

**Oracle® Communications
Tekelec Platform**

TVOE 2.7.0.0.0 Disaster Recovery Procedure

Release 2.7.0.0.0

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September 2014

ORACLE®

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

Before upgrading your system, access **My Oracle Support** web portal (<https://support.oracle.com>) and review any Alerts that may be related to the System Health Check or the Upgrade.

Before beginning this procedure, contact [Oracle Support](#) to inform them of your upgrade plans.

TABLE OF CONTENTS

INTRODUCTION	5
1.1 Purpose and Scope.....	5
1.2 My Oracle Support.....	5
1.3 References	5
1.4 Acronyms	5
1.5 Terminology	6
2 PREREQUISITES	7
2.1 Required Tools for TVOE Disaster Recovery Procedure	7
2.1.1 Files	7
2.1.2 Documents.....	7
2.1.3 Information.....	7
2.2 Network Connections	7
2.3 Assumptions & Restrictions	7
3 TVOE DISASTER RECOVERY PROCEDURE.....	8
3.1 Restore TVOE configuration from backup media	8
3.2 Supporting Procedures	20
APPENDIX A - ACCESSING ORACLE CUSTOMER SUPPORT SITE	27

List of Tables

Table 1 - Acronyms	5
Table 2. Terminology	6
Table 3. Required Information	7

List of Procedures

Procedure 1: Restore TVOE configuration from backup media	8
Procedure 2: Standalone TVOE IPM	20
Procedure 3: PM&C Aided TVOE IPM	20
Procedure 4: Configure Network	21
Procedure 5: Restore TVOE backup ISO using NetBackup	22
Procedure 6: Restore TVOE backup ISO using SCP	23
Procedure 7: Delete TVOE host key from PM&C	24
Procedure 8: Determine IPv6 Link Local Address	25

INTRODUCTION

TVOE is a TPD based virtualization host. TVOE allows for virtualization of servers so that multiple applications can reside on one physical machine while still retaining dedicated resources. This means software solutions that include multiple applications and require several physical machines can be installed on very few (possibly one) TVOE hosts.

1.1 Purpose and Scope

In a disaster scenario in which the TVOE host has been lost, the procedures contained herein can be used to recover the TVOE host to its state at the time of the last backup. The disaster recovery requires that a TVOE host backup image has been stored on a customer medium and is available. The scope of this disaster recovery includes only the TVOE host. Guests WILL NOT be restored during this procedure. Instructions for guests may be found in the disaster recovery documents for the appropriate application(s).

NOTE: These procedures are intended to be run by Oracle personnel. This document assumes that the user has basic knowledge of the server's hardware, and at least an intermediate skill set with the Linux environment.

1.2 My Oracle Support

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

Phone: +1.800.223.1711 (toll-free in the US),

Or retrieve your local hotline from Oracle Global Customer Support Center at <http://www.oracle.com/support/contact.html>

Make the following selections on the Support telephone menu:

Select **2** for **New Service Request**

Then select **3** for **Hardware, Networking, and Solaris Operating System Support**

Then either

- select **1** for **Technical Issues**,
When talking to the agent, please indicate that you are an existing Tekelec customer.
Note: Oracle support personnel performing installations or upgrades on a customer site must obtain the customer Support Identification (SI) number prior to seeking assistance.
OR
- select **2** for **Non-Technical Issues**, for example, for My Oracle Support (MOS) registration.
When talking to the agent, mention that you are a Tekelec customer new to MOS.

1.3 References

- [1] Platform 6.7 Configuration Procedures Reference, E54387, Latest Revision, Oracle
- [2] TPD Initial Product Manufacture, E54521, Latest Revision, Oracle

1.4 Acronyms

Table 1 - Acronyms

Acronym	Description
iLO	Integrated Lights Out manager
IPM	Initial Product Manufacture
PM&C	Platform Management and Configuration
TPD	Tekelec Platform Distribution
TVOE	Tekelec Virtualization Operating Environment

1.5 Terminology

Table 2. Terminology

Link Local IPv6 Address	An IPv6 address that is assigned automatically to every IPv6 enabled network interface and can only be used within the segment of a local network. This means it is a non-routable address and can only be accessed from machines that are on the same link.
--------------------------------	--

2 PREREQUISITES

2.1 Required Tools for TVOE Disaster Recovery Procedure

2.1.1 Files

The following files or media are required in order to run a Disaster Recovery procedure on a TVOE host:

- TVOE IPM Media
- TVOE Backup ISO Image

2.1.2 Documents

The following documents are required in order to run a Disaster Recovery procedure on a TVOE host:

- Platform 6.7 Configuration Procedures Reference [1]
- TPD Initial Product Manufacture [2]

2.1.3 Information

The following information is required in order to run a Disaster Recovery procedure for the TVOE host.

Table 3. Required Information

Item	Value
TVOE iLO IP Address	
TVOE iLO username	
TVOE iLO password	
TVOE IP address	
TVOE network device name (e.g. eth01)	
TVOE Netmask	
TVOE Gateway address	
VLAN number (If using a tagged network)	
TVOE admusr password	
TVOE tvoeadmin password	
TVOE tvoexfer password	
TVOE platcfg password	
Customer Server* IP address	
Customer Server* username	
Customer Server* password	
Full path of TVOE backup image on Customer Server*	

* The machine used to copy the backup image to the TVOE host.

2.2 Network Connections

The user must have network connectivity to the iLO and a network interface on the TVOE host.

2.3 Assumptions & Restrictions

- This is a software disaster recovery for the TVOE host which will not recover the hardware.
- If there was a hardware failure then it should be resolved and the system should be in a healthy state before executing this procedure.

- This procedure only recovers the TVOE host. Guests previously installed on the TVOE will not be recovered by this procedure.
- TVOE backups must be from the same version of TVOE as the newly installed TVOE.
- TVOE backups can only be used on servers of the same hardware type as the server the backup was created on.
- TVOE backups have been stored somewhere safe by the customer at an earlier point in time and are to be transferred to the TVOE host over the network.

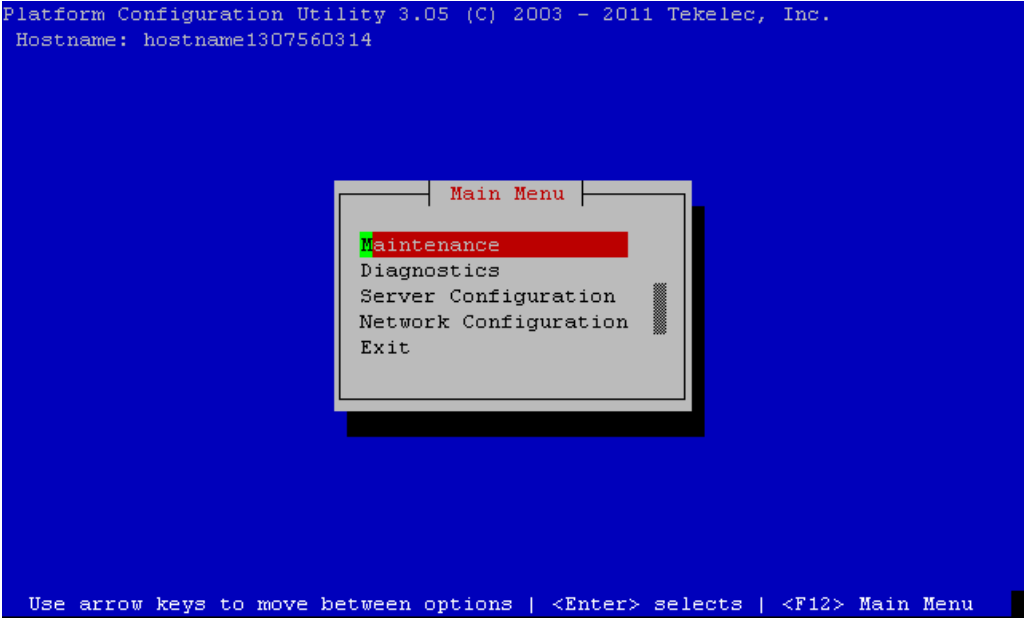
3 TVOE DISASTER RECOVERY PROCEDURE

3.1 Restore TVOE configuration from backup media

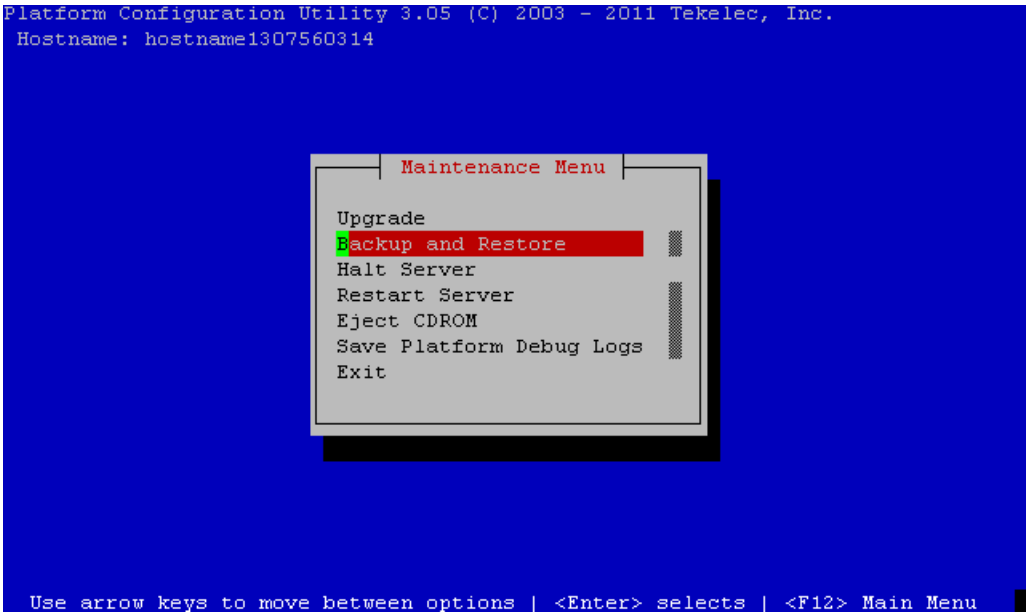
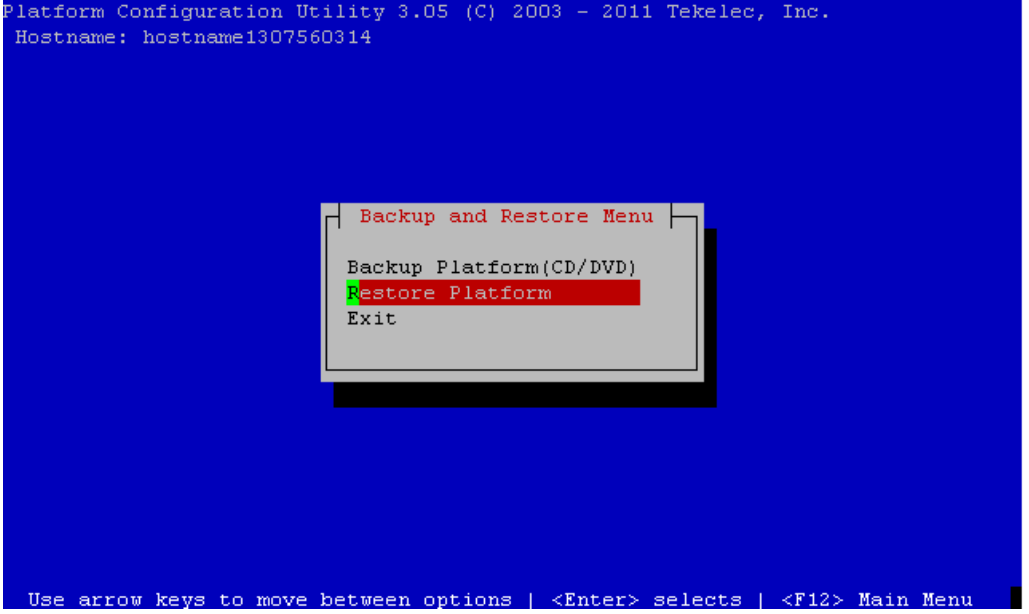
Procedure 1: Restore TVOE configuration from backup media

S T E P #	This procedure provides instructions on how to restore the TVOE application configuration from backup media. Check off (✓) each step as it is completed. Boxes have been provided for this purpose under each step number. IF THIS PROCEDURE FAILS, CONTACT ORACLE SUPPORT.	
NOTE: You must have a backup ISO image to perform this procedure.		
1. <input type="checkbox"/>	<p>Install TVOE application.</p> <p>Check each box as each task is completed. Do not check the box if the task is not performed.</p>	<p>If PM&C is available then IPM the TVOE application using the following procedure from this document:</p> <p><input type="checkbox"/> “Procedure 3: PM&C Aided TVOE IPM”</p> <p>If PM&C is not available, IPM the TVOE application using the following procedure from this document:</p> <p><input type="checkbox"/> “Procedure 2: Standalone TVOE IPM”</p>
2. <input type="checkbox"/>	<p>TVOE host iLO:</p> <p>Configure network</p>	<p>Execute the following procedure to configure an IP address on the TVOE host.</p> <p>Note: The IP address that is configured on the TVOE must be one that will be accessible via the network of the machine that currently holds the TVOE Backup ISO image. This could be a NetBackup Master Server, a Customer PC, etc.</p> <p><input type="checkbox"/> “Procedure 4: Configure Network”</p>

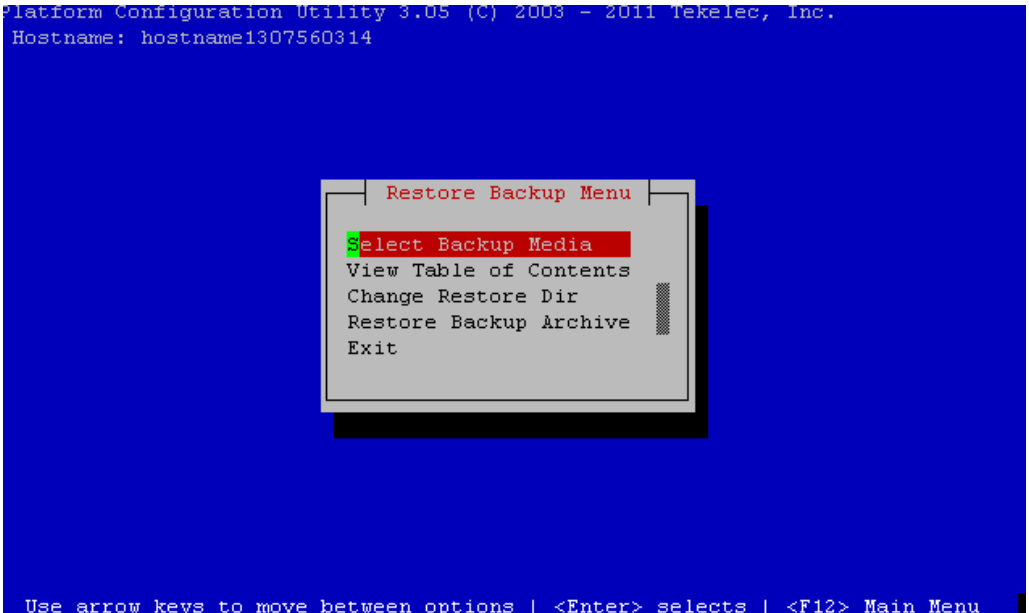
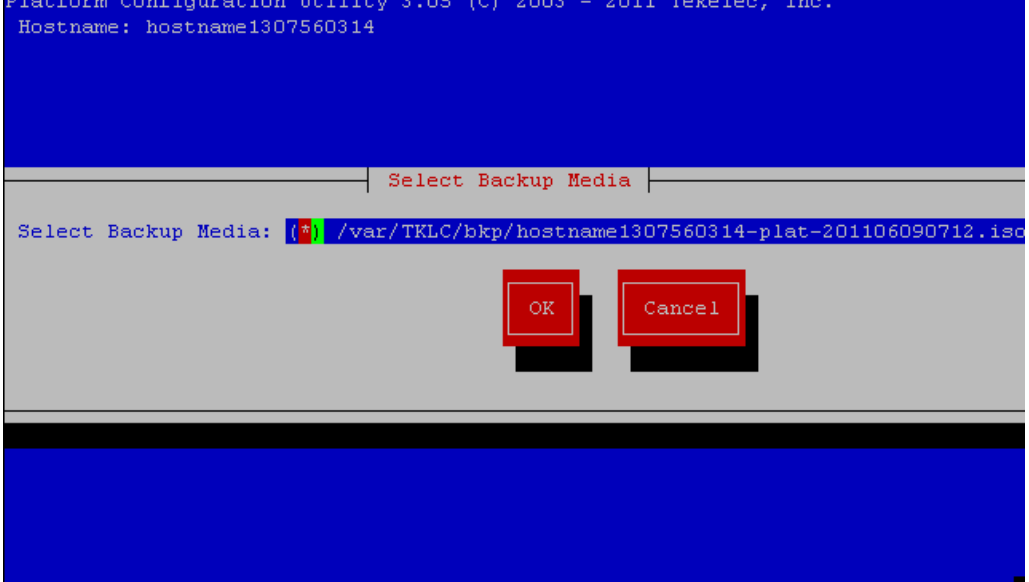
Procedure 1: Restore TVOE configuration from backup media

<p>3.</p> <input type="checkbox"/>	<p>Restore TVOE Backup ISO image to the TVOE host.</p>	<p>Restore the TVOE Backup ISO image to the TVOE host by executing one of the following procedures:</p> <p>If using NetBackup to restore the TVOE Backup ISO image then execute:</p> <p><input type="checkbox"/> “Procedure 5: Restore TVOE backup ISO using ”</p> <p>If copying the TVOE Backup ISO from a remote location, such as a Customer PC, then execute:</p> <p><input type="checkbox"/> “Procedure 6: Restore TVOE backup ISO using SCP”</p>
<p>4.</p> <input type="checkbox"/>	<p>TVOE host iLO: Log in to iLO</p>	<p>Using the section listed below from the <i>Platform 6.7 Configuration Procedures Reference [1]</i>, log in to the iLO by using a SSH client to connect to the IP address of the TVOE host iLO.</p> <p><input type="checkbox"/> “3.4.4 Accessing the Server Virtual Serial Port” [1]</p>
<p>5.</p> <input type="checkbox"/>	<p>TVOE host iLO: Log in to the platcfg menu.</p>	<p>Log in as the platcfg user.</p>
<p>6.</p> <input type="checkbox"/>	<p>TVOE host iLO: Select the “Maintenance” option</p>	 <pre> Platform Configuration Utility 3.05 (C) 2003 - 2011 Tekelec, Inc. Hostname: hostname1307560314 Main Menu Maintenance Diagnostics Server Configuration Network Configuration Exit Use arrow keys to move between options <Enter> selects <F12> Main Menu </pre>

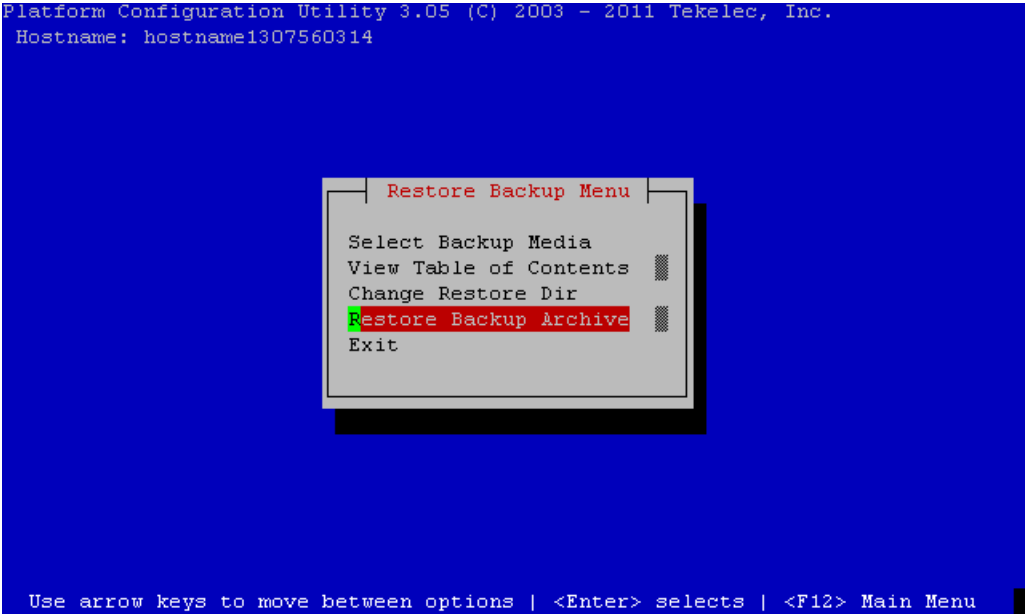
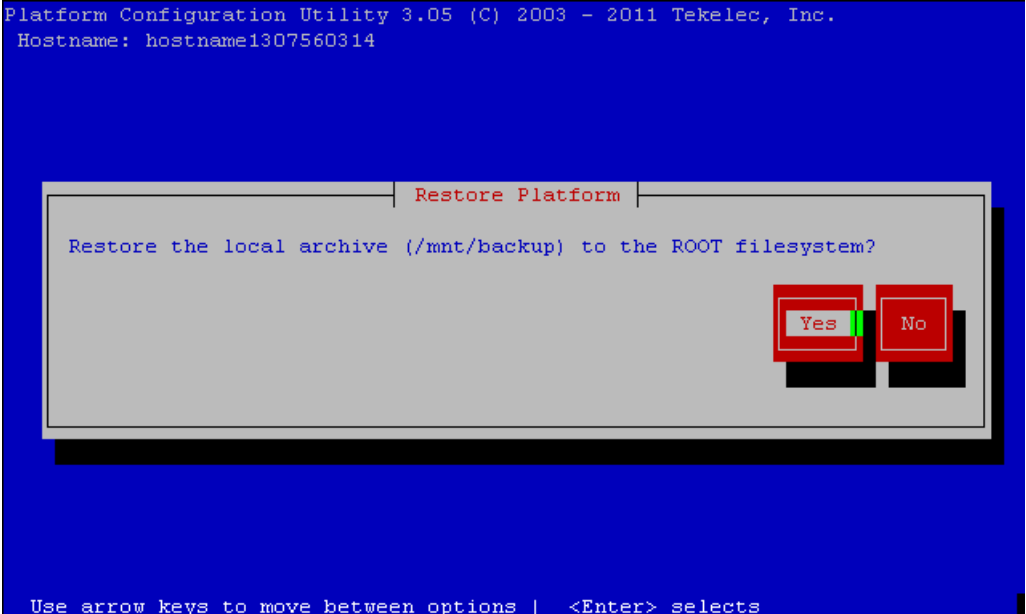
Procedure 1: Restore TVOE configuration from backup media

<p>7.</p> <input type="checkbox"/>	<p>TVOE host iLO: Select the "Backup and Restore" option</p>	 <p>The screenshot shows the Platform Configuration Utility 3.05 (C) 2003 - 2011 Tekelec, Inc. interface. The hostname is hostname1307560314. A Maintenance Menu is displayed with the following options: Upgrade, Backup and Restore (highlighted in red), Halt Server, Restart Server, Eject CDROM, Save Platform Debug Logs, and Exit. At the bottom, it says: Use arrow keys to move between options <Enter> selects <F12> Main Menu</p>
<p>8.</p> <input type="checkbox"/>	<p>TVOE host iLO: Select the "Restore Platform" option.</p>	 <p>The screenshot shows the Platform Configuration Utility 3.05 (C) 2003 - 2011 Tekelec, Inc. interface. The hostname is hostname1307560314. A Backup and Restore Menu is displayed with the following options: Backup Platform(CD/DVD), Restore Platform (highlighted in red), and Exit. At the bottom, it says: Use arrow keys to move between options <Enter> selects <F12> Main Menu</p>

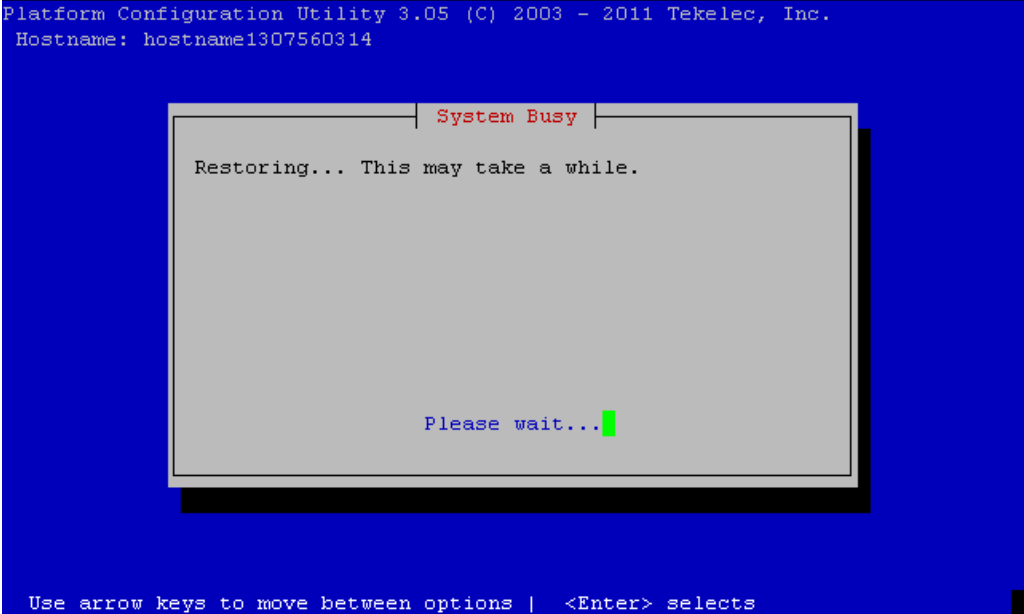
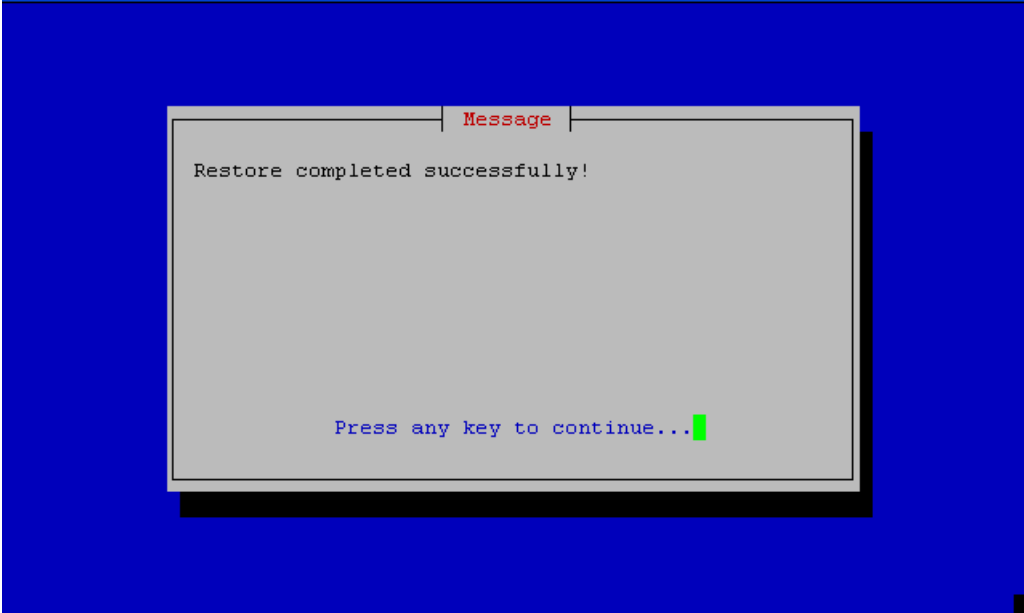
Procedure 1: Restore TVOE configuration from backup media

<p>9.</p> <input type="checkbox"/>	<p>TVOE host iLO: Select the "Select Backup Media" option</p>	 <p>Platform Configuration Utility 3.05 (C) 2003 - 2011 Tekelec, Inc. Hostname: hostname1307560314</p> <p>Restore Backup Menu</p> <ul style="list-style-type: none">Select Backup MediaView Table of ContentsChange Restore DirRestore Backup ArchiveExit <p>Use arrow keys to move between options <Enter> selects <F12> Main Menu</p>
<p>10.</p> <input type="checkbox"/>	<p>TVOE host iLO: Select the desired archive.</p>	 <p>Platform Configuration Utility 3.05 (C) 2003 - 2011 Tekelec, Inc. Hostname: hostname1307560314</p> <p>Select Backup Media</p> <p>Select Backup Media: (*) /var/TKLC/bkp/hostname1307560314-plat-201106090712.isc</p> <p>OK Cancel</p> <p>Use arrow keys to move between options <Enter> selects</p>

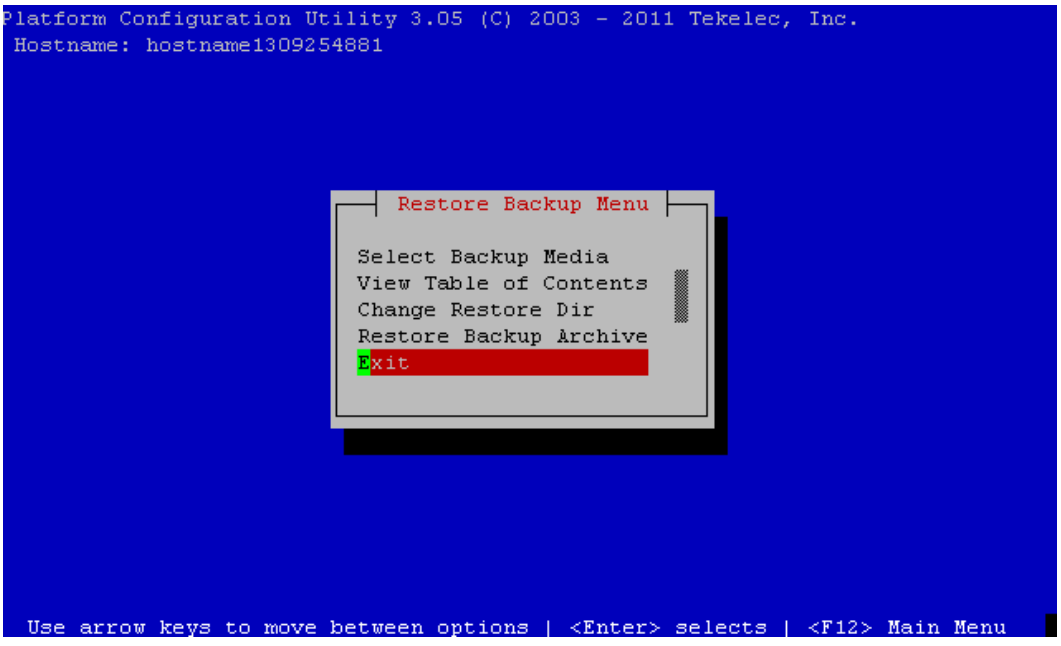
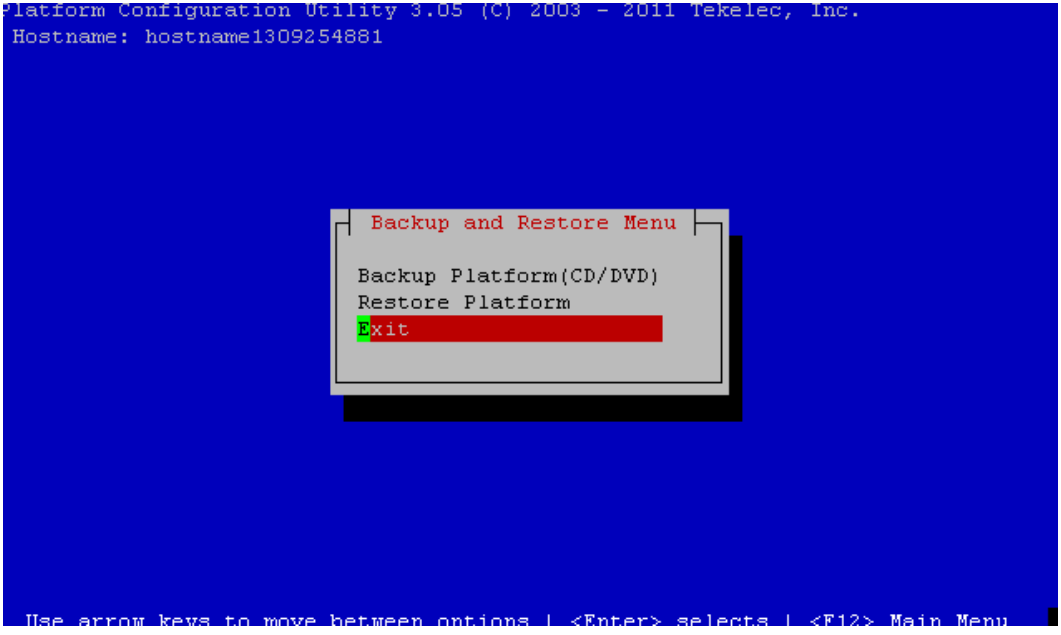
Procedure 1: Restore TVOE configuration from backup media

<p>11.</p> <input type="checkbox"/>	<p>TVOE host iLO: Select the "Restore Backup Archive" option.</p>	 <p>Platform Configuration Utility 3.05 (C) 2003 - 2011 Tekelec, Inc. Hostname: hostname1307560314</p> <p>Restore Backup Menu</p> <ul style="list-style-type: none">Select Backup MediaView Table of ContentsChange Restore DirRestore Backup ArchiveExit <p>Use arrow keys to move between options <Enter> selects <F12> Main Menu</p>
<p>12.</p> <input type="checkbox"/>	<p>TVOE host iLO: Confirm restore</p>	 <p>Platform Configuration Utility 3.05 (C) 2003 - 2011 Tekelec, Inc. Hostname: hostname1307560314</p> <p>Restore Platform</p> <p>Restore the local archive (/mnt/backup) to the ROOT filesystem?</p> <p>Yes No</p> <p>Use arrow keys to move between options <Enter> selects</p>

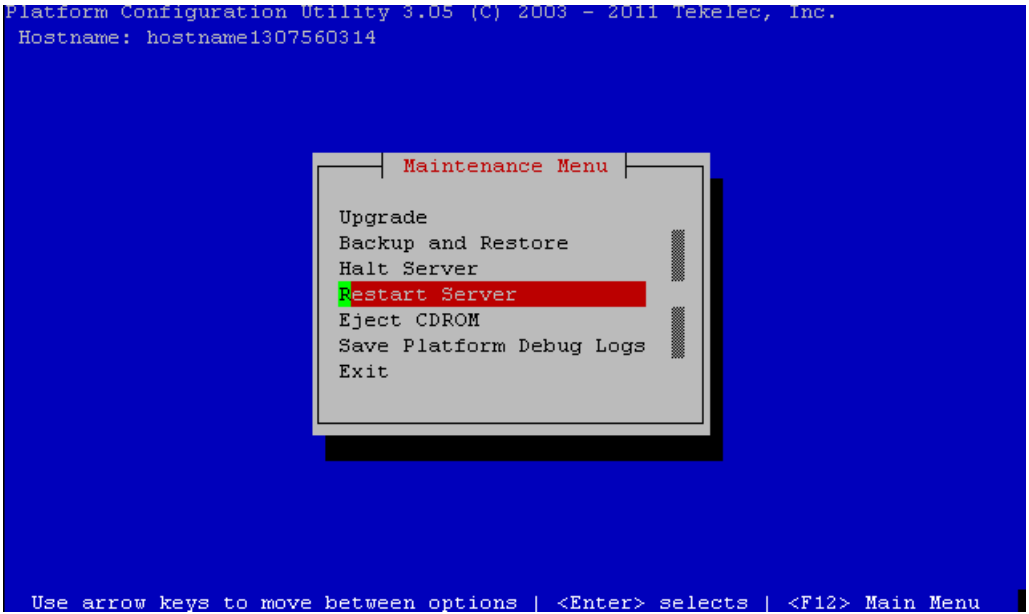
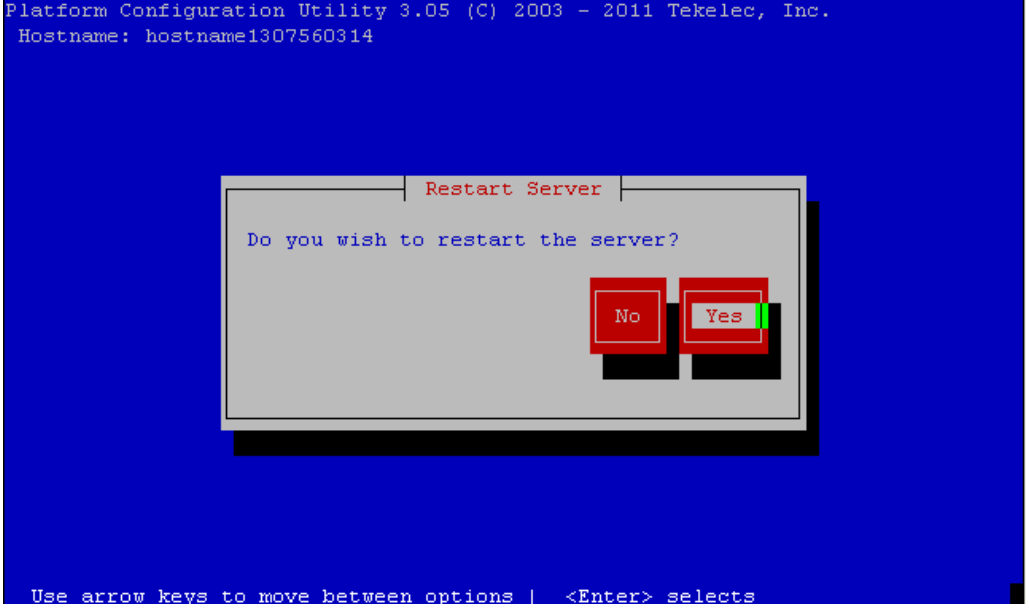
Procedure 1: Restore TVOE configuration from backup media

<p>13.</p> <input type="checkbox"/>	<p>TVOE host iLO:</p> <p>Wait for restore to complete. This will typically take less than 5 minutes.</p>	 <p>Platform Configuration Utility 3.05 (C) 2003 - 2011 Tekelec, Inc. Hostname: hostname1307560314</p> <p>System Busy</p> <p>Restoring... This may take a while.</p> <p>Please wait... █</p> <p>Use arrow keys to move between options <Enter> selects</p>
<p>14.</p> <input type="checkbox"/>	<p>TVOE host iLO:</p> <p>Restore is complete</p>	 <p>Message</p> <p>Restore completed successfully!</p> <p>Press any key to continue... █</p> <p>Note: If any failures are reported contact Oracle Support for information on how to proceed.</p>

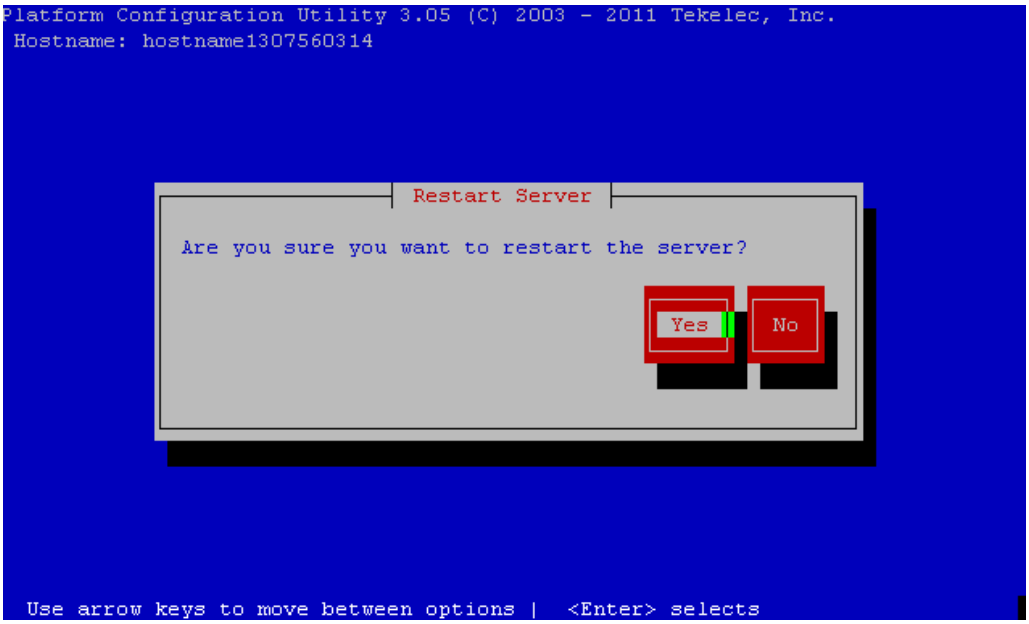
Procedure 1: Restore TVOE configuration from backup media

<p>15.</p> <input type="checkbox"/>	<p>TVOE host iLO: Exit out of the Restore Backup Menu.</p>	 <p>Platform Configuration Utility 3.05 (C) 2003 - 2011 Tekelec, Inc. Hostname: hostname1309254881</p> <p>Restore Backup Menu</p> <ul style="list-style-type: none">Select Backup MediaView Table of ContentsChange Restore DirRestore Backup ArchiveExit <p>Use arrow keys to move between options <Enter> selects <F12> Main Menu</p>
<p>16.</p> <input type="checkbox"/>	<p>TVOE host iLO: Exit out of the Backup and Restore Menu.</p>	 <p>Platform Configuration Utility 3.05 (C) 2003 - 2011 Tekelec, Inc. Hostname: hostname1309254881</p> <p>Backup and Restore Menu</p> <ul style="list-style-type: none">Backup Platform(CD/DVD)Restore PlatformExit <p>Use arrow keys to move between options <Enter> selects <F12> Main Menu</p>

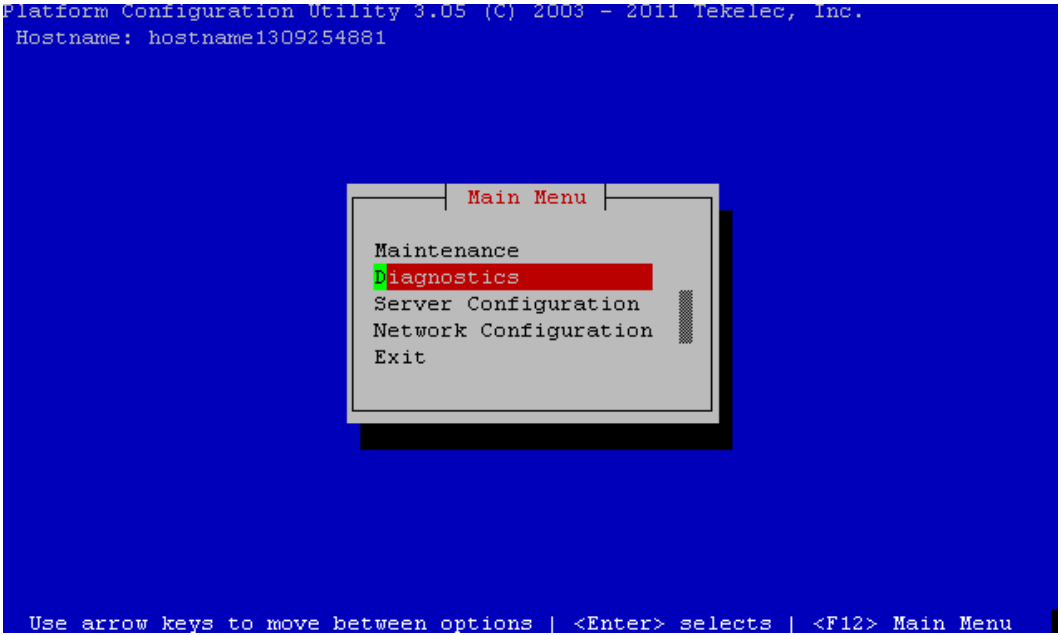
Procedure 1: Restore TVOE configuration from backup media

<p>17.</p> <input type="checkbox"/>	<p>TVOE host iLO: Select the "Restart Server" option.</p>	 <p>Platform Configuration Utility 3.05 (C) 2003 - 2011 Tekelec, Inc. Hostname: hostname1307560314</p> <p>Maintenance Menu</p> <ul style="list-style-type: none">UpgradeBackup and RestoreHalt ServerRestart ServerEject CDROMSave Platform Debug LogsExit <p>Use arrow keys to move between options <Enter> selects <F12> Main Menu</p>
<p>18.</p> <input type="checkbox"/>	<p>TVOE host iLO: Select yes to restart server.</p>	 <p>Platform Configuration Utility 3.05 (C) 2003 - 2011 Tekelec, Inc. Hostname: hostname1307560314</p> <p>Restart Server</p> <p>Do you wish to restart the server?</p> <p>No Yes</p> <p>Use arrow keys to move between options <Enter> selects</p>

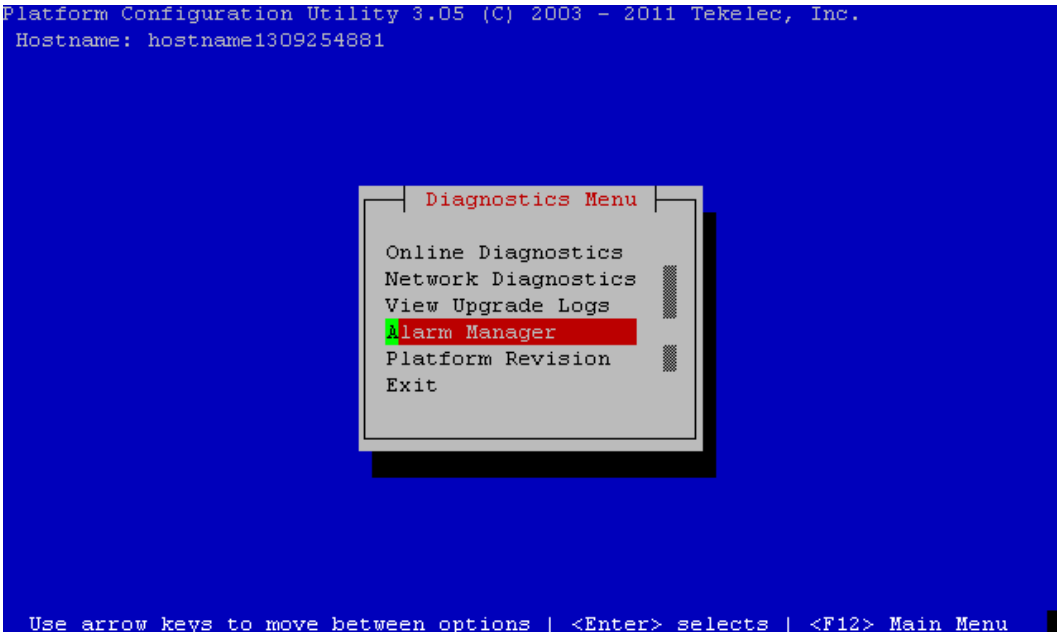
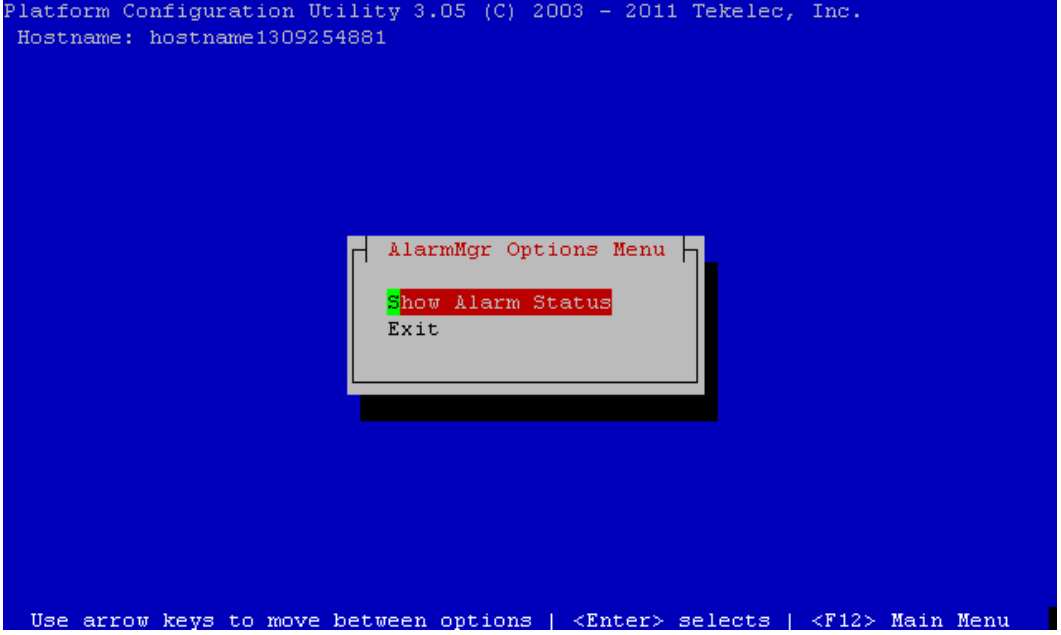
Procedure 1: Restore TVOE configuration from backup media

<p>19.</p> <input type="checkbox"/>	<p>TVOE host iLO: Confirm reboot.</p>	 <p>Platform Configuration Utility 3.05 (C) 2003 - 2011 Tekelec, Inc. Hostname: hostname1307560314</p> <p>Restart Server</p> <p>Are you sure you want to restart the server?</p> <p>Yes No</p> <p>Use arrow keys to move between options <Enter> selects</p>
<p>20.</p> <input type="checkbox"/>	<p>TVOE host iLO: Wait for reboot to successfully complete. This should typically take less than 20 minutes to complete.</p>	<pre> n2.conf [OK] Starting syscheck: [OK] Starting hpacucliStatus: [OK] Starting TKLCwatchdog: [OK] Starting tpdProvd: [OK] Using Proliant High Performance IPMI based System Health Monitor Using standard Linux IPMI device driver Starting ipmi drivers: [OK] Starting Proliant High Performance IPMI based System Health Monitor (hpsmxd): [OK] Verifying disk configuration for S.M.A.R.T.: [OK] [OK] atd: [OK] Starting libvirtd daemon: [OK] Checking network config files: [OK] Starting smartd: [OK] completeTasks started: Thu Jun 30 04:39:07 2011 LOG FILE: /var/TKLC/log/TaskMgr/completeTasks.log Red Hat Enterprise Linux Server release 5.5 (Tikanga) Kernel 2.6.18-194.17.4.el5 on an x86_64 hostname1309254881 login: █ </pre>
<p>21.</p> <input type="checkbox"/>	<p>TVOE host iLO: Log in as tveadmin user.</p>	<p>Log in as the tveadmin user.</p>

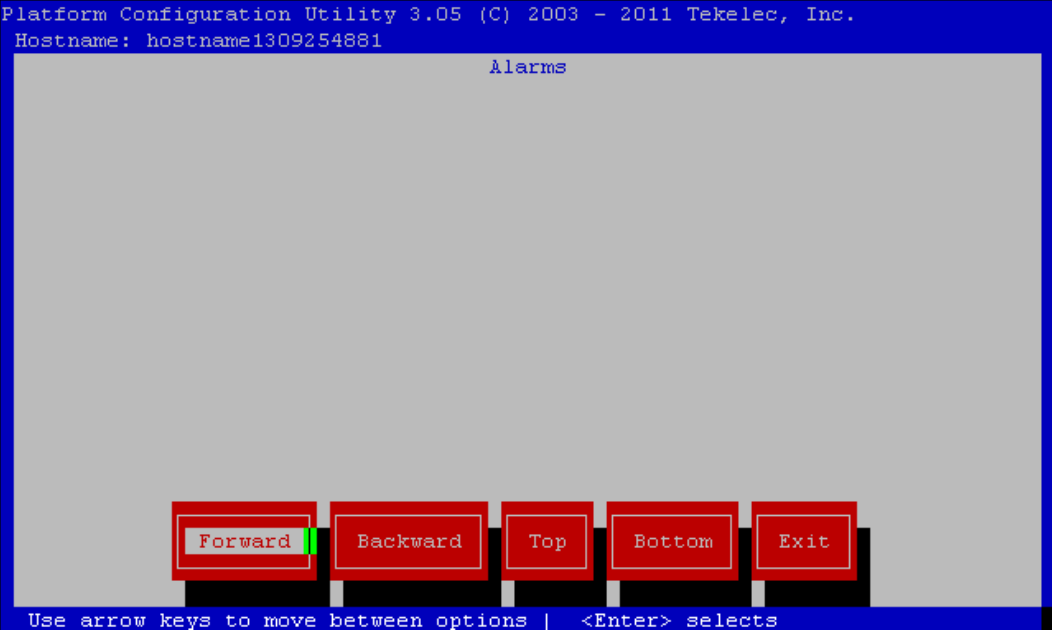
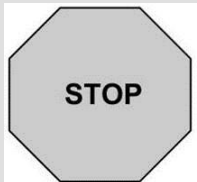
Procedure 1: Restore TVOE configuration from backup media

22. <input type="checkbox"/>	TVOE host iLO: Verify storage pools are active.	Execute the following command and verify all storage pools are listed and are in the active state: <code>% virsh -c "qemu:///system" pool-list</code> Note: If any storage pools are missing or inactive, contact Oracle Support for information on how to proceed.
23. <input type="checkbox"/>	TVOE host iLO: Log in as platcfg user.	Log out by typing exit at the command prompt and pressing Enter . Log in as the platcfg user.
24. <input type="checkbox"/>	TVOE host iLO: Select the "Diagnostics" option.	 <pre>Platform Configuration Utility 3.05 (C) 2003 - 2011 Tekelec, Inc. Hostname: hostname1309254881 Main Menu Maintenance Diagnostics Server Configuration Network Configuration Exit Use arrow keys to move between options <Enter> selects <F12> Main Menu</pre>

Procedure 1: Restore TVOE configuration from backup media

<p>25.</p> <input type="checkbox"/>	<p>TVOE host iLO: Select the "Alarm Manager" option.</p>	 <p>Platform Configuration Utility 3.05 (C) 2003 - 2011 Tekelec, Inc. Hostname: hostname1309254881</p> <p>Diagnostics Menu</p> <ul style="list-style-type: none">Online DiagnosticsNetwork DiagnosticsView Upgrade LogsAlarm ManagerPlatform RevisionExit <p>Use arrow keys to move between options <Enter> selects <F12> Main Menu</p>
<p>26.</p> <input type="checkbox"/>	<p>TVOE host iLO: Select the "Show Alarm Status" option.</p>	 <p>Platform Configuration Utility 3.05 (C) 2003 - 2011 Tekelec, Inc. Hostname: hostname1309254881</p> <p>AlarmMgr Options Menu</p> <ul style="list-style-type: none">Show Alarm StatusExit <p>Use arrow keys to move between options <Enter> selects <F12> Main Menu</p>

Procedure 1: Restore TVOE configuration from backup media

<p>27.</p> <input type="checkbox"/>	<p>TVOE host iLO: Examine the output and determine if any errors or failures were reported.</p>	 <p>Note: If any failures are reported contact Oracle Support for information on how to proceed.</p>
<p>28.</p> <input type="checkbox"/>	<p>TVOE host iLO: Log out of TVOE iLO.</p>	<p>Using the section listed below from the <i>Platform 6.7 Configuration Procedures Reference</i> [1], log out of the iLO.</p> <p><input type="checkbox"/> “3.4.4 Accessing the Server Virtual Serial Port” [1]</p>
<p>29.</p> <input type="checkbox"/>	<p>Remove TVOE SSH key from PM&C.</p>	<p>If this TVOE host will host PM&C or there is no PM&C in the network then no work is necessary for this step.</p> <p>Remove the TVOE remote host key from the PM&C in the network by executing the following procedure from this document:</p> <p><input type="checkbox"/> “Procedure 7: Delete TVOE host key from PM&C ”</p>
 <p>The Restore of TVOE has been completed and guests may now be installed. No other procedures in this document should be executed.</p>		

3.2 Supporting Procedures

Procedure 2: Standalone TVOE IPM

S T E P #	<p>This procedure provides instructions on how to install the TVOE application without a PM&C.</p> <p>Check off (✓) each step as it is completed. Boxes have been provided for this purpose under each step number.</p> <p>IF THIS PROCEDURE FAILS, CONTACT ORACLE SUPPORT.</p>	
1. <input type="checkbox"/>	<p>Install TVOE application.</p> <p>Check each box as each task is completed.</p>	<p>Using the section listed below from the <i>Platform 6.7 Configuration Procedures Reference</i> [1], reinstall the TVOE application in accordance with the checklist shown:</p> <p><input type="checkbox"/> “3.4.4 IPM Management Server” [1]</p> <p>NOTE: The version of TVOE used for this procedure must match the backed up version of TVOE.</p>

Procedure 3: PM&C Aided TVOE IPM

S T E P #	<p>This procedure provides instructions on how to install the TVOE application using a PM&C.</p> <p>Check off (✓) each step as it is completed. Boxes have been provided for this purpose under each step number.</p> <p>IF THIS PROCEDURE FAILS, CONTACT ORACLE SUPPORT.</p>	
<p>NOTE: In addition to the requirements listed in Section 2, this procedure also requires the following:</p> <ul style="list-style-type: none"> • PM&C IP Address • PM&C GUI Password 		
1. <input type="checkbox"/>	<p>Install TVOE application.</p> <p>Check each box as each task is completed.</p>	<p>Use the sections listed below from the <i>Platform 6.7 Configuration Procedures Reference</i> [1], to reinstall the TVOE application with the aid of PM&C:</p> <p><input type="checkbox"/> “3.7.10 IPM Servers Using PM&C Application” [1]</p> <p>NOTE: The version of TVOE used for this procedure must match the backed up version of TVOE.</p>

Procedure 4: Configure Network

S T E P #	<p>This procedure provides instructions on how to configure an IP address and default route on the TVOE host. Once an IP address is configured it can then be used to transfer the TVOE backup ISO image to the TVOE host.</p> <p>Check off (✓) each step as it is completed. Boxes have been provided for this purpose under each step number.</p> <p>IF THIS PROCEDURE FAILS, CONTACT ORACLE SUPPORT</p>	
1. <input type="checkbox"/>	TVOE host iLO: Log in to iLO	Using the section listed below from the <i>Platform 6.7 Configuration Procedures Reference</i> [1], log in to the iLO by using a ssh client to connect to the IP address of the TVOE host iLO. <input type="checkbox"/> “3.4.4 Accessing the Server Virtual Serial Port” [1]
2. <input type="checkbox"/>	TVOE host iLO: Log into the server	Log in as the admusr user.
3. <input type="checkbox"/>	TVOE host iLO: Remove live network configuration.	Remove any live interface configuration on the TVOE by executing the following command: <pre>\$ sudo /sbin/service network stop</pre> An example of the output is shown below: <pre>\$ sudo /sbin/service network stop Shutting down interface control: [OK] Shutting down interface bond0: [OK] Shutting down loopback interface: [OK]</pre>
4. <input type="checkbox"/>	TVOE host iLO: Bring the loopback interface up.	The loopback interface was also brought down in the previous step. Bring it back up by executing the following command: <pre>\$ sudo /sbin/ifup lo</pre>
5. <input type="checkbox"/>	TVOE host iLO: Set up a vlan device if needed.	If a vlan tagged interface is needed then create it and bring it up using the following two commands. <DEVICE> is the name of the vlan device that is being created, <PHYSDEV> is the name of the physical interface to build the vlan device on top of, and <VLAN> is the number of the vlan. <pre>\$ sudo /sbin/ip link add dev <DEVICE> link <PHYSDEV> type vlan id <VLAN> \$ sudo /sbin/ip link set up <PHYSDEV></pre> There should be no output from the commands. An example is shown below: <pre>\$ sudo /sbin/ip link add dev eth01.3 link eth01 type vlan id 3 \$ sudo /sbin/ip link set up eth01</pre> <p>NOTE: <DEV> in the following steps would now be “eth01.3”</p>

Procedure 4: Configure Network

<p>6.</p> <input type="checkbox"/>	<p>TVOE host iLO: Set up IP address on ethernet device.</p>	<p>On the command line execute the following command to add an IP address to the system. The <IP> and <NETMASK> will need to be on a network that is accessible from the machine currently hosting the TVOE backup ISO image; this could be a NetBackup Master server, a customer system or a PM&C. The device <DEV> will need to be physically attached to a network segment that can be reached from the machine hosting the TVOE backup ISO image.</p> <pre>\$ sudo /sbin/ip addr add <IP>/<NETMASK> dev <DEV></pre> <p>There should be no output from the command. An example is shown below:</p> <pre>\$ sudo /sbin/ip addr add 10.25.6.170/255.255.255.0 dev eth01</pre>
<p>7.</p> <input type="checkbox"/>	<p>TVOE host iLO: Bring up the ethernet device.</p>	<p>On the command line execute the following command to bring up the interface <DEV>.</p> <pre>\$ sudo /sbin/ip link set up <DEV></pre> <p>There should be no output from the command. An example is shown below:</p> <pre>\$ sudo /sbin/ip link set up eth01</pre>
<p>8.</p> <input type="checkbox"/>	<p>TVOE host iLO: Add route if necessary.</p>	<p>If a default route needs to be configured (this is the case when the IP and netmask configured in the previous steps are on a different network than the IP and netmask of the server hosting the TVOE backup ISO image) then execute the following command. <GATEWAY> is the IP address of the gateway.</p> <pre>\$ sudo /sbin/ip route add default via <GATEWAY></pre> <p>There should be no output from the command. An example is shown below:</p> <pre>\$ sudo /sbin/ip route add default via 10.25.6.1</pre>
<p>9.</p> <input type="checkbox"/>	<p>TVOE host iLO: Log out of TVOE iLO.</p>	<p>Using the section listed below from the <i>Platform 6.7 Configuration Procedures Reference</i>[1], log out of the iLO.</p> <p><input type="checkbox"/> “3.4.4 Accessing the Server Virtual Serial Port” [1]</p>

Procedure 5: Restore TVOE backup ISO using NetBackup

<p>S T E P #</p>	<p>This procedure will restore the TVOE Backup ISO image to the TVOE host by pushing it via NetBackup.</p> <p>Check off (✓) each step as it is completed. Boxes have been provided for this purpose under each step number.</p> <p>IF THIS PROCEDURE FAILS, CONTACT ORACLE SUPPORT.</p>
<p>NOTE: In addition to the requirements listed in Section 2, this procedure also requires the following:</p> <ul style="list-style-type: none"> TVOE has been configured with an IP address in <i>Procedure 4: Configure Network</i> 	

Procedure 5: Restore TVOE backup ISO using NetBackup

<p>1. <input type="checkbox"/></p>	<p>TVOE host iLO: Log in to iLO</p>	<p>Using the section listed below from the <i>Platform 6.7 Configuration Procedures Reference</i>[1], log in to the iLO by using a ssh client to connect to the IP address of the TVOE host iLO.</p> <p><input type="checkbox"/> “3.4.4 Accessing the Server Virtual Serial Port” [1]</p>
<p>2. <input type="checkbox"/></p>	<p>TVOE host iLO: Install NetBackup Client.</p>	<p>Using the section listed below from the <i>Platform 6.7 Configuration Procedures Reference</i>[1], install and configure the NetBackup Client on TVOE.</p> <p><input type="checkbox"/> “3.11.2 TVOE NetBackup Client Configuration” [1]</p>
<p>3. <input type="checkbox"/></p>	<p>NetBackup Server: Restore TVOE Backup ISO.</p>	<p>Interface with the NetBackup Master Server and initiate a restore of the TVOE Backup ISO image.</p> <p>NOTE: Once restored, the ISO image will be in /var/TKLC/bkp/ on the TVOE Server.</p>
<p>4. <input type="checkbox"/></p>	<p>TVOE host iLO: Log out of TVOE iLO.</p>	<p>Using the section listed below from the <i>Platform 6.7 Configuration Procedures Reference</i> [1], log out of the iLO.</p> <p><input type="checkbox"/> “3.4.4 Accessing the Server Virtual Serial Port” [1]</p>

Procedure 6: Restore TVOE backup ISO using SCP

<p>S T E P #</p>	<p>This procedure will restore the TVOE backup ISO image to the TVOE host by pushing it via SCP from a remote location, such as a Customer PC, where the Backup ISO image is located.</p> <p>Check off (✓) each step as it is completed. Boxes have been provided for this purpose under each step number.</p> <p>IF THIS PROCEDURE FAILS, CONTACT ORACLE SUPPORT.</p>
<p>NOTE: In addition to the requirements listed in Section 2, this procedure also requires the following:</p> <ul style="list-style-type: none"> TVOE has been configured with an IP address in <i>Procedure 4: Configure Network</i> 	

Procedure 6: Restore TVOE backup ISO using SCP

<p>1.</p> <input type="checkbox"/>	<p>Customer PC:</p> <p>Copy Backup ISO image to TVOE</p>	<p>Using the IP address configured on the TVOE host (this was done in <i>Procedure 4: Configure Network</i>), transfer the Backup ISO image to TVOE. The Backup ISO image should be copied into the backup directory within the tvoexfer user's home directory.</p> <p>***NOTE: If you do not have a backup ISO image then you cannot proceed.***</p> <p>— Linux</p> <ul style="list-style-type: none"> From the command line of a Linux machine use the following command to copy the Backup ISO image to the TVOE host: <pre># scp <path_to_image> tvoexfer@<TVOE_IP>:backup/</pre> <p>Where <path_to_image> is the path to the Backup ISO image local to the Customer PC and <TVOE_IP> is the TVOE IP address. If the IP is an IPv4 address then <TVOE_IP> will be a normal dot-decimal notation (e.g. "10.240.6.170"). If the IP is an IPv6 link local address then <TVOE_IP> will be need to be scoped such as "[fe80::21e:bff:fe76:5e1c%control]" where control is the name of the interface on the machine that is initiating the transfer and it must be on the same link as the interface on the TVOE host.</p> <p>IPv4 Example: <pre># scp /path/to/image.iso tvoexfer@10.240.6.170:backup/</pre> IPv6 Example: <pre># scp /path/to/image.iso tvoexfer@[fe80::21e:bff:fe76:5e1c%control]:backup/</pre></p> <p>— Windows</p> <ul style="list-style-type: none"> Use WinSCP to copy the Backup ISO image into the backup directory within the tvoexfer user's home directory. Refer to "Appendix A: Using WinSCP" from <i>Platform 6.7 Configuration Procedures Reference [1]</i> for help using WinSCP.
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Procedure 7: Delete TVOE host key from PM&C

<p>S T E P #</p>	<p>This procedure provides instructions on how to delete the TVOE host SSH key from PM&C. This is only needed if PM&C exists in the network at the time TVOE is being recovered.</p> <p>Check off (✓) each step as it is completed. Boxes have been provided for this purpose under each step number.</p> <p>IF THIS PROCEDURE FAILS, CONTACT ORACLE SUPPORT.</p>
<p>NOTE: In addition to the requirements listed in Section 2, this procedure also requires the following:</p> <ul style="list-style-type: none"> PM&C IP Address PM&C admusr password 	

Procedure 7: Delete TVOE host key from PM&C

<p>1.</p> <input type="checkbox"/>	<p>Determine TVOE ipv6 link local address.</p>	<p>Determine the IPv6 link local address of the TVOE host by executing the following procedure from this document:</p> <p><input type="checkbox"/> “Procedure 8: Determine IPv6 Link Local Address”</p>
<p>2.</p> <input type="checkbox"/>	<p>Log in to the PM&C CLI.</p>	<p>Log in to the PM&C via SSH as the admusr user.</p>
<p>3.</p> <input type="checkbox"/>	<p>PM&C CLI:</p> <p>Delete the remote host key.</p>	<p>Using the IPv6 address found in Step 1, execute the following command to remove the TVOE host’s SSH key from the PM&C.</p> <pre>\$ sudo /usr/TKLC/smac/bin/pmacadm removeHostKeys --ip=<TVOE_IP></pre> <p>An example of this is shown below:</p> <pre>\$ sudo /usr/TKLC/smac/bin/pmacadm removeHostKeys -- ip=fe80::21e:bff:fe76:5e1c Successful delete of entry for ip (fe80::21e:bff:fe76:5e1c) from PM&C list of known hosts.</pre>

Procedure 8: Determine IPv6 Link Local Address

<p>S T E P #</p>	<p>This procedure provides instructions on how to find the IPv6 link local address of the TVOE host.</p> <p>Check off (✓) each step as it is completed. Boxes have been provided for this purpose under each step number.</p> <p>IF THIS PROCEDURE FAILS, CONTACT ORACLE SUPPORT.</p>	
<p>1.</p> <input type="checkbox"/>	<p>TVOE host iLO:</p> <p>Log in to iLO</p>	<p>Using the section listed below from the <i>Platform 6.7 Configuration Procedures Reference</i> [1], log in to the iLO by using a SSH client to connect to the IP address of the TVOE host iLO.</p> <p><input type="checkbox"/> “3.4.4 Accessing the Server Virtual Serial Port” [1]</p>
<p>2.</p> <input type="checkbox"/>	<p>TVOE host iLO:</p> <p>Log into the server</p>	<p>Log in as the admusr user.</p>

Procedure 8: Determine IPv6 Link Local Address

<p>3.</p> <input type="checkbox"/>	<p>TVOE host iLO:</p> <p>Detect IPv6 link local address.</p>	<p>On the command line execute the following command:</p> <pre>\$ ip -6 addr show dev control</pre> <p>An example of the output of this command is shown below:</p> <pre>\$ ip -6 addr show dev control 12: control: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 inet6 fe80::21e:bff:fe76:5e1c/64 scope link valid_lft forever preferred_lft forever</pre> <p>In this case the link local address is <code>fe80::21e:bff:fe76:5e1c</code>. Record the link local address in the output for later use.</p>
<p>4.</p> <input type="checkbox"/>	<p>TVOE host iLO:</p> <p>Log out of TVOE iLO.</p>	<p>Using the section listed below from the <i>Platform 6.7 Configuration Procedures Reference</i> [1], log out of the iLO.</p> <p><input type="checkbox"/> “3.4.4 Accessing the Server Virtual Serial Port” [1]</p>

APPENDIX A - LOCATE PRODUCT DOCUMENTATION ON THE ORACLE TECHNOLOGY NETWORK SITE

Oracle customer documentation is available on the web at the Oracle Technology Network (OTN) site, <http://docs.oracle.com/>. You do not have to register to access these documents. Viewing the document requires Adobe Acrobat Reader, which can be downloaded at www.adobe.com.

1. Log into the Oracle Customer Support site at <http://docs.oracle.com>.
2. Under **Applications**, click the link for **Communications**. The **Oracle Communications Documentation** window opens with Tekelec shown near the top.
3. Click **Oracle Communications Documentation for Tekelec Products**.
4. Navigate to your Product and then the Release Number, and click the **View** link (the **Download** link will retrieve the entire documentation set).
5. To download a file to your location, right-click the PDF link and select **Save Target As**.