/IP Rte IP address on 1102 are same after upgrade Notice: PVN/Local IP address on 1102 are same after upgrade Notice: FCN A/Local IP address on 1102 are same after upgrade Notice: FCN B/Local IP address on 1102 are same after upgrade  IP Address Validation Result: Fail or Attention Required. ;                     </pre>
<p>39</p> <p><input type="checkbox"/></p>	<p>Issue the command to enter the software access key.</p>	<p><b>chg-upgrade-config:sak=XXXXXXXXXXXXX:src=fixed</b></p> <p>(Where XXXXXXXXXXXXXXXX is the Software Access Key)</p>
<p>40</p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p>	<p>Response to command is displayed.</p> <p>Verify the command completed successfully and the correct Upgrade target release is output</p>	<pre> tekelecstp YY-MM-DD hh:mm:ss TTTT P P P P P XX.X.X-YY.yy.y Upg Phase 0 chg-upgrade-config:sak=XXXXXXXXXXXXX:src=zzzzz Command entered at terminal #6. ;  tekelecstp YY-MM-DD hh:mm:ss TTTT P P P P P XX.X.X-YY.yy.y Upg Phase 0  Upgrade target: EAGLE XX.X.X-YY.yy.y  tekelecstp YY-MM-DD hh:mm:ss TTTT P P P XX.X.X-YY.yy.y Command Completed. ;                     </pre>
<p>41</p> <p><input type="checkbox"/></p>	<p>Issue the command to initialize the active and standby MASP cards so that they are running the source release software.</p>	<p><b>init-card:appl=oam</b></p>
<p>42</p> <p><input type="checkbox"/></p>	<p>Response to the initialize-card command is displayed</p>	<pre> tekelecstp YY-MM-DD hh:mm:ss zzz P P P P P XX.X.X-YY.yy.y init-card:appl=oam Command entered at terminal #X. ;                     </pre>
<p>43</p> <p><input type="checkbox"/></p>	<p>Issue command to log back in to the system.</p>	<p><b>login:uid=XXXXXX</b></p> <p>(Where XXXXXX is a valid login ID)</p>

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<p>44 <input type="checkbox"/></p>	<p>Response to login command is displayed.</p>	<pre>tekelecstp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x-YY.yy.y User logged in on terminal X</pre>
<p>45 <input type="checkbox"/></p>	<p>Issue the command to activate capture.</p>	<pre>act-echo:trm=P (Where P is a capture terminal port that was selected in Procedure 2, Step 4)</pre>
<p>46 <input type="checkbox"/></p>	<p>Response to activate command is displayed.</p>	<pre>tekelecstp YY-MM-DD hh:mm:ss ZZZZ PPPPP XX.x.x-YY.yy.y Scroll Area output will be echoed to Terminal X. ;</pre>
<p>47 <input type="checkbox"/></p>	<p>Verify that the capture terminal is correctly collecting data.</p>	<p>(<b>Caution:</b> loss of output may occur if too many terminals are echoed)</p>
<p>48 <input type="checkbox"/></p>	<p>Issue the command to report card status.</p>	<pre>rept-stat-card</pre>
<p>49 <input type="checkbox"/></p>	<p>Typical response to card status command.</p>	<pre>tekelecstp YY-MM-DD hh:mm:ss zzzz PPPPP XX.x.x-YY.yy.y CARD  VERSION  TYPE  GPL  PST  SST  AST 1101  134-061-000  DCM  IPGHC  IS-NR  Active  ALMINH 1102  134-061-000  DCM  IPLHC  IS-NR  Active  ALMINH 1103  134-061-000  E5ENET  IPSG  IS-NR  Active  ----- 1107  134-061-000  DSM  VSCCP  IS-NR  Active  ----- 1109  134-058-000  HIPR  HIPR  IS-NR  Active  ----- 1110  134-058-000  HIPR  HIPR  IS-NR  Active  ----- 1111  134-061-000  DSM  SCCPHC  IS-NR  Active  ----- 1113  134-061-000  E5MCAP  OAMHC  IS-NR  Standby  ----- 1114  -----  E5TDM  -----  IS-NR  Active  ----- 1115  134-061-000  E5MCAP  OAMHC  IS-NR  Active  ----- 1116  -----  E5TDM  -----  IS-NR  Active  ----- 1117  -----  E5MDAL  -----  IS-NR  Active  ----- 1201  134-061-000  LIMDS0  SS7ML  IS-NR  Active  ----- Command Completed. ;</pre>
<p>50 <input type="checkbox"/></p>	<p>Issue the command to report trouble status.</p>	<pre>rept-stat-trbl:display=timestamp</pre>
<p>51 <input type="checkbox"/></p>	<p>Response to trouble status command is displayed.</p> <p>Record any non-network alarms.</p> <p>Alarm _____</p>	<pre>tekelecstp YY-MM-DD hh:mm:ss zzz PPPPP XX.x.x-YY.yy.y Searching devices for alarms... ; tekelecstp YY-MM-DD hh:mm:ss EST PPP XX.x.x-YY.y.y SEQN UAM AL DEVICE ELEMENT TROUBLE TEXT 5728.0048 * TERMINAL 14 Terminal failed 98-03-09 10:05:36 5729.0048 * TERMINAL 15 Terminal failed 98-03-09 10:05:36 5730.0155 * DLK 1107,A STPLAN connection unavailable 98-03-09 13:57:40 5731.0013 ** CARD 1214 SS7ANSI Card is isolated from the system 98-03-09 13:57:40 5604.0013 ** CARD 1111 SCCP Card is isolated from the system 98-03-09 13:57:40 5732.0236 ** SLK 1214,A lsn1214 REPT-LKF: not aligned 98-03-09 13:57:40 5733.0236 ** SLK 1214,B lsn1214 REPT-LKF: not aligned 98-03-09 13:57:40 5734.0236 ** SLK 1106,A lsnx1 REPT-LKF: not aligned 98-03-09 13:57:40 5735.0318 ** LSN lsn1214 REPT-LKSTO: link set prohibited 98-03-09 13:57:40 5736.0318 ** LSN lsnx1 REPT-LKSTO: link set prohibited 98-03-09 13:57:40 Command Completed. ;</pre>
<p>51 <input type="checkbox"/></p>	<p>All steps in this procedure were completed.</p>	

### 3.20 Verifying Fixed and Removable Media (Part 1)

**Procedure 20: Verifying Fixed Disks Functions with TST-DSK**

<b>S T E P #</b>	<b>This procedure verifies that EAGLE fixed disks and removable disk/drive are accessible and in proper working order. Disks/drives are exercised by issuing test disk and backup commands. If no on-site personnel are available and the removable drive is not inserted then this procedure needs to be rescheduled.</b>	
<input type="checkbox"/> <b>1</b>	Issue the command to backup to the fixed disk.	<b>chg-db:action=backup</b>
<input type="checkbox"/> <b>2</b>	Response to backup command is displayed.	<pre> sysint211 98-03-09 17:59:25 EST Re1 XX.X.X 7706.1114 CARD 1115 Database BACKUP started Report Date:98-03-09 Time:17:59:25 ;  sysint211 98-03-09 17:59:44 EST Re1 XX.X.X BACKUP (FIXED): MASP B - Backup starts on active MASP. ;  sysint211 98-03-09 18:04:08 EST Re1 XX.X.X BACKUP (FIXED): MASP B - Backup on active MASP to fixed disk complete. ;  sysint211 98-03-09 18:04:08 EST Re1 XX.X.X BACKUP (FIXED): MASP B - Backup starts on standby MASP. ;  sysint211 98-03-09 18:07:59 EST Re1 XX.X.X BACKUP (FIXED): MASP B - Backup on standby MASP to fixed disk complete. ;                     </pre>
<input type="checkbox"/> <b>3</b>	<b>If not already inserted, insert the source removable media drive into the system</b>	
<input type="checkbox"/> <b>4</b>	Issue the command to backup to the removable. Otherwise, procedure needs to be rescheduled. <sup>6</sup>	<b>chg-db:action=backup:dest=remove</b>
<input type="checkbox"/> <b>5</b>	Response to backup command is displayed.  <input type="checkbox"/> Record which MASP is active:  A or B: _____  If A, then 1113/1114 are active. If B, than 1115/1116 is active.	<pre> tekelecstp 98-01-26 09:21:21 EST Re1 XX.X.X BACKUP (REMOVABLE): MASP A - Backup starts on active MASP. ;  tekelecstp 98-01-26 09:21:21 EST Re1 XX.X.X 0465.1114 CARD 1113 Database BACKUP started Report Date:98-03-31 Time:00:02:03 ;  tekelecstp 98-01-26 09:21:23 EST Re1 XX.X.X BACKUP (REMOVABLE): MASP A - Backup to removable cartridge complete. ;  tekelecstp 98-01-26 09:29:13 EST Re1 XX.X.X 0466.1116 CARD 1113 Database action ended - OK Report Date:98-03-31 Time:00:05:08 ;                     </pre>
<input type="checkbox"/> <b>6</b>	Issue the command to copy GPLs from active TDM to removable drive.	<b>copy-gp1:s1oc=XXXX:ddrv=remove</b>
<input type="checkbox"/> <b>7</b>	Response to copy GPL command is displayed  <input type="checkbox"/> Verify command completes successfully.	<pre> tekelecstp 98-01-26 09:29:39 EST Re1 XX.X.X COPY GPL: MASP Y - COPY STARTS ON ACTIVE MASP COPY GPL: MASP Y - COPY TO REMOVABLE CARTRIDGE COMPLETE (where Y is the active MASP - A or B) ;                     </pre>
<input type="checkbox"/> <b>8</b>	Remove the removable drive from the active MASP. Update the label with release and database level. Store in a safe place for later use.	

<sup>6</sup> A removable media drive needs to be inserted to complete the procedure. If the drive cannot be inserted, go to step 6 however this procedure fails.

**Procedure 20: Verifying Fixed Disks Functions with TST-DSK**

<p>9 <input type="checkbox"/></p>	<p>Issue the commands to display disk directory of the fixed disk.</p>	<p><b>disp-disk-dir:loc=XXXX</b> <i>(where XXXX is the standby TDM)</i></p>
<p>10 <input type="checkbox"/></p>	<p>Response to the display command is displayed.  Verify command completes successfully.  <i>Note that the output data may vary from this example.</i></p>	<pre>tekelecstp YY-MM-DD hh:mm:ss EST PPP XX.x.x-YY.y.y  DISP-DISK-DIR  Loc=1114  Dev = FIXED(Active) Filename      Ext          Length DMS1024      CFG          32768 dbstat       bkp          47662 dbstat       tbl          47662 ipas         tbl          262090 mcfg         bkp          156 mcfg         tbl          156  (additional files listed ...)  File(s) : 465      Bytes : 1925810639 Disk Size (MB) : 7515 ;</pre>
<p>11 <input type="checkbox"/></p>	<p>Issue this command to test the fixed disk.</p>	<p><b>tst-disk:loc=XXXX:partition=all</b> <i>(where XXXX is the standby fixed disk)</i></p>
<p>12 <input type="checkbox"/></p>	<p>Response to the test disk command is displayed.  Verify that there are no errors and retries are indicated.  This command will complete in less than a minute.</p>	<pre>tekelecstp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x-YY.y.y  TST-DISK RESULTS: Total clusters: 983290 Free Clusters: 983290 Bad Clusters: 0 Total Free Space: 3933160 Max. Contiguous Free Space: 3933160 Files: 932 Folders: 0 Bytes in Files: 3761348 Lost Chains: 0 Bytes in Lost Chains: 0 ;</pre>
<p>13 <input type="checkbox"/></p>	<p>Issue the command to initialize the active MASP.</p>	<p><b>init-card:loc=XXXX</b> <i>(Where XXXX is the location of the active E5-MASP)</i></p>
<p>14 <input type="checkbox"/></p>	<p>Response to the initialize command is displayed</p>	<pre>tekelecstp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x-YY.y.y init-card:loc=XXXX Command entered at terminal #10. ; tekelecstp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x-YY.y.y ** 6573.0013 ** CARD XXXX OAMHC Card is isolated from the system ASSY SN: xxxxxxxxxxxx ; tekelecstp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x-YY.y.y 6577.0014 CARD XXXX OAMHC Card is present ASSY SN: xxxxxxxxxxxx ;</pre>
<p>15 <input type="checkbox"/></p>	<p>Issue the command to log in to the EAGLE terminal.</p>	<p><b>login:uid=XXXXXX</b> <i>(where XXXXXX is your login ID)</i></p>
<p>16 <input type="checkbox"/></p>	<p>Response to login command is displayed.</p>	<pre>tekelecstp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x-YY.y.y User logged in on terminal X ;</pre>
<p>17 <input type="checkbox"/></p>	<p>Issue the command to activate capture.</p>	<p><b>act-echo:trm=P</b> <i>(where P is a terminal port used in Procedure 3.2, Step 5)</i></p>
<p>18 <input type="checkbox"/></p>	<p>Response to activate command is displayed.</p>	<pre>tekelecstp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x-YY.y.y Scroll Area Output will be echoed to Terminal X. ;</pre>
<p>19 <input type="checkbox"/></p>	<p>Repeat Steps 9-12 for the formerly-active TDM.</p>	
<p>20 <input type="checkbox"/></p>	<p>All steps in this procedure were completed.</p>	

### 3.21 Testing IMT Status

#### Procedure 21: Testing IMT Buses

S T E P #	<p><b>This procedure tests that the IMT Buses are healthy.</b></p> <p><b>This procedure should be executed in a maintenance window. If it cannot be done in a maintenance window, then this procedure needs to be rescheduled.</b></p>	
1	Issue the command to report the status of the IMT buses.	<b>rept-stat-imt:mode=full</b>
2	Response to report IMT status command is displayed.	<pre>tekelecstp YY-MM-DD HH:MM:SS tzzone Rel XX.X.X-YY.Y.Y IMT PST SST AST A IS-NR Active ----- ALARM STATUS = No Alarms.  IMT PST SST AST B IS-NR Active ----- ALARM STATUS = No Alarms. Command Completed. ;</pre>
3	If in a maintenance window, issue the command to inhibit the IMT bus.	<b>inh-imt:bus=A</b>
4	Response to inhibit IMT bus command is displayed.	<pre>tekelecstp YY-MM-DD HH:MM:SS tzzone Rel XX.X.X-YY.Y.Y Inhibit IMT Bus A command issued ;  tekelecstp YY-MM-DD HH:MM:SS tzzone Rel XX.X.X-YY.Y.Y 0401.0098 IMT BUS A IMT inhibited ;</pre>
5	Issue the command to test the IMT bus.	<b>tst-imt:type=faulttest:bus=A</b>
6	Response to test IMT bus command is displayed.  "Test Passed" message displayed.	<pre>tekelecstp YY-MM-DD HH:MM:SS tzzone Rel XX.X.X-YY.Y.Y IMT Fault Isolation Bus A Fault Location Probable Cause Failure(s) No Faults Found All Tests Passed ;</pre>
7	Issue the command to allow the IMT bus.	<b>alw-imt:bus=A</b>
8	Response to allow IMT bus command is displayed.	<pre>tekelecstp YY-MM-DD HH:MM:SS tzzone Rel XX.X.X-YY.Y.Y Allow IMT Bus A command issued ;  tekelecstp YY-MM-DD HH:MM:SS tzzone Rel XX.X.X-YY.Y.Y 0403.0097 IMT BUS A IMT allowed ;</pre>
9	Issue the command for the Extended BERT test.	<b>tst-imt:type=extbert:time=10:bus=A</b>
10	Response to test IMT bus command is displayed. Otherwise, error "E4765 Cmd Rej: Obsolete MUX cards detected in the system" is displayed when the hardware is invalid for this command.	<pre>tekelecstp YY-MM-DD HH:MM:SS tzzone Rel XX.X.X-YY.Y.Y Extended BERT: Command in progress... ;  tekelecstp YY-MM-DD HH:MM:SS tzzone Rel XX.X.X-YY.Y.Y Extended BERT: Target Bus A will be inhibited ;  tekelecstp YY-MM-DD HH:MM:SS tzzone Rel XX.X.X-YY.Y.Y 5042.0098 IMT BUS A IMT inhibited ;  tekelecstp YY-MM-DD HH:MM:SS tzzone Rel XX.X.X-YY.Y.Y Extended BERT: Active MASP will be reconnected on Bus A ;  tekelecstp YY-MM-DD HH:MM:SS tzzone Rel XX.X.X-YY.Y.Y Extended BERT: Extended processing time required. Results will be displayed on test completion.</pre>

Procedure 21: Testing IMT Buses

<input type="checkbox"/>	<p>“PASS” messages displayed in BERT Status column.</p>	<pre> ; tekelecstp YY-MM-DD HH:MM:SS tzzone Re1 XX.X.X-YY.Y.Y Command Completed.  After 10 minutes: tekelecstp YY-MM-DD HH:MM:SS tzzone Re1 XX.X.X-YY.Y.Y Extended Bit Error Rate Test Bus A MAX ERROR = 20      TIME = 00:10:00      START TIME = 12:10:30 TEST STATUS = PASS  CARD  TYPE      SERIAL_NUMBER  BERT_STATUS  BIT_ERROR  ERRORED_SEC  DURATION 1110  HIPR2      10208345012   PASS         3          2            01:00:00 1210  HIPR2      10208345031   PASS         2          1            01:00:00 1310  HIPR2      10208345052   PASS         5          3            01:00:00 ;  tekelecstp YY-MM-DD HH:MM:SS tzzone Re1 XX.X.X-YY.Y.Y Extended BERT: Target Bus A will be allowed ;  tekelecstp YY-MM-DD HH:MM:SS tzzone Re1 XX.X.X-YY.Y.Y 5042.0098      IMT BUS A          IMT allowed ;                 </pre>
<p><b>11</b></p> <input type="checkbox"/>	<p>Issue the status command for the IMT buses.</p>	<pre> <b>rept-stat-imt:mode=full</b>                 </pre>
<p><b>12</b></p> <input type="checkbox"/>	<p>Response to IMT bus status command is displayed.</p>	<pre> tekelecstp YY-MM-DD hh:mm:ss EST PPP XX.x.x-YY.y.y IMT  PST      SST      AST A   IS-NR    Active   ----- ALARM STATUS      = No Alarms.  IMT  PST      SST      AST B   IS-NR    Active   ----- ALARM STATUS      = No Alarms. Command Completed. ;                 </pre>
<p><b>13</b></p> <input type="checkbox"/>	<p>Repeat Steps 3 – 12 for IMT Bus B.</p>	<p>Repeat command in order to test IMT Bus B</p>
<p><b>14</b></p> <input type="checkbox"/>	<p>All steps in this procedure were completed.</p>	

### 3.22 Verifying Fixed and Removable Media (Part 2)

#### Procedure 22: Verifying Fixed Disks and Removable Media Function with TST-DISK

<b>S T E P #</b>	<p><b>This procedure verifies that EAGLE fixed disks and removable media are accessible and in proper working order. Disks will be exercised by issuing test disk and backup commands. If no on-site personnel are available to insert the source release removable media then this procedure needs to be rescheduled. This procedure must be done in a maintenance window.</b></p>	
<b>1</b> <input type="checkbox"/>	<p>Verify that a <b>source release removable media</b> is inserted in the active MASP.</p> <p>If in a maintenance window, issue the command to display card status.</p>	<p><b>rept-stat-card:appl=oam</b></p>
<b>2</b> <input type="checkbox"/> <input type="checkbox"/>	<p>Response to card status command is displayed.</p> <p>Determine which MASP is currently Standby by looking in the column labeled SST.</p> <p>Record the locations of the MASPs:</p> <p>Active MASP _____</p> <p>Standby MASP _____</p>	<pre>tekelecstp YY-MM-DD hh:mm:ss EST PPP XX.x.x-YY.y.y CARD  VERSION   TYPE      GPL      PST      SST      AST 1113  XXX-XXX-XXX  E%MCAP   OAMHC    IS-NR    Standby  ----- 1115  XXX-XXX-XXX  E5MCAP   OAMHC    IS-NR    Active   -----</pre> <p>Command Completed.</p>
<b>3</b> <input type="checkbox"/>	<p>Remove Standby E5MASP from the system.</p>	<p><input type="checkbox"/> Slide the MASP H/S switch (SW3) on the standby MASP up to the unlocked position (Wait for all drive LEDs to transition to a steady blue).</p> <p><input type="checkbox"/> Remove the standby E5MASP card determined in step 2</p>
<b>4</b> <input type="checkbox"/>	<p>Issue the command to report clock status.</p>	<p><b>rept-stat-clk:mode=full</b></p>
<b>5</b> <input type="checkbox"/> <input type="checkbox"/>	<p>Response to clock status command is displayed.</p> <p>Verify that all cards are using the clock on the other E5MASP.</p>	<pre>tekelecstp YY-MM-DD hh:mm:ss EST PPP XX.x.x-YY.y.y COMPOSITE                               PST      SST      AST SYSTEM CLOCK                             IS-ANR    Idle   ----- ALARM STATUS = No Alarms. Primary Comp Clk 1114 (CLK A)             IS-NR    Active Primary Comp Clk 1116 (CLK B)             IS-NR    Idle Secondary Comp Clk 1114 (CLK A)           IS-NR    Idle Secondary Comp Clk 1116 (CLK B)           IS-NR    Idle  Clock      Using      Bad CLK A      3            0 CLK B      0            3 CLK I      0            --  HIGH SPEED                                PST      SST      AST SYSTEM CLOCK                             IS-NR    Idle   ----- ALARM STATUS = No Alarms. Primary HS Clk 1114 (HS CLK A)            IS-NR    Active Primary HS Clk 1116 (HS CLK B)            IS-NR    Idle Secondary HS Clk 1114(HS CLK A)           IS-NR    Idle Secondary HS Clk 1116(HS CLK B)           IS-NR    Idle  HS CLK TYPE 1114      = RS422 HS CLK LINELEN 1114  = ----- HS CLK TYPE 1116      = RS422 HS CLK LINELEN 1116  = -----  Clock      Using      Bad HS CLK A    0            0 HS CLK B    0            0 HS CLK I    0            --  Cards with bad clock source: CARD        CLK A      CLK B      HS CLK A  HS CLK B ----- 1103        Active     Fault      ----- 1105        Active     Fault      ----- 1113        Active     Fault      -----</pre>



**Procedure 22: Verifying Fixed Disks and Removable Media Function with TST-DISK**

<p><b>15</b> <input type="checkbox"/></p>	<p>Issue the commands to display disk directory of the standby MASP.</p>	<p><b>disp-disk-dir:loc=XXXX</b>  <i>(Where XXXX is the standby MASP disk slot)</i></p>
<p><b>16</b> <input type="checkbox"/>  <input type="checkbox"/></p>	<p>Response to display disk directory command is displayed.  Verify command completes successfully.  <i>Note that the output data may vary from this example.</i></p>	<pre>tekelecstp YY-MM-DD hh:mm:ss EST PPP XX.x.x-YY.y.y  DISP-DISK-DIR  Loc=1114  Dev = FIXED(Active) Filename      Ext          Length DMS1024      CFG           32768 dbstat       bkp           47662 dbstat       tbl           47662 ipas         tbl           262090 mcfg         bkp            156 mcfg         tbl            156  (additional files listed ...)  File(s) : 465      Bytes : 1925810639 Disk Size (MB) : 7515 ;</pre>
<p><b>17</b> <input type="checkbox"/></p>	<p>Issue this command to test the fixed disk.</p>	<p><b>tst-disk:partition=all:loc=XXXX</b>  <i>(Where XXXX is the standby MASP disk slot recorded in step 2)</i></p>
<p><b>18</b> <input type="checkbox"/>  <input type="checkbox"/></p>	<p>Response to the test disk command is displayed.  Verify that there are no errors and retries are indicated.</p>	<pre>tekelecstp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x-YY.y.y  TST-DISK RESULTS: Total clusters: 149949 Free Clusters: 149949 Bad Clusters: 0 Total Free Space: 599796 Max. Contiguous Free Space: 517336 Files: 431 Folders: 0 Bytes in Files: 1323558 Lost Chains: 0 Bytes in Lost Chains: 0 ;</pre>
<p><b>19</b> <input type="checkbox"/></p>	<p>Issue the commands to display disk directory of the removable media.</p>	<p><b>disp-disk-dir:loc=xxxx:src=remove</b>  <i>(Where XXXX is the active MASP)</i></p>
<p><b>20</b> <input type="checkbox"/>  <input type="checkbox"/></p>	<p>Response to disp-disk-dir command is displayed.  Verify command completes successfully.  <i>Note that the output data may vary from this example.</i></p>	<pre>tekelecstp YY-MM-DD hh:mm:ss EST PPP XX.x.x-YY.y.y DISP-DISK-DIR  Loc=1115  Dev = REMOVE Filename      Ext          Length DMS1024      CFG           32768 TATMANSI     ELF          3145728 TATMHC       ELF          5242880 TATMITU      ELF          3145728 TBLBEPM      ELF          3145728 TBLBIOS      ELF          3145728  (additional files listed ...)  File(s) : 182      Bytes : 511026520 Disk Size (MB) : 1910 ;</pre>
<p><b>21</b> <input type="checkbox"/></p>	<p>Issue this command to test the removable media.</p>	<p><b>tst-disk:disk=remove:loc=xxxx</b>  <i>(Where XXXX is the active MASP)</i></p>
<p><b>22</b> <input type="checkbox"/>  <input type="checkbox"/></p>	<p>Response from the tst-disk command is displayed.  For E5OAM system, execution time is under a minute.  Verify that there are no errors and no retries indicated in output.</p>	<pre>tekelecstp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x-YY.y.y  TST-DISK RESULTS: Total clusters: 149949 Free Clusters: 149949 Bad Clusters: 0 Total Free Space: 599796 Max. Contiguous Free Space: 517336 Files: 431 Folders: 0 Bytes in Files: 1323558 Lost Chains: 0 Bytes in Lost Chains: 0 ;</pre>
<p><b>23</b> <input type="checkbox"/></p>	<p>Remove the removable media from the system and place in a safe place.</p>	

**Procedure 22: Verifying Fixed Disks and Removable Media Function with TST-DISK**

<p><input type="checkbox"/> 24</p>	<p>Issue the initialize card command for the active MASP.</p>	<p><b>init-card:loc=XXXX</b>  <i>(Where for the first time executing this command, XXXX is the location of the active MASP recorded in step 2; where for the second time executing this command, XXXX is the location of the standby MASP recorded in step 2 )</i></p>
<p><input type="checkbox"/> 25</p>	<p>Response to the initialize command is displayed.</p>	<pre> tekelecstp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x-YY.y.y 0261.0013 * CARD XXXX OAM      Card is isolated from the system           ASSY SN:  xxxxxxxx ; tekelecstp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x-YY.y.y 5038.0014  CARD XXXX OAM      Card is present           ASSY SN:  xxxxxxxx ;                     </pre>
<p><input type="checkbox"/> 26</p>	<p>Issue the command to log in to the EAGLE terminal.</p>	<p><b>Login:uid=XXXXXX</b>  <i>(Where XXXXXX is your login ID)</i></p>
<p><input type="checkbox"/> 27</p>	<p>Response to login command is displayed.</p>	<pre> tekelecstp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x-YY.y.y User logged in on terminal X ;                     </pre>
<p><input type="checkbox"/> 28</p>	<p>Issue the command to activate capture. Refer to Section 2.1.2 for information on how to set up terminals for data capture.</p>	<p><b>act-echo:trm=P</b>  <i>(Where P is a terminal port used in Procedure 3.2, Step 5)</i></p>
<p><input type="checkbox"/> 29</p>	<p>Response to activate command is displayed.</p>	<pre> tekelecstp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x-YY.y.y act-echo:trm=P Command entered at terminal #X. ; tekelecstp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x-YY.y.y Scroll Area Output will be echoed to Terminal X. ;                     </pre>
<p><input type="checkbox"/> 30</p>	<p>Issue the command to report the status of the MDAL.</p>	<p><b>rept-stat-card:loc=1117</b></p>
<p><input type="checkbox"/> 31</p>	<p>Response to the status command is displayed.</p> <p>Verify that status is IS-NR.</p>	<pre> tekelecstp YY-MM-DD hh:mm:ss EST PPP XX.x.x-YY.y.y CARD  VERSION      TYPE      APPL      PST          SST      AST 1117  -----      MDAL          IS-NR          Active     ----- Command Completed. ;                     </pre>
<p><input type="checkbox"/> 32</p>	<p>Repeat Steps 24 – 31.</p> <p>If second time executing this step, continue to next step.</p>	
<p><input type="checkbox"/> 33</p>	<p>Inhibit the standby MASP so that the spare MASP may be removed from the system.</p>	<p><b>inh-card:loc=XXXX</b>  <i>(Where XXXX is the location of the standby MASP.)</i></p>
<p><input type="checkbox"/> 34</p>	<p>Response to the inhibit command is displayed</p> <p><input type="checkbox"/> Verify UAM 514 is displayed.</p>	<pre> tekelecstp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x-YY.y.y Card is inhibited. ; tekelecstp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x-YY.y.y ** 7991.0514 ** CARD xxxx OAMHC      Standby MASP is inhibited ; <b>Wait for card to boot and return to the IMT bus.</b>                     </pre>

**Procedure 22: Verifying Fixed Disks and Removable Media Function with TST-DISK**

<p>35 <input type="checkbox"/></p>	<p>Remove Standby E5MASP from the system.</p>	<p><input type="checkbox"/> Slide the MASP H/S switch (SW3) on the standby MASP up to the unlocked position (Wait for all drive LEDs to transition to a steady blue).</p> <p><input type="checkbox"/> Remove the standby E5MASP card; the location specified in Step 24</p> <p><input type="checkbox"/> Insert the spare E5MASP card</p> <p><input type="checkbox"/> Slide the MASP H/S switch (SW3) on the standby MASP down to the locked position (Wait for the MASP H/S LED to transition from blinking blue to off and the MASP to come up in standby mode).</p>
<p>36 <input type="checkbox"/></p>	<p>Issue the allow card to bring the standby MASP in service.</p>	<p><b>a1w-card:loc=xxxx</b> (Where xxxx is the location of the standby MASP specified in step 32)</p>
<p>37 <input type="checkbox"/></p>	<p>Response to allow card is displayed.</p>	<pre>tekelecstp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x-YY.y.y Card has been allowed. ; tekelecstp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x-YY.y.y 1798.0014 CARD XXXX OAM Card is present ASSY SN: 10202081389 ;</pre>
<p>38 <input type="checkbox"/></p>	<p>Display database version information.</p>	<p><b>act-upgrade:action=dbstatus</b></p>
<p>39 <input type="checkbox"/></p> <p><b>If the database version on the standby disk is not the same as the active disk, first repeat previous step and then contact the Customer Care Center.</b></p> <p><input type="checkbox"/> If target release was downloaded, verify the version of the inactive partition is that of the upgrade target release, the database level is "1" and the coherency is "Y". If otherwise, contact the Customer Care Center.</p>	<p>Verify that the standby MASP contains the same database version as the active.</p>	<pre>tekelecstp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x-YY.y.y DATABASE STATUS: &gt;&gt; OK &lt;&lt; TDM 1114 ( ACTV ) TDM 1116 ( STDBY) C LEVEL TIME LAST BACKUP C LEVEL TIME LAST BACKUP ----- FD BKUP Y XXX YY-MM-DD hh:mm:ss TTTT Y XXX YY-MM-DD hh:mm:ss TTTT FD CRNT Y XXX MDAL 1117 - - - - - RD BKUP Y 1 - - CARD/APPL LOC C T LEVEL TIME LAST UPDATE VERSION STATUS ----- TDM-CRNT 1114 Y N XXX YY-MM-DD hh:mm:ss XXX-XXX-XXX NORMAL TDM-BKUP 1114 Y - XXX YY-MM-DD hh:mm:ss XXX-XXX-XXX NORMAL TDM-CRNT 1116 Y N XXX YY-MM-DD hh:mm:ss XXX-XXX-XXX NORMAL TDM-BKUP 1116 Y - XXX YY-MM-DD hh:mm:ss XXX-XXX-XXX NORMAL MDAL 1117 Y - 1 - - YYY-YYY-YYY NORMAL  INACTIVE PARTITION GROUP CARD/APPL LOC C T LEVEL TIME LAST UPDATE VERSION STATUS ----- TDM-CRNT 1114 Y - ZZZ YY-MM-DD hh:mm:ss ZZZ-ZZZ-ZZZ NORMAL TDM-BKUP 1114 Y - ZZZ YY-MM-DD hh:mm:ss ZZZ-ZZZ-ZZZ NORMAL TDM-CRNT 1116 Y - ZZZ YY-MM-DD hh:mm:ss ZZZ-ZZZ-ZZZ NORMAL TDM-BKUP 1116 Y - ZZZ YY-MM-DD hh:mm:ss ZZZ-ZZZ-ZZZ NORMAL ;</pre>
<p>40 <input type="checkbox"/></p>	<p>All steps in this procedure were completed.</p>	

### 3.23 Table Capacity Status

The following procedure is for data collection only. It does not have any pass fail criteria and does not include command response output.

**Procedure 23: Collect Table Capacity Status**

<b>S T E P #</b>	<b>This procedure collects the current capacity of certain database tables. Upon analysis of the health check data capture, it is Tekelec’s goal to identify if table capacity is approaching any limitation prior to any impact on the EAGLE’s performance.</b>	
<b>1</b> <input type="checkbox"/>	Issue the following command.	<b>rtrv-ls</b>
<b>2</b> <input type="checkbox"/>	Issue the following command.	<b>rtrv-tbl-capacity</b>
<b>3</b> <input type="checkbox"/>	Issue the following command.	<b>rept-stat-sys</b>
<b>4</b> <input type="checkbox"/>	If EGT feature is on, go to Step 6. If GTT feature is on (refer to Procedure 3.2, Step 12), issue the following command. Otherwise, go to the end of this procedure	<b>rtrv-tt</b>
<b>5</b> <input type="checkbox"/>	Issue the following command.	<b>rtrv-gtt:type=XX</b> <i>(where XX is any Type displayed in step 4)</i>
<b>6</b> <input type="checkbox"/>	If any LNP feature is on, issue the following command.	<b>rtrv-lnp-serv</b>
<b>7</b> <input type="checkbox"/>	Issue the following command.	<b>rtrv-cspc</b>
<b>8</b> <input type="checkbox"/>	Issue the following command.	<b>rtrv-npp-srs</b>

### 3.24 Health Check Conclusion

#### Procedure 24: Return the System to Former Configuration

<b>S T E P #</b>	<b>This procedure returns the EAGLE to the configuration prior to the start of this health check.</b>	
<b>1</b> <input type="checkbox"/>	Issue the command to changes the user's terminal output group configuration.	<b>chg-trm:trm=P:YYY=yes,ZZZ=no</b> <i>(Where P is the location of the printer terminal recorded in Procedure 3.2, Step 4.)</i> <i>( YYY is an output group that was recorded in Procedure 3.2, Step 4.)</i> <i>( ZZZ is another output group that was recorded in Procedure 3.2, Step 4.)</i>
<b>2</b> <input type="checkbox"/>	Response to change terminal command is displayed.	tekelecstp YY-MM-DD hh:mm:ss TTTT PTTTT XX.X.X-YY.Y.Y chg-trm:trm=P:YYY=yes,ZZZ=no Command entered at terminal #X. ;  tekelecstp YY-MM-DD hh:mm:ss TTTT PTTTT XX.X.X-YY.Y.Y CHG-TRM: MASP A - COMPLTD ;
<b>3</b> <input type="checkbox"/>	Issue the command to changes the user's terminal output group configuration.	<b>chg-trm:trm=X:YYY=yes,ZZZ=no:TMOUT=TTT</b> <i>(Where X is the location of the user's terminal recorded in Procedure 3.2, Step 4.)</i> <i>( YYY is an output group that was recorded in Procedure 3.2, Step 4.)</i> <i>( ZZZ is another output group that was recorded in Procedure 3.2, Step 4.)</i> <i>( TTT is the timeout value that was recorded in Procedure 3.2, Step 4</i>
<b>4</b> <input type="checkbox"/>	Response to change terminal command is displayed.	tekelecstp YY-MM-DD hh:mm:ss TTTT PTTTT XX.X.X-YY.Y.Y chg-trm:trm=X:YYY=yes,ZZZ=no Command entered at terminal #X. ;  tekelecstp YY-MM-DD hh:mm:ss TTTT PTTTT XX.X.X-YY.Y.Y CHG-TRM: MASP A - COMPLTD ;
<b>5</b> <input type="checkbox"/>	Issue the command to cancel capture.	<b>canc-echo:trm=P</b> <i>(Where P is a terminal port that was recorded in Procedure 3.2, Step 4)</i>
<b>6</b> <input type="checkbox"/>	Response to cancel command is displayed.	tekelecstp YY-MM-DD hh:mm:ss TTTT PTTTT XX.X.X-YY.Y.Y canc-echo:trm=P Command entered at terminal #X. ;  tekelecstp 98-03-09 08:29:26 EST Re1 XX.X.X-YY.Y.Y Scroll Area Output echo disabled for terminal X. ;
<b>7</b> <input type="checkbox"/>	All steps in this procedure were completed.	

#### **4. COMPLETION OF HEALTH CHECK**

When the System Health Check has been completed, record all procedures completed, data along with the date into Table 2. Health Check Record on page 8. Contact the Customer Care Center at **1-888-FOR-TKLC or 919-460-2150 (international)** if any failed procedures. Be prepared to identify your Release level, which procedures failed, and at what point each procedure failed.

## APPENDIX A. ACCESSING TEKELEC'S CUSTOMER SUPPORT SITE

Access to Tekelec's Customer Support site is restricted to current Tekelec customers only. This section describes how to log into Tekelec's Customer Support site and locate a document. Viewing the document requires Adobe Acrobat Reader, which can be downloaded at [www.adobe.com](http://www.adobe.com).

1. Log into Tekelec new Customer Support site at [support.tekelec.com](http://support.tekelec.com).

**Note:** If you have not registered yet for this new site, click the **Register Here** link. Have your customer number available. The response time to registration requests is 24 to 48 hours.

2. Click the Product Support tab.
3. Use the Search field to locate quickly a document by its part number, release number, document name, or document type. The Search field accepts both full and partial entries.
4. Click a subject folder to browse through a list of related files.
5. To download a file to your location, right-click the file name and select **Save Target As**.