

**Oracle® Communications  
Diameter Signaling Router (DSR)  
SDS Initial Installation and Configuration Guide**

Release 5.0

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**ORACLE®**

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**CAUTION: Use only the Install procedure included in the Installation Kit.**

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

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

Phone: 1-888-367-8552 or 919-460-2150 (international)  
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## 1.0 INTRODUCTION

### 1.1 Purpose and Scope

This document describes how to install the Eagle XG Subscriber Data Server (SDS) product within a customer network. It makes use of the AppWorks 5.0 network installation and is intended to cover the initial network configuration steps for a SDS/Query Server NE and a DP-SOAM/DP (Blade) NE for production use as part of the DSR 4.0 solution. This document includes switch configuration (Cisco 4948E-F) and validation of the initial SDS configuration.

This document only describes the SDS product SW installation on the HP DL360 Server, deployed using Cisco 4948E-F switches. It does not cover hardware installation, site survey, customer network configuration, IP assignments, customer router configurations, or the configuration of any device outside of the SDS cabinet. Users needing familiarity with these areas of interest should refer to sources cited in **Section 1.2, References**.

### 1.2 References

#### External (Customer Facing):

- [1] *TEKELEC Acronym Guide*, MS005077, Latest Revision
- [2] *Site Survey (Domestic US AC Power)*, SS005955, Latest Revision
- [3] *Site Survey (Domestic US DC Power)*, SS005956, Latest Revision
- [4] *Hardware Verification Plan*, VP005629, Latest Revision
- [5] *DSR 4.0 HP C-Class Installation*, 902-2228-001, Ver 0.7

#### Internal (ORACLE Communications Personnel Only):

- [6] *HP Solutions Firmware Upgrade Pack Release Notes*, 795-000-2xx, v2.1.5 (or latest 2.1 version)
- [7] *Platform 6.x Configuration Procedure Reference*, 909-2209-001, v. A or greater, 2012
- [8] *Manufacturing Acceptance Test Procedure Subscriber Data Management Rack Mount Servers*, 820-6641-01, Revision B
- [9] *DSR IP Network Planning for AT&T Mobility – LTE*, MS006641, Latest Revision

### 1.3 Acronyms

Acronym	Meaning
CSV	Comma Separated Values
DR	Disaster Recovery
IMI	Internal Management Interface
ISL	Inter-Switch-Link
NE	Network Element
NOAM	Network Operations, Administration & Maintenance
iLO	HP Integrated Lights-Out
SDS	Subscriber Data Server
SOAM	Systems Operations, Administration & Maintenance
TPD	Tekelec Platform Distribution (Linux OS)
VIP	Virtual IP
XMI	External Management Interface

Table 1 - Acronyms

## 1.4 Assumptions

This procedure assumes the following;

- The user has reviewed the latest Customer specific DSR Network Planning document [9] and has received assigned values for all requested information related to SDS, Query Server, DP-SOAM and DP installation.
- The user has taken assigned values from the latest Customer specific DSR Network Planning document [9] and used them to compile XML files (See **Appendix F**) for each SDS and DP-SOAM site's NE prior to attempting to execute this procedure.
- The user conceptually understands DSR topology and SDS network configuration as described in the latest Customer specific DSR Network Planning document [9].
- The user has at least an intermediate skill set with command prompt activities on an Open Systems computing environment such as Linux or TPD.

## 1.5 XML Files (for installing NE)

The XML files compiled for installation of the each of the SDS and DP-SOAM site's NE must be maintained and accessible for use in Disaster Recovery procedures. The ORACLE Professional Services Engineer (PSE) will provide a copy of the XML files used for installation to the designated Customer Operations POC. The customer is ultimately responsible for maintaining and providing the XML files to Oracle's Tekelec Customer Service (*US: 1-888-367-8552, Intl: +1-919-460-2150*) if needed for use in Disaster Recovery operations.

## 1.6 How to use this Document

Although this document is primarily to be used as an initial installation guide, its secondary purpose is to be used as a reference for Disaster Recovery procedures. When executing this document for either purpose, there are a few points which help to ensure that the user understands the author's intent. These points are as follows;

- 1) Before beginning a procedure, completely read the instructional text (it will appear immediately after the Section heading for each procedure) and all associated procedural WARNINGS or NOTES.
- 2) Before execution of a STEP within a procedure, completely read the left and right columns including any STEP specific WARNINGS or NOTES.

If a procedural STEP fails to execute successfully, STOP and contact Oracle's Tekelec Customer Service (*US: 1-888-367-8552, Intl: +1-919-460-2150*) for assistance before attempting to continue.

## 2.0 PRE-INSTALLATION SETUP

### 2.1 Installation Prerequisites

The following items/settings are required in order to perform installation for HP DL360 based SDS HW:

- A laptop or desktop computer equipped as follows;
  - 10/100 Base-TX Ethernet Interface.
  - Administrative privileges for the OS.
  - An approved web browser (currently Internet Explorer 7.x or 8.x)
- An IEEE compliant 10/100 Base-TX Ethernet Cable, RJ-45, Straight-Through.
- USB flash drive with at least 1GB of available space.
- TPD “root” user password.

**NOTE:** When using the iLO for SSH connectivity, supported terminal Emulations are **VT100 or higher** (i.e. VT-102, VT-220, VT-320).

### 2.2 Physical Connections

A connection to the VGA/Keyboard ports on the HP DL360 rear panel or a connection to the iLO is required to initiate and monitor the progress of SDS installation procedures.

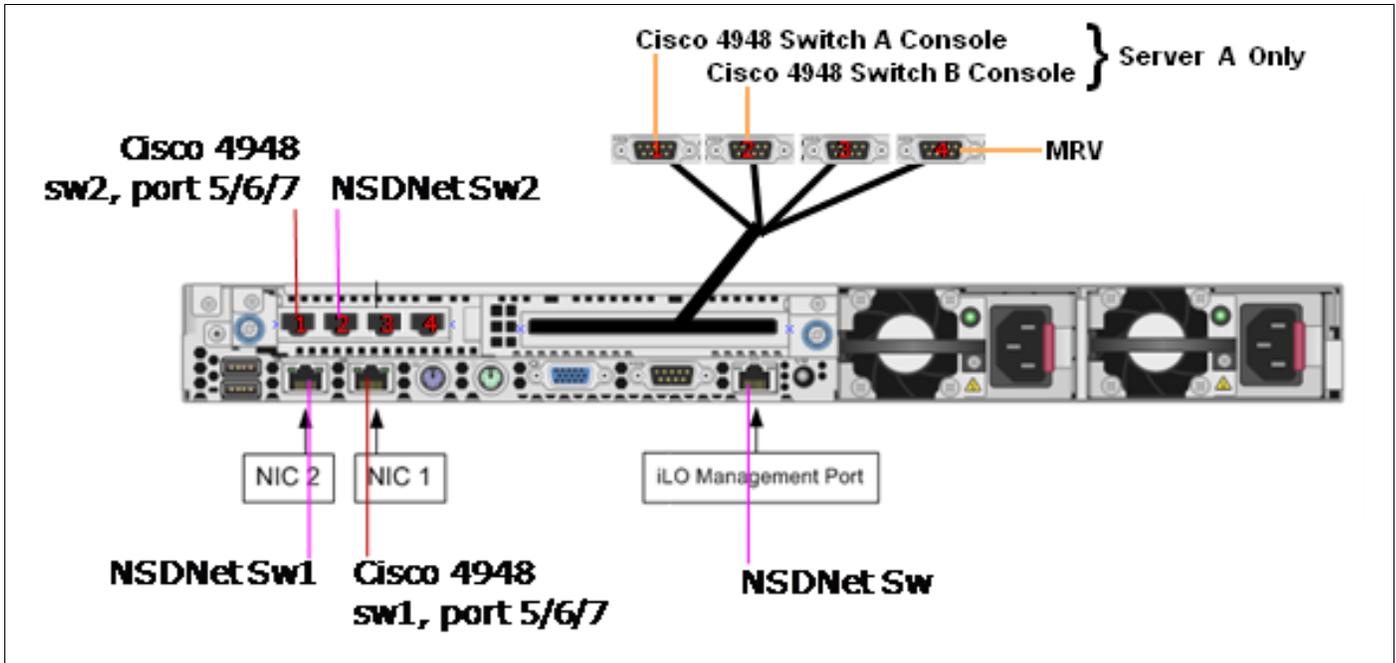


Figure 1 – HP DL360, DC (Rear Panel)

## 2.3 Access Alternatives for Application Install

This procedure may also be executed using one of the access methods described below:

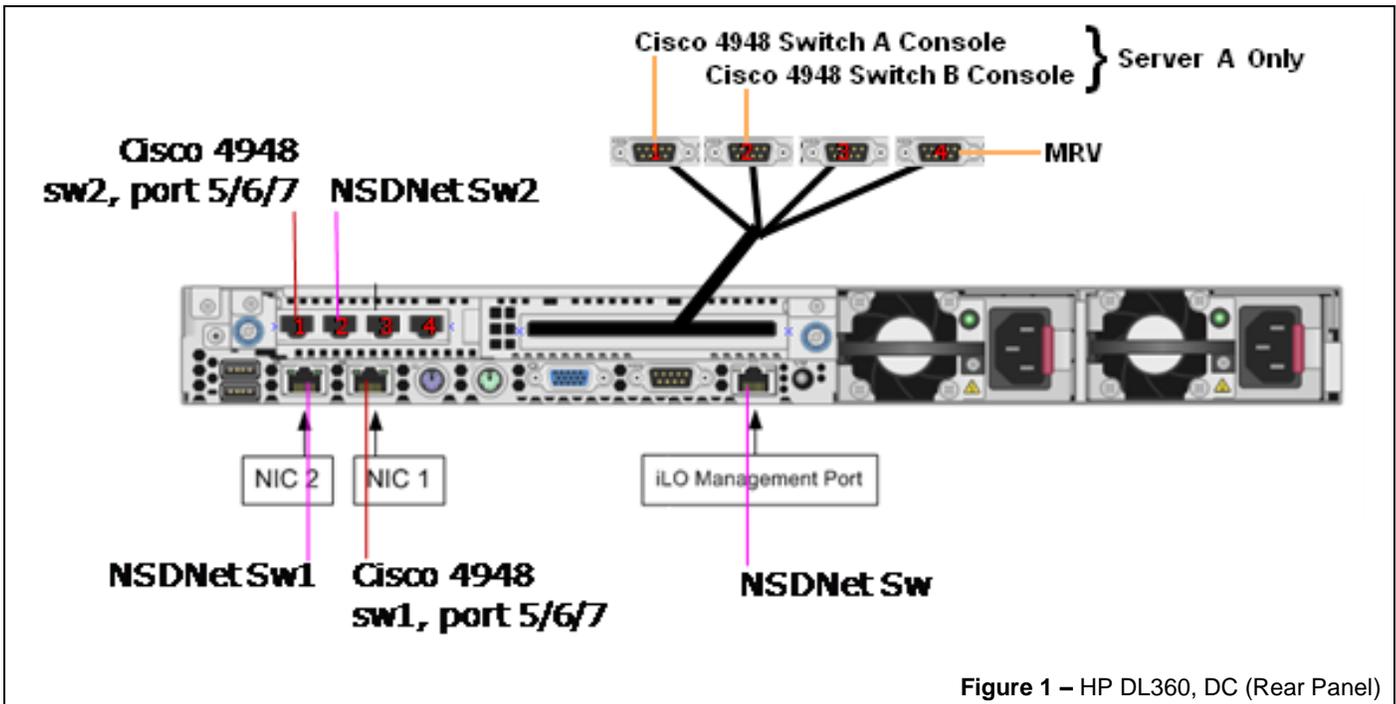


Figure 1 – HP DL360, DC (Rear Panel)

One of the **Access Methods** shown to the right may be used to initiate and monitor SDS installation.

**NOTE:** *Methods 3 & 4 may only be used on an HP DL360 with an iLO that has been previously configured with a statically assigned IP address. It is not intended for use with a new, out-of-the-box server.*

- Method 1)** VGA Monitor and PS2 Keyboard.
- Method 2)** Laptop +  KVM2USB Switch.  
<http://www.epiphany.com/products/frame-grabbers/kvm2usb/>
- Method 3)** iLO VGA Redirection Window, IE8 (or IE9 with Document Mode "IE8 Standards"), Ethernet cable. (See **Appendix A**)
- Method 4)** iLO access via SSH, terminal program, Ethernet cable.

## 2.4 Activity Logging

All activity while connected to the system should be logged using a convention which notates the **Customer Name**, **Site/Node** location, **Server hostname** and the **Date**. All logs should be provided to ORACLE Communications for archiving post installation.

**NOTE:** *Parts of this procedure will utilize a VGA Monitor (or equivalent) as the active terminal. It is understood that logging is not possible during these times. The user is only expected to provide logs for those parts of the procedures where direct terminal capture is possible (i.e. SSH, serial, etc.).*

## **3.0 INSTALLATION MATRIX**

### **3.1 Installing SDS on the Customer Network**

Installing the SDS product is a task which requires multiple installations of varying types. The matrix below provides a guide to the user as to which procedures are to be performed on which site types. The user should be aware that this document only covers the necessary configuration required to complete product install. Refer to the online help or contact the Oracle's Tekelec Customer Care Center for assistance with post installation configuration options.

**NOTE:** Although the SDS sites are fully redundant by function, we must distinguish between them during installation due to procedural changes based on the installation sequence. The user should be aware that any reference to the “SDS” site refers to the 1<sup>st</sup> installation of a SDS pair on the customer network while references to the “DR SDS” site refers to the 2<sup>nd</sup> SDS pair to be installed.

### SDS Installation Matrix

Site Type																
		1	2	3	4	5	6	7	8	9	10	11	12	13	E.*	J
<input type="checkbox"/>	SDS	✓	✓	✓	✗	✗	✗	✗	✗	✗	✗	✓	✓	✓	✓	✗
<input type="checkbox"/>	DR SDS	✓	✗	✗	✗	✓	✓	✗	✗	✗	✗	✓	✗	✗	✓	✗
<input type="checkbox"/>	Query Server	✓	✗	✗	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
<input type="checkbox"/>	DP-SOAM	✗	✗	✗	✗	✗	✗	✓	✓	✓	✗	✗	✗	✗	✗	✗
<input type="checkbox"/>	DP	✗	✗	✗	✗	✗	✗	✗	✗	✗	✓	✓	✗	✗	✗	✓

Table 2 - SDS Installation Matrix

### SDS Installation: List of Procedures

In general, unless following a cross reference or otherwise instructed differently, the procedures listed here are meant to be executed in numeric order.

Procedure No :	Title :	Page No :
1	Installing the SDS Application (All SDS Sites)	11
2	Configuring SDS Servers A and B (1 <sup>st</sup> SDS site only)	19
3	OAM Pairing (1 <sup>st</sup> SDS site only)	41
4	Query Server Installation (All SDS sites)	57
5	OAM Installation for DR SDS site	77
6	OAM Pairing for DR SDS site	94
7	Add SDS software images to PMAC servers (All DP-SOAM sites)	107
8	OAM Installation for DP-SOAM sites (All DP-SOAM sites)	111
9	OAM Pairing for DP-SOAM sites (All DP-SOAM sites)	138
10	DP Installation (All DP-SOAM sites)	152
11	Configuring ComAgent	186
E.1	Verifying Cisco Switch Wiring (SDS sites)	200
E.2	Configure Cisco 4948E-F Aggregation Switches	203
E.3	Cisco 4948E-F IOS Upgrade (SDS sites)	222
E.4	Cisco 4948E-F Configuration Backup (SDS sites)	230
J	Disable Hyperthreading (DP Only)	241

Table 3 - SDS Installation: List of Procedures

## 4.0 APPLICATION INSTALL

### 4.1 Installing the SDS Application (All SDS Sites)

The user should confirm that the server has been verified through the SDS Hardware Verification Plan [4] before beginning this procedure.

#### Procedure 1: Installing the SDS Application

Step	Procedure	Result
1. <input type="checkbox"/>	Access the HP DL360 server's console.	<ul style="list-style-type: none"> <li>Connect to the HP DL360 server's console using one of the access methods described in <b>Section 2.3</b>.</li> </ul>
2. <input type="checkbox"/>	<p>1) Access the command prompt.</p> <p>2) Log into the HP DL360 server as the "root" user.</p>	<pre>CentOS release 5.6 (Final) Kernel 2.6.18-238.19.1.el5prere15.0.0_72.22.0 on an x86_64  hostname1260476221 login: root Password: &lt;root_password&gt;</pre>
3. <input type="checkbox"/>	Verify that the correct Date & Time are displayed in <b>GMT</b> (+/- 4 min.).	<pre>[root@hostname1260476221 ~]# date -u Wed Nov 16 14:49:17 UTC 2011 [root@hostname1260476221 ~]#</pre>



**IF THE CORRECT DATE & TIME (IN GMT) ARE NOT SHOWN IN THE PREVIOUS STEP, THEN STOP THIS PROCEDURE AND PERFORM THE FOLLOWING STEPS:**

- Execute the steps for updating the date and time found in section entitled "HP DL360 G6 ProLiant Server: BIOS Settings and Server IPM" in **820-6641-01, RevB** (or higher) [8] using the **TPD 6.x.x** media which shipped with the SDS cabinet.
- Restart this procedure beginning with **Section 4.1** (*Installing the SDS Application*).

**IF THE CORRECT DATE & TIME (IN GMT) ARE SHOWN IN THE PREVIOUS STEP, THEN CONTINUE ON TO STEP 4 OF THIS PROCEDURE.**

4. <input type="checkbox"/>	Verify that the TPD release is <b>6.x.x</b> .	<pre>[root@hostname1260476221 ~]# getPlatRev 6.0.0-80.21.0 [root@hostname1260476221 ~]#</pre>
--------------------------------	---	---

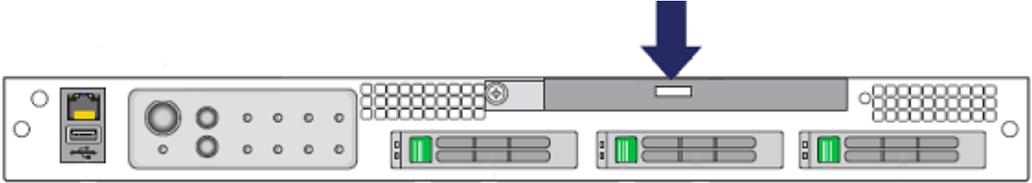
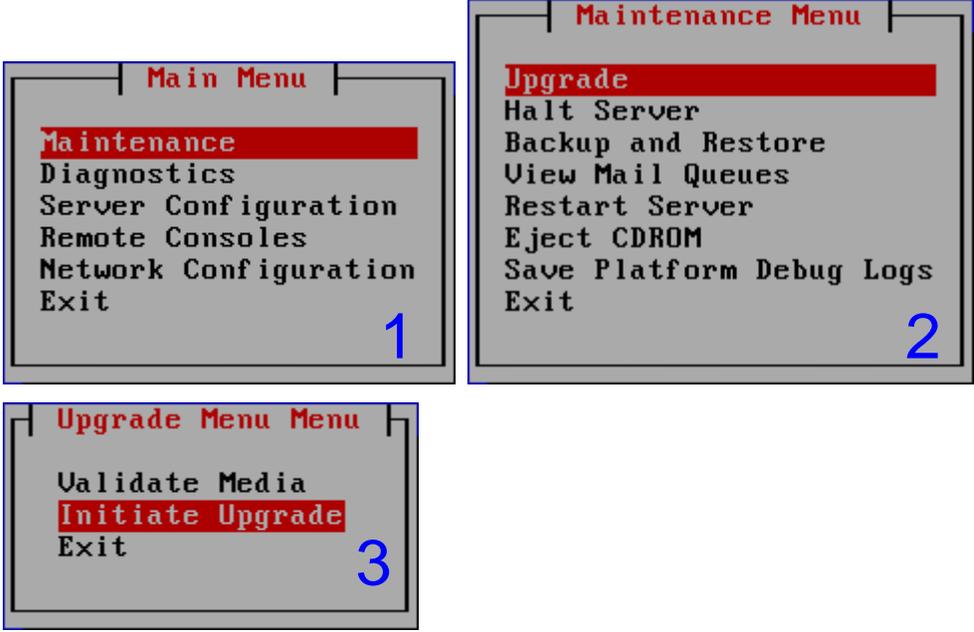


**IF THE PLATFORM REVISION SHOWN IN THE PREVIOUS STEP IS 5.x.x, THEN STOP THIS PROCEDURE AND PERFORM THE FOLLOWING STEPS:**

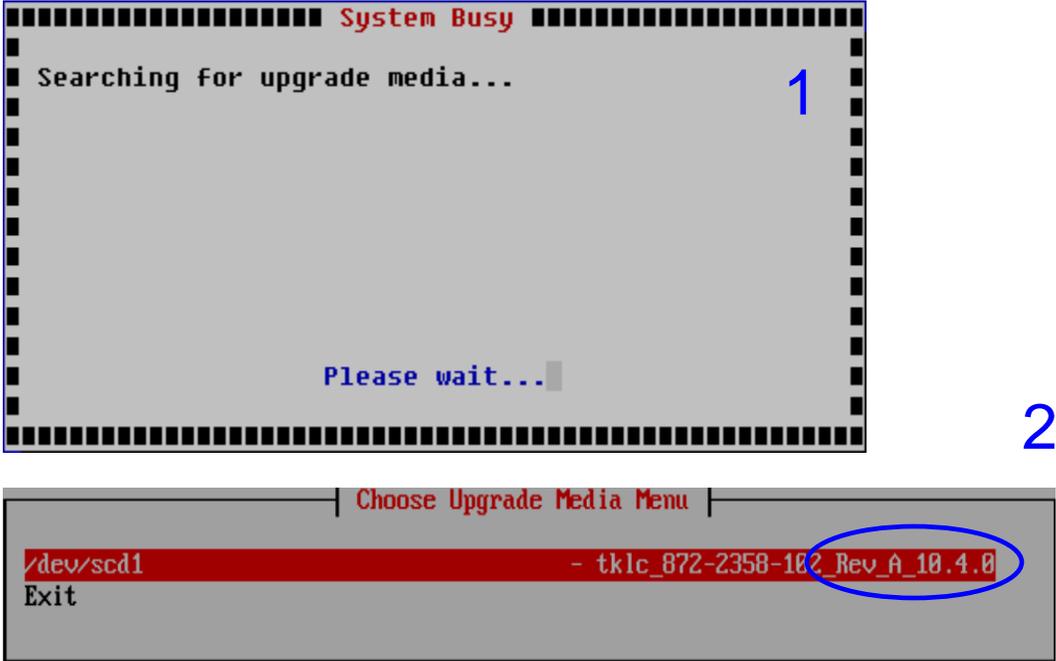
**Procedure 1: Installing the SDS Application**

Step	Procedure	Result
<p>1) Execute the section entitled “HP DL360 G6 ProLiant Server: BIOS Settings and Server IPM” in <b>820-6641-01, RevB</b> (or higher) [8] using the <b>TPD 6.x.x</b> media which shipped with the SDS cabinet.</p> <p>2) Restart this procedure beginning with <b>Section 4.1</b> (<i>Installing the SDS Application</i>).</p> <p><b>IF THE PLATFORM REVISION SHOWN IN THE PREVIOUS STEP IS 6.x.x, THEN CONTINUE ON TO STEP 5 OF THIS PROCEDURE.</b></p>		
<p><b>5.</b> <input type="checkbox"/></p>	<p>Execute “<b>syscheck</b>” to verify the state of the server before Application install.</p> <p><b>NOTE:</b> <i>The user should stop and resolve any errors returned from “syscheck” before continuing on to the next step.</i></p>	<pre>Last Login: Wed Nov 16 14:49:17 on tty1 [root@hostname1260476221 ~]# <b>syscheck</b> Running modules in class hardware...                                 OK  Running modules in class disk...                                 OK  Running modules in class net...                                 OK  Running modules in class system...                                 OK  Running modules in class proc...                                 OK  LOG LOCATION: /var/TKLC/log/syscheck/fail_log [root@hostname1260476221 ~]#</pre>
<p><b>6.</b> <input type="checkbox"/></p>	<p>Execute “<b>verifyUpgrade</b>” as a secondary way to verify the state of the server before Application install.</p> <p><b>NOTE 1:</b> If there are no problems, the user is returned to a command prompt.</p> <p><b>NOTE 2:</b> <i>The user should stop and resolve any errors returned from “verifyIPM” before continuing on to the next step.</i></p>	<pre>[root@hostname1260476221 ~]# <b>verifyUpgrade</b> [root@hostname1260476221 ~]#</pre>

**Procedure 1: Installing the SDS Application**

Step	Procedure	Result
7. <input type="checkbox"/>	Verify server hardware is DL360.	<pre>[root@hostname1260476221 ~]# hardwareInfo   grep Hardware Hardware ID: ProLiantDL360G6 [root@hostname1260476221 ~]#</pre>
8. <input type="checkbox"/>	Place the <b>CDROM</b> containing the <b>SDS Application software</b> into the server's optical drive.	 <p><b>Figure 2 - HP DL360 Front Panel: Optical Drive</b></p>
9. <input type="checkbox"/>	Login to the "platcfg" utility.	<pre>[root@hostname1260476221 ~]# su - platcfg</pre>
10. <input type="checkbox"/>	<p>From the "platcfg" Main Menu...</p> <p>Select each option as shown on the right, pressing the &lt;ENTER&gt; key after each selection.</p>	

**Procedure 1: Installing the SDS Application**

Step	Procedure	Result
<p>11.</p> <input type="checkbox"/>	<p>Verify that the Application release level shown matches the target release.</p>	
<p>12.</p> <input type="checkbox"/>	<p>Output similar to that shown on the right may be observed as the Application install progresses.</p>	<pre> Determining if we should upgrade... Install product is TPD Install product record exists in /etc/tekelec.cfg Install products match Stopping cron service... Checking for stale RPM DB locks... Installing public key /mnt/upgrade/upgrade/pub_keys/MjSQL_public_key.asc... Installing public key /mnt/upgrade/upgrade/pub_keys/RPM-GPG-KEY-redhat-beta... Installing public key /mnt/upgrade/upgrade/pub_keys/RPM-GPG-KEY-redhat-release... . Checking for any missing packages or files Checking for missing files...     No missing files found. Checking if upgrade is supported     Current platform version: 5.0.0-72.28.0     Target platform version: 5.0.0-72.28.0     Minimum supported version: 4.2.0-70.60.0  Upgrade from same release as current is supported  Evaluate if there are any packages to upgrade Evaluating if there are packages to upgrade...         </pre>

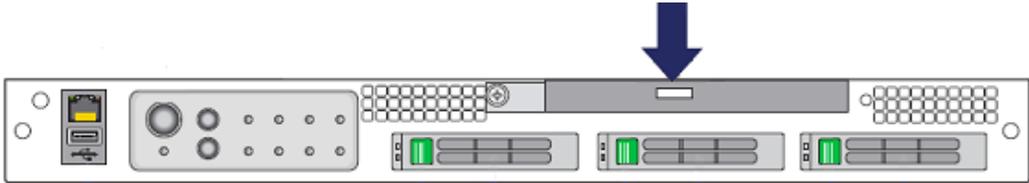
**Procedure 1: Installing the SDS Application**

Step	Procedure	Result
<p>13.</p> <input type="checkbox"/>	<p>Output similar to that shown on the right may be observed as the Application install progresses.</p>	<pre>Adding /usr/TKLC/plat/etc/rpm.d/plat.TKLCplat.macro to /etc/rpm/macros... [ OK ] Adding /usr/TKLC/plat/etc/rpm.d/plat.TPD-provd.macro to /etc/rpm/macros... [ OK ] Updating /etc/rpm/macros...  Now dispatching /mnt/upgrade/upgrade/ugwrap --noexecdispatch [ OK ] Initializing Upgrade Wrapper... package TKLCappworks is not installed TKLCappworks is not installed, therefore this must be an initial install. Validating Distribution... Validating cdrom... ##### #####</pre>
<p>14.</p> <input type="checkbox"/>	<p>Output similar to that shown on the right may be observed as the Application install progresses.</p>	<pre>Performing preupgrade processing Cleaning repackage package repository... Repackage Dir: /var/TKLC/backout/pkg No cleaning to do for an incremental upgrade... The runlevel transition complete RC file was created as /etc/rc3.d/S99smartd_runlevel_transition_complete. Changing to run-level 3... ***** * Waiting for run level 3 transistion to finish * ***** waiting for /etc/rc3.d/S99smartd_runlevel_transition_complete to disappear. waiting for /etc/rc3.d/S99smartd_runlevel_transition_complete to disappear. waiting for /etc/rc3.d/S99smartd_runlevel_transition_complete to disappear.</pre>
<p>15.</p> <input type="checkbox"/>	<p>Output similar to that shown on the right may be observed as the Application install progresses.</p>	<pre>Volume logs_process will be created. Success: Volume logs_process was created. Creating filesystem, this may take a while. Creating lv logs_security. Volume logs_security will be created. Success: Volume logs_security was created. Creating filesystem, this may take a while. Creating lv run_db. Volume run_db will be created. Success: Volume run_db was created. Creating filesystem, this may take a while.</pre>

**Procedure 1: Installing the SDS Application**

Step	Procedure	Result
<p>16.</p> <input type="checkbox"/>	<p>Output similar to that shown on the right may be observed at the completion of the Application install.</p>	<pre> Executing da01_sds_app_enable.sh... da01_sds_app_enable.sh: 'Nothing to do if fresh install.' Applications Enabled. Running /usr/TKLC/plat/bin/service_conf reconfig  UPGRADE IS COMPLETE  Waiting for reboot Updating platform revision file...  A reboot of the server is required. The server will be rebooted in 10 seconds                     </pre>
<p>17.</p> <input type="checkbox"/>	<p>Output similar to that shown on the right may be observed as the server initiates a post-install reboot.</p>	<pre> scsi7 : SCSI emulation for USB Mass Storage devices scsi8 : SCSI emulation for USB Mass Storage devices input: Intel(R) Multidevice as /class/input/input3 input: USB HID v1.01 Mouse [Intel(R) Multidevice] on usb-0000:00:1d.3-1 input: Intel(R) Multidevice as /class/input/input4 input: USB HID v1.01 Keyboard [Intel(R) Multidevice] on usb-0000:00:1d.3-1 Restarting system.  - machine restart █                     </pre>
<p>18.</p> <input type="checkbox"/>	<p>After the server has completed reboot...  Log back into the HP DL360 server as the "root" user.</p>	<pre> CentOS release 5.6 (Final) Kernel 2.6.18-238.19.1.el5prere15.0.0_72.22.0 on an x86_64  hostname1260476221 login: root Password: &lt;root_password&gt;                     </pre>
<p>19.</p> <input type="checkbox"/>	<p>Output similar to that shown on the right will appear as the server returns to a command prompt.</p>	<pre> *** TRUNCATED OUTPUT ***   =====    This system has been upgraded but the upgrade has not yet     been accepted or rejected. Please accept or reject the     upgrade soon.    =====   VPATH=/opt/TKLCcomcol/runcm5.16:/opt/TKLCcomcol/cm5.16 PRODPATH= RELEASE=5.16 RUNID=00 VPATH=/var/TKLC/rundb:/usr/TKLC/appworks:/usr/TKLC/awpcommon:/usr/TKLC/co magent-gui:/usr/TKLC/comagent:/usr/TKLC/sds PRODPATH=/opt/comcol/prod RUNID=00 [root@hostname1260476221 ~]#                     </pre>

**Procedure 1: Installing the SDS Application**

Step	Procedure	Result
20. <input type="checkbox"/>	Verify successful installation of the Application software.	<pre>[root@hostname1260476221 ~]# grep COMPLETE /var/TKLC/log/upgrade/upgrade.log 1321462900:: UPGRADE IS COMPLETE [root@hostname1260476221 ~]</pre>
21. <input type="checkbox"/>	Verify that the Application release level shown matches the target release.	<pre>[root@hostname1260476221 ~]# rpm -qa  grep sds TKLCsds-4.0.0-4.0.0_40.4.0.x86_64 [root@hostname1260476221 ~]#</pre>
22. <input type="checkbox"/>	Accept upgrade to the Application Software.	<pre>[root@hostname1260476221 ~]# /var/TKLC/backout/accept Called with options: --accept Loading Upgrade::Backout::RPM Accepting Upgrade Setting POST_UPGRADE_ACTION to ACCEPT in upgrade info. Cleaning backout directory. Clearing Upgrade Accept/Reject alarm. Cleaning message from MOTD. Cleaning up RPM config backup files... Checking / Checking /boot Checking /tmp Checking /usr Checking /var Checking /var/TKLC Checking /tmp/appworks_temp Checking /var/TKLC/appw/logs/Process Checking /var/TKLC/appw/logs/Security Checking /var/TKLC/db/filemgmt Checking /var/TKLC/rundb Starting cleanup of RCS repository. INFO: Removing '/var/lib/prelink/force' from RCS repository INFO: Removing '/etc/my.cnf' from RCS repository [root@hostname1260476221 ~]#</pre>
23. <input type="checkbox"/>	Put the server in trusted time mode	<pre>[root@hostname1260476221 ~]# tw.setdate --trusted [root@hostname1260476221 ~]# prod.start [root@hostname1260476221 ~]#</pre>
24. <input type="checkbox"/>	Eject the CDROM from the server's optical drive.	<pre>[root@hostname1260476221 ~]# eject /dev/scd0 [root@hostname1260476221 ~]#</pre>
25. <input type="checkbox"/>	Remove the CDROM from the server's optical drive.	 <p><b>Figure 3 - HP DL360 Front Panel: Optical Drive</b></p>

### Procedure 1: Installing the SDS Application

Step	Procedure	Result
26. <input type="checkbox"/>	Exit from the command line to return the server console to the login prompt.	<pre>[root@hostname1260476221 upgrade]# exit  CentOS release 5.6 (Final) Kernel 2.6.18-238.19.1.el5prere15.0.0_72.22.0 on an x86_64  hostname1260476221 login:</pre>
27. <input type="checkbox"/>	<ul style="list-style-type: none"><li>Repeat this procedure for each RMS server installed in the cabinet before continuing on to the next procedure. <i>(e.g. Server A, Server B, Query Server)</i></li></ul>	
<b>THIS PROCEDURE HAS BEEN COMPLETED</b>		

## 5.0 CONFIGURATION PROCEDURES

### 5.1 Configuring SDS Servers A and B (1<sup>st</sup> SDS site only)

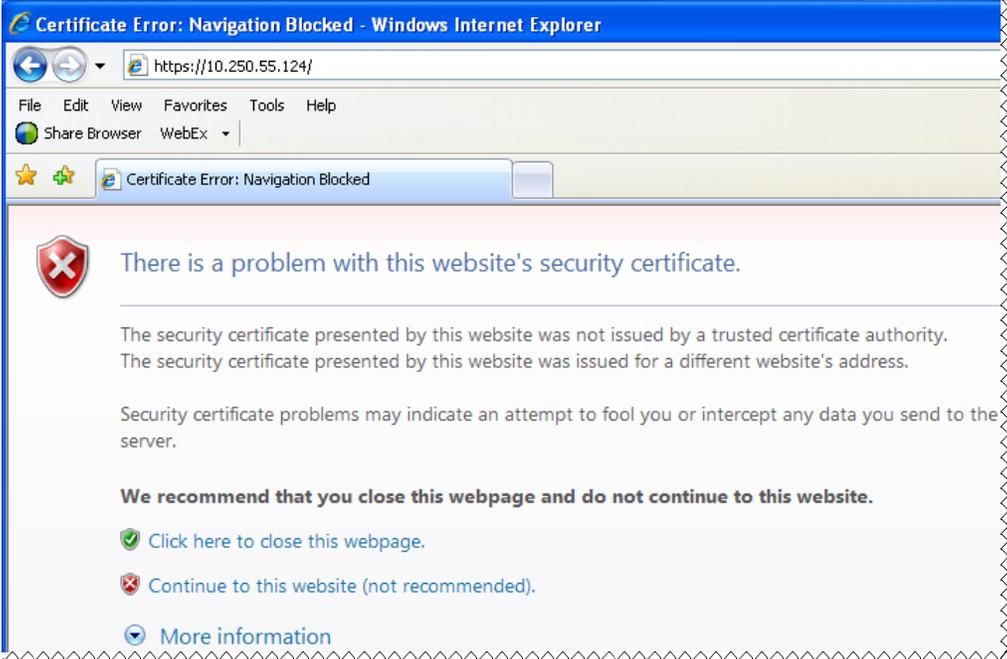
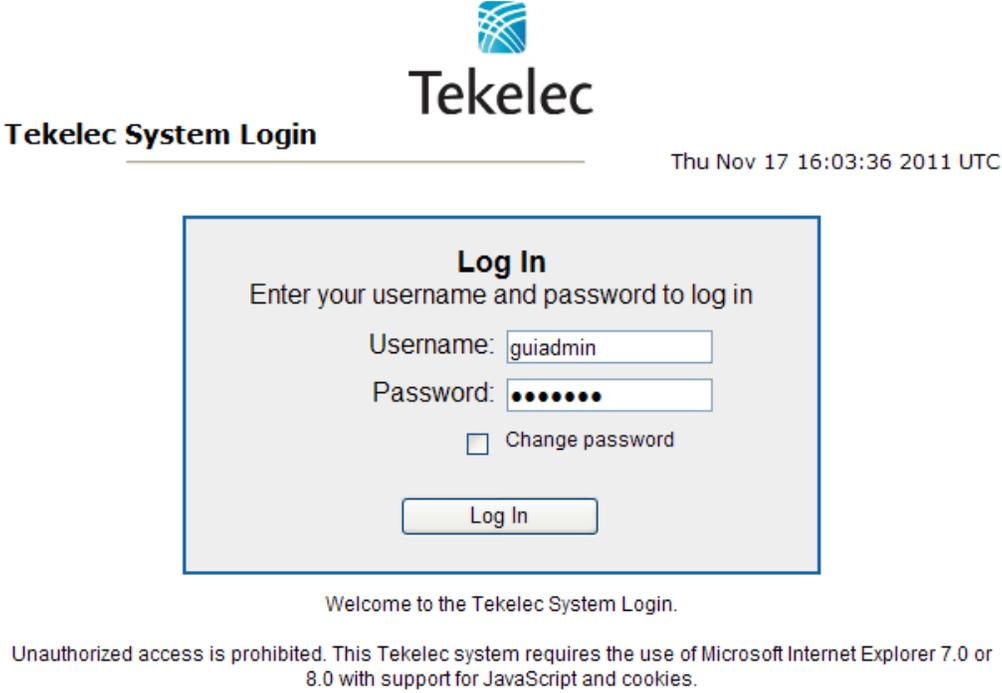
#### **Assumptions:**

- This procedure assumes that the SDS Network Element XML file for the Primary Provisioning SDS site has previously been created, as described in **Appendix F**.
- This procedure assumes that the Network Element XML files are either on a USB flash drive or the laptop's hard drive. The steps are written as if the XML files are on a USB flash drive, but the files can exist on any accessible drive.

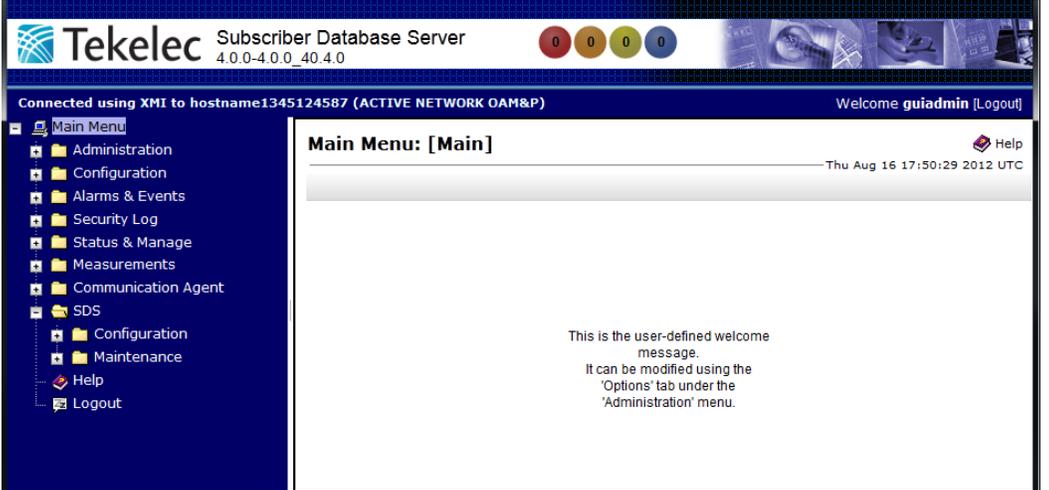
This procedure requires that the user connects to the SDS GUI prior to configuring the first SDS server. This can be done either by one of two procedures:

1. Configuring a temporary external IP address, as described in Appendix C
2. Plugging a laptop into an unused, unconfigured port on the SDS-A server using a direct-connect Ethernet cable, as described in Appendix D.

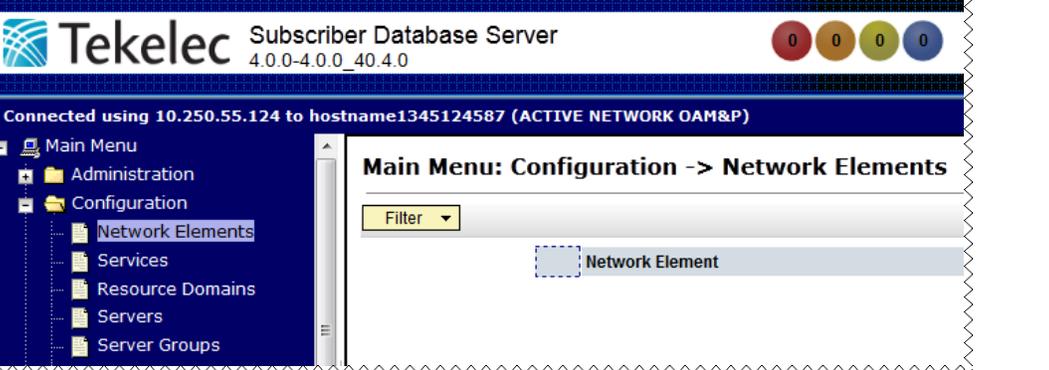
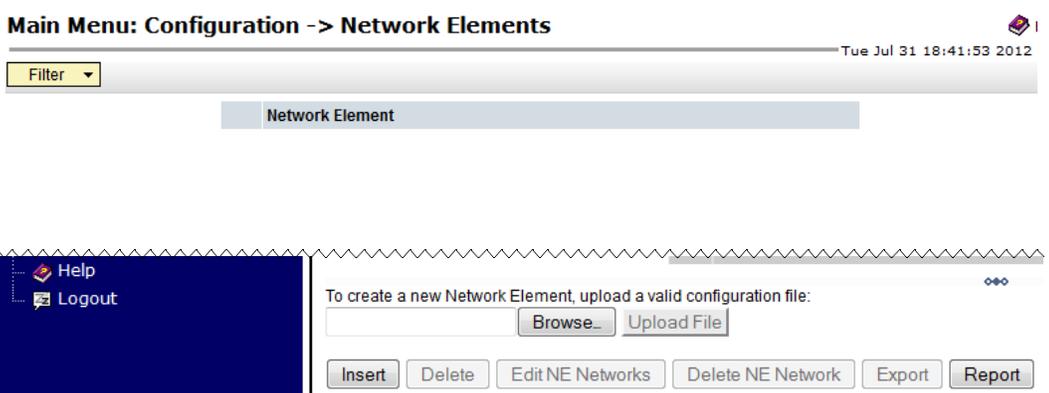
**Procedure 2:** Configuring SDS Servers A and B (1<sup>st</sup> SDS site only)

Step	Procedure	Result
<p>1.</p> <input type="checkbox"/>	<p><b>SDS Server A:</b></p> <p>Connect to the SDS GUI.</p>	<ul style="list-style-type: none"> <li>Execute <b>Appendix D. Establishing a Local Connection for Accessing the SDS GUI</b></li> </ul>
<p>2.</p> <input type="checkbox"/>	<p><b>SDS Server A:</b></p> <p>Launch an approved web browser and connect to the SDS Server A IP address using <a href="https://192.168.100.1">https://192.168.100.1</a></p> <p><b>NOTE:</b> <i>If presented with the "security certificate" warning screen shown to the right, choose the following option:</i></p> <p><b>"Continue to this website (not recommended)".</b></p>	
<p>3.</p> <input type="checkbox"/>	<p><b>SDS Server A:</b></p> <p>The user should be presented the login screen shown on the right.</p> <p>Login to the GUI using the default user and password.</p>	

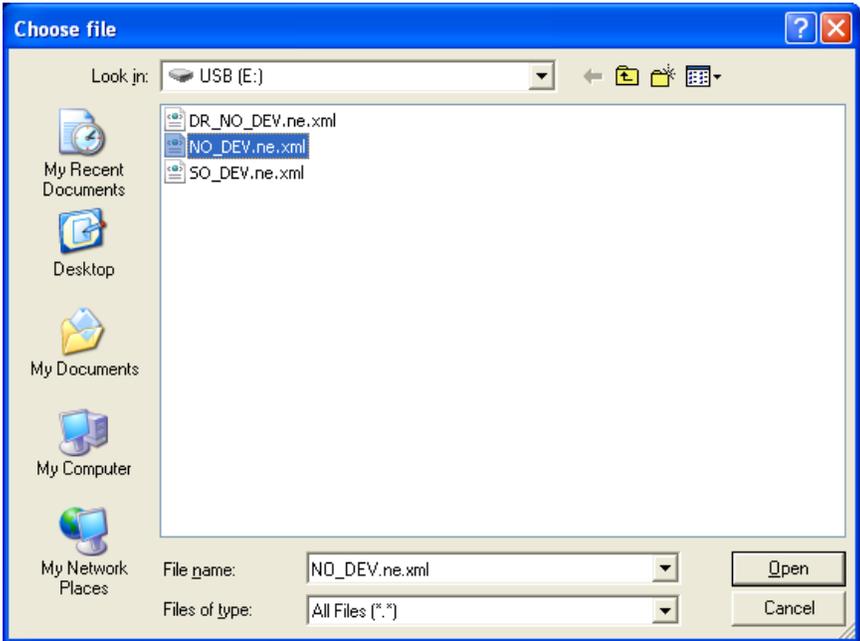
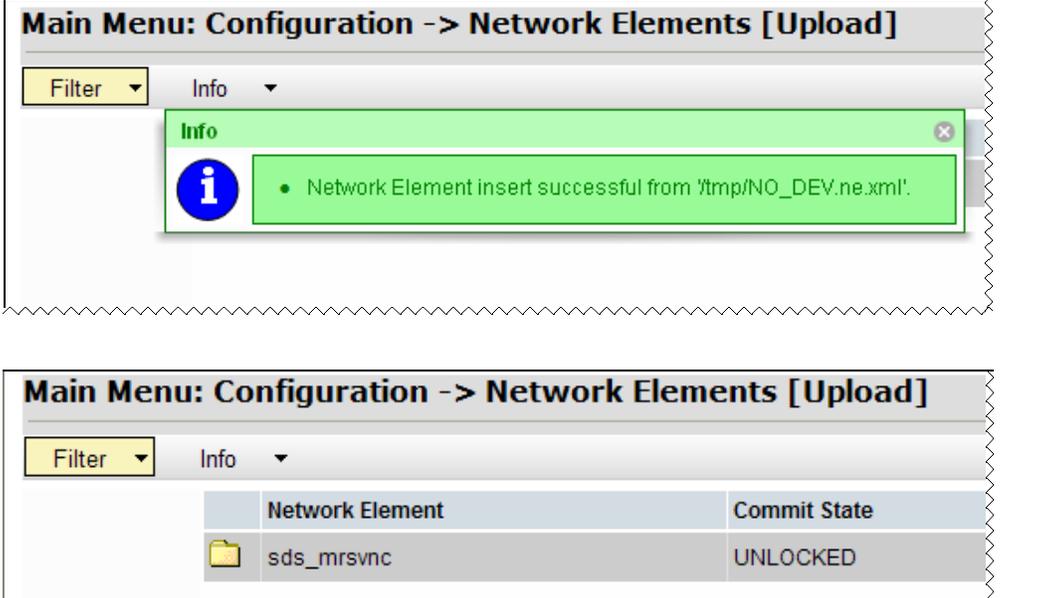
**Procedure 2:** Configuring SDS Servers A and B (1<sup>st</sup> SDS site only)

Step	Procedure	Result
<p>4.</p> <p><input type="checkbox"/></p>	<p><b>SDS Server A:</b></p> <p>The user should be presented the SDS Main Menu as shown on the right.</p>	

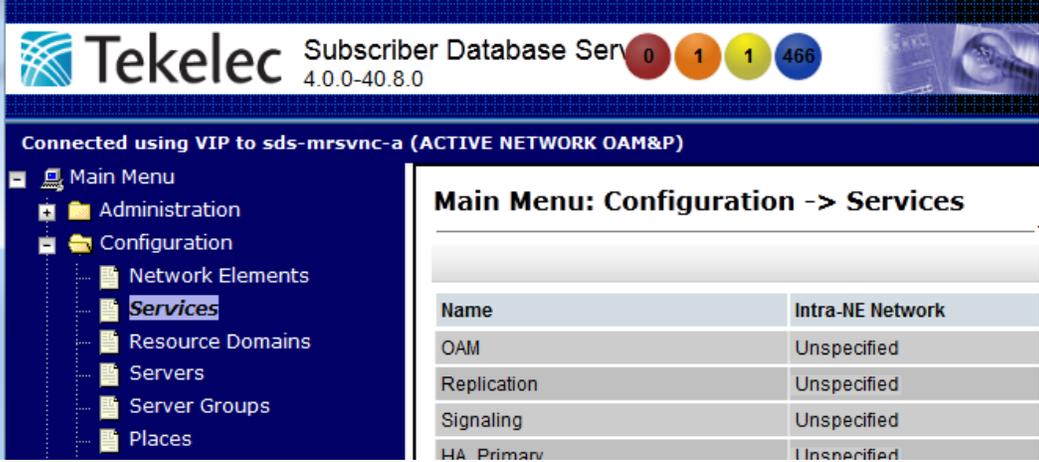
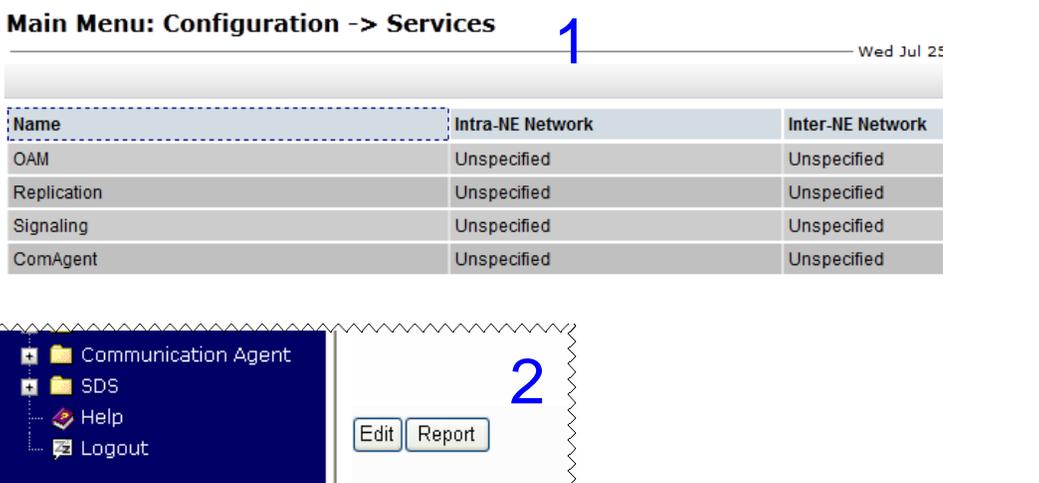
**Procedure 2.1 Configuring the Network Element**

<p>5.</p> <p><input type="checkbox"/></p>	<p><b>SDS Server A:</b></p> <p>Select...</p> <p><b>Main Menu</b></p> <p>→ Configuration</p> <p>→ Network Elements</p> <p>...as shown on the right.</p>	
<p>6.</p> <p><input type="checkbox"/></p>	<p><b>SDS Server A:</b></p> <p>From the <b>Configuration / Network Elements</b> screen...</p> <p>Select the <b>“Browse”</b> dialogue button (scroll to bottom left corner of screen).</p>	

## Procedure 2.1 Configuring the Network Element

<p>7.</p> <p><input type="checkbox"/></p>	<p><b>SDS Server A:</b></p> <p><b>Note:</b> This step assumes that the <b>xml</b> files were previously prepared, as described in <b>Appendix F</b>.</p> <p>1) Select the location containing the site <b>.xml</b> file.</p> <p>2) Select the <b>.xml</b> file and click the <b>“Open”</b> dialogue button.</p>					
<p>8.</p> <p><input type="checkbox"/></p>	<p><b>SDS Server A:</b></p> <p>Select the <b>“Upload File”</b> dialogue button (bottom left corner of screen).</p>					
<p>9.</p> <p><input type="checkbox"/></p>	<p><b>SDS Server A:</b></p> <p>If the values in the <b>.xml</b> file pass validation rules, the user will receive a banner information message showing that the data has been successfully validated and committed to the DB.</p> <p><b>NOTE:</b> You may have to left mouse click the <b>“Info”</b> banner option in order to see the banner output.</p>	 <table border="1"> <thead> <tr> <th>Network Element</th> <th>Commit State</th> </tr> </thead> <tbody> <tr> <td>sds_mrsvnc</td> <td>UNLOCKED</td> </tr> </tbody> </table>	Network Element	Commit State	sds_mrsvnc	UNLOCKED
Network Element	Commit State					
sds_mrsvnc	UNLOCKED					

## Procedure 2.2 Configuring Services

<p>10.</p> <p><input type="checkbox"/></p>	<p><b>SDS Server A:</b></p> <p>Select...</p> <p><b>Main Menu</b></p> <p>→ Configuration</p> <p>→ Services</p> <p>...as shown on the right.</p>	 <p>Tekelec Subscriber Database Service 4.0.0-40.8.0</p> <p>Connected using VIP to sds-mrsvnc-a (ACTIVE NETWORK OAM&amp;P)</p> <p>Main Menu: Configuration -&gt; Services</p> <table border="1"> <thead> <tr> <th>Name</th> <th>Intra-NE Network</th> </tr> </thead> <tbody> <tr> <td>OAM</td> <td>Unspecified</td> </tr> <tr> <td>Replication</td> <td>Unspecified</td> </tr> <tr> <td>Signaling</td> <td>Unspecified</td> </tr> <tr> <td>HA Primary</td> <td>Unspecified</td> </tr> </tbody> </table>	Name	Intra-NE Network	OAM	Unspecified	Replication	Unspecified	Signaling	Unspecified	HA Primary	Unspecified					
Name	Intra-NE Network																
OAM	Unspecified																
Replication	Unspecified																
Signaling	Unspecified																
HA Primary	Unspecified																
<p>11.</p> <p><input type="checkbox"/></p>	<p><b>SDS Server A:</b></p> <p>1) The user will be presented with the "Services" configuration screen as shown on the right.</p> <p>2) Select the "Edit" dialogue button.</p>	 <p>Main Menu: Configuration -&gt; Services 1</p> <p>Wed Jul 25</p> <table border="1"> <thead> <tr> <th>Name</th> <th>Intra-NE Network</th> <th>Inter-NE Network</th> </tr> </thead> <tbody> <tr> <td>OAM</td> <td>Unspecified</td> <td>Unspecified</td> </tr> <tr> <td>Replication</td> <td>Unspecified</td> <td>Unspecified</td> </tr> <tr> <td>Signaling</td> <td>Unspecified</td> <td>Unspecified</td> </tr> <tr> <td>ComAgent</td> <td>Unspecified</td> <td>Unspecified</td> </tr> </tbody> </table> <p>2</p> <p>Communication Agent</p> <p>SDS</p> <p>Help</p> <p>Logout</p> <p>Edit Report</p>	Name	Intra-NE Network	Inter-NE Network	OAM	Unspecified	Unspecified	Replication	Unspecified	Unspecified	Signaling	Unspecified	Unspecified	ComAgent	Unspecified	Unspecified
Name	Intra-NE Network	Inter-NE Network															
OAM	Unspecified	Unspecified															
Replication	Unspecified	Unspecified															
Signaling	Unspecified	Unspecified															
ComAgent	Unspecified	Unspecified															

## Procedure 2.2 Configuring Services

12.

### SDS Server A:

1) With the exception of “**Signaling**” which is left “**Unspecified**”, set other services values so that all **Intra-NE Network** traffic is directed across **IMI** and all **Inter-NE Network** traffic is across **XMI**.

2) Select the “**Apply**” dialogue button.

**NOTE:** These are recommended names for SDS 5.0. Service names may vary according to those used in **Appendix F**.

## Main Menu: Configuration -> Services [Edit]

Thu Feb 06 15:32:14

### Services

Name	Intra-NE Network	Inter-NE Network
OAM	IMI	XMI
Replication	IMI	XMI
Signaling	Unspecified	Unspecified
HA_Secondary	IMI	XMI
HA_MP_Secondary	IMI	XMI
Replication_MP	IMI	XMI
ComAgent	IMI	XMI

Ok Apply Cancel

13.

### SDS Server A:

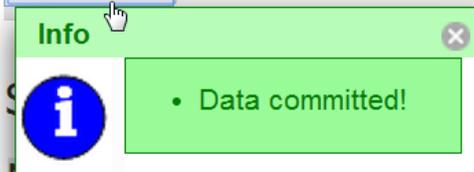
1) The user should now click the “**Info**” tab to be presented with a banner information message stating “**Data committed**”

2) Select the “**Ok**” dialogue button.

## Main Menu: Configuration -> Services [Edit]

Thu Feb 06 15:32:14

Info



Name	Intra-NE Network	Inter-NE Network
OAM	IMI	XMI
Replication	IMI	XMI
Signaling	Unspecified	Unspecified
HA_Secondary	IMI	XMI

## Procedure 2.2 Configuring Services

14.  **SDS Server A:**  
 The user will be presented with the “**Services**” configuration screen as shown on the right

### Main Menu: Configuration -> Services

Thu Feb 06 15:38:06 20

Name	Intra-NE Network	Inter-NE Network
OAM	IMI	XMI
Replication	IMI	XMI
Signaling	Unspecified	Unspecified
HA_Secondary	IMI	XMI
HA_MP_Secondary	IMI	XMI
Replication_MP	IMI	XMI
ComAgent	IMI	XMI

## Procedure 2.3 Configuring the SDS Server

15.  **Note:** This step thru the last step of this procedure need to be done for both SDS Server A and SDS Server B.

**SDS Server A:**  
 Select...

**Main Menu**  
 → **Configuration**  
 → **Servers**

...as shown on the right.

Tekelec Subscriber Database Server 3.0.0-3.0.0\_10.7.1

Connected using XMI to hostname1326211623 (ACTIVE NETWORK OAM&P)

- Main Menu
  - Administration
  - Configuration
  - Network Elements
  - Services
  - Servers**
  - Server Groups
  - Network

#### Main Menu: Configuration -> Servers

Filter ▼

Hostname	Role	Server Group
----------	------	--------------

16.  **SDS Server A:**  
 Select the “**Insert**” dialogue button.

+ SDS

Help

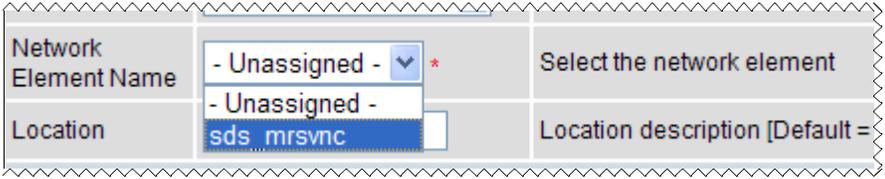
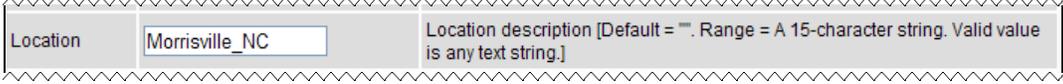
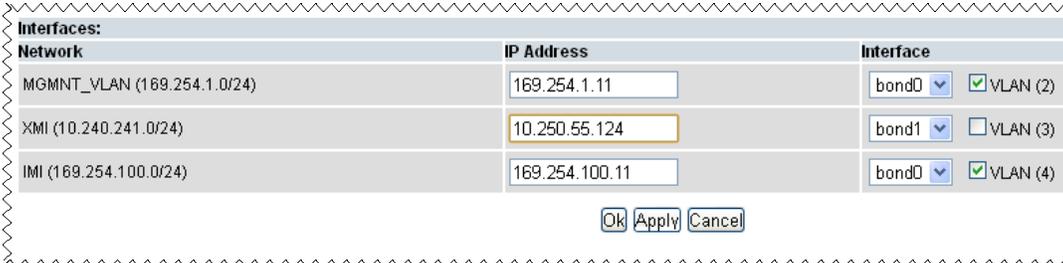
Logout

Insert
Delete
Export
Report

## Procedure 2.3 Configuring the SDS Server

<p>17.</p> <input type="checkbox"/>	<p><b>SDS Server A:</b></p> <p>The user is now presented with the “Adding a new server” configuration screen.</p>	
<p>18.</p> <input type="checkbox"/>	<p><b>SDS Server A:</b></p> <p>Input the assigned “hostname” for the SDS Server (A or B).</p>	
<p>19.</p> <input type="checkbox"/>	<p><b>SDS Server A:</b></p> <p>Select “NETWORK OAM&amp;P” for the server “Role” from the pull-down menu.</p>	
<p>20.</p>	<p><b>SDS Server A:</b></p> <p>Input the assigned hostname again as the “System ID” for the SDS Server (A or B).</p>	
<p>21.</p> <input type="checkbox"/>	<p><b>SDS Server A:</b></p> <p>Select “SDS HP Rack Mount” for the Hardware Profile for the SDS from the pull-down menu.</p>	

## Procedure 2.3 Configuring the SDS Server

<p>22.</p> <input type="checkbox"/>	<p><b>SDS Server A:</b></p> <p>Select the <b>Network Element Name</b> for the SDS from the pull-down menu.</p> <p><b>NOTE:</b> After the <i>Network Element Name</i> is selected, the <i>Interfaces</i> fields will be displayed, as seen in <b>Step 25</b>.</p>										
<p>23.</p> <input type="checkbox"/>	<p><b>SDS Server A:</b></p> <p>Enter the site location.</p> <p><b>NOTE:</b> <i>Location</i> is an optional field.</p>										
<p>24.</p> <input type="checkbox"/>	<p><b>SDS Server A:</b></p> <p>1) Enter the <b>MGMNT_VLAN</b> and <b>IMI IP</b> addresses for the SDS Server.</p> <p>2) Set the <b>MGMNT_VLAN</b> and <b>IMI</b> Interfaces to “bond0” and check each <b>VLAN</b> checkbox.</p> <p>3) Enter the <b>XMI IP</b> address for the SDS Server.</p> <p>4) Set the <b>XMI</b> Interface to “bond1” and <b>DO NOT</b> check the <b>VLAN</b> box.</p>	 <table border="1"> <thead> <tr> <th>SDS Server</th> <th>MGMNT_VLAN IP</th> <th>IMI IP</th> </tr> </thead> <tbody> <tr> <td>SDS-A (Primary)</td> <td>169.254.1.11</td> <td>169.254.100.11</td> </tr> <tr> <td>SDS-B (Primary)</td> <td>169.254.1.12</td> <td>169.254.100.12</td> </tr> </tbody> </table> <p><b>NOTE:</b> These values should be used for all SDS installations where 4948E-F Aggregations switches are deployed.</p>	SDS Server	MGMNT_VLAN IP	IMI IP	SDS-A (Primary)	169.254.1.11	169.254.100.11	SDS-B (Primary)	169.254.1.12	169.254.100.12
SDS Server	MGMNT_VLAN IP	IMI IP									
SDS-A (Primary)	169.254.1.11	169.254.100.11									
SDS-B (Primary)	169.254.1.12	169.254.100.12									

## Procedure 2.3 Configuring the SDS Server

<p><b>25.</b></p> <p><input type="checkbox"/></p>	<p><b>SDS Server A:</b></p> <p>1) Click the “NTP Servers:” “Add” dialogue button.</p> <p>2) Enter the NTP Server IP Address for an NTP Server.</p> <p>3) If you have another NTP Server IP address, repeat (1) and (2) to enter it.</p> <p>4) Optionally, click the “Prefer” checkbox to prefer one NTP Server over the other.</p>											
<p><b>26.</b></p> <p><input type="checkbox"/></p>	<p><b>SDS Server A:</b></p> <p>1) The user should be presented with a banner information message stating “Pre-Validation passed”.</p> <p>2) Click the “Apply” dialogue button.</p>	<table border="1"> <thead> <tr> <th colspan="2">Interfaces:</th> </tr> <tr> <th>Network</th> <th>IP Address</th> </tr> </thead> <tbody> <tr> <td>MGMNT_VLAN (169.254.1.0/24)</td> <td>169.254.1.11</td> </tr> <tr> <td>XMI (10.240.241.0/24)</td> <td>10.250.55.124</td> </tr> <tr> <td>IMI (169.254.100.0/24)</td> <td>169.254.100.11</td> </tr> </tbody> </table>	Interfaces:		Network	IP Address	MGMNT_VLAN (169.254.1.0/24)	169.254.1.11	XMI (10.240.241.0/24)	10.250.55.124	IMI (169.254.100.0/24)	169.254.100.11
Interfaces:												
Network	IP Address											
MGMNT_VLAN (169.254.1.0/24)	169.254.1.11											
XMI (10.240.241.0/24)	10.250.55.124											
IMI (169.254.100.0/24)	169.254.100.11											

## Procedure 2.3 Configuring the SDS Server

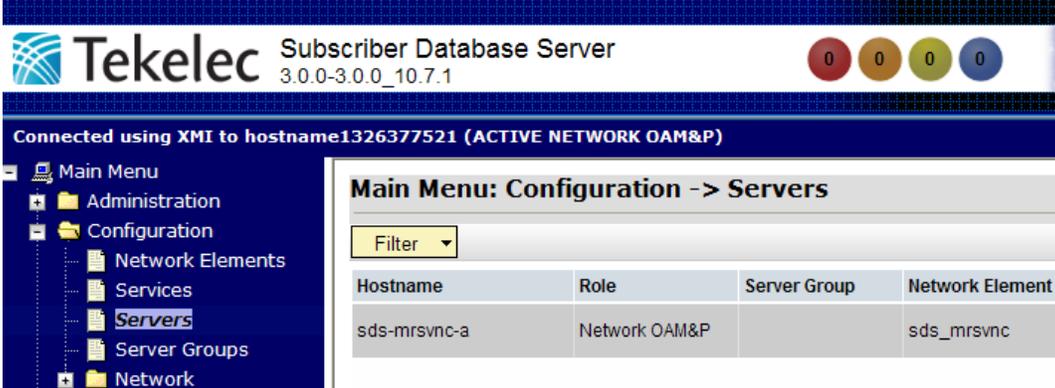
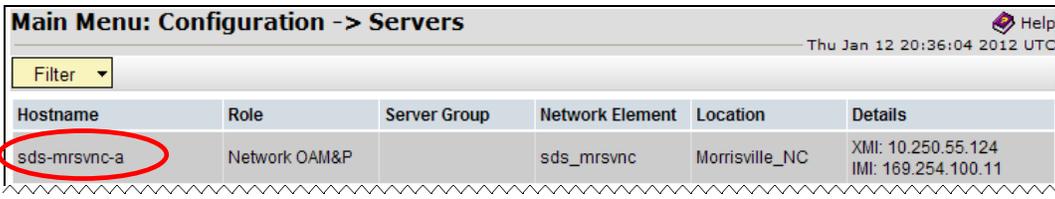
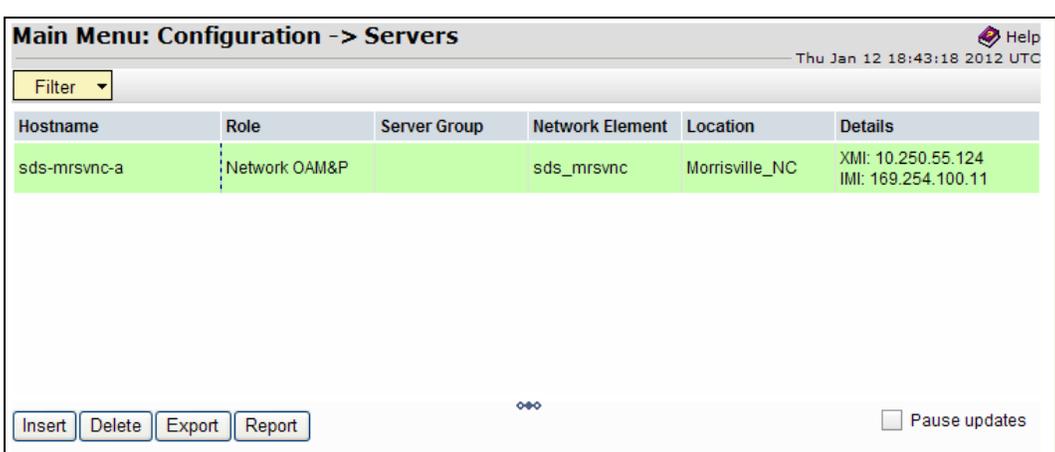
27.

### SDS Server A:

If the values provided match the network ranges assigned to the SDS NE, the user will receive a banner information message showing that the data has been validated and committed to the DB.

The screenshot displays the 'Main Menu: Configuration -> Servers [Insert]' interface. A green information box with a blue 'i' icon and a close button (x) is overlaid on the form, containing the text 'Data committed!'. Below the message, the 'Host Name' field is populated with 'sds-mrsvnc-a' and has a red asterisk next to it. To the right, the 'Description' field contains the text: 'Unique name for the server. [Default Valid characters are alphanumeric and end with an alpha'. A dropdown menu labeled 'Info' is visible at the top left of the form area.

## Procedure 2.4 Applying the SDS Server Configuration File

<p>28.</p> <p><input type="checkbox"/></p>	<p><b>SDS Server A:</b></p> <p>Select...</p> <p><b>Main Menu</b>  → Configuration  → Servers</p> <p>...as shown on the right.</p>	 <p>Tekelec Subscriber Database Server 3.0.0-3.0.0_10.7.1</p> <p>Connected using XMI to hostname1326377521 (ACTIVE NETWORK OAM&amp;P)</p> <p>Main Menu: Configuration -&gt; Servers</p> <table border="1"> <thead> <tr> <th>Hostname</th> <th>Role</th> <th>Server Group</th> <th>Network Element</th> </tr> </thead> <tbody> <tr> <td>sds-mrsvnc-a</td> <td>Network OAM&amp;P</td> <td></td> <td>sds_mrsvnc</td> </tr> </tbody> </table>	Hostname	Role	Server Group	Network Element	sds-mrsvnc-a	Network OAM&P		sds_mrsvnc				
Hostname	Role	Server Group	Network Element											
sds-mrsvnc-a	Network OAM&P		sds_mrsvnc											
<p>29.</p> <p><input type="checkbox"/></p>	<p><b>SDS Server A:</b></p> <p>The “Configuration →Servers” screen should now show the newly added SDS Server in the list.</p>	 <p>Main Menu: Configuration -&gt; Servers</p> <p>Thu Jan 12 20:36:04 2012 UTC</p> <table border="1"> <thead> <tr> <th>Hostname</th> <th>Role</th> <th>Server Group</th> <th>Network Element</th> <th>Location</th> <th>Details</th> </tr> </thead> <tbody> <tr> <td>sds-mrsvnc-a</td> <td>Network OAM&amp;P</td> <td></td> <td>sds_mrsvnc</td> <td>Morrisville_NC</td> <td>XMI: 10.250.55.124 IMI: 169.254.100.11</td> </tr> </tbody> </table>	Hostname	Role	Server Group	Network Element	Location	Details	sds-mrsvnc-a	Network OAM&P		sds_mrsvnc	Morrisville_NC	XMI: 10.250.55.124 IMI: 169.254.100.11
Hostname	Role	Server Group	Network Element	Location	Details									
sds-mrsvnc-a	Network OAM&P		sds_mrsvnc	Morrisville_NC	XMI: 10.250.55.124 IMI: 169.254.100.11									
<p>30.</p> <p><input type="checkbox"/></p>	<p><b>SDS Server A:</b></p> <p>1) Use the cursor to select the SDS Server entry added in Steps 15 - 27.</p> <p>The row containing the desired SDS Server should now be highlighted in GREEN.</p> <p>2) Select the “Export” dialogue button.</p>	 <p>Main Menu: Configuration -&gt; Servers</p> <p>Thu Jan 12 18:43:18 2012 UTC</p> <table border="1"> <thead> <tr> <th>Hostname</th> <th>Role</th> <th>Server Group</th> <th>Network Element</th> <th>Location</th> <th>Details</th> </tr> </thead> <tbody> <tr> <td>sds-mrsvnc-a</td> <td>Network OAM&amp;P</td> <td></td> <td>sds_mrsvnc</td> <td>Morrisville_NC</td> <td>XMI: 10.250.55.124 IMI: 169.254.100.11</td> </tr> </tbody> </table> <p>Insert Delete Export Report</p> <p>Pause updates</p>	Hostname	Role	Server Group	Network Element	Location	Details	sds-mrsvnc-a	Network OAM&P		sds_mrsvnc	Morrisville_NC	XMI: 10.250.55.124 IMI: 169.254.100.11
Hostname	Role	Server Group	Network Element	Location	Details									
sds-mrsvnc-a	Network OAM&P		sds_mrsvnc	Morrisville_NC	XMI: 10.250.55.124 IMI: 169.254.100.11									

## Procedure 2.4 Applying the SDS Server Configuration File

31.

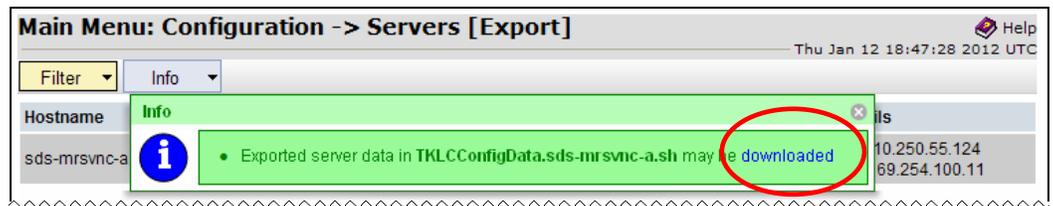


### SDS Server A:

The user will receive a banner information message showing a download link for the **SDS Server** configuration data.

Click on the word "**downloaded**" to download and save the configuration file.

Note: You may be required to click the **Info** tab to display the Info banner shown here.



## Procedure 2.4 Applying the SDS Server Configuration File

32.

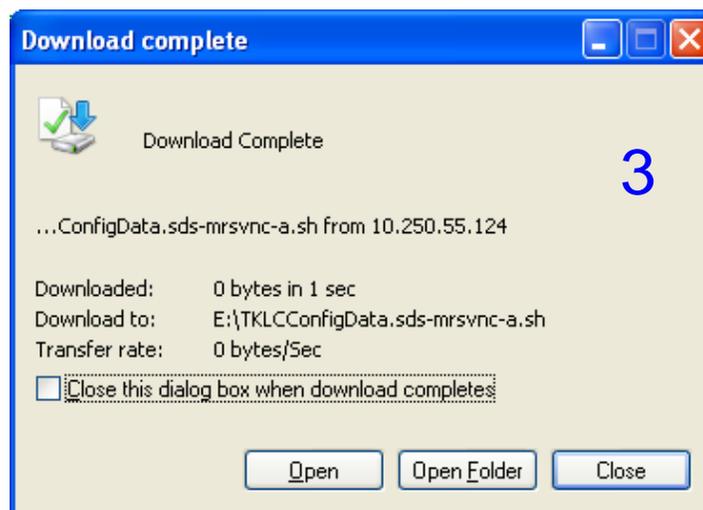
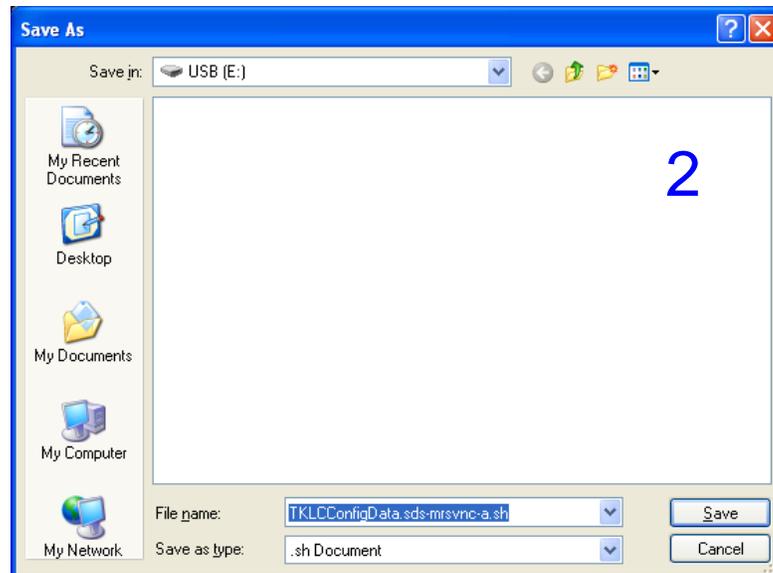
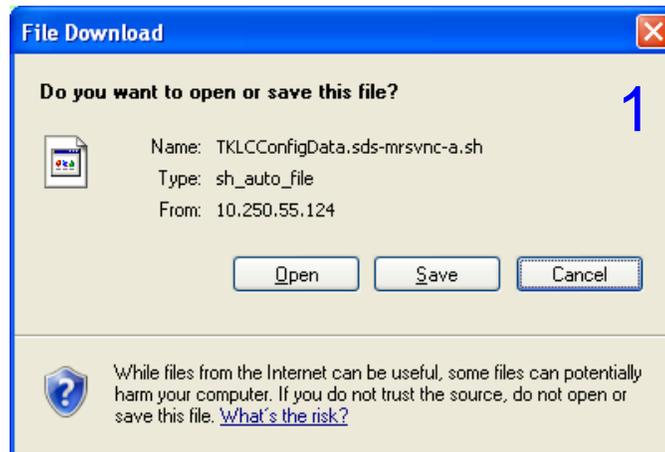


### SDS Server A:

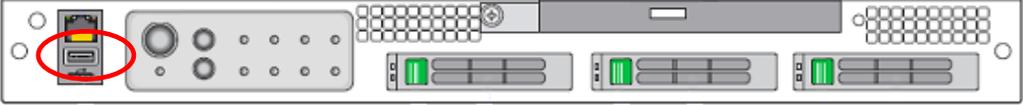
1) Click the “Save” dialogue button.

2) Save the SDS Server configuration file to a USB flash drive.

3) Click the “Close” dialogue button



## Procedure 2.4 Applying the SDS Server Configuration File

<p>33.</p> <input type="checkbox"/>	<p><b>SDS Server A or B:</b></p> <p>Access the server console.</p>	<ul style="list-style-type: none"> <li>Connect to the <b>SDS Server A or B</b> console using one of the access methods described in <b>Section 2.3</b>.</li> </ul>
<p>34.</p> <input type="checkbox"/>	<p><b>SDS Server A or B:</b></p> <p>1) Access the command prompt.</p> <p>2) Log into the server as the “root” user.</p>	<pre>CentOS release 5.6 (Final) Kernel 2.6.18-238.19.1.el5prere15.0.0_72.22.0 on an x86_64  hostname1260476099 login: root Password: &lt;root_password&gt;</pre>
<p>35.</p> <input type="checkbox"/>	<p><b>SDS Server A or B:</b></p> <p>Output similar to that shown on the right will appear as the server presents the command prompt.</p>	<pre>*** TRUNCATED OUTPUT *** VPATH=/opt/TKLCcomcol/runcm5.16:/opt/TKLCcomcol/cm5.16 PRODPATH= RELEASE=5.16 RUNID=00 VPATH=/var/TKLC/rundb:/usr/TKLC/appworks:/usr/TKLC/awpcommon:/usr/TKLC/co magent-gui:/usr/TKLC/comagent:/usr/TKLC/sds PRODPATH=/opt/comcol/prod RUNID=00 [root@hostname1260476099 ~]#</pre>
<p>36.</p> <input type="checkbox"/>	<p><b>SDS Server A or B:</b></p> <p>Insert the USB flash drive containing the server configuration file into the USB port on the front panel of <b>SDS Server</b>.</p>	 <p><b>Figure 4 - HP DL360 Front Panel: USB Port</b></p>
<p>37.</p> <input type="checkbox"/>	<p><b>SDS Server A or B:</b></p> <p>Output similar to that shown on the right will appear as the USB flash drive is inserted into the <b>SDS Server</b> front USB port.</p> <p>Press the <b>&lt;ENTER&gt;</b> key to return to the command prompt.</p>	<pre>[root@hostname1260476099 ~]# sd 3:0:0:0: [sdb] Assuming drive cache: write through sd 3:0:0:0: [sdb] Assuming drive cache: write through &lt;ENTER&gt;  [root@hostname1260476099 ~]#</pre>
<p>38.</p> <input type="checkbox"/>	<p><b>SDS Server A or B:</b></p> <p>Verify that the USB flash drive's partition has been mounted by the OS: Search <b>df</b> for the device named in the previous step's output.</p>	<pre>[root@hostname1260476099 ~]# df  grep sdb /dev/sdb1          2003076            8  2003068   1% /media/sdb1 [root@hostname1260476099 ~]#</pre>

## Procedure 2.4 Applying the SDS Server Configuration File

<p>39.</p> <input type="checkbox"/>	<p><b>SDS Server A or B:</b></p> <p>Copy the configuration file to the SDS server</p> <p><b>NOTE:</b> <i>This step can be skipped for SDS Server A because the file should already exist.</i></p> <p><b>NOTE:</b> <i>If Appendix C was used to create this interface, un-configure the interface before copying this file.</i></p>	<pre>[root@hostname1260476099 ~]# cp -p /media/sdb1/TKLCConfigData.sds-mrsvnc-a.sh /var/TKLC/db/filemgmt/.</pre> <pre>[root@hostname1260476099 ~]#</pre>
<p>40.</p> <input type="checkbox"/>	<p><b>SDS Server A or B:</b></p> <p><b>NOTE:</b> <i>If Appendix C was used to create this interface, un-configure the interface.</i></p>	<pre>[root@hostname1260476099 ~]# netAdm delete --device=eth02</pre> <pre>Interface eth02 removed</pre> <pre>[root@hostname1260476099 ~]#</pre>
<p>41.</p> <input type="checkbox"/>	<p><b>SDS Server A or B:</b></p> <p>Copy the <b>server</b> configuration file to the “<b>/var/tmp</b>” directory on the server, making sure to rename the file by omitting the server hostname from the file name.</p> <p><b>NOTE:</b> <i>The server will poll the <b>/var/tmp</b> directory for the presence of the configuration file and automatically execute it when found.</i></p>	<p><b>Example:</b></p> <p>TKLCConfigData&lt;.server_hostname&gt;.sh → will translate to →TKLCConfigData.sh</p> <pre>[root@hostname1260476099 ~]# cp -p /var/TKLC/db/filemgmt/TKLCConfigData.sds-mrsvnc-a.sh /var/tmp/TKLCConfigData.sh</pre> <pre>[root@hostname1260476099 ~]#</pre>

## Procedure 2.4 Applying the SDS Server Configuration File

<p>42.</p> <input type="checkbox"/>	<p><b>SDS Server A or B:</b></p> <p>After the script completes, a broadcast message will be sent to the terminal.</p> <p><b>NOTE:</b> <i>The user should be aware that the time to complete this step varies by server and may take from 3-20 minutes to complete.</i></p>	<p><b>*** NO OUTPUT FOR ≈ 3-20 MINUTES ***</b></p> <pre>Broadcast message from root (Thu Dec 1 09:41:24 2011):  Server configuration completed successfully! See /var/TKLC/appw/logs/Process/install.log for details.  Please remove the USB flash drive if connected and reboot the server.</pre>
<p>43.</p> <input type="checkbox"/>	<p><b>SDS Server A or B:</b></p> <p>Remove the USB flash drive from the USB port on the front panel of the server.</p> <p><b>CAUTION:</b> <i>It is important that the USB flash drive be removed from the server before continuing on to the next step.</i></p>	 <p>Figure 4 - HP DL360 Front Panel: USB Port</p>
<p>44.</p> <input type="checkbox"/>	<p><b>SDS Server A or B:</b></p> <p>Ignore the output shown and press the <b>&lt;ENTER&gt;</b> key to return to the command prompt.</p>	<pre>Broadcast message from root (Thu Dec 1 09:41:24 2011):  Server configuration completed successfully! See /var/TKLC/appw/logs/Process/install.log for details.  Please remove the USB flash drive if connected and reboot the server. &lt;ENTER&gt;  [root@hostname1260476099 ~]#</pre>
<p>45.</p> <input type="checkbox"/>	<p><b>SDS Server A or B:</b></p> <p>Configure the time zone.</p>	<pre>[root@hostname1260476099 ~]# set_ini_tz.pl &lt;time zone&gt;</pre> <p><b>Note:</b> The following command example uses Etc/UTC time zone. Replace, as appropriate, with the time zone you have selected for this installation. See Appendix H for a list of valid time zones.</p> <pre>[root@hostname1260476099 ~]# set_ini_tz.pl "Etc/UTC"</pre>
<p>46.</p> <input type="checkbox"/>	<p><b>SDS Server A or B:</b></p> <p>Initiate a reboot of the <b>SDS Server</b>.</p>	<pre>[root@hostname1260476099 ~]# init 6</pre>

## Procedure 2.4 Applying the SDS Server Configuration File

<p>47.</p> <input type="checkbox"/>	<p><b>SDS Server A or B:</b></p> <p>Wait ~9 minutes</p> <p>Output similar to that shown on the right may be observed as the server initiates a reboot.</p>	<pre>[root@hostname1322679281 ~]# init 6 [root@hostname1322679281 ~]# bonding: bond0: Removing slave eth02 bonding: bond0: Warning: the permanent Hwaddr of eth02 - 98:4B:E1:6F:74:56 - is still in use by bond0. Set the Hwaddr of eth02 to a different address to avoid c onflicts. bonding: bond0: releasing active interface eth02 bonding: bond0: making interface eth12 the new active one. bonding: bond0: Removing slave eth12 bonding: bond0: releasing active interface eth12 e1000e 0000:07:00.0: eth12: changing MTU from 1500 to 1500 bonding: bond1: Removing slave eth01  *** TRUNCATED OUTPUT ***  Initializing USB Mass Storage driver... usbcore: registered new driver usb-storage USB Mass Storage support registered. device-mapper: uevent: version 1.0.3 device-mapper: ioctl: 4.11.5-ioctl (2007-12-12) initialised: dm-devel@redhat.com device-mapper: dm-raid45: initialized 0.25941 kjournald starting. Commit interval 5 seconds EXT3-fs: mounted filesystem with ordered data mode. SELinux: Disabled at runtime. type=1404 audit(1322751643.542:2): selinux=0 auid=4294967295 ses=4294967295</pre>
<p>48.</p> <input type="checkbox"/>	<p><b>SDS Server A or B:</b></p> <p>After the server has completed reboot...</p> <p>Verify that the server console returns to a login prompt.</p>	<pre>CentOS release 5.6 (Final) Kernel 2.6.18-238.19.1.el5prere15.0.0_72.22.0 on an x86_64  sds-mrsvnc-a login: root Password: &lt;root_password&gt;</pre>
<p>49.</p> <input type="checkbox"/>	<p><b>SDS Server A or B:</b></p> <p>Output similar to that shown on the right will appear as the server access the command prompt.</p>	<pre>*** TRUNCATED OUTPUT ***  VPATH=/opt/TKLCcomcol/runcm5.16:/opt/TKLCcomcol/cm5.16 PRODPATH= RELEASE=5.16 RUNID=00  VPATH=/var/TKLC/rundb:/usr/TKLC/appworks:/usr/TKLC/awpcommon:/usr/TKLC/co magent-gui:/usr/TKLC/comagent:/usr/TKLC/sds PRODPATH=/opt/comcol/prod RUNID=00  [root@sds-mrsvnc-a ~]#</pre>

## Procedure 2.4 Applying the SDS Server Configuration File

<p>50.</p> <input type="checkbox"/>	<p><b>SDS Server A or B:</b></p> <p>1) Verify that the <b>IMI IP address</b> input in <b>Step 25</b> has been applied to <b>“bond0.4”</b>.</p> <p>2) Verify that the <b>XMI IP address</b> input in <b>Step 25</b> has been applied to <b>“bond1”</b>.</p> <p><b>NOTE:</b> <i>The server’s XMI &amp; IMI addresses can be verified by reviewing the server configuration through the SDS GUI.</i></p> <p><i>i.e.</i></p> <p><b>Main Menu</b>  → Configuration  → Servers</p> <p><i>Scroll to line entry containing the server’s hostname.</i></p>	<pre>[root@sds-mrsvnc-a ~]# ifconfig  grep in  grep -v inet6 bond0      Link encap:Ethernet  HWaddr 98:4B:E1:6F:74:68 bond0.4    Link encap:Ethernet  HWaddr 98:4B:E1:6F:74:68             inet addr:169.254.100.11  Bcast:169.254.100.255  Mask:255.255.255.0 bond1      Link encap:Ethernet  HWaddr 98:4B:E1:6F:74:6A             inet addr:10.250.55.124  Bcast:10.250.55.255  Mask:255.255.255.0 eth01      Link encap:Ethernet  HWaddr 98:4B:E1:6F:74:68 eth02      Link encap:Ethernet  HWaddr 98:4B:E1:6F:74:6A eth11      Link encap:Ethernet  HWaddr 98:4B:E1:6F:74:68 eth12      Link encap:Ethernet  HWaddr 98:4B:E1:6F:74:6A lo         Link encap:Local Loopback             inet addr:127.0.0.1  Mask:255.0.0.0  [root@sds-mrsvnc-a ~]#</pre>
<p>51.</p> <input type="checkbox"/>	<p><b>SDS Server A or B:</b></p> <p>Use the <b>“ntpq”</b> command to verify that the server has connectivity to the assigned Primary and Secondary NTP server(s).</p>	<pre>[root@sds-mrsvnc-a ~]# ntpq -np       remote           refid      st t when poll reach   delay   offset  jitter ===== +10.250.32.10      192.5.41.209    2 u   56   64  377    0.141  -2729.8  230.741 *10.250.32.51      192.5.41.209    2 u   46   64  377    0.190  -2401.9  232.170  [root@sds-mrsvnc-a ~]#</pre>



**IF CONNECTIVITY TO THE NTP SERVER(S) CANNOT BE ESTABLISHED, STOP AND EXECUTE THE FOLLOWING STEPS:**

- Have the customer IT group provide a network path from the OAM server IP to the assigned NTP IP addresses.

**ONCE NETWORK CONNECTIVITY IS ESTABLISHED TO THE ASSIGNED NTP IP ADDRESSES, THEN RESTART THIS PROCEDURE BEGINNING WITH STEP 51**

## Procedure 2.4 Applying the SDS Server Configuration File

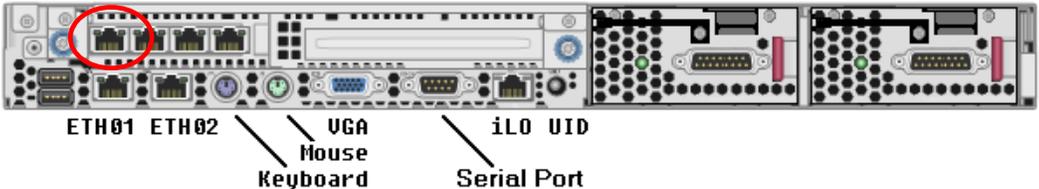
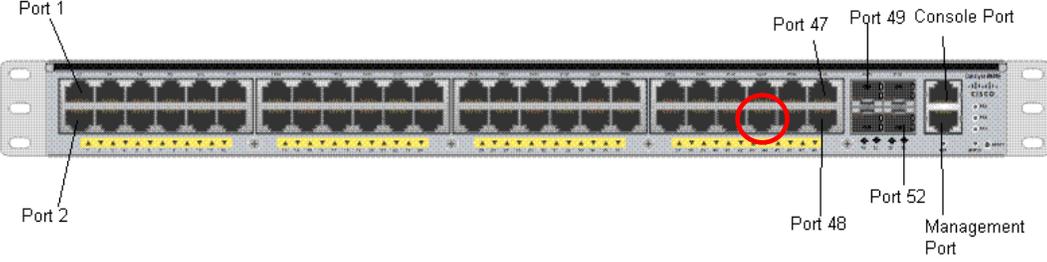
<p>52.</p> <input type="checkbox"/>	<p><b>SDS Server A or B:</b></p> <p>Execute a “syscheck” to verify the current health of the server.</p>	<pre>[root@sds-mrsvnc-a ~]# syscheck Running modules in class system...                                 OK  Running modules in class proc...                                 OK  Running modules in class net...                                 OK  Running modules in class hardware...                                 OK  Running modules in class disk...                                 OK  LOG LOCATION: /var/TKLC/log/syscheck/fail_log [root@sds-mrsvnc-a ~]#</pre>
<p>53.</p> <input type="checkbox"/>	<p><b>SDS Server A or B:</b></p> <p>Exit from the command line to return the server console to the login prompt.</p>	<pre>[root@sds-mrsvnc-a ~]# exit  CentOS release 5.6 (Final) Kernel 2.6.18-238.19.1.el5prere15.0.0_72.22.0 on an x86_64  sds-mrsvnc-a login:</pre>
<p>54.</p> <input type="checkbox"/>	<ul style="list-style-type: none"> <li>• <b>Configure SDS Server B by repeating steps 15 - 53 of this procedure.</b></li> </ul>	



**IF 4948E-F SWITCH CONFIGURATION HAS NOT BEEN COMPLETED PRIOR TO THIS STEP, STOP AND EXECUTE THE FOLLOWING STEPS:**

- 1) **APPENDIX E.1**
- 2) **APPENDIX E.2** (*Appendix E.2 references Appendix E.3 where applicable*).
- 3) **APPENDIX E.4**

## Procedure 2.4 Applying the SDS Server Configuration File

<p>55.</p> <input type="checkbox"/>	<p><b>SDS Server A:</b></p> <p>From <b>SDS Server A</b> “ping” the IP address configured for “bond0.4” (IML) on <b>SDS Server B</b>.</p> <p><b>NOTE:</b> Use the <b>&lt;CTRL-C&gt;</b> key combination to terminate the “ping” process after a few seconds.</p>	<pre>[root@sds-mrsvnc-a ~]# ping 169.254.100.12 PING 169.254.100.11 (169.254.1.12) 56(84) bytes of data. 64 bytes from 169.254.100.12: icmp_seq=1 ttl=64 time=0.018 ms 64 bytes from 169.254.100.12: icmp_seq=2 ttl=64 time=0.019 ms 64 bytes from 169.254.100.12: icmp_seq=3 ttl=64 time=0.014 ms 64 bytes from 169.254.100.12: icmp_seq=4 ttl=64 time=0.018 ms 64 bytes from 169.254.100.12: icmp_seq=5 ttl=64 time=0.009 ms 64 bytes from 169.254.100.12: icmp_seq=6 ttl=64 time=0.018 ms&lt;CTRL-C&gt;  --- 169.254.100.12 ping statistics --- 6 packets transmitted, 6 received, 0% packet loss, time 4997ms rtt min/avg/max/mdev = 0.009/0.016/0.019/0.003 ms [root@sds-mrsvnc-a ~]#</pre>
<p>56.</p> <input type="checkbox"/>	<p><b>SDS Server A &amp; B:</b></p> <p>Use “ping” to verify that the “bond1” device now has connectivity to the <b>XMI Gateway</b> address.</p> <p><b>NOTE:</b> Use the <b>&lt;CTRL-C&gt;</b> key combination to terminate the “ping” process after a few seconds.</p>	<pre>[root@sds-mrsvnc-a ~]# ping 10.250.55.124 PING 10.250.55.124 (10.250.55.124) 56(84) bytes of data. 64 bytes from 10.250.55.124: icmp_seq=1 ttl=64 time=0.019 ms 64 bytes from 10.250.55.124: icmp_seq=2 ttl=64 time=0.007 ms 64 bytes from 10.250.55.124: icmp_seq=3 ttl=64 time=0.009 ms 64 bytes from 10.250.55.124: icmp_seq=4 ttl=64 time=0.008 ms 64 bytes from 10.250.55.124: icmp_seq=5 ttl=64 time=0.007 ms 64 bytes from 10.250.55.124: icmp_seq=6 ttl=64 time=0.008 ms&lt;CTRL-C&gt;  --- 10.250.55.124 ping statistics --- 6 packets transmitted, 6 received, 0% packet loss, time 4995ms rtt min/avg/max/mdev = 0.007/0.009/0.019/0.005 ms [root@sds-mrsvnc-a ~]#</pre>
<p>57.</p> <input type="checkbox"/>	<p><b>SDS Server A:</b></p> <p>Disconnect the laptop from the <b>Server A, eth14</b> Ethernet port.</p>	<p style="text-align: center;"><b>HP DL360, DC (Rear Panel)</b></p>  <p style="text-align: center;">HP DL360 Rear Panel</p>
<p>58.</p> <input type="checkbox"/>	<p><b>switch1A:</b></p> <p>Connect the laptop to <b>Port 44</b> of <b>switch1A</b> (bottom switch).</p>	 <p style="text-align: center;">Cisco 4948E-F Switch Ports</p>

## Procedure 2.4 Applying the SDS Server Configuration File

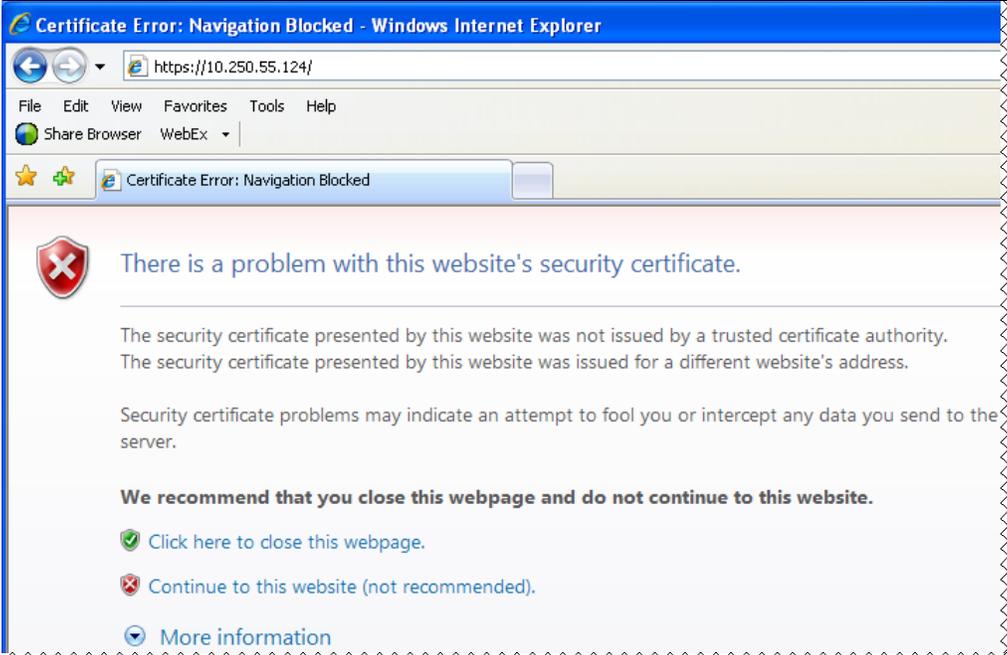
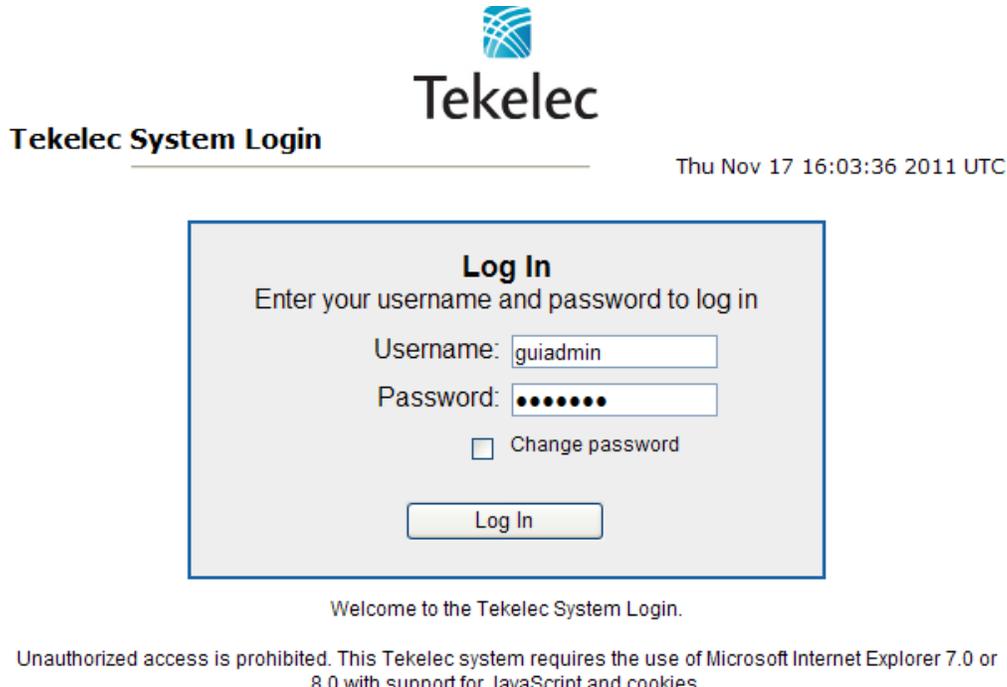
<p>59.</p> <input type="checkbox"/>	<p><b>Laptop:</b></p> <p>Set a static IP address and netmask within the Management VLAN for the laptop's network interface card (<b>169.254.1.100</b> is suggested).</p>	<ul style="list-style-type: none"> <li>Reference <b>Appendix D. Steps 5-6</b> if assistance is needed in modifying the laptop's network configuration.</li> </ul>
<p>60.</p> <input type="checkbox"/>	<p><b>SDS Server A:</b></p> <p>Using <b>SSH</b>, login to <b>Server A</b> using its Management VLAN IP address <b>169.254.1.11</b></p>	<pre>CentOS release 5.6 (Final) Kernel 2.6.18-238.19.1.el5prere15.0.0_72.22.0 on an x86_64  sds-mrsvnc-a login: root Password: &lt;root_password&gt;</pre>
<p>61.</p> <input type="checkbox"/>	<p><b>SDS Server A:</b></p> <p>Output similar to that shown on the right will appear as the server access the command prompt.</p>	<pre>*** TRUNCATED OUTPUT ***  VPATH=/opt/TKLCcomcol/runcm5.16:/opt/TKLCcomcol/cm5.16 PRODPATH= RELEASE=5.16 RUNID=00  VPATH=/var/TKLC/rundb:/usr/TKLC/appworks:/usr/TKLC/awpcommon:/usr/TKLC/comagent-gui:/usr/TKLC/comagent:/usr/TKLC/sds PRODPATH=/opt/comcol/prod RUNID=00  [root@sds-mrsvnc-a ~]#</pre>
<p>62.</p> <input type="checkbox"/>	<p><b>SDS Server A:</b></p> <p>Using the “<b>netAdm</b>” utility, delete the <b>eth14</b> interface.</p>	<pre>[root@sds-mrsvnc-a ~]# netAdm delete --device=eth14 Interface eth14 removed [root@sds-mrsvnc-a ~]#</pre>
<p>63.</p> <input type="checkbox"/>	<p><b>SDS Server A:</b></p> <p>Using the “<b>netAdm</b>” utility, re-add the <b>eth14</b> interface.</p>	<pre>[root@sds-mrsvnc-a ~]# netAdm add --device=eth14 Interface eth14 added [root@sds-mrsvnc-a ~]#</pre>

**THIS PROCEDURE HAS BEEN COMPLETED**

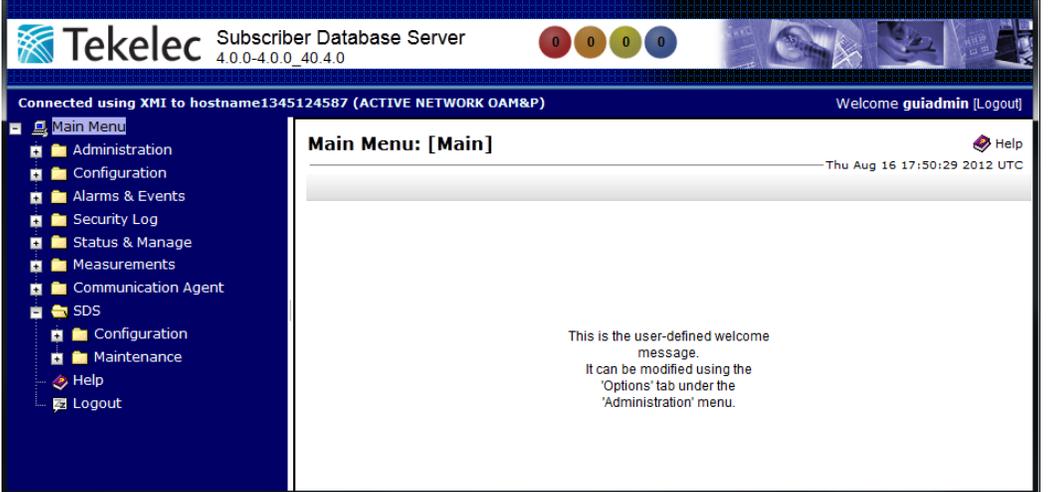
## 5.2 OAM Pairing (1<sup>st</sup> SDS site only)

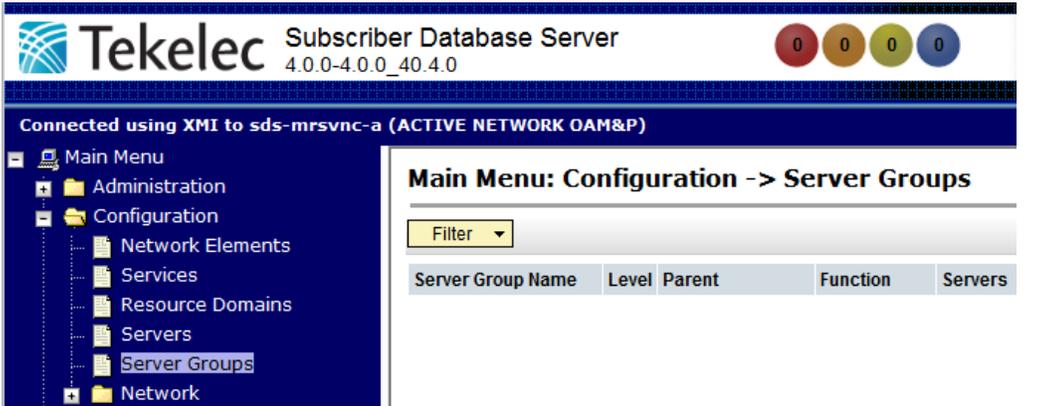
The user should be aware that during the OAM Pairing procedure, various errors may be seen at different stages of the procedure. During the execution of a step, the user is directed to ignore errors related to values other than the ones referenced by that step.

### Procedure 3: Pairing the OAM Servers (1<sup>st</sup> SDS site only)

Step	Procedure	Result
<p>1.</p> <input type="checkbox"/>	<p><b>SDS Server A:</b></p> <p>Launch an approved web browser and connect to the XMI IP address assigned to <b>SDS Server A</b> using "https://"</p>	
<p>2.</p> <input type="checkbox"/>	<p><b>SDS Server A:</b></p> <p>The user should be presented the login screen shown on the right.</p> <p>Login to the GUI using the default user and password.</p>	

**Procedure 3: Pairing the OAM Servers (1<sup>st</sup> SDS site only)**

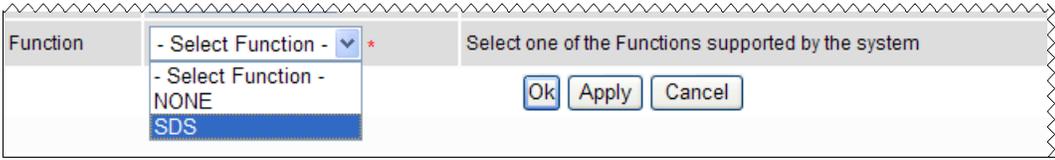
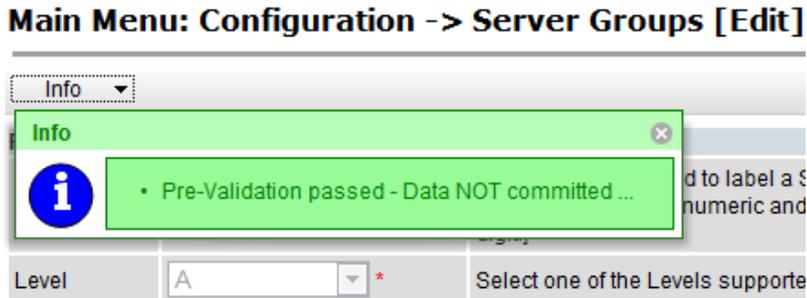
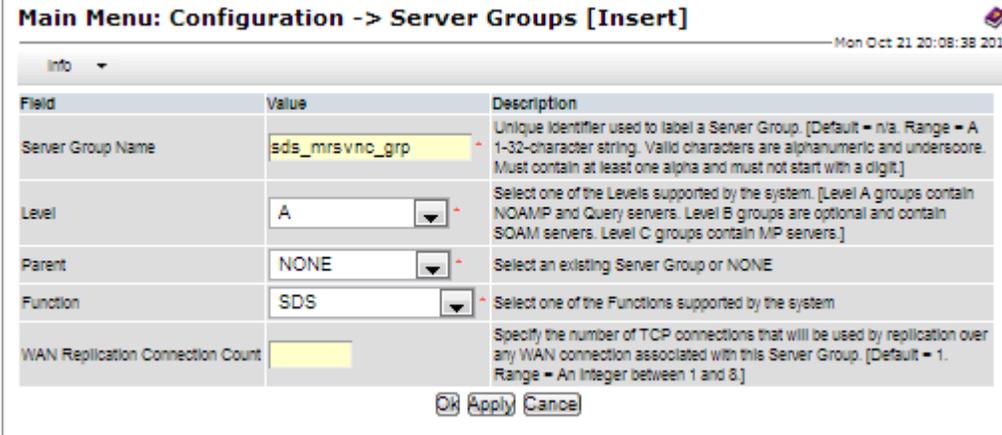
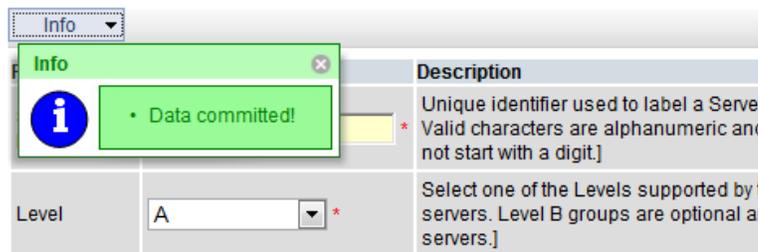
Step	Procedure	Result
<p>3.</p> <input type="checkbox"/>	<p><b>SDS Server A:</b></p> <p>The user should be presented the SDS Main Menu as shown on the right.</p>	

<b>Procedure 3.1 Configuring the SDS Server Group</b>		
<p>4.</p> <input type="checkbox"/>	<p><b>SDS Server A:</b></p> <p>Select...</p> <p><b>Main Menu</b></p> <p>→ Configuration</p> <p>    → <i>Server Groups</i></p> <p>...as shown on the right.</p>	

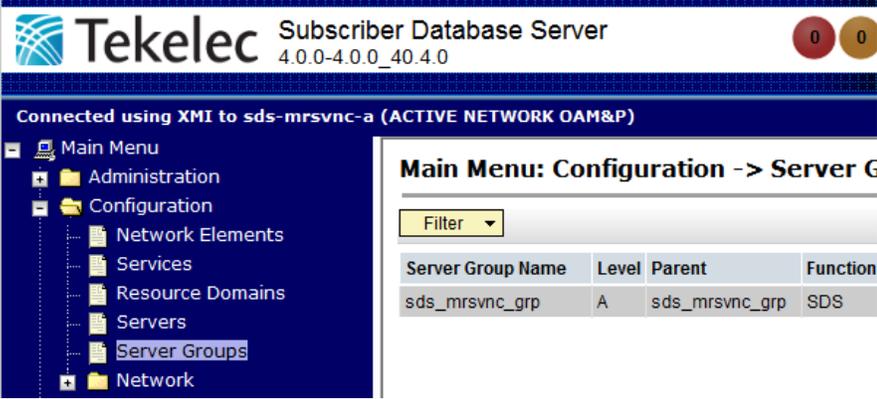
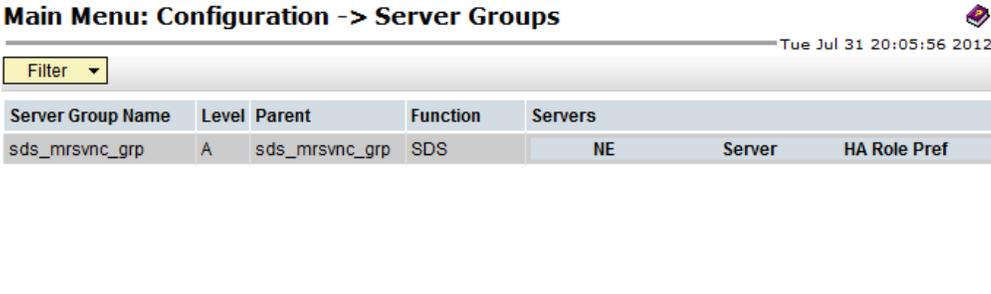
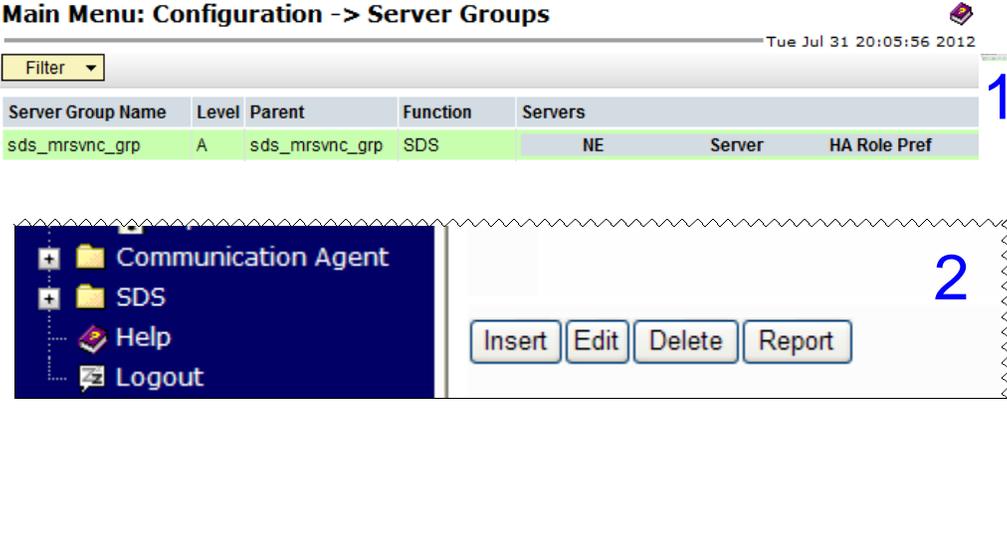
### Procedure 3.1 Configuring the SDS Server Group

<p>5. <input type="checkbox"/></p> <p><b>SDS Server A:</b></p> <p>1) The user will be presented with the “<b>Server Groups</b>” configuration screen as shown on the right.</p> <p>2) Select the “<b>Insert</b>” dialogue button from the bottom left corner of the screen.</p> <p><b>NOTE:</b> The user may need to use the vertical scroll-bar in order to make the “<b>Insert</b>” dialogue button visible.</p>	<p><b>Main Menu: Configuration -&gt; Server Groups</b></p> <p>Tue Jul 31 19:59:42 2012 L</p> <p>Filter</p> <table border="1"> <thead> <tr> <th>Server Group Name</th> <th>Level</th> <th>Parent</th> <th>Function</th> <th>Servers</th> </tr> </thead> <tbody> <tr> <td colspan="5" style="text-align: center;"> </td> </tr> </tbody> </table>	Server Group Name	Level	Parent	Function	Servers													
Server Group Name	Level	Parent	Function	Servers															
<p>6. <input type="checkbox"/></p> <p><b>SDS Server A:</b></p> <p>The user will be presented with the “<b>Server Groups [Insert]</b>” screen as shown on the right.</p> <p><b>NOTE:</b> Leave the “<b>WAN Replication Connection Count</b>” blank (it will default to 1).</p>	<p><b>Main Menu: Configuration -&gt; Server Groups [Insert]</b></p> <p>Mon Oct 21 20:08:38 2013</p> <table border="1"> <thead> <tr> <th>Field</th> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Server Group Name</td> <td></td> <td>Unique Identifier used to label a Server Group. [Default = n/a. Range = A 1-32-character string. Valid characters are alphanumeric and underscore. Must contain at least one alpha and must not start with a digit.]</td> </tr> <tr> <td>Level</td> <td>- Select Level -</td> <td>Select one of the Levels supported by the system. [Level A groups contain NOAMP and Query servers. Level B groups are optional and contain SOAM servers. Level C groups contain MP servers.]</td> </tr> <tr> <td>Parent</td> <td>- Select Parent -</td> <td>Select an existing Server Group or NONE</td> </tr> <tr> <td>Function</td> <td>- Select Function -</td> <td>Select one of the Functions supported by the system</td> </tr> <tr> <td>WAN Replication Connection Count</td> <td></td> <td>Specify the number of TCP connections that will be used by replication over any WAN connection associated with this Server Group. [Default = 1. Range = An Integer between 1 and 8.]</td> </tr> </tbody> </table> <p>OK Apply Cancel</p>	Field	Value	Description	Server Group Name		Unique Identifier used to label a Server Group. [Default = n/a. Range = A 1-32-character string. Valid characters are alphanumeric and underscore. Must contain at least one alpha and must not start with a digit.]	Level	- Select Level -	Select one of the Levels supported by the system. [Level A groups contain NOAMP and Query servers. Level B groups are optional and contain SOAM servers. Level C groups contain MP servers.]	Parent	- Select Parent -	Select an existing Server Group or NONE	Function	- Select Function -	Select one of the Functions supported by the system	WAN Replication Connection Count		Specify the number of TCP connections that will be used by replication over any WAN connection associated with this Server Group. [Default = 1. Range = An Integer between 1 and 8.]
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<p>7. <input type="checkbox"/></p> <p><b>SDS Server A:</b></p> <p>Input the <b>Server Group Name</b>.</p>	<table border="1"> <tbody> <tr> <td>Server Group Name</td> <td>sds_mrsvnc_grp *</td> <td>Unique identifier used to label a Server Group string. Valid characters are alphanumeric and and must not start with a digit.]</td> </tr> </tbody> </table>	Server Group Name	sds_mrsvnc_grp *	Unique identifier used to label a Server Group string. Valid characters are alphanumeric and and must not start with a digit.]															
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<p>8. <input type="checkbox"/></p> <p><b>SDS Server A:</b></p> <p>Select “<b>A</b>” on the “<b>Level</b>” pull-down menu.</p>	<table border="1"> <tbody> <tr> <td>Level</td> <td>- Select Level - *</td> <td>Select one of the Levels supported by the system. Query servers. Level B groups are optional and contain MP servers.]</td> </tr> <tr> <td>Parent</td> <td>A - Select Parent - *</td> <td>Select an existing Server Group or NONE</td> </tr> </tbody> </table>	Level	- Select Level - *	Select one of the Levels supported by the system. Query servers. Level B groups are optional and contain MP servers.]	Parent	A - Select Parent - *	Select an existing Server Group or NONE												
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<p>9. <input type="checkbox"/></p> <p><b>SDS Server A:</b></p> <p>Select “<b>None</b>” on the “<b>Parent</b>” pull-down menu.</p>	<table border="1"> <tbody> <tr> <td>Parent</td> <td>- Select Parent- *</td> <td>Select an existing Server Group or NONE</td> </tr> <tr> <td>Function</td> <td>- Select Parent- NONE *</td> <td>Select one of the Functions supported by</td> </tr> </tbody> </table>	Parent	- Select Parent- *	Select an existing Server Group or NONE	Function	- Select Parent- NONE *	Select one of the Functions supported by												
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## Procedure 3.1 Configuring the SDS Server Group

<p><b>10.</b></p> <input style="width: 20px; height: 20px;" type="checkbox"/>	<p><b>SDS Server A:</b></p> <p>Select “<b>SDS</b>” on the “<b>Function</b>” pull-down menu.</p>	
<p><b>11.</b></p> <input style="width: 20px; height: 20px;" type="checkbox"/>	<p><b>SDS Server A:</b></p> <p>1) The user should be presented with a banner information message stating “<b>Pre-Validation passed</b>”.</p> <p>2) Select the “<b>Apply</b>” dialogue button.</p>	<div style="display: flex; justify-content: space-between;"> <div style="width: 80%;">  </div> <div style="width: 15%; text-align: right; font-size: 2em; color: blue;">1</div> </div> <div style="margin-top: 10px;">  </div> <div style="text-align: right; font-size: 2em; color: blue; margin-top: 10px;">2</div>
<p><b>12.</b></p> <input style="width: 20px; height: 20px;" type="checkbox"/>	<p><b>SDS Server A:</b></p> <p>The user should be presented with a banner information message stating “<b>Data committed</b>”.</p>	

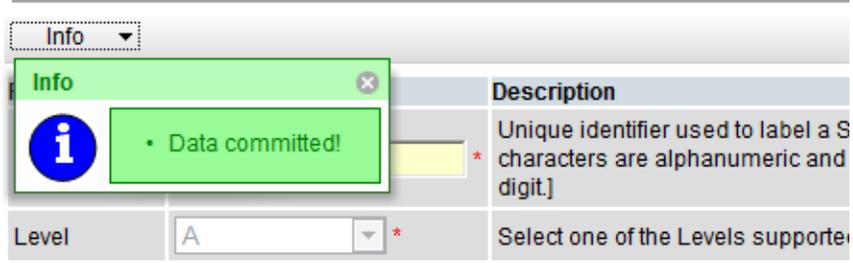
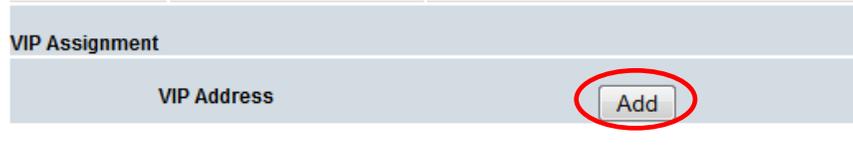
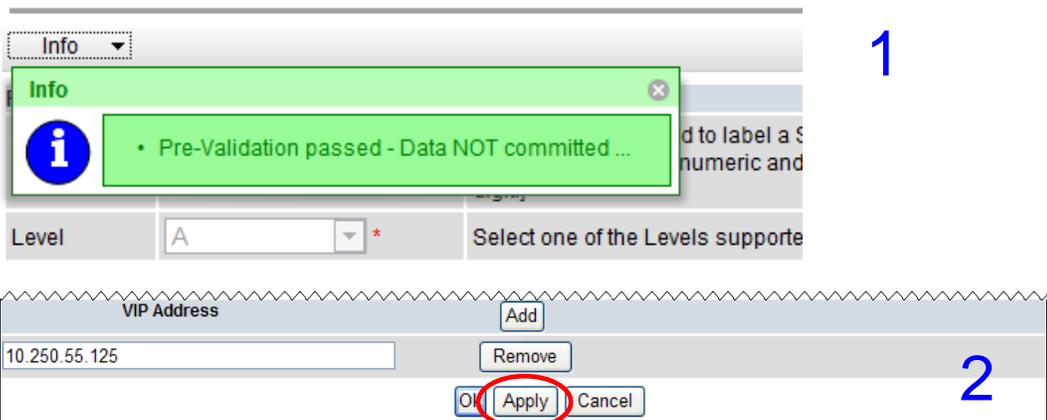
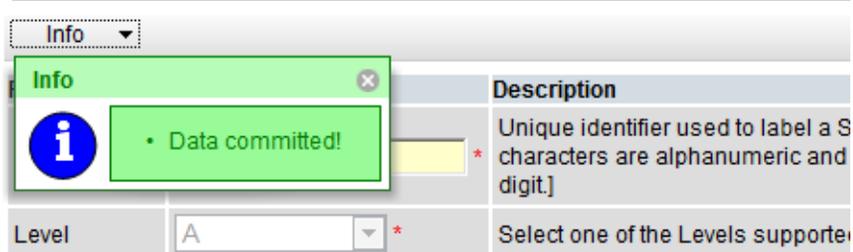
## Procedure 3.2 Adding a Server to an OAM Server Group

<p>13.</p> <input type="checkbox"/>	<p><b>SDS Server A:</b></p> <p>Select...</p> <p><b>Main Menu</b>          → Configuration          → <b>Server Groups</b></p> <p>...as shown on the right.</p>	 <p>Tekelec Subscriber Database Server 4.0.0-4.0.0_40.4.0</p> <p>Connected using XMI to sds-mrvnc-a (ACTIVE NETWORK OAM&amp;P)</p> <p><b>Main Menu: Configuration -&gt; Server G</b></p> <p>Filter</p> <table border="1"> <thead> <tr> <th>Server Group Name</th> <th>Level</th> <th>Parent</th> <th>Function</th> </tr> </thead> <tbody> <tr> <td>sds_mrvnc_grp</td> <td>A</td> <td>sds_mrvnc_grp</td> <td>SDS</td> </tr> </tbody> </table>	Server Group Name	Level	Parent	Function	sds_mrvnc_grp	A	sds_mrvnc_grp	SDS		
Server Group Name	Level	Parent	Function									
sds_mrvnc_grp	A	sds_mrvnc_grp	SDS									
<p>14.</p> <input type="checkbox"/>	<p><b>SDS Server A:</b></p> <p>The <b>Server Group</b> entry added in <b>Steps 6 - 12</b> should now appear on the <b>“Server Groups”</b> configuration screen as shown on the right.</p>	 <p><b>Main Menu: Configuration -&gt; Server Groups</b></p> <p>Tue Jul 31 20:05:56 2012</p> <p>Filter</p> <table border="1"> <thead> <tr> <th>Server Group Name</th> <th>Level</th> <th>Parent</th> <th>Function</th> <th>Servers</th> </tr> </thead> <tbody> <tr> <td>sds_mrvnc_grp</td> <td>A</td> <td>sds_mrvnc_grp</td> <td>SDS</td> <td>NE Server HA Role Pref</td> </tr> </tbody> </table>	Server Group Name	Level	Parent	Function	Servers	sds_mrvnc_grp	A	sds_mrvnc_grp	SDS	NE Server HA Role Pref
Server Group Name	Level	Parent	Function	Servers								
sds_mrvnc_grp	A	sds_mrvnc_grp	SDS	NE Server HA Role Pref								
<p>15.</p> <input type="checkbox"/>	<p><b>SDS Server A:</b></p> <p>1) Select the <b>Server Group</b> entry added in <b>Steps 6 - 12</b>. The line entry should now be highlighted in <b>GREEN</b>.</p> <p>2) Select the <b>“Edit”</b> dialogue button from the bottom left corner of the screen.</p> <p><b>NOTE:</b> The user may need to use the vertical scroll-bar in order to make the <b>“Edit”</b> dialogue button visible.</p>	 <p><b>Main Menu: Configuration -&gt; Server Groups</b></p> <p>Tue Jul 31 20:05:56 2012</p> <p>Filter</p> <table border="1"> <thead> <tr> <th>Server Group Name</th> <th>Level</th> <th>Parent</th> <th>Function</th> <th>Servers</th> </tr> </thead> <tbody> <tr> <td>sds_mrvnc_grp</td> <td>A</td> <td>sds_mrvnc_grp</td> <td>SDS</td> <td>NE Server HA Role Pref</td> </tr> </tbody> </table> <p>1</p> <p>2</p> <p>Insert Edit Delete Report</p>	Server Group Name	Level	Parent	Function	Servers	sds_mrvnc_grp	A	sds_mrvnc_grp	SDS	NE Server HA Role Pref
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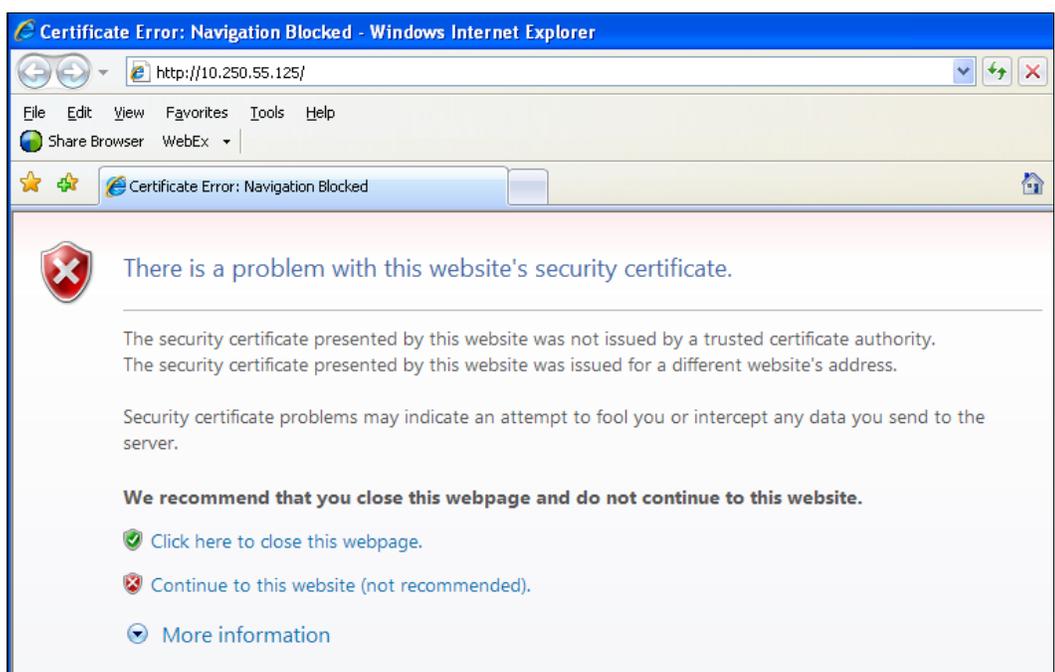
## Procedure 3.2 Adding a Server to an OAM Server Group

<p>16.</p> <p><input type="checkbox"/></p>	<p><b>SDS Server A:</b></p> <p>The user will be presented with the “<b>Server Groups [Edit]</b>” screen as shown on the right.</p>	<p><b>Main Menu: Configuration -&gt; Server Groups [Edit]</b></p> <p style="text-align: right;">Tue Jul 31 20:08:09</p> <table border="1"> <thead> <tr> <th>Field</th> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Server Group Name</td> <td>sds_mrsvnc_grp *</td> <td>Unique identifier used to label a Server Group. [Default = n/a. Range = A 1-32-character string. Valid characters are alphanumeric and underscore. Must contain at least one alpha and must not start with a digit.]</td> </tr> <tr> <td>Level</td> <td>A *</td> <td>Select one of the Levels supported by the system</td> </tr> <tr> <td>Parent</td> <td>sds_mrsvnc_grp *</td> <td>Select an existing Server Group or NONE</td> </tr> <tr> <td>Function</td> <td>SDS *</td> <td>Select one of the Functions supported by the system</td> </tr> <tr> <td>NTP Server 1</td> <td>10.250.32.10</td> <td>The IP Address of a reachable NTP server to be used for clock synchronization. Configurable for level A only. [Range = A valid IP address or blank]</td> </tr> <tr> <td>NTP Server 2</td> <td>10.250.32.51</td> <td>The IP Address of a backup NTP server (optional). Configurable for level A only. [Range = A valid IP address or blank]</td> </tr> <tr> <td colspan="3"><b>sds_mrsvnc</b></td> </tr> <tr> <td>Server</td> <td>SG Inclusion</td> <td>Preferred HA Role</td> </tr> <tr> <td>sds-mrsvnc-a</td> <td><input type="checkbox"/> Include in SG</td> <td><input type="checkbox"/> Preferred Spare</td> </tr> <tr> <td>sds-mrsvnc-b</td> <td><input type="checkbox"/> Include in SG</td> <td><input type="checkbox"/> Preferred Spare</td> </tr> <tr> <td colspan="3"><b>VIP Assignment</b></td> </tr> <tr> <td colspan="2">VIP Address</td> <td>Add</td> </tr> <tr> <td colspan="3" style="text-align: right;">Ok Apply Cancel</td> </tr> </tbody> </table>	Field	Value	Description	Server Group Name	sds_mrsvnc_grp *	Unique identifier used to label a Server Group. [Default = n/a. Range = A 1-32-character string. Valid characters are alphanumeric and underscore. Must contain at least one alpha and must not start with a digit.]	Level	A *	Select one of the Levels supported by the system	Parent	sds_mrsvnc_grp *	Select an existing Server Group or NONE	Function	SDS *	Select one of the Functions supported by the system	NTP Server 1	10.250.32.10	The IP Address of a reachable NTP server to be used for clock synchronization. Configurable for level A only. [Range = A valid IP address or blank]	NTP Server 2	10.250.32.51	The IP Address of a backup NTP server (optional). Configurable for level A only. [Range = A valid IP address or blank]	<b>sds_mrsvnc</b>			Server	SG Inclusion	Preferred HA Role	sds-mrsvnc-a	<input type="checkbox"/> Include in SG	<input type="checkbox"/> Preferred Spare	sds-mrsvnc-b	<input type="checkbox"/> Include in SG	<input type="checkbox"/> Preferred Spare	<b>VIP Assignment</b>			VIP Address		Add	Ok Apply Cancel		
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<p>17.</p> <p><input type="checkbox"/></p>	<p><b>SDS Server A:</b></p> <p>Select the “<b>A</b>” server and the “<b>B</b>” server from the list of “<b>Servers</b>” by clicking the check box next to their names.</p>	<table border="1"> <thead> <tr> <th>Server</th> <th>SG Inclusion</th> <th>Preferred HA Role</th> </tr> </thead> <tbody> <tr> <td>sds-mrsvnc-a</td> <td><input checked="" type="checkbox"/> Include in SG</td> <td><input type="checkbox"/> Preferred Spare</td> </tr> <tr> <td>sds-mrsvnc-b</td> <td><input checked="" type="checkbox"/> Include in SG</td> <td><input type="checkbox"/> Preferred Spare</td> </tr> </tbody> </table>	Server	SG Inclusion	Preferred HA Role	sds-mrsvnc-a	<input checked="" type="checkbox"/> Include in SG	<input type="checkbox"/> Preferred Spare	sds-mrsvnc-b	<input checked="" type="checkbox"/> Include in SG	<input type="checkbox"/> Preferred Spare																																	
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<p>18.</p> <p><input type="checkbox"/></p>	<p><b>SDS Server A:</b></p> <p>1) The user should be presented with a banner information message stating “<b>Pre-Validation passed</b>”.</p> <p>2) Select the “<b>Apply</b>” dialogue button.</p>	<p><b>Main Menu: Configuration -&gt; Server Groups [Edit]</b></p> <p>Info</p> <div style="border: 1px solid green; background-color: #e0ffe0; padding: 5px; margin: 10px 0;"> <p><b>Info</b></p> <p>• Pre-Validation passed - Data NOT committed ...</p> </div> <p>Level: A *</p>																																										

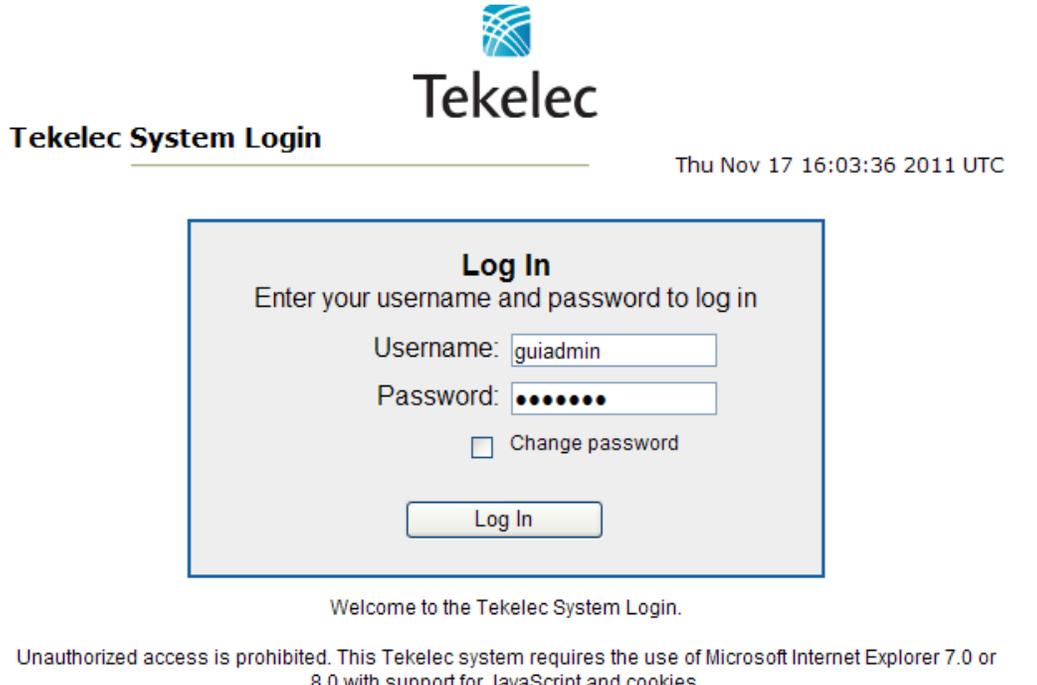
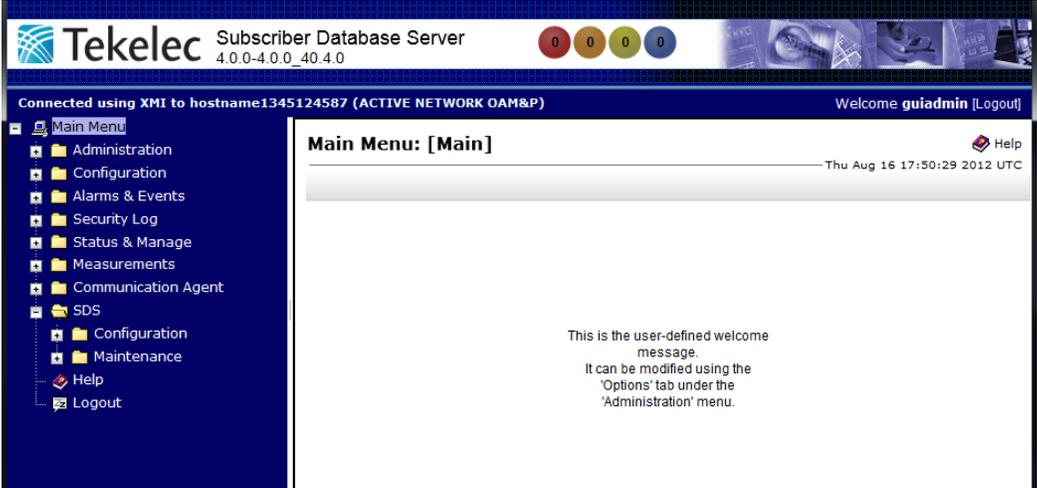
### Procedure 3.2 Adding a Server to an OAM Server Group

<p>19.</p> <input type="checkbox"/>	<p><b>SDS Server A:</b></p> <p>The user should be presented with a banner information message stating <b>“Data committed”</b>.</p>	<p><b>Main Menu: Configuration -&gt; Server Groups [Edit]</b></p> 
<p>20.</p> <input type="checkbox"/>	<p><b>SDS Server A:</b></p> <p>Click the <b>“Add”</b> dialogue button for the <b>VIP Address</b>.</p>	
<p>21.</p> <input type="checkbox"/>	<p><b>SDS Server A:</b></p> <p>Input the <b>VIP Address</b></p>	
<p>22.</p> <input type="checkbox"/>	<p><b>SDS Server A:</b></p> <p>1) The user should be presented with a banner information message stating <b>“Pre-Validation passed”</b>.</p> <p>2) Select the <b>“Apply”</b> dialogue button.</p>	<p><b>Main Menu: Configuration -&gt; Server Groups [Edit]</b></p> 
<p>23.</p> <input type="checkbox"/>	<p><b>SDS Server A:</b></p> <p>The user should be presented with a banner information message stating <b>“Data committed”</b>.</p>	<p><b>Main Menu: Configuration -&gt; Server Groups [Edit]</b></p> 

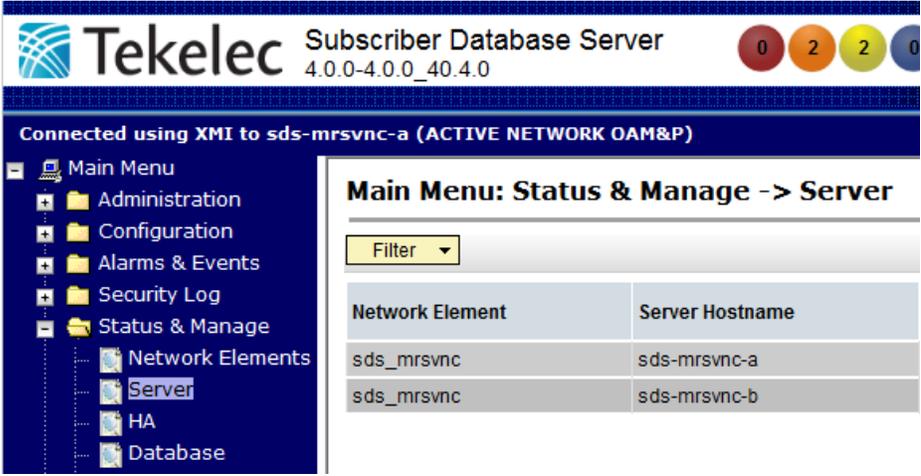
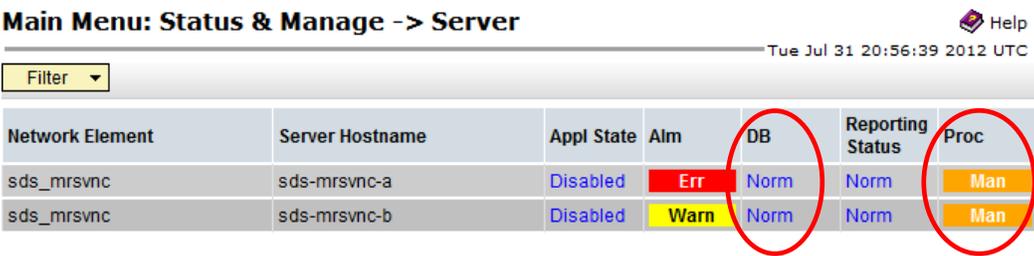
## Procedure 3.2 Adding a Server to an OAM Server Group

<p>24.</p> <input type="checkbox"/>	<p><b>SDS Server A:</b></p> <p>Click the “Logout” link on the OAM A server GUI.</p>	
<p>25.</p> <input type="checkbox"/>	<p><b>IMPORTANT:</b></p> <p>Wait at least <b>5 minutes</b> before proceeding on to the next Step.</p>	<ul style="list-style-type: none"> <li>• Now that the server(s) have been paired within a Server Group they must establish a master/slave relationship for High Availability (HA). It may take several minutes for this process to be completed.</li> <li>• Allow a minimum of <b>5 minutes</b> before continuing to the next Step.</li> </ul>
<p>26.</p> <input type="checkbox"/>	<p><b>SDS VIP:</b></p> <p>Launch an approved web browser and connect to the <b>XMI Virtual IP Address (VIP)</b> assigned in <b>STEP 21</b> to the <b>SDS Server Group</b> using “https://”.</p>	

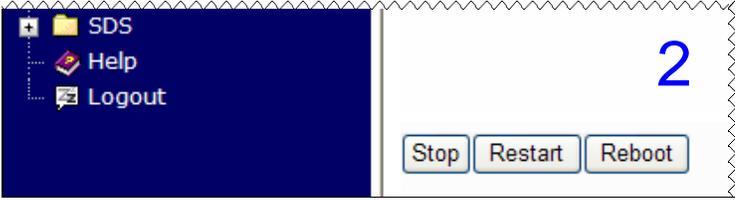
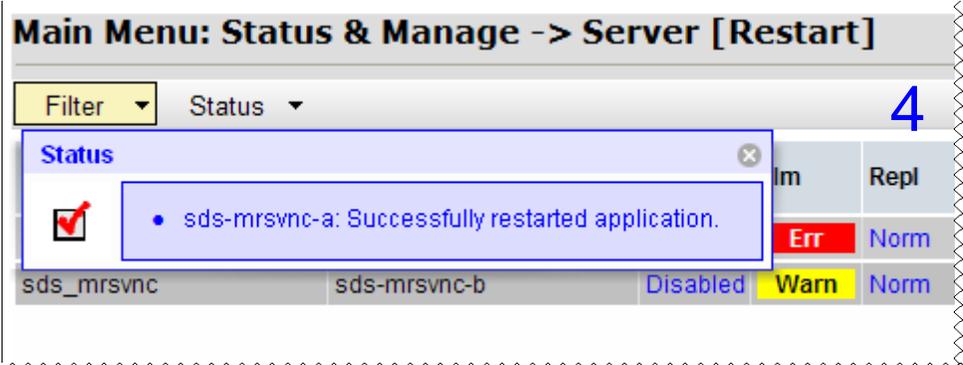
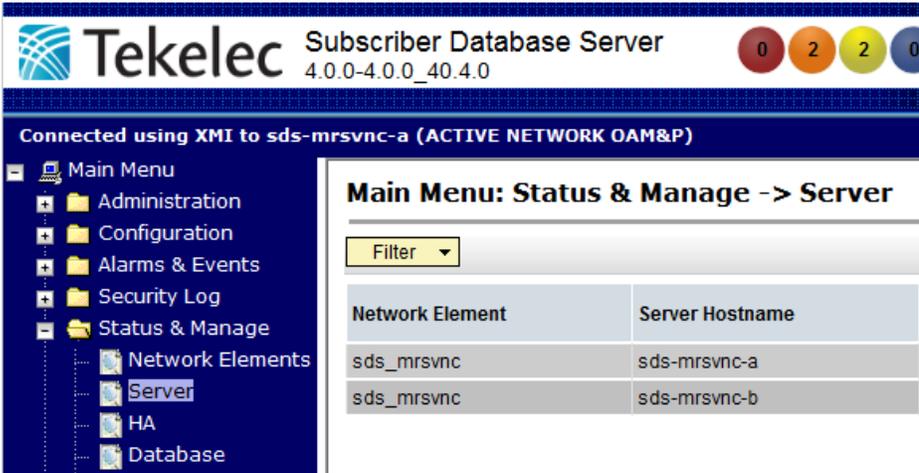
## Procedure 3.2 Adding a Server to an OAM Server Group

<p>27.</p> <p><input type="checkbox"/></p>	<p><b>SDS VIP:</b></p> <p>The user should be presented the login screen shown on the right.</p> <p>Login to the GUI using the default user and password.</p>	
<p>28.</p> <p><input type="checkbox"/></p>	<p><b>SDS VIP:</b></p> <p>The user should be presented the SDS Main Menu as shown on the right.</p>	

## Procedure 3.2 Adding a Server to an OAM Server Group

<p>29.</p> <p><input type="checkbox"/></p>	<p><b>SDS VIP:</b> Select...</p> <p><b>Main Menu</b> → Status &amp; Manage → Server</p> <p>...as shown on the right.</p>	 <p>Tekelec Subscriber Database Server 4.0.0-4.0.0_40.4.0</p> <p>Connected using XMI to sds-mrsvnc-a (ACTIVE NETWORK OAM&amp;P)</p> <p>Main Menu: Status &amp; Manage -&gt; Server</p> <table border="1"> <thead> <tr> <th>Network Element</th> <th>Server Hostname</th> </tr> </thead> <tbody> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-a</td> </tr> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-b</td> </tr> </tbody> </table>	Network Element	Server Hostname	sds_mrsvnc	sds-mrsvnc-a	sds_mrsvnc	sds-mrsvnc-b															
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sds_mrsvnc	sds-mrsvnc-a																						
sds_mrsvnc	sds-mrsvnc-b																						
<p>30.</p> <p><input type="checkbox"/></p>	<p><b>SDS VIP:</b></p> <p>1) The “A” and “B” SDS servers should now appear in the right panel.</p> <p>2) Verify that the “DB” status shows “Norm” and the “Proc” status shows “Man” for both servers before proceeding to the next Step.</p>	 <p>Main Menu: Status &amp; Manage -&gt; Server</p> <p>Tue Jul 31 20:56:39 2012 UTC</p> <table border="1"> <thead> <tr> <th>Network Element</th> <th>Server Hostname</th> <th>Appl State</th> <th>Alm</th> <th>DB</th> <th>Reporting Status</th> <th>Proc</th> </tr> </thead> <tbody> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-a</td> <td>Disabled</td> <td>Err</td> <td>Norm</td> <td>Norm</td> <td>Man</td> </tr> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-b</td> <td>Disabled</td> <td>Warn</td> <td>Norm</td> <td>Norm</td> <td>Man</td> </tr> </tbody> </table>	Network Element	Server Hostname	Appl State	Alm	DB	Reporting Status	Proc	sds_mrsvnc	sds-mrsvnc-a	Disabled	Err	Norm	Norm	Man	sds_mrsvnc	sds-mrsvnc-b	Disabled	Warn	Norm	Norm	Man
Network Element	Server Hostname	Appl State	Alm	DB	Reporting Status	Proc																	
sds_mrsvnc	sds-mrsvnc-a	Disabled	Err	Norm	Norm	Man																	
sds_mrsvnc	sds-mrsvnc-b	Disabled	Warn	Norm	Norm	Man																	

### Procedure 3.2 Adding a Server to an OAM Server Group

<p>31. <input type="checkbox"/></p> <p><b>SDS VIP:</b></p> <p>1) Using the mouse, select <b>SDS Server A</b>. The line entry should now be highlighted in <b>GREEN</b>.</p> <p>2) Select the <b>“Restart”</b> dialogue button from the bottom left corner of the screen.</p> <p>3) Click the <b>“OK”</b> button on the confirmation dialogue box.</p> <p>4) The user should be presented with a confirmation message (in the banner area) for <b>SDS Server A</b> stating: <b>“Successfully restarted application”</b>.</p> <p><b>NOTE:</b> The user may need to use the vertical scroll-bar in order to make the <b>“Restart”</b> dialogue button visible.</p>	 <p>1</p>  <p>2</p>  <p>3</p>  <p>4</p>
<p>32. <input type="checkbox"/></p> <p><b>SDS VIP:</b></p> <p>Select...</p> <p><b>Main Menu</b></p> <p>→ <b>Status &amp; Manage</b></p> <p>→ <b>Server</b></p> <p>...as shown on the right.</p>	

### Procedure 3.2 Adding a Server to an OAM Server Group

33.



#### SDS VIP:

Verify that the “**Appl State**” now shows “**Enabled**” and that the “**DB, Reporting Status & Proc**” status columns all show “**Norm**” for **SDS Server A** before proceeding to the next Step.

**NOTE:** *If user chooses to refresh the Server status screen in advance of the default setting (15-30 sec.). This may be done by simply reselecting the “**Status & Manage** → **Server**” option from the Main menu on the left.*

#### Main Menu: Status & Manage -> Server

Help

Tue Jul 31 21:00:12 2012 UTC

Network Element	Server Hostname	Appl State	Alm	DB	Reporting Status	Proc
sds_mrsvnc	sds-mrsvnc-a	Enabled	Err	Norm	Norm	Norm
sds_mrsvnc	sds-mrsvnc-b	Disabled	Warn	Norm	Norm	Man

## Procedure 3.2 Adding a Server to an OAM Server Group

34.



### SDS VIP:

1) Using the mouse, select **SDS Server B**. The line entry should now be highlighted in **GREEN**.

2) Select the **“Restart”** dialogue button from the bottom left corner of the screen.

3) Click the **“OK”** button on the confirmation dialogue box.

4) The user should be presented with a confirmation message (in the banner area) for **SDS Server B** stating: **“Successfully restarted application”**.

**NOTE:** The user may need to use the vertical scroll-bar in order to make the **“Restart”** dialogue button visible.

Network Element	Server Hostname	Appl State	Alm	DB	Reporting Status	Proc
sds_mrvnc	sds-mrvnc-a	Enabled	Err	Norm	Norm	Norm
sds_mrvnc	sds-mrvnc-b	Disabled	Warn	Norm	Norm	Man

1



2



3

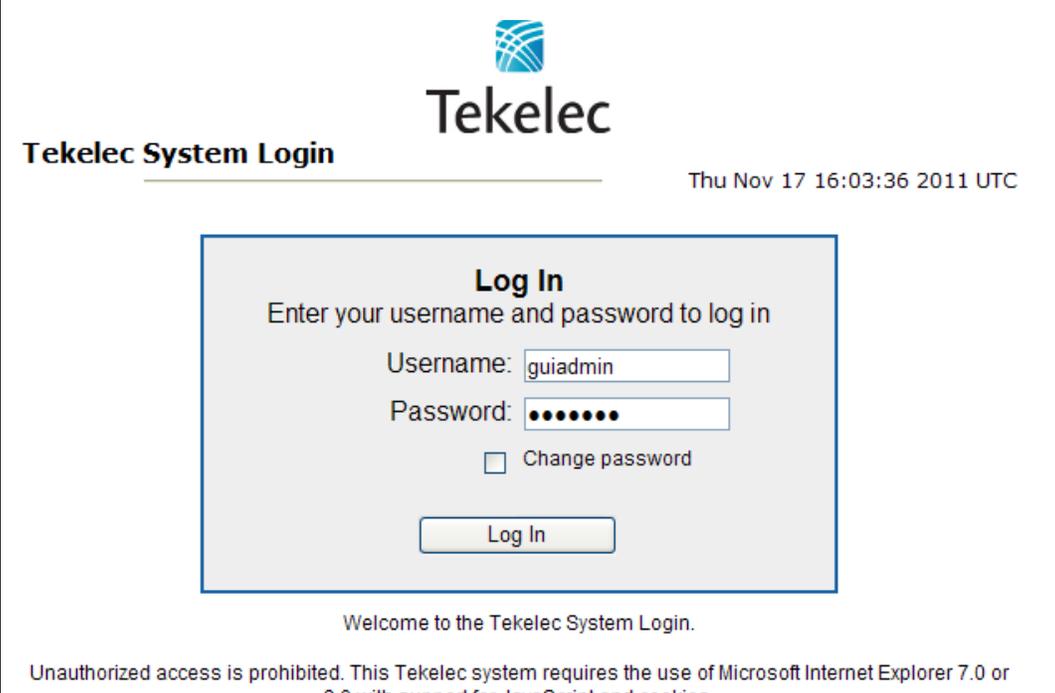
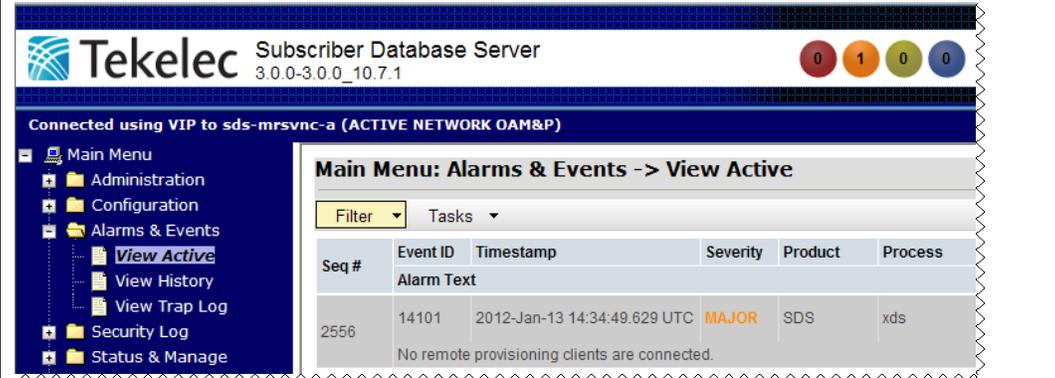
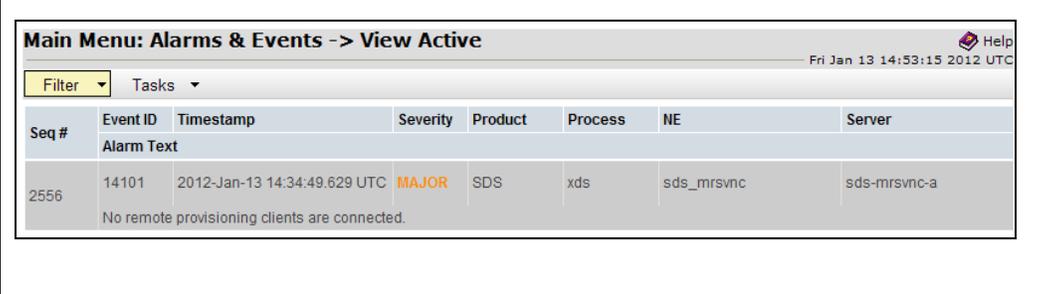
Main Menu: Status & Manage -> Server [Restart]						
Filter	Status					
<div style="border: 1px solid blue; padding: 5px;"> <b>Status</b> <ul style="list-style-type: none"> <li>• sds-mrvnc-b: Successfully restarted application.</li> </ul> </div>						
sds_mrvnc	sds-mrvnc-b	Disabled	Warn	Norm	Err	Norm

4

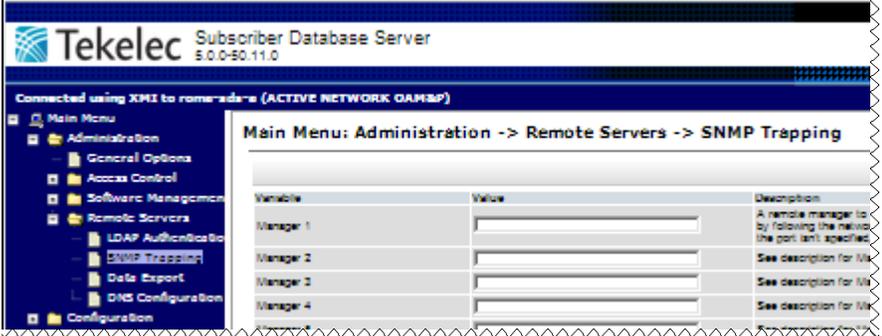
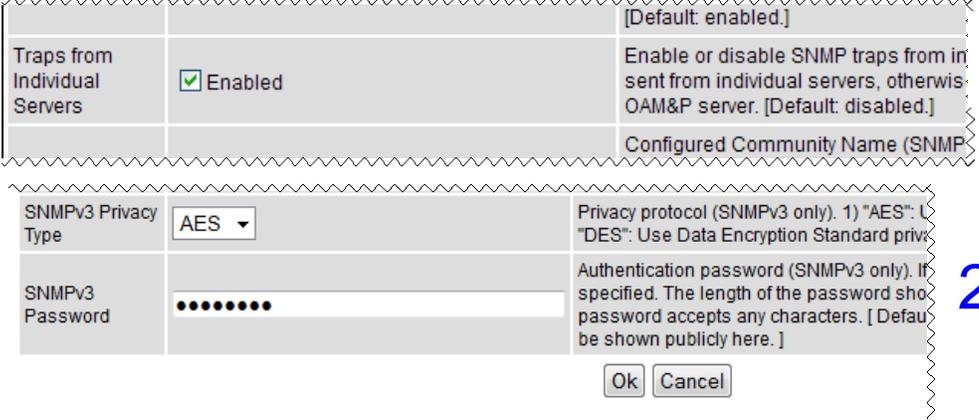
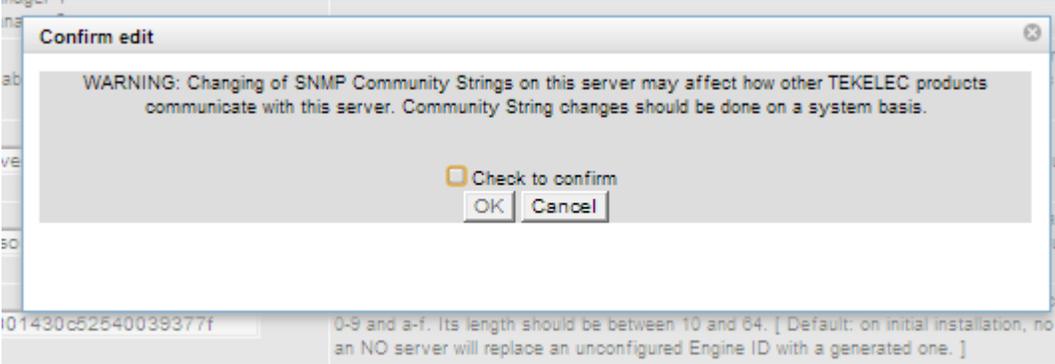
## Procedure 3.2 Adding a Server to an OAM Server Group

<p>35. <input type="checkbox"/></p>	<p><b>SDS VIP:</b></p> <p>Verify that the “<b>Appl State</b>” now shows “<b>Enabled</b>” and that the “<b>DB, Reporting Status &amp; Proc</b>” status columns all show “<b>Norm</b>” for <b>SDS Server A</b> and <b>SDS Server B</b> before proceeding to the next Step.</p> <p><b>NOTE:</b> <i>If user chooses to refresh the Server status screen in advance of the default setting (15-30 sec.). This may be done by simply reselecting the “<b>Status &amp; Manage</b> → <b>Server</b>” option from the Main menu on the left.</i></p>	<p><b>Main Menu: Status &amp; Manage -&gt; Server</b> <span style="float: right;">Tue Jul 31 21:03:15 2012 U </span></p> <p>Filter ▾</p> <table border="1"> <thead> <tr> <th>Network Element</th> <th>Server Hostname</th> <th>Appl State</th> <th>Alm</th> <th>DB</th> <th>Reporting Status</th> <th>Proc</th> </tr> </thead> <tbody> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-a</td> <td>Enabled</td> <td>Err</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-b</td> <td>Enabled</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> </tbody> </table>	Network Element	Server Hostname	Appl State	Alm	DB	Reporting Status	Proc	sds_mrsvnc	sds-mrsvnc-a	Enabled	Err	Norm	Norm	Norm	sds_mrsvnc	sds-mrsvnc-b	Enabled	Norm	Norm	Norm	Norm
Network Element	Server Hostname	Appl State	Alm	DB	Reporting Status	Proc																	
sds_mrsvnc	sds-mrsvnc-a	Enabled	Err	Norm	Norm	Norm																	
sds_mrsvnc	sds-mrsvnc-b	Enabled	Norm	Norm	Norm	Norm																	
<p>36. <input type="checkbox"/></p>	<p><b>IMPORTANT:</b></p> <p>Wait at least <b>5 minutes</b> before proceeding on to the next Step.</p>	<ul style="list-style-type: none"> <li>Now that the server(s) have been restarted they must establish a master/slave relationship for High Availability (HA). It may take several minutes for this process to be completed.</li> <li>Allow a minimum of <b>5 minutes</b> before continuing to the next Step.</li> </ul>																					

### Procedure 3.3 Verifying the SDS Server Alarm status

<p>37. <input type="checkbox"/></p> <p><b>SDS VIP:</b></p> <p>If there is a context switch, you may be required to login again.</p> <p>Login to the GUI using the default user and password.</p>	
<p>38. <input type="checkbox"/></p> <p><b>SDS VIP:</b></p> <p>Select...</p> <p><b>Main Menu</b>          → Alarms &amp; Events              → View Active</p> <p>...as shown on the right.</p>	
<p>39. <input type="checkbox"/></p> <p><b>SDS VIP:</b></p> <p>Verify that <b>Event ID 14101</b> ("No remote provisioning clients are connected") is the only alarm present on the system at this time.</p>	

### Procedure 3.4 Configuring SNMP for Traps from Individual Servers

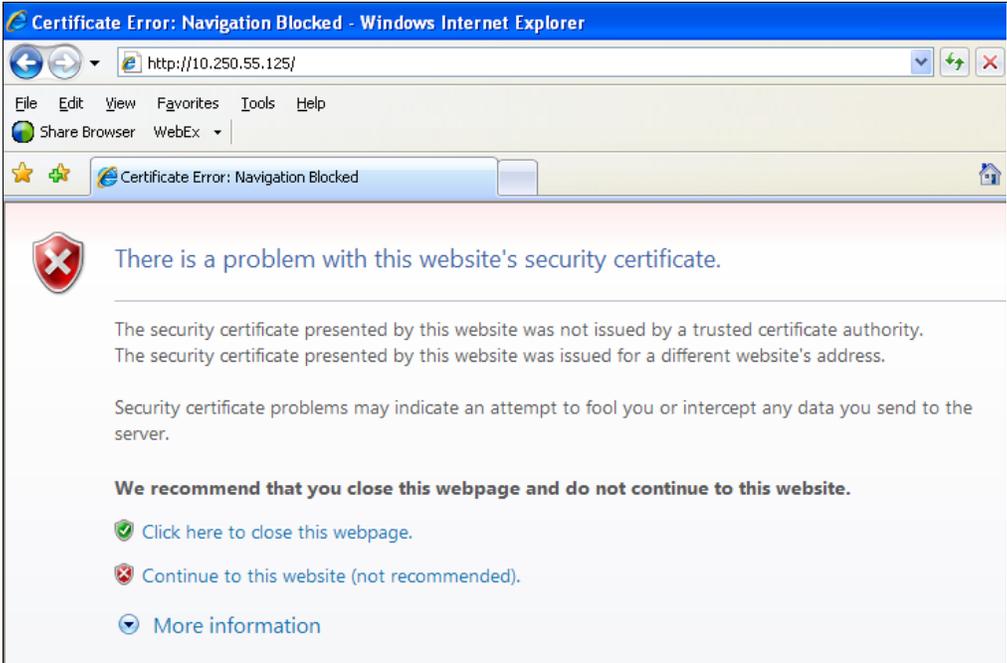
<p>40.</p> <p><input type="checkbox"/></p>	<p><b>SDS VIP:</b></p> <p>Select...</p> <p><b>Main Menu</b></p> <p>→ Administration</p> <p>→ Remote Servers</p> <p>→ SNMP Trapping</p> <p>...as shown on the right.</p>	
<p>41.</p> <p><input type="checkbox"/></p>	<p><b>SDS VIP:</b></p> <p>1) Using the cursor, place a “check” in the check box for “<b>Traps from Individual Servers</b>”.</p> <p>2) Click the “<b>Ok</b>” dialogue button located at the bottom of the right panel.</p>	
<p>42.</p> <p><input type="checkbox"/></p>	<p><b>SDS VIP:</b></p> <p>1) Using the cursor, place a “check” in the check box for “<b>Check to confirm</b>”.</p> <p>2) Click the “<b>OK</b>” dialogue button.</p>	
<p>43.</p> <p><input type="checkbox"/></p>	<p><b>SDS VIP:</b></p> <p>Click the “<b>Logout</b>” link on the server GUI.</p>	

**THIS PROCEDURE HAS BEEN COMPLETED**

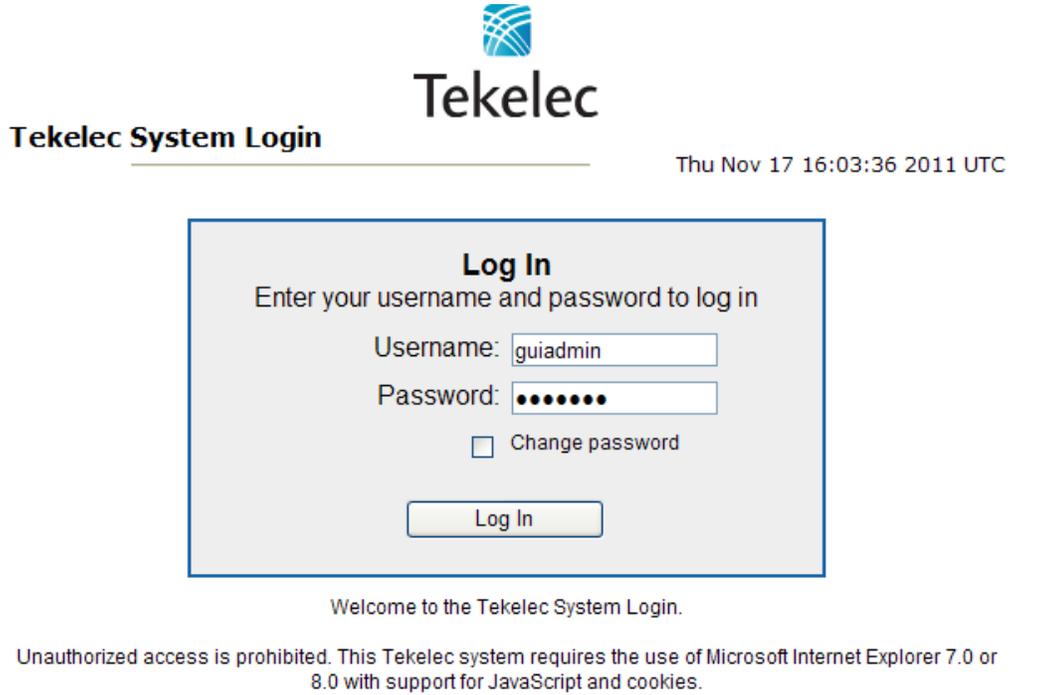
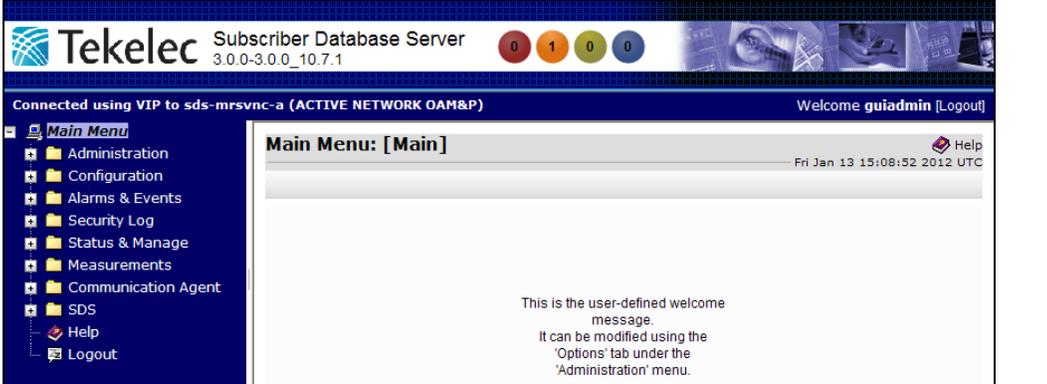
### 5.3 Query Server Installation (All SDS sites)

The user should be aware that during the Query Server installation procedure, various errors may be seen at different stages of the procedure. During the execution of a step, the user is directed to ignore errors related to values other than the ones referenced by that step.

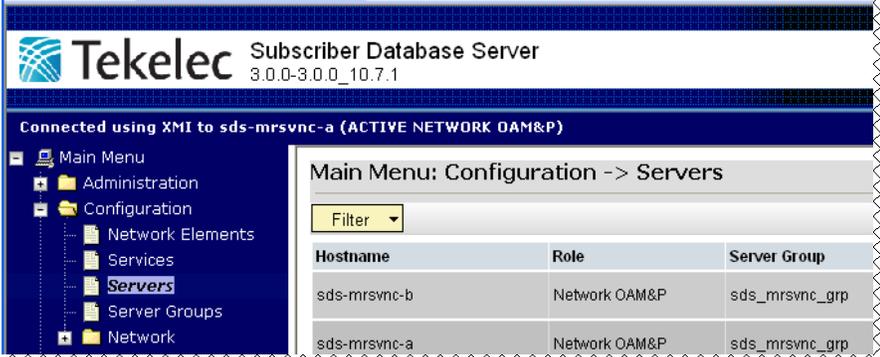
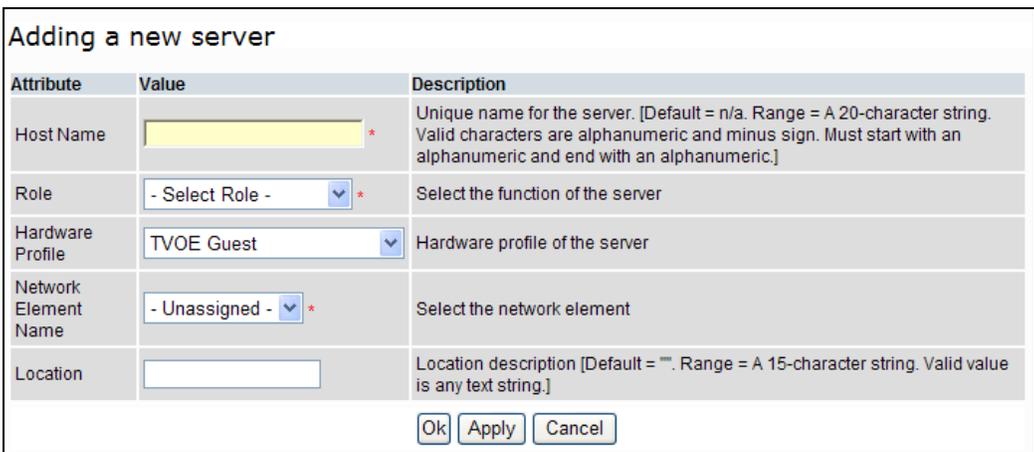
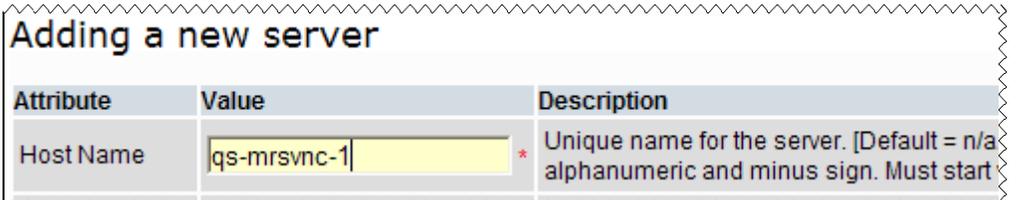
#### Procedure 4: Configuring the Query Server (All SDS sites)

Step	Procedure	Result
<p>1.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Launch an approved web browser and connect to the XMI Virtual IP address (VIP) assigned to <b>Active SDS site</b> using "https://"</p>	

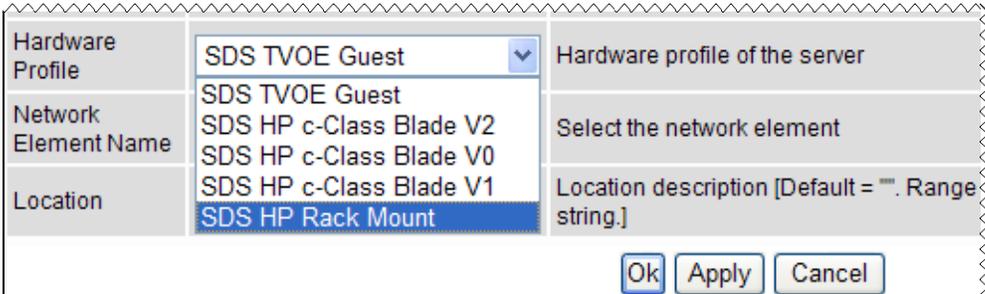
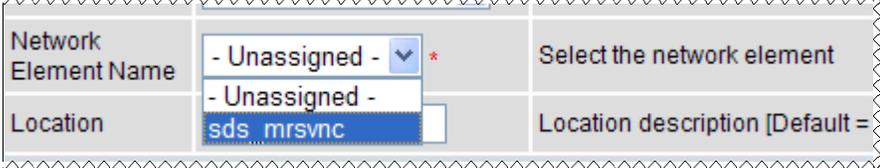
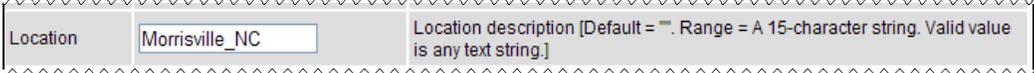
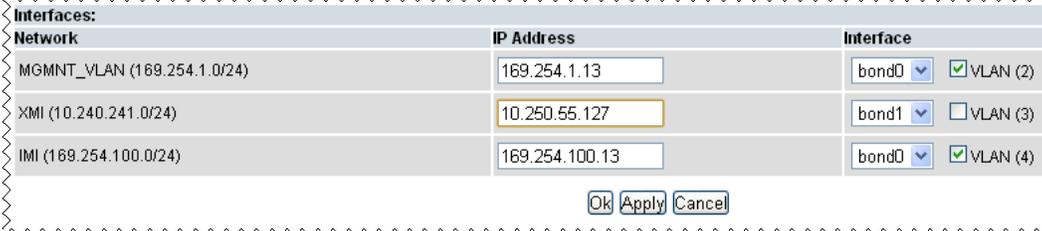
**Procedure 4:** Configuring the Query Server (All SDS sites)

Step	Procedure	Result
<p>2.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>The user should be presented the login screen shown on the right.</p> <p>Login to the GUI using the default user and password.</p>	
<p>3.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>The user should be presented the SDS Main Menu as shown on the right.</p>	

## Procedure 4.1 Configuring the Query Server

<p>4.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Select...</p> <p><b>Main Menu</b>  → Configuration  → Servers</p> <p>...as shown on the right.</p>	 <table border="1"> <thead> <tr> <th>Hostname</th> <th>Role</th> <th>Server Group</th> </tr> </thead> <tbody> <tr> <td>sds-mrsvnc-b</td> <td>Network OAM&amp;P</td> <td>sds_mrsvnc_grp</td> </tr> <tr> <td>sds-mrsvnc-a</td> <td>Network OAM&amp;P</td> <td>sds_mrsvnc_grp</td> </tr> </tbody> </table>	Hostname	Role	Server Group	sds-mrsvnc-b	Network OAM&P	sds_mrsvnc_grp	sds-mrsvnc-a	Network OAM&P	sds_mrsvnc_grp									
Hostname	Role	Server Group																		
sds-mrsvnc-b	Network OAM&P	sds_mrsvnc_grp																		
sds-mrsvnc-a	Network OAM&P	sds_mrsvnc_grp																		
<p>5.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Select the "Insert" dialogue button.</p>																			
<p>6.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>The user is now presented with the "Adding a new server" configuration screen.</p>	 <table border="1"> <thead> <tr> <th>Attribute</th> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Host Name</td> <td><input type="text"/></td> <td>Unique name for the server. [Default = n/a. Range = A 20-character string. Valid characters are alphanumeric and minus sign. Must start with an alphanumeric and end with an alphanumeric.]</td> </tr> <tr> <td>Role</td> <td>- Select Role -</td> <td>Select the function of the server</td> </tr> <tr> <td>Hardware Profile</td> <td>TVOE Guest</td> <td>Hardware profile of the server</td> </tr> <tr> <td>Network Element Name</td> <td>- Unassigned -</td> <td>Select the network element</td> </tr> <tr> <td>Location</td> <td><input type="text"/></td> <td>Location description [Default = "". Range = A 15-character string. Valid value is any text string.]</td> </tr> </tbody> </table>	Attribute	Value	Description	Host Name	<input type="text"/>	Unique name for the server. [Default = n/a. Range = A 20-character string. Valid characters are alphanumeric and minus sign. Must start with an alphanumeric and end with an alphanumeric.]	Role	- Select Role -	Select the function of the server	Hardware Profile	TVOE Guest	Hardware profile of the server	Network Element Name	- Unassigned -	Select the network element	Location	<input type="text"/>	Location description [Default = "". Range = A 15-character string. Valid value is any text string.]
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<p>7.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Input the assigned "hostname" for the Query Server.</p>	 <table border="1"> <thead> <tr> <th>Attribute</th> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Host Name</td> <td>qs-mrsvnc-1</td> <td>Unique name for the server. [Default = n/a alphanumeric and minus sign. Must start</td> </tr> </tbody> </table>	Attribute	Value	Description	Host Name	qs-mrsvnc-1	Unique name for the server. [Default = n/a alphanumeric and minus sign. Must start												
Attribute	Value	Description																		
Host Name	qs-mrsvnc-1	Unique name for the server. [Default = n/a alphanumeric and minus sign. Must start																		
<p>8.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Select "QUERY SERVER" for the server "Role" from the pull-down menu.</p>	 <table border="1"> <tbody> <tr> <td>Role</td> <td>- Select Role -</td> <td>Select the function of the server</td> </tr> <tr> <td>Hardware Profile</td> <td>- Select Role - NETWORK OAM&amp;P</td> <td>Hardware profile of the server</td> </tr> <tr> <td>Network Element Name</td> <td>MP QUERY SERVER</td> <td>Select the network element</td> </tr> </tbody> </table>	Role	- Select Role -	Select the function of the server	Hardware Profile	- Select Role - NETWORK OAM&P	Hardware profile of the server	Network Element Name	MP QUERY SERVER	Select the network element									
Role	- Select Role -	Select the function of the server																		
Hardware Profile	- Select Role - NETWORK OAM&P	Hardware profile of the server																		
Network Element Name	MP QUERY SERVER	Select the network element																		

## Procedure 4.1 Configuring the Query Server

<p>9.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Select “<b>SDS HP Rack Mount</b>” for the <b>Hardware Profile</b> for the SDS from the pull-down menu.</p>										
<p>10.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Select the <b>Network Element Name</b> of the <b>SDS site</b> where the Query Server is physically located from the list of available NEs in the pull-down menu.</p>										
<p>11.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Enter the site location.</p> <p><b>NOTE:</b> <i>Location is an optional field.</i></p>										
<p>12.</p> <input type="checkbox"/>	<p><b>SDS Server A:</b></p> <p>1) Enter the <b>MGMNT_VLAN</b> and <b>IMI IP</b> addresses for the <b>Query Server</b>.</p> <p>2) Set the <b>MGMNT_VLAN</b> and <b>IMI Interfaces</b> to “<b>bond0</b>” and check each <b>VLAN</b> checkbox.</p> <p>3) Enter the <b>XMI IP</b> address for the <b>Query Server</b>.</p> <p>4) Set the <b>XMI Interface</b> to “<b>bond1</b>” and <b>DO NOT</b> check the <b>VLAN</b> box.</p>	 <table border="1"> <thead> <tr> <th>SDS Server</th> <th>MGMNT_VLAN IP</th> <th>IMI IP</th> </tr> </thead> <tbody> <tr> <td>SDS-QS (Primary)</td> <td>169.254.1.13</td> <td>169.254.100.13</td> </tr> <tr> <td>SDS-QS (DR)</td> <td>169.254.1.16</td> <td>169.254.100.16</td> </tr> </tbody> </table> <p><b>NOTE:</b> <i>These values should be used for all SDS installations where 4948E-F Aggregations switches are deployed.</i></p>	SDS Server	MGMNT_VLAN IP	IMI IP	SDS-QS (Primary)	169.254.1.13	169.254.100.13	SDS-QS (DR)	169.254.1.16	169.254.100.16
SDS Server	MGMNT_VLAN IP	IMI IP									
SDS-QS (Primary)	169.254.1.13	169.254.100.13									
SDS-QS (DR)	169.254.1.16	169.254.100.16									

## Procedure 4.1 Configuring the Query Server

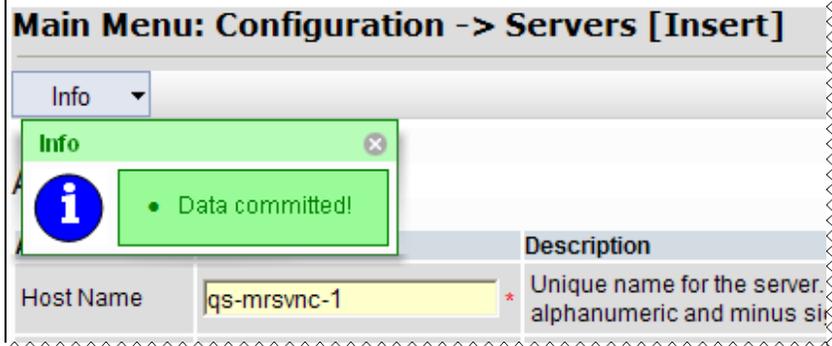
<p><b>13.</b></p> <p><input type="checkbox"/></p>	<p><b>SDS Server A:</b></p> <p>1) Click the “<b>NTP Servers:</b>” “<b>Add</b>” dialogue button.</p> <p>2) Enter the <b>NTP Server IP Address</b> for an NTP Server.</p> <p>3) If you have another <b>NTP Server IP address</b>, repeat (1) and (2) to enter it.</p> <p>4) Optionally, click the “<b>Prefer</b>” checkbox to prefer one NTP Server over the other.</p>											
<p><b>14.</b></p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>1) The user should be presented with a banner information message stating “<b>Pre-Validation passed</b>”.</p> <p>2) Click the “<b>Apply</b>” dialogue button.</p>	<table border="1"> <thead> <tr> <th colspan="2">Interfaces:</th> </tr> <tr> <th>Network</th> <th>IP Address</th> </tr> </thead> <tbody> <tr> <td>MGMNT_VLAN (169.254.1.0/24)</td> <td>169.254.1.13</td> </tr> <tr> <td>XMI (10.240.241.0/24)</td> <td>10.250.55.127</td> </tr> <tr> <td>IMI (169.254.100.0/24)</td> <td>169.254.100.13</td> </tr> </tbody> </table>	Interfaces:		Network	IP Address	MGMNT_VLAN (169.254.1.0/24)	169.254.1.13	XMI (10.240.241.0/24)	10.250.55.127	IMI (169.254.100.0/24)	169.254.100.13
Interfaces:												
Network	IP Address											
MGMNT_VLAN (169.254.1.0/24)	169.254.1.13											
XMI (10.240.241.0/24)	10.250.55.127											
IMI (169.254.100.0/24)	169.254.100.13											

## Procedure 4.1 Configuring the Query Server

15.

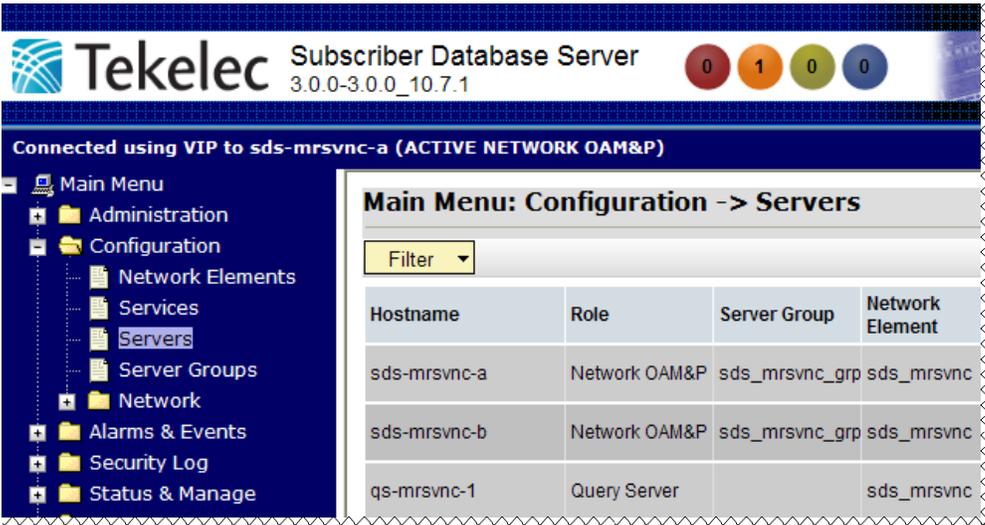
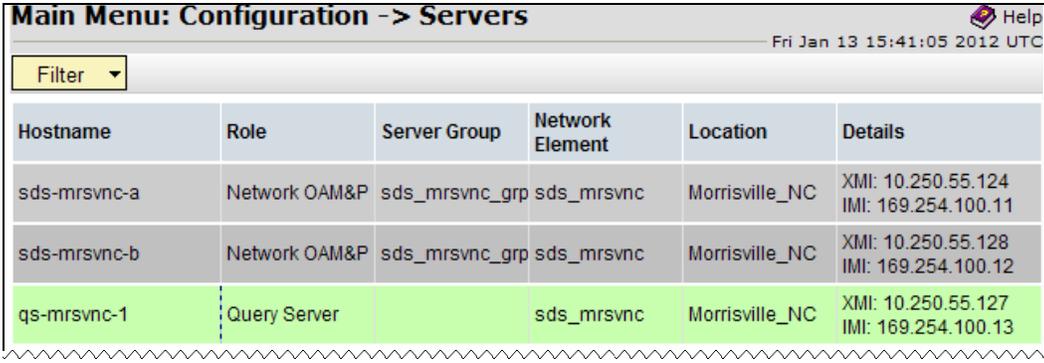
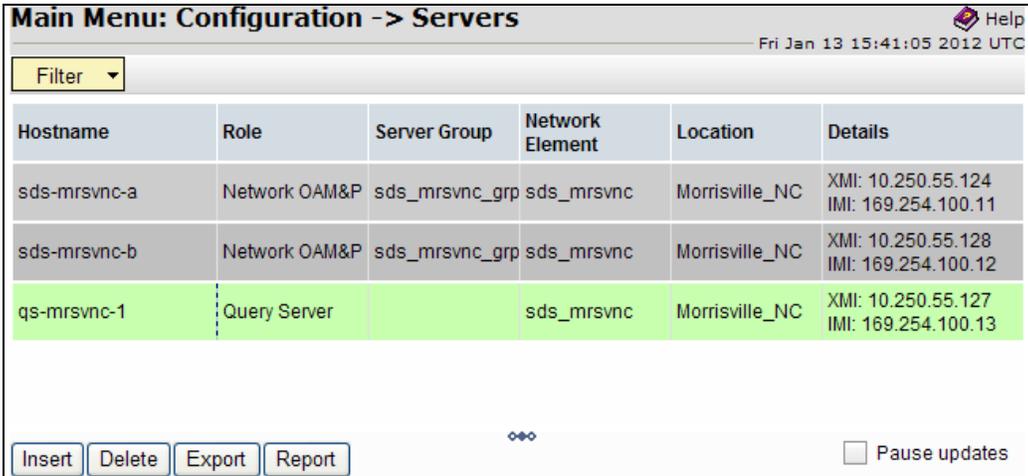
### Active SDS VIP:

If the values provided match the network ranges assigned to the NE, the user will receive a banner information message showing that the data has been validated and committed to the DB.

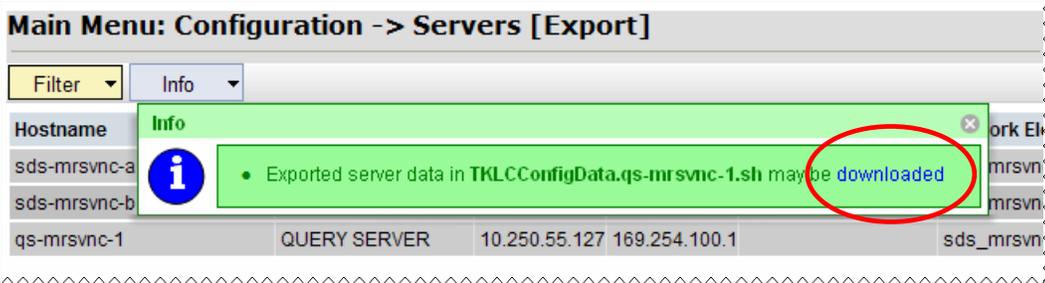
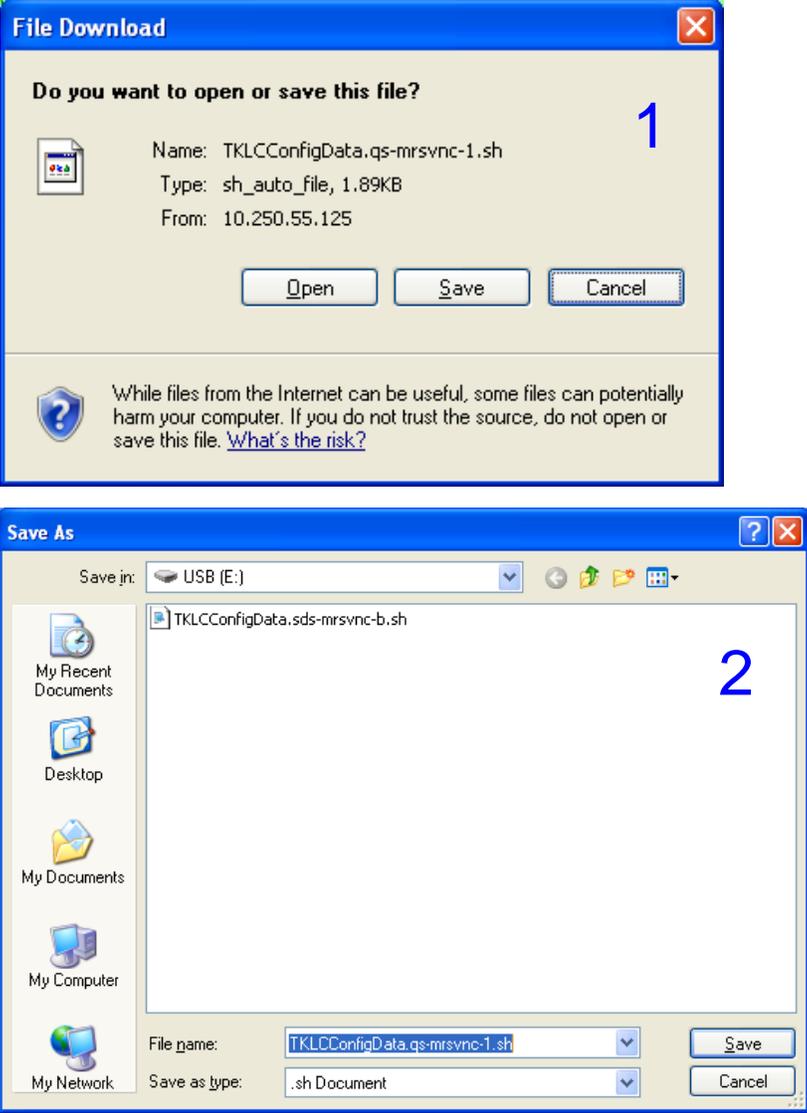


The screenshot displays a web-based configuration interface titled "Main Menu: Configuration -> Servers [Insert]". At the top, there is a dropdown menu labeled "Info". A green information message box is overlaid on the interface, containing a blue information icon and the text "Data committed!". Below the message, a form field for "Host Name" contains the value "qs-mrsvnc-1" and is marked with a red asterisk. To the right of the form field is a "Description" label with the text "Unique name for the server. alphanumeric and minus si".

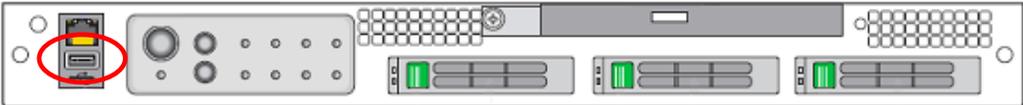
## Procedure 4.2 Applying the Query Server Configuration file

<p>16.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b> Select...</p> <p><b>Main Menu</b> → Configuration → Servers</p> <p>...as shown on the right.</p>	 <p>Tekelec Subscriber Database Server 3.0.0-3.0.0_10.7.1</p> <p>Connected using VIP to sds-mrsvnc-a (ACTIVE NETWORK OAM&amp;P)</p> <p>Main Menu: Configuration -&gt; Servers</p> <table border="1"> <thead> <tr> <th>Hostname</th> <th>Role</th> <th>Server Group</th> <th>Network Element</th> </tr> </thead> <tbody> <tr> <td>sds-mrsvnc-a</td> <td>Network OAM&amp;P</td> <td>sds_mrsvnc_grp</td> <td>sds_mrsvnc</td> </tr> <tr> <td>sds-mrsvnc-b</td> <td>Network OAM&amp;P</td> <td>sds_mrsvnc_grp</td> <td>sds_mrsvnc</td> </tr> <tr> <td>qs-mrsvnc-1</td> <td>Query Server</td> <td></td> <td>sds_mrsvnc</td> </tr> </tbody> </table>	Hostname	Role	Server Group	Network Element	sds-mrsvnc-a	Network OAM&P	sds_mrsvnc_grp	sds_mrsvnc	sds-mrsvnc-b	Network OAM&P	sds_mrsvnc_grp	sds_mrsvnc	qs-mrsvnc-1	Query Server		sds_mrsvnc								
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<p>17.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b> The “Configuration →Servers” screen now shows the newly added Query Server in the list.</p>	<table border="1"> <thead> <tr> <th>Hostname</th> <th>Role</th> <th>Server Group</th> <th>Network Element</th> <th>Location</th> <th>Details</th> </tr> </thead> <tbody> <tr> <td>sds-mrsvnc-a</td> <td>Network OAM&amp;P</td> <td>sds_mrsvnc_grp</td> <td>sds_mrsvnc</td> <td>Morrisville_NC</td> <td>XMI: 10.250.55.124 IMI: 169.254.100.11</td> </tr> <tr> <td>sds-mrsvnc-b</td> <td>Network OAM&amp;P</td> <td>sds_mrsvnc_grp</td> <td>sds_mrsvnc</td> <td>Morrisville_NC</td> <td>XMI: 10.250.55.128 IMI: 169.254.100.12</td> </tr> <tr> <td>qs-mrsvnc-1</td> <td>Query Server</td> <td></td> <td>sds_mrsvnc</td> <td>Morrisville_NC</td> <td>XMI: 10.250.55.127 IMI: 169.254.100.13</td> </tr> </tbody> </table>	Hostname	Role	Server Group	Network Element	Location	Details	sds-mrsvnc-a	Network OAM&P	sds_mrsvnc_grp	sds_mrsvnc	Morrisville_NC	XMI: 10.250.55.124 IMI: 169.254.100.11	sds-mrsvnc-b	Network OAM&P	sds_mrsvnc_grp	sds_mrsvnc	Morrisville_NC	XMI: 10.250.55.128 IMI: 169.254.100.12	qs-mrsvnc-1	Query Server		sds_mrsvnc	Morrisville_NC	XMI: 10.250.55.127 IMI: 169.254.100.13
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<p>18.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b> Using the mouse, select the Query Server. The line entry containing the Query Server should now be highlighted in <b>GREEN</b>.</p>	 <p>Main Menu: Configuration -&gt; Servers</p> <p>Fri Jan 13 15:41:05 2012 UTC</p> <table border="1"> <thead> <tr> <th>Hostname</th> <th>Role</th> <th>Server Group</th> <th>Network Element</th> <th>Location</th> <th>Details</th> </tr> </thead> <tbody> <tr> <td>sds-mrsvnc-a</td> <td>Network OAM&amp;P</td> <td>sds_mrsvnc_grp</td> <td>sds_mrsvnc</td> <td>Morrisville_NC</td> <td>XMI: 10.250.55.124 IMI: 169.254.100.11</td> </tr> <tr> <td>sds-mrsvnc-b</td> <td>Network OAM&amp;P</td> <td>sds_mrsvnc_grp</td> <td>sds_mrsvnc</td> <td>Morrisville_NC</td> <td>XMI: 10.250.55.128 IMI: 169.254.100.12</td> </tr> <tr style="background-color: #e0ffe0;"> <td>qs-mrsvnc-1</td> <td>Query Server</td> <td></td> <td>sds_mrsvnc</td> <td>Morrisville_NC</td> <td>XMI: 10.250.55.127 IMI: 169.254.100.13</td> </tr> </tbody> </table>	Hostname	Role	Server Group	Network Element	Location	Details	sds-mrsvnc-a	Network OAM&P	sds_mrsvnc_grp	sds_mrsvnc	Morrisville_NC	XMI: 10.250.55.124 IMI: 169.254.100.11	sds-mrsvnc-b	Network OAM&P	sds_mrsvnc_grp	sds_mrsvnc	Morrisville_NC	XMI: 10.250.55.128 IMI: 169.254.100.12	qs-mrsvnc-1	Query Server		sds_mrsvnc	Morrisville_NC	XMI: 10.250.55.127 IMI: 169.254.100.13
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<p>19.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b> Select the “Export” dialogue button.</p>	 <p>Main Menu: Configuration -&gt; Servers</p> <p>Fri Jan 13 15:41:05 2012 UTC</p> <table border="1"> <thead> <tr> <th>Hostname</th> <th>Role</th> <th>Server Group</th> <th>Network Element</th> <th>Location</th> <th>Details</th> </tr> </thead> <tbody> <tr> <td>sds-mrsvnc-a</td> <td>Network OAM&amp;P</td> <td>sds_mrsvnc_grp</td> <td>sds_mrsvnc</td> <td>Morrisville_NC</td> <td>XMI: 10.250.55.124 IMI: 169.254.100.11</td> </tr> <tr> <td>sds-mrsvnc-b</td> <td>Network OAM&amp;P</td> <td>sds_mrsvnc_grp</td> <td>sds_mrsvnc</td> <td>Morrisville_NC</td> <td>XMI: 10.250.55.128 IMI: 169.254.100.12</td> </tr> <tr style="background-color: #e0ffe0;"> <td>qs-mrsvnc-1</td> <td>Query Server</td> <td></td> <td>sds_mrsvnc</td> <td>Morrisville_NC</td> <td>XMI: 10.250.55.127 IMI: 169.254.100.13</td> </tr> </tbody> </table> <p>Insert Delete Export Report</p> <p>Pause updates</p>	Hostname	Role	Server Group	Network Element	Location	Details	sds-mrsvnc-a	Network OAM&P	sds_mrsvnc_grp	sds_mrsvnc	Morrisville_NC	XMI: 10.250.55.124 IMI: 169.254.100.11	sds-mrsvnc-b	Network OAM&P	sds_mrsvnc_grp	sds_mrsvnc	Morrisville_NC	XMI: 10.250.55.128 IMI: 169.254.100.12	qs-mrsvnc-1	Query Server		sds_mrsvnc	Morrisville_NC	XMI: 10.250.55.127 IMI: 169.254.100.13
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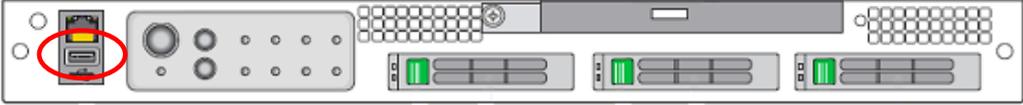
## Procedure 4.2 Applying the Query Server Configuration file

<p>20.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>The user will receive a banner information message showing a download link for the Query Server configuration data.</p> <p>Click on the word <b>“downloaded”</b> to download and save the file.</p>	
<p>21.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>1) Click the “Save” dialogue button.</p> <p>2) Save the Query Server configuration file to a USB flash drive.</p>	
<p>22.</p> <p><input type="checkbox"/></p>	<p><b>Query Server:</b></p> <p>Access the server console.</p>	<ul style="list-style-type: none"> <li>• Connect to the <b>Query Server</b> console using one of the access methods described in <b>Section 2.3.</b></li> </ul>

## Procedure 4.2 Applying the Query Server Configuration file

<p>23.</p> <input type="checkbox"/>	<p><b>Query Server:</b></p> <p>1) Access the command prompt.</p> <p>2) Log into the Query Server as the “root” user.</p>	<pre>CentOS release 5.6 (Final) Kernel 2.6.18-238.19.1.el5prere15.0.0_72.22.0 on an x86_64  hostname1262121944 login: root Password: &lt;root_password&gt;</pre>
<p>24.</p> <input type="checkbox"/>	<p><b>Query Server:</b></p> <p>Output similar to that shown on the right will appear as the server access the command prompt.</p>	<pre>*** TRUNCATED OUTPUT ***  VPATH=/opt/TKLCcomcol/runcm5.16:/opt/TKLCcomcol/cm5.16 PRODPATH= RELEASE=5.16 RUNID=00 VPATH=/var/TKLC/rundb:/usr/TKLC/appworks:/usr/TKLC/awpcommon:/usr/TKLC/c omagent-gui:/usr/TKLC/comagent:/usr/TKLC/sds PRODPATH=/opt/comcol/prod RUNID=00 [root@hostname1262121944 ~]#</pre>
<p>25.</p> <input type="checkbox"/>	<p><b>Query Server:</b></p> <p>Insert the USB flash drive containing the server configuration file into the USB port on the front panel of the Query Server.</p>	 <p>Figure 4 - HP DL360 Front Panel: USB Port</p>
<p>26.</p> <input type="checkbox"/>	<p><b>Query Server:</b></p> <p>Output similar to that shown on the right will appear as the USB flash drive is inserted into the <b>SDS Server</b> front USB port.</p> <p>Press the <b>&lt;ENTER&gt;</b> key to return to the command prompt.</p>	<pre>[root@hostname1260476099 ~]# sd 3:0:0:0: [sdb] Assuming drive cache: write through sd 3:0:0:0: [sdb] Assuming drive cache: write through &lt;ENTER&gt;  [root@hostname1260476099 ~]#</pre>
<p>27.</p> <input type="checkbox"/>	<p><b>Query Server:</b></p> <p>Verify that the USB flash drive's partition has been mounted by the OS: Search <b>df</b> for the device named in the previous step's output.</p>	<pre>[root@hostname1260476099 ~]# df  grep sdb /dev/sdb1          2003076          8   2003068   1% /media/sdb1 [root@hostname1260476099 ~]#</pre>
<p>28.</p> <input type="checkbox"/>	<p><b>Query Server:</b></p> <p>Copy the configuration file to the SDS server</p>	<pre>[root@hostname1262121944 ~]# cp -p /media/sdb1/TKLCConfigData.qs-mrsvnc- 1.sh /var/TKLC/db/filemgmt/. [root@hostname1260476099 ~]#</pre>

## Procedure 4.2 Applying the Query Server Configuration file

<p>29.</p> <input type="checkbox"/>	<p><b>Query Server:</b></p> <p>Copy the Query Server configuration file to the “<b>/var/tmp</b>” directory on the server, making sure to rename the file by omitting the server hostname from the file name.</p> <p><b>NOTE:</b> <i>The server will poll the <b>/var/tmp</b> directory for the presence of the configuration file and automatically execute it when found.</i></p>	<p><b>Example:</b></p> <p>TKLCConfigData&lt;.server_hostname&gt;.sh → will translate to →TKLCConfigData.sh</p> <pre>[root@hostname1262121944 ~]# cp -p /var/TKLC/db/filemgmt/TKLCConfigData.qs-mrsvnc-1.sh /var/tmp/TKLCConfigData.sh [root@hostname1260476099 ~]#</pre>
<p>30.</p> <input type="checkbox"/>	<p><b>Query Server:</b></p> <p>After the script completes, a broadcast message will be sent to the terminal.</p> <p><b>NOTE:</b> <i>The user should be aware that the time to complete this step varies by server and may take from 3-20 minutes to complete.</i></p>	<p><b>*** NO OUTPUT FOR ≈ 3-20 MINUTES ***</b></p> <p>Broadcast message from root (Mon Dec 14 16:17:13 2009):</p> <p>Server configuration completed successfully! See /var/TKLC/appw/logs/Process/install.log for details.</p> <p>Please remove the USB flash drive if connected and reboot the server.</p>
<p>31.</p> <input type="checkbox"/>	<p><b>Query Server:</b></p> <p>Remove the USB flash drive from the USB port on the front panel of <b>Query Server</b>.</p> <p><b>CAUTION:</b> <i>It is important that the USB flash drive be removed from the server before continuing on to the next step.</i></p>	 <p>Figure 4 - HP DL360 Front Panel: USB Port</p>

## Procedure 4.2 Applying the Query Server Configuration file

<p><b>32.</b></p> <input type="checkbox"/>	<p><b>Query Server:</b></p> <p>Ignore the output shown and press the <b>&lt;ENTER&gt;</b> key to return to the command prompt.</p>	<pre>Broadcast message from root (Mon Dec 14 16:17:13 2009):  Server configuration completed successfully! See /var/TKLC/appw/logs/Process/install.log for details.  Please remove the USB flash drive if connected and reboot the server. &lt;ENTER&gt; [root@hostname1262121944 ~]#</pre>
<p><b>33.</b></p> <input type="checkbox"/>	<p><b>Query Server:</b></p> <p>Configure the time zone.</p>	<pre>[root@hostname1262121944 ~]# set_ini_tz.pl &lt;time zone&gt;</pre> <p><b>Note:</b> The following command example uses Etc/UTC time zone. Replace, as appropriate, with the time zone you have selected for this installation. See Appendix H for a list of valid time zones.</p> <pre>[root@hostname1262121944 ~]# set_ini_tz.pl "Etc/UTC"</pre>
<p><b>34.</b></p> <input type="checkbox"/>	<p><b>Query Server:</b></p> <p>Initiate a reboot of the Query Server.</p>	<pre>[root@hostname1262121944 ~]# init 6</pre>
<p><b>35.</b></p> <input type="checkbox"/>	<p><b>Query Server:</b></p> <p>Output similar to that shown on the right may be observed as the server initiates a reboot.</p>	<pre>[root@hostname1322832264 ~]# init 6 [root@hostname1322832264 ~]# bonding: bond0: Removing slave eth02 bonding: bond0: Warning: the permanent Hwaddr of eth02 - 98:4B:E1:74:16:36 - is still in use by bond0. Set the Hwaddr of eth02 to a different address to avoid c onflicts. bonding: bond0: releasing backup interface eth02 bonding: bond0: Removing slave eth12 bonding: bond0: releasing active interface eth12 e1000e 0000:07:00:0: eth12: changing MTU from 1500 to 1500 bonding: bond1: Removing slave eth01</pre> <p style="text-align: center;"><b>*** TRUNCATED OUTPUT ***</b></p> <pre>Initializing USB Mass Storage driver... usbcore: registered new driver usb-storage USB Mass Storage support registered. device-mapper: uevent: version 1.0.3 device-mapper: ioctl: 4.11.5-ioctl (2007-12-12) initialised: dm-devel@redhat.com device-mapper: dm-raid45: initialized v0.25941 kjournald starting. Commit interval 5 seconds EXT3-fs: mounted filesystem with ordered data mode. SELinux: Disabled at runtime. type=1404 audit(1323351578.858:2): selinux=0 auid=4294967295 ses=4294967295</pre>
<p><b>36.</b></p> <input type="checkbox"/>	<p><b>Query Server:</b></p> <p>After the server has completed reboot...</p> <p>Verify that the server console returns to a login prompt.</p>	<pre>CentOS release 5.6 (Final) Kernel 2.6.18-238.19.1.el5prere15.0.0_72.22.0 on an x86_64  qs-mrsvnc-1 login: root Password: &lt;root_password&gt;</pre>

## Procedure 4.2 Applying the Query Server Configuration file

<p>37.</p> <input type="checkbox"/>	<p><b>Query Server:</b></p> <p>Output similar to that shown on the right will appear as the server access the command prompt.</p>	<pre>*** TRUNCATED OUTPUT *** VPATH=/opt/TKLCcomcol/runcm5.16:/opt/TKLCcomcol/cm5.16 PRODPATH= RELEASE=5.16 RUNID=00 VPATH=/var/TKLC/rundb:/usr/TKLC/appworks:/usr/TKLC/awpcommon:/usr/TKLC/comagent-gui:/usr/TKLC/comagent:/usr/TKLC/sds PRODPATH=/opt/comcol/prod RUNID=00 [root@qs-mrsvnc-1 ~]#</pre>
<p>38.</p> <input type="checkbox"/>	<p><b>Query Server:</b></p> <p>1) Verify that the <b>IMI IP address</b> input in <b>Step 12</b> has been applied to <b>“bond0.4”</b>.</p> <p>2) Verify that the <b>XMI IP address</b> input in <b>Step 12</b> has been applied to <b>“bond1”</b>.</p> <p><b>NOTE:</b> The server's <b>XMI &amp; IMI</b> addresses can be verified by reviewing the server configuration through the SDS GUI.</p> <p><i>i.e.</i></p> <p><b>Main Menu</b>  → Configuration  → Servers</p> <p>Scroll to line entry containing the server's <b>hostname</b>.</p>	<pre>[root@qs-mrsvnc-1 ~]# ifconfig  grep in  grep -v inet6 bond0    Link encap:Ethernet  HWaddr 98:4B:E1:74:16:34 bond0.4  Link encap:Ethernet  HWaddr 98:4B:E1:74:16:34           inet addr:169.254.100.13  Bcast:169.254.100.255  Mask:255.255.255.0 bond1    Link encap:Ethernet  HWaddr 98:4B:E1:74:16:36           inet addr:10.250.55.127  Bcast:10.250.55.255  Mask:255.255.255.0 eth01    Link encap:Ethernet  HWaddr 98:4B:E1:74:16:34 eth02    Link encap:Ethernet  HWaddr 98:4B:E1:74:16:36 eth11    Link encap:Ethernet  HWaddr 98:4B:E1:74:16:34 eth12    Link encap:Ethernet  HWaddr 98:4B:E1:74:16:36 lo        Link encap:Local Loopback           inet addr:127.0.0.1  Mask:255.0.0.0 [root@qs-mrsvnc-1 ~]</pre>
<p>39.</p> <input type="checkbox"/>	<p><b>Query Server:</b></p> <p>Use <b>“ping”</b> to verify that the <b>“bond0.4”</b> device now has connectivity to the <b>IMI Gateway address</b> associated with the NE.</p> <p><b>NOTE:</b> Use the <b>&lt;CTRL-C&gt;</b> key combination to terminate the <b>“ping”</b> process after a few seconds.</p>	<pre>[root@qs-mrsvnc-1 ~]# ping 169.254.100.13 PING 169.254.100.13 (169.254.100.13) 56(84) bytes of data. 64 bytes from 169.254.100.13: icmp_seq=1 ttl=64 time=0.021 ms 64 bytes from 169.254.100.13: icmp_seq=2 ttl=64 time=0.019 ms 64 bytes from 169.254.100.13: icmp_seq=3 ttl=64 time=0.006 ms 64 bytes from 169.254.100.13: icmp_seq=4 ttl=64 time=0.019 ms 64 bytes from 169.254.100.13: icmp_seq=5 ttl=64 time=0.006 ms&lt;CTRL-C&gt;  --- 169.254.100.13 ping statistics --- 5 packets transmitted, 5 received, 0% packet loss, time 3999ms rtt min/avg/max/mdev = 0.006/0.014/0.021/0.007 ms [root@qs-mrsvnc-1 ~]#</pre>

## Procedure 4.2 Applying the Query Server Configuration file

<p>40.</p> <input type="checkbox"/>	<p><b>Query Server:</b></p> <p>Use “ping” to verify that the “bond1” device now has connectivity to the <b>XMI Gateway address</b> associated with the NE.</p> <p><b>NOTE:</b> Use the <b>&lt;CTRL-C&gt;</b> key combination to terminate the “ping” process after a few seconds.</p>	<pre>[root@qs-mrsvnc-1 ~]# ping 10.250.55.127 PING 10.250.55.127 (10.250.55.127) 56(84) bytes of data. 64 bytes from 10.250.55.127: icmp_seq=1 ttl=64 time=0.018 ms 64 bytes from 10.250.55.127: icmp_seq=2 ttl=64 time=0.016 ms 64 bytes from 10.250.55.127: icmp_seq=3 ttl=64 time=0.013 ms 64 bytes from 10.250.55.127: icmp_seq=4 ttl=64 time=0.016 ms 64 bytes from 10.250.55.127: icmp_seq=5 ttl=64 time=0.011 ms&lt;CTRL-C&gt;  --- 10.250.55.127 ping statistics --- 5 packets transmitted, 5 received, 0% packet loss, time 3999ms rtt min/avg/max/mdev = 0.011/0.014/0.018/0.005 ms [root@qs-mrsvnc-1 ~]#</pre>
<p>41.</p> <input type="checkbox"/>	<p><b>Query Server:</b></p> <p>Use the “ntpq” command to verify that the server has connectivity to the assigned Primary and Secondary NTP server(s).</p>	<pre>[root@ qs-mrsvnc-1 ~]# ntpq -np       remote           refid      st t when poll reach  delay  offset  jitter ===== +10.250.32.10      192.5.41.209    2 u 184 256 175   0.220   46.852  35.598 *10.250.32.51     192.5.41.209    2 u 181 256 377   0.176    7.130  22.192 [root@qs-mrsvnc-1 ~]#</pre>



**IF CONNECTIVITY TO THE NTP SERVER(S) CANNOT BE ESTABLISHED, STOP AND EXECUTE THE FOLLOWING STEPS:**

- Have the customer IT group provide a network path from the OAM server IP to the assigned NTP IP addresses.

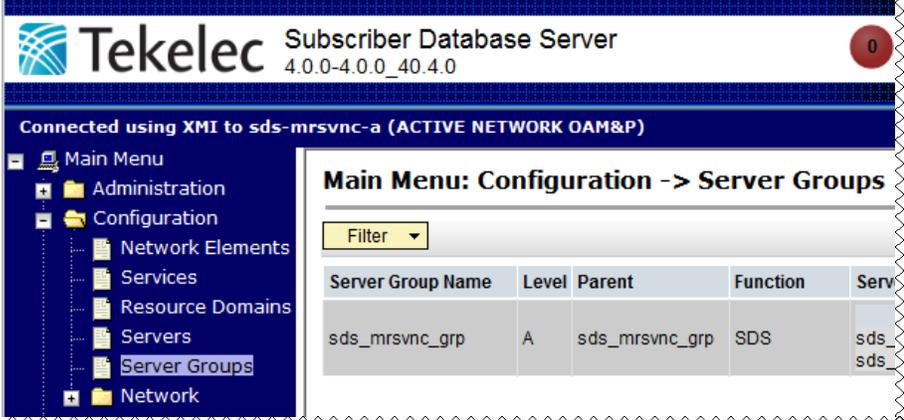
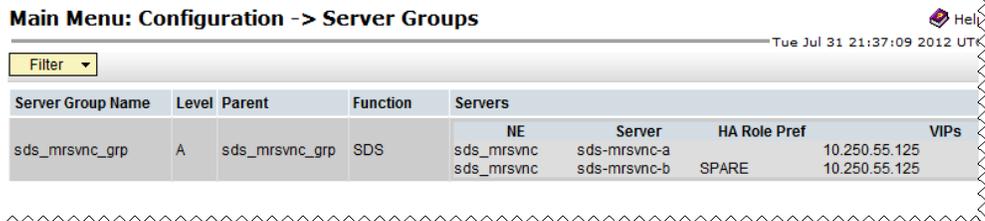
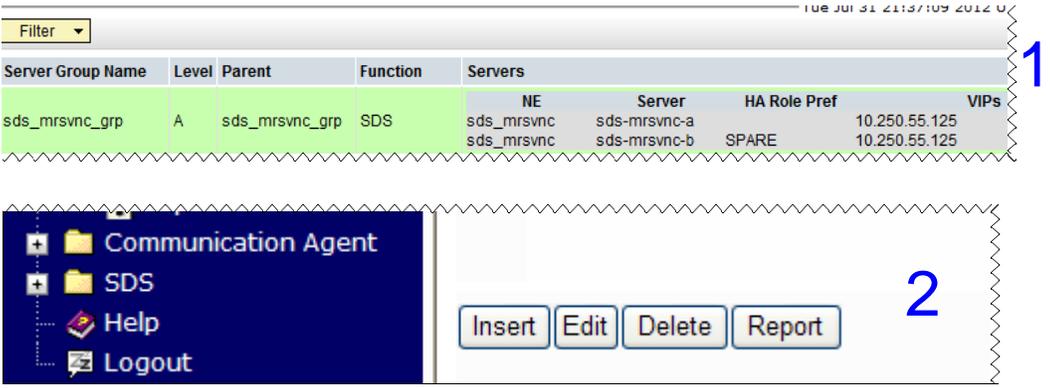
**ONCE NETWORK CONNECTIVITY IS ESTABLISHED TO THE ASSIGNED NTP IP ADDRESSES, THEN RESTART THIS PROCEDURE BEGINNING WITH STEP 41**

<p>42.</p> <input type="checkbox"/>	<p><b>Query Server:</b></p> <p>Execute a “syscheck” to verify the current health of the server.</p>	<pre>[root@qs-mrsvnc-1 ~]# syscheck Running modules in class hardware...   OK Running modules in class disk...   OK Running modules in class net...   OK Running modules in class system...   OK Running modules in class proc...   OK LOG LOCATION: /var/TKLC/log/syscheck/fail_log [root@qs-mrsvnc-1 ~]#</pre>
-------------------------------------	---	--

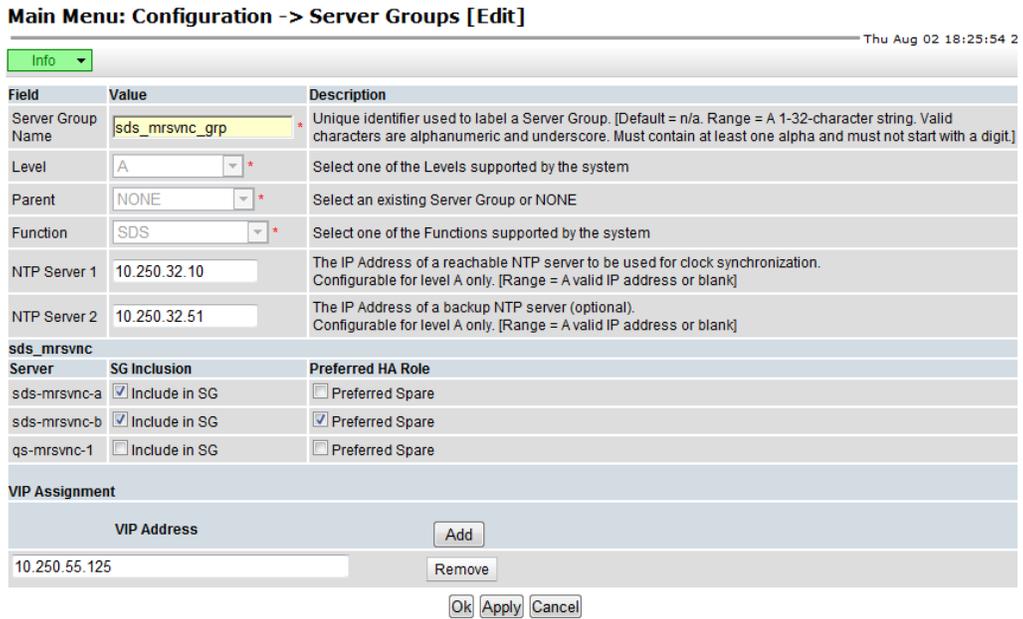
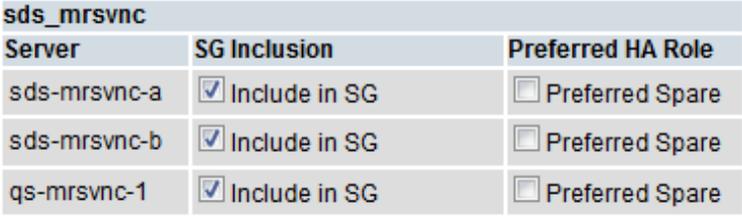
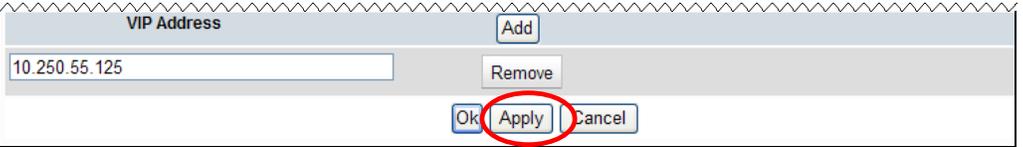
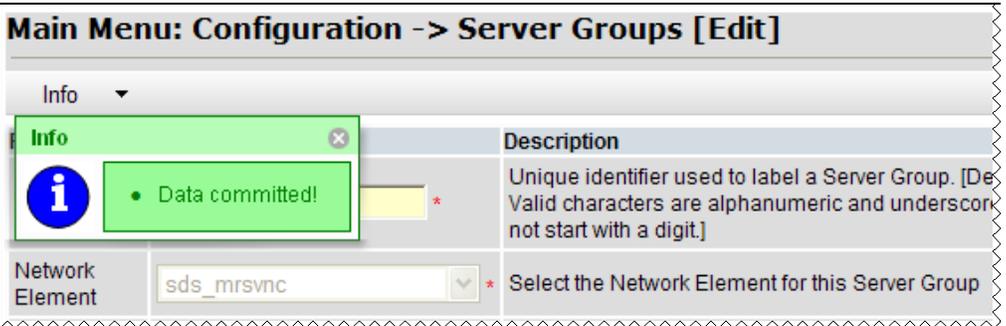
## Procedure 4.2 Applying the Query Server Configuration file

43. <input type="checkbox"/>	<b>Query Server:</b> Exit from the command line to return the server console to the login prompt.	<pre>[root@qs-mrsvnc-1 ~]# <b>exit</b> logout  CentOS release 5.6 (Final) Kernel 2.6.18-238.19.1.el5prere15.0.0_72.22.0 on an x86_64  qs-mrsvnc-1 login:</pre>
---------------------------------	--	--

## Procedure 4.3 Adding the Query Server to the SDS Server Group

<p>44.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>Select...</p> <p><b>Main Menu</b>          → Configuration          → <i>Server Groups</i></p> <p>...as shown on the right.</p>	
<p>45.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>The user will be presented with the “<b>Configuration → Server Groups</b>” screen as shown on the right</p>	
<p>46.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>1) Using the mouse, select the SDS Server Group associated with the Query Server being installed.</p> <p>2) Select the “<b>Edit</b>” dialogue button from the bottom left corner of the screen.</p> <p><b>NOTE:</b> The user may need to use the vertical scroll-bar in order to make the “<b>Edit</b>” dialogue button visible.</p>	

### Procedure 4.3 Adding the Query Server to the SDS Server Group

<p>47.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>The user will be presented with the “<b>Server Groups [Edit]</b>” screen as shown on the right.</p>	 <p>Main Menu: Configuration -&gt; Server Groups [Edit]</p> <p>Info ▼ Thu Aug 02 18:25:54 2</p> <table border="1"> <thead> <tr> <th>Field</th> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Server Group Name</td> <td>sds_mrsvnc_grp *</td> <td>Unique identifier used to label a Server Group. [Default = n/a. Range = A 1-32-character string. Valid characters are alphanumeric and underscore. Must contain at least one alpha and must not start with a digit.]</td> </tr> <tr> <td>Level</td> <td>A ▼ *</td> <td>Select one of the Levels supported by the system</td> </tr> <tr> <td>Parent</td> <td>NONE ▼ *</td> <td>Select an existing Server Group or NONE</td> </tr> <tr> <td>Function</td> <td>SDS ▼ *</td> <td>Select one of the Functions supported by the system</td> </tr> <tr> <td>NTP Server 1</td> <td>10.250.32.10</td> <td>The IP Address of a reachable NTP server to be used for clock synchronization. Configurable for level A only. [Range = A valid IP address or blank]</td> </tr> <tr> <td>NTP Server 2</td> <td>10.250.32.51</td> <td>The IP Address of a backup NTP server (optional). Configurable for level A only. [Range = A valid IP address or blank]</td> </tr> <tr> <td colspan="3"><b>sds_mrsvnc</b></td> </tr> <tr> <td><b>Server</b></td> <td><b>SG Inclusion</b></td> <td><b>Preferred HA Role</b></td> </tr> <tr> <td>sds-mrsvnc-a</td> <td><input checked="" type="checkbox"/> Include in SG</td> <td><input type="checkbox"/> Preferred Spare</td> </tr> <tr> <td>sds-mrsvnc-b</td> <td><input checked="" type="checkbox"/> Include in SG</td> <td><input checked="" type="checkbox"/> Preferred Spare</td> </tr> <tr> <td>qs-mrsvnc-1</td> <td><input type="checkbox"/> Include in SG</td> <td><input type="checkbox"/> Preferred Spare</td> </tr> <tr> <td colspan="3"><b>VIP Assignment</b></td> </tr> <tr> <td colspan="2">VIP Address</td> <td>Add</td> </tr> <tr> <td>10.250.55.125</td> <td></td> <td>Remove</td> </tr> <tr> <td colspan="3">Ok Apply Cancel</td> </tr> </tbody> </table>	Field	Value	Description	Server Group Name	sds_mrsvnc_grp *	Unique identifier used to label a Server Group. [Default = n/a. Range = A 1-32-character string. Valid characters are alphanumeric and underscore. Must contain at least one alpha and must not start with a digit.]	Level	A ▼ *	Select one of the Levels supported by the system	Parent	NONE ▼ *	Select an existing Server Group or NONE	Function	SDS ▼ *	Select one of the Functions supported by the system	NTP Server 1	10.250.32.10	The IP Address of a reachable NTP server to be used for clock synchronization. Configurable for level A only. [Range = A valid IP address or blank]	NTP Server 2	10.250.32.51	The IP Address of a backup NTP server (optional). Configurable for level A only. [Range = A valid IP address or blank]	<b>sds_mrsvnc</b>			<b>Server</b>	<b>SG Inclusion</b>	<b>Preferred HA Role</b>	sds-mrsvnc-a	<input checked="" type="checkbox"/> Include in SG	<input type="checkbox"/> Preferred Spare	sds-mrsvnc-b	<input checked="" type="checkbox"/> Include in SG	<input checked="" type="checkbox"/> Preferred Spare	qs-mrsvnc-1	<input type="checkbox"/> Include in SG	<input type="checkbox"/> Preferred Spare	<b>VIP Assignment</b>			VIP Address		Add	10.250.55.125		Remove	Ok Apply Cancel		
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<p>48.</p>	<p><b>Active SDS VIP:</b></p> <p>Select the “<b>Query Server</b>” from the list of “<b>Available Servers in Network Element</b>” by clicking on the check box next to its name.</p>	 <p>sds_mrsvnc</p> <table border="1"> <thead> <tr> <th>Server</th> <th>SG Inclusion</th> <th>Preferred HA Role</th> </tr> </thead> <tbody> <tr> <td>sds-mrsvnc-a</td> <td><input checked="" type="checkbox"/> Include in SG</td> <td><input type="checkbox"/> Preferred Spare</td> </tr> <tr> <td>sds-mrsvnc-b</td> <td><input checked="" type="checkbox"/> Include in SG</td> <td><input type="checkbox"/> Preferred Spare</td> </tr> <tr> <td>qs-mrsvnc-1</td> <td><input checked="" type="checkbox"/> Include in SG</td> <td><input type="checkbox"/> Preferred Spare</td> </tr> </tbody> </table>	Server	SG Inclusion	Preferred HA Role	sds-mrsvnc-a	<input checked="" type="checkbox"/> Include in SG	<input type="checkbox"/> Preferred Spare	sds-mrsvnc-b	<input checked="" type="checkbox"/> Include in SG	<input type="checkbox"/> Preferred Spare	qs-mrsvnc-1	<input checked="" type="checkbox"/> Include in SG	<input type="checkbox"/> Preferred Spare																																				
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<p>49.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>Click the “<b>Apply</b>” dialogue button from the bottom of the screen.</p>	 <p>VIP Address Add</p> <p>10.250.55.125 Remove</p> <p>Ok Apply Cancel</p>																																																
<p>50.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>The user should be presented with a banner information message stating “<b>Data committed</b>”.</p>	 <p>Main Menu: Configuration -&gt; Server Groups [Edit]</p> <p>Info ▼</p> <p>Info • Data committed!</p> <table border="1"> <thead> <tr> <th>Field</th> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Server Group Name</td> <td>sds_mrsvnc *</td> <td>Unique identifier used to label a Server Group. [Default = n/a. Range = A 1-32-character string. Valid characters are alphanumeric and underscore. Must contain at least one alpha and must not start with a digit.]</td> </tr> <tr> <td>Network Element</td> <td>sds_mrsvnc ▼ *</td> <td>Select the Network Element for this Server Group</td> </tr> </tbody> </table>	Field	Value	Description	Server Group Name	sds_mrsvnc *	Unique identifier used to label a Server Group. [Default = n/a. Range = A 1-32-character string. Valid characters are alphanumeric and underscore. Must contain at least one alpha and must not start with a digit.]	Network Element	sds_mrsvnc ▼ *	Select the Network Element for this Server Group																																							
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### Procedure 4.3 Adding the Query Server to the SDS Server Group

51.

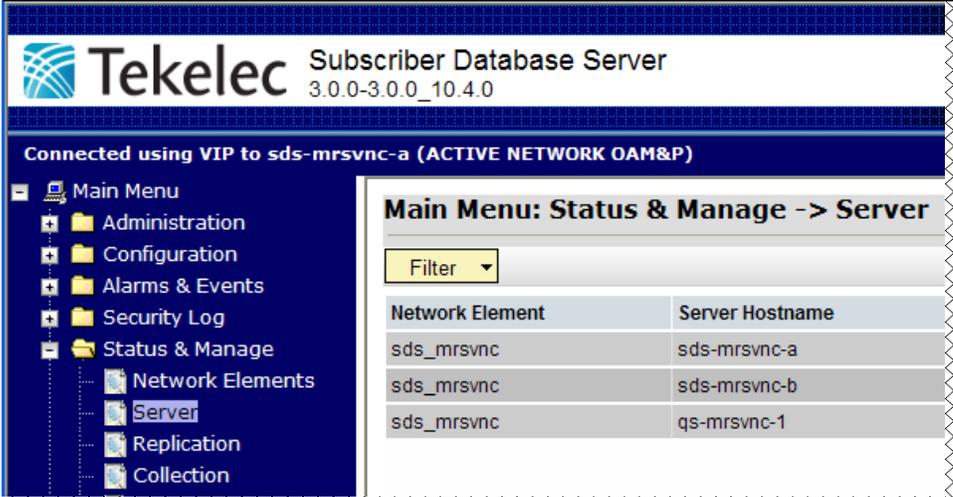
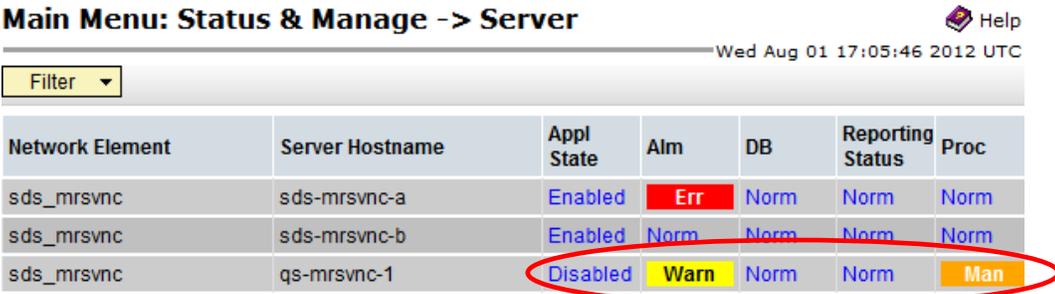


**IMPORTANT:**

Wait at least **5 minutes** before proceeding on to the next Step.

- Now that the Query Server has been paired within its SDS Server Group, it must establish DB replication with the Active SDS server. It may take several minutes for this process to be completed.
- Allow a minimum of **5 minutes** before continuing to the next Step.

## Procedure 4.4 Restarting the Query Server Application

<p>52.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>Select...</p> <p><b>Main Menu</b>  → Status &amp; Manage  → Server</p> <p>...as shown on the right.</p>	 <p>Tekelec Subscriber Database Server 3.0.0-3.0.0_10.4.0</p> <p>Connected using VIP to sds-mrsvnc-a (ACTIVE NETWORK OAM&amp;P)</p> <p>Main Menu: Status &amp; Manage -&gt; Server</p> <table border="1"> <thead> <tr> <th>Network Element</th> <th>Server Hostname</th> </tr> </thead> <tbody> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-a</td> </tr> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-b</td> </tr> <tr> <td>sds_mrsvnc</td> <td>qs-mrsvnc-1</td> </tr> </tbody> </table>	Network Element	Server Hostname	sds_mrsvnc	sds-mrsvnc-a	sds_mrsvnc	sds-mrsvnc-b	sds_mrsvnc	qs-mrsvnc-1																				
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sds_mrsvnc	qs-mrsvnc-1																													
<p>53.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>Verify that the “<b>DB and Reporting Status</b>” status columns show “<b>Norm</b>” for the Query Server at this point. The “<b>Proc</b>” column should show “<b>Man</b>”.</p> <p><b>NOTE:</b> If user chooses to refresh the Server status screen in advance of the default setting (15-30 sec.). This may be done by simply reselecting the “<b>Status &amp; Manage</b> → <b>Server</b>” option from the Main menu on the left.</p>	 <p>Main Menu: Status &amp; Manage -&gt; Server</p> <p>Wed Aug 01 17:05:46 2012 UTC</p> <table border="1"> <thead> <tr> <th>Network Element</th> <th>Server Hostname</th> <th>Appl State</th> <th>Alm</th> <th>DB</th> <th>Reporting Status</th> <th>Proc</th> </tr> </thead> <tbody> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-a</td> <td>Enabled</td> <td>Err</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-b</td> <td>Enabled</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>sds_mrsvnc</td> <td>qs-mrsvnc-1</td> <td>Disabled</td> <td>Warn</td> <td>Norm</td> <td>Norm</td> <td>Man</td> </tr> </tbody> </table>	Network Element	Server Hostname	Appl State	Alm	DB	Reporting Status	Proc	sds_mrsvnc	sds-mrsvnc-a	Enabled	Err	Norm	Norm	Norm	sds_mrsvnc	sds-mrsvnc-b	Enabled	Norm	Norm	Norm	Norm	sds_mrsvnc	qs-mrsvnc-1	Disabled	Warn	Norm	Norm	Man
Network Element	Server Hostname	Appl State	Alm	DB	Reporting Status	Proc																								
sds_mrsvnc	sds-mrsvnc-a	Enabled	Err	Norm	Norm	Norm																								
sds_mrsvnc	sds-mrsvnc-b	Enabled	Norm	Norm	Norm	Norm																								
sds_mrsvnc	qs-mrsvnc-1	Disabled	Warn	Norm	Norm	Man																								

## Procedure 4.4 Restarting the Query Server Application

54.



### Active SDS VIP:

1) Using the mouse, select the “**Query Server**” hostname. The line entry should now be highlighted in **GREEN**.

2) Select the “**Restart**” dialogue button from the bottom left corner of the screen.

3) Click the “**OK**” button on the confirmation dialogue box.

4) The user should be presented with a confirmation message (in the banner area) for the “**Query Server**” stating: “**Successfully restarted application**”.

**NOTE:** The user may need to use the vertical scroll-bar in order to make the “**Restart**” dialogue button visible.

### Main Menu: Status & Manage -> Server



Wed Aug 01 17:06:17 2012 UTC

Filter ▾

Network Element	Server Hostname	Appl State	Alm	DB	Reporting Status	Proc
sds_mrsvnc	sds-mrsvnc-a	Enabled	Err	Norm	Norm	Norm
sds_mrsvnc	sds-mrsvnc-b	Enabled	Norm	Norm	Norm	Norm
sds_mrsvnc	qs-mrsvnc-1	Disabled	Warn	Norm	Norm	Man



### Main Menu: Status & Manage -> Server [Restart]

Filter ▾ Status ▾

Status

- qs-mrsvnc-1: Successfully restarted application.

Appl State	Alm	Repl
abled	Err	Norm
abled	Norm	Norm
Disabled	Warn	Norm

## Procedure 4.4 Restarting the Query Server Application

55.

**Active SDS VIP:**

Verify that the “**Appl State**” now shows “**Enabled**” and that the “**Alm, DB, Reporting Status & Proc**” status columns all show “**Norm**” for the “**Query Server**”.

**NOTE:** *If user chooses to refresh the Server status screen in advance of the default setting (15-30 sec.). This may be done by simply reselecting the “**Status & Manage** → **Server**” option from the Main menu on the left.*

**Main Menu: Status & Manage -> Server**

 Help

Wed Aug 01 17:07:41 2012 UTC

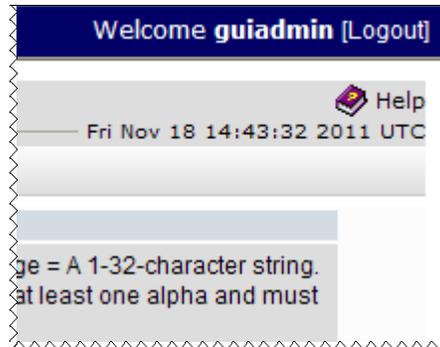
Filter ▾

Network Element	Server Hostname	Appl State	Alm	DB	Reporting Status	Proc
sds_mrsvnc	sds-mrsvnc-a	Enabled	Err	Norm	Norm	Norm
sds_mrsvnc	sds-mrsvnc-b	Enabled	Norm	Norm	Norm	Norm
sds_mrsvnc	qs-mrsvnc-1	Enabled	Norm	Norm	Norm	Norm

56.

**Active SDS VIP:**

Click the “**Logout**” link on the SDS server GUI.



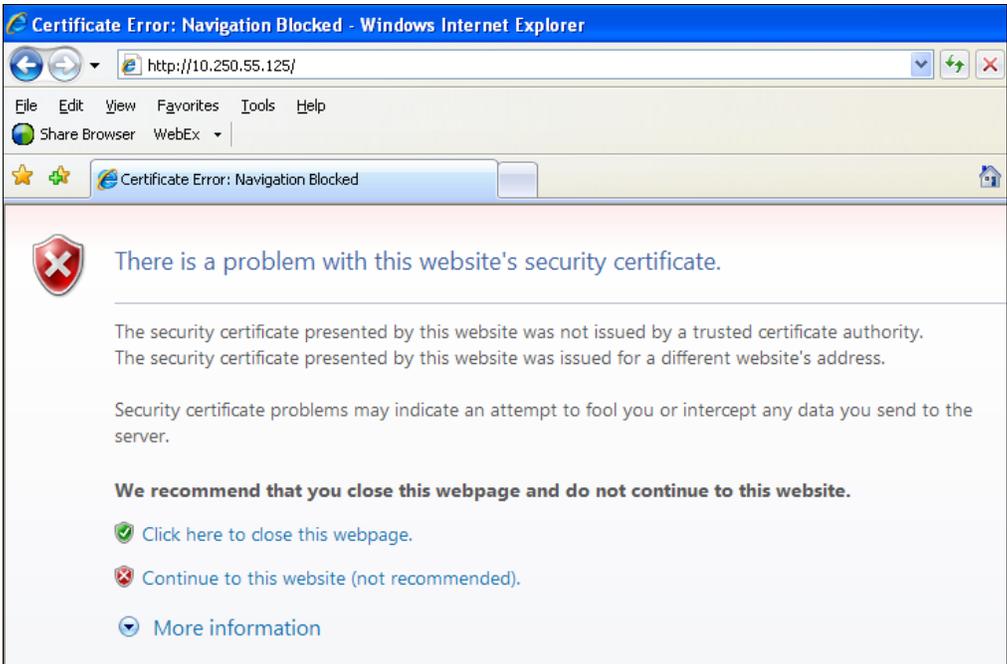
**THIS PROCEDURE HAS BEEN COMPLETED**

## 5.4 OAM Installation for DR SDS site

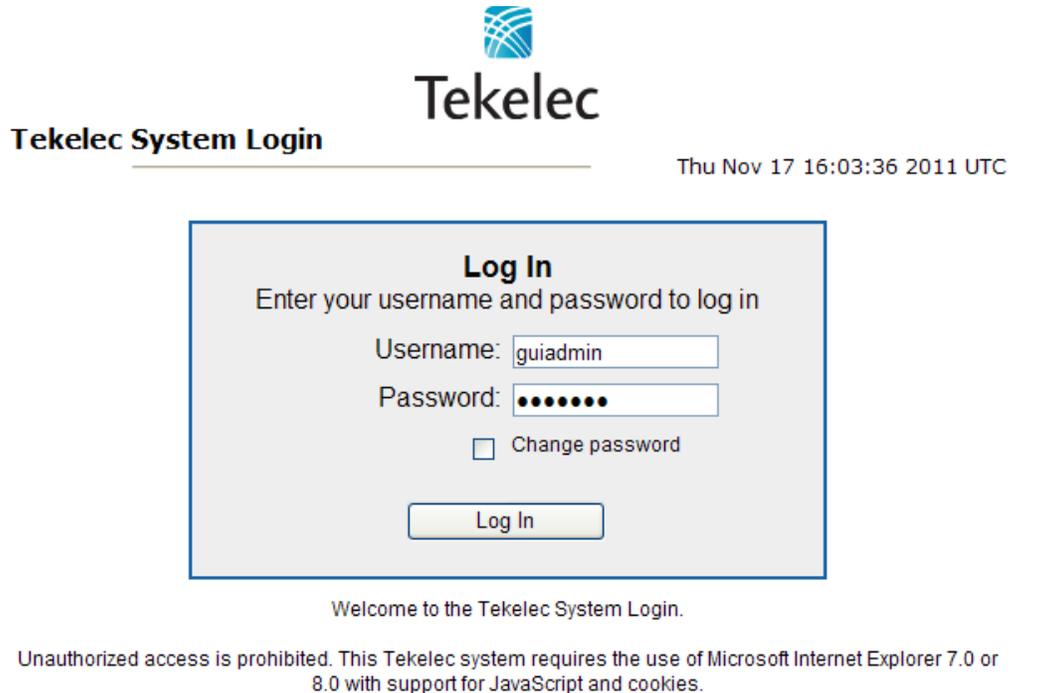
### Assumptions:

- This procedure assumes that the SDS Network Element XML file for the Disaster Recovery SDS Provisioning site has previously been created, as described in **Appendix F**.
- This procedure assumes that the Network Element XML files are either on a USB flash drive or the laptop's hard drive. The steps are written as if the XML files are on a USB flash drive, but the files can exist on any accessible drive.

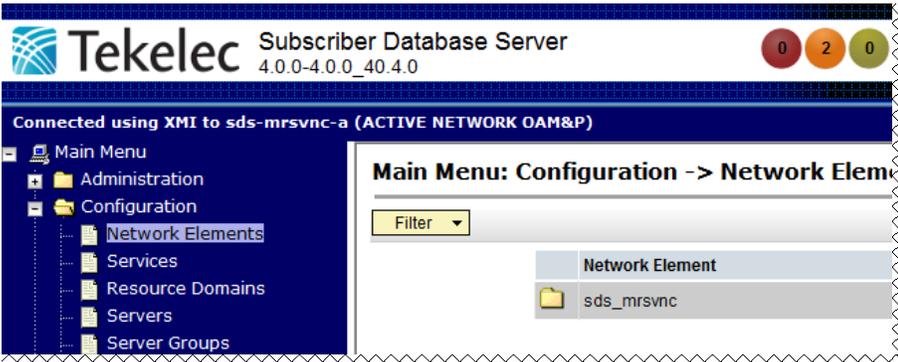
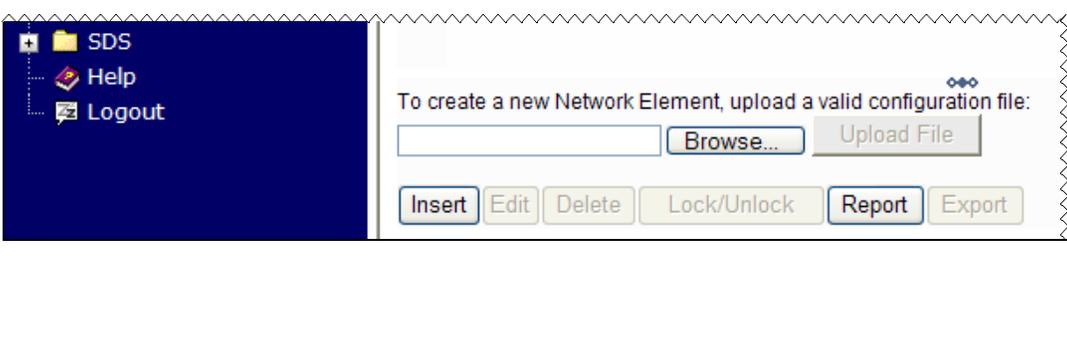
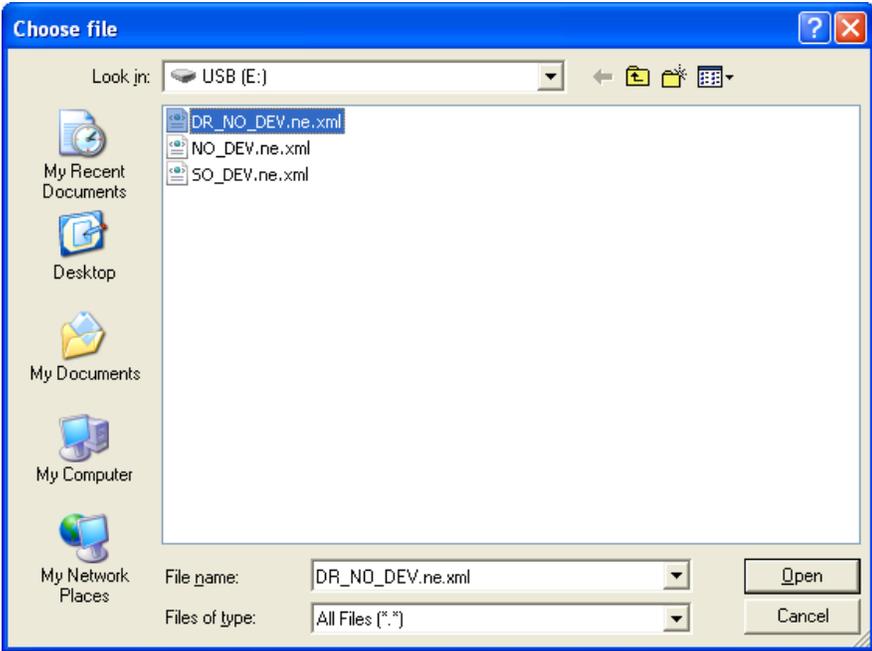
### Procedure 5: Configuring an OAM Server for DR SDS site

Step	Procedure	Result
<p>1.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Launch an approved web browser and connect to the <b>XMI Virtual IP Address (VIP)</b> of the <b>Active SDS site</b> using "https://"</p>	

**Procedure 5:** Configuring an OAM Server for DR SDS site

Step	Procedure	Result
<p>2.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>The user should be presented the login screen shown on the right.</p> <p>Login to the GUI using the default user and password.</p>	
<p>3.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>The user should be presented the SDS Main Menu as shown on the right.</p>	

## Procedure 5.1 Configuring the Network Element (DR SDS)

<p>4.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b> Select...</p> <p><b>Main Menu</b> → Configuration → Network Elements</p> <p>...as shown on the right.</p>	 <p>The screenshot shows the Tekelec Subscriber Database Server interface. The title bar reads 'Tekelec Subscriber Database Server 4.0.0-4.0.0_40.4.0'. Below the title bar, it says 'Connected using XML to sds-mrsvnc-a (ACTIVE NETWORK OAM&amp;P)'. The 'Main Menu' is expanded to show 'Configuration' &gt; 'Network Elements'. A search filter is applied, showing 'Network Element' and 'sds_mrsvnc'.</p>
<p>5.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b> From the Configuration / Network Elements screen...</p> <p>Select the "Browse" dialogue button (scroll to bottom left corner of screen).</p>	 <p>The screenshot shows the 'Main Menu: Configuration -&gt; Network Elements' screen. It features a 'Filter' dropdown and a list of items including 'Network Element' and 'sds_mrsvnc'. At the bottom, there are several buttons: 'Insert', 'Edit', 'Delete', 'Lock/Unlock', 'Report', and 'Export'. The 'Browse...' button is highlighted.</p>
<p>6.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p><b>Note:</b> This step assumes that the xml files were previously prepared, as described in Appendix F.</p> <p>1) Select the location containing the site .xml file.</p> <p>2) Select the .xml file and click the "Open" dialogue button.</p>	 <p>The screenshot shows a Windows 'Choose file' dialog box. The 'Look in:' field is set to 'USB (E:)'. The file list contains 'DR_NO_DEV.ne.xml', 'NO_DEV.ne.xml', and 'SO_DEV.ne.xml'. The 'DR_NO_DEV.ne.xml' file is selected. The 'File name:' field contains 'DR_NO_DEV.ne.xml' and the 'Files of type:' field is set to 'All Files (*.*)'. The 'Open' button is visible.</p>
<p>7.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b> Select the "Upload File" dialogue button (bottom left corner of screen).</p>	 <p>The screenshot shows the 'Main Menu: Configuration -&gt; Network Elements' screen. The 'Upload File' button is highlighted. The 'File name:' field now contains 'E:\DR_NO_DEV.ne.xml'.</p>

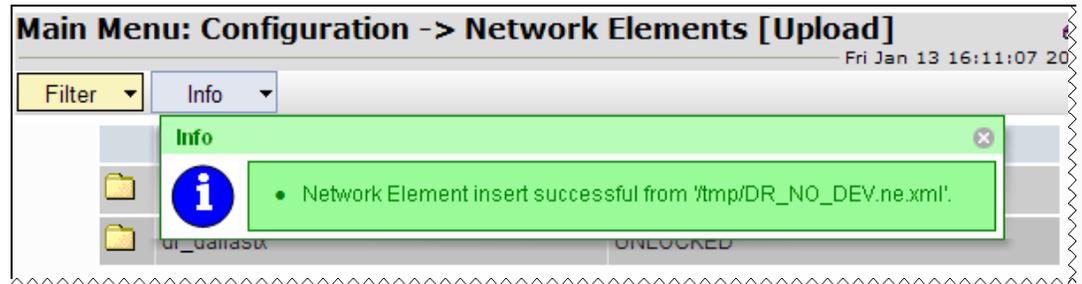
## Procedure 5.1 Configuring the Network Element (DR SDS)

8.



### Active SDS VIP:

If the values in the .xml file pass validation rules, the user will receive a banner information message showing that the data has been successfully validated and committed to the DB.



### Main Menu: Configuration -> Network Elements



Wed Aug 01 17:09:47 2012 UTC

Filter	Info
	Network Element
	sds_mrsvnc
	dr_dallastx

## Procedure 5.2 Configuring the OAM Server (DR SDS)

9.



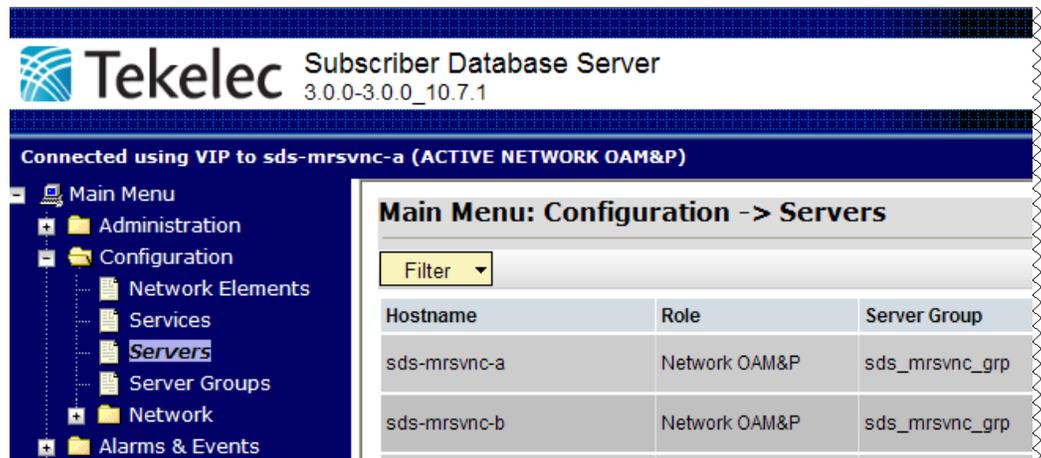
### Active SDS VIP:

Select...

### Main Menu

→ Configuration  
→ Servers

...as shown on the right.



10.

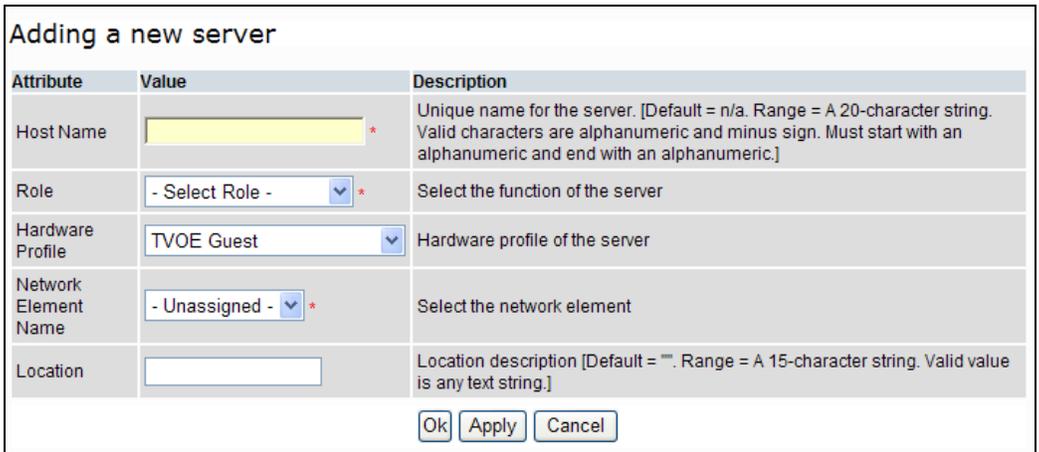
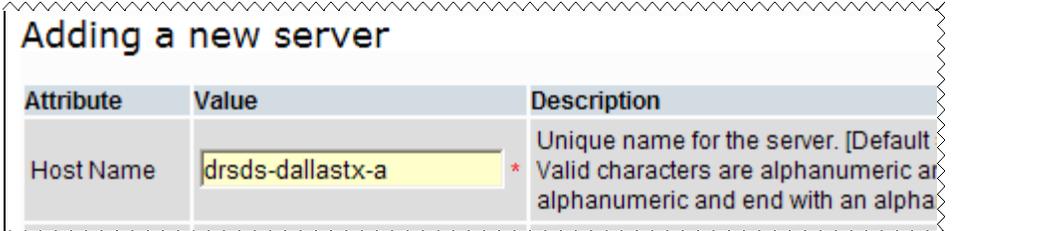
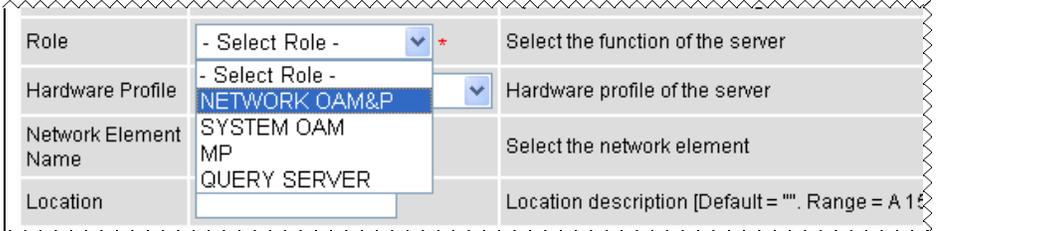
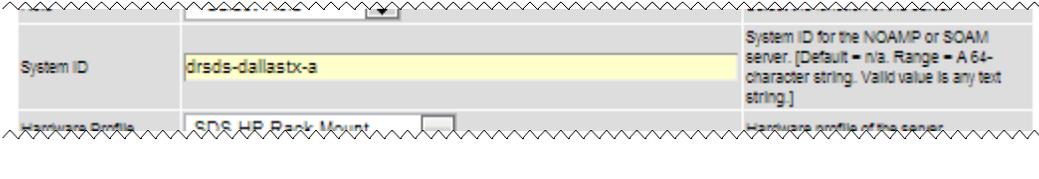
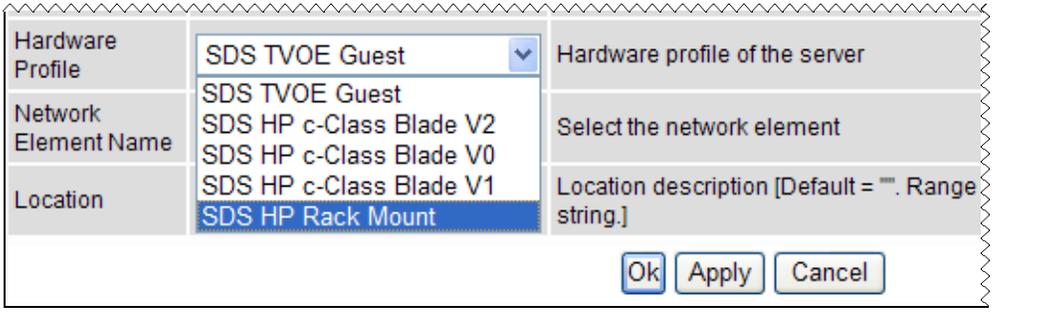


### Active SDS VIP:

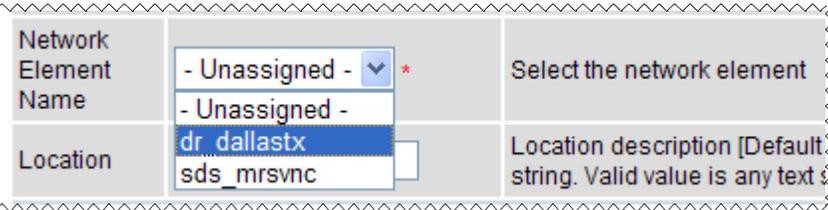
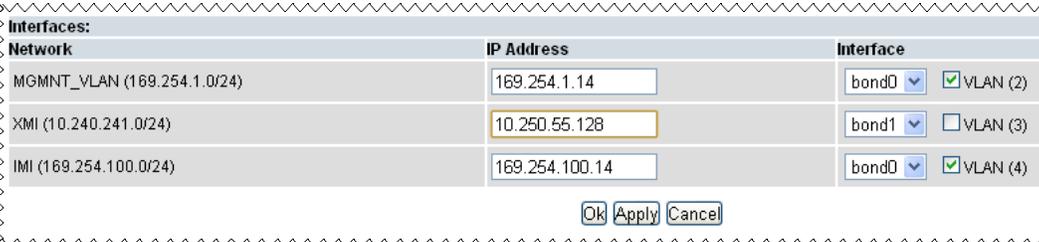
Select the "Insert" dialogue button (bottom left corner of screen).



## Procedure 5.2 Configuring the OAM Server (DR SDS)

<p>11.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>The user is now presented with the “Adding a new server” configuration screen.</p>	
<p>12.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Input the assigned “hostname” for OAM Server.</p>	
<p>13.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Select “NETWORK OAM&amp;P” for the server “Role” from the pull-down menu.</p>	
<p>14.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Input the assigned hostname again as the “System ID” for the SDS DR Server (A or B).</p>	
<p>15.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Select “SDS HP Rack Mount” for the Hardware Profile for the SDS from the pull-down menu.</p>	

## Procedure 5.2 Configuring the OAM Server (DR SDS)

<p>16.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Select the <b>Network Element Name</b> for the SDS from the pull-down menu.</p> <p><b>NOTE:</b> After the <i>Network Element Name</i> is selected, the <i>Interfaces</i> fields will be displayed, as seen in <b>Step 18</b>.</p>										
<p>17.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Enter the site location.</p> <p><b>NOTE:</b> Location is an optional field.</p>										
<p>18.</p> <input type="checkbox"/>	<p><b>SDS Server A:</b></p> <p>1) Enter the <b>MGMNT_VLAN</b> and <b>IMI IP</b> addresses for the <b>SDS Server</b>.</p> <p>2) Set the <b>MGMNT_VLAN</b> and <b>IMI Interfaces</b> to “bond0” and check each <b>VLAN</b> checkbox.</p> <p>3) Enter the <b>XMI IP</b> address for the <b>SDS Server</b>.</p> <p>4) Set the <b>XMI Interface</b> to “bond1” and <b>DO NOT</b> check the <b>VLAN</b> box.</p>	 <table border="1"> <thead> <tr> <th>SDS Server</th> <th>MGMNT_VLAN IP</th> <th>IMI IP</th> </tr> </thead> <tbody> <tr> <td>SDS-A (DR)</td> <td>169.254.1.14</td> <td>169.254.100.14</td> </tr> <tr> <td>SDS-B (DR)</td> <td>169.254.1.15</td> <td>169.254.100.15</td> </tr> </tbody> </table> <p><b>NOTE:</b> These values should be used for all SDS installations where 4948E-F Aggregations switches are deployed.</p>	SDS Server	MGMNT_VLAN IP	IMI IP	SDS-A (DR)	169.254.1.14	169.254.100.14	SDS-B (DR)	169.254.1.15	169.254.100.15
SDS Server	MGMNT_VLAN IP	IMI IP									
SDS-A (DR)	169.254.1.14	169.254.100.14									
SDS-B (DR)	169.254.1.15	169.254.100.15									

## Procedure 5.2 Configuring the OAM Server (DR SDS)

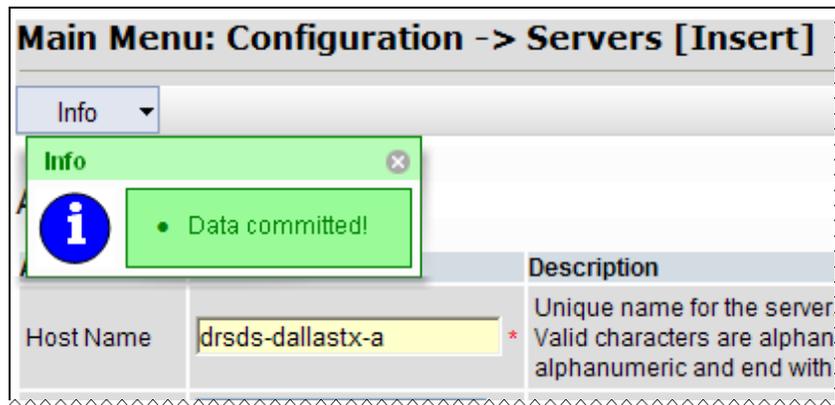
<p>19.</p> <p><input type="checkbox"/></p>	<p><b>SDS Server A:</b></p> <p>1) Click the “NTP Servers:” “Add” dialogue button.</p> <p>2) Enter the <b>NTP Server IP Address</b> for an NTP Server.</p> <p>3) If you have another <b>NTP Server IP address</b>, repeat (1) and (2) to enter it.</p> <p>4) Optionally, click the “Prefer” checkbox to prefer one NTP Server over the other.</p>											
<p>20.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>1) The user should be presented with a banner information message stating “Pre-Validation passed”.</p> <p>2) Click the “Apply” dialogue button.</p>	<table border="1"> <thead> <tr> <th colspan="2">Interfaces:</th> </tr> <tr> <th>Network</th> <th>IP Address</th> </tr> </thead> <tbody> <tr> <td>MGMNT_VLAN (169.254.1.0/24)</td> <td>169.254.1.14</td> </tr> <tr> <td>XMI (10.240.241.0/24)</td> <td>10.250.55.128</td> </tr> <tr> <td>IMI (169.254.100.0/24)</td> <td>169.254.100.14</td> </tr> </tbody> </table>	Interfaces:		Network	IP Address	MGMNT_VLAN (169.254.1.0/24)	169.254.1.14	XMI (10.240.241.0/24)	10.250.55.128	IMI (169.254.100.0/24)	169.254.100.14
Interfaces:												
Network	IP Address											
MGMNT_VLAN (169.254.1.0/24)	169.254.1.14											
XMI (10.240.241.0/24)	10.250.55.128											
IMI (169.254.100.0/24)	169.254.100.14											

## Procedure 5.2 Configuring the OAM Server (DR SDS)

21.

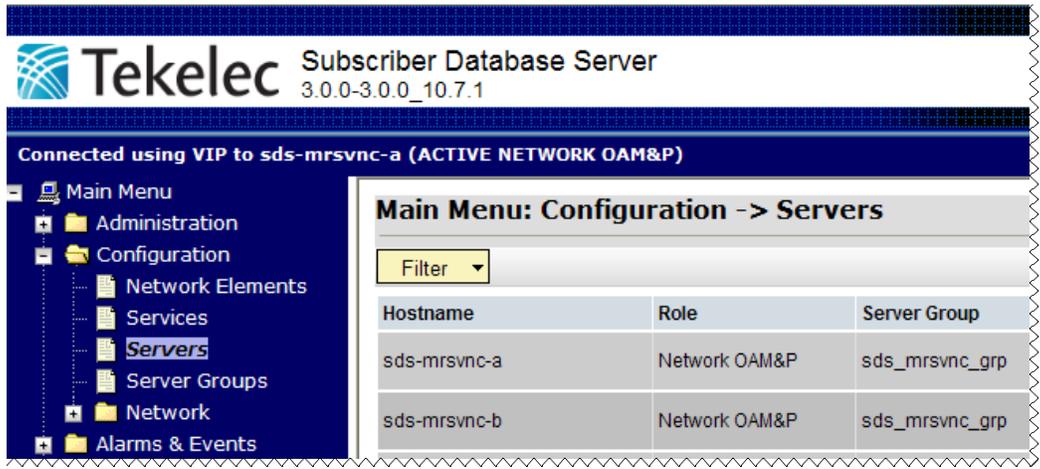
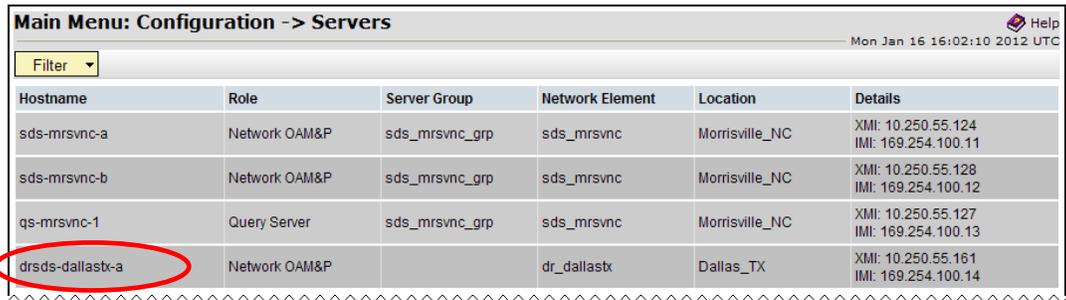
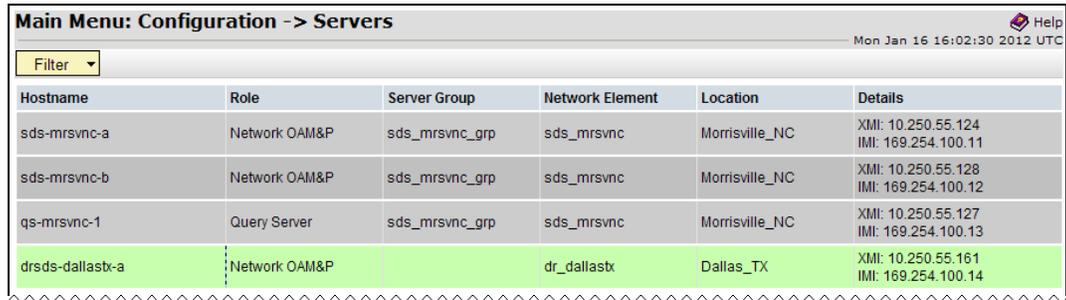
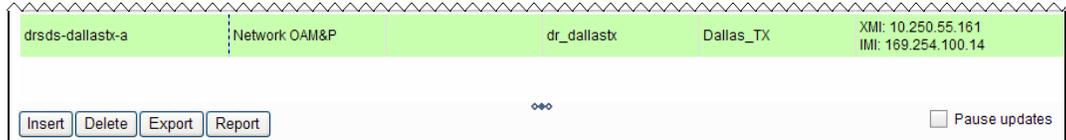
### Active SDS VIP:

If the values provided match the network ranges assigned to the NE, the user will receive a banner information message showing that the data has been validated and committed to the DB.



The screenshot shows a web-based configuration interface titled "Main Menu: Configuration -> Servers [Insert]". A green information box with a blue 'i' icon and a close button is overlaid on the page, displaying the message "Data committed!". Below the message, there is a form with a "Host Name" field containing the text "drdsds-dallastx-a" and a "Description" field. The description text reads: "Unique name for the server. Valid characters are alphanumeric and end with". A red asterisk is visible next to the description text.

## Procedure 5.3 Applying the OAM Server Configuration file (DR SDS)

22.	<p><b>Active SDS VIP:</b></p> <p>Select...</p> <p><b>Main Menu</b> → Configuration → Servers</p> <p>...as shown on the right.</p>	 <p>The screenshot shows the Tekelec Subscriber Database Server interface. The main menu is open, highlighting 'Servers'. The 'Servers' configuration screen displays a table with the following data:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Hostname</th> <th>Role</th> <th>Server Group</th> </tr> </thead> <tbody> <tr> <td>sds-mrsvnc-a</td> <td>Network OAM&amp;P</td> <td>sds_mrsvnc_grp</td> </tr> <tr> <td>sds-mrsvnc-b</td> <td>Network OAM&amp;P</td> <td>sds_mrsvnc_grp</td> </tr> </tbody> </table>	Hostname	Role	Server Group	sds-mrsvnc-a	Network OAM&P	sds_mrsvnc_grp	sds-mrsvnc-b	Network OAM&P	sds_mrsvnc_grp																					
Hostname	Role	Server Group																														
sds-mrsvnc-a	Network OAM&P	sds_mrsvnc_grp																														
sds-mrsvnc-b	Network OAM&P	sds_mrsvnc_grp																														
23.	<p><b>Active SDS VIP:</b></p> <p>On the “Configuration → Servers” screen, find the newly added OAM server in the list.</p>	 <p>The screenshot shows the 'Main Menu: Configuration -&gt; Servers' screen. The table below shows the server list, with the entry 'drds-dallastx-a' circled in red.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Hostname</th> <th>Role</th> <th>Server Group</th> <th>Network Element</th> <th>Location</th> <th>Details</th> </tr> </thead> <tbody> <tr> <td>sds-mrsvnc-a</td> <td>Network OAM&amp;P</td> <td>sds_mrsvnc_grp</td> <td>sds_mrsvnc</td> <td>Morrisville_NC</td> <td>XMI: 10.250.55.124 IMI: 169.254.100.11</td> </tr> <tr> <td>sds-mrsvnc-b</td> <td>Network OAM&amp;P</td> <td>sds_mrsvnc_grp</td> <td>sds_mrsvnc</td> <td>Morrisville_NC</td> <td>XMI: 10.250.55.128 IMI: 169.254.100.12</td> </tr> <tr> <td>qs-mrsvnc-1</td> <td>Query Server</td> <td>sds_mrsvnc_grp</td> <td>sds_mrsvnc</td> <td>Morrisville_NC</td> <td>XMI: 10.250.55.127 IMI: 169.254.100.13</td> </tr> <tr style="border: 2px solid red;"> <td>drds-dallastx-a</td> <td>Network OAM&amp;P</td> <td></td> <td>dr_dallastx</td> <td>Dallas_TX</td> <td>XMI: 10.250.55.161 IMI: 169.254.100.14</td> </tr> </tbody> </table>	Hostname	Role	Server Group	Network Element	Location	Details	sds-mrsvnc-a	Network OAM&P	sds_mrsvnc_grp	sds_mrsvnc	Morrisville_NC	XMI: 10.250.55.124 IMI: 169.254.100.11	sds-mrsvnc-b	Network OAM&P	sds_mrsvnc_grp	sds_mrsvnc	Morrisville_NC	XMI: 10.250.55.128 IMI: 169.254.100.12	qs-mrsvnc-1	Query Server	sds_mrsvnc_grp	sds_mrsvnc	Morrisville_NC	XMI: 10.250.55.127 IMI: 169.254.100.13	drds-dallastx-a	Network OAM&P		dr_dallastx	Dallas_TX	XMI: 10.250.55.161 IMI: 169.254.100.14
Hostname	Role	Server Group	Network Element	Location	Details																											
sds-mrsvnc-a	Network OAM&P	sds_mrsvnc_grp	sds_mrsvnc	Morrisville_NC	XMI: 10.250.55.124 IMI: 169.254.100.11																											
sds-mrsvnc-b	Network OAM&P	sds_mrsvnc_grp	sds_mrsvnc	Morrisville_NC	XMI: 10.250.55.128 IMI: 169.254.100.12																											
qs-mrsvnc-1	Query Server	sds_mrsvnc_grp	sds_mrsvnc	Morrisville_NC	XMI: 10.250.55.127 IMI: 169.254.100.13																											
drds-dallastx-a	Network OAM&P		dr_dallastx	Dallas_TX	XMI: 10.250.55.161 IMI: 169.254.100.14																											
24.	<p><b>Active SDS VIP:</b></p> <p>Use the cursor to select the new OAM server entry added in the <b>Steps 11 - 21</b>.</p> <p>The row containing the server should now be highlighted.</p>	 <p>The screenshot shows the 'Main Menu: Configuration -&gt; Servers' screen. The row for 'drds-dallastx-a' is highlighted in green.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Hostname</th> <th>Role</th> <th>Server Group</th> <th>Network Element</th> <th>Location</th> <th>Details</th> </tr> </thead> <tbody> <tr> <td>sds-mrsvnc-a</td> <td>Network OAM&amp;P</td> <td>sds_mrsvnc_grp</td> <td>sds_mrsvnc</td> <td>Morrisville_NC</td> <td>XMI: 10.250.55.124 IMI: 169.254.100.11</td> </tr> <tr> <td>sds-mrsvnc-b</td> <td>Network OAM&amp;P</td> <td>sds_mrsvnc_grp</td> <td>sds_mrsvnc</td> <td>Morrisville_NC</td> <td>XMI: 10.250.55.128 IMI: 169.254.100.12</td> </tr> <tr> <td>qs-mrsvnc-1</td> <td>Query Server</td> <td>sds_mrsvnc_grp</td> <td>sds_mrsvnc</td> <td>Morrisville_NC</td> <td>XMI: 10.250.55.127 IMI: 169.254.100.13</td> </tr> <tr style="background-color: #e0ffe0;"> <td>drds-dallastx-a</td> <td>Network OAM&amp;P</td> <td></td> <td>dr_dallastx</td> <td>Dallas_TX</td> <td>XMI: 10.250.55.161 IMI: 169.254.100.14</td> </tr> </tbody> </table>	Hostname	Role	Server Group	Network Element	Location	Details	sds-mrsvnc-a	Network OAM&P	sds_mrsvnc_grp	sds_mrsvnc	Morrisville_NC	XMI: 10.250.55.124 IMI: 169.254.100.11	sds-mrsvnc-b	Network OAM&P	sds_mrsvnc_grp	sds_mrsvnc	Morrisville_NC	XMI: 10.250.55.128 IMI: 169.254.100.12	qs-mrsvnc-1	Query Server	sds_mrsvnc_grp	sds_mrsvnc	Morrisville_NC	XMI: 10.250.55.127 IMI: 169.254.100.13	drds-dallastx-a	Network OAM&P		dr_dallastx	Dallas_TX	XMI: 10.250.55.161 IMI: 169.254.100.14
Hostname	Role	Server Group	Network Element	Location	Details																											
sds-mrsvnc-a	Network OAM&P	sds_mrsvnc_grp	sds_mrsvnc	Morrisville_NC	XMI: 10.250.55.124 IMI: 169.254.100.11																											
sds-mrsvnc-b	Network OAM&P	sds_mrsvnc_grp	sds_mrsvnc	Morrisville_NC	XMI: 10.250.55.128 IMI: 169.254.100.12																											
qs-mrsvnc-1	Query Server	sds_mrsvnc_grp	sds_mrsvnc	Morrisville_NC	XMI: 10.250.55.127 IMI: 169.254.100.13																											
drds-dallastx-a	Network OAM&P		dr_dallastx	Dallas_TX	XMI: 10.250.55.161 IMI: 169.254.100.14																											
25.	<p><b>Active SDS VIP:</b></p> <p>Select the “Export” dialogue button (bottom left corner of screen).</p>	 <p>The screenshot shows the 'Main Menu: Configuration -&gt; Servers' screen. The 'Export' button is highlighted in the bottom left corner.</p> <p style="text-align: center;"> <input type="button" value="Insert"/> <input type="button" value="Delete"/> <input style="border: 2px solid green;" type="button" value="Export"/> <input type="button" value="Report"/> </p> <p style="text-align: right;"> <input type="checkbox"/> Pause updates     </p>																														

### Procedure 5.3 Applying the OAM Server Configuration file (DR SDS)

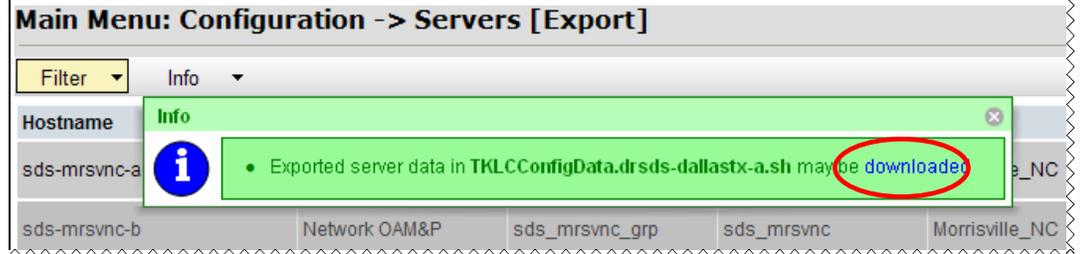
26.



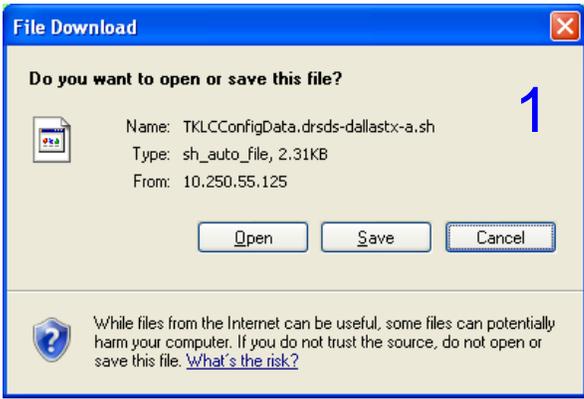
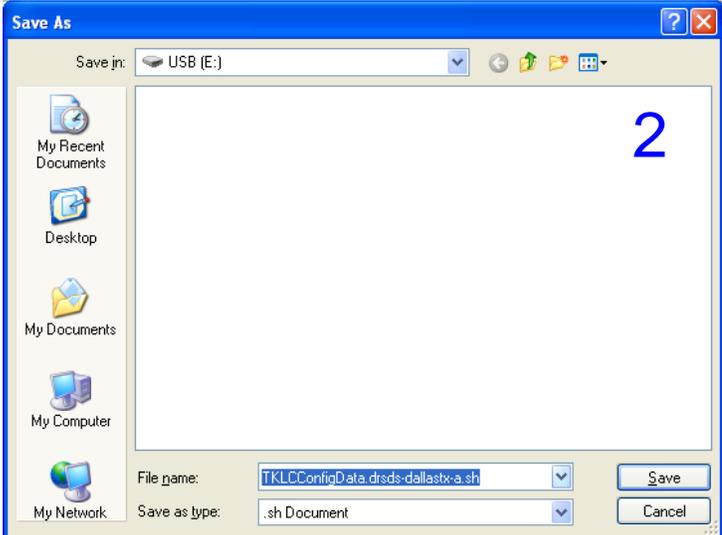
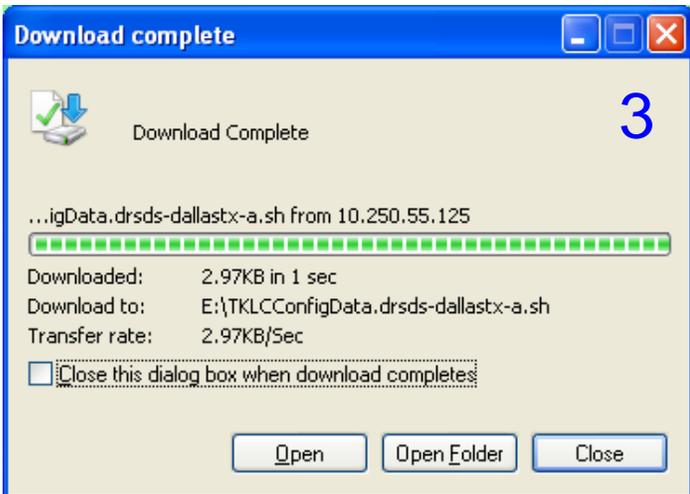
#### Active SDS VIP:

The user will receive a banner information message showing a download link for the Server configuration data.

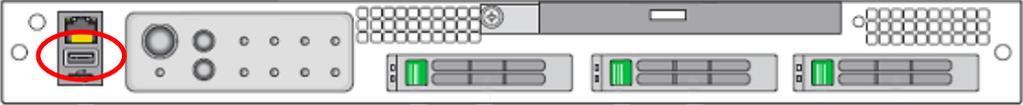
Click on the word **“downloaded”** to download and save the OAM server configuration file.



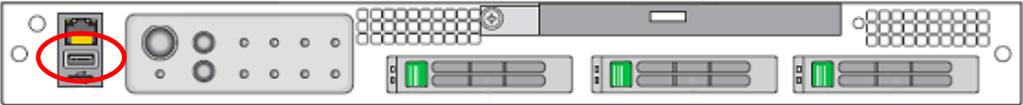
## Procedure 5.3 Applying the OAM Server Configuration file (DR SDS)

<p>27.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>1) Click the “Save” dialogue button.</p> <p>2) Save the OAM server configuration file to a USB flash drive.</p> <p>3) Click the “Close” dialogue button</p>	  
<p>28.</p> <p><input type="checkbox"/></p>	<p><b>OAM Server:</b></p> <p>Access the server console.</p>	<ul style="list-style-type: none"> <li>• Connect to the <b>OAM Server</b> console using one of the access methods described in <b>Section 2.3</b>.</li> </ul>

### Procedure 5.3 Applying the OAM Server Configuration file (DR SDS)

<p>29.</p> <input type="checkbox"/>	<p><b>OAM Server:</b></p> <p>1) Access the command prompt.</p> <p>2) Log into the OAM server as the "root" user.</p>	<pre>CentOS release 5.6 (Final) Kernel 2.6.18-238.19.1.el5prere15.0.0_72.22.0 on an x86_64  hostname1260476035 login: root Password: &lt;root_password&gt;</pre>
<p>30.</p> <input type="checkbox"/>	<p><b>OAM Server:</b></p> <p>Output similar to that shown on the right will appear as the server access the command prompt.</p>	<pre>*** TRUNCATED OUTPUT *** VPATH=/opt/TKLCcomcol/runcm5.16:/opt/TKLCcomcol/cm5.16 PRODPATH= RELEASE=5.16 RUNID=00 VPATH=/var/TKLC/rundb:/usr/TKLC/appworks:/usr/TKLC/awpcommon:/usr/TKLC/comagent-gui:/usr/TKLC/comagent:/usr/TKLC/sds PRODPATH=/opt/comcol/prod RUNID=00 [root@hostname1260476035 ~]#</pre>
<p>31.</p> <input type="checkbox"/>	<p><b>OAM Server:</b></p> <p>Insert the USB flash drive containing the server configuration file into the USB port on the front panel of the server.</p>	 <p>Figure 4 - HP DL360 Front Panel: USB Port</p>
<p>32.</p> <input type="checkbox"/>	<p><b>OAM Server:</b></p> <p>Output similar to that shown on the right will appear as the USB flash drive is inserted into the SDS Server front USB port.</p> <p>Press the &lt;ENTER&gt; key to return to the command prompt.</p>	<pre>[root@hostname1260476099 ~]# sd 3:0:0:0: [sdb] Assuming drive cache: write through sd 3:0:0:0: [sdb] Assuming drive cache: write through &lt;ENTER&gt;  [root@hostname1260476099 ~]#</pre>
<p>33.</p> <input type="checkbox"/>	<p><b>OAM Server:</b></p> <p>Verify that the USB flash drive's partition has been mounted by the OS: Search <b>df</b> for the device named in the previous step's output.</p>	<pre>[root@hostname1260476099 ~]# df  grep sdb /dev/sdb1          2003076            8  2003068    1% /media/sdb1 [root@hostname1260476099 ~]#</pre>

## Procedure 5.3 Applying the OAM Server Configuration file (DR SDS)

<p>34.</p> <input type="checkbox"/>	<p><b>OAM Server:</b></p> <p>Copy the configuration file to the SDS server with the server name as shown in red</p>	<pre>[root@hostname1260476035 ~]# cp -p /media/sdb1/TKLCConfigData.drdsd- dallastx-a.sh /var/TKLC/db/filemgmt/. [root@hostname1260476035 ~]#</pre>
<p>35.</p> <input type="checkbox"/>	<p><b>OAM Server:</b></p> <p>Copy the server configuration file to the “/var/tmp” directory on the server, making sure to rename the file by omitting the server hostname from the file name.</p> <p><b>NOTE:</b> The server will poll the /var/tmp directory for the presence of the configuration file and automatically execute it when found.</p>	<p><b>Example:</b> TKLCConfigData&lt;.server_hostname&gt;.sh → will translate to →TKLCConfigData.sh</p> <pre>[root@hostname1260476035 ~]# cp -p /var/TKLC/db/filemgmt/TKLCConfigData.drdsd-dallastx-a.sh /var/tmp/TKLCConfigData.sh [root@hostname1260476035 ~]#</pre>
<p>36.</p> <input type="checkbox"/>	<p><b>OAM Server:</b></p> <p>After the script completes, a broadcast message will be sent to the terminal.</p> <p><b>NOTE:</b> The user should be aware that the time to complete this step varies by server and may take from 3-20 minutes to complete.</p>	<p><b>*** NO OUTPUT FOR ≈ 3-20 MINUTES ***</b></p> <p>Broadcast message from root (Mon Dec 14 15:47:33 2009):</p> <p>Server configuration completed successfully! See /var/TKLC/appw/logs/Process/install.log for details.</p> <p>Please remove the USB flash drive if connected and reboot the server. <b>&lt;ENTER&gt;</b></p> <pre>[root@hostname1260476099 ~]#</pre>
<p>37.</p> <input type="checkbox"/>	<p><b>OAM Server:</b></p> <p>Remove the USB flash drive from the USB port on the front panel of <b>OAM server</b>.</p> <p><b>CAUTION:</b> It is important that the USB flash drive be removed from the server before continuing on to the next step.</p>	 <p>Figure 4 - HP DL360 Front Panel: USB Port</p>

### Procedure 5.3 Applying the OAM Server Configuration file (DR SDS)

<p>38.</p> <input type="checkbox"/>	<p><b>OAM Server:</b></p> <p>Configure the time zone.</p>	<pre>[root@hostname1260476099 ~]# set_ini_tz.pl &lt;time zone&gt;</pre> <p><b>Note:</b> The following command example uses Etc/UTC time zone. Replace, as appropriate, with the time zone you have selected for this installation. See Appendix H for a list of valid time zones.</p> <pre>[root@hostname1260476099 ~]# set_ini_tz.pl "Etc/UTC"</pre>
<p>39.</p> <input type="checkbox"/>	<p><b>OAM Server:</b></p> <p>Initiate a reboot of the OAM server.</p>	<pre>[root@hostname1260476035 ~]# init 6</pre>
<p>40.</p> <input type="checkbox"/>	<p><b>OAM Server:</b></p> <p>Wait ~9 minutes</p> <p>Output similar to that shown on the right may be observed as the server initiates a reboot.</p>	<pre>[root@hostname1322679281 ~]# init 6 [root@hostname1322679281 ~]# bonding: bond0: Removing slave eth02 bonding: bond0: Warning: the permanent Hwaddr of eth02 - 98:4B:E1:6F:74:56 - is still in use by bond0. Set the Hwaddr of eth02 to a different address to avoid c onflicts. bonding: bond0: releasing active interface eth02 bonding: bond0: making interface eth12 the new active one. bonding: bond0: Removing slave eth12 bonding: bond0: releasing active interface eth12 e1000e 0000:07:00.0: eth12: changing MTU from 1500 to 1500 bonding: bond1: Removing slave eth01</pre> <p><b>*** TRUNCATED OUTPUT ***</b></p> <pre>Initializing USB Mass Storage driver... usbcore: registered new driver usb-storage USB Mass Storage support registered. device-mapper: uevent: version 1.0.3 device-mapper: ioctl: 4.11.5-iocli (2007-12-12) initialised: dm-devel@redhat.com device-mapper: dm-raid45: initialized 0.25941 kjournald starting. Commit interval 5 seconds EXT3-fs: mounted filesystem with ordered data mode. SELinux: Disabled at runtime. type=1404 audit(1322751643.542:2): selinux=0 auid=4294967295 ses=4294967295</pre>
<p>41.</p> <input type="checkbox"/>	<p><b>OAM Server:</b></p> <p>After the server has completed reboot...</p> <p>Verify that the server console returns to a login prompt.</p>	<pre>CentOS release 5.6 (Final) Kernel 2.6.18-238.19.1.el5prere15.0.0_72.22.0 on an x86_64  drsd-dallastx-a login: root Password: &lt;root_password&gt;</pre>

## Procedure 5.3 Applying the OAM Server Configuration file (DR SDS)

<p>42.</p> <input type="checkbox"/>	<p><b>OAM Server:</b></p> <p>Output similar to that shown on the right will appear as the server access the command prompt.</p>	<pre>*** TRUNCATED OUTPUT *** VPATH=/opt/TKLCcomcol/runcm5.16:/opt/TKLCcomcol/cm5.16 PRODPATH= RELEASE=5.16 RUNID=00 VPATH=/var/TKLC/rundb:/usr/TKLC/appworks:/usr/TKLC/awpcommon:/usr/TKLC/comagent-gui:/usr/TKLC/comagent:/usr/TKLC/sds PRODPATH=/opt/comcol/prod RUNID=00 [root@drsds-dallastx-a ~]#</pre>
<p>43.</p> <input type="checkbox"/>	<p><b>OAM Server:</b></p> <p>1) Verify that the <b>IMI IP address</b> input in <b>Step 18</b> has been applied to <b>“bond0.4”</b>.</p> <p>2) Verify that the <b>XMI IP address</b> input in <b>Step 18</b> has been applied to <b>“bond1”</b>.</p> <p><b>NOTE:</b> The server's <b>XMI &amp; IMI</b> addresses can be verified by reviewing the server configuration through the SDS GUI.</p> <p><b>i.e.</b>  <u>Main Menu</u>          → Configuration          → Servers</p> <p>Scroll to line entry containing the server's <b>hostname</b>.</p>	<pre>[root@drsds-dallastx-a ~]# ifconfig  grep in  grep -v inet6 bond0    Link encap:Ethernet  HWaddr 98:4B:E1:74:15:2C bond0.4  Link encap:Ethernet  HWaddr 98:4B:E1:74:15:2C           inet addr:169.254.100.14 Bcast:169.254.100.255 Mask:255.255.255.0 bond1    Link encap:Ethernet  HWaddr 98:4B:E1:74:15:2E           inet addr:10.250.55.161 Bcast:10.250.55.255 Mask:255.255.255.0 eth01    Link encap:Ethernet  HWaddr 98:4B:E1:74:15:2C eth02    Link encap:Ethernet  HWaddr 98:4B:E1:74:15:2E eth11    Link encap:Ethernet  HWaddr 98:4B:E1:74:15:2C eth12    Link encap:Ethernet  HWaddr 98:4B:E1:74:15:2E lo        Link encap:Local Loopback           inet addr:127.0.0.1 Mask:255.0.0.0 [root@drsds-dallastx-a ~]#</pre>
<p>44.</p> <input type="checkbox"/>	<p><b>SDS Server B:</b></p> <p>Use the <b>“ntpq”</b> command to verify that the server has connectivity to the assigned Primary and Secondary NTP server(s).</p>	<pre>[root@drsds-dallastx-a ~]# ntpq -np       remote           refid      st t when poll reach  delay  offset  jitter ===== +10.250.32.10      192.5.41.209      2 u  59   64  377   0.142 -2468.3  99.875 *10.250.32.51      192.5.41.209      2 u  58   64  377   0.124 -2528.2 128.432 [root@drsds-dallastx-a ~]#</pre>



**IF CONNECTIVITY TO THE NTP SERVER(S) CANNOT BE ESTABLISHED, STOP AND EXECUTE THE FOLLOWING STEPS:**

- 1) Contact the customer to verify that the IP addresses for the NTP server(s) are correct.
- 2) Have the customer IT group provide a network path from the OAM server IP to the assigned NTP IP addresses.

**ONCE NETWORK CONNECTIVITY IS ESTABLISHED TO THE ASSIGNED NTP IP ADDRESSES, THEN RESTART THIS PROCEDURE BEGINNING WITH STEP 43.**

### Procedure 5.3 Applying the OAM Server Configuration file (DR SDS)

<p><b>45.</b> <input type="checkbox"/></p>	<p><b>OAM Server:</b> Execute a “syscheck” to verify the current health of the server.</p>	<pre>[root@drsds-dallastx-a ~]# <b>syscheck</b> Running modules in class hardware...   OK Running modules in class disk...   OK Running modules in class net...   OK Running modules in class system...   OK Running modules in class proc...   OK LOG LOCATION: /var/TKLC/log/syscheck/fail_log [root@drsds-dallastx-a ~]#</pre>
<p><b>46.</b> <input type="checkbox"/></p>	<p><b>OAM Server:</b> Exit from the command line to return the server console to the login prompt.</p>	<pre>[root@drsds-dallastx-a ~]# <b>exit</b> logout  CentOS release 5.6 (Final) Kernel 2.6.18-238.19.1.el5prere15.0.0_72.22.0 on an x86_64  root@drsds-dallastx-a login:</pre>
<p><b>47.</b> <input type="checkbox"/></p>	<ul style="list-style-type: none"> <li>• <b>Configure DR SDS Server B by repeating steps 9 - 46 of this procedure.</b></li> </ul>	



**IF 4948E-F SWITCH CONFIGURATION HAS NOT BEEN COMPLETED PRIOR TO THIS STEP, STOP AND EXECUTE THE FOLLOWING STEPS:**

- 1) **APPENDIX E.1**
- 2) **APPENDIX E.2** (*Appendix E.2 references Appendix E.3 where applicable*).
- 3) **APPENDIX E.4**

**Procedure 5.3 Applying the OAM Server Configuration file (DR SDS)**

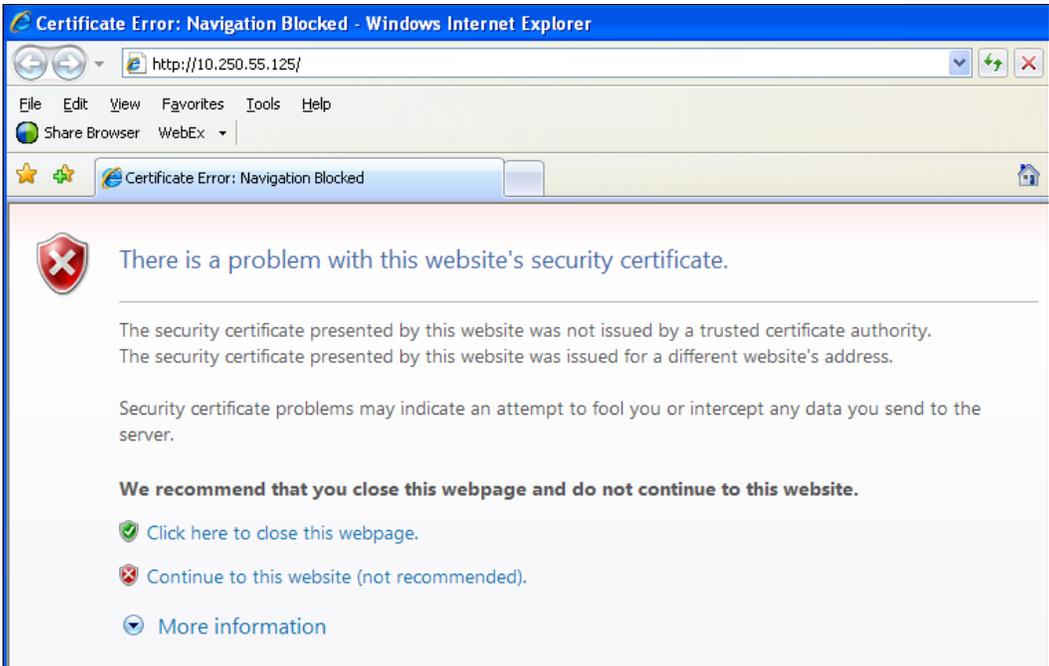
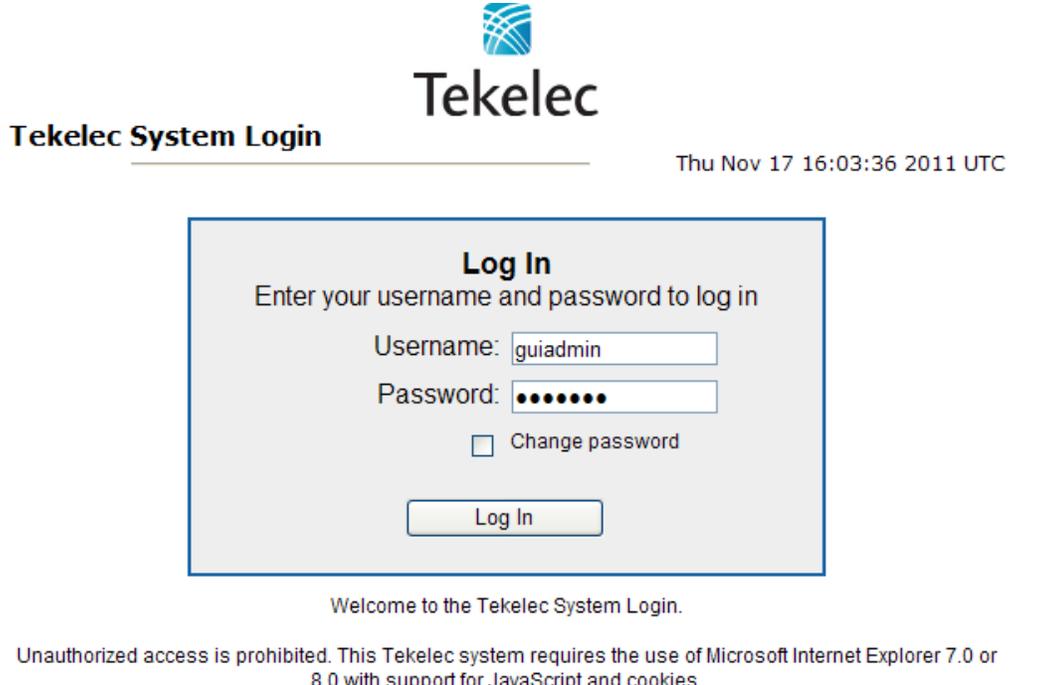
<p><b>48.</b></p> <input type="checkbox"/>	<p><b>DR SDS Server A:</b></p> <p>From <b>SDS Server A</b> “ping” the IP address configured for “<b>bond0.4</b>” (IMI) on <b>SDS Server B</b>.</p> <p><b>NOTE:</b> Use the <b>&lt;CTRL-C&gt;</b> key combination to terminate the “ping” process after a few seconds.</p>	<pre>[root@drsds-dallastx-a ~]# ping 169.254.100.15 PING 169.254.100.14 (169.254.100.15) 56(84) bytes of data. 64 bytes from 169.254.100.15: icmp_seq=1 ttl=64 time=0.021 ms 64 bytes from 169.254.100.15: icmp_seq=2 ttl=64 time=0.011 ms 64 bytes from 169.254.100.15: icmp_seq=3 ttl=64 time=0.020 ms 64 bytes from 169.254.100.15: icmp_seq=4 ttl=64 time=0.011 ms 64 bytes from 169.254.100.15: icmp_seq=5 ttl=64 time=0.023 ms&lt;CTRL-C&gt;  --- 169.254.100.15 ping statistics --- 5 packets transmitted, 5 received, 0% packet loss, time 3999ms rtt min/avg/max/mdev = 0.011/0.017/0.023/0.005 ms [root@drsds-dallastx-a ~]#</pre>
<p><b>49.</b></p> <input type="checkbox"/>	<p><b>DR SDS Server(s): A &amp; B</b></p> <p>Use “ping” to verify that the “<b>bond1</b>” device now has connectivity to the <b>XMI Gateway</b> address.</p> <p><b>NOTE:</b> Use the <b>&lt;CTRL-C&gt;</b> key combination to terminate the “ping” process after a few seconds.</p>	<pre>[root@so-carync-a ~]# ping 10.250.55.161 PING 10.250.55.161 (10.250.55.161) 56(84) bytes of data. 64 bytes from 10.250.55.161: icmp_seq=1 ttl=64 time=0.021 ms 64 bytes from 10.250.55.161: icmp_seq=2 ttl=64 time=0.017 ms 64 bytes from 10.250.55.161: icmp_seq=3 ttl=64 time=0.017 ms 64 bytes from 10.250.55.161: icmp_seq=4 ttl=64 time=0.022 ms 64 bytes from 10.250.55.161: icmp_seq=5 ttl=64 time=0.012 ms&lt;CTRL-C&gt;  --- 10.250.55.161 ping statistics --- 5 packets transmitted, 5 received, 0% packet loss, time 3999ms rtt min/avg/max/mdev = 0.012/0.017/0.022/0.006 ms [root@drsds-dallastx-a ~]#</pre>

**THIS PROCEDURE HAS BEEN COMPLETED**

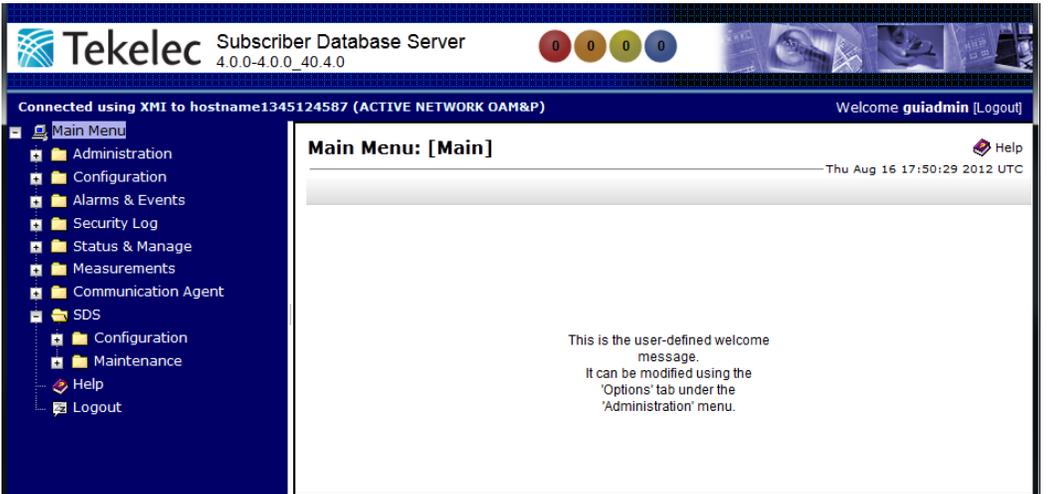
## 5.5 OAM Pairing for DR SDS site

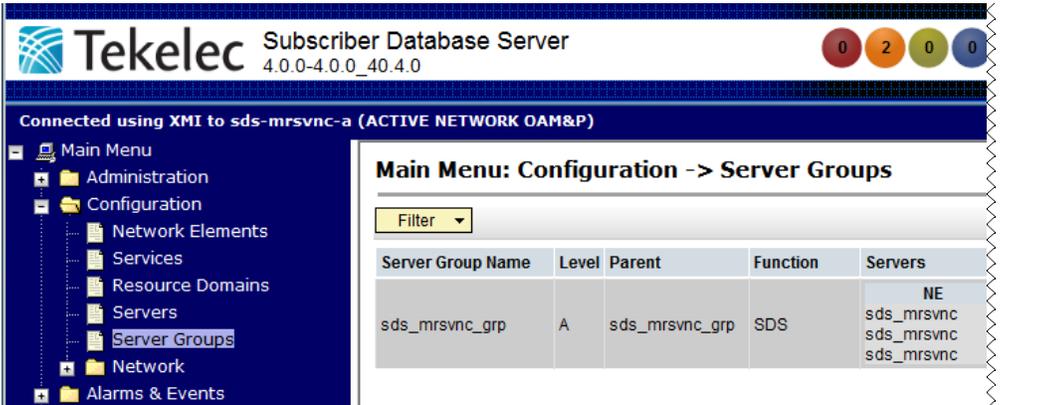
The user should be aware that during the OAM Pairing procedure, various errors may be seen at different stages of the procedure. During the execution of a step, the user is directed to ignore errors related to values other than the ones referenced by that step.

### Procedure 6: Pairing the OAM Servers for DR SDS site

Step	Procedure	Result
<p>1.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Launch an approved web browser and connect to the <b>XMI Virtual IP Address (VIP)</b> of the <b>Active SDS site</b> using "https://"</p>	
<p>2.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>The user should be presented the login screen shown on the right.</p> <p>Login to the GUI using the default user and password.</p>	

**Procedure 6:** Pairing the OAM Servers for DR SDS site

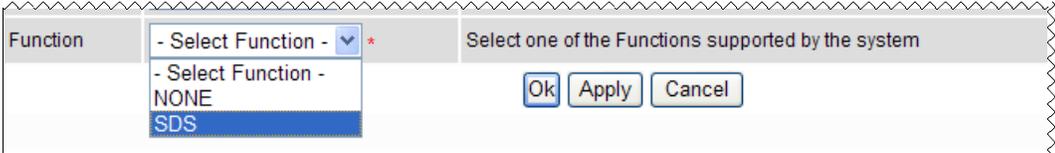
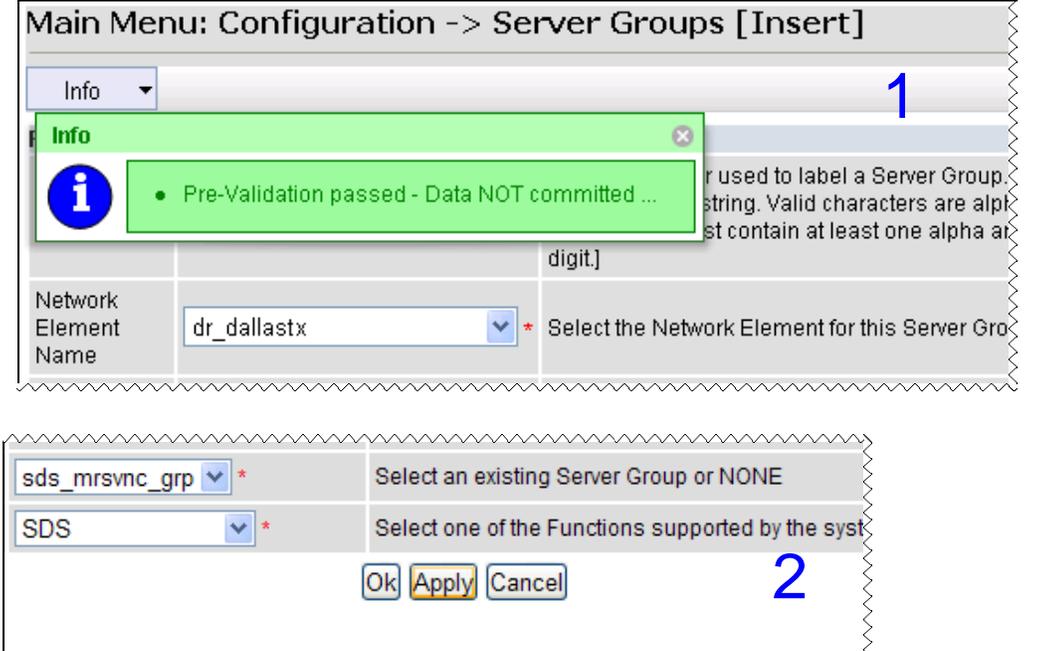
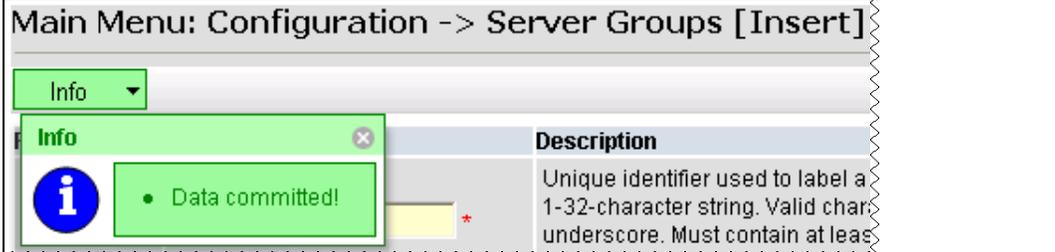
Step	Procedure	Result
<p>3.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>The user should be presented the SDS Main Menu as shown on the right.</p>	 <p>The screenshot shows the Tekelec Subscriber Database Server interface. The top header includes the Tekelec logo, the text 'Subscriber Database Server 4.0.0-4.0.0_40.4.0', and four status indicators (red, orange, green, blue). Below the header, it says 'Connected using XMI to hostname1345124587 (ACTIVE NETWORK OAM&amp;P)' and 'Welcome guidadmin [Logout]'. A left-hand navigation menu is visible with categories like Administration, Configuration, Alarms &amp; Events, Security Log, Status &amp; Manage, Measurements, Communication Agent, SDS, Configuration, Maintenance, Help, and Logout. The main content area displays 'Main Menu: [Main]' and a welcome message: 'This is the user-defined welcome message. It can be modified using the 'Options' tab under the 'Administration' menu.' The date and time 'Thu Aug 16 17:50:29 2012 UTC' are shown in the top right.</p>

<p><b>Procedure 6.1 Configuring the OAM Server Group (DR SDS)</b></p>												
<p>4.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Select...</p> <p><b>Main Menu</b></p> <p>→ Configuration</p> <p>    → Server Groups</p> <p>...as shown on the right.</p>	 <p>The screenshot shows the Tekelec Subscriber Database Server interface with the 'Server Groups' configuration page. The top header is the same as in the previous screenshot. The connection information now reads 'Connected using XMI to sds-mrsvnc-a (ACTIVE NETWORK OAM&amp;P)'. The left-hand navigation menu is expanded to show 'Configuration' and 'Server Groups' selected. The main content area displays 'Main Menu: Configuration -&gt; Server Groups' and a table of server groups.</p> <table border="1"> <thead> <tr> <th>Server Group Name</th> <th>Level</th> <th>Parent</th> <th>Function</th> <th>Servers</th> </tr> </thead> <tbody> <tr> <td>sds_mrsvnc_grp</td> <td>A</td> <td>sds_mrsvnc_grp</td> <td>SDS</td> <td>NE sds_mrsvnc sds_mrsvnc sds_mrsvnc</td> </tr> </tbody> </table>	Server Group Name	Level	Parent	Function	Servers	sds_mrsvnc_grp	A	sds_mrsvnc_grp	SDS	NE sds_mrsvnc sds_mrsvnc sds_mrsvnc
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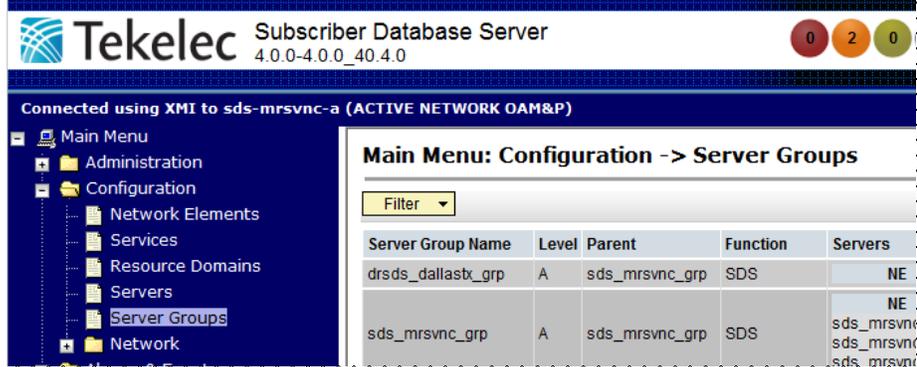
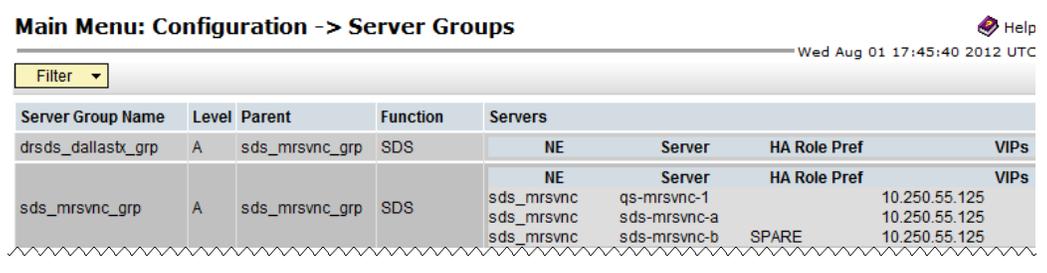
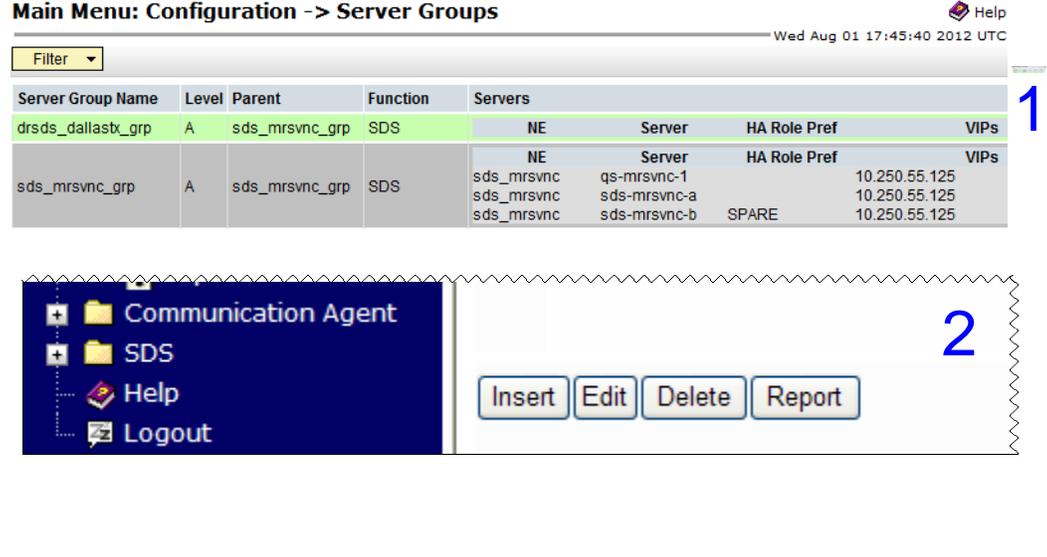
## Procedure 6.1 Configuring the OAM Server Group (DR SDS)

<p>5.</p> <input style="width: 20px; height: 20px;" type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>1) The user will be presented with the “<b>Server Groups</b>” configuration screen as shown on the right.</p> <p>2) Select the “<b>Insert</b>” dialogue button from the bottom left corner of the screen.</p> <p><b>NOTE:</b> The user may need to use the vertical scroll-bar in order to make the “<b>Insert</b>” dialogue button visible.</p>	<div style="border: 1px solid gray; padding: 5px;"> <p><b>Main Menu: Configuration -&gt; Server Groups</b> <span style="float: right;">Wed Aug 01 17:38:35</span></p> <p>Filter <input type="text"/></p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th>Server Group Name</th> <th>Level</th> <th>Parent</th> <th>Function</th> <th>Servers</th> </tr> </thead> <tbody> <tr> <td>sds_mrvnc_grp</td> <td>A</td> <td>sds_mrvnc_grp</td> <td>SDS</td> <td> <table style="font-size: small; text-align: left; margin: 0 auto;"> <tr> <th>NE</th> <th>Server</th> <th>HA Role Pref</th> </tr> <tr> <td>sds_mrvnc</td> <td>qs-mrvnc-1</td> <td>10.250.5</td> </tr> <tr> <td>sds_mrvnc</td> <td>sds-mrvnc-a</td> <td>10.250.5</td> </tr> <tr> <td>sds_mrvnc</td> <td>sds-mrvnc-b</td> <td>SPARE 10.250.5</td> </tr> </table> </td> </tr> </tbody> </table> </div> <div style="border: 1px solid gray; padding: 5px; margin-top: 5px;"> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="background-color: #000080; color: white; padding: 5px;"> <div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: left;"> <p>Communication Agent</p> <p>SDS</p> <p>Help</p> <p>Logout</p> </div> <div style="text-align: right;"> <p style="font-size: 2em; color: white;">2</p> </div> </div> </td> <td style="padding: 5px; text-align: right;"> <p>Insert Edit Delete Report</p> </td> </tr> </table> </div>	Server Group Name	Level	Parent	Function	Servers	sds_mrvnc_grp	A	sds_mrvnc_grp	SDS	<table style="font-size: small; text-align: left; margin: 0 auto;"> <tr> <th>NE</th> <th>Server</th> <th>HA Role Pref</th> </tr> <tr> <td>sds_mrvnc</td> <td>qs-mrvnc-1</td> <td>10.250.5</td> </tr> <tr> <td>sds_mrvnc</td> <td>sds-mrvnc-a</td> <td>10.250.5</td> </tr> <tr> <td>sds_mrvnc</td> <td>sds-mrvnc-b</td> <td>SPARE 10.250.5</td> </tr> </table>	NE	Server	HA Role Pref	sds_mrvnc	qs-mrvnc-1	10.250.5	sds_mrvnc	sds-mrvnc-a	10.250.5	sds_mrvnc	sds-mrvnc-b	SPARE 10.250.5	<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: left;"> <p>Communication Agent</p> <p>SDS</p> <p>Help</p> <p>Logout</p> </div> <div style="text-align: right;"> <p style="font-size: 2em; color: white;">2</p> </div> </div>	<p>Insert Edit Delete Report</p>
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<p>6.</p> <input style="width: 20px; height: 20px;" type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>The user will be presented with the “<b>Server Groups [Insert]</b>” screen as shown on the right.</p>	<div style="border: 1px solid gray; padding: 5px;"> <p><b>Main Menu: Configuration -&gt; Server Groups [Insert]</b> <span style="float: right;">Wed Aug 01 17:41:56 2012</span></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Field</th> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Server Group Name</td> <td><input style="width: 100%;" type="text"/></td> <td>Unique identifier used to label a Server Group. [Default = n/a. Range = A 1-32-character string. Valid characters are alphanumeric and underscore. Must contain at least one alpha and must not start with a digit.]</td> </tr> <tr> <td>Level</td> <td>- Select Level - *</td> <td>Select one of the Levels supported by the system. [Level A groups contain NOAMP and Query servers. Level B groups are optional and contain SOAM servers. Level C groups contain MP servers.]</td> </tr> <tr> <td>Parent</td> <td>- Select Parent - *</td> <td>Select an existing Server Group or NONE</td> </tr> <tr> <td>Function</td> <td>- Select Function - *</td> <td>Select one of the Functions supported by the system</td> </tr> </tbody> </table> <p style="text-align: center;">OK Apply Cancel</p> </div>	Field	Value	Description	Server Group Name	<input style="width: 100%;" type="text"/>	Unique identifier used to label a Server Group. [Default = n/a. Range = A 1-32-character string. Valid characters are alphanumeric and underscore. Must contain at least one alpha and must not start with a digit.]	Level	- Select Level - *	Select one of the Levels supported by the system. [Level A groups contain NOAMP and Query servers. Level B groups are optional and contain SOAM servers. Level C groups contain MP servers.]	Parent	- Select Parent - *	Select an existing Server Group or NONE	Function	- Select Function - *	Select one of the Functions supported by the system									
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<p>9.</p> <input style="width: 20px; height: 20px;" type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Select Parent “<b>NONE</b>” on the pull-down menu.</p>	<div style="border: 1px solid gray; padding: 5px;"> <table border="1" style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td>Parent</td> <td>- Select Parent - *</td> <td rowspan="2">Select one of the Functions supported by</td> </tr> <tr> <td>Function</td> <td>NONE *</td> </tr> </tbody> </table> </div>	Parent	- Select Parent - *	Select one of the Functions supported by	Function	NONE *																			
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Function	NONE *																									

**Procedure 6.1 Configuring the OAM Server Group (DR SDS)**

<p>10.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>Select “<b>SDS</b>” on the “<b>Function</b>” pull-down menu.</p>	
<p>11.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>1) The user should be presented with a banner information message stating “<b>Pre-Validation passed</b>”.</p> <p>2) Select the “<b>Apply</b>” dialogue button.</p>	
<p>12.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>The user should be presented with a banner information message stating “<b>Data committed</b>”.</p>	

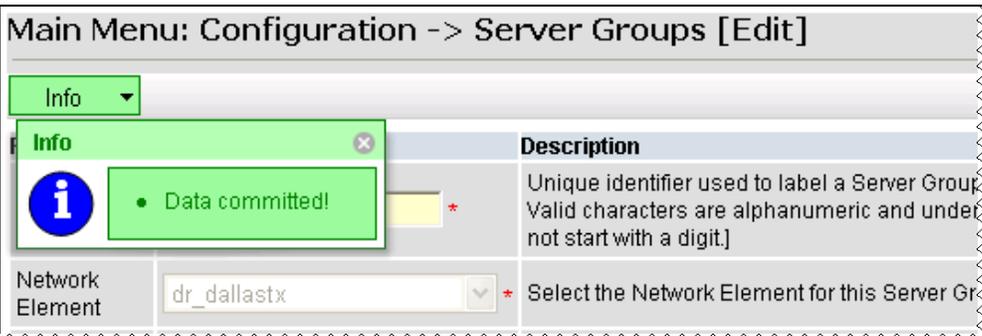
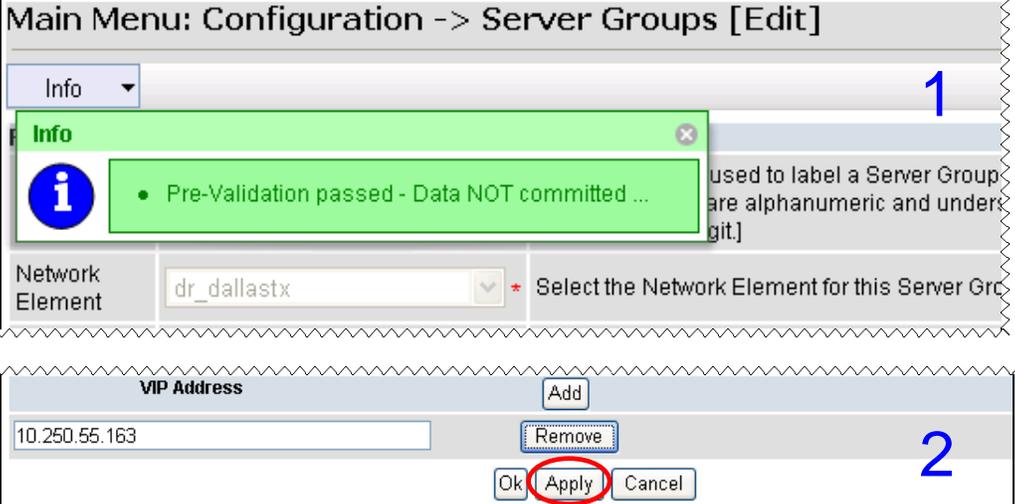
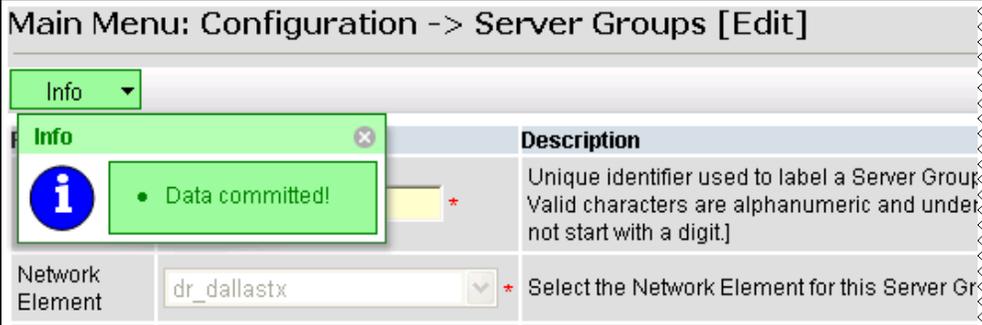
## Procedure 6.2 Adding a Server to the OAM Server Group (DR SDS)

<p>13.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b> Select...</p> <p><b>Main Menu</b> → Configuration → <b>Server Groups</b></p> <p>...as shown on the right.</p>	
<p>14.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>The <b>Server Group</b> entry should be shown on the “<b>Server Groups</b>” configuration screen as shown on the right.</p>	
<p>15.</p> <input type="checkbox"/>	<p><b>SDS Server A:</b></p> <p>1) Select the <b>Server Group</b> entry applied in <b>Step 12</b>. The line entry should now be highlighted in <b>GREEN</b>.</p> <p>2) Select the “<b>Edit</b>” dialogue button from the bottom left corner of the screen.</p> <p><b>NOTE:</b> The user may need to use the vertical scroll-bar in order to make the “<b>Edit</b>” dialogue button visible.</p>	

## Procedure 6.2 Adding a Server to the OAM Server Group (DR SDS)

<p>16.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>The user will be presented with the “<b>Server Groups [Edit]</b>” screen as shown on the right.</p>	<p><b>Main Menu: Configuration -&gt; Server Groups [Edit]</b></p> <p>Info ▼ <span style="float: right;">Fri Aug 17 17:20:52 2014</span></p> <table border="1"> <thead> <tr> <th>Field</th> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Server Group Name</td> <td>drdsd_dallastx_grp *</td> <td>Unique identifier used to label a Server Group. [Default = n/a. Range = A 1-32-character string. Valid characters are alphanumeric and underscore. Must contain at least one alpha and must not start with a digit.]</td> </tr> <tr> <td>Level</td> <td>A ▼ *</td> <td>Select one of the Levels supported by the system</td> </tr> <tr> <td>Parent</td> <td>NONE ▼ *</td> <td>Select an existing Server Group or NONE</td> </tr> <tr> <td>Function</td> <td>SDS ▼ *</td> <td>Select one of the Functions supported by the system</td> </tr> <tr> <td>NTP Server 1</td> <td>10.250.32.10</td> <td>The IP Address of a reachable NTP server to be used for clock synchronization. Configurable for level A only. [Range = A valid IP address or blank]</td> </tr> <tr> <td>NTP Server 2</td> <td>10.250.32.51</td> <td>The IP Address of a backup NTP server (optional). Configurable for level A only. [Range = A valid IP address or blank]</td> </tr> </tbody> </table> <p><b>dr_dallastx</b></p> <table border="1"> <thead> <tr> <th>Server</th> <th>SG Inclusion</th> <th>Preferred HA Role</th> </tr> </thead> <tbody> <tr> <td>drdsd-dallastx-b</td> <td><input type="checkbox"/> Include in SG</td> <td><input type="checkbox"/> Preferred Spare</td> </tr> <tr> <td>drdsd-dallastx-a</td> <td><input type="checkbox"/> Include in SG</td> <td><input type="checkbox"/> Preferred Spare</td> </tr> </tbody> </table> <p><b>VIP Assignment</b></p> <p>VIP Address <input type="text"/> <input type="button" value="Add"/></p> <p><input type="button" value="Ok"/> <input type="button" value="Apply"/> <input type="button" value="Cancel"/></p>	Field	Value	Description	Server Group Name	drdsd_dallastx_grp *	Unique identifier used to label a Server Group. [Default = n/a. Range = A 1-32-character string. Valid characters are alphanumeric and underscore. Must contain at least one alpha and must not start with a digit.]	Level	A ▼ *	Select one of the Levels supported by the system	Parent	NONE ▼ *	Select an existing Server Group or NONE	Function	SDS ▼ *	Select one of the Functions supported by the system	NTP Server 1	10.250.32.10	The IP Address of a reachable NTP server to be used for clock synchronization. Configurable for level A only. [Range = A valid IP address or blank]	NTP Server 2	10.250.32.51	The IP Address of a backup NTP server (optional). Configurable for level A only. [Range = A valid IP address or blank]	Server	SG Inclusion	Preferred HA Role	drdsd-dallastx-b	<input type="checkbox"/> Include in SG	<input type="checkbox"/> Preferred Spare	drdsd-dallastx-a	<input type="checkbox"/> Include in SG	<input type="checkbox"/> Preferred Spare
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<p>17.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>Select the “<b>A</b>” server and the “<b>B</b>” server from the list of “<b>Servers</b>” by clicking the check box next to their names.</p>	<p><b>dr_dallastx</b></p> <table border="1"> <thead> <tr> <th>Server</th> <th>SG Inclusion</th> <th>Preferred HA Role</th> </tr> </thead> <tbody> <tr> <td>drdsd-dallastx-b</td> <td><input checked="" type="checkbox"/> Include in SG</td> <td><input type="checkbox"/> Preferred Spare</td> </tr> <tr> <td>drdsd-dallastx-a</td> <td><input checked="" type="checkbox"/> Include in SG</td> <td><input type="checkbox"/> Preferred Spare</td> </tr> </tbody> </table>	Server	SG Inclusion	Preferred HA Role	drdsd-dallastx-b	<input checked="" type="checkbox"/> Include in SG	<input type="checkbox"/> Preferred Spare	drdsd-dallastx-a	<input checked="" type="checkbox"/> Include in SG	<input type="checkbox"/> Preferred Spare																					
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<p>18.</p> <p><input type="checkbox"/></p>	<p><b>SDS Server A:</b></p> <p>1) The user should be presented with a banner information message stating “<b>Pre-Validation passed</b>”.</p> <p>2) Select the “<b>Apply</b>” dialogue button.</p>	<p><b>Main Menu: Configuration -&gt; Server Groups [Edit]</b></p> <p>Info ▼ <span style="float: right;">1</span></p> <div style="border: 1px solid green; background-color: #e0ffe0; padding: 5px; margin-bottom: 10px;"> <p><b>Info</b> <span style="float: right;">x</span></p> <p><b>i</b> • Pre-Validation passed - Data NOT committed ...</p> </div> <p>Network Element: dr_dallastx ▼ * <span style="float: right;">2</span></p> <p>Select the Network Element for this Server Group</p> <p><input type="button" value="Ok"/> <input style="border: 2px solid red;" type="button" value="Apply"/> <input type="button" value="Cancel"/></p>																														

**Procedure 6.2 Adding a Server to the OAM Server Group (DR SDS)**

<p>19.</p> <p><input type="checkbox"/></p>	<p><b>SDS Server A:</b></p> <p>The user should be presented with a banner information message stating <b>“Data committed”</b>.</p>	 <p>Main Menu: Configuration -&gt; Server Groups [Edit]</p> <p>Info</p> <p>Info</p> <p>Description: Unique identifier used to label a Server Group. Valid characters are alphanumeric and under not start with a digit.]</p> <p>Network Element: dr_dallastx</p>
<p>20.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>Click the <b>“Add”</b> dialogue button for the <b>VIP Address</b>.</p>	 <p>VIP Address</p> <p>Add</p>
<p>21.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>Input the <b>VIP Address</b></p>	 <p>VIP Address</p> <p>10.250.55.163</p> <p>Add</p> <p>Remove</p>
<p>22.</p> <p><input type="checkbox"/></p>	<p><b>SDS Server A:</b></p> <p>1) The user should be presented with a banner information message stating <b>“Pre-Validation passed”</b>.</p> <p>2) Select the <b>“Apply”</b> dialogue button.</p>	 <p>Main Menu: Configuration -&gt; Server Groups [Edit]</p> <p>Info</p> <p>Info</p> <p>Description: Unique identifier used to label a Server Group. Valid characters are alphanumeric and under not start with a digit.]</p> <p>Network Element: dr_dallastx</p> <p>VIP Address</p> <p>10.250.55.163</p> <p>Add</p> <p>Remove</p> <p>Apply</p> <p>Cancel</p>
<p>23.</p> <p><input type="checkbox"/></p>	<p><b>SDS Server A:</b></p> <p>The user should be presented with a banner information message stating <b>“Data committed”</b>.</p>	 <p>Main Menu: Configuration -&gt; Server Groups [Edit]</p> <p>Info</p> <p>Info</p> <p>Description: Unique identifier used to label a Server Group. Valid characters are alphanumeric and under not start with a digit.]</p> <p>Network Element: dr_dallastx</p>

## Procedure 6.2 Adding a Server to the OAM Server Group (DR SDS)

24.

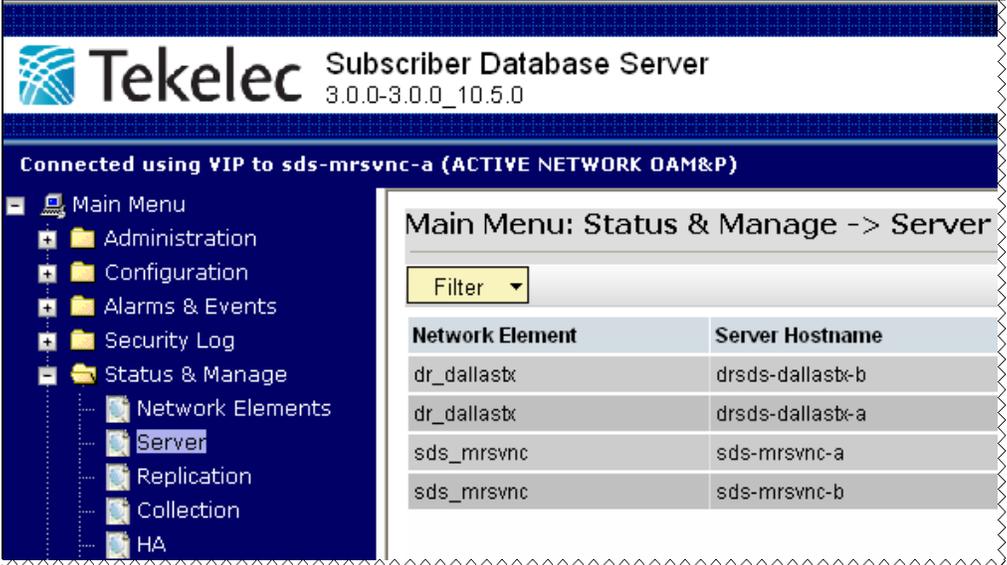


**IMPORTANT:**

Wait at least **5 minutes** before proceeding on to the next Step.

- Now that the server(s) have been paired within a Server Group they must establish a master/slave relationship for High Availability (HA). It may take several minutes for this process to be completed.
- Allow a minimum of **5 minutes** before continuing to the next Step.

### Procedure 6.3 Restarting the OAM Server Application (DR SDS)

<p>25.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>Select...</p> <p><b>Main Menu</b></p> <p>→ Status &amp; Manage</p> <p>→ Server</p> <p>...as shown on the right.</p>	 <p>Tekelec Subscriber Database Server 3.0.0-3.0.0_10.5.0</p> <p>Connected using VIP to sds-mrsvnc-a (ACTIVE NETWORK OAM&amp;P)</p> <p>Main Menu: Status &amp; Manage -&gt; Server</p> <table border="1"> <thead> <tr> <th>Network Element</th> <th>Server Hostname</th> </tr> </thead> <tbody> <tr> <td>dr_dallastx</td> <td>drsds-dallastx-b</td> </tr> <tr> <td>dr_dallastx</td> <td>drsds-dallastx-a</td> </tr> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-a</td> </tr> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-b</td> </tr> </tbody> </table>	Network Element	Server Hostname	dr_dallastx	drsds-dallastx-b	dr_dallastx	drsds-dallastx-a	sds_mrsvnc	sds-mrsvnc-a	sds_mrsvnc	sds-mrsvnc-b																																														
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<p>26.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>1) The “A” and “B” DR SDS servers should now appear in the right panel.</p> <p>2) Verify that the “DB” status shows “Norm” and the “Proc” status shows “Man” for both servers before proceeding to the next Step.</p>	<table border="1"> <thead> <tr> <th>Network Element</th> <th>Server Hostname</th> <th>Appl State</th> <th>Alm</th> <th>DB</th> <th>Reporting Status</th> <th>Proc</th> </tr> </thead> <tbody> <tr> <td>dr_dallastx</td> <td>drsds-dallastx-b</td> <td>Disabled</td> <td>Warn</td> <td>Norm</td> <td>Norm</td> <td>Man</td> </tr> <tr> <td>dr_dallastx</td> <td>drsds-dallastx-a</td> <td>Disabled</td> <td>Warn</td> <td>Norm</td> <td>Norm</td> <td>Man</td> </tr> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-b</td> <td>Enabled</td> <td>Err</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-a</td> <td>Enabled</td> <td>Err</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>so_carync</td> <td>so-carync-a</td> <td>Enabled</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>so_carync</td> <td>so-carync-b</td> <td>Enabled</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>so_carync</td> <td>dp-carync-1</td> <td>Enabled</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> </tbody> </table>	Network Element	Server Hostname	Appl State	Alm	DB	Reporting Status	Proc	dr_dallastx	drsds-dallastx-b	Disabled	Warn	Norm	Norm	Man	dr_dallastx	drsds-dallastx-a	Disabled	Warn	Norm	Norm	Man	sds_mrsvnc	sds-mrsvnc-b	Enabled	Err	Norm	Norm	Norm	sds_mrsvnc	sds-mrsvnc-a	Enabled	Err	Norm	Norm	Norm	so_carync	so-carync-a	Enabled	Norm	Norm	Norm	Norm	so_carync	so-carync-b	Enabled	Norm	Norm	Norm	Norm	so_carync	dp-carync-1	Enabled	Norm	Norm	Norm	Norm
Network Element	Server Hostname	Appl State	Alm	DB	Reporting Status	Proc																																																				
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sds_mrsvnc	sds-mrsvnc-b	Enabled	Err	Norm	Norm	Norm																																																				
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so_carync	so-carync-a	Enabled	Norm	Norm	Norm	Norm																																																				
so_carync	so-carync-b	Enabled	Norm	Norm	Norm	Norm																																																				
so_carync	dp-carync-1	Enabled	Norm	Norm	Norm	Norm																																																				

## Procedure 6.3 Restarting the OAM Server Application (DR SDS)

27.



### Active SDS VIP:

1) Using the mouse, select **DR OAM Server A**. The line entry should now be highlighted in **GREEN**.

2) Select the **“Restart”** dialogue button from the bottom left corner of the screen.

3) Click the **“OK”** button on the confirmation dialogue box.

4) The user should be presented with a confirmation message (in the banner area) for **DR OAM Server A** stating: **“Successfully restarted application”**.

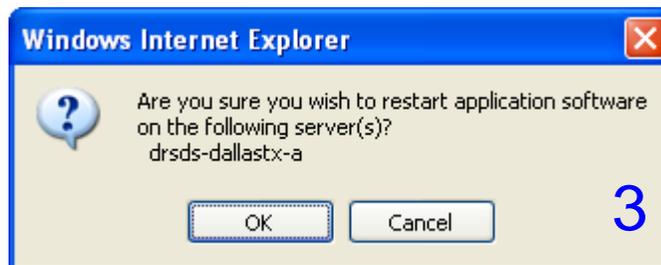
**NOTE:** The user may need to use the vertical scroll-bar in order to make the **“Restart”** dialogue button visible.

Network Element	Server Hostname	Appl State	Alm	DB	Reporting Status	Proc
dr_dallastx	drdsd-dallastx-a	Disabled	Warn	Norm	Norm	Man
dr_dallastx	drdsd-dallastx-b	Disabled	Warn	Norm	Norm	Man
sds_mrsvnc	sds-mrsvnc-b	Enabled	Err	Norm	Norm	Norm
sds_mrsvnc	sds-mrsvnc-a	Enabled	Err	Norm	Norm	Norm
so_carync	so-carync-b	Enabled	Norm	Norm	Norm	Norm
so_carync	so-carync-a	Enabled	Norm	Norm	Norm	Norm
so_carync	dp-carync-1	Enabled	Norm	Norm	Norm	Norm

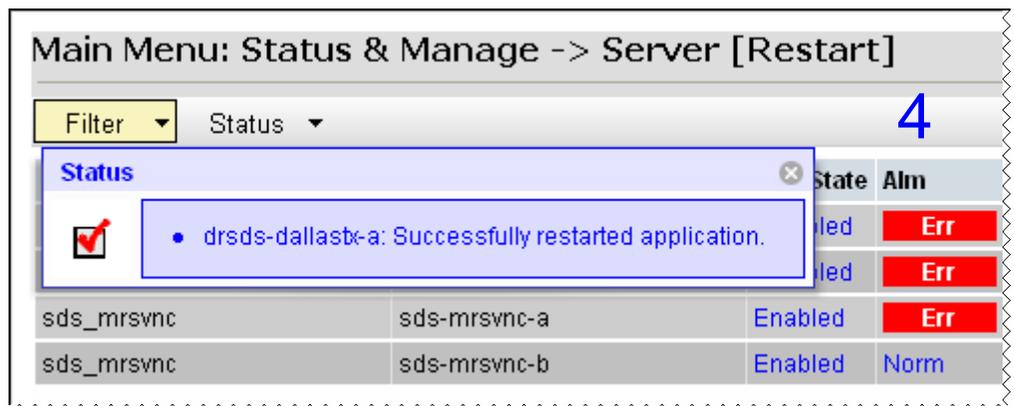
1



2

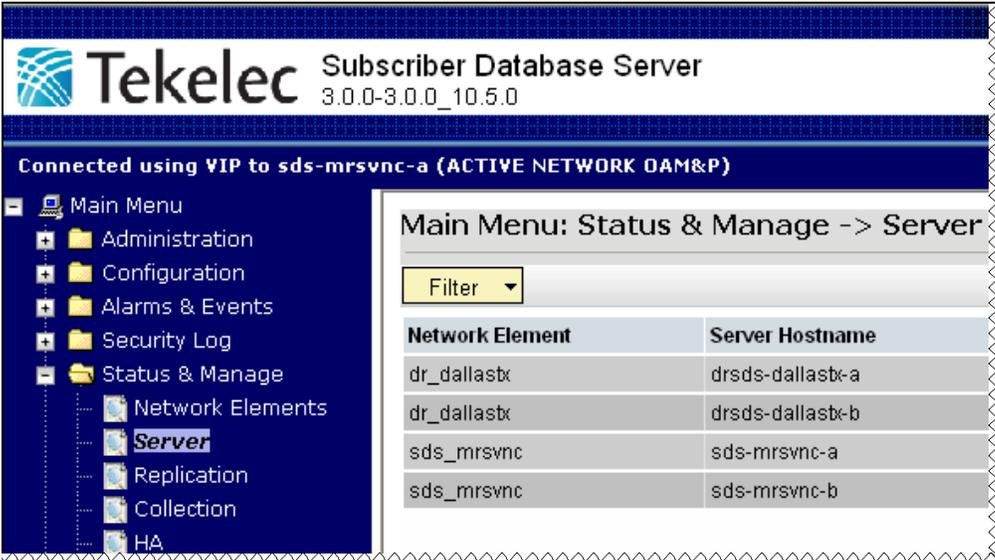
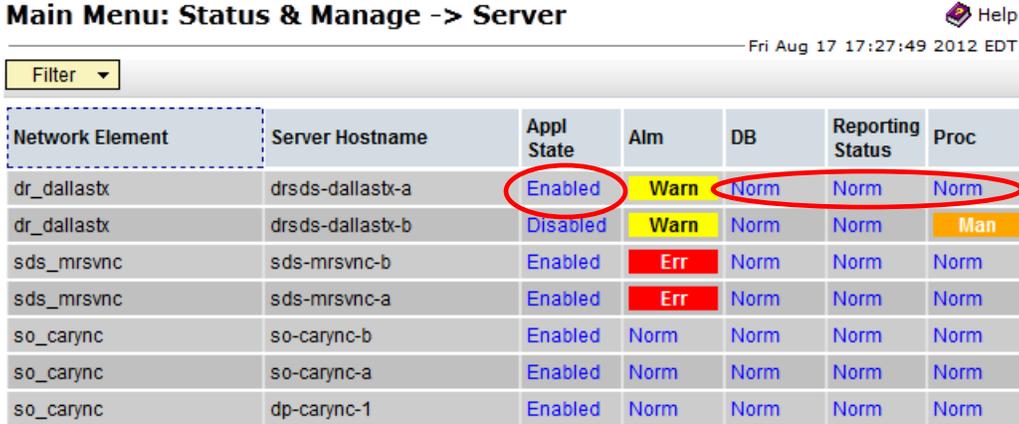


3



4

## Procedure 6.3 Restarting the OAM Server Application (DR SDS)

<p>28.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>Select...</p> <p><b>Main Menu</b>  → Status &amp; Manage  → Server</p> <p>...as shown on the right.</p>	 <p>Tekelec Subscriber Database Server 3.0.0-3.0.0_10.5.0</p> <p>Connected using VIP to sds-mrsvnc-a (ACTIVE NETWORK OAM&amp;P)</p> <p>Main Menu: Status &amp; Manage -&gt; Server</p> <table border="1"> <thead> <tr> <th>Network Element</th> <th>Server Hostname</th> </tr> </thead> <tbody> <tr> <td>dr_dallastx</td> <td>drsds-dallastx-a</td> </tr> <tr> <td>dr_dallastx</td> <td>drsds-dallastx-b</td> </tr> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-a</td> </tr> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-b</td> </tr> </tbody> </table>	Network Element	Server Hostname	dr_dallastx	drsds-dallastx-a	dr_dallastx	drsds-dallastx-b	sds_mrsvnc	sds-mrsvnc-a	sds_mrsvnc	sds-mrsvnc-b																																														
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sds_mrsvnc	sds-mrsvnc-b																																																									
<p>29.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>Verify that the “<b>Appl State</b>” now shows “<b>Enabled</b>” and that the “<b>Alm, DB, Reporting Status &amp; Proc</b>” status columns all show “<b>Norm</b>” for <b>OAM Server A</b> before proceeding to the next Step.</p> <p><b>NOTE:</b> If user chooses to refresh the Server status screen in advance of the default setting (15-30 sec.). This may be done by simply reselecting the “<b>Status &amp; Manage</b> → <b>Server</b>” option from the Main menu on the left.</p>	 <p>Main Menu: Status &amp; Manage -&gt; Server</p> <p>Fri Aug 17 17:27:49 2012 EDT</p> <table border="1"> <thead> <tr> <th>Network Element</th> <th>Server Hostname</th> <th>Appl State</th> <th>Alm</th> <th>DB</th> <th>Reporting Status</th> <th>Proc</th> </tr> </thead> <tbody> <tr> <td>dr_dallastx</td> <td>drsds-dallastx-a</td> <td>Enabled</td> <td>Warn</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>dr_dallastx</td> <td>drsds-dallastx-b</td> <td>Disabled</td> <td>Warn</td> <td>Norm</td> <td>Norm</td> <td>Man</td> </tr> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-b</td> <td>Enabled</td> <td>Err</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-a</td> <td>Enabled</td> <td>Err</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>so_carync</td> <td>so-carync-b</td> <td>Enabled</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>so_carync</td> <td>so-carync-a</td> <td>Enabled</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>so_carync</td> <td>dp-carync-1</td> <td>Enabled</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> </tbody> </table>	Network Element	Server Hostname	Appl State	Alm	DB	Reporting Status	Proc	dr_dallastx	drsds-dallastx-a	Enabled	Warn	Norm	Norm	Norm	dr_dallastx	drsds-dallastx-b	Disabled	Warn	Norm	Norm	Man	sds_mrsvnc	sds-mrsvnc-b	Enabled	Err	Norm	Norm	Norm	sds_mrsvnc	sds-mrsvnc-a	Enabled	Err	Norm	Norm	Norm	so_carync	so-carync-b	Enabled	Norm	Norm	Norm	Norm	so_carync	so-carync-a	Enabled	Norm	Norm	Norm	Norm	so_carync	dp-carync-1	Enabled	Norm	Norm	Norm	Norm
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dr_dallastx	drsds-dallastx-a	Enabled	Warn	Norm	Norm	Norm																																																				
dr_dallastx	drsds-dallastx-b	Disabled	Warn	Norm	Norm	Man																																																				
sds_mrsvnc	sds-mrsvnc-b	Enabled	Err	Norm	Norm	Norm																																																				
sds_mrsvnc	sds-mrsvnc-a	Enabled	Err	Norm	Norm	Norm																																																				
so_carync	so-carync-b	Enabled	Norm	Norm	Norm	Norm																																																				
so_carync	so-carync-a	Enabled	Norm	Norm	Norm	Norm																																																				
so_carync	dp-carync-1	Enabled	Norm	Norm	Norm	Norm																																																				

## Procedure 6.3 Restarting the OAM Server Application (DR SDS)

30.



### Active SDS VIP:

1) Using the mouse, select **DR OAM Server B**. The line entry should now be highlighted in **GREEN**.

2) Select the **“Restart”** dialogue button from the bottom left corner of the screen.

3) Click the **“OK”** button on the confirmation dialogue box.

4) The user should be presented with a confirmation message (in the banner area) for **DR OAM Server B** stating: **“Successfully restarted application”**.

**NOTE:** The user may need to use the vertical scroll-bar in order to make the **“Restart”** dialogue button visible.

Network Element	Server Hostname	Appl State	Alm	DB	Reporting Status	Proc
dr_dallastx	drdsd-dallastx-a	Enabled	Warn	Norm	Norm	Norm
dr_dallastx	drdsd-dallastx-b	Disabled	Warn	Norm	Norm	Man
sds_mrsvnc	sds-mrsvnc-b	Enabled	Err	Norm	Norm	Norm
sds_mrsvnc	sds-mrsvnc-a	Enabled	Err	Norm	Norm	Norm
so_carync	so-carync-b	Enabled	Norm	Norm	Norm	Norm
so_carync	so-carync-a	Enabled	Norm	Norm	Norm	Norm
so_carync	dp-carync-1	Enabled	Norm	Norm	Norm	Norm

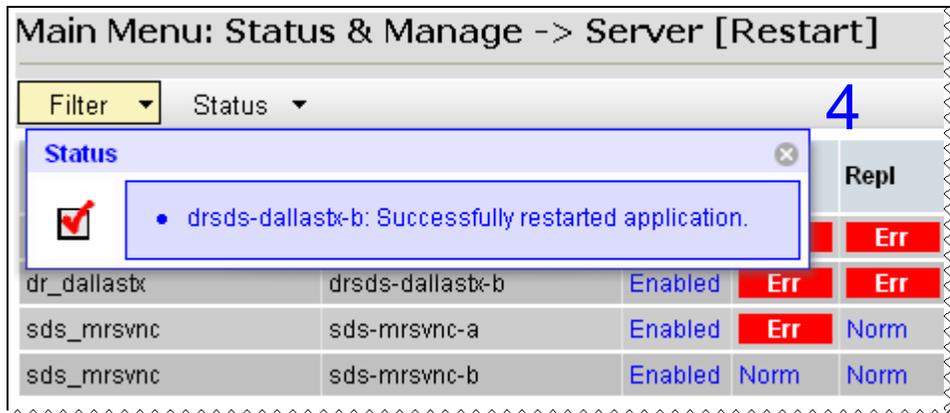
1



2



3



4

### Procedure 6.3 Restarting the OAM Server Application (DR SDS)

31.

**Active SDS VIP:**

Verify that the “**Appl State**” now shows “**Enabled**” and that the “**Alm, DB, Reporting Status & Proc**” status columns all show “**Norm**” for **OAM Server A** and **OAM Server B** before proceeding to the next Step.

**NOTE:** If user chooses to refresh the Server status screen in advance of the default setting (15-30 sec.). This may be done by simply reselecting the “**Status & Manage** → **Server**” option from the Main menu on the left.

**Main Menu: Status & Manage -> Server**



Fri Aug 17 17:29:12 2012 EDT

Filter ▾

Network Element	Server Hostname	Appl State	Alm	DB	Reporting Status	Proc
dr_dallastx	drds-dallastx-b	Enabled	Norm	Norm	Norm	Norm
dr_dallastx	drds-dallastx-a	Enabled	Norm	Norm	Norm	Norm
sds_mrsvnc	sds-mrsvnc-b	Enabled	Norm	Norm	Norm	Norm
sds_mrsvnc	sds-mrsvnc-a	Enabled	Err	Norm	Norm	Norm
so_carync	so-carync-a	Enabled	Norm	Norm	Norm	Norm
so_carync	so-carync-b	Enabled	Norm	Norm	Norm	Norm
so_carync	dp-carync-1	Enabled	Norm	Norm	Norm	Norm

32.

**Active SDS VIP:**

Add the Query Server for the DR SDS Server

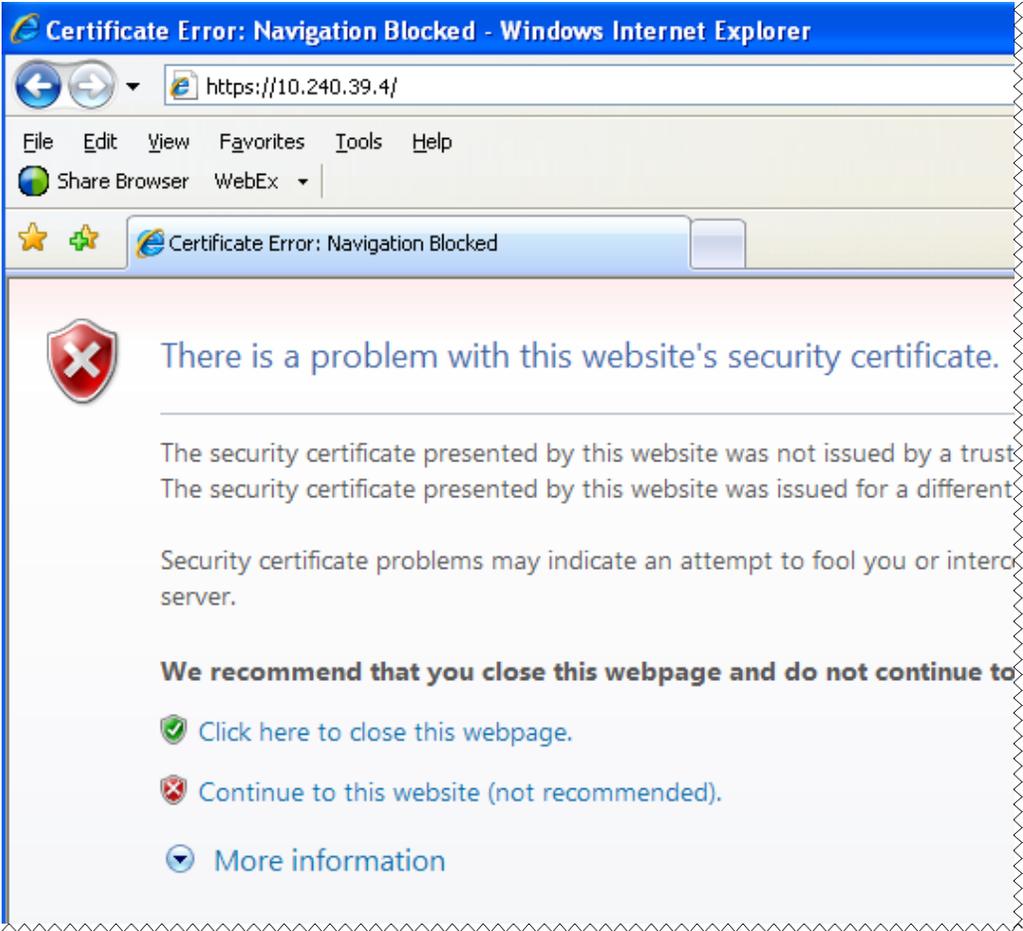
- Repeat all steps listed in Procedure 4 except use the DR SDS site’s NE and Server Group instead of the Primary (1<sup>st</sup> SDS) site’s NE and Server Group.

**THIS PROCEDURE HAS BEEN COMPLETED**

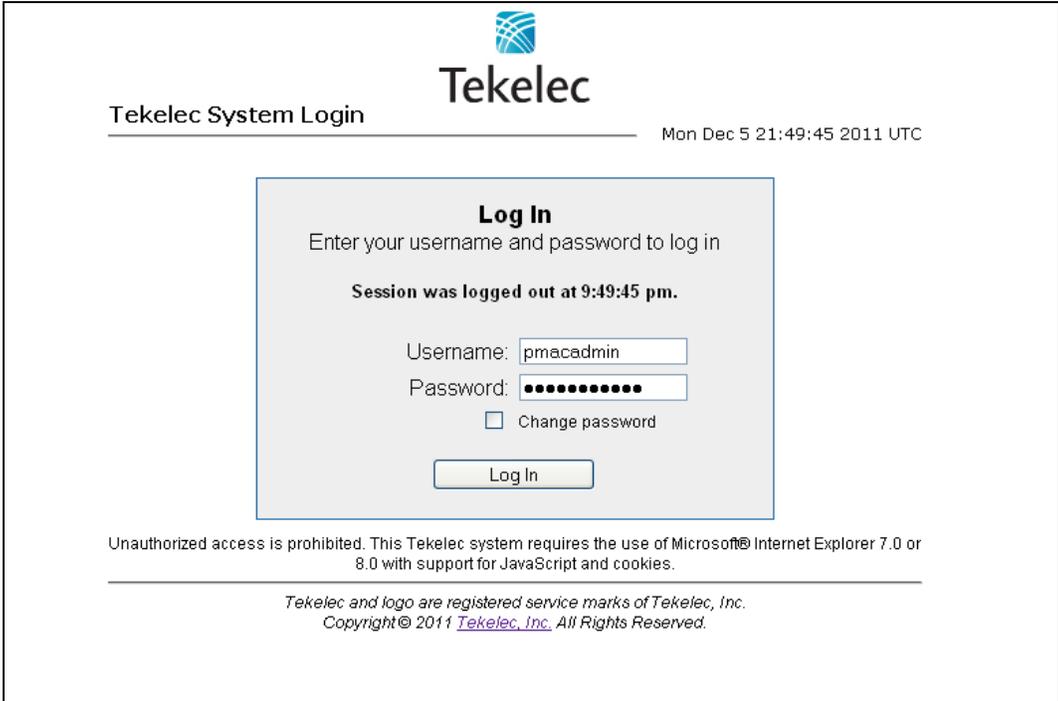
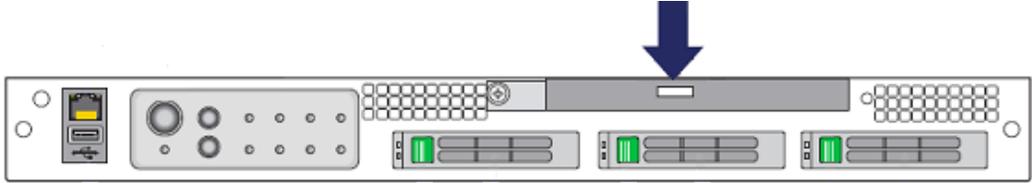
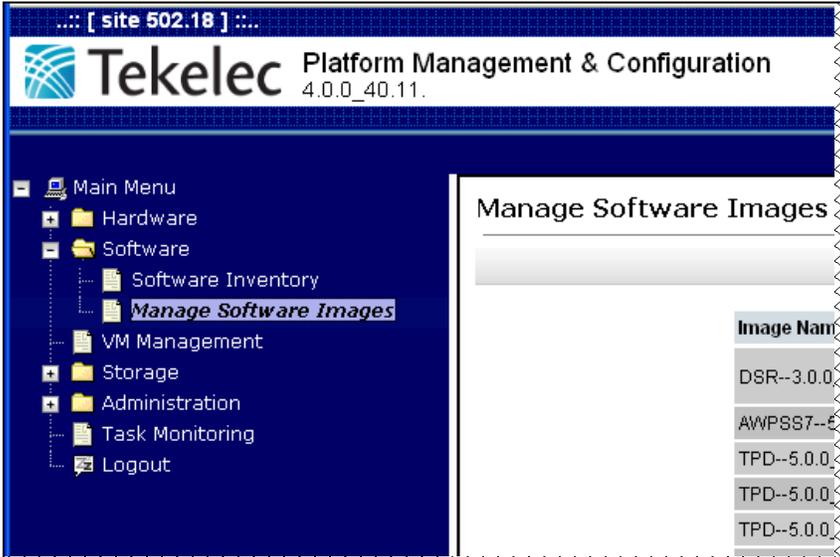
## 5.6 Add SDS software images to PMAC servers (All DP-SOAM sites)

This procedure must be done once for each DSR signaling site, which is also an SDS DP-SOAM site. This procedure assumes that the PMAC server has already been installed, as described in [5].

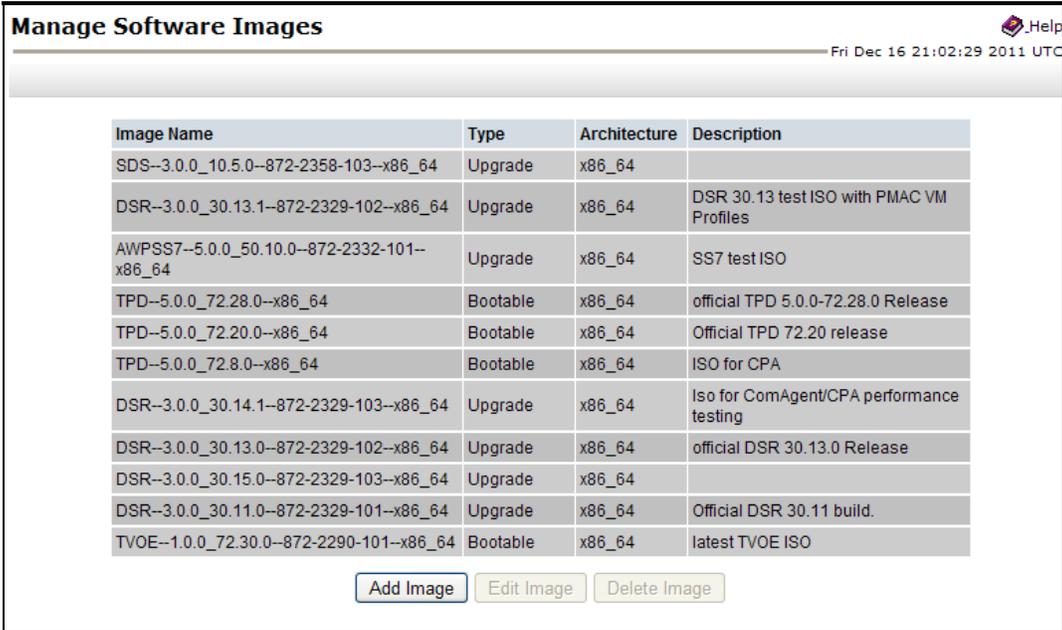
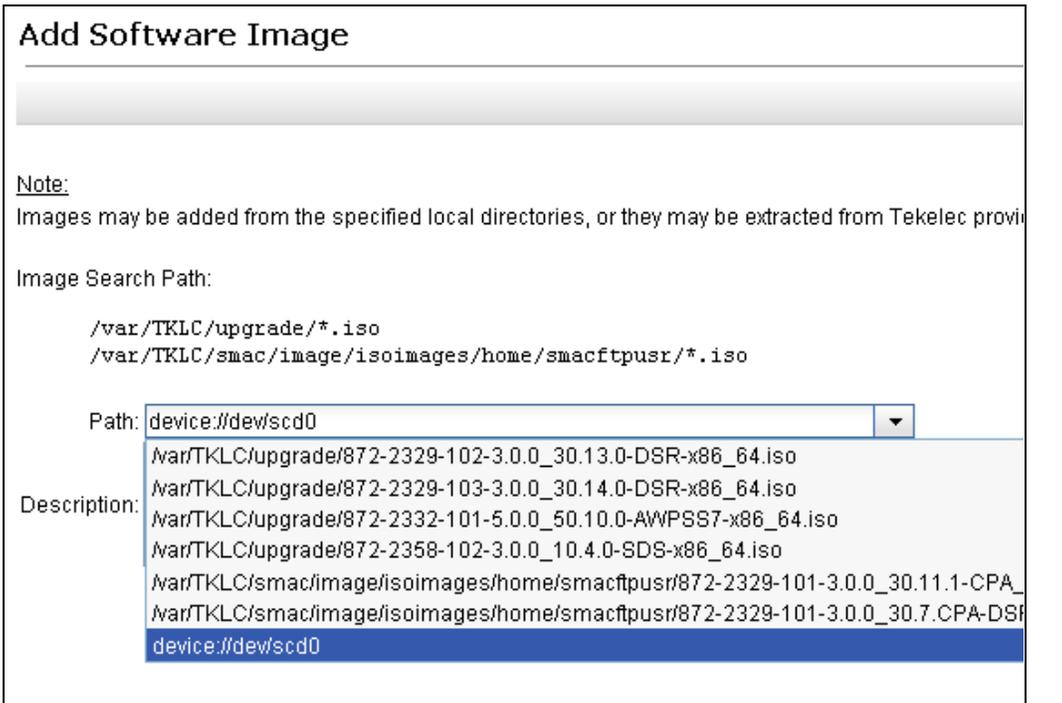
### Procedure 7: Add SDS software images to PMAC servers for DSR signaling sites

Step	Procedure	Result
<p>1.</p> <input type="checkbox"/>	<p><b>PMAC Server:</b></p> <p>Launch an approved web browser and connect to the <b>XMI IP Address</b> of the <b>PMAC server at the DP-SOAM site</b> using "https://"</p>	 <p>The screenshot shows a Windows Internet Explorer browser window with a blue title bar that reads "Certificate Error: Navigation Blocked - Windows Internet Explorer". The address bar shows "https://10.240.39.4/". The browser menu includes File, Edit, View, Favorites, Tools, and Help. Below the menu is a "Share Browser" button and a "WebEx" dropdown. The main content area displays a red shield icon with a white 'X' and the text: "There is a problem with this website's security certificate." Below this, it explains that the certificate was not issued by a trust and was issued for a different purpose. It warns that such problems may indicate an attempt to fool the user or intercept server data. At the bottom, it provides three options: "Click here to close this webpage." (with a green checkmark icon), "Continue to this website (not recommended)." (with a red shield icon), and "More information" (with a blue downward arrow icon).</p>

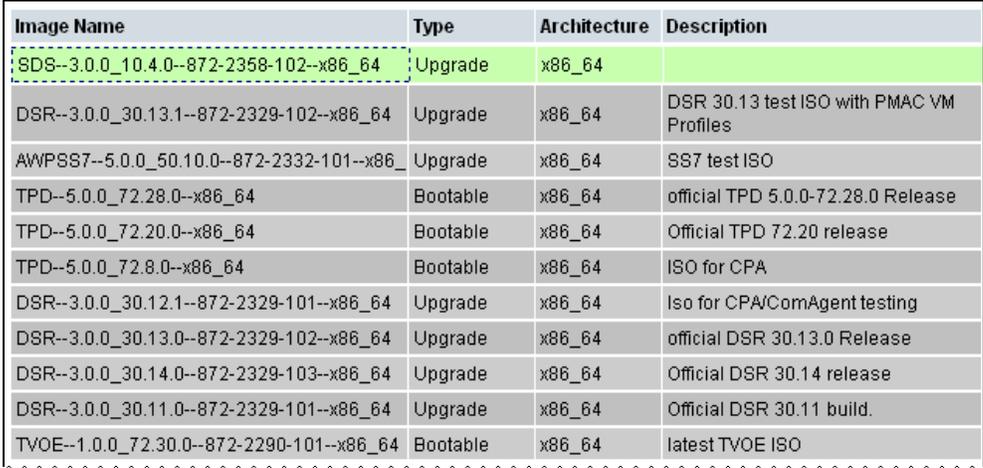
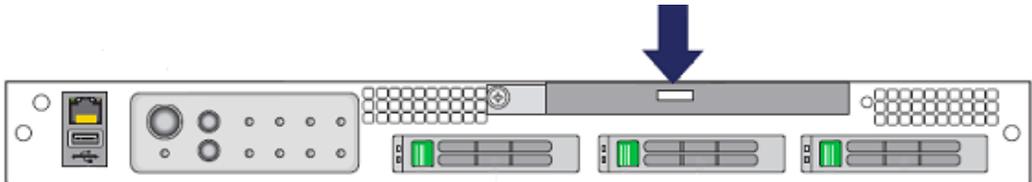
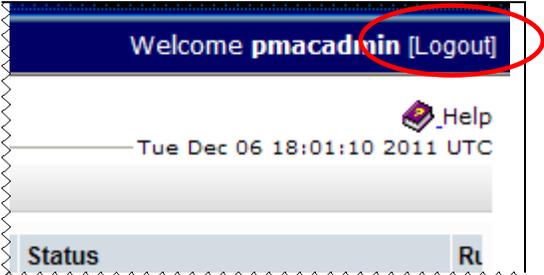
**Procedure 7:** Add SDS software images to PMAC servers for DSR signaling sites

Step	Procedure	Result
<p>2.</p> <p><input type="checkbox"/></p>	<p><b>PMAC Server:</b></p> <p>The user should be presented the login screen shown on the right.</p> <p>Login to the PMAC using the default user and password.</p>	
<p>3.</p> <p><input type="checkbox"/></p>	<p><b>PMAC Server:</b></p> <p>Place the CDROM containing the SDS Application software into the server's optical drive.</p>	 <p><b>Figure 5 - HP DL360 Front Panel: Optical Drive</b></p>
<p>4.</p> <p><input type="checkbox"/></p>	<p><b>PMAC Server:</b></p> <p>Select...</p> <p><b>Main Menu</b>  → Software  → Manage Software Images</p> <p>...as shown on the right.</p>	

**Procedure 7:** Add SDS software images to PMAC servers for DSR signaling sites

Step	Procedure	Result																																																
<p>5.</p> <input type="checkbox"/>	<p><b>PMAC Server:</b> Select...</p> <p><b>Main Menu</b> → <b>Software</b> → <b>Manage Software Images</b></p> <p>Select the <b>“Add Image”</b> button</p>	 <p><b>Manage Software Images</b> <span style="float: right;">_Help Fri Dec 16 21:02:29 2011 UTC</span></p> <table border="1"> <thead> <tr> <th>Image Name</th> <th>Type</th> <th>Architecture</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>SDS-3.0.0_10.5.0-872-2358-103-x86_64</td> <td>Upgrade</td> <td>x86_64</td> <td></td> </tr> <tr> <td>DSR-3.0.0_30.13.1-872-2329-102-x86_64</td> <td>Upgrade</td> <td>x86_64</td> <td>DSR 30.13 test ISO with PMAC VM Profiles</td> </tr> <tr> <td>AWPSS7-5.0.0_50.10.0-872-2332-101-x86_64</td> <td>Upgrade</td> <td>x86_64</td> <td>SS7 test ISO</td> </tr> <tr> <td>TPD-5.0.0_72.28.0-x86_64</td> <td>Bootable</td> <td>x86_64</td> <td>official TPD 5.0.0-72.28.0 Release</td> </tr> <tr> <td>TPD-5.0.0_72.20.0-x86_64</td> <td>Bootable</td> <td>x86_64</td> <td>Official TPD 72.20 release</td> </tr> <tr> <td>TPD-5.0.0_72.8.0-x86_64</td> <td>Bootable</td> <td>x86_64</td> <td>ISO for CPA</td> </tr> <tr> <td>DSR-3.0.0_30.14.1-872-2329-103-x86_64</td> <td>Upgrade</td> <td>x86_64</td> <td>Iso for ComAgent/CPA performance testing</td> </tr> <tr> <td>DSR-3.0.0_30.13.0-872-2329-102-x86_64</td> <td>Upgrade</td> <td>x86_64</td> <td>official DSR 30.13.0 Release</td> </tr> <tr> <td>DSR-3.0.0_30.15.0-872-2329-103-x86_64</td> <td>Upgrade</td> <td>x86_64</td> <td></td> </tr> <tr> <td>DSR-3.0.0_30.11.0-872-2329-101-x86_64</td> <td>Upgrade</td> <td>x86_64</td> <td>Official DSR 30.11 build.</td> </tr> <tr> <td>TVOE-1.0.0_72.30.0-872-2290-101-x86_64</td> <td>Bootable</td> <td>x86_64</td> <td>latest TVOE ISO</td> </tr> </tbody> </table> <p style="text-align: center;"> <input type="button" value="Add Image"/> <input type="button" value="Edit Image"/> <input type="button" value="Delete Image"/> </p>	Image Name	Type	Architecture	Description	SDS-3.0.0_10.5.0-872-2358-103-x86_64	Upgrade	x86_64		DSR-3.0.0_30.13.1-872-2329-102-x86_64	Upgrade	x86_64	DSR 30.13 test ISO with PMAC VM Profiles	AWPSS7-5.0.0_50.10.0-872-2332-101-x86_64	Upgrade	x86_64	SS7 test ISO	TPD-5.0.0_72.28.0-x86_64	Bootable	x86_64	official TPD 5.0.0-72.28.0 Release	TPD-5.0.0_72.20.0-x86_64	Bootable	x86_64	Official TPD 72.20 release	TPD-5.0.0_72.8.0-x86_64	Bootable	x86_64	ISO for CPA	DSR-3.0.0_30.14.1-872-2329-103-x86_64	Upgrade	x86_64	Iso for ComAgent/CPA performance testing	DSR-3.0.0_30.13.0-872-2329-102-x86_64	Upgrade	x86_64	official DSR 30.13.0 Release	DSR-3.0.0_30.15.0-872-2329-103-x86_64	Upgrade	x86_64		DSR-3.0.0_30.11.0-872-2329-101-x86_64	Upgrade	x86_64	Official DSR 30.11 build.	TVOE-1.0.0_72.30.0-872-2290-101-x86_64	Bootable	x86_64	latest TVOE ISO
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<p>6.</p> <input type="checkbox"/>	<p><b>PMAC Server:</b> Click the “Path:” drop box and select...</p> <p>device://dev/scd0</p> <p>...from the list.</p>	 <p><b>Add Software Image</b></p> <hr/> <p><b>Note:</b> Images may be added from the specified local directories, or they may be extracted from Tekelec provi</p> <p>Image Search Path:</p> <pre> /var/TKLC/upgrade/*.iso /var/TKLC/smac/image/isoimages/home/smacftpusr/*.iso </pre> <p>Path: <input type="text" value="device://dev/scd0"/> ▼</p> <p>Description:</p> <ul style="list-style-type: none"> <li>/var/TKLC/upgrade/872-2329-102-3.0.0_30.13.0-DSR-x86_64.iso</li> <li>/var/TKLC/upgrade/872-2329-103-3.0.0_30.14.0-DSR-x86_64.iso</li> <li>/var/TKLC/upgrade/872-2332-101-5.0.0_50.10.0-AWPSS7-x86_64.iso</li> <li>/var/TKLC/upgrade/872-2358-102-3.0.0_10.4.0-SDS-x86_64.iso</li> <li>/var/TKLC/smac/image/isoimages/home/smacftpusr/872-2329-101-3.0.0_30.11.1-CPA_</li> <li>/var/TKLC/smac/image/isoimages/home/smacftpusr/872-2329-101-3.0.0_30.7.CPA-DSR</li> </ul> <p><input type="text" value="device://dev/scd0"/></p>																																																
<p>7.</p> <input type="checkbox"/>	<p><b>PMAC Server:</b> Select <b>“Add New Image”</b> button</p>	 <p style="text-align: center;"><input type="button" value="Add New Image"/></p>																																																

**Procedure 7: Add SDS software images to PMAC servers for DSR signaling sites**

Step	Procedure	Result																																																
<p>8.</p> <input type="checkbox"/>	<p><b>PMAC Server:</b></p> <p>An info message will be raised to show a new background task.</p>																																																	
<p>9.</p> <input type="checkbox"/>	<p><b>PMAC Server:</b></p> <p>Watch the extraction progress in the lower task list on the same page.</p>	 <table border="1"> <thead> <tr> <th>ID</th> <th>Task</th> <th>Target</th> <th>Status</th> <th>Running Time</th> <th>Start Time</th> <th>Progress</th> </tr> </thead> <tbody> <tr> <td>773</td> <td>Add Image</td> <td></td> <td>Extracting/Verifying image source.</td> <td>0:00:00</td> <td>2011-12-05 16:32:50</td> <td>11%</td> </tr> <tr> <td>762</td> <td>Add Image</td> <td></td> <td>Done: 872-2329-103-3.0.0_30.14.0-DSR-x86_64</td> <td>0:00:05</td> <td>2011-12-05 09:38:36</td> <td>100%</td> </tr> <tr> <td>739</td> <td>Add Image</td> <td></td> <td>Done: 872-2329-101-3.0.0_30.12.1-DSR-x86_64</td> <td>0:00:06</td> <td>2011-11-30 16:51:57</td> <td>100%</td> </tr> <tr> <td>729</td> <td>Add Image</td> <td></td> <td>Done: 872-2329-102-3.0.0_30.13.0-</td> <td>0:00:06</td> <td>2011-11-25</td> <td>100%</td> </tr> </tbody> </table>	ID	Task	Target	Status	Running Time	Start Time	Progress	773	Add Image		Extracting/Verifying image source.	0:00:00	2011-12-05 16:32:50	11%	762	Add Image		Done: 872-2329-103-3.0.0_30.14.0-DSR-x86_64	0:00:05	2011-12-05 09:38:36	100%	739	Add Image		Done: 872-2329-101-3.0.0_30.12.1-DSR-x86_64	0:00:06	2011-11-30 16:51:57	100%	729	Add Image		Done: 872-2329-102-3.0.0_30.13.0-	0:00:06	2011-11-25	100%													
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<p>10.</p> <input type="checkbox"/>	<p><b>PMAC Server:</b></p> <p>When the extraction task is complete, a new software image will be displayed.</p>	 <table border="1"> <thead> <tr> <th>Image Name</th> <th>Type</th> <th>Architecture</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>SDS--3.0.0_10.4.0--872-2358-102--x86_64</td> <td>Upgrade</td> <td>x86_64</td> <td></td> </tr> <tr> <td>DSR--3.0.0_30.13.1--872-2329-102--x86_64</td> <td>Upgrade</td> <td>x86_64</td> <td>DSR 30.13 test ISO with PMAC VM Profiles</td> </tr> <tr> <td>AWPSS7--5.0.0_50.10.0--872-2332-101--x86_64</td> <td>Upgrade</td> <td>x86_64</td> <td>SS7 test ISO</td> </tr> <tr> <td>TPD--5.0.0_72.28.0--x86_64</td> <td>Bootable</td> <td>x86_64</td> <td>official TPD 5.0.0-72.28.0 Release</td> </tr> <tr> <td>TPD--5.0.0_72.20.0--x86_64</td> <td>Bootable</td> <td>x86_64</td> <td>Official TPD 72.20 release</td> </tr> <tr> <td>TPD--5.0.0_72.8.0--x86_64</td> <td>Bootable</td> <td>x86_64</td> <td>ISO for CPA</td> </tr> <tr> <td>DSR--3.0.0_30.12.1--872-2329-101--x86_64</td> <td>Upgrade</td> <td>x86_64</td> <td>Iso for CPA/ComAgent testing</td> </tr> <tr> <td>DSR--3.0.0_30.13.0--872-2329-102--x86_64</td> <td>Upgrade</td> <td>x86_64</td> <td>official DSR 30.13.0 Release</td> </tr> <tr> <td>DSR--3.0.0_30.14.0--872-2329-103--x86_64</td> <td>Upgrade</td> <td>x86_64</td> <td>Official DSR 30.14 release</td> </tr> <tr> <td>DSR--3.0.0_30.11.0--872-2329-101--x86_64</td> <td>Upgrade</td> <td>x86_64</td> <td>Official DSR 30.11 build.</td> </tr> <tr> <td>TVOE--1.0.0_72.30.0--872-2290-101--x86_64</td> <td>Bootable</td> <td>x86_64</td> <td>latest TVOE ISO</td> </tr> </tbody> </table>	Image Name	Type	Architecture	Description	SDS--3.0.0_10.4.0--872-2358-102--x86_64	Upgrade	x86_64		DSR--3.0.0_30.13.1--872-2329-102--x86_64	Upgrade	x86_64	DSR 30.13 test ISO with PMAC VM Profiles	AWPSS7--5.0.0_50.10.0--872-2332-101--x86_64	Upgrade	x86_64	SS7 test ISO	TPD--5.0.0_72.28.0--x86_64	Bootable	x86_64	official TPD 5.0.0-72.28.0 Release	TPD--5.0.0_72.20.0--x86_64	Bootable	x86_64	Official TPD 72.20 release	TPD--5.0.0_72.8.0--x86_64	Bootable	x86_64	ISO for CPA	DSR--3.0.0_30.12.1--872-2329-101--x86_64	Upgrade	x86_64	Iso for CPA/ComAgent testing	DSR--3.0.0_30.13.0--872-2329-102--x86_64	Upgrade	x86_64	official DSR 30.13.0 Release	DSR--3.0.0_30.14.0--872-2329-103--x86_64	Upgrade	x86_64	Official DSR 30.14 release	DSR--3.0.0_30.11.0--872-2329-101--x86_64	Upgrade	x86_64	Official DSR 30.11 build.	TVOE--1.0.0_72.30.0--872-2290-101--x86_64	Bootable	x86_64	latest TVOE ISO
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DSR--3.0.0_30.12.1--872-2329-101--x86_64	Upgrade	x86_64	Iso for CPA/ComAgent testing																																															
DSR--3.0.0_30.13.0--872-2329-102--x86_64	Upgrade	x86_64	official DSR 30.13.0 Release																																															
DSR--3.0.0_30.14.0--872-2329-103--x86_64	Upgrade	x86_64	Official DSR 30.14 release																																															
DSR--3.0.0_30.11.0--872-2329-101--x86_64	Upgrade	x86_64	Official DSR 30.11 build.																																															
TVOE--1.0.0_72.30.0--872-2290-101--x86_64	Bootable	x86_64	latest TVOE ISO																																															
<p>11.</p> <input type="checkbox"/>	<p>Remove the <b>CDROM</b> from the server's optical drive.</p>	 <p><b>Figure 6 - HP DL360 Front Panel: Optical Drive</b></p>																																																
<p>12.</p> <input type="checkbox"/>	<p><b>PMAC Server:</b></p> <p>Click the “Logout” link on the PMAC server GUI.</p>																																																	
<p><b>THIS PROCEDURE HAS BEEN COMPLETED</b></p>																																																		

## 5.7 OAM Installation for DP-SOAM sites (All DP-SOAM sites)

### Assumptions:

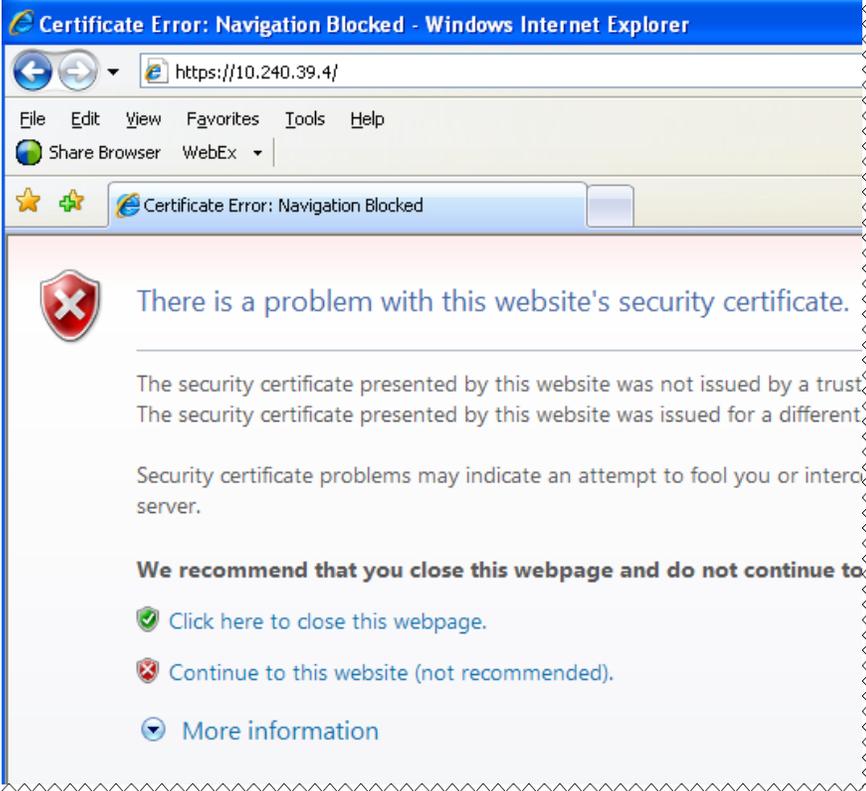
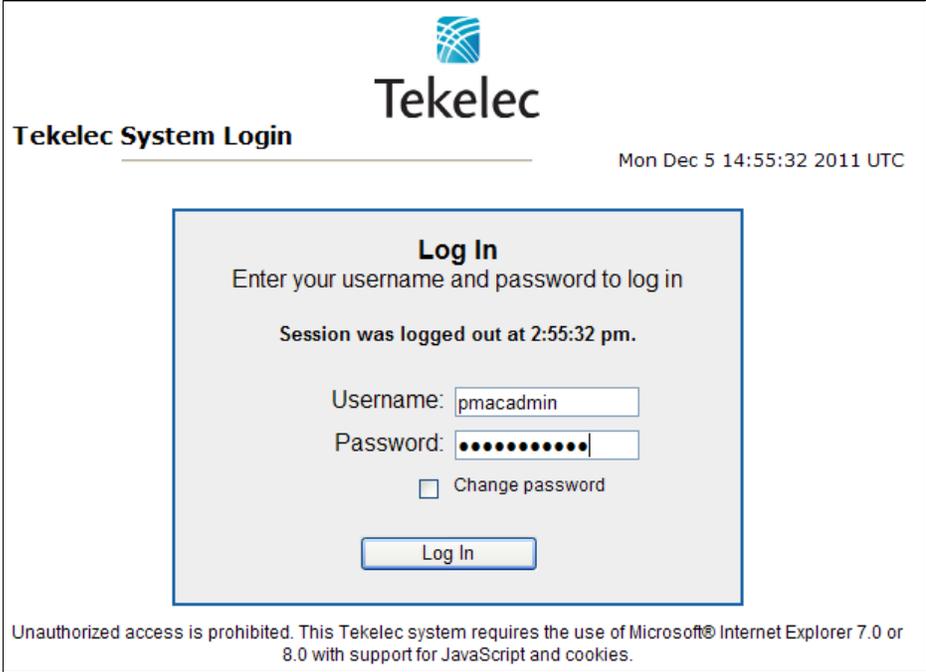
- This procedure assumes that the DP-SOAM Network Element XML file for the DP-SOAM site has previously been created, as described in **Appendix F**.
- This procedure assumes that the Network Element XML files are either on a USB flash drive or the laptop's hard drive. The steps are written as if the XML files are on a USB flash drive, but the files can exist on any accessible drive.

This procedure is for installing the DP-SOAM software on the OAM server blades located at each DSR Signaling Site. The DP-SOAM and DSR OAM servers run in 2 virtual machines on the same HP C-Class blade.

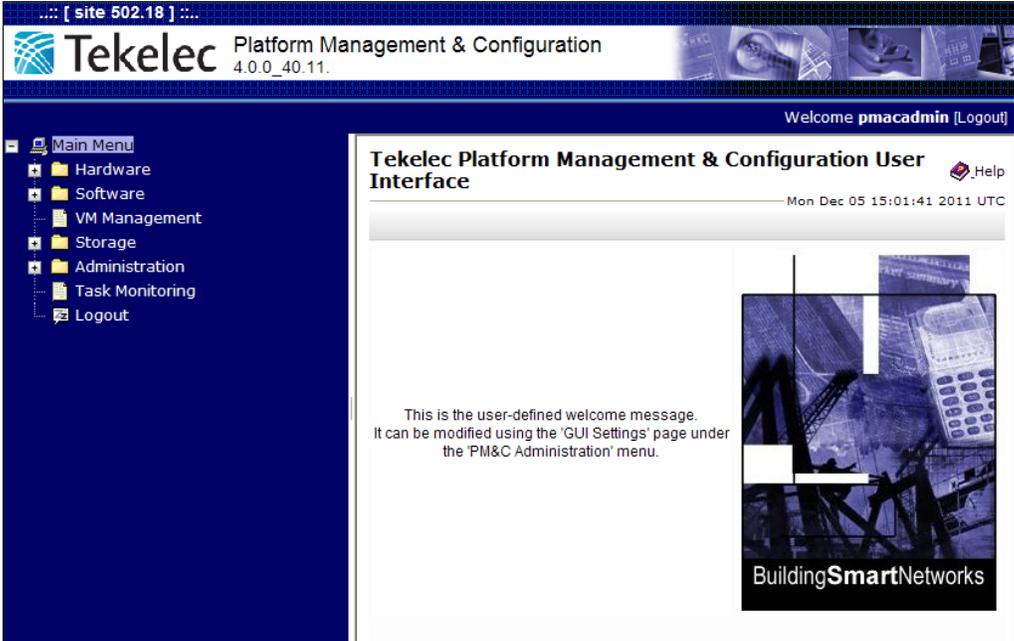
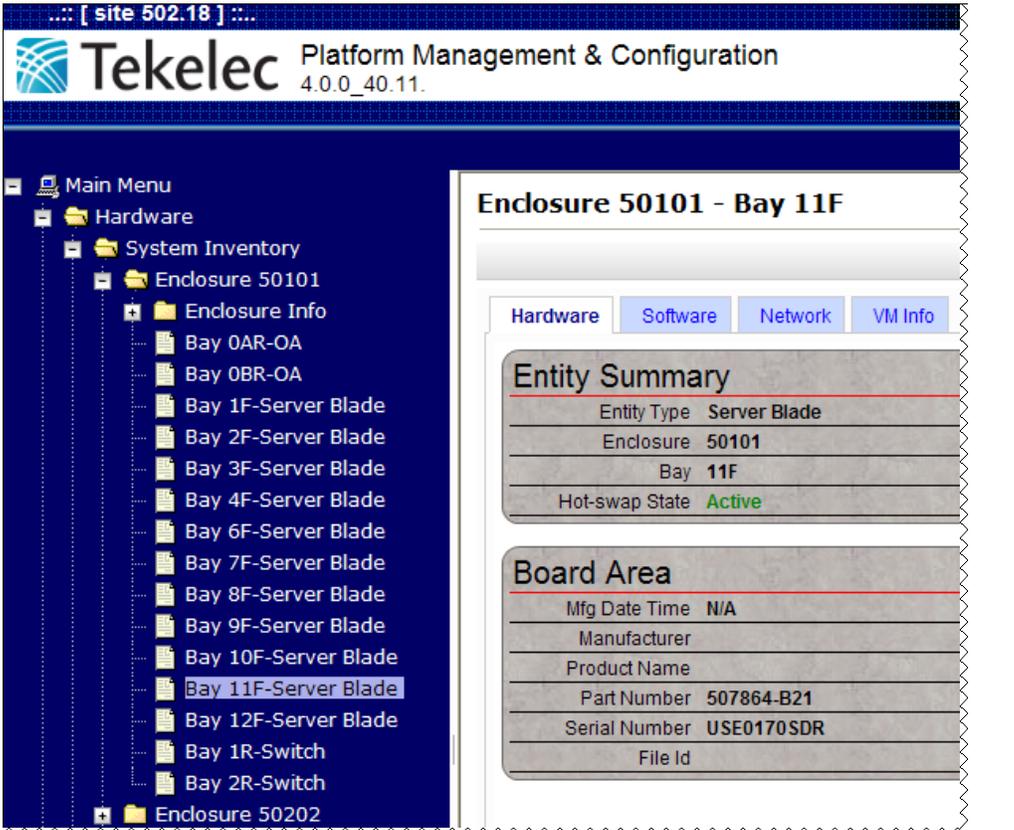
This procedure assumes that the DSR 4.0 or later OAM has already been installed in a virtual environment on the server blade, as described in as described in *DSR 4.0 HP C-Class Installation*, 902-2228-001, Ver 0.7 (or higher) [5]. This assumption also implies that the PMAC server has been installed and that TVOE has been installed in the OAM server blades.

This procedure also assumes that the SDS software image has already been added to the PMAC server, as described in section 5.6.

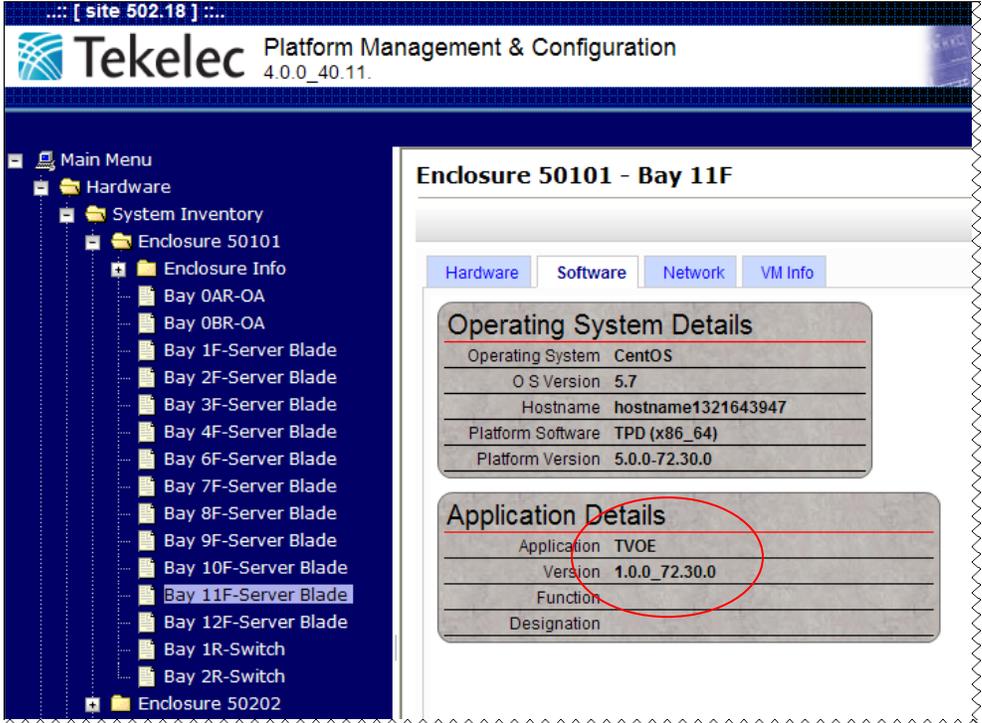
**Procedure 8:** Configuring an OAM Server for DP-SOAM sites

Step	Procedure	Result
<p>1.</p> <input type="checkbox"/>	<p><b>PMAC Server:</b></p> <p>Launch an approved web browser and connect to the <b>XMI IP Address</b> of the <b>PMAC server at the DP-SOAM site</b> using "https://"</p>	
<p>2.</p> <input type="checkbox"/>	<p><b>PMAC Server:</b></p> <p>The user should be presented the login screen shown on the right.</p> <p>Login to the GUI using the default user and password.</p>	

**Procedure 8:** Configuring an OAM Server for DP-SOAM sites

Step	Procedure	Result
<p>3.</p> <input type="checkbox"/>	<p><b>PMAC Server:</b></p> <p>The user should be presented the PMAC Main Menu as shown on the right.</p>	
<p>4.</p> <input type="checkbox"/>	<p><b>PMAC Server:</b></p> <p>Select desired OAM server blade...</p> <p><b>Main Menu</b></p> <ul style="list-style-type: none"> <li>→ Hardware</li> <li>→ System Inventory</li> <li>→ &lt;Enclosure&gt;</li> <li>→ &lt;Server Blade&gt;</li> </ul> <p>...as shown on the right.</p>	

**Procedure 8:** Configuring an OAM Server for DP-SOAM sites

Step	Procedure	Result
<p>5.</p> <input type="checkbox"/>	<p><b>PMAC Server:</b></p> <p>Select the Software tab.</p> <p>...as shown on the right.</p> <p>Verify that TVOE application has been installed.</p>	 <p>The screenshot shows the Tekelec Platform Management &amp; Configuration interface. The left sidebar displays a tree view under 'Main Menu' &gt; 'Hardware' &gt; 'System Inventory' &gt; 'Enclosure 50101' &gt; 'Enclosure Info' &gt; 'Bay 11F-Server Blade'. The right pane shows 'Enclosure 50101 - Bay 11F' with tabs for 'Hardware', 'Software', 'Network', and 'VM Info'. The 'Software' tab is active, displaying 'Operating System Details' (CentOS 5.7) and 'Application Details' (TVOE 1.0.0_72.30.0). The 'Application Details' section has a red circle around the 'Application' and 'Version' fields.</p>

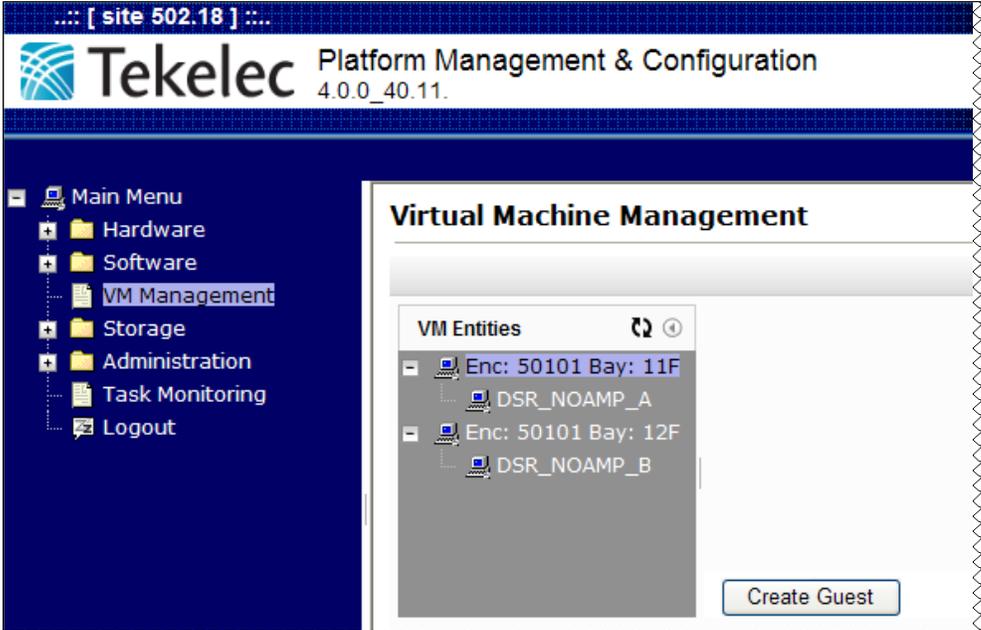
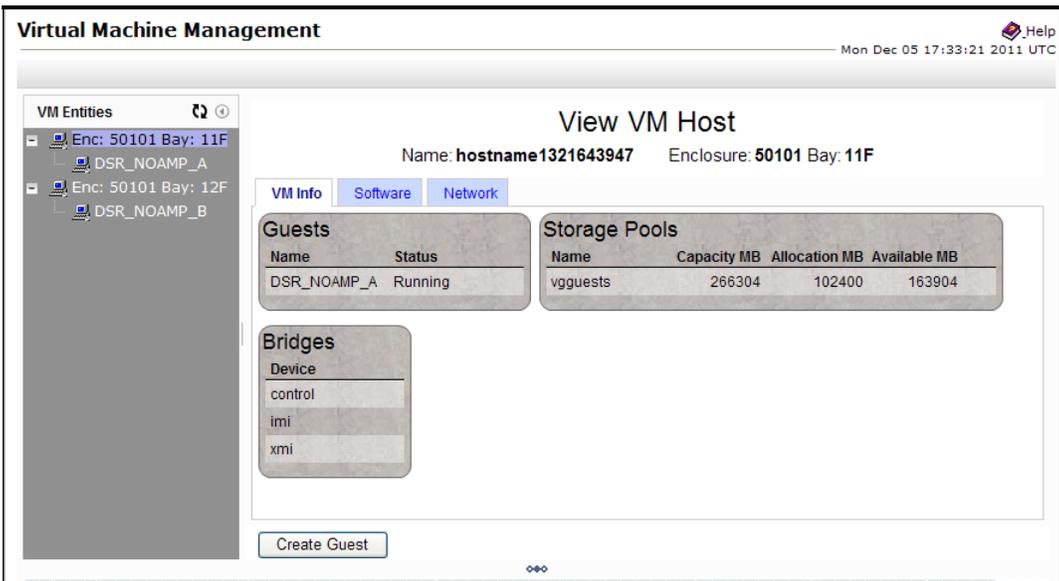


**IF TVOE WAS NOT INSTALLED ON THE BLADE SERVER, STOP AND EXECUTE THE FOLLOWING STEPS:**

- 1) Verify that the enclosure and bay number are correct.
- 2) Contact DSR Installation Engineer to confirm location of OAM blade and status of TVOE installation.
- 3) Restart this procedure.

**IF THE TVOE APPLICATION WAS ALREADY INSTALLED, THEN CONTINUE ON TO THE NEXT STEP IN THIS PROCEDURE.**

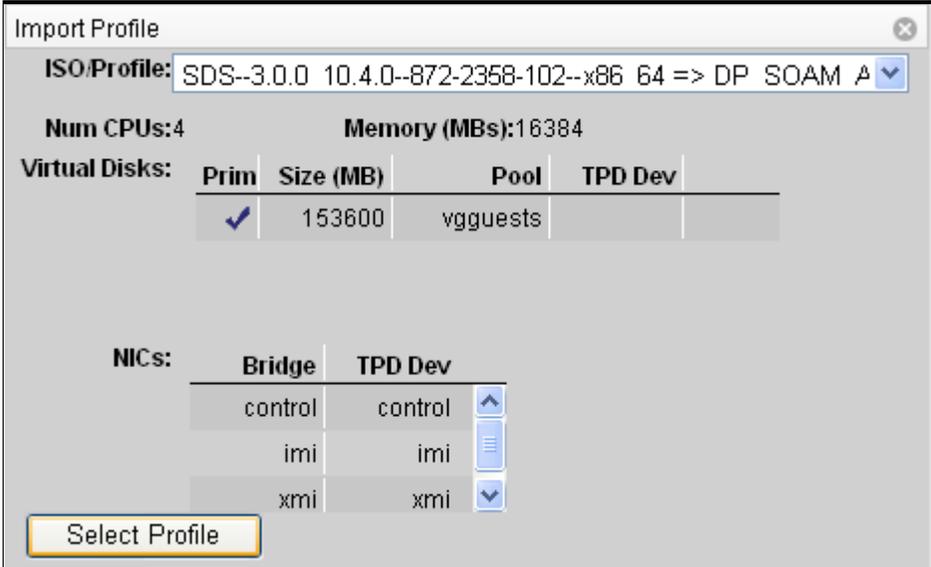
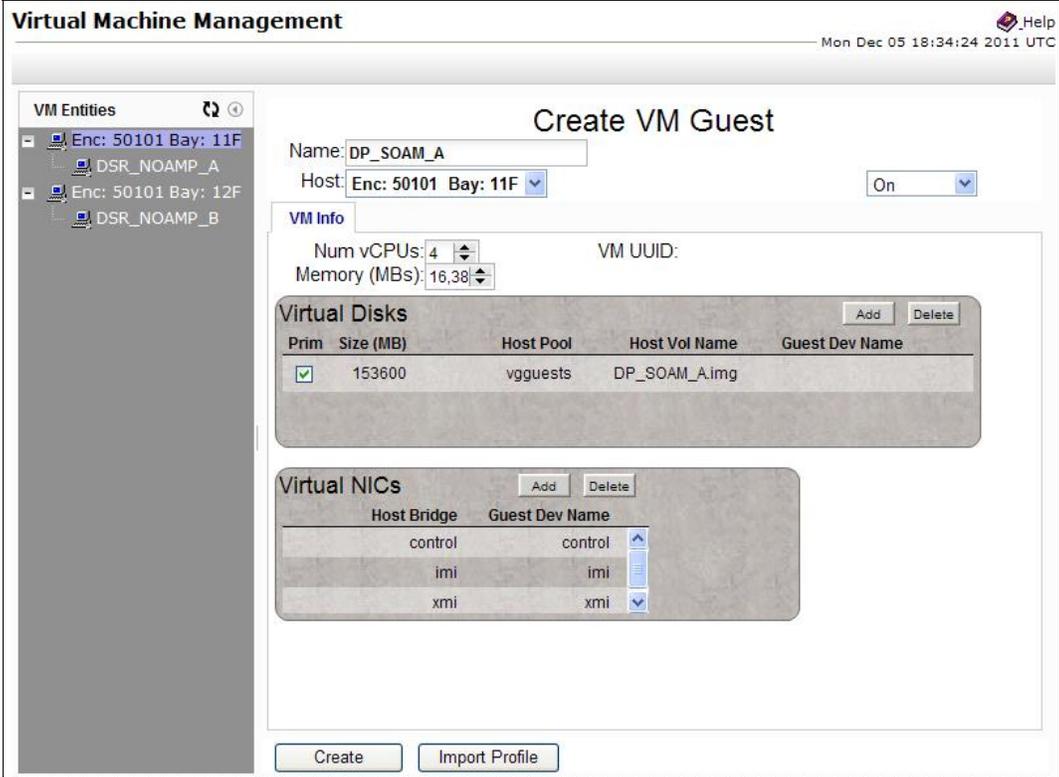
**Procedure 8:** Configuring an OAM Server for DP-SOAM sites

Step	Procedure	Result
<p>6.</p> <input type="checkbox"/>	<p><b>PMAC Server:</b></p> <p>Select ...</p> <p><b>Main Menu</b> → VM Management</p> <p>...as shown on the right.</p>	 <p>The screenshot shows the Tekelec Platform Management &amp; Configuration interface. The breadcrumb is "... [ site 502.18 ] :...". The main menu is expanded to show "VM Management". The "VM Entities" section is visible, listing "Enc: 50101 Bay: 11F" and "Enc: 50101 Bay: 12F", each with sub-entities "DSR_NOAMP_A" and "DSR_NOAMP_B". A "Create Guest" button is at the bottom right.</p>
<p>7.</p> <input type="checkbox"/>	<p><b>PMAC Server:</b></p> <p>1) In the VM Entities box, select the desired server</p> <p>...as shown on the right.</p> <p>2) Click the “<b>Create Guest</b>” dialogue button</p>	 <p>The screenshot shows the "View VM Host" page. The breadcrumb is "Virtual Machine Management". The page title is "View VM Host". The host name is "hostname1321643947" and the enclosure is "50101 Bay: 11F". There are tabs for "VM Info", "Software", and "Network". The "VM Info" tab is active, showing a "Guests" table and a "Storage Pools" table. The "Guests" table has one entry: "DSR_NOAMP_A" with status "Running". The "Storage Pools" table has one entry: "vggcasts" with Capacity MB 266304, Allocation MB 102400, and Available MB 163904. There is also a "Bridges" section with devices "control", "imi", and "xmi". A "Create Guest" button is at the bottom left.</p>

**Procedure 8:** Configuring an OAM Server for DP-SOAM sites

Step	Procedure	Result												
<p>8.</p> <p><input type="checkbox"/></p>	<p><b>PMAC Server:</b></p> <p>Click the “<b>Import Profile</b>” dialogue button</p> <p>...as shown on the right.</p>	<p><b>Virtual Machine Management</b></p> <p>Info ▾</p> <p><b>VM Entities</b> </p> <ul style="list-style-type: none"> <li>Enc: 50101 Bay: 11F             <ul style="list-style-type: none"> <li>DSR_NOAMP_A</li> </ul> </li> <li>Enc: 50101 Bay: 12F             <ul style="list-style-type: none"> <li>DSR_NOAMP_B</li> </ul> </li> </ul> <p><b>Create VM Guest</b></p> <p>Name: <input type="text"/></p> <p>Host: <b>Enc: 50101 Bay: 12F</b> ▾</p> <p><b>VM Info</b></p> <p>Num vCPUs: <input type="text" value="1"/> ▾</p> <p>Memory (MBs): <input type="text" value="1024"/> ▾</p> <p>VM UUID: <input type="text"/></p> <p><b>Virtual Disks</b></p> <table border="1"> <thead> <tr> <th>Prim</th> <th>Size (MB)</th> <th>Host Pool</th> <th>Host Vol Name</th> </tr> </thead> <tbody> <tr> <td><input checked="" type="checkbox"/></td> <td>12288</td> <td>vguests</td> <td></td> </tr> </tbody> </table> <p><b>Virtual NICs</b> <input type="button" value="Add"/> <input type="button" value="Delete"/></p> <table border="1"> <thead> <tr> <th>Host Bridge</th> <th>Guest Dev Name</th> </tr> </thead> <tbody> <tr> <td>control</td> <td>control</td> </tr> </tbody> </table> <p><input type="button" value="Create"/> <input type="button" value="Import Profile"/></p>	Prim	Size (MB)	Host Pool	Host Vol Name	<input checked="" type="checkbox"/>	12288	vguests		Host Bridge	Guest Dev Name	control	control
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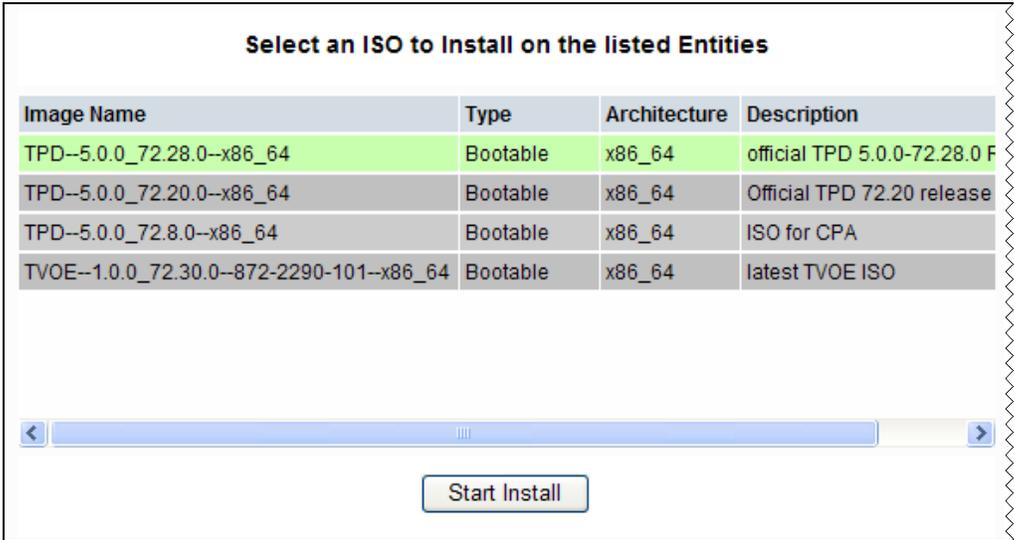
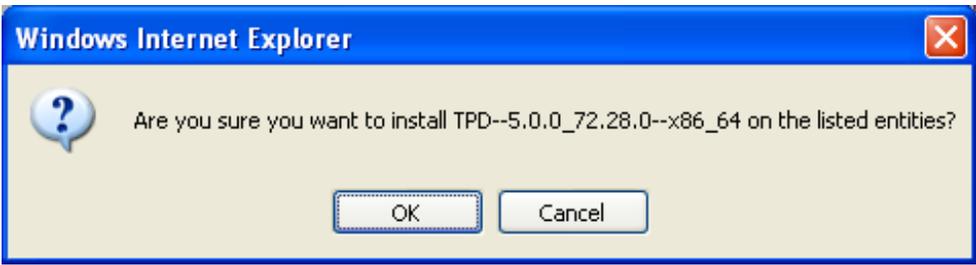
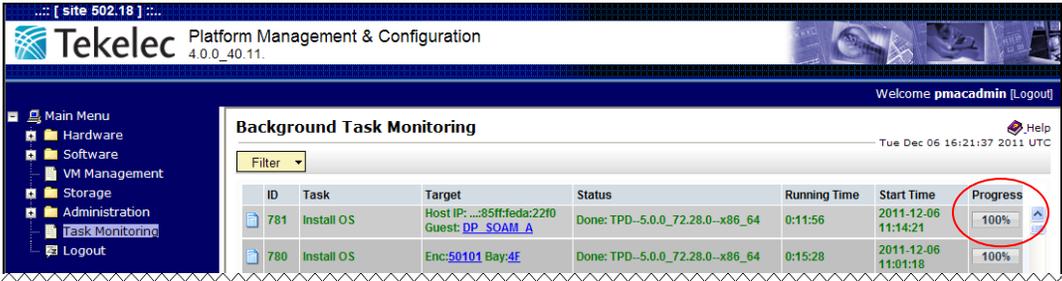
**Procedure 8:** Configuring an OAM Server for DP-SOAM sites

Step	Procedure	Result
<p>9.</p> <p><input type="checkbox"/></p>	<p><b>PMAC Server:</b></p> <p>1) Select the desired <b>ISO/Profile</b> value</p> <p>...as shown on the right.</p> <p>2) Click the “<b>Select Profile</b>” dialogue button</p>	
<p>10.</p> <p><input type="checkbox"/></p>	<p><b>PMAC Server:</b></p> <p>1) Overwrite the <b>Name</b> field with the Server host name (e.g. "so-mrsvnc-a")</p> <p>2) Click the “<b>Create</b>” dialogue button</p>	

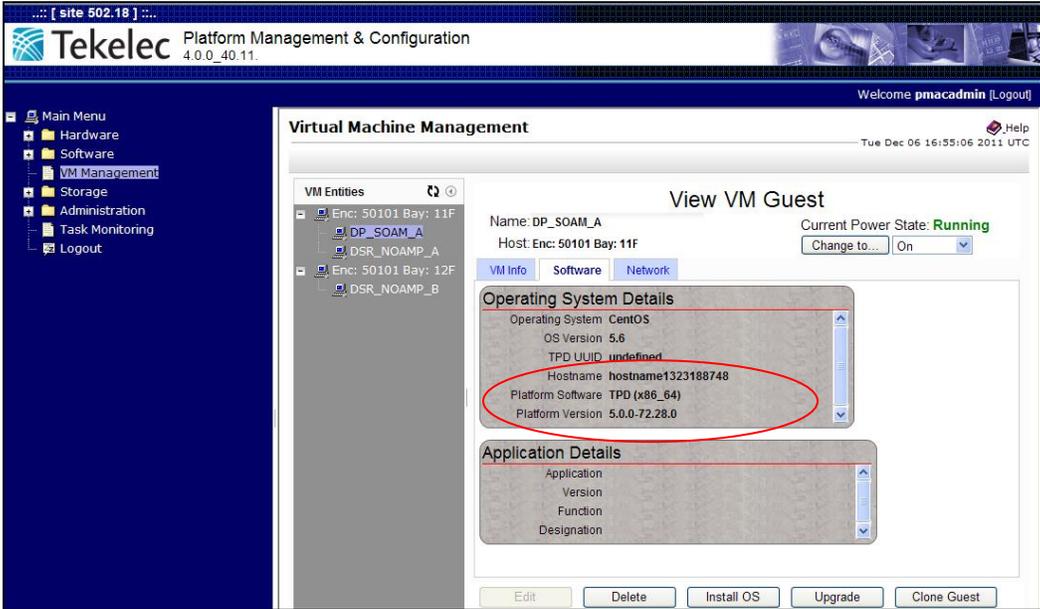
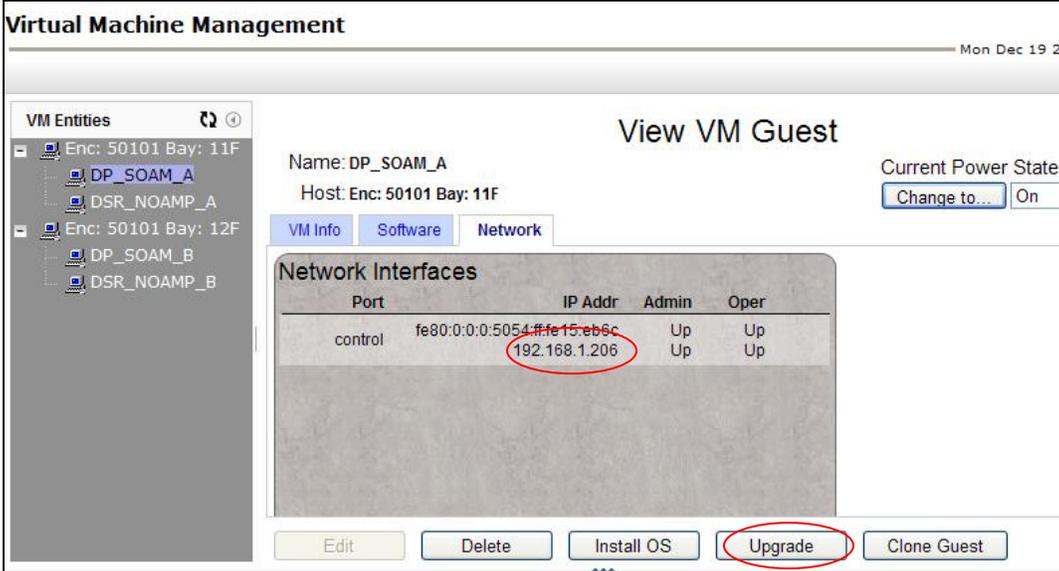
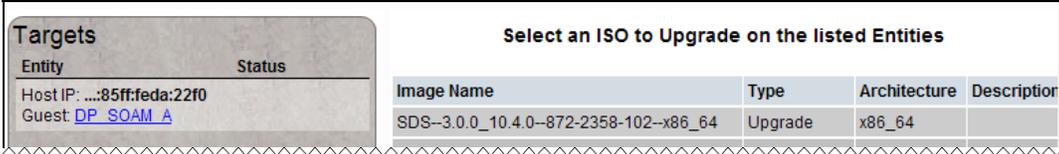
**Procedure 8:** Configuring an OAM Server for DP-SOAM sites

Step	Procedure	Result																																	
<p>11.</p> <p><input type="checkbox"/></p>	<p><b>PMAC Server:</b></p> <p>Verify that task successfully completes.</p> <p>The user should see a screen similar to the one on the right with <b>Progress</b> value of <b>100%</b>.</p>	<p><b>VM Entities</b></p> <ul style="list-style-type: none"> <li>Enc: 50101 Bay: 11F <ul style="list-style-type: none"> <li><b>DP_SOAM_A</b></li> <li>DSR_NOAMP_A</li> </ul> </li> <li>Enc: 50101 Bay: 12F <ul style="list-style-type: none"> <li>DSR_NOAMP_B</li> </ul> </li> </ul> <p><b>View VM Guest</b></p> <p>Name: DP_SOAM_A Host: Enc: 50101 Bay: 11F Current Power State: <b>Running</b> Change to... On</p> <p>VM Info   Software   Network</p> <p>Num vCPUs: 4 Memory (MBs): 16,384 VM UUID: fa4567bf-b32e-0479-15d4-e281bab47f83</p> <p><b>Virtual Disks</b></p> <table border="1"> <thead> <tr> <th>Prim</th> <th>Size (MB)</th> <th>Host Pool</th> <th>Host Vol Name</th> <th>Guest Dev Name</th> </tr> </thead> <tbody> <tr> <td><input checked="" type="checkbox"/></td> <td>153600</td> <td>vgguests</td> <td>DP_SOAM_A.img</td> <td>PRIMARY</td> </tr> </tbody> </table> <p><b>Virtual NICs</b></p> <table border="1"> <thead> <tr> <th>Host Bridge</th> <th>Guest Dev Name</th> <th>MAC Addr</th> </tr> </thead> <tbody> <tr> <td>control</td> <td>control</td> <td>52:54:00:15:eb:6c</td> </tr> <tr> <td>xmi</td> <td>xmi</td> <td>52:54:00:d9:ba:7f</td> </tr> </tbody> </table> <p>Edit Delete Install OS Upgrade Clone Guest</p> <table border="1"> <thead> <tr> <th>ID</th> <th>Task</th> <th>Target</th> <th>Status</th> <th>Running Time</th> <th>Start Time</th> <th>Progress</th> </tr> </thead> <tbody> <tr> <td>767</td> <td>VirtAction: Create</td> <td>Enc:50101 Bay:11F Guest: DP_SOAM_A</td> <td>Guest creation completed (DP_SOAM_A)</td> <td>0:00:04</td> <td>2011-12-05 13:36:58</td> <td>100%</td> </tr> </tbody> </table>	Prim	Size (MB)	Host Pool	Host Vol Name	Guest Dev Name	<input checked="" type="checkbox"/>	153600	vgguests	DP_SOAM_A.img	PRIMARY	Host Bridge	Guest Dev Name	MAC Addr	control	control	52:54:00:15:eb:6c	xmi	xmi	52:54:00:d9:ba:7f	ID	Task	Target	Status	Running Time	Start Time	Progress	767	VirtAction: Create	Enc:50101 Bay:11F Guest: DP_SOAM_A	Guest creation completed (DP_SOAM_A)	0:00:04	2011-12-05 13:36:58	100%
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<p>12.</p> <p><input type="checkbox"/></p>	<p><b>PMAC Server:</b></p> <p>Install the operating system by clicking the <b>"Install OS"</b> dialogue button</p>	<p><b>Virtual NICs</b></p> <table border="1"> <thead> <tr> <th>Host Bridge</th> <th>Guest Dev Name</th> <th>MAC Addr</th> </tr> </thead> <tbody> <tr> <td>control</td> <td>control</td> <td>52:54:00:15:eb:6c</td> </tr> <tr> <td>xmi</td> <td>xmi</td> <td>52:54:00:d9:ba:7f</td> </tr> </tbody> </table> <p>Edit Delete <b>Install OS</b> Upgrade Clone Guest</p> <p>Target Status Running Time Start Time</p>	Host Bridge	Guest Dev Name	MAC Addr	control	control	52:54:00:15:eb:6c	xmi	xmi	52:54:00:d9:ba:7f																								
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<p>13.</p> <p><input type="checkbox"/></p>	<p><b>PMAC Server:</b></p> <p>The user should see a screen similar to the one on the right.</p>	<p><b>Software Install - Select Image</b></p> <p>Tue Dec 06 16:07:15 2011 UTC</p> <p>Targets</p> <table border="1"> <thead> <tr> <th>Entity</th> <th>Status</th> </tr> </thead> <tbody> <tr> <td>Host IP: ...:85ff:feda:22f0 Guest: DP_SOAM_A</td> <td></td> </tr> </tbody> </table> <p>Select an ISO to Install on the listed Entities</p> <table border="1"> <thead> <tr> <th>Image Name</th> <th>Type</th> <th>Architecture</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>TPD--5.0.0_72.28.0--x86_64</td> <td>Bootable</td> <td>x86_64</td> <td>official TPD 5.0.0-72.28.0 F</td> </tr> <tr> <td>TPD--5.0.0_72.20.0--x86_64</td> <td>Bootable</td> <td>x86_64</td> <td>Official TPD 72.20 release</td> </tr> <tr> <td>TPD--5.0.0_72.8.0--x86_64</td> <td>Bootable</td> <td>x86_64</td> <td>ISO for CPA</td> </tr> <tr> <td>TVOE--1.0.0_72.30.0--872-2290-101--x86_64</td> <td>Bootable</td> <td>x86_64</td> <td>latest TVOE ISO</td> </tr> </tbody> </table>	Entity	Status	Host IP: ...:85ff:feda:22f0 Guest: DP_SOAM_A		Image Name	Type	Architecture	Description	TPD--5.0.0_72.28.0--x86_64	Bootable	x86_64	official TPD 5.0.0-72.28.0 F	TPD--5.0.0_72.20.0--x86_64	Bootable	x86_64	Official TPD 72.20 release	TPD--5.0.0_72.8.0--x86_64	Bootable	x86_64	ISO for CPA	TVOE--1.0.0_72.30.0--872-2290-101--x86_64	Bootable	x86_64	latest TVOE ISO									
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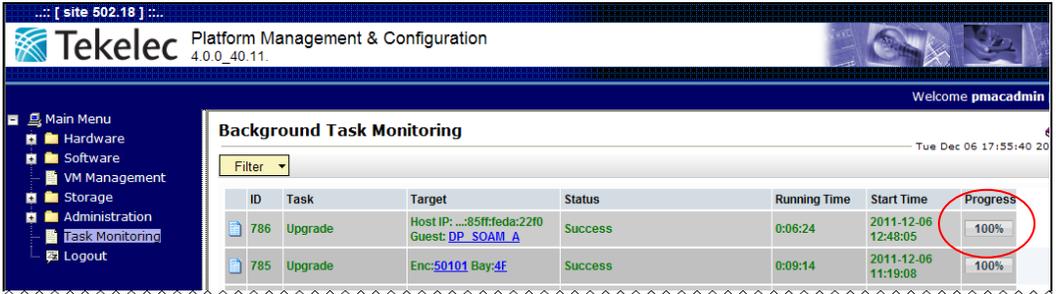
**Procedure 8:** Configuring an OAM Server for DP-SOAM sites

Step	Procedure	Result																					
<p>14.</p> <input type="checkbox"/>	<p><b>PMAC Server:</b></p> <p>1) Select the desired <b>TPD Image</b></p> <p>2) Click the “<b>Start Install</b>” dialogue button.</p>	 <table border="1"> <thead> <tr> <th>Image Name</th> <th>Type</th> <th>Architecture</th> <th>Description</th> </tr> </thead> <tbody> <tr style="background-color: #e0ffe0;"> <td>TPD--5.0.0_72.28.0--x86_64</td> <td>Bootable</td> <td>x86_64</td> <td>official TPD 5.0.0-72.28.0 F</td> </tr> <tr> <td>TPD--5.0.0_72.20.0--x86_64</td> <td>Bootable</td> <td>x86_64</td> <td>Official TPD 72.20 release</td> </tr> <tr> <td>TPD--5.0.0_72.8.0--x86_64</td> <td>Bootable</td> <td>x86_64</td> <td>ISO for CPA</td> </tr> <tr> <td>TVOE--1.0.0_72.30.0--872-2290-101--x86_64</td> <td>Bootable</td> <td>x86_64</td> <td>latest TVOE ISO</td> </tr> </tbody> </table> <p style="text-align: center;">Start Install</p>	Image Name	Type	Architecture	Description	TPD--5.0.0_72.28.0--x86_64	Bootable	x86_64	official TPD 5.0.0-72.28.0 F	TPD--5.0.0_72.20.0--x86_64	Bootable	x86_64	Official TPD 72.20 release	TPD--5.0.0_72.8.0--x86_64	Bootable	x86_64	ISO for CPA	TVOE--1.0.0_72.30.0--872-2290-101--x86_64	Bootable	x86_64	latest TVOE ISO	
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<p>15.</p> <input type="checkbox"/>	<p><b>PMAC Server:</b></p> <p>The user should be presented with an “<b>Are you sure you want to install</b>” message box</p> <p>....as shown on the right.</p> <p>Click the “<b>OK</b>” dialogue button.</p>																						
<p>16.</p> <input type="checkbox"/>	<p><b>PMAC Server:</b></p> <p>An installation task will be started. This task takes ~11 minutes. The user can monitor this task by doing the following:</p> <p>Select...</p> <p><b>Main Menu</b> → <b>Task Monitoring</b></p> <p>Wait until you see the <b>Progress</b> value equal <b>100%</b>.</p>	 <table border="1"> <thead> <tr> <th>ID</th> <th>Task</th> <th>Target</th> <th>Status</th> <th>Running Time</th> <th>Start Time</th> <th>Progress</th> </tr> </thead> <tbody> <tr> <td>781</td> <td>Install OS</td> <td>Host IP: ...85ff:feda:2210 Guest: DP_SOAM_A</td> <td>Done: TPD--5.0.0_72.28.0--x86_64</td> <td>0:11:56</td> <td>2011-12-06 11:14:21</td> <td>100%</td> </tr> <tr> <td>780</td> <td>Install OS</td> <td>Enc:50101 Bay:4F</td> <td>Done: TPD--5.0.0_72.28.0--x86_64</td> <td>0:15:28</td> <td>2011-12-06 11:01:18</td> <td>100%</td> </tr> </tbody> </table>	ID	Task	Target	Status	Running Time	Start Time	Progress	781	Install OS	Host IP: ...85ff:feda:2210 Guest: DP_SOAM_A	Done: TPD--5.0.0_72.28.0--x86_64	0:11:56	2011-12-06 11:14:21	100%	780	Install OS	Enc:50101 Bay:4F	Done: TPD--5.0.0_72.28.0--x86_64	0:15:28	2011-12-06 11:01:18	100%
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781	Install OS	Host IP: ...85ff:feda:2210 Guest: DP_SOAM_A	Done: TPD--5.0.0_72.28.0--x86_64	0:11:56	2011-12-06 11:14:21	100%																	
780	Install OS	Enc:50101 Bay:4F	Done: TPD--5.0.0_72.28.0--x86_64	0:15:28	2011-12-06 11:01:18	100%																	

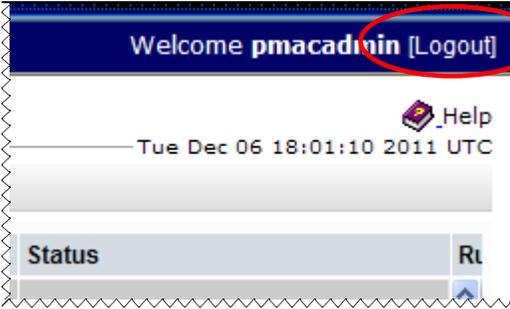
**Procedure 8:** Configuring an OAM Server for DP-SOAM sites

Step	Procedure	Result														
<p>17.</p> <p><input type="checkbox"/></p>	<p><b>PMAC Server:</b></p> <p>1) Select...</p> <p><b>Main Menu</b> → VM Management</p> <p>2) Select the "Software" tab</p> <p>3) Verify the operating system has been installed.</p> <p>4) Verify the "Application Details" section is blank.</p>															
<p>18.</p> <p><input type="checkbox"/></p>	<p><b>PMAC Server:</b></p> <p>1) Select the "Network" tab</p> <p>2) Make note of the control IP address for this OAM; it will be referenced later.</p> <p>3) Select the "Upgrade" dialogue button</p>	 <table border="1"> <thead> <tr> <th>Port</th> <th>IP Addr</th> <th>Admin</th> <th>Oper</th> </tr> </thead> <tbody> <tr> <td>control</td> <td>fe80:0:0:5054::fe15:eb6c 192.168.1.206</td> <td>Up</td> <td>Up</td> </tr> </tbody> </table>	Port	IP Addr	Admin	Oper	control	fe80:0:0:5054::fe15:eb6c 192.168.1.206	Up	Up						
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<p>19.</p> <p><input type="checkbox"/></p>	<p><b>PMAC Server:</b></p> <p>The user should be presented the Select Image screen as shown on the right</p>	 <table border="1"> <thead> <tr> <th>Entity</th> <th>Status</th> </tr> </thead> <tbody> <tr> <td>Host IP: ....85ff:feda:22f0</td> <td></td> </tr> <tr> <td>Guest DP_SOAM_A</td> <td></td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th>Image Name</th> <th>Type</th> <th>Architecture</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>SDS-3.0.0_10.4.0-872-2358-102-x86_64</td> <td>Upgrade</td> <td>x86_64</td> <td></td> </tr> </tbody> </table>	Entity	Status	Host IP: ....85ff:feda:22f0		Guest DP_SOAM_A		Image Name	Type	Architecture	Description	SDS-3.0.0_10.4.0-872-2358-102-x86_64	Upgrade	x86_64	
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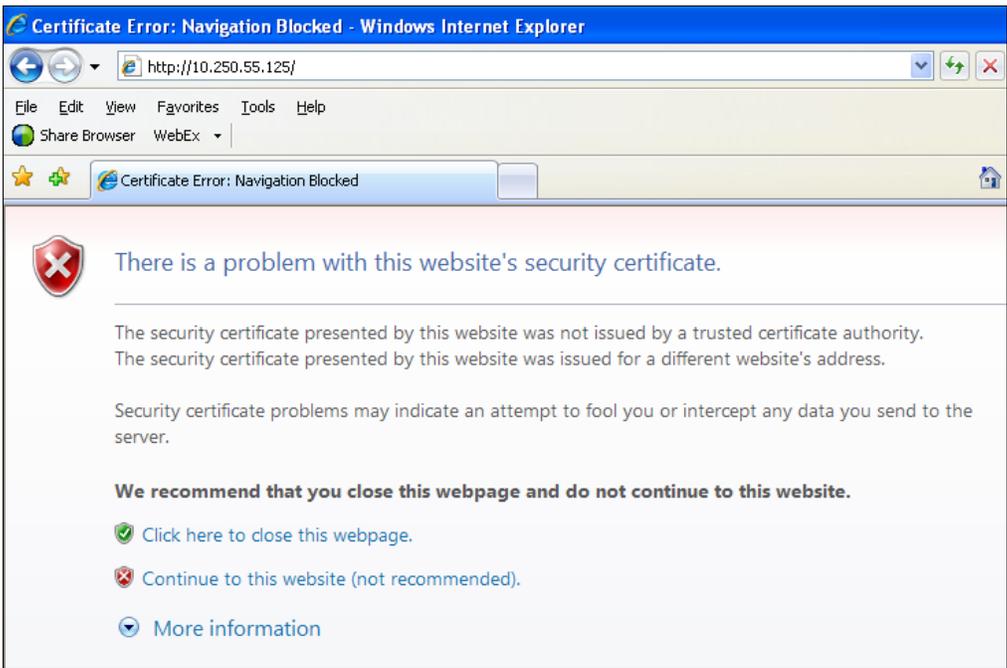
**Procedure 8:** Configuring an OAM Server for DP-SOAM sites

Step	Procedure	Result																																								
<p>20.</p> <input type="checkbox"/>	<p><b>PMAC Server:</b></p> <p>1) Select the correct <b>SDS</b> version from the “<b>Image Name</b>” list. The line entry should now be highlighted in <b>GREEN</b>.</p> <p>2) Select the “<b>Start Upgrade</b>” dialogue button</p>	<p style="text-align: center;"><b>Select an ISO to Upgrade on the listed Entities</b></p> <table border="1"> <thead> <tr> <th>Image Name</th> <th>Type</th> <th>Architecture</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>TPD--6.0.0_80.15.0--x86_64</td> <td>Bootable</td> <td>x86_64</td> <td></td> </tr> <tr style="background-color: #90EE90;"> <td>SDS--4.0.0_40.3.0--872-2469-001--x86_64</td> <td>Bootable</td> <td>x86_64</td> <td></td> </tr> <tr> <td>TVOE--2.0.0_80.16.0--872-2290-104--x86_64</td> <td>Bootable</td> <td>x86_64</td> <td></td> </tr> <tr> <td>DSR--4.0.0_40.8.1--872-2438-107--x86_64</td> <td>Bootable</td> <td>x86_64</td> <td></td> </tr> <tr> <td>TPD--6.0.0_80.16.0--x86_64</td> <td>Bootable</td> <td>x86_64</td> <td></td> </tr> <tr> <td>DSR--4.0.0_40.8.2--872-2438-107--x86_64</td> <td>Bootable</td> <td>x86_64</td> <td>Test ISO for VM profiles</td> </tr> <tr> <td>TPD--6.0.0_80.17.0--x86_64</td> <td>Bootable</td> <td>x86_64</td> <td></td> </tr> <tr> <td>SDS--4.0.0_40.4.0--872-2469-102--x86_64</td> <td>Bootable</td> <td>x86_64</td> <td></td> </tr> <tr> <td>DSR--4.0.0_40.9.1--872-2438-108--x86_64</td> <td>Bootable</td> <td>x86_64</td> <td>DSR 40.9.1 software</td> </tr> </tbody> </table>	Image Name	Type	Architecture	Description	TPD--6.0.0_80.15.0--x86_64	Bootable	x86_64		SDS--4.0.0_40.3.0--872-2469-001--x86_64	Bootable	x86_64		TVOE--2.0.0_80.16.0--872-2290-104--x86_64	Bootable	x86_64		DSR--4.0.0_40.8.1--872-2438-107--x86_64	Bootable	x86_64		TPD--6.0.0_80.16.0--x86_64	Bootable	x86_64		DSR--4.0.0_40.8.2--872-2438-107--x86_64	Bootable	x86_64	Test ISO for VM profiles	TPD--6.0.0_80.17.0--x86_64	Bootable	x86_64		SDS--4.0.0_40.4.0--872-2469-102--x86_64	Bootable	x86_64		DSR--4.0.0_40.9.1--872-2438-108--x86_64	Bootable	x86_64	DSR 40.9.1 software
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<p>21.</p> <input type="checkbox"/>	<p><b>PMAC Server:</b></p> <p>The user should be presented with an “<b>Are you sure you want to upgrade</b>” message box</p> <p>....as shown on the right.</p> <p>Click the “<b>OK</b>” dialogue button.</p>	<p style="text-align: center;">Are you sure you want to upgrade to SDS--4.0.0_40.3.0--872-2469-001--x86_64 on the listed entities?</p> <div style="text-align: center;"> <input type="button" value="OK"/> <input type="button" value="Cancel"/> </div>																																								
<p>22.</p> <input type="checkbox"/>	<p><b>PMAC Server:</b></p> <p>An upgrade task will be started. This task takes ~8 minutes. The user can monitor this task by doing the following:</p> <p>Select...</p> <p><b>Main Menu</b> → <b>Task Monitoring</b></p> <p>Wait until you see the <b>Progress</b> value equal <b>100%</b>.</p>	 <p>The screenshot shows the Tekelec Platform Management &amp; Configuration interface. On the left is a navigation menu with 'Task Monitoring' selected. The main area displays 'Background Task Monitoring' with a table of tasks. Two tasks are listed, both with a progress of 100%.</p> <table border="1"> <thead> <tr> <th>ID</th> <th>Task</th> <th>Target</th> <th>Status</th> <th>Running Time</th> <th>Start Time</th> <th>Progress</th> </tr> </thead> <tbody> <tr> <td>786</td> <td>Upgrade</td> <td>Host IP: ...85ff:feda:22f0 Guest: DP_SOAM_A</td> <td>Success</td> <td>0:06:24</td> <td>2011-12-06 12:48:05</td> <td>100%</td> </tr> <tr> <td>785</td> <td>Upgrade</td> <td>Enc:50101 Bay:4f</td> <td>Success</td> <td>0:09:14</td> <td>2011-12-06 11:19:08</td> <td>100%</td> </tr> </tbody> </table>	ID	Task	Target	Status	Running Time	Start Time	Progress	786	Upgrade	Host IP: ...85ff:feda:22f0 Guest: DP_SOAM_A	Success	0:06:24	2011-12-06 12:48:05	100%	785	Upgrade	Enc:50101 Bay:4f	Success	0:09:14	2011-12-06 11:19:08	100%																			
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<p>23.</p> <input type="checkbox"/>	<p>Repeat <b>Steps 4 - 23</b> of this procedure for the <b>DP-SOAM B Server</b>.</p>																																									

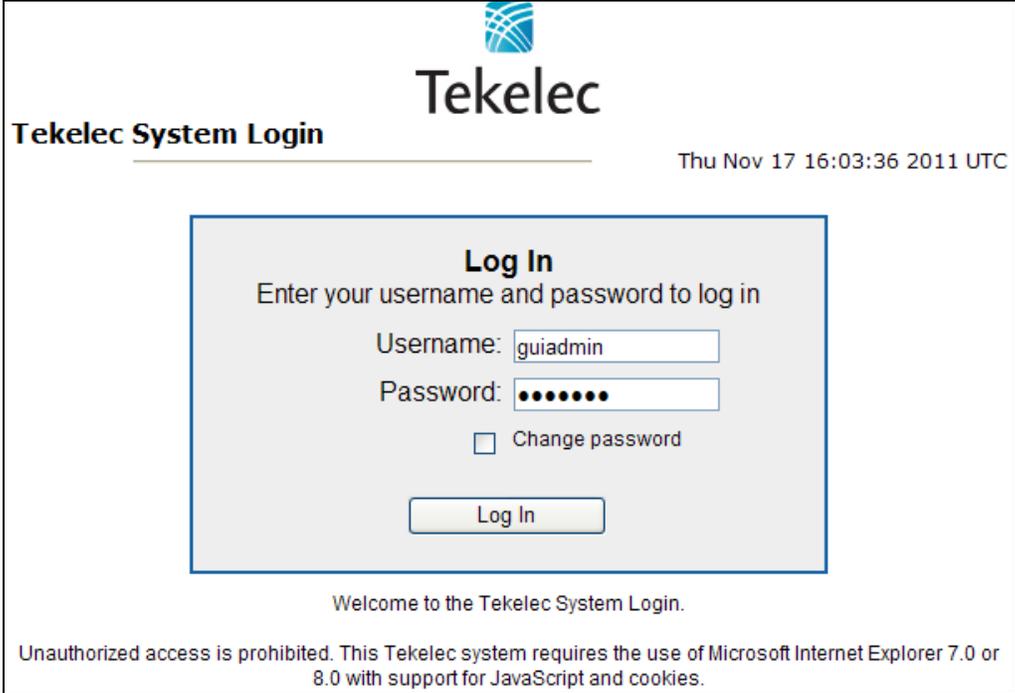
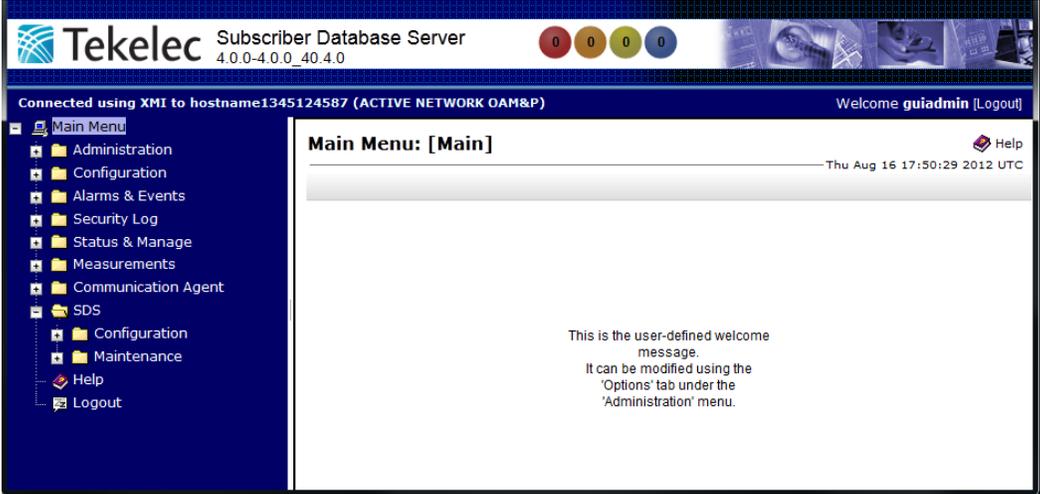
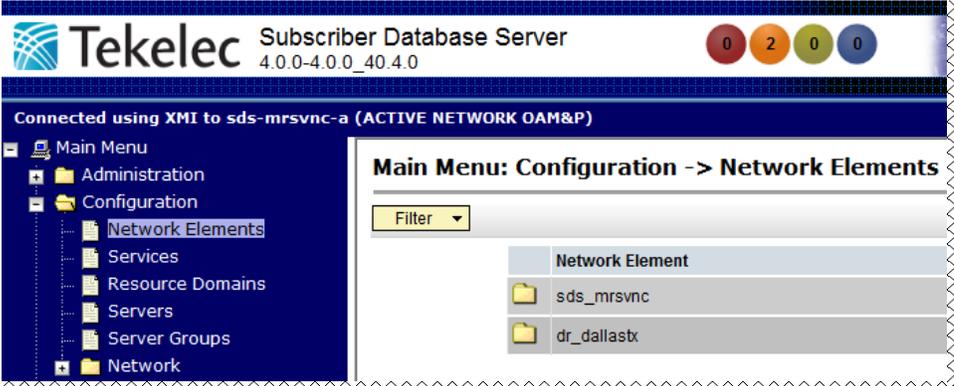
**Procedure 8:** Configuring an OAM Server for DP-SOAM sites

Step	Procedure	Result
<p>24.</p> <input type="checkbox"/>	<p><b>PMAC Server:</b></p> <p>Click the “Logout” link on the PMAC server GUI.</p>	

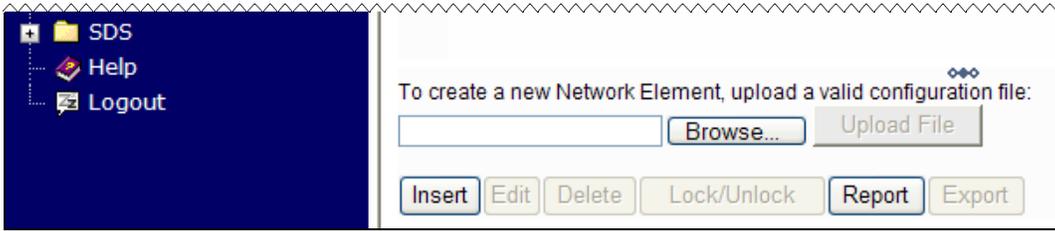
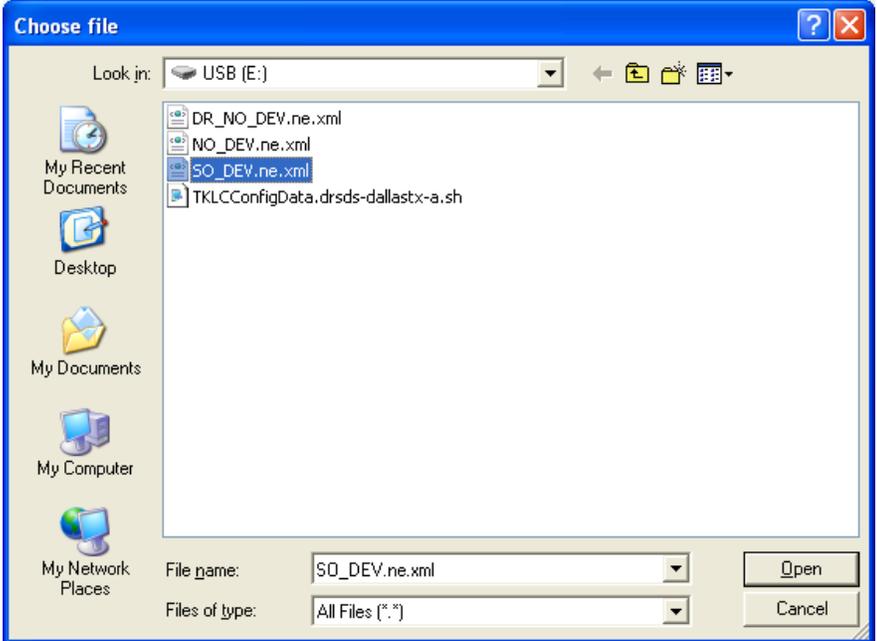
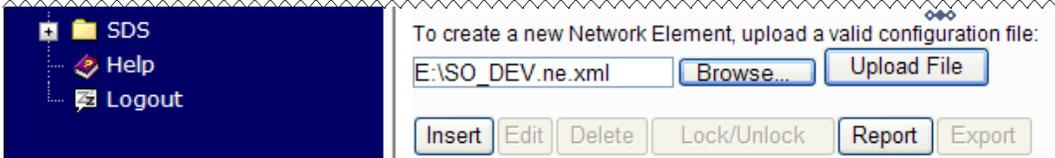
**Procedure 8.1 Configuring the Network Element (DP-SOAM)**

<p>25.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Launch an approved web browser and connect to the XMI Virtual IP address (VIP) assigned to <b>Active SDS site</b> using “https://”</p>	
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## Procedure 8.1 Configuring the Network Element (DP-SOAM)

<p>26.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>The user should be presented the login screen shown on the right.</p> <p>Login to the GUI using the default user and password.</p>							
<p>27.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>The user should be presented the SDS Main Menu as shown on the right.</p>							
<p>28.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>Select...</p> <p><b>Main Menu</b></p> <p>→ Configuration</p> <p>→ Network Elements</p> <p>...as shown on the right.</p>	 <table border="1"> <thead> <tr> <th colspan="2">Network Element</th> </tr> </thead> <tbody> <tr> <td>Folder</td> <td>sds_mrsvnc</td> </tr> <tr> <td>Folder</td> <td>dr_dallastx</td> </tr> </tbody> </table>	Network Element		Folder	sds_mrsvnc	Folder	dr_dallastx
Network Element								
Folder	sds_mrsvnc							
Folder	dr_dallastx							

## Procedure 8.1 Configuring the Network Element (DP-SOAM)

<p>29.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>From the <b>Configuration / Network Elements</b> screen...</p> <p>Select the <b>“Browse”</b> dialogue button (scroll to bottom left corner of screen).</p>	
<p>30.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p><b>Note:</b> This step assumes that the <b>xml</b> files were previously prepared, as described in <b>Appendix F</b>.</p> <p>1) Select the location containing the site <b>.xml</b> file.</p> <p>2) Select the <b>.xml</b> file and click the <b>“Open”</b> dialogue button.</p>	
<p>31.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Select the <b>“Upload File”</b> dialogue button (bottom left corner of screen).</p>	

## Procedure 8.1 Configuring the Network Element (DP-SOAM)

32.



### Active SDS VIP:

If the values in the .xml file pass validation rules, the user will receive a banner information message showing that the data has been successfully validated and committed to the DB.

**Main Menu: Configuration -> Network Elements**

Filter Info

Info

- Network Element insert successful from /tmp/SO\_DEV.ne.xml.

dr\_dallastx

---

**Main Menu: Configuration -> Network Elements**

Filter Info

Network Element
sds_mvsvnc
dr_dallastx
so_carync

## Procedure 8.2 Configuring the SOAM Server

33.



### Active SDS VIP:

Select...

### Main Menu

→ Configuration  
→ Servers

...as shown on the right.

Tekelec Subscriber Database Server  
3.0.0-3.0.0\_10.7.1

Connected using VIP to sds-mrvsvnc-a (ACTIVE NETWORK OAM&P)

Main Menu

- Administration
- Configuration
- Network Elements
- Services
- Servers**
- Server Groups
- Network
- Alarms & Events

**Main Menu: Configuration -> Servers**

Filter

Hostname	Role	Server Group
sds-mrvsvnc-a	Network OAM&P	sds_mvsvnc_grp
sds-mrvsvnc-b	Network OAM&P	sds_mvsvnc_grp

34.



### Active SDS VIP:

Select the "Insert" dialogue button (bottom left corner of screen).

SDS

Help

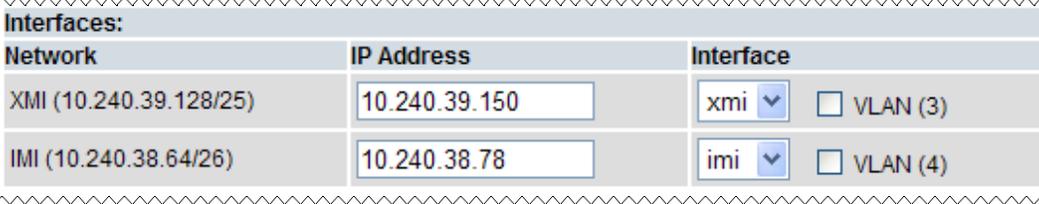
Logout

Insert Delete Export Report

## Procedure 8.2 Configuring the SOAM Server

<p>35.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>The user is now presented with the “Adding a new server” configuration screen.</p>	
<p>36.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Input the assigned “hostname” for OAM Server.</p>	
<p>37.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Select “SYSTEM OAM” for the Role from the pull-down menu.</p>	
<p>38.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Input the assigned hostname again as the “System ID” for the SO Server (A or B).</p>	
<p>39.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Select “SDS TVOE Guest” for the Hardware Profile for the DP-SOAM from the pull-down menu.</p>	

## Procedure 8.2 Configuring the SOAM Server

<p>40.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Select the <b>Network Element Name</b> for the SDS from the pull-down menu.</p> <p><b>NOTE:</b> After the <i>Network Element Name</i> is selected, the <i>Interfaces</i> fields will be displayed, as seen in <b>Step 42</b>.</p>													
<p>41.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Enter the site location.</p> <p><b>NOTE:</b> <i>Location</i> is an optional field.</p>													
<p>42.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>1) Enter the <b>XMI IP address</b> and <b>IMI IP address</b> for the <b>DP-SOAM Server</b>.</p> <p>2) Set the <b>XMI Interface</b> to “xmi” and do NOT check the <b>VLAN</b> box.</p> <p>3) Set the <b>IMI Interface</b> to “imi” and do NOT check the <b>VLAN</b> box.</p>	 <table border="1"> <thead> <tr> <th colspan="3">Interfaces:</th> </tr> <tr> <th>Network</th> <th>IP Address</th> <th>Interface</th> </tr> </thead> <tbody> <tr> <td>XMI (10.240.39.128/25)</td> <td>10.240.39.150</td> <td>xmi <input type="checkbox"/> VLAN (3)</td> </tr> <tr> <td>IMI (10.240.38.64/26)</td> <td>10.240.38.78</td> <td>imi <input type="checkbox"/> VLAN (4)</td> </tr> </tbody> </table>	Interfaces:			Network	IP Address	Interface	XMI (10.240.39.128/25)	10.240.39.150	xmi <input type="checkbox"/> VLAN (3)	IMI (10.240.38.64/26)	10.240.38.78	imi <input type="checkbox"/> VLAN (4)
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## Procedure 8.2 Configuring the SOAM Server

<p><b>43.</b></p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>1) Click the “NTP Servers:” “Add” dialogue button.</p> <p>2) Enter the NTP Server IP Address for an NTP Server.</p> <p>3) If you have another NTP Server IP address, repeat (1) and (2) to enter it.</p> <p>4) Optionally, click the “Prefer” checkbox to prefer one NTP Server over the other.</p>	
<p><b>44.</b></p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>1) The user should be presented with a banner information message stating “Pre-Validation passed”.</p> <p>2) Click the “Apply” dialogue button.</p>	

## Procedure 8.2 Configuring the SOAM Server

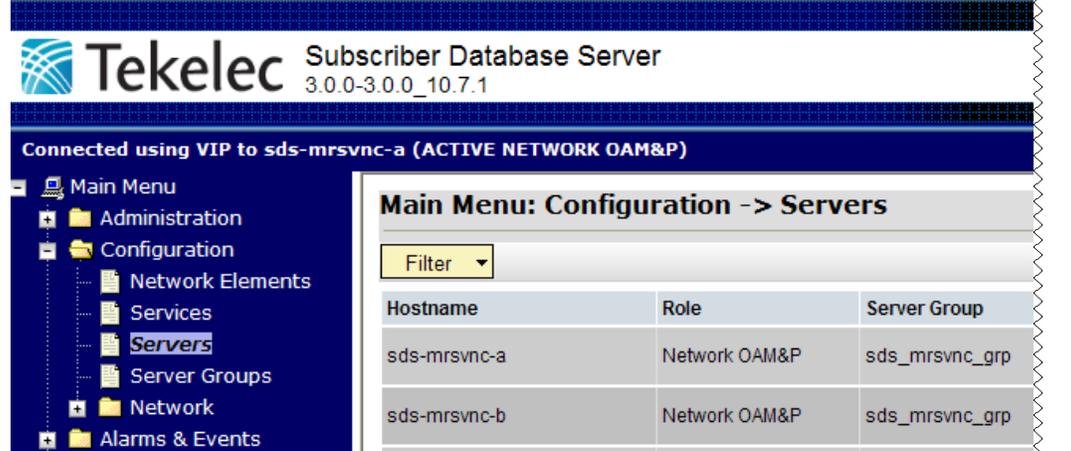
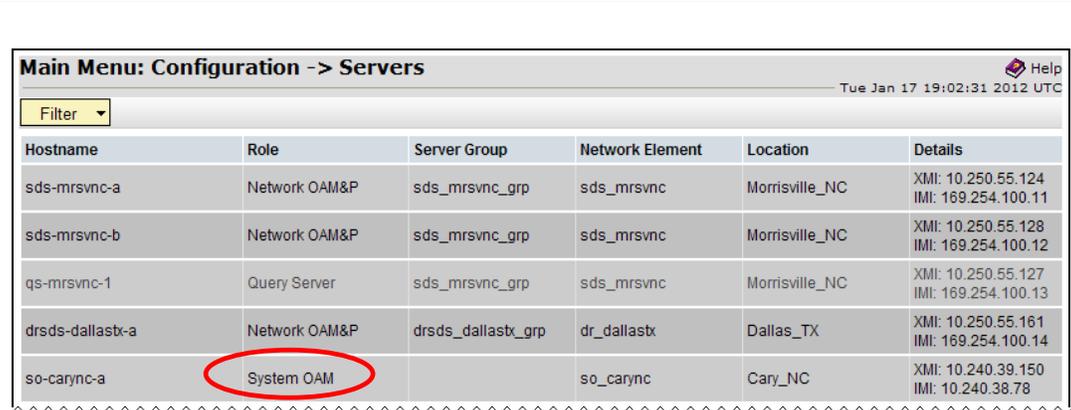
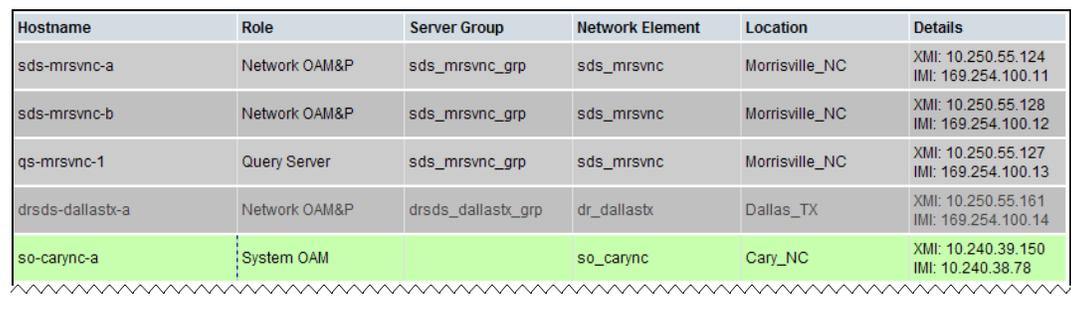
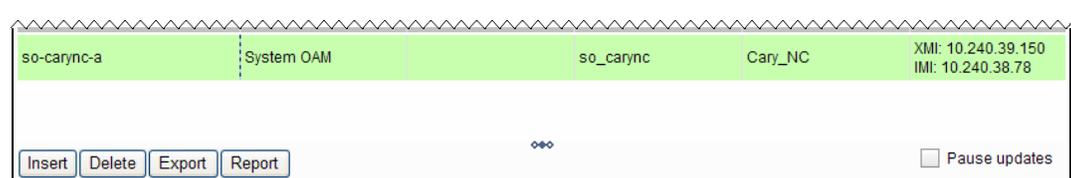
45.

### Active SDS VIP:

If the values provided match the network ranges assigned to the NE, the user will receive a banner information message showing that the data has been validated and committed to the DB.

The screenshot displays the 'Main Menu: Configuration -> Servers [Insert]' interface. A green information box with a blue 'i' icon and a close button (x) is overlaid on the form, containing the message 'Data committed!'. Below the message, the 'Host Name' field is populated with 'so-carync-a' and has a red asterisk indicating a required field. The 'Description' field contains the text 'Unique name for the server, alphanumeric and minus si'. A dropdown menu labeled 'Info' is visible at the top left of the form area.

## Procedure 8.3 Applying the SOAM Server Configuration file

<p>46.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Select...</p> <p><b>Main Menu</b>  → Configuration  → Servers</p> <p>...as shown on the right.</p>	 <p>Tekelec Subscriber Database Server 3.0.0-3.0.0_10.7.1</p> <p>Connected using VIP to sds-mrsvnc-a (ACTIVE NETWORK OAM&amp;P)</p> <p>Main Menu: Configuration -&gt; Servers</p> <table border="1"> <thead> <tr> <th>Hostname</th> <th>Role</th> <th>Server Group</th> </tr> </thead> <tbody> <tr> <td>sds-mrsvnc-a</td> <td>Network OAM&amp;P</td> <td>sds_mrsvnc_grp</td> </tr> <tr> <td>sds-mrsvnc-b</td> <td>Network OAM&amp;P</td> <td>sds_mrsvnc_grp</td> </tr> </tbody> </table>	Hostname	Role	Server Group	sds-mrsvnc-a	Network OAM&P	sds_mrsvnc_grp	sds-mrsvnc-b	Network OAM&P	sds_mrsvnc_grp																											
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<p>47.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>On the “<b>Configuration</b> → <b>Servers</b>” screen, find the newly added System OAM server in the list.</p>	 <p>Main Menu: Configuration -&gt; Servers</p> <p>Tue Jan 17 19:02:31 2012 UTC</p> <table border="1"> <thead> <tr> <th>Hostname</th> <th>Role</th> <th>Server Group</th> <th>Network Element</th> <th>Location</th> <th>Details</th> </tr> </thead> <tbody> <tr> <td>sds-mrsvnc-a</td> <td>Network OAM&amp;P</td> <td>sds_mrsvnc_grp</td> <td>sds_mrsvnc</td> <td>Morrisville_NC</td> <td>XMI: 10.250.55.124 IMI: 169.254.100.11</td> </tr> <tr> <td>sds-mrsvnc-b</td> <td>Network OAM&amp;P</td> <td>sds_mrsvnc_grp</td> <td>sds_mrsvnc</td> <td>Morrisville_NC</td> <td>XMI: 10.250.55.128 IMI: 169.254.100.12</td> </tr> <tr> <td>qs-mrsvnc-1</td> <td>Query Server</td> <td>sds_mrsvnc_grp</td> <td>sds_mrsvnc</td> <td>Morrisville_NC</td> <td>XMI: 10.250.55.127 IMI: 169.254.100.13</td> </tr> <tr> <td>drdsds-dallastx-a</td> <td>Network OAM&amp;P</td> <td>drdsds_dallastx_grp</td> <td>dr_dallastx</td> <td>Dallas_TX</td> <td>XMI: 10.250.55.161 IMI: 169.254.100.14</td> </tr> <tr> <td>so-carync-a</td> <td>System OAM</td> <td></td> <td>so_carync</td> <td>Cary_NC</td> <td>XMI: 10.240.39.150 IMI: 10.240.38.78</td> </tr> </tbody> </table>	Hostname	Role	Server Group	Network Element	Location	Details	sds-mrsvnc-a	Network OAM&P	sds_mrsvnc_grp	sds_mrsvnc	Morrisville_NC	XMI: 10.250.55.124 IMI: 169.254.100.11	sds-mrsvnc-b	Network OAM&P	sds_mrsvnc_grp	sds_mrsvnc	Morrisville_NC	XMI: 10.250.55.128 IMI: 169.254.100.12	qs-mrsvnc-1	Query Server	sds_mrsvnc_grp	sds_mrsvnc	Morrisville_NC	XMI: 10.250.55.127 IMI: 169.254.100.13	drdsds-dallastx-a	Network OAM&P	drdsds_dallastx_grp	dr_dallastx	Dallas_TX	XMI: 10.250.55.161 IMI: 169.254.100.14	so-carync-a	System OAM		so_carync	Cary_NC	XMI: 10.240.39.150 IMI: 10.240.38.78
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<p>48.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Use the cursor to select the new DP-SOAM server entry added in the <b>Step 36</b>.</p> <p>The row containing the server should now be highlighted.</p>	 <table border="1"> <thead> <tr> <th>Hostname</th> <th>Role</th> <th>Server Group</th> <th>Network Element</th> <th>Location</th> <th>Details</th> </tr> </thead> <tbody> <tr> <td>sds-mrsvnc-a</td> <td>Network OAM&amp;P</td> <td>sds_mrsvnc_grp</td> <td>sds_mrsvnc</td> <td>Morrisville_NC</td> <td>XMI: 10.250.55.124 IMI: 169.254.100.11</td> </tr> <tr> <td>sds-mrsvnc-b</td> <td>Network OAM&amp;P</td> <td>sds_mrsvnc_grp</td> <td>sds_mrsvnc</td> <td>Morrisville_NC</td> <td>XMI: 10.250.55.128 IMI: 169.254.100.12</td> </tr> <tr> <td>qs-mrsvnc-1</td> <td>Query Server</td> <td>sds_mrsvnc_grp</td> <td>sds_mrsvnc</td> <td>Morrisville_NC</td> <td>XMI: 10.250.55.127 IMI: 169.254.100.13</td> </tr> <tr> <td>drdsds-dallastx-a</td> <td>Network OAM&amp;P</td> <td>drdsds_dallastx_grp</td> <td>dr_dallastx</td> <td>Dallas_TX</td> <td>XMI: 10.250.55.161 IMI: 169.254.100.14</td> </tr> <tr> <td>so-carync-a</td> <td>System OAM</td> <td></td> <td>so_carync</td> <td>Cary_NC</td> <td>XMI: 10.240.39.150 IMI: 10.240.38.78</td> </tr> </tbody> </table>	Hostname	Role	Server Group	Network Element	Location	Details	sds-mrsvnc-a	Network OAM&P	sds_mrsvnc_grp	sds_mrsvnc	Morrisville_NC	XMI: 10.250.55.124 IMI: 169.254.100.11	sds-mrsvnc-b	Network OAM&P	sds_mrsvnc_grp	sds_mrsvnc	Morrisville_NC	XMI: 10.250.55.128 IMI: 169.254.100.12	qs-mrsvnc-1	Query Server	sds_mrsvnc_grp	sds_mrsvnc	Morrisville_NC	XMI: 10.250.55.127 IMI: 169.254.100.13	drdsds-dallastx-a	Network OAM&P	drdsds_dallastx_grp	dr_dallastx	Dallas_TX	XMI: 10.250.55.161 IMI: 169.254.100.14	so-carync-a	System OAM		so_carync	Cary_NC	XMI: 10.240.39.150 IMI: 10.240.38.78
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<p>49.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Select the “<b>Export</b>” dialogue button (bottom left corner of screen).</p>	 <table border="1"> <tbody> <tr> <td>so-carync-a</td> <td>System OAM</td> <td></td> <td>so_carync</td> <td>Cary_NC</td> <td>XMI: 10.240.39.150 IMI: 10.240.38.78</td> </tr> </tbody> </table> <p>Insert Delete Export Report</p> <p>Pause updates</p>	so-carync-a	System OAM		so_carync	Cary_NC	XMI: 10.240.39.150 IMI: 10.240.38.78																														
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<p>50.</p> <input type="checkbox"/>	<p>Repeat <b>Steps 33- 49</b> of this procedure for the <b>DP-SOAM B Server</b>.</p>																																					

## Procedure 8.3 Applying the SOAM Server Configuration file

<p>51.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Click the “Logout” link on the SDS server GUI.</p>	
<p>52.</p> <input type="checkbox"/>	<p><b>Active SDS Server:</b></p> <p>Access the server console.</p>	<ul style="list-style-type: none"> <li>• Connect to the <b>Active SDS VIP</b> console using one of the access methods described in <b>Section 2.3</b>.</li> </ul>
<p>53.</p> <input type="checkbox"/>	<p><b>Active SDS Server:</b></p> <p>1) Access the command prompt.</p> <p>2) Log into the OAM server as the “root” user.</p>	<pre>CentOS release 5.6 (Final) Kernel 2.6.18-238.19.1.el5prere15.0.0_72.22.0 on an x86_64  hostname1260476035 login: root Password: &lt;root_password&gt;</pre>
<p>54.</p> <input type="checkbox"/>	<p><b>Active SDS Server:</b></p> <p>Output similar to that shown on the right will appear as the server access the command prompt.</p>	<pre>*** TRUNCATED OUTPUT ***  VPATH=/opt/TKLCcomcol/runcm5.16:/opt/TKLCcomcol/cm5.16 PRODPATH= RELEASE=5.16 RUNID=00 VPATH=/var/TKLC/rundb:/usr/TKLC/appworks:/usr/TKLC/awpcommon:/usr/TKLC/comagent-gui:/usr/TKLC/comagent:/usr/TKLC/sds PRODPATH=/opt/comcol/prod RUNID=00 [root@hostname1260476035 ~]#</pre>
<p>55.</p> <input type="checkbox"/>	<p><b>Active SDS Server:</b></p> <p>Change directory into the file management space.</p>	<pre>[root@hostname1260476035 ~]# cd /var/TKLC/db/filemgmt</pre>
<p>56.</p> <input type="checkbox"/>	<p><b>Active SDS Server:</b></p> <p>Get a directory listing and find the configuration files with the OAM server A and B name as shown in red.</p> <p>Note: These should appear toward the bottom of the listing.</p>	<pre>[root@hostname1260476035 ~]# ls -ltr TKLCConfigData*.sh  *** TRUNCATED OUTPUT *** -rw-rw-rw- 1 root root 2208 Dec 19 16:37 TKLCConfigData.so-carync-a.sh -rw-rw-rw- 1 root root 2208 Dec 19 16:50 TKLCConfigData.so-carync-b.sh</pre>

### Procedure 8.3 Applying the SOAM Server Configuration file

<p>57.</p> <input type="checkbox"/>	<p><b>Active SDS Server:</b></p> <p>Copy the configuration files found in the previous step to the PMAC.</p>	<pre>[root@hostname1260476035 ~]# scp -p &lt;configuration_file-a&gt; &lt;configuration_file-b&gt; root@&lt;PMAC_IP&gt;:/tmp root@10.240.39.4's password: TKLCConfigData.so-carync-a.sh                100% 1741    1.7KB/s   00:00 TKLCConfigData.so-carync-b.sh                100% 1741    1.7KB/s   00:00 [root@sds-mrsvnc-a filemgmt]#</pre>
<p>58.</p> <input type="checkbox"/>	<p><b>PMAC Server:</b></p> <p>Access the server console.</p>	<ul style="list-style-type: none"> <li>Connect to the <b>PMAC Server</b> console using one of the access methods described in <b>Section 2.3</b>.</li> </ul>
<p>59.</p> <input type="checkbox"/>	<p><b>PMAC Server:</b></p> <p>Copy the server configuration file to the Control IP for the SOAM.</p> <p><b>Note:</b> The Control IP for each OAM is obtained in <b>Step 18</b> of this procedure.</p>	<pre>[root@pmac ~]# scp -p /tmp/&lt;configuration_file&gt; root@&lt;DP_SOAM_Control_IP&gt;:/var/TKLC/db/filemgmt root@192.168.1.199's password: TKLCConfigData.so-carync-a.sh                100% 1741    1.7KB/s   00:00 [root@pmac ~]#</pre>
<p>60.</p> <input type="checkbox"/>	<p><b>PMAC Server:</b></p> <p>Connect to the SOAM server console from the PMAC Server Console</p>	<pre>[root@pmac ~]# ssh &lt;OAM_Control_IP&gt; root@192.168.1.199's password: &lt;root_password&gt;</pre>
<p>61.</p> <input type="checkbox"/>	<p><b>SOAM Server:</b></p> <p>Output similar to that shown on the right will appear as the server access the command prompt</p>	<pre>*** TRUNCATED OUTPUT *** VPATH=/opt/TKLCcomcol/runcm5.16:/opt/TKLCcomcol/cm5.16 PRODPATH= RELEASE=5.16 RUNID=00 VPATH=/var/TKLC/rundb:/usr/TKLC/appworks:/usr/TKLC/awpcommon:/usr/TKLC/co magent-gui:/usr/TKLC/comagent:/usr/TKLC/sds PRODPATH=/opt/comcol/prod RUNID=00 [root@hostname1326744539 ~]#</pre>

## Procedure 8.3 Applying the SOAM Server Configuration file

<p>62. <input type="checkbox"/></p>	<p><b>SOAM Server:</b></p> <p>Copy the server configuration file to the “<b>/var/tmp</b>” directory on the server, making sure to rename the file by omitting the server hostname (shown in red) from the file name.</p> <p><b>NOTE:</b> <i>The server will poll the <b>/var/tmp</b> directory for the presence of the configuration file and automatically execute it when found.</i></p>	<p><b>Example:</b></p> <p>TKLCConfigData&lt;.server_hostname&gt;.sh → will translate to →TKLCConfigData.sh</p> <pre>[root@so-carync-a ~]# cp -p /var/TKLC/db/filemgmt/TKLCConfigData.so-carync-a.sh /var/tmp/TKLCConfigData.sh</pre>
<p>63. <input type="checkbox"/></p>	<p><b>SOAM Server:</b></p> <p>After the script completes, a broadcast message will be sent to the terminal.</p> <p><b>NOTE:</b> <i>The user should be aware that the time to complete this step varies by server and may take from 3-20 minutes to complete.</i></p>	<p><b>*** NO OUTPUT FOR ≈ 3-20 MINUTES ***</b></p> <pre>Broadcast message from root (Mon Dec 14 15:47:33 2009):  Server configuration completed successfully! See /var/TKLC/appw/logs/Process/install.log for details.  Please remove the USB flash drive if connected and reboot the server. &lt;ENTER&gt;</pre>

## Procedure 8.3 Applying the SOAM Server Configuration file

<p>64.</p> <input type="checkbox"/>	<p>Accept upgrade to the Application Software.</p>	<pre>[root@hostname1260476221 ~]# /var/TKLC/backout/accept Called with options: --accept Loading Upgrade::Backout::RPM Accepting Upgrade Setting POST_UPGRADE_ACTION to ACCEPT in upgrade info. Cleaning backout directory. Clearing Upgrade Accept/Reject alarm. Cleaning message from MOTD. Cleaning up RPM config backup files... Checking / Checking /boot Checking /tmp Checking /usr Checking /var Checking /var/TKLC Checking /tmp/appworks_temp Checking /var/TKLC/appw/logs/Process Checking /var/TKLC/appw/logs/Security Checking /var/TKLC/db/filemgmt Checking /var/TKLC/rundb Starting cleanup of RCS repository.   INFO: Removing '/var/lib/prelink/force' from RCS repository   INFO: Removing '/etc/my.cnf' from RCS repository [root@hostname1260476221 ~]#</pre>
<p>65.</p> <input type="checkbox"/>	<p><b>SOAM Server:</b> Configure the time zone.</p>	<pre>[root@hostname1260476221 ~]# set_ini_tz.pl &lt;time zone&gt;</pre> <p><b>Note: The following command example uses Etc/UTC time zone. Replace, as appropriate, with the time zone you have selected for this installation. See Appendix H for a list of valid time zones.</b></p> <pre>[root@hostname1260476221 ~]# set_ini_tz.pl "Etc/UTC"</pre>
<p>66.</p> <input type="checkbox"/>	<p><b>SOAM Server:</b> Initiate a reboot of the OAM server.</p>	<pre>[root@hostname1260476221 ~]# init 6</pre>
<p>67.</p> <input type="checkbox"/>	<p><b>SOAM Server:</b> Output similar to that shown on the right may be observed as the server initiates a reboot.</p>	<pre>[root@hostname1260476221 ~]# Connection to 192.168.1.199 closed by remote host. Connection to 192.168.1.199 closed. [root@pmac ~]#</pre>

## Procedure 8.3 Applying the SOAM Server Configuration file

<p>68.</p> <input type="checkbox"/>	<p><b>PMAC Server:</b></p> <p>After the DP-SOAM server has completed reboot...</p> <p>Re-connect to the DP-SOAM server console from the PMAC Server Console</p>	<pre>[root@pmac ~]# ssh &lt;OAM_Control_IP&gt; root@192.168.1.199's password: &lt;root_password&gt;</pre>
<p>69.</p> <input type="checkbox"/>	<p><b>SOAM Server:</b></p> <p>Output similar to that shown on the right will appear as the server access the command prompt.</p>	<pre>*** TRUNCATED OUTPUT *** VPATH=/opt/TKLCcomcol/runcm5.16:/opt/TKLCcomcol/cm5.16 PRODPATH= RELEASE=5.16 RUNID=00 VPATH=/var/TKLC/rundb:/usr/TKLC/appworks:/usr/TKLC/awpcommon:/usr/TKLC/comagent-gui:/usr/TKLC/comagent:/usr/TKLC/sds PRODPATH=/opt/comcol/prod RUNID=00 [root@so-carync-a ~]#</pre>
<p>70.</p> <input type="checkbox"/>	<p><b>SOAM Server:</b></p> <p>1) Verify that the <b>IMI IP address</b> input in <b>Step 42</b> has been applied to <b>"bond0.4"</b>.</p> <p>2) Verify that the <b>XMI IP address</b> input in <b>Step 42</b> has been applied to <b>"bond1"</b>.</p> <p><b>NOTE:</b> The server's <b>XMI &amp; IMI</b> addresses can be verified by reviewing the server configuration through the SDS GUI.</p> <p><b>i.e.</b></p> <p><b>Main Menu</b>  → <b>Configuration</b>  → <b>Servers</b></p> <p>Scroll to line entry containing the server's <b>hostname</b>.</p>	<pre>[root@so-carync-a ~]# ifconfig  grep in  grep -v inet6 control  Link encap:Ethernet  HWaddr 52:54:00:23:DC:32           inet addr:192.168.1.199  Bcast:192.168.1.255  Mask:255.255.255.0 imi      Link encap:Ethernet  HWaddr 52:54:00:33:DC:DC           inet addr:10.240.38.78  Bcast:10.240.38.127  Mask:255.255.255.192 lo       Link encap:Local Loopback           inet addr:127.0.0.1  Mask:255.0.0.0 xmi      Link encap:Ethernet  HWaddr 52:54:00:63:63:BD           inet addr:10.240.39.150  Bcast:10.240.39.255  Mask:255.255.255.128 [root@so-carync-a ~]#</pre>

## Procedure 8.3 Applying the SOAM Server Configuration file

<p>71.</p> <input type="checkbox"/>	<p><b>SOAM Server:</b></p> <p>Use “ping” to verify that the “bond0.4” device now has connectivity to the <b>IMI Gateway address</b> (swtch1A) associated with the NE.</p> <p><b>NOTE:</b> Use the <b>&lt;CTRL-C&gt;</b> key combination to terminate the “ping” process after a few seconds.</p>	<pre>[root@so-carync-a ~]# ping 10.240.39.150 PING 10.240.39.150 (10.240.39.150) 56(84) bytes of data. 64 bytes from 10.240.39.150: icmp_seq=1 ttl=64 time=0.024 ms 64 bytes from 10.240.39.150: icmp_seq=2 ttl=64 time=0.033 ms 64 bytes from 10.240.39.150: icmp_seq=3 ttl=64 time=0.032 ms 64 bytes from 10.240.39.150: icmp_seq=4 ttl=64 time=0.026 ms 64 bytes from 10.240.39.150: icmp_seq=5 ttl=64 time=0.027 ms 64 bytes from 10.240.39.150: icmp_seq=6 ttl=64 time=0.026 ms&lt;CTRL-C&gt;  --- 10.240.39.150 ping statistics --- 6 packets transmitted, 6 received, 0% packet loss, time 5004ms rtt min/avg/max/mdev = 0.024/0.028/0.033/0.003 ms [root@so-carync-a ~]#</pre>
<p>72.</p> <input type="checkbox"/>	<p><b>SOAM Server:</b></p> <p>Use “ping” to verify that the “bond1” device now has connectivity to the <b>XMI Gateway address</b> associated with the NE.</p> <p><b>NOTE:</b> Use the <b>&lt;CTRL-C&gt;</b> key combination to terminate the “ping” process after a few seconds.</p>	<pre>[root@so-carync-a ~]# ping 10.240.38.78 PING 10.240.38.78 (10.240.38.78) 56(84) bytes of data. 64 bytes from 10.240.38.78: icmp_seq=1 ttl=64 time=0.031 ms 64 bytes from 10.240.38.78: icmp_seq=2 ttl=64 time=0.017 ms 64 bytes from 10.240.38.78: icmp_seq=3 ttl=64 time=0.031 ms 64 bytes from 10.240.38.78: icmp_seq=4 ttl=64 time=0.028 ms 64 bytes from 10.240.38.78: icmp_seq=5 ttl=64 time=0.030 ms 64 bytes from 10.240.38.78: icmp_seq=6 ttl=64 time=0.028 ms&lt;CTRL-C&gt;  --- 10.240.38.78 ping statistics --- 6 packets transmitted, 6 received, 0% packet loss, time 5000ms rtt min/avg/max/mdev = 0.017/0.027/0.031/0.007 ms [root@so-carync-a ~]#</pre>
<p>73.</p> <input type="checkbox"/>	<p><b>SOAM Server:</b></p> <p>Use the “ntpq” command to verify that the server has connectivity to the assigned Primary and Secondary NTP server(s).</p>	<pre>[root@so-carync-a ~]# ntpq -np       remote           refid      st t when poll reach  delay  offset  jitter ===== +10.250.32.10      192.5.41.209    2 u  139 1024  377    2.008    1.006    1.049 *10.250.32.51      192.5.41.209    2 u   979 1024  377    0.507    1.664    0.702 [root@so-carync-a ~]#</pre>



**IF CONNECTIVITY TO THE NTP SERVER(S) CANNOT BE ESTABLISHED, STOP AND EXECUTE THE FOLLOWING STEPS:**

- 1) Contact the customer to verify that the IP addresses for the NTP server(s) are correct.
- 2) Have the customer IT group provide a network path from the OAM server IP to the assigned NTP IP addresses.

**ONCE NETWORK CONNECTIVITY IS ESTABLISHED TO THE ASSIGNED NTP IP ADDRESSES, THEN RESTART THIS PROCEDURE BEGINNING WITH STEP 73.**

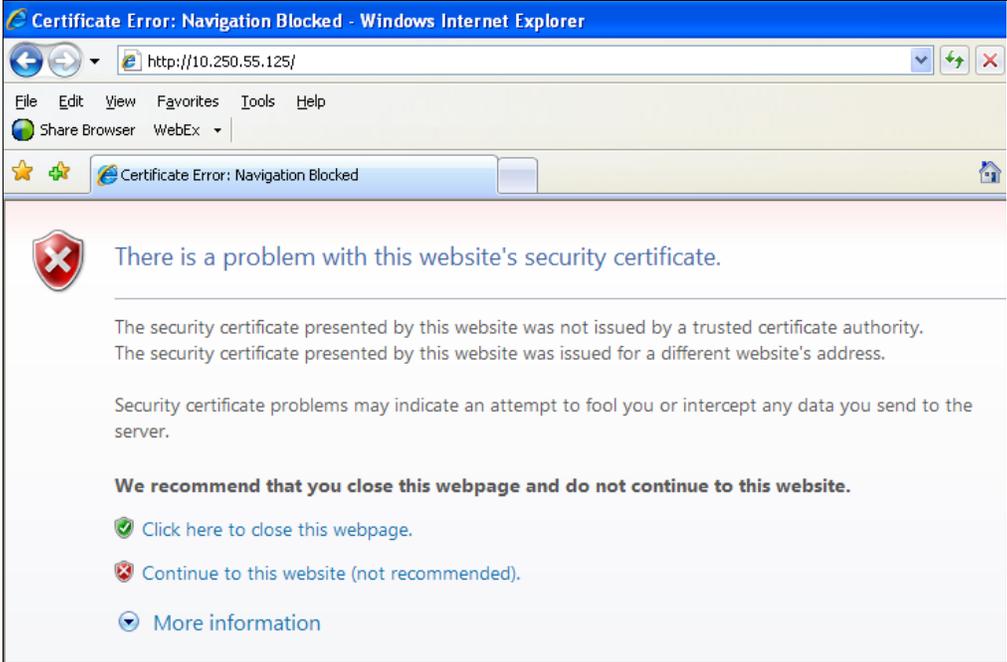
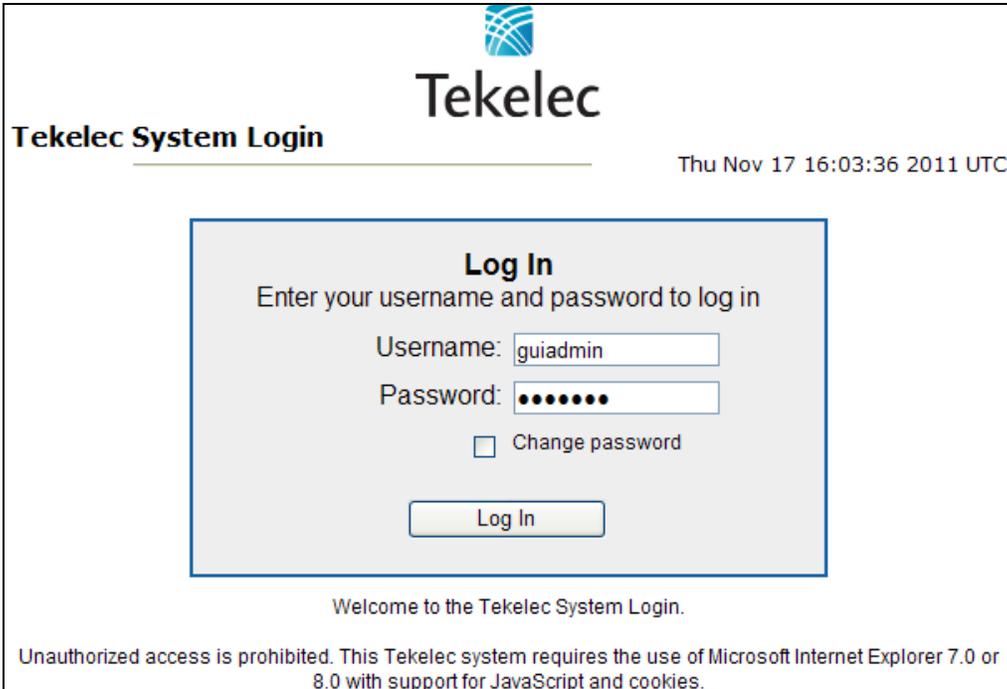
### Procedure 8.3 Applying the SOAM Server Configuration file

<p><b>74.</b> <input type="checkbox"/></p>	<p><b>SOAM Server:</b> Execute a “<b>syscheck</b>” to verify the current health of the server.</p>	<pre>[root@so-carync-a ~]# <b>syscheck</b> Running modules in class hardware...                                 OK  Running modules in class disk...                                 OK  Running modules in class net...                                 OK  Running modules in class system...                                 OK  Running modules in class proc...                                 OK  LOG LOCATION: /var/TKLC/log/syscheck/fail_log [root@so-carync-a ~]#</pre>
<p><b>75.</b> <input type="checkbox"/></p>	<p><b>SOAM Server:</b> Exit from the DP-SOAM command line to return the PMAC server console prompt.</p>	<pre>[root@so-carync-a ~]# <b>exit</b> Connection to 192.168.1.199 closed. [root@pmac ~]#</pre>
<p><b>76.</b> <input type="checkbox"/></p>	<p>If you have just completed this procedure for the <b>SOAM Server A</b> in the enclosure then repeat <b>Steps 33 - 75</b> this procedure for <b>SOAM Server B</b>.</p>	
<p><b>77.</b> <input type="checkbox"/></p>	<p><b>PMAC Server:</b> Exit from the PMAC server</p>	<pre>[root@pmac ~]# <b>exit</b></pre>
<p><b>THIS PROCEDURE HAS BEEN COMPLETED</b></p>		

## 5.8 OAM Pairing for DP-SOAM sites (All DP-SOAM sites)

The user should be aware that during the OAM Pairing procedure, various errors may be seen at different stages of the procedure. During the execution of a step, the user is directed to ignore errors related to values other than the ones referenced by that step.

### Procedure 9: Pairing the OAM Servers for DP-SOAM sites

Step	Procedure	Result
<p>1.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Launch an approved web browser and connect to the <b>XMI Virtual IP Address (VIP)</b> of the <b>Active SDS site</b> using "https://"</p>	
<p>2.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>The user should be presented the login screen shown on the right.</p> <p>Login to the GUI using the default user and password.</p>	

**Procedure 9:** Pairing the OAM Servers for DP-SOAM sites

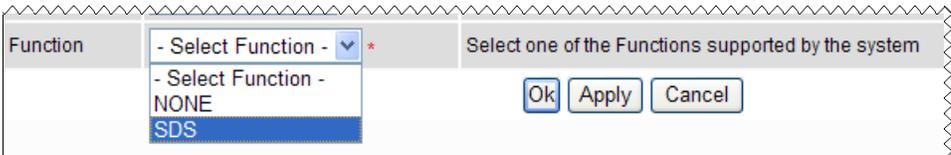
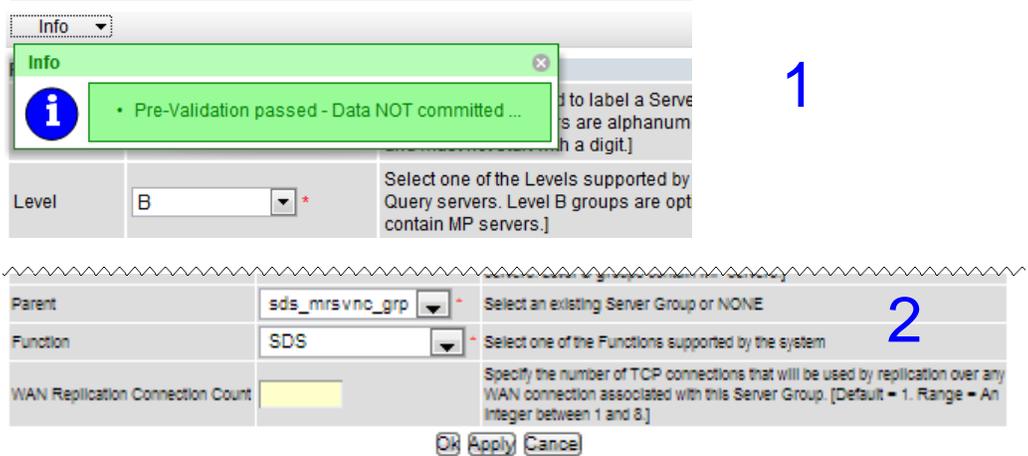
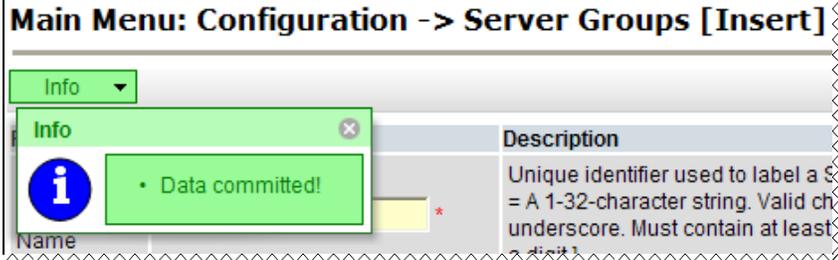
Step	Procedure	Result
<p>3.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>The user should be presented the SDS Main Menu as shown on the right.</p>	

<b>Procedure 9.1 Configuring the SOAM Server Group (SOAM)</b>											
<p>4.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Select...</p> <p><b>Main Menu</b></p> <p>→ Configuration</p> <p>→ Server Groups</p> <p>...as shown on the right.</p>	<table border="1"> <thead> <tr> <th>Server Group Name</th> <th>Level</th> <th>Parent</th> </tr> </thead> <tbody> <tr> <td>drsds_dallastx_grp</td> <td>A</td> <td>sds_mrvnc_grp</td> </tr> <tr> <td>sds_mrvnc_grp</td> <td>A</td> <td>sds_mrvnc_grp</td> </tr> </tbody> </table>	Server Group Name	Level	Parent	drsds_dallastx_grp	A	sds_mrvnc_grp	sds_mrvnc_grp	A	sds_mrvnc_grp
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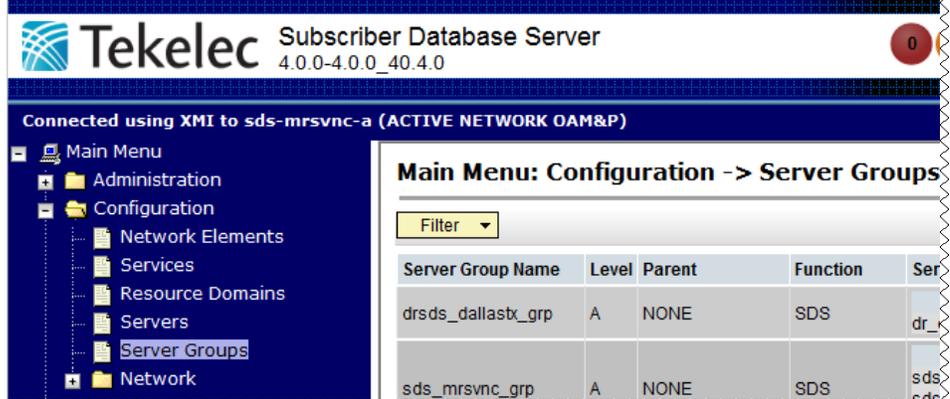
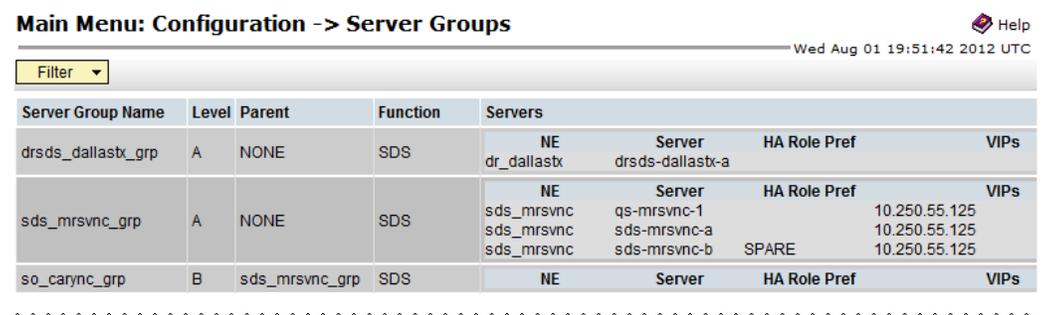
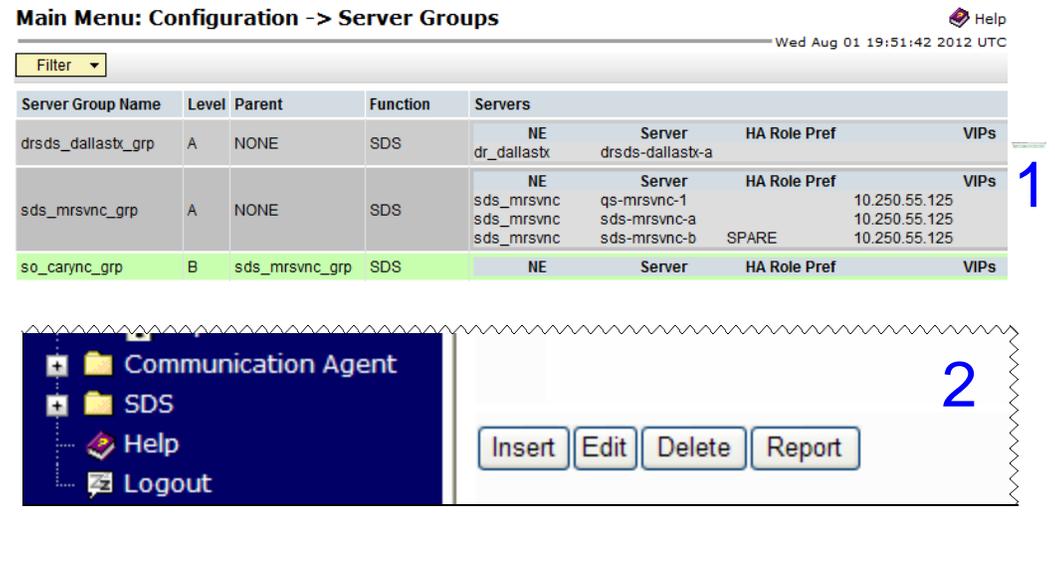
## Procedure 9.1 Configuring the SOAM Server Group (SOAM)

<p><b>5.</b></p> <input style="width: 20px; height: 20px;" type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>1) The user will be presented with the <b>“Server Groups”</b> configuration screen as shown on the right.</p> <p>2) Select the <b>“Insert”</b> dialogue button from the bottom left corner of the screen.</p> <p><b>NOTE:</b> The user may need to use the vertical scroll-bar in order to make the <b>“Insert”</b> dialogue button visible.</p>	<div style="border: 1px solid gray; padding: 5px;"> <p><b>Main Menu: Configuration -&gt; Server Groups</b> <span style="float: right;">Help</span></p> <p style="text-align: right;">Wed Aug 01 19:45:57 2012 UTC</p> <p>Filter <input type="text"/></p> <table border="1" style="width: 100%; border-collapse: collapse; font-size: small;"> <thead> <tr> <th>Server Group Name</th> <th>Level</th> <th>Parent</th> <th>Function</th> <th>Servers</th> <th>HA Role Pref</th> <th>VIPs</th> </tr> </thead> <tbody> <tr> <td>drdsds_dallastx_grp</td> <td>A</td> <td>sds_mrsvnc_grp</td> <td>SDS</td> <td>dr_dallastx</td> <td>NE</td> <td>10.250.55.125</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>Server</td> <td>drdsds-dallastx-a</td> <td>10.250.55.125</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>HA Role Pref</td> <td></td> <td>10.250.55.125</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>VIPs</td> <td></td> <td>10.250.55.125</td> </tr> <tr> <td>sds_mrsvnc_grp</td> <td>A</td> <td>sds_mrsvnc_grp</td> <td>SDS</td> <td>sds_mrsvnc</td> <td>NE</td> <td>10.250.55.125</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>Server</td> <td>qs-mrsvnc-1</td> <td>10.250.55.125</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>Server</td> <td>sds-mrsvnc-a</td> <td>10.250.55.125</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>Server</td> <td>sds-mrsvnc-b</td> <td>10.250.55.125</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>HA Role Pref</td> <td>SPARE</td> <td>10.250.55.125</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>VIPs</td> <td></td> <td>10.250.55.125</td> </tr> </tbody> </table> <div style="border: 1px solid gray; padding: 5px; margin-top: 10px;"> <table style="width: 100%;"> <tr> <td style="background-color: #000080; color: white; padding: 5px;"> <div style="display: flex; justify-content: space-between; align-items: center;"> <div style="font-size: 1.2em;">+</div> <div>Communication Agent</div> </div> <div style="display: flex; justify-content: space-between; align-items: center;"> <div style="font-size: 1.2em;">+</div> <div>SDS</div> </div> <div style="display: flex; justify-content: space-between; align-items: center;"> <div style="font-size: 1.2em;">+</div> <div>Help</div> </div> <div style="display: flex; justify-content: space-between; align-items: center;"> <div style="font-size: 1.2em;">+</div> <div>Logout</div> </div> </td> <td style="padding: 5px; text-align: center;"> <div style="display: flex; justify-content: center; gap: 10px;"> <input type="button" value="Insert"/> <input type="button" value="Edit"/> <input type="button" value="Delete"/> <input type="button" value="Report"/> </div> </td> </tr> </table> </div> </div>	Server Group Name	Level	Parent	Function	Servers	HA Role Pref	VIPs	drdsds_dallastx_grp	A	sds_mrsvnc_grp	SDS	dr_dallastx	NE	10.250.55.125					Server	drdsds-dallastx-a	10.250.55.125					HA Role Pref		10.250.55.125					VIPs		10.250.55.125	sds_mrsvnc_grp	A	sds_mrsvnc_grp	SDS	sds_mrsvnc	NE	10.250.55.125					Server	qs-mrsvnc-1	10.250.55.125					Server	sds-mrsvnc-a	10.250.55.125					Server	sds-mrsvnc-b	10.250.55.125					HA Role Pref	SPARE	10.250.55.125					VIPs		10.250.55.125	<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="font-size: 1.2em;">+</div> <div>Communication Agent</div> </div> <div style="display: flex; justify-content: space-between; align-items: center;"> <div style="font-size: 1.2em;">+</div> <div>SDS</div> </div> <div style="display: flex; justify-content: space-between; align-items: center;"> <div style="font-size: 1.2em;">+</div> <div>Help</div> </div> <div style="display: flex; justify-content: space-between; align-items: center;"> <div style="font-size: 1.2em;">+</div> <div>Logout</div> </div>	<div style="display: flex; justify-content: center; gap: 10px;"> <input type="button" value="Insert"/> <input type="button" value="Edit"/> <input type="button" value="Delete"/> <input type="button" value="Report"/> </div>
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<p><b>6.</b></p> <input style="width: 20px; height: 20px;" type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>The user will be presented with the <b>“Server Groups [Insert]”</b> screen as shown on the right.</p> <p><b>NOTE:</b> Leave the <b>“WAN Replication Connection Count”</b> blank (it will default to 1).</p>	<div style="border: 1px solid gray; padding: 5px;"> <p><b>Main Menu: Configuration -&gt; Server Groups [Insert]</b> <span style="float: right;">Help</span></p> <p style="text-align: right;">Mon Oct 21 20:08:38 2013</p> <p>info <input type="text"/></p> <table border="1" style="width: 100%; border-collapse: collapse; font-size: small;"> <thead> <tr> <th>Field</th> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Server Group Name</td> <td>sds_mrsvnc_grp</td> <td>Unique identifier used to label a Server Group. [Default = n/a. Range = A 1-32-character string. Valid characters are alphanumeric and underscore. Must contain at least one alpha and must not start with a digit.]</td> </tr> <tr> <td>Level</td> <td>A</td> <td>Select one of the Levels supported by the system. [Level A groups contain NOAMP and Query servers. Level B groups are optional and contain SOAM servers. Level C groups contain MP servers.]</td> </tr> <tr> <td>Parent</td> <td>NONE</td> <td>Select an existing Server Group or NONE</td> </tr> <tr> <td>Function</td> <td>SDS</td> <td>Select one of the Functions supported by the system</td> </tr> <tr> <td>WAN Replication Connection Count</td> <td></td> <td>Specify the number of TCP connections that will be used by replication over any WAN connection associated with this Server Group. [Default = 1. Range = An Integer between 1 and 8.]</td> </tr> </tbody> </table> <p style="text-align: right;">Ok Apply Cancel</p> </div>	Field	Value	Description	Server Group Name	sds_mrsvnc_grp	Unique identifier used to label a Server Group. [Default = n/a. Range = A 1-32-character string. Valid characters are alphanumeric and underscore. Must contain at least one alpha and must not start with a digit.]	Level	A	Select one of the Levels supported by the system. [Level A groups contain NOAMP and Query servers. Level B groups are optional and contain SOAM servers. Level C groups contain MP servers.]	Parent	NONE	Select an existing Server Group or NONE	Function	SDS	Select one of the Functions supported by the system	WAN Replication Connection Count		Specify the number of TCP connections that will be used by replication over any WAN connection associated with this Server Group. [Default = 1. Range = An Integer between 1 and 8.]																																																													
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<p><b>7.</b></p> <input style="width: 20px; height: 20px;" type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Input the <b>Server Group Name</b>.</p>	<table border="1" style="width: 100%; border-collapse: collapse; font-size: small;"> <thead> <tr> <th>Field</th> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Server Group Name</td> <td>so_carync_grp</td> <td>Unique identifier used to label a Server Group string. Valid characters are alphanumeric and alpha and must not start with a digit.]</td> </tr> </tbody> </table>	Field	Value	Description	Server Group Name	so_carync_grp	Unique identifier used to label a Server Group string. Valid characters are alphanumeric and alpha and must not start with a digit.]																																																																									
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<p><b>8.</b></p> <input style="width: 20px; height: 20px;" type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Select <b>“B”</b> on the <b>“Level”</b> pull-down menu...</p>	<table border="1" style="width: 100%; border-collapse: collapse; font-size: small;"> <tbody> <tr> <td style="width: 20%;">Level</td> <td style="width: 40%;"> <div style="border: 1px solid gray; padding: 2px;">                     - Select Level - <input type="button" value="v"/> *                      - Select Level -                 </div> </td> <td style="width: 40%;">Select one of the Levels supported by the servers. Level B groups are optional and servers.]</td> </tr> <tr> <td>Parent</td> <td> <div style="border: 1px solid gray; padding: 2px;">                     B                      C                 </div> </td> <td>Select an existing Server Group or NONE</td> </tr> </tbody> </table>	Level	<div style="border: 1px solid gray; padding: 2px;">                     - Select Level - <input type="button" value="v"/> *                      - Select Level -                 </div>	Select one of the Levels supported by the servers. Level B groups are optional and servers.]	Parent	<div style="border: 1px solid gray; padding: 2px;">                     B                      C                 </div>	Select an existing Server Group or NONE																																																																									
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<p><b>10.</b></p> <input style="width: 20px; height: 20px;" type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Select the 1<sup>st</sup> SDS Site's server group, as entered in <b>Procedure 6, Step 7</b>, on the <b>“Parent”</b> pull-down menu...</p>	<table border="1" style="width: 100%; border-collapse: collapse; font-size: small;"> <tbody> <tr> <td style="width: 20%;">Parent</td> <td style="width: 40%;"> <div style="border: 1px solid gray; padding: 2px;">                     sds_mrsvnc_grp <input type="button" value="v"/> *                 </div> </td> <td style="width: 40%;">Select an existing Server Group</td> </tr> <tr> <td>Function</td> <td> <div style="border: 1px solid gray; padding: 2px;">                     - Select Parent-                      sds_mrsvnc_grp <input type="button" value="v"/> *                 </div> </td> <td>Select one of the Functions sup</td> </tr> </tbody> </table>	Parent	<div style="border: 1px solid gray; padding: 2px;">                     sds_mrsvnc_grp <input type="button" value="v"/> *                 </div>	Select an existing Server Group	Function	<div style="border: 1px solid gray; padding: 2px;">                     - Select Parent-                      sds_mrsvnc_grp <input type="button" value="v"/> *                 </div>	Select one of the Functions sup																																																																									
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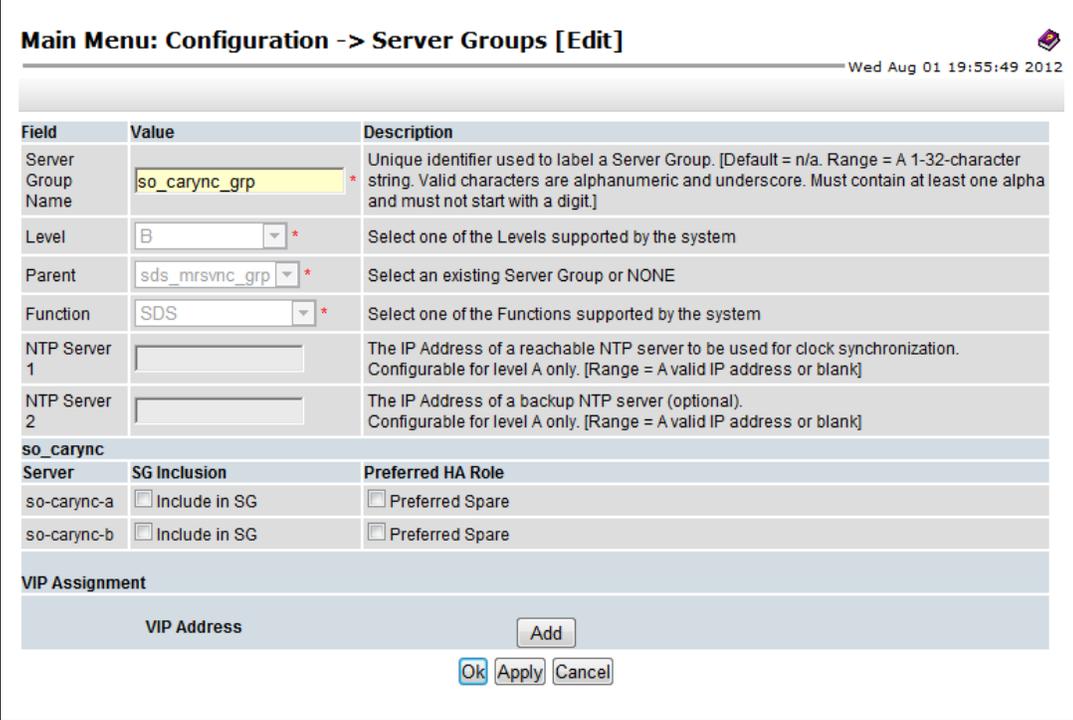
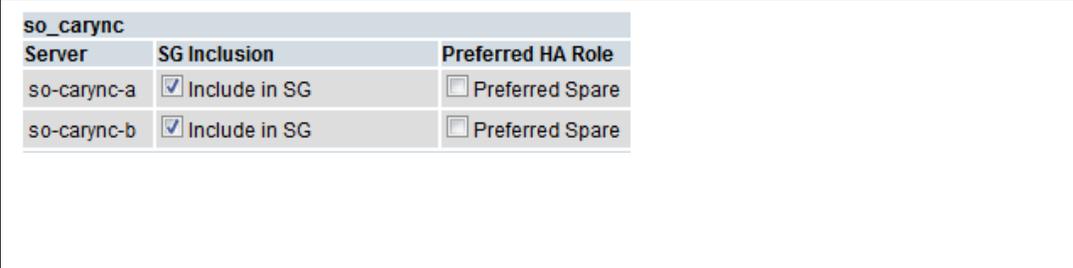
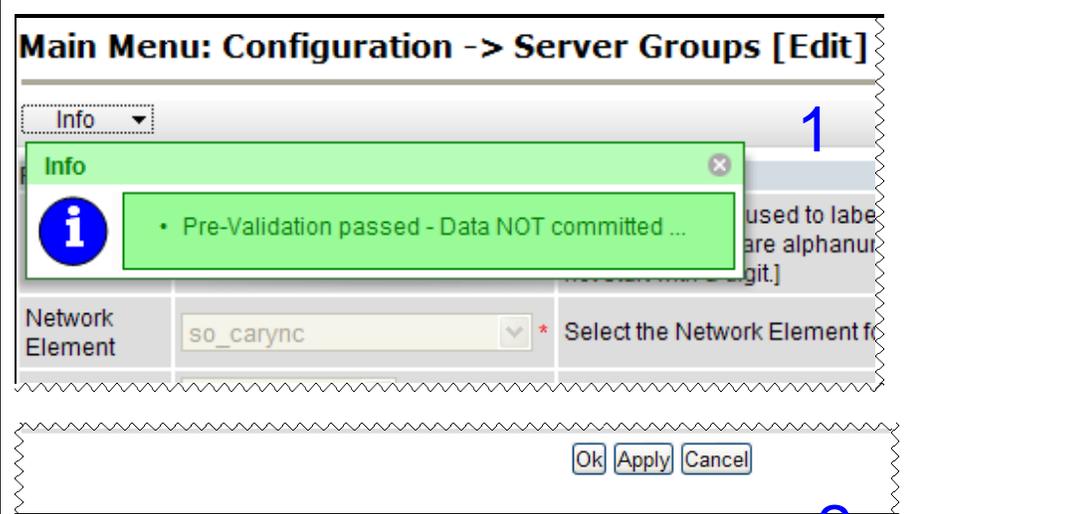
**Procedure 9.1 Configuring the SOAM Server Group (SOAM)**

<p>11.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>Select “<b>SDS</b>” on the “<b>Function</b>” pull-down menu.</p>	 <p>A screenshot of a configuration window showing a dropdown menu for 'Function'. The menu is open, showing options: '- Select Function -', '- Select Function -', 'NONE', and 'SDS'. The 'SDS' option is highlighted. To the right of the dropdown is the text 'Select one of the Functions supported by the system' and buttons for 'Ok', 'Apply', and 'Cancel'.</p>
<p>12.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>1) The user should be presented with a banner information message stating “<b>Pre-Validation passed</b>”.</p> <p>2) Select the “<b>Apply</b>” dialogue button.</p>	<p><b>Main Menu: Configuration -&gt; Server Groups [Insert]</b></p>  <p>A screenshot of the 'Main Menu: Configuration -&gt; Server Groups [Insert]' window. A green information dialog box is overlaid on top, displaying a blue 'i' icon and the text 'Pre-Validation passed - Data NOT committed ...'. Below the dialog, the 'Level' dropdown is set to 'B'. To the right of the dialog is a large blue number '1'. Below the dialog, the 'Parent' dropdown is set to 'sds_mrs vnc_grp' and the 'Function' dropdown is set to 'SDS'. To the right of these dropdowns is a large blue number '2'. The 'WAN Replication Connection Count' field is empty. At the bottom are 'Ok', 'Apply', and 'Cancel' buttons.</p>
<p>13.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>The user should be presented with a banner information message stating “<b>Data committed</b>”.</p>	<p><b>Main Menu: Configuration -&gt; Server Groups [Insert]</b></p>  <p>A screenshot of the 'Main Menu: Configuration -&gt; Server Groups [Insert]' window. A green information dialog box is overlaid on top, displaying a blue 'i' icon and the text 'Data committed!'. Below the dialog, the 'Name' field is partially visible. To the right of the dialog is a table with a 'Description' column. The description text is partially visible: 'Unique identifier used to label a S = A 1-32-character string. Valid ch underscore. Must contain at least'. At the bottom are 'Ok', 'Apply', and 'Cancel' buttons.</p>

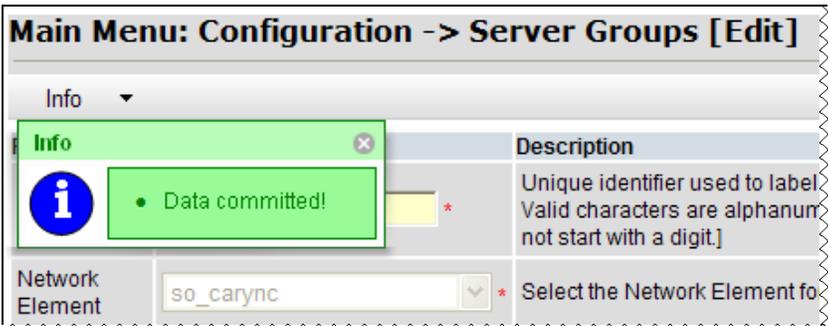
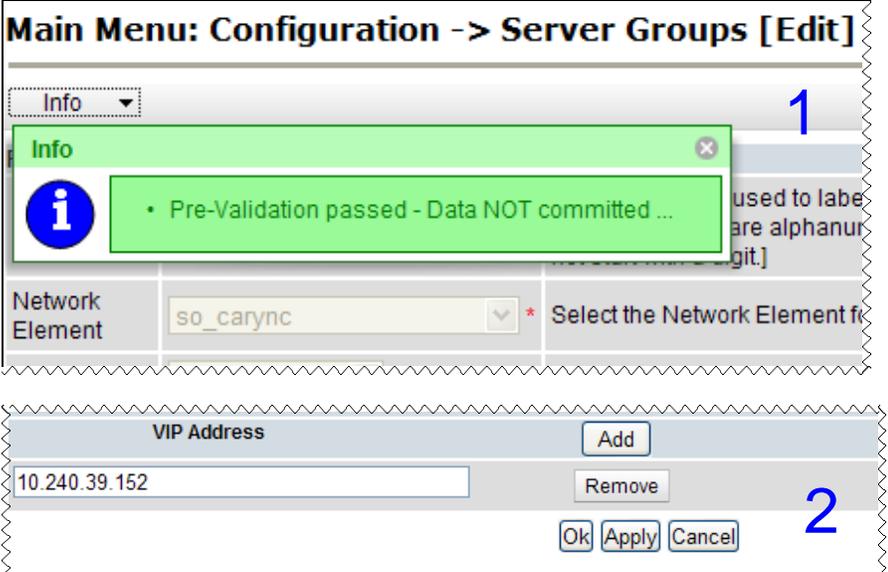
## Procedure 9.2 Adding a Server to the OAM Server Group (SOAM)

<p>14.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b> Select...</p> <p><b>Main Menu</b> → Configuration → <b>Server Groups</b></p> <p>...as shown on the right.</p>	 <p>Tekelec Subscriber Database Server 4.0.0-4.0.0_40.4.0</p> <p>Connected using XMI to sds-mrsvnc-a (ACTIVE NETWORK OAM&amp;P)</p> <p>Main Menu: Configuration -&gt; Server Groups</p> <table border="1"> <thead> <tr> <th>Server Group Name</th> <th>Level</th> <th>Parent</th> <th>Function</th> <th>Ser</th> </tr> </thead> <tbody> <tr> <td>drsds_dallastx_grp</td> <td>A</td> <td>NONE</td> <td>SDS</td> <td>dr_</td> </tr> <tr> <td>sds_mrsvnc_grp</td> <td>A</td> <td>NONE</td> <td>SDS</td> <td>sds</td> </tr> </tbody> </table>	Server Group Name	Level	Parent	Function	Ser	drsds_dallastx_grp	A	NONE	SDS	dr_	sds_mrsvnc_grp	A	NONE	SDS	sds																																					
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<p>16.</p> <input type="checkbox"/>	<p><b>SDS Server A:</b></p> <p>1) Select the <b>Server Group</b> entry applied in <b>Step 13</b>. The line entry should now be highlighted in <b>GREEN</b>.</p> <p>2) Select the <b>“Edit”</b> dialogue button from the bottom left corner of the screen.</p> <p><b>NOTE:</b> The user may need to use the vertical scroll-bar in order to make the <b>“Edit”</b> dialogue button visible.</p>	 <p>Main Menu: Configuration -&gt; Server Groups</p> <p>Filter</p> <table border="1"> <thead> <tr> <th>Server Group Name</th> <th>Level</th> <th>Parent</th> <th>Function</th> <th>Servers</th> </tr> </thead> <tbody> <tr> <td>drsds_dallastx_grp</td> <td>A</td> <td>NONE</td> <td>SDS</td> <td> <table border="1"> <thead> <tr> <th>NE</th> <th>Server</th> <th>HA Role Pref</th> <th>VIPs</th> </tr> </thead> <tbody> <tr> <td>dr_dallastx</td> <td>drsds-dallastx-a</td> <td></td> <td></td> </tr> </tbody> </table> </td> </tr> <tr> <td>sds_mrsvnc_grp</td> <td>A</td> <td>NONE</td> <td>SDS</td> <td> <table border="1"> <thead> <tr> <th>NE</th> <th>Server</th> <th>HA Role Pref</th> <th>VIPs</th> </tr> </thead> <tbody> <tr> <td>sds_mrsvnc</td> <td>qs-mrsvnc-1</td> <td></td> <td>10.250.55.125</td> </tr> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-a</td> <td></td> <td>10.250.55.125</td> </tr> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-b</td> <td>SPARE</td> <td>10.250.55.125</td> </tr> </tbody> </table> </td> </tr> <tr> <td>so_carync_grp</td> <td>B</td> <td>sds_mrsvnc_grp</td> <td>SDS</td> <td> <table border="1"> <thead> <tr> <th>NE</th> <th>Server</th> <th>HA Role Pref</th> <th>VIPs</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> </td> </tr> </tbody> </table> <p>Communication Agent</p> <p>SDS</p> <p>Help</p> <p>Logout</p> <p>Insert Edit Delete Report</p>	Server Group Name	Level	Parent	Function	Servers	drsds_dallastx_grp	A	NONE	SDS	<table border="1"> <thead> <tr> <th>NE</th> <th>Server</th> <th>HA Role Pref</th> <th>VIPs</th> </tr> </thead> <tbody> <tr> <td>dr_dallastx</td> <td>drsds-dallastx-a</td> <td></td> <td></td> </tr> </tbody> </table>	NE	Server	HA Role Pref	VIPs	dr_dallastx	drsds-dallastx-a			sds_mrsvnc_grp	A	NONE	SDS	<table border="1"> <thead> <tr> <th>NE</th> <th>Server</th> <th>HA Role Pref</th> <th>VIPs</th> </tr> </thead> <tbody> <tr> <td>sds_mrsvnc</td> <td>qs-mrsvnc-1</td> <td></td> <td>10.250.55.125</td> </tr> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-a</td> <td></td> <td>10.250.55.125</td> </tr> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-b</td> <td>SPARE</td> <td>10.250.55.125</td> </tr> </tbody> </table>	NE	Server	HA Role Pref	VIPs	sds_mrsvnc	qs-mrsvnc-1		10.250.55.125	sds_mrsvnc	sds-mrsvnc-a		10.250.55.125	sds_mrsvnc	sds-mrsvnc-b	SPARE	10.250.55.125	so_carync_grp	B	sds_mrsvnc_grp	SDS	<table border="1"> <thead> <tr> <th>NE</th> <th>Server</th> <th>HA Role Pref</th> <th>VIPs</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	NE	Server	HA Role Pref	VIPs				
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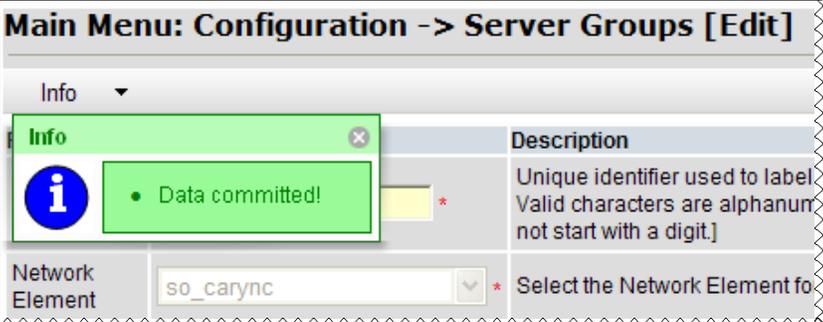
## Procedure 9.2 Adding a Server to the OAM Server Group (SOAM)

<p>17.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>The user will be presented with the “<b>Server Groups [Edit]</b>” screen as shown on the right.</p>	
<p>18.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>Select the “<b>A</b>” server and the “<b>B</b>” server from the list of “<b>Servers</b>” by clicking the check box next to their names.</p>	
<p>19.</p> <p><input type="checkbox"/></p>	<p><b>SDS Server A:</b></p> <p>1) The user should be presented with a banner information message stating “<b>Pre-Validation passed</b>”.</p> <p>2) Select the “<b>Apply</b>” dialogue button.</p>	

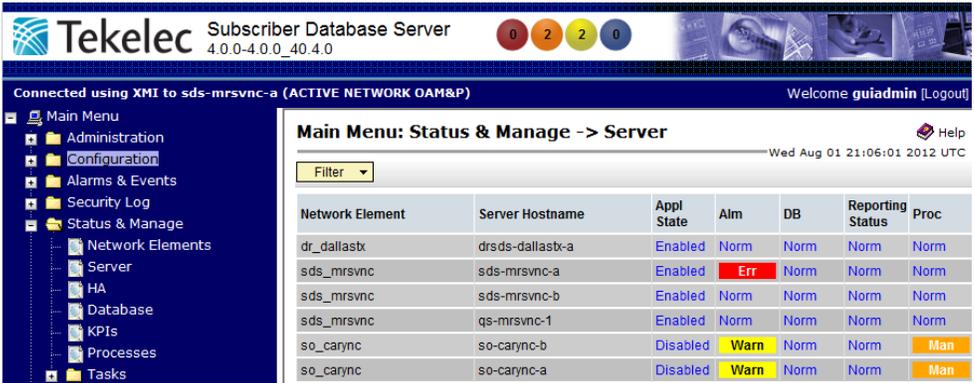
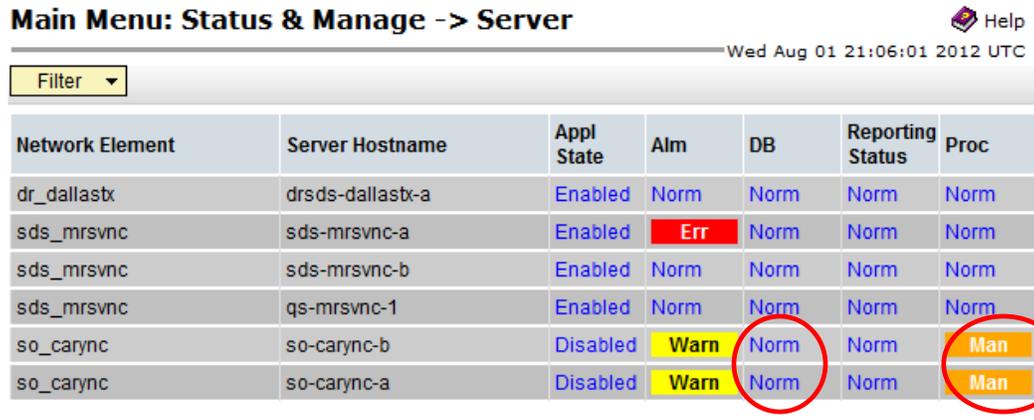
## Procedure 9.2 Adding a Server to the OAM Server Group (SOAM)

<p>20.</p> <input type="checkbox"/>	<p><b>SDS Server A:</b></p> <p>The user should be presented with a banner information message stating <b>“Data committed”</b>.</p>	 <p><b>Main Menu: Configuration -&gt; Server Groups [Edit]</b></p> <p>Info</p> <p><b>Info</b> • Data committed!</p> <p>Description: Unique identifier used to label. Valid characters are alphanumeric, not start with a digit.]</p> <p>Network Element: so_carync * Select the Network Element for</p>
<p>21.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Click the <b>“Add”</b> dialogue button for the <b>VIP Address</b>.</p>	 <p>VIP Address Add</p>
<p>22.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Input the <b>VIP Address</b></p>	 <p>VIP Address Add</p> <p>10.240.39.152 Remove</p>
<p>23.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Click the <b>“Apply”</b> dialogue button.</p>	 <p>VIP Address Add</p> <p>10.240.39.152 Remove</p> <p>Ok Apply Cancel</p>
<p>24.</p> <input type="checkbox"/>	<p><b>SDS Server A:</b></p> <p>1) The user should be presented with a banner information message stating <b>“Pre-Validation passed”</b>.</p> <p>2) Select the <b>“Apply”</b> dialogue button.</p>	 <p><b>Main Menu: Configuration -&gt; Server Groups [Edit]</b></p> <p>Info</p> <p><b>Info</b> • Pre-Validation passed - Data NOT committed ...</p> <p>Description: Unique identifier used to label. Valid characters are alphanumeric, not start with a digit.]</p> <p>Network Element: so_carync * Select the Network Element for</p> <p>VIP Address Add</p> <p>10.240.39.152 Remove</p> <p>Ok Apply Cancel</p> <p>1</p> <p>2</p>

## Procedure 9.2 Adding a Server to the OAM Server Group (SOAM)

<p>25.</p> <input type="checkbox"/>	<p><b>SDS Server A:</b></p> <p>The user should be presented with a banner information message stating <b>“Data committed”</b>.</p>	 <p><b>Main Menu: Configuration -&gt; Server Groups [Edit]</b></p> <p>Info ▾</p> <p><b>Info</b> [x]</p> <p><b>i</b> • Data committed!</p> <p><b>Description</b></p> <p>Unique identifier used to label. Valid characters are alphanumeric not start with a digit.]</p> <p><b>Network Element</b> so_carync ▾ * Select the Network Element fo</p>
<p>26.</p> <input type="checkbox"/>	<p><b>IMPORTANT:</b></p> <p>Wait at least <b>5 minutes</b> before proceeding on to the next Step.</p>	<ul style="list-style-type: none"> <li>• Now that the server(s) have been paired within a Server Group they must establish a master/slave relationship for High Availability (HA). It may take several minutes for this process to be completed.</li> <li>• Allow a minimum of <b>5 minutes</b> before continuing to the next Step.</li> </ul>

## Procedure 9.3 Restarting the OAM Server Application (SOAM)

<p>27.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>Select...</p> <p><b>Main Menu</b>          → <b>Status &amp; Manage</b>              → <b>Server</b></p> <p>...as shown on the right.</p>	 <p>Tekelec Subscriber Database Server 4.0.0-4.0.0_40.4.0</p> <p>Connected using XMI to sds-mrsvnc-a (ACTIVE NETWORK OAM&amp;P) Welcome guidadmin [Logout]</p> <p><b>Main Menu: Status &amp; Manage -&gt; Server</b> Help</p> <p>Wed Aug 01 21:06:01 2012 UTC</p> <table border="1"> <thead> <tr> <th>Network Element</th> <th>Server Hostname</th> <th>Appl State</th> <th>Alm</th> <th>DB</th> <th>Reporting Status</th> <th>Proc</th> </tr> </thead> <tbody> <tr> <td>dr_dallastx</td> <td>drsds-dallastx-a</td> <td>Enabled</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-a</td> <td>Enabled</td> <td>Err</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-b</td> <td>Enabled</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>sds_mrsvnc</td> <td>qs-mrsvnc-1</td> <td>Enabled</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>so_carync</td> <td>so-carync-b</td> <td>Disabled</td> <td>Warn</td> <td>Norm</td> <td>Norm</td> <td>Man</td> </tr> <tr> <td>so_carync</td> <td>so-carync-a</td> <td>Disabled</td> <td>Warn</td> <td>Norm</td> <td>Norm</td> <td>Man</td> </tr> </tbody> </table>	Network Element	Server Hostname	Appl State	Alm	DB	Reporting Status	Proc	dr_dallastx	drsds-dallastx-a	Enabled	Norm	Norm	Norm	Norm	sds_mrsvnc	sds-mrsvnc-a	Enabled	Err	Norm	Norm	Norm	sds_mrsvnc	sds-mrsvnc-b	Enabled	Norm	Norm	Norm	Norm	sds_mrsvnc	qs-mrsvnc-1	Enabled	Norm	Norm	Norm	Norm	so_carync	so-carync-b	Disabled	Warn	Norm	Norm	Man	so_carync	so-carync-a	Disabled	Warn	Norm	Norm	Man
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<p>28.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>1) The “A” and “B” DP-SOAM servers should now appear in the right panel.</p> <p>2) Verify that the “DB” status shows “Norm” and the “Proc” status shows “Man” for both servers before proceeding to the next Step.</p>	 <p><b>Main Menu: Status &amp; Manage -&gt; Server</b> Help</p> <p>Wed Aug 01 21:06:01 2012 UTC</p> <table border="1"> <thead> <tr> <th>Network Element</th> <th>Server Hostname</th> <th>Appl State</th> <th>Alm</th> <th>DB</th> <th>Reporting Status</th> <th>Proc</th> </tr> </thead> <tbody> <tr> <td>dr_dallastx</td> <td>drsds-dallastx-a</td> <td>Enabled</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-a</td> <td>Enabled</td> <td>Err</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-b</td> <td>Enabled</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>sds_mrsvnc</td> <td>qs-mrsvnc-1</td> <td>Enabled</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>so_carync</td> <td>so-carync-b</td> <td>Disabled</td> <td>Warn</td> <td>Norm</td> <td>Norm</td> <td>Man</td> </tr> <tr> <td>so_carync</td> <td>so-carync-a</td> <td>Disabled</td> <td>Warn</td> <td>Norm</td> <td>Norm</td> <td>Man</td> </tr> </tbody> </table>	Network Element	Server Hostname	Appl State	Alm	DB	Reporting Status	Proc	dr_dallastx	drsds-dallastx-a	Enabled	Norm	Norm	Norm	Norm	sds_mrsvnc	sds-mrsvnc-a	Enabled	Err	Norm	Norm	Norm	sds_mrsvnc	sds-mrsvnc-b	Enabled	Norm	Norm	Norm	Norm	sds_mrsvnc	qs-mrsvnc-1	Enabled	Norm	Norm	Norm	Norm	so_carync	so-carync-b	Disabled	Warn	Norm	Norm	Man	so_carync	so-carync-a	Disabled	Warn	Norm	Norm	Man
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so_carync	so-carync-a	Disabled	Warn	Norm	Norm	Man																																													

## Procedure 9.3 Restarting the OAM Server Application (SOAM)

29.



### Active SDS VIP:

1) Using the mouse, select **DP-SOAM Server A**. The line entry should now be highlighted in **GREEN**.

2) Select the **“Restart”** dialogue button from the bottom left corner of the screen.

3) Click the **“OK”** button on the confirmation dialogue box.

4) The user should be presented with a confirmation message (in the banner area) for **DP-SOAM Server A** stating: **“Successfully restarted application”**.

**NOTE:** The user may need to use the vertical scroll-bar in order to make the **“Restart”** dialogue button visible.

### Main Menu: Status & Manage -> Server



Wed Aug 01 21:08:01 2012 UTC

Filter

Network Element	Server Hostname	Appl State	Alm	DB	Reporting Status	Proc
dr_dallastx	drsds-dallastx-a	Enabled	Norm	Norm	Norm	Norm
sds_mrsvnc	sds-mrsvnc-a	Enabled	Err	Norm	Norm	Norm
sds_mrsvnc	sds-mrsvnc-b	Enabled	Norm	Norm	Norm	Norm
sds_mrsvnc	qs-mrsvnc-1	Enabled	Norm	Norm	Norm	Norm
so_carync	so-carync-b	Disabled	Warn	Norm	Norm	Man
so_carync	so-carync-a	Disabled	Warn	Norm	Norm	Man

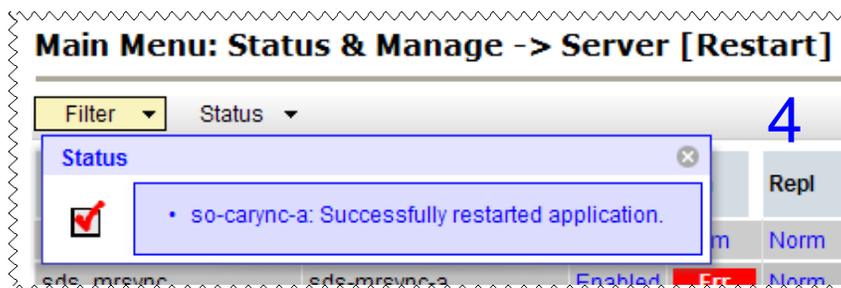
1



2

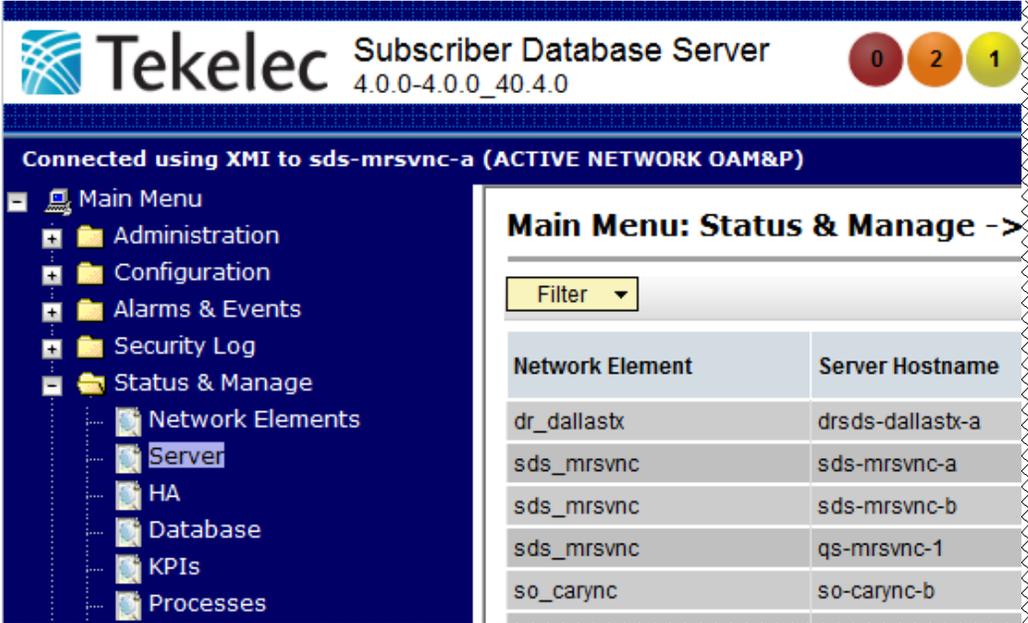
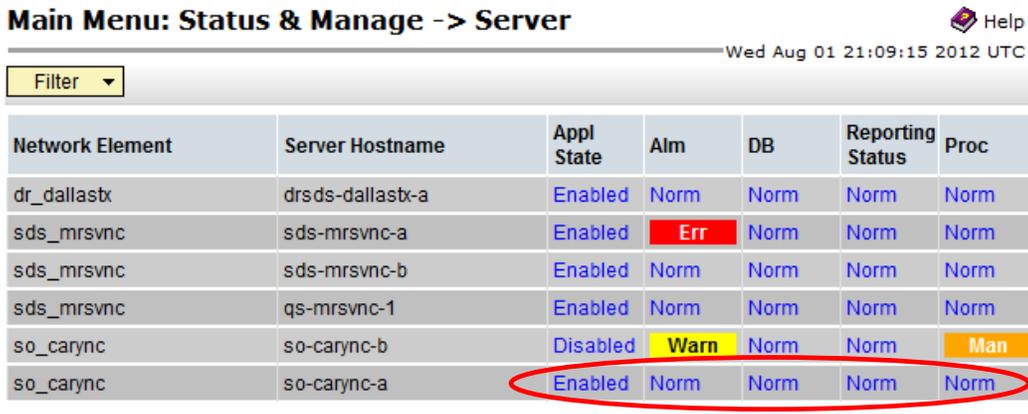


3



4

## Procedure 9.3 Restarting the OAM Server Application (SOAM)

<p>30.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>Select...</p> <p><b>Main Menu</b></p> <p>→ Status &amp; Manage</p> <p>→ Server</p> <p>...as shown on the right.</p>	 <p>Tekelec Subscriber Database Server 4.0.0-4.0.0_40.4.0</p> <p>Connected using XMI to sds-mrsvnc-a (ACTIVE NETWORK OAM&amp;P)</p> <p>Main Menu: Status &amp; Manage -&gt;</p> <table border="1"> <thead> <tr> <th>Network Element</th> <th>Server Hostname</th> </tr> </thead> <tbody> <tr> <td>dr_dallastx</td> <td>drsds-dallastx-a</td> </tr> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-a</td> </tr> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-b</td> </tr> <tr> <td>sds_mrsvnc</td> <td>qs-mrsvnc-1</td> </tr> <tr> <td>so_carync</td> <td>so-carync-b</td> </tr> </tbody> </table>	Network Element	Server Hostname	dr_dallastx	drsds-dallastx-a	sds_mrsvnc	sds-mrsvnc-a	sds_mrsvnc	sds-mrsvnc-b	sds_mrsvnc	qs-mrsvnc-1	so_carync	so-carync-b																																					
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so_carync	so-carync-b																																																		
<p>31.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>Verify that the “Appl State” now shows “Enabled” and that the “Alm, DB, Reporting Status, &amp; Proc” status columns all show “Norm” for OAM Server A before proceeding to the next Step.</p> <p><b>NOTE:</b> If user chooses to refresh the Server status screen in advance of the default setting (15-30 sec.). This may be done by simply reselecting the “Status &amp; Manage → Server” option from the Main menu on the left.</p>	 <p>Main Menu: Status &amp; Manage -&gt; Server</p> <p>Wed Aug 01 21:09:15 2012 UTC</p> <table border="1"> <thead> <tr> <th>Network Element</th> <th>Server Hostname</th> <th>Appl State</th> <th>Alm</th> <th>DB</th> <th>Reporting Status</th> <th>Proc</th> </tr> </thead> <tbody> <tr> <td>dr_dallastx</td> <td>drsds-dallastx-a</td> <td>Enabled</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-a</td> <td>Enabled</td> <td>Err</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-b</td> <td>Enabled</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>sds_mrsvnc</td> <td>qs-mrsvnc-1</td> <td>Enabled</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>so_carync</td> <td>so-carync-b</td> <td>Disabled</td> <td>Warn</td> <td>Norm</td> <td>Norm</td> <td>Man</td> </tr> <tr> <td>so_carync</td> <td>so-carync-a</td> <td>Enabled</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> </tbody> </table>	Network Element	Server Hostname	Appl State	Alm	DB	Reporting Status	Proc	dr_dallastx	drsds-dallastx-a	Enabled	Norm	Norm	Norm	Norm	sds_mrsvnc	sds-mrsvnc-a	Enabled	Err	Norm	Norm	Norm	sds_mrsvnc	sds-mrsvnc-b	Enabled	Norm	Norm	Norm	Norm	sds_mrsvnc	qs-mrsvnc-1	Enabled	Norm	Norm	Norm	Norm	so_carync	so-carync-b	Disabled	Warn	Norm	Norm	Man	so_carync	so-carync-a	Enabled	Norm	Norm	Norm	Norm
Network Element	Server Hostname	Appl State	Alm	DB	Reporting Status	Proc																																													
dr_dallastx	drsds-dallastx-a	Enabled	Norm	Norm	Norm	Norm																																													
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so_carync	so-carync-a	Enabled	Norm	Norm	Norm	Norm																																													

## Procedure 9.3 Restarting the OAM Server Application (SOAM)

32.



### Active SDS VIP:

1) Using the mouse, select **DP-SOAM Server B**. The line entry should now be highlighted in **GREEN**.

2) Select the **“Restart”** dialogue button from the bottom left corner of the screen.

3) Click the **“OK”** button on the confirmation dialogue box.

4) The user should be presented with a confirmation message (in the banner area) for **DP-SOAM Server B** stating: **“Successfully restarted application”**.

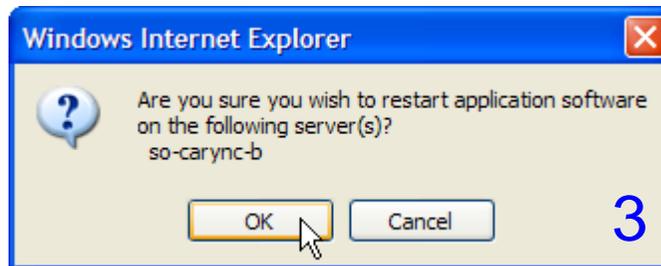
**NOTE:** The user may need to use the vertical scroll-bar in order to make the **“Restart”** dialogue button visible.

### Main Menu: Status & Manage -> Server



Wed Aug 01 21:11:16 2012 UTC

Network Element	Server Hostname	Appl State	Alm	DB	Reporting Status	Proc
dr_dallastx	drsds-dallastx-a	Enabled	Norm	Norm	Norm	Norm
sds_mrsvnc	sds-mrsvnc-a	Enabled	Err	Norm	Norm	Norm
sds_mrsvnc	sds-mrsvnc-b	Enabled	Norm	Norm	Norm	Norm
sds_mrsvnc	qs-mrsvnc-1	Enabled	Norm	Norm	Norm	Norm
so_carync	so-carync-b	Disabled	Warn	Norm	Norm	Man
so_carync	so-carync-a	Enabled	Norm	Norm	Norm	Norm



### Main Menu: Status & Manage -> Server [Restart]

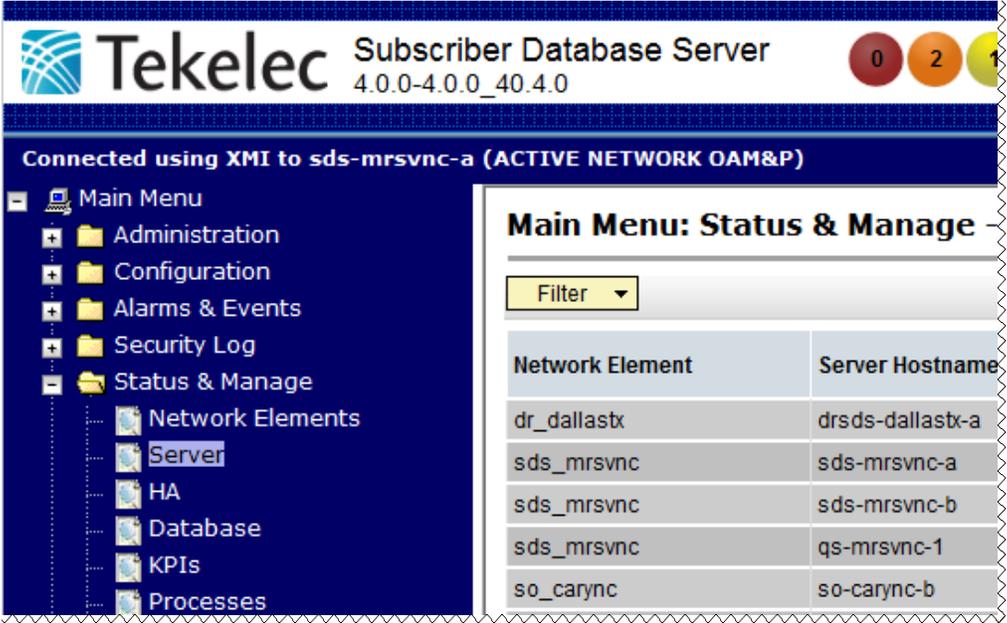
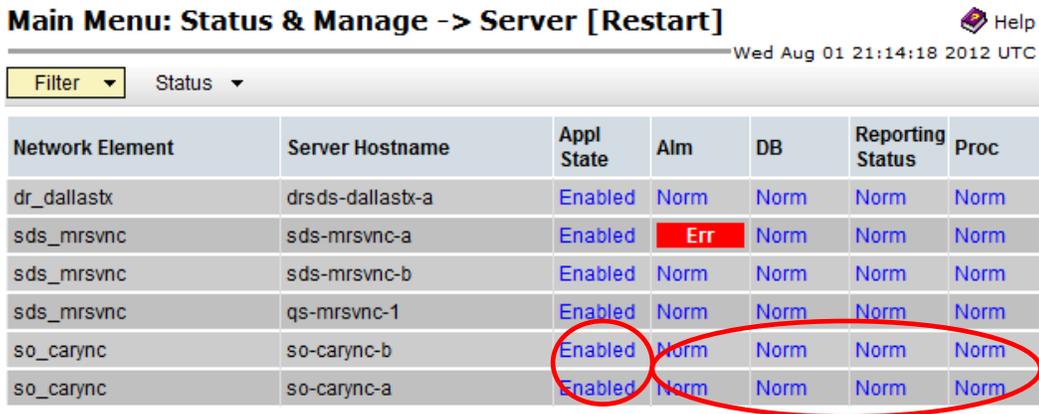
Filter Status

Network Element	Server Hostname	Appl State	Alm
sds_mrsvnc	sds-mrsvnc-a	Enabled	Err

Status

- so-carync-b: Successfully restarted application.

### Procedure 9.3 Restarting the OAM Server Application (SOAM)

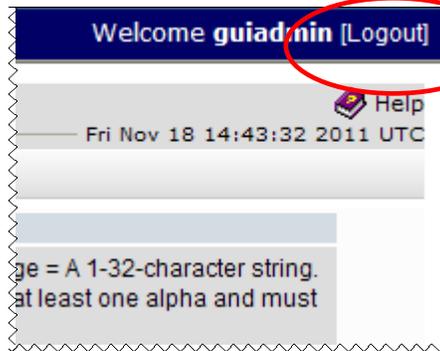
<p>33.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>Select...</p> <p><b>Main Menu</b></p> <p>→ <b>Status &amp; Manage</b></p> <p>→ <b>Server</b></p> <p>...as shown on the right.</p>	 <p>The screenshot shows the Tekelec Subscriber Database Server interface. The top header includes the Tekelec logo, the text 'Subscriber Database Server 4.0.0-4.0.0_40.4.0', and three status indicators (0, 2, 1). Below the header, it says 'Connected using XMI to sds-mrsvnc-a (ACTIVE NETWORK OAM&amp;P)'. A 'Main Menu' tree on the left lists: Administration, Configuration, Alarms &amp; Events, Security Log, Status &amp; Manage (selected), Network Elements, Server (highlighted), HA, Database, KPIs, and Processes. The 'Main Menu: Status &amp; Manage' window is open, showing a table with columns 'Network Element' and 'Server Hostname'.</p> <table border="1"> <thead> <tr> <th>Network Element</th> <th>Server Hostname</th> </tr> </thead> <tbody> <tr> <td>dr_dallastx</td> <td>drsds-dallastx-a</td> </tr> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-a</td> </tr> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-b</td> </tr> <tr> <td>sds_mrsvnc</td> <td>qs-mrsvnc-1</td> </tr> <tr> <td>so_carync</td> <td>so-carync-b</td> </tr> </tbody> </table>	Network Element	Server Hostname	dr_dallastx	drsds-dallastx-a	sds_mrsvnc	sds-mrsvnc-a	sds_mrsvnc	sds-mrsvnc-b	sds_mrsvnc	qs-mrsvnc-1	so_carync	so-carync-b																																					
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<p>34.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>Verify that the “<b>Appl State</b>” now shows “<b>Enabled</b>” and that the “<b>Alm, DB, Reporting Status &amp; Proc</b>” status columns all show “<b>Norm</b>” for <b>OAM Server A</b> and <b>OAM Server B</b> before proceeding to the next Step.</p> <p><b>NOTE:</b> <i>If user chooses to refresh the Server status screen in advance of the default setting (15-30 sec.). This may be done by simply reselecting the “<b>Status &amp; Manage</b> → <b>Server</b>” option from the Main menu on the left.</i></p>	 <p>The screenshot shows the 'Main Menu: Status &amp; Manage -&gt; Server [Restart]' window. It includes a 'Filter' dropdown and a 'Status' dropdown. Below is a table with columns: Network Element, Server Hostname, Appl State, Alm, DB, Reporting Status, and Proc. The 'Appl State' column for 'sds_mrsvnc' (both a and b) and 'so_carync' (both b and a) is circled in red. The 'Alm' column for 'sds_mrsvnc-a' shows 'Err'.</p> <table border="1"> <thead> <tr> <th>Network Element</th> <th>Server Hostname</th> <th>Appl State</th> <th>Alm</th> <th>DB</th> <th>Reporting Status</th> <th>Proc</th> </tr> </thead> <tbody> <tr> <td>dr_dallastx</td> <td>drsds-dallastx-a</td> <td>Enabled</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-a</td> <td>Enabled</td> <td>Err</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-b</td> <td>Enabled</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>sds_mrsvnc</td> <td>qs-mrsvnc-1</td> <td>Enabled</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>so_carync</td> <td>so-carync-b</td> <td>Enabled</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>so_carync</td> <td>so-carync-a</td> <td>Enabled</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> </tbody> </table>	Network Element	Server Hostname	Appl State	Alm	DB	Reporting Status	Proc	dr_dallastx	drsds-dallastx-a	Enabled	Norm	Norm	Norm	Norm	sds_mrsvnc	sds-mrsvnc-a	Enabled	Err	Norm	Norm	Norm	sds_mrsvnc	sds-mrsvnc-b	Enabled	Norm	Norm	Norm	Norm	sds_mrsvnc	qs-mrsvnc-1	Enabled	Norm	Norm	Norm	Norm	so_carync	so-carync-b	Enabled	Norm	Norm	Norm	Norm	so_carync	so-carync-a	Enabled	Norm	Norm	Norm	Norm
Network Element	Server Hostname	Appl State	Alm	DB	Reporting Status	Proc																																													
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sds_mrsvnc	sds-mrsvnc-b	Enabled	Norm	Norm	Norm	Norm																																													
sds_mrsvnc	qs-mrsvnc-1	Enabled	Norm	Norm	Norm	Norm																																													
so_carync	so-carync-b	Enabled	Norm	Norm	Norm	Norm																																													
so_carync	so-carync-a	Enabled	Norm	Norm	Norm	Norm																																													

### Procedure 9.3 Restarting the OAM Server Application (SOAM)

35.

**Active SDS VIP:**

Click the “Logout” link on the SDS server GUI.



**THIS PROCEDURE HAS BEEN COMPLETED**

## 5.9 DP Installation (All DP-SOAM sites)

The user should be aware that during the Data Processor (DP) installation procedure, various errors may be seen at different stages of the procedure. During the execution of a step, the user is directed to ignore errors related to values other than the ones referenced by that step.

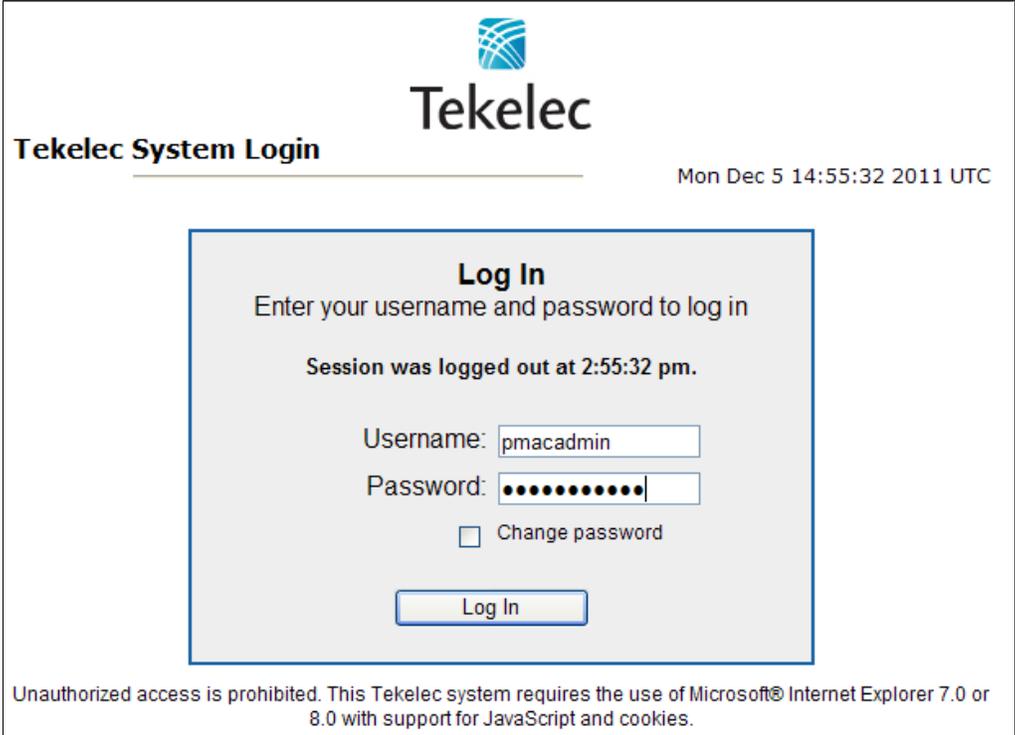
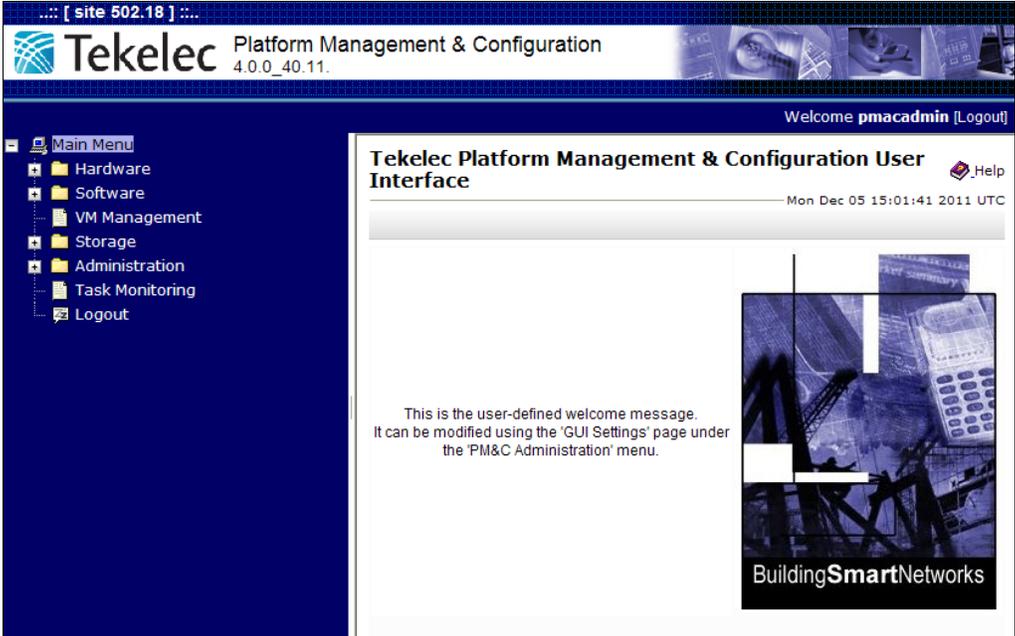


**Make sure you run Appendix J (Disable Hyperthreading (DP Only)) on each DP.**

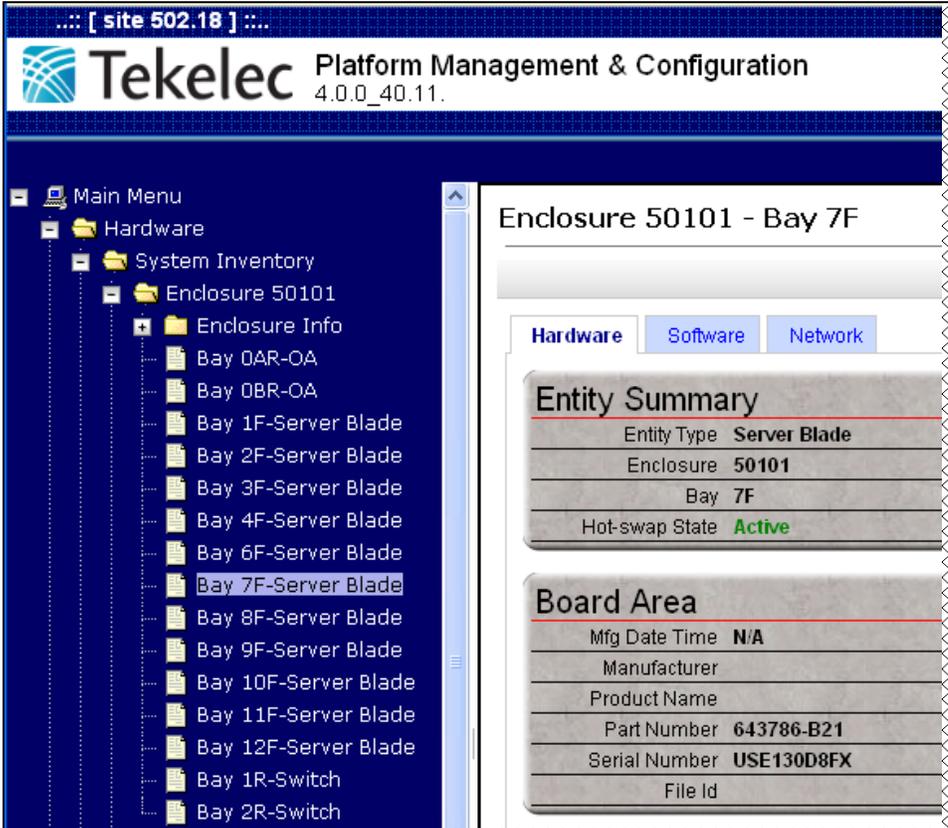
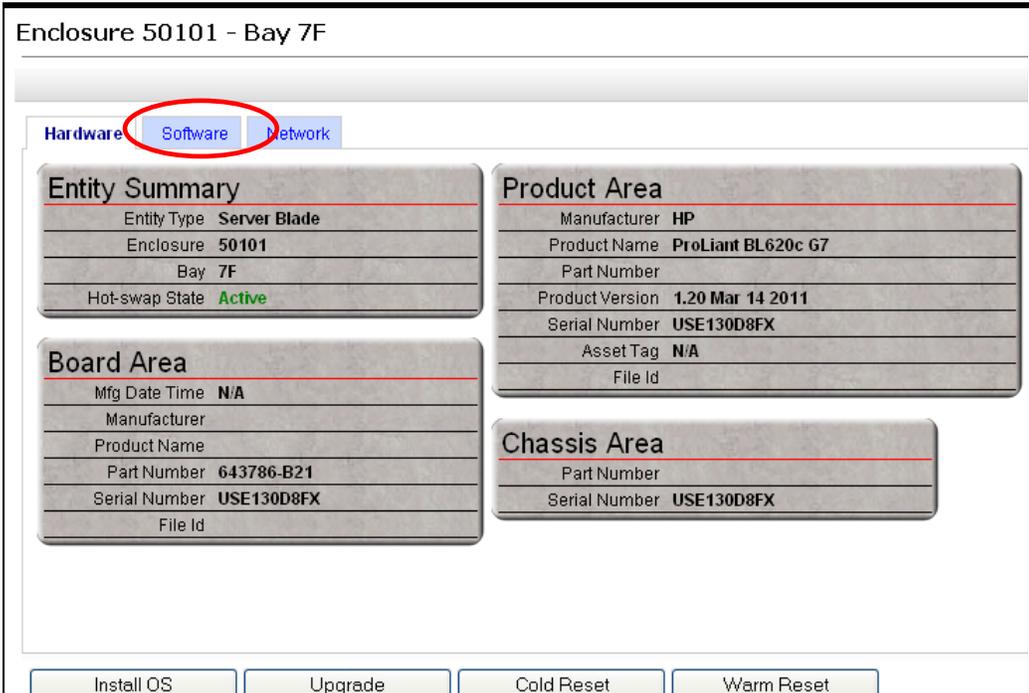
### Procedure 10: Installing a Data Processor (All DP-SOAM sites)

Step	Procedure	Result
<p>1.</p> <input type="checkbox"/>	<p><b>PMAC Server:</b></p> <p>Launch an approved web browser and connect to the <b>XMI IP Address</b> of the <b>PMAC server at the DP-SOAM site</b> using "https://"</p>	

**Procedure 10:** Installing a Data Processor (All DP-SOAM sites)

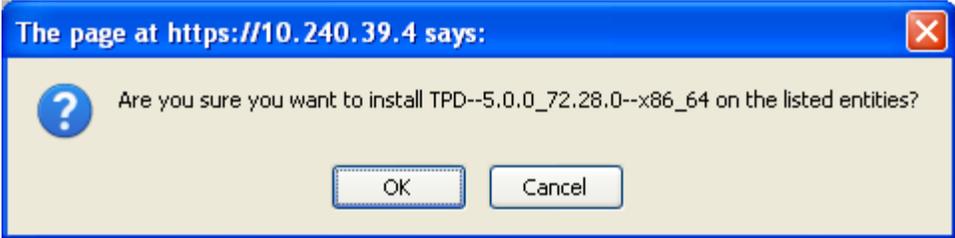
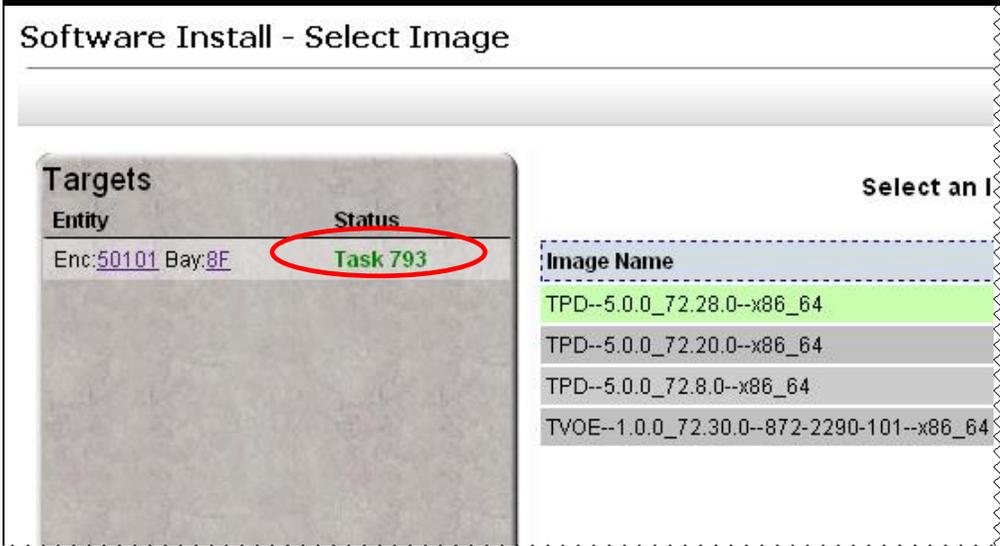
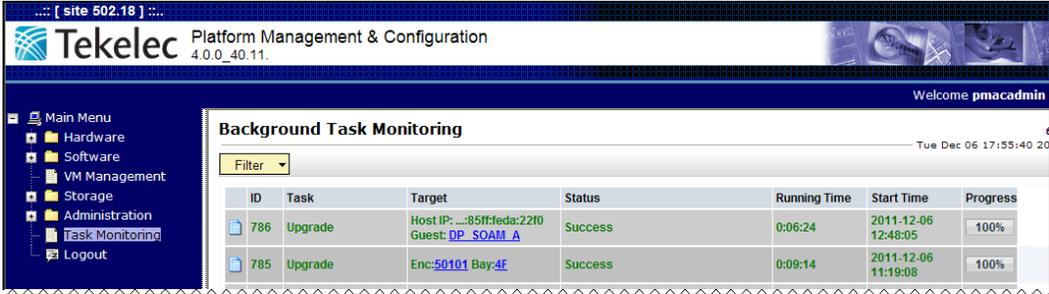
Step	Procedure	Result
<p>2.</p> <p><input type="checkbox"/></p>	<p><b>PMAC Server:</b></p> <p>The user should be presented the login screen shown on the right.</p> <p>Login to the GUI using the default user and password.</p>	
<p>3.</p> <p><input type="checkbox"/></p>	<p><b>PMAC Server:</b></p> <p>The user should be presented the PMAC Main Menu as shown on the right...</p>	

**Procedure 10:** Installing a Data Processor (All DP-SOAM sites)

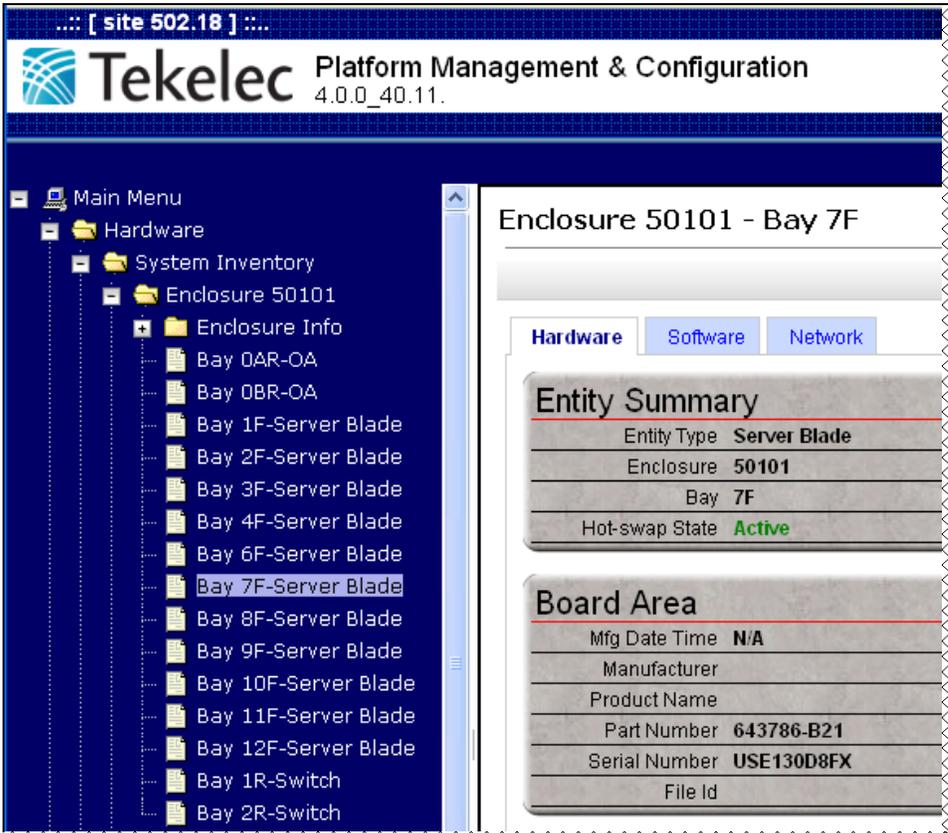
Step	Procedure	Result
<p>4.</p> <p><input type="checkbox"/></p>	<p><b>PMAC Server:</b></p> <p>Select desired server blade...</p> <p><b>Main Menu</b></p> <ul style="list-style-type: none"> <li>→ Hardware</li> <li>→ System Inventory</li> <li>→ &lt;Enclosure&gt;</li> <li>→ &lt;Server Blade&gt;</li> </ul> <p>...as shown on the right.</p>	 <p>The screenshot shows the Tekelec Platform Management &amp; Configuration interface. The breadcrumb path is "... [ site 502.18 ] ...". The navigation tree on the left includes: Main Menu, Hardware, System Inventory, Enclosure 50101, Enclosure Info, and a list of server blades from Bay 0AR-OA to Bay 2R-Switch. The "Bay 7F-Server Blade" is selected. The main content area displays "Enclosure 50101 - Bay 7F" with tabs for Hardware, Software, and Network. The "Entity Summary" shows: Entity Type: Server Blade, Enclosure: 50101, Bay: 7F, Hot-swap State: Active. The "Board Area" shows: Mfg Date Time: N/A, Manufacturer, Product Name, Part Number: 643786-B21, Serial Number: USE130D8FX, File Id.</p>
<p>5.</p> <p><input type="checkbox"/></p>	<p><b>PMAC Server:</b></p> <p>Select "Software" tab.</p> <p>...as shown on the right.</p>	 <p>The screenshot shows the same interface as step 4, but with the "Software" tab selected and circled in red. The "Entity Summary" remains the same. The "Product Area" shows: Manufacturer: HP, Product Name: ProLiant BL620c G7, Part Number, Product Version: 1.20 Mar 14 2011, Serial Number: USE130D8FX, Asset Tag: N/A, File Id. The "Chassis Area" shows: Part Number, Serial Number: USE130D8FX. At the bottom, there are buttons for "Install OS", "Upgrade", "Cold Reset", and "Warm Reset".</p>



**Procedure 10:** Installing a Data Processor (All DP-SOAM sites)

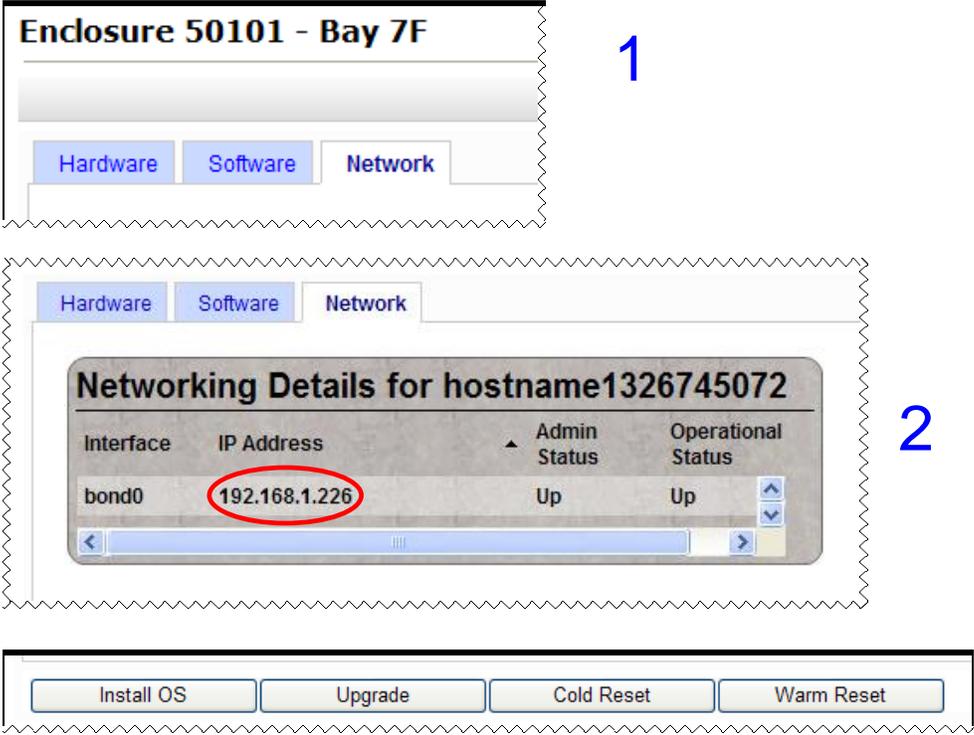
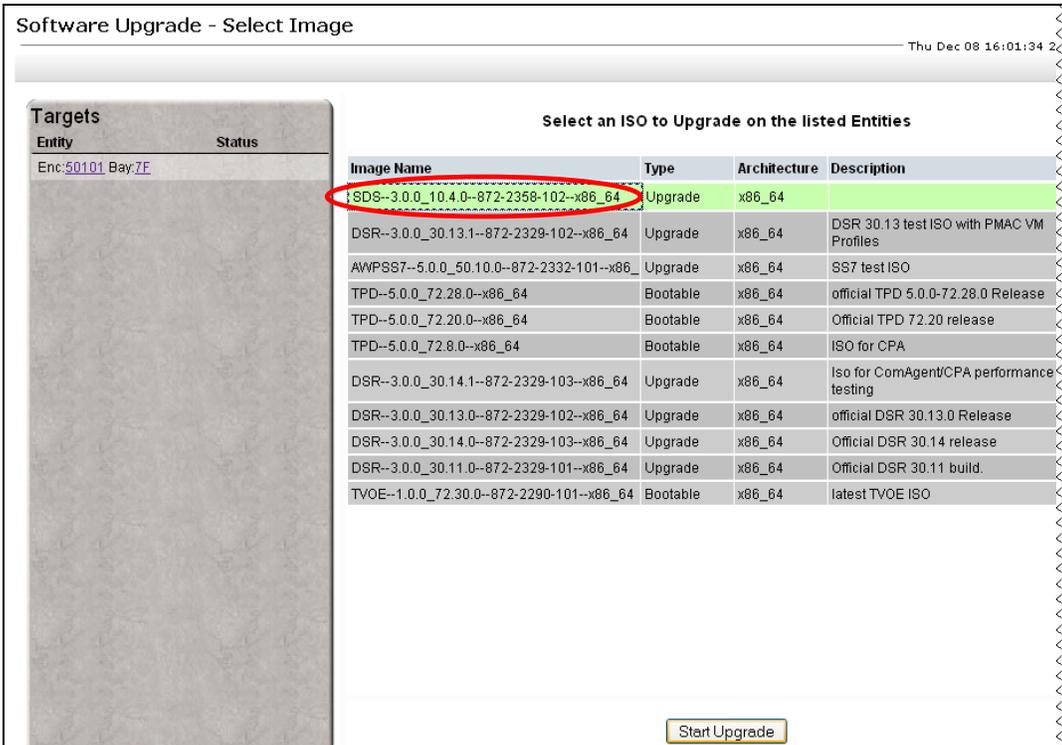
Step	Procedure	Result
<p>8.</p> <input type="checkbox"/>	<p><b>PMAC Server:</b></p> <p>The user should be presented with an <b>“Are you sure you want to install”</b> message box</p> <p>....as shown on the right.</p> <p>Click the <b>“OK”</b> dialogue button</p>	
<p>9.</p> <input type="checkbox"/>	<p><b>PMAC Server:</b></p> <p>Note the task number assigned to TPD install. This number will be used to track its progress.</p> <p>This task takes ~25 minutes.</p>	
<p>10.</p> <input type="checkbox"/>	<p>Repeat this procedure for each additional DP Server.</p>	<ul style="list-style-type: none"> <li>Repeat <b>Steps 3- 9</b> of this procedure for each additional subtending <b>DPs</b> in the same DP-SOAM enclosure.</li> </ul>
<p>11.</p> <input type="checkbox"/>	<p><b>PMAC Server:</b></p> <p>Select...</p> <p><b>Main Menu</b> → <b>Task Monitoring</b></p> <p>...as shown on the right.</p>	

**Procedure 10:** Installing a Data Processor (All DP-SOAM sites)

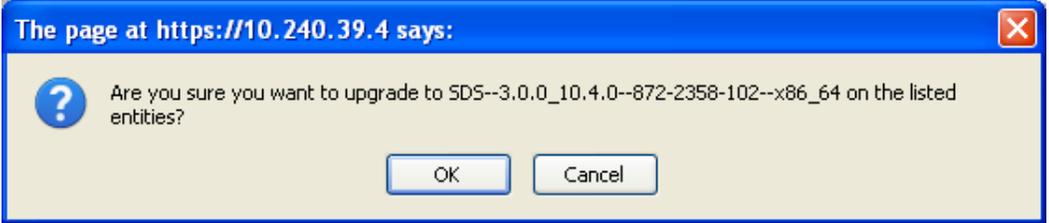
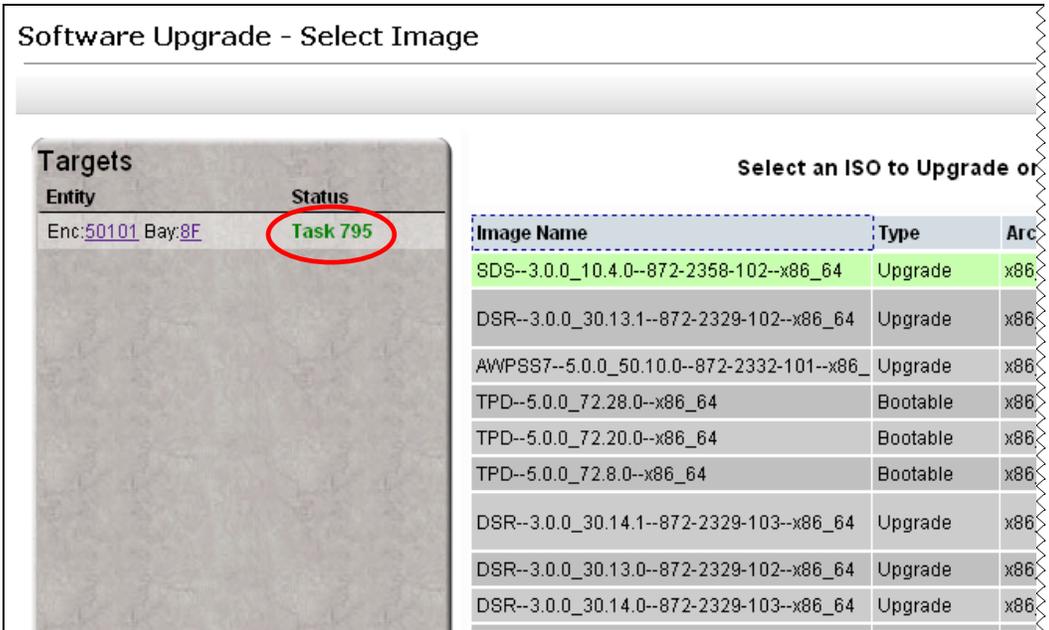
Step	Procedure	Result																																																	
<p>12.</p> <input type="checkbox"/>	<p><b>PMAC Server:</b></p> <p>Wait until “Install OS” tasks show 100% under the <b>Progress</b> column.</p> <p>.... then proceed to the next step.</p>	<table border="1"> <thead> <tr> <th>ID</th> <th>Task</th> <th>Target</th> <th>Status</th> <th>Running Time</th> <th>Start Time</th> <th>Progress</th> </tr> </thead> <tbody> <tr> <td>793</td> <td>Install OS</td> <td>Enc:50101 Bay:8F</td> <td>Done: TPD--5.0.0_72.28.0--x86_64</td> <td>0:24:45</td> <td>2011-12-08 10:28:08</td> <td>100%</td> </tr> <tr> <td>792</td> <td>Install OS</td> <td>Enc:50101 Bay:7F</td> <td>Done: TPD--5.0.0_72.28.0--x86_64</td> <td>0:25:08</td> <td>2011-12-08 10:26:42</td> <td>100%</td> </tr> <tr> <td>791</td> <td>Backup PM&amp;C</td> <td></td> <td>PM&amp;C Backup successful</td> <td>0:00:09</td> <td>2011-12-08 05:00:01</td> <td>100%</td> </tr> <tr> <td>790</td> <td>Upgrade</td> <td>Host IP: ...55fffe85:3528 Guest: DP_SOAM_B</td> <td>Success</td> <td>0:06:24</td> <td>2011-12-07 12:24:53</td> <td>100%</td> </tr> <tr> <td>789</td> <td>Install OS</td> <td>Host IP: ...55fffe85:3528 Guest: DP_SOAM_B</td> <td>Done: TPD--5.0.0_72.28.0--x86_64</td> <td>0:12:00</td> <td>2011-12-07 11:59:27</td> <td>100%</td> </tr> <tr> <td>788</td> <td>VirtAction: Create</td> <td>Enc:50101 Bay:12F Guest: DP_SOAM_B</td> <td>Guest creation completed (DP_SOAM_B)</td> <td>0:00:05</td> <td>2011-12-07 11:57:55</td> <td>100%</td> </tr> </tbody> </table>	ID	Task	Target	Status	Running Time	Start Time	Progress	793	Install OS	Enc:50101 Bay:8F	Done: TPD--5.0.0_72.28.0--x86_64	0:24:45	2011-12-08 10:28:08	100%	792	Install OS	Enc:50101 Bay:7F	Done: TPD--5.0.0_72.28.0--x86_64	0:25:08	2011-12-08 10:26:42	100%	791	Backup PM&C		PM&C Backup successful	0:00:09	2011-12-08 05:00:01	100%	790	Upgrade	Host IP: ...55fffe85:3528 Guest: DP_SOAM_B	Success	0:06:24	2011-12-07 12:24:53	100%	789	Install OS	Host IP: ...55fffe85:3528 Guest: DP_SOAM_B	Done: TPD--5.0.0_72.28.0--x86_64	0:12:00	2011-12-07 11:59:27	100%	788	VirtAction: Create	Enc:50101 Bay:12F Guest: DP_SOAM_B	Guest creation completed (DP_SOAM_B)	0:00:05	2011-12-07 11:57:55	100%
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<p>13.</p> <input type="checkbox"/>	<p><b>PMAC Server:</b></p> <p>Select...</p> <p><b>Main Menu</b></p> <ul style="list-style-type: none"> <li>→ Hardware</li> <li>→ System Inventory</li> <li>→ &lt;Enclosure&gt;</li> <li>→ &lt;Server Blade&gt;</li> </ul> <p>...as shown on the right.</p>	 <p>The screenshot shows the Tekelec Platform Management &amp; Configuration interface. On the left, a tree view shows the navigation path: Main Menu &gt; Hardware &gt; System Inventory &gt; Enclosure 50101 &gt; Enclosure Info &gt; Bay 7F-Server Blade. On the right, the detailed view for 'Enclosure 50101 - Bay 7F' is displayed, showing tabs for Hardware, Software, and Network. The 'Entity Summary' section lists: Entity Type: Server Blade, Enclosure: 50101, Bay: 7F, and Hot-swap State: Active. The 'Board Area' section lists: Mfg Date Time: N/A, Manufacturer, Product Name, Part Number: 643786-B21, Serial Number: USE130D8FX, and File Id.</p>																																																	



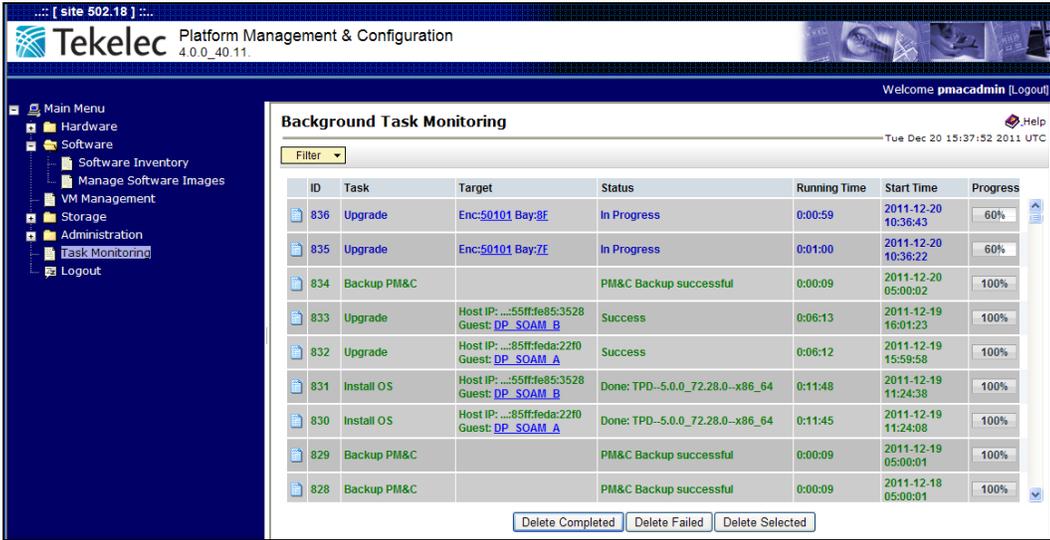
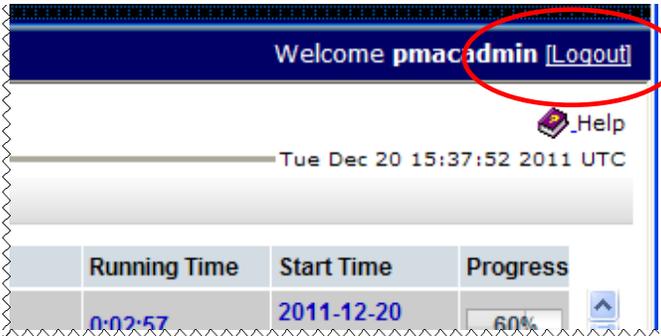
**Procedure 10:** Installing a Data Processor (All DP-SOAM sites)

Step	Procedure	Result																																																
<p>16.</p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p>	<p><b>PMAC Server:</b></p> <p>1) Select the <b>"Network"</b> tab.</p> <p>2) Make note of the control IP address for this DP, called <b>"bond0"</b>; it will be referenced later</p> <p>3) Select the <b>"Upgrade"</b> button.</p>	 <p>The screenshot shows the 'Enclosure 50101 - Bay 7F' interface. The 'Network' tab is selected. Below the tabs, the 'Networking Details for hostname1326745072' are displayed in a table:</p> <table border="1"> <thead> <tr> <th>Interface</th> <th>IP Address</th> <th>Admin Status</th> <th>Operational Status</th> </tr> </thead> <tbody> <tr> <td>bond0</td> <td>192.168.1.226</td> <td>Up</td> <td>Up</td> </tr> </tbody> </table> <p>At the bottom of the interface, the 'Upgrade' button is highlighted with a blue box.</p>	Interface	IP Address	Admin Status	Operational Status	bond0	192.168.1.226	Up	Up																																								
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<p>17.</p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p>	<p><b>PMAC Server:</b></p> <p>1) Select the correct <b>SDS</b> version from the <b>"Image Name"</b> list. The line entry should now be highlighted in <b>GREEN</b>.</p> <p>2) Select the <b>"Start Upgrade"</b> dialogue button</p>	 <p>The screenshot shows the 'Software Upgrade - Select Image' dialog. On the left, a 'Targets' list shows 'Enc:50101 Bay:7F' highlighted in green. On the right, a table titled 'Select an ISO to Upgrade on the listed Entities' is displayed:</p> <table border="1"> <thead> <tr> <th>Image Name</th> <th>Type</th> <th>Architecture</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>SDS--3.0.0_10.4.0--872-2358-102--x86_64</td> <td>Upgrade</td> <td>x86_64</td> <td></td> </tr> <tr> <td>DSR--3.0.0_30.13.1--872-2329-102--x86_64</td> <td>Upgrade</td> <td>x86_64</td> <td>DSR 30.13 test ISO with PMAC VM Profiles</td> </tr> <tr> <td>AWPSS7--5.0.0_50.10.0--872-2332-101--x86_64</td> <td>Upgrade</td> <td>x86_64</td> <td>SS7 test ISO</td> </tr> <tr> <td>TPD--5.0.0_72.28.0--x86_64</td> <td>Bootable</td> <td>x86_64</td> <td>official TPD 5.0.0-72.28.0 Release</td> </tr> <tr> <td>TPD--5.0.0_72.20.0--x86_64</td> <td>Bootable</td> <td>x86_64</td> <td>Official TPD 72.20 release</td> </tr> <tr> <td>TPD--5.0.0_72.8.0--x86_64</td> <td>Bootable</td> <td>x86_64</td> <td>ISO for CPA</td> </tr> <tr> <td>DSR--3.0.0_30.14.1--872-2329-103--x86_64</td> <td>Upgrade</td> <td>x86_64</td> <td>Iso for ComAgent/CPA performance testing</td> </tr> <tr> <td>DSR--3.0.0_30.13.0--872-2329-102--x86_64</td> <td>Upgrade</td> <td>x86_64</td> <td>official DSR 30.13.0 Release</td> </tr> <tr> <td>DSR--3.0.0_30.14.0--872-2329-103--x86_64</td> <td>Upgrade</td> <td>x86_64</td> <td>Official DSR 30.14 release</td> </tr> <tr> <td>DSR--3.0.0_30.11.0--872-2329-101--x86_64</td> <td>Upgrade</td> <td>x86_64</td> <td>Official DSR 30.11 build.</td> </tr> <tr> <td>TVOE--1.0.0_72.30.0--872-2290-101--x86_64</td> <td>Bootable</td> <td>x86_64</td> <td>latest TVOE ISO</td> </tr> </tbody> </table> <p>The 'SDS--3.0.0_10.4.0--872-2358-102--x86_64' entry is highlighted in green. A 'Start Upgrade' button is visible at the bottom right.</p>	Image Name	Type	Architecture	Description	SDS--3.0.0_10.4.0--872-2358-102--x86_64	Upgrade	x86_64		DSR--3.0.0_30.13.1--872-2329-102--x86_64	Upgrade	x86_64	DSR 30.13 test ISO with PMAC VM Profiles	AWPSS7--5.0.0_50.10.0--872-2332-101--x86_64	Upgrade	x86_64	SS7 test ISO	TPD--5.0.0_72.28.0--x86_64	Bootable	x86_64	official TPD 5.0.0-72.28.0 Release	TPD--5.0.0_72.20.0--x86_64	Bootable	x86_64	Official TPD 72.20 release	TPD--5.0.0_72.8.0--x86_64	Bootable	x86_64	ISO for CPA	DSR--3.0.0_30.14.1--872-2329-103--x86_64	Upgrade	x86_64	Iso for ComAgent/CPA performance testing	DSR--3.0.0_30.13.0--872-2329-102--x86_64	Upgrade	x86_64	official DSR 30.13.0 Release	DSR--3.0.0_30.14.0--872-2329-103--x86_64	Upgrade	x86_64	Official DSR 30.14 release	DSR--3.0.0_30.11.0--872-2329-101--x86_64	Upgrade	x86_64	Official DSR 30.11 build.	TVOE--1.0.0_72.30.0--872-2290-101--x86_64	Bootable	x86_64	latest TVOE ISO
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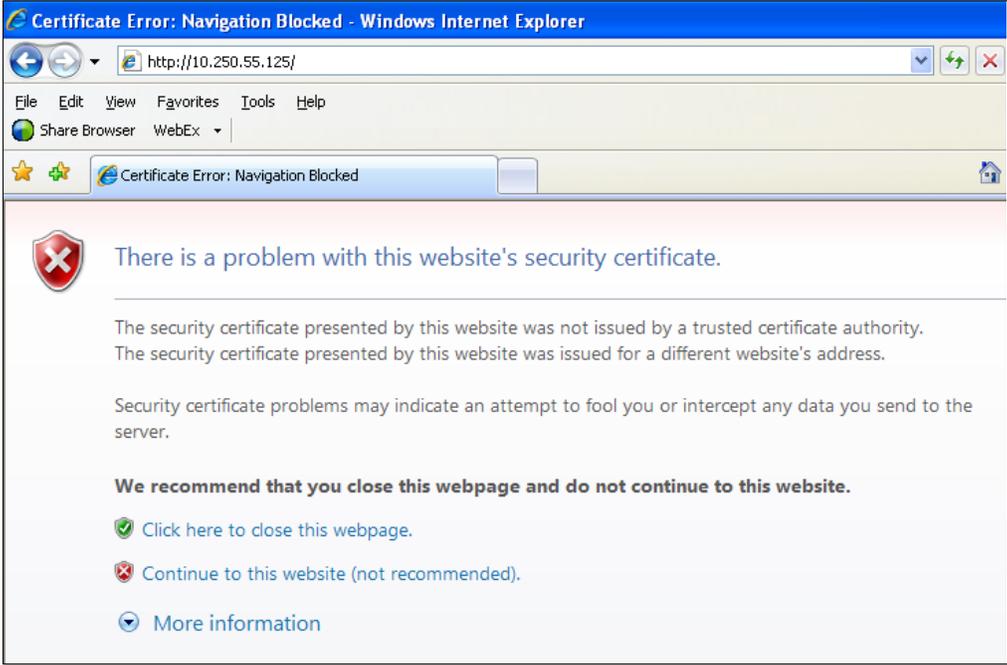
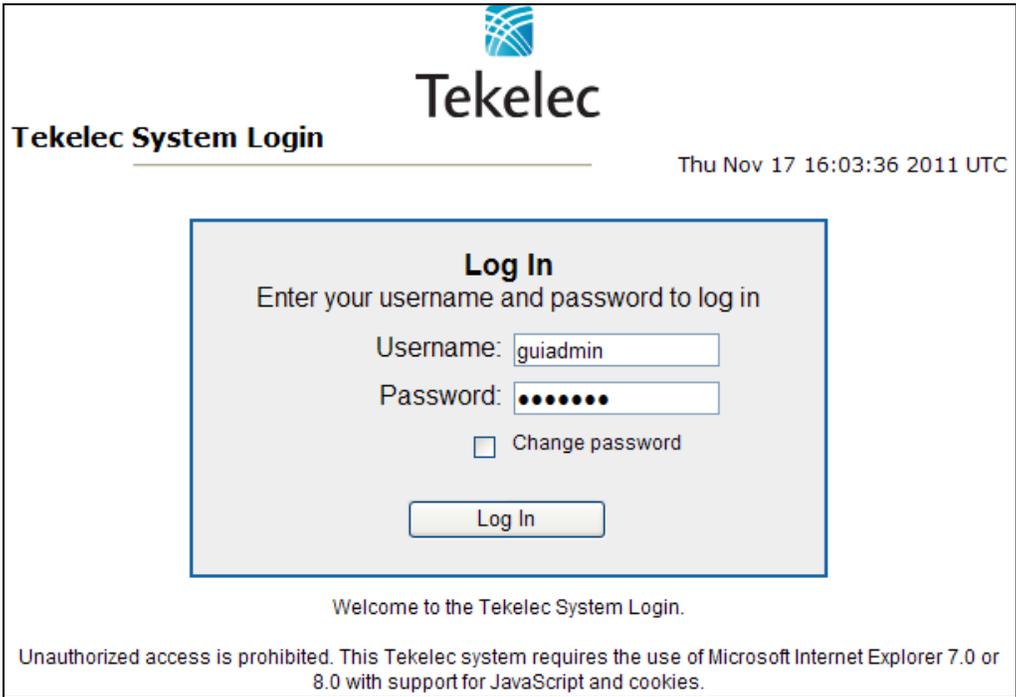
**Procedure 10:** Installing a Data Processor (All DP-SOAM sites)

Step	Procedure	Result																														
<p>18.</p> <input type="checkbox"/>	<p><b>PMAC Server:</b></p> <p>The user should be presented with an <b>“Are you sure you want to upgrade”</b> message box</p> <p>....as shown on the right.</p> <p>Click the <b>“OK”</b> dialogue button.</p>																															
<p>19.</p> <input type="checkbox"/>	<p><b>PMAC Server:</b></p> <p>Note the task number assigned to TPD install. This number will be used to track its progress.</p> <p>This task takes ~21 minutes.</p>	 <table border="1"> <thead> <tr> <th>Image Name</th> <th>Type</th> <th>Arc</th> </tr> </thead> <tbody> <tr> <td>SDS--3.0.0_10.4.0--872-2358-102--x86_64</td> <td>Upgrade</td> <td>x86</td> </tr> <tr> <td>DSR--3.0.0_30.13.1--872-2329-102--x86_64</td> <td>Upgrade</td> <td>x86</td> </tr> <tr> <td>AWPSS7--5.0.0_50.10.0--872-2332-101--x86_64</td> <td>Upgrade</td> <td>x86</td> </tr> <tr> <td>TPD--5.0.0_72.28.0--x86_64</td> <td>Bootable</td> <td>x86</td> </tr> <tr> <td>TPD--5.0.0_72.20.0--x86_64</td> <td>Bootable</td> <td>x86</td> </tr> <tr> <td>TPD--5.0.0_72.8.0--x86_64</td> <td>Bootable</td> <td>x86</td> </tr> <tr> <td>DSR--3.0.0_30.14.1--872-2329-103--x86_64</td> <td>Upgrade</td> <td>x86</td> </tr> <tr> <td>DSR--3.0.0_30.13.0--872-2329-102--x86_64</td> <td>Upgrade</td> <td>x86</td> </tr> <tr> <td>DSR--3.0.0_30.14.0--872-2329-103--x86_64</td> <td>Upgrade</td> <td>x86</td> </tr> </tbody> </table>	Image Name	Type	Arc	SDS--3.0.0_10.4.0--872-2358-102--x86_64	Upgrade	x86	DSR--3.0.0_30.13.1--872-2329-102--x86_64	Upgrade	x86	AWPSS7--5.0.0_50.10.0--872-2332-101--x86_64	Upgrade	x86	TPD--5.0.0_72.28.0--x86_64	Bootable	x86	TPD--5.0.0_72.20.0--x86_64	Bootable	x86	TPD--5.0.0_72.8.0--x86_64	Bootable	x86	DSR--3.0.0_30.14.1--872-2329-103--x86_64	Upgrade	x86	DSR--3.0.0_30.13.0--872-2329-102--x86_64	Upgrade	x86	DSR--3.0.0_30.14.0--872-2329-103--x86_64	Upgrade	x86
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<p>20.</p> <input type="checkbox"/>	<p>Repeat <b>Steps 11 - 19</b> of this procedure for each subtending <b>DP</b> servers installed in the same DP-SOAM enclosure.</p>																															

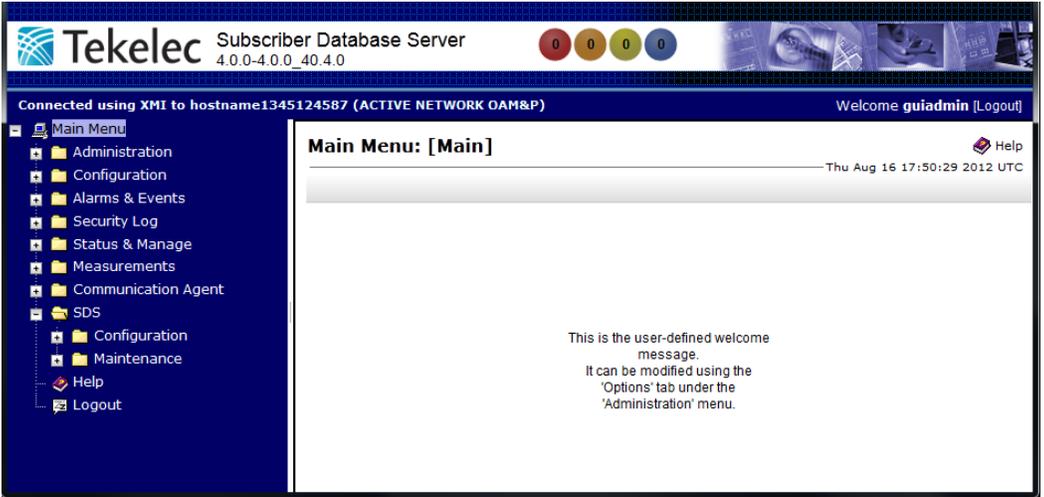
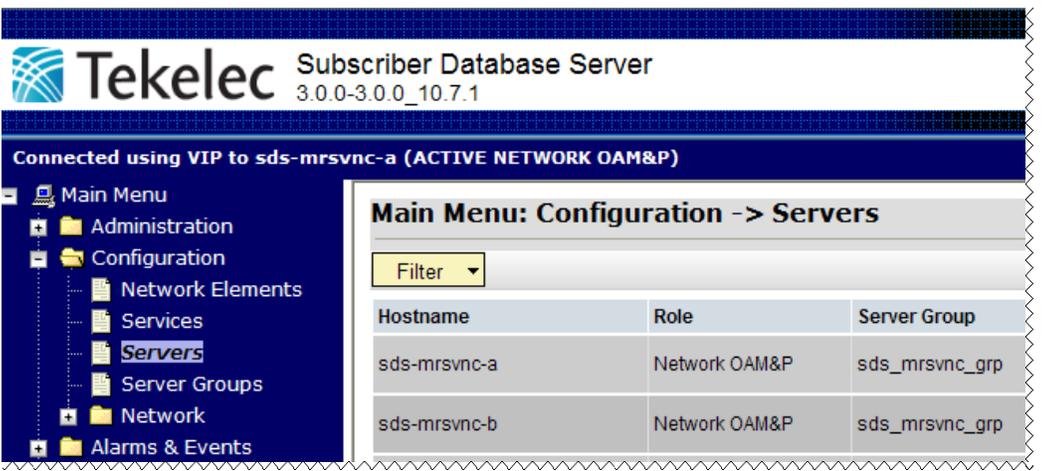
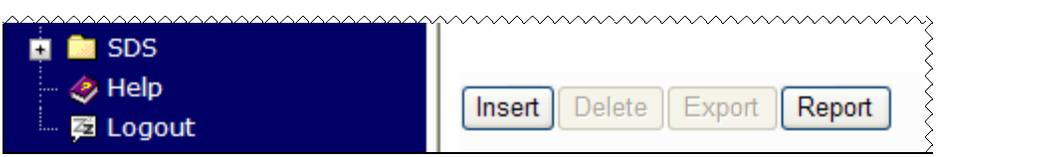
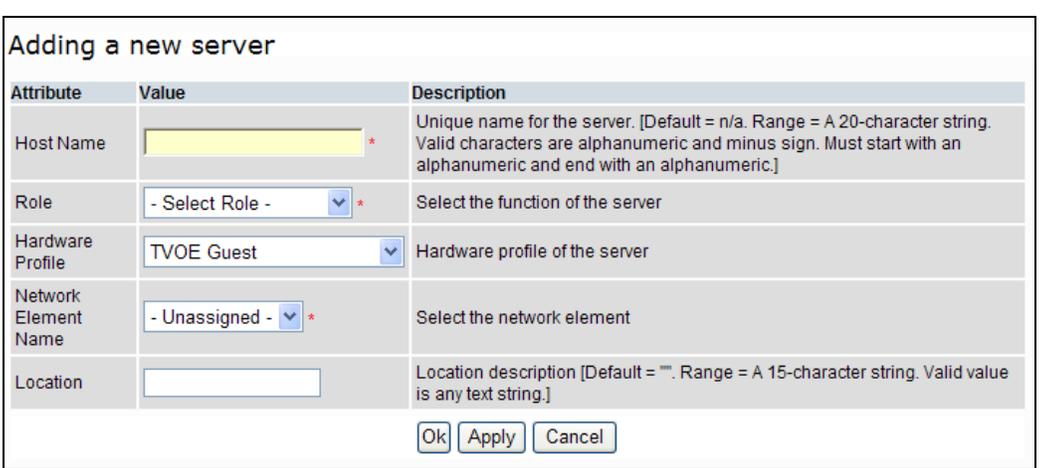
**Procedure 10: Installing a Data Processor (All DP-SOAM sites)**

Step	Procedure	Result																																																																						
<p>21.</p> <p><input type="checkbox"/></p>	<p><b>PMAC Server:</b></p> <p>Select...</p> <p><b>Main Menu</b> → <b>Task Monitoring</b></p> <p>...as shown on the right.</p>	 <p>Tekelec Platform Management &amp; Configuration 4.0.0_40.11</p> <p>Welcome pmacadmin [Logout]</p> <p><b>Background Task Monitoring</b></p> <table border="1"> <thead> <tr> <th>ID</th> <th>Task</th> <th>Target</th> <th>Status</th> <th>Running Time</th> <th>Start Time</th> <th>Progress</th> </tr> </thead> <tbody> <tr> <td>836</td> <td>Upgrade</td> <td>Enc:50101 Bay:8F</td> <td>In Progress</td> <td>0:00:59</td> <td>2011-12-20 10:36:43</td> <td>60%</td> </tr> <tr> <td>835</td> <td>Upgrade</td> <td>Enc:50101 Bay:7E</td> <td>In Progress</td> <td>0:01:00</td> <td>2011-12-20 10:36:22</td> <td>60%</td> </tr> <tr> <td>834</td> <td>Backup PM&amp;C</td> <td></td> <td>PM&amp;C Backup successful</td> <td>0:00:09</td> <td>2011-12-20 05:00:02</td> <td>100%</td> </tr> <tr> <td>833</td> <td>Upgrade</td> <td>Host IP: ...55fffe85:3528 Guest: DP_SOAM_B</td> <td>Success</td> <td>0:06:13</td> <td>2011-12-19 16:01:23</td> <td>100%</td> </tr> <tr> <td>832</td> <td>Upgrade</td> <td>Host IP: ...85fffe85:22f0 Guest: DP_SOAM_A</td> <td>Success</td> <td>0:06:12</td> <td>2011-12-19 15:59:58</td> <td>100%</td> </tr> <tr> <td>831</td> <td>Install OS</td> <td>Host IP: ...55fffe85:3528 Guest: DP_SOAM_B</td> <td>Done: TPD--5.0.0_72.28.0--x86_64</td> <td>0:11:48</td> <td>2011-12-19 11:24:38</td> <td>100%</td> </tr> <tr> <td>830</td> <td>Install OS</td> <td>Host IP: ...85fffe85:22f0 Guest: DP_SOAM_A</td> <td>Done: TPD--5.0.0_72.28.0--x86_64</td> <td>0:11:45</td> <td>2011-12-19 11:24:08</td> <td>100%</td> </tr> <tr> <td>829</td> <td>Backup PM&amp;C</td> <td></td> <td>PM&amp;C Backup successful</td> <td>0:00:09</td> <td>2011-12-19 05:00:01</td> <td>100%</td> </tr> <tr> <td>828</td> <td>Backup PM&amp;C</td> <td></td> <td>PM&amp;C Backup successful</td> <td>0:00:09</td> <td>2011-12-18 05:00:01</td> <td>100%</td> </tr> </tbody> </table> <p>Delete Completed Delete Failed Delete Selected</p>	ID	Task	Target	Status	Running Time	Start Time	Progress	836	Upgrade	Enc:50101 Bay:8F	In Progress	0:00:59	2011-12-20 10:36:43	60%	835	Upgrade	Enc:50101 Bay:7E	In Progress	0:01:00	2011-12-20 10:36:22	60%	834	Backup PM&C		PM&C Backup successful	0:00:09	2011-12-20 05:00:02	100%	833	Upgrade	Host IP: ...55fffe85:3528 Guest: DP_SOAM_B	Success	0:06:13	2011-12-19 16:01:23	100%	832	Upgrade	Host IP: ...85fffe85:22f0 Guest: DP_SOAM_A	Success	0:06:12	2011-12-19 15:59:58	100%	831	Install OS	Host IP: ...55fffe85:3528 Guest: DP_SOAM_B	Done: TPD--5.0.0_72.28.0--x86_64	0:11:48	2011-12-19 11:24:38	100%	830	Install OS	Host IP: ...85fffe85:22f0 Guest: DP_SOAM_A	Done: TPD--5.0.0_72.28.0--x86_64	0:11:45	2011-12-19 11:24:08	100%	829	Backup PM&C		PM&C Backup successful	0:00:09	2011-12-19 05:00:01	100%	828	Backup PM&C		PM&C Backup successful	0:00:09	2011-12-18 05:00:01	100%
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833	Upgrade	Host IP: ...55fffe85:3528 Guest: DP_SOAM_B	Success	0:06:13	2011-12-19 16:01:23	100%																																																																		
832	Upgrade	Host IP: ...85fffe85:22f0 Guest: DP_SOAM_A	Success	0:06:12	2011-12-19 15:59:58	100%																																																																		
831	Install OS	Host IP: ...55fffe85:3528 Guest: DP_SOAM_B	Done: TPD--5.0.0_72.28.0--x86_64	0:11:48	2011-12-19 11:24:38	100%																																																																		
830	Install OS	Host IP: ...85fffe85:22f0 Guest: DP_SOAM_A	Done: TPD--5.0.0_72.28.0--x86_64	0:11:45	2011-12-19 11:24:08	100%																																																																		
829	Backup PM&C		PM&C Backup successful	0:00:09	2011-12-19 05:00:01	100%																																																																		
828	Backup PM&C		PM&C Backup successful	0:00:09	2011-12-18 05:00:01	100%																																																																		
<p>22.</p> <p><input type="checkbox"/></p>	<p><b>PMAC Server:</b></p> <p>Wait until “Upgrade” tasks show 100% under the <b>Progress</b> column.</p> <p>.... then proceed to the next step.</p>	<table border="1"> <thead> <tr> <th>ID</th> <th>Task</th> <th>Target</th> <th>Status</th> <th>Running Time</th> <th>Start Time</th> <th>Progress</th> </tr> </thead> <tbody> <tr> <td>795</td> <td>Upgrade</td> <td>Enc:50101 Bay:8F</td> <td>Success</td> <td>0:12:11</td> <td>2011-12-08 11:02:33</td> <td>100%</td> </tr> <tr> <td>794</td> <td>Upgrade</td> <td>Enc:50101 Bay:7E</td> <td>Success</td> <td>0:12:08</td> <td>2011-12-08 11:01:56</td> <td>100%</td> </tr> <tr> <td>793</td> <td>Install OS</td> <td>Enc:50101 Bay:8F</td> <td>Done: TPD--5.0.0_72.28.0--x86_64</td> <td>0:24:45</td> <td>2011-12-08 10:28:08</td> <td>100%</td> </tr> <tr> <td>792</td> <td>Install OS</td> <td>Enc:50101 Bay:7E</td> <td>Done: TPD--5.0.0_72.28.0--x86_64</td> <td>0:25:08</td> <td>2011-12-08 10:26:42</td> <td>100%</td> </tr> <tr> <td>791</td> <td>Backup PM&amp;C</td> <td></td> <td>PM&amp;C Backup successful</td> <td>0:00:09</td> <td>2011-12-08 05:00:01</td> <td>100%</td> </tr> <tr> <td>790</td> <td>Upgrade</td> <td>Host IP: ...55fffe85:3528 Guest: DP_SOAM_B</td> <td>Success</td> <td>0:06:24</td> <td>2011-12-07 12:24:53</td> <td>100%</td> </tr> <tr> <td></td> <td></td> <td>Host IP: ...55fffe85:3528</td> <td></td> <td></td> <td>2011-12-07</td> <td></td> </tr> </tbody> </table>	ID	Task	Target	Status	Running Time	Start Time	Progress	795	Upgrade	Enc:50101 Bay:8F	Success	0:12:11	2011-12-08 11:02:33	100%	794	Upgrade	Enc:50101 Bay:7E	Success	0:12:08	2011-12-08 11:01:56	100%	793	Install OS	Enc:50101 Bay:8F	Done: TPD--5.0.0_72.28.0--x86_64	0:24:45	2011-12-08 10:28:08	100%	792	Install OS	Enc:50101 Bay:7E	Done: TPD--5.0.0_72.28.0--x86_64	0:25:08	2011-12-08 10:26:42	100%	791	Backup PM&C		PM&C Backup successful	0:00:09	2011-12-08 05:00:01	100%	790	Upgrade	Host IP: ...55fffe85:3528 Guest: DP_SOAM_B	Success	0:06:24	2011-12-07 12:24:53	100%			Host IP: ...55fffe85:3528			2011-12-07															
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<p>23.</p> <p><input type="checkbox"/></p>	<p><b>PMAC Server::</b></p> <p>Click the “Logout” link on the PMAC server GUI.</p>	 <p>Welcome pmacadmin [Logout]</p> <p>_Help</p> <p>Tue Dec 20 15:37:52 2011 UTC</p> <table border="1"> <thead> <tr> <th>Running Time</th> <th>Start Time</th> <th>Progress</th> </tr> </thead> <tbody> <tr> <td>0:02:57</td> <td>2011-12-20</td> <td>60%</td> </tr> </tbody> </table>	Running Time	Start Time	Progress	0:02:57	2011-12-20	60%																																																																
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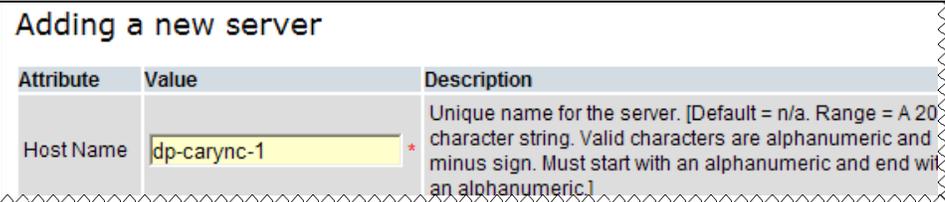
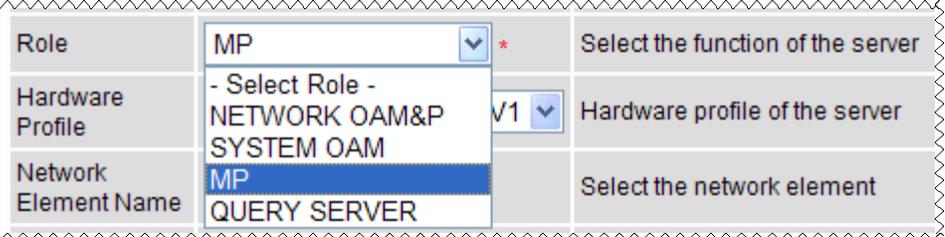
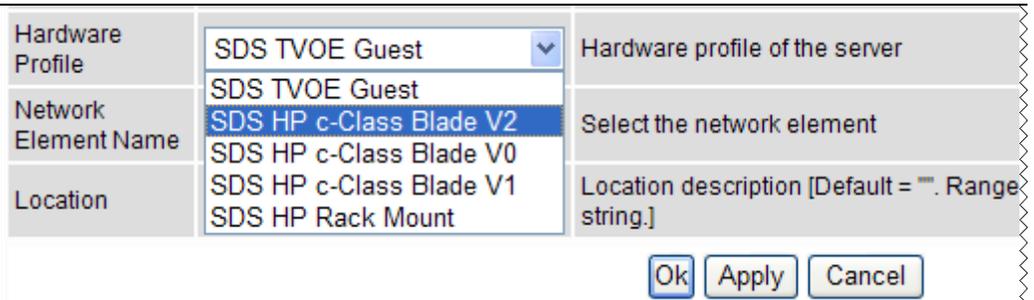
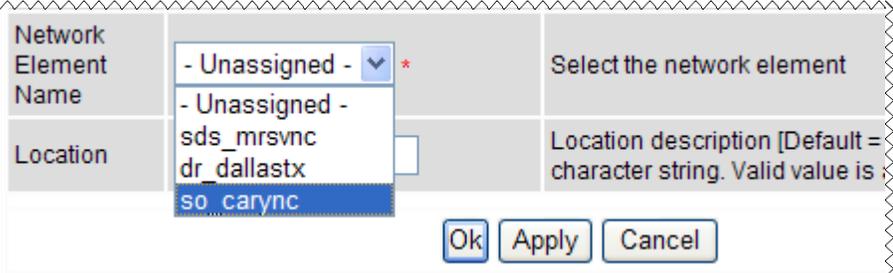
## Procedure 10.1 Configuring the Database Processor Server (DP)

<p>24.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Launch an approved web browser and connect to the XMI Virtual IP address (VIP) assigned to <b>Active SDS site</b> using "https://"</p>	
<p>25.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>The user should be presented the login screen shown on the right.</p> <p>Login to the GUI using the default user and password.</p>	

## Procedure 10.1 Configuring the Database Processor Server (DP)

<p>26.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>The user should be presented the SDS Main Menu as shown on the right.</p>																			
<p>27.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Select...</p> <p><b>Main Menu</b> → Configuration → Servers</p> <p>...as shown on the right.</p>	 <table border="1"> <thead> <tr> <th>Hostname</th> <th>Role</th> <th>Server Group</th> </tr> </thead> <tbody> <tr> <td>sds-mrsvnc-a</td> <td>Network OAM&amp;P</td> <td>sds_mrsvnc_grp</td> </tr> <tr> <td>sds-mrsvnc-b</td> <td>Network OAM&amp;P</td> <td>sds_mrsvnc_grp</td> </tr> </tbody> </table>	Hostname	Role	Server Group	sds-mrsvnc-a	Network OAM&P	sds_mrsvnc_grp	sds-mrsvnc-b	Network OAM&P	sds_mrsvnc_grp									
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<p>28.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Select the “Insert” dialogue button.</p>																			
<p>29.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>The user is now presented with the “Adding a new server” configuration screen.</p>	 <table border="1"> <thead> <tr> <th>Attribute</th> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Host Name</td> <td><input type="text"/></td> <td>Unique name for the server. [Default = n/a. Range = A 20-character string. Valid characters are alphanumeric and minus sign. Must start with an alphanumeric and end with an alphanumeric.]</td> </tr> <tr> <td>Role</td> <td>- Select Role -</td> <td>Select the function of the server</td> </tr> <tr> <td>Hardware Profile</td> <td>TVOE Guest</td> <td>Hardware profile of the server</td> </tr> <tr> <td>Network Element Name</td> <td>- Unassigned -</td> <td>Select the network element</td> </tr> <tr> <td>Location</td> <td><input type="text"/></td> <td>Location description [Default = ". Range = A 15-character string. Valid value is any text string.]</td> </tr> </tbody> </table>	Attribute	Value	Description	Host Name	<input type="text"/>	Unique name for the server. [Default = n/a. Range = A 20-character string. Valid characters are alphanumeric and minus sign. Must start with an alphanumeric and end with an alphanumeric.]	Role	- Select Role -	Select the function of the server	Hardware Profile	TVOE Guest	Hardware profile of the server	Network Element Name	- Unassigned -	Select the network element	Location	<input type="text"/>	Location description [Default = ". Range = A 15-character string. Valid value is any text string.]
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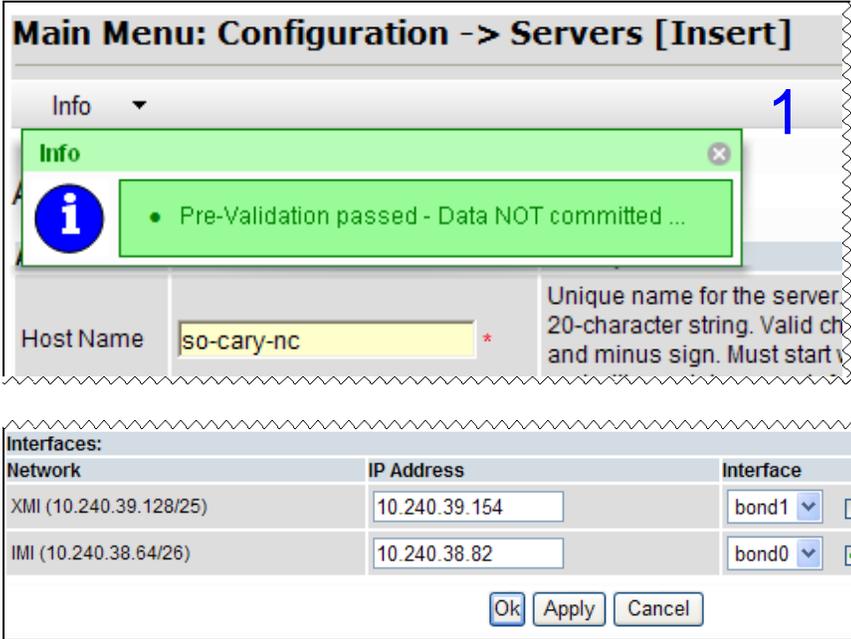
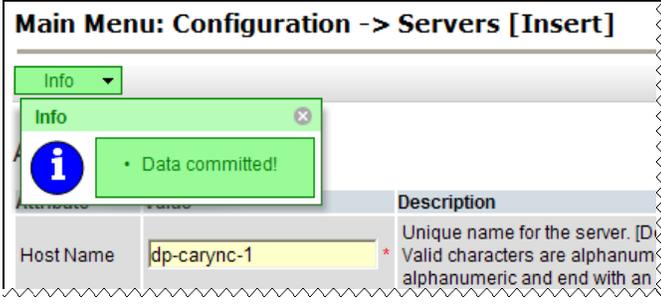
## Procedure 10.1 Configuring the Database Processor Server (DP)

<p>30.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Input the assigned <b>“hostname”</b> for the Database Processor (DP).</p>	 <p>Adding a new server</p> <table border="1"> <thead> <tr> <th>Attribute</th> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Host Name</td> <td>dp-carync-1 *</td> <td>Unique name for the server. [Default = n/a. Range = A 20 character string. Valid characters are alphanumeric and minus sign. Must start with an alphanumeric and end with an alphanumeric.]</td> </tr> </tbody> </table>	Attribute	Value	Description	Host Name	dp-carync-1 *	Unique name for the server. [Default = n/a. Range = A 20 character string. Valid characters are alphanumeric and minus sign. Must start with an alphanumeric and end with an alphanumeric.]
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<p>31.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Select <b>“MP”</b> for the server <b>Role</b> from the pull-down menu.</p>	 <p>Role: MP * Select the function of the server</p> <p>Hardware Profile: NETWORK OAM&amp;P V1 Hardware profile of the server</p> <p>Network Element Name: MP Select the network element</p>						
<p>32.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Select <b>“SDS HP c-Class Blade V2”</b> for the <b>Hardware Profile</b> for the DP-SOAM from the pull-down menu.</p>	 <p>Hardware Profile: SDS TVOE Guest Hardware profile of the server</p> <p>Network Element Name: SDS HP c-Class Blade V2 Select the network element</p> <p>Location: SDS HP c-Class Blade V1 Location description [Default = ". Range string.]</p> <p>Buttons: Ok Apply Cancel</p>						
<p>33.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Select the <b>Network Element Name</b> of the <b>DP-SOAM site</b> where the <b>DP</b> is physically located from the list of available NEs in the pull-down menu</p> <p><b>NOTE:</b> After the <i>Network Element Name</i> is selected, the <i>Interfaces</i> fields will be displayed, as seen in <b>Step 35</b>.</p>	 <p>Network Element Name: - Unassigned - * Select the network element</p> <p>Location: dr_dallastx Location description [Default = character string. Valid value is</p> <p>Buttons: Ok Apply Cancel</p>						
<p>34.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Enter the site location.</p> <p><b>NOTE:</b> <i>Location</i> is an optional field.</p>	 <p>Location: Cary_NC Location description [Default = character string. Valid value is</p>						

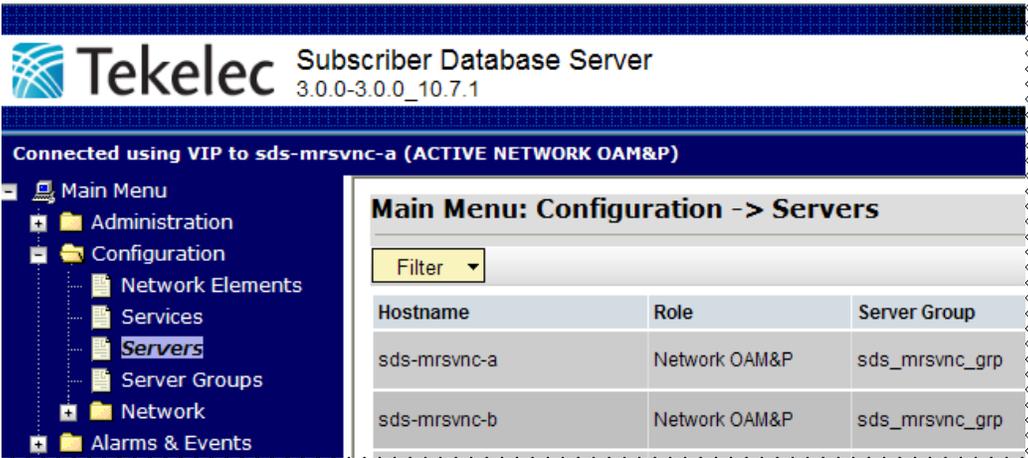
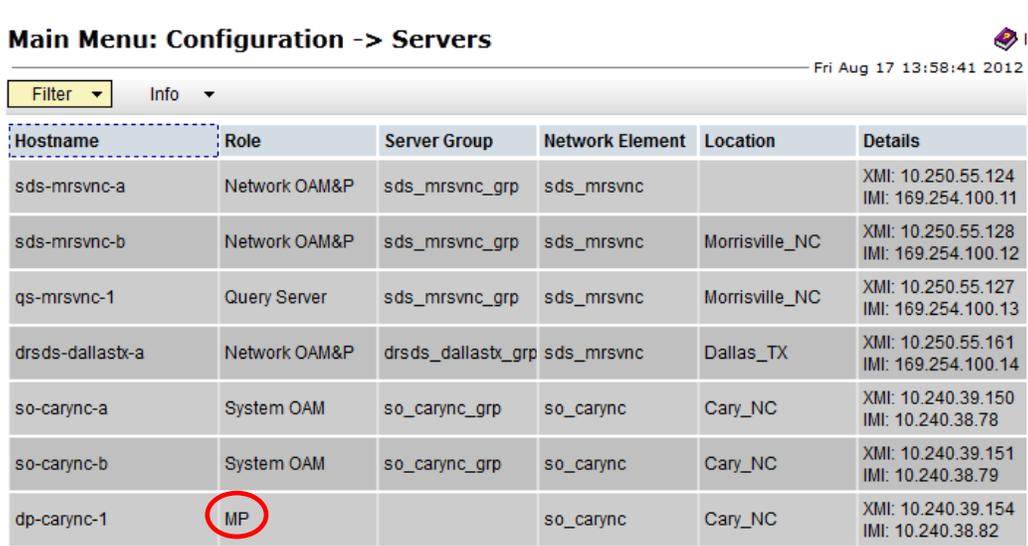
## Procedure 10.1 Configuring the Database Processor Server (DP)

<p>35.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>1) Enter the <b>XMI IP address</b> and <b>IMI IP address</b> for the <b>DP-SOAM Server</b>.</p> <p>2) Set the <b>XMI Interface</b> to “<b>bond1</b>” and do NOT check the <b>VLAN</b> box.</p> <p>3) Set the <b>IMI Interface</b> to “<b>bond0</b>” and check the <b>VLAN</b> box.</p>	<table border="1"> <thead> <tr> <th>Network</th> <th>IP Address</th> <th>Interface</th> <th>VLAN</th> </tr> </thead> <tbody> <tr> <td>XMI (10.240.39.128/25)</td> <td>10.240.39.154</td> <td>bond1</td> <td><input type="checkbox"/> VLAN (3)</td> </tr> <tr> <td>IMI (10.240.38.64/26)</td> <td>10.240.38.82</td> <td>bond0</td> <td><input checked="" type="checkbox"/> VLAN (4)</td> </tr> </tbody> </table>	Network	IP Address	Interface	VLAN	XMI (10.240.39.128/25)	10.240.39.154	bond1	<input type="checkbox"/> VLAN (3)	IMI (10.240.38.64/26)	10.240.38.82	bond0	<input checked="" type="checkbox"/> VLAN (4)						
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<p>36.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>1) Click the “<b>NTP Servers:</b>” “<b>Add</b>” dialogue button.</p> <p>2) Enter the <b>NTP Server IP Address</b> for an NTP Server.</p> <p>3) If you have another <b>NTP Server IP address</b>, repeat (1) and (2) to enter it.</p> <p>4) Optionally, click the “<b>Prefer</b>” checkbox to prefer one NTP Server over the other.</p>	<p><b>NTP Servers:</b></p> <table border="1"> <thead> <tr> <th>NTP Server IP Address</th> <th>Prefer</th> <th>Action</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td>Add</td> </tr> <tr> <td>10.250.32.10</td> <td><input type="checkbox"/></td> <td>Remove</td> </tr> </tbody> </table> <p><b>NTP Servers:</b></p> <table border="1"> <thead> <tr> <th>NTP Server IP Address</th> <th>Prefer</th> <th>Action</th> </tr> </thead> <tbody> <tr> <td>10.250.32.51</td> <td><input type="checkbox"/></td> <td>Remove</td> </tr> <tr> <td>10.250.32.10</td> <td><input checked="" type="checkbox"/></td> <td>Remove</td> </tr> </tbody> </table>	NTP Server IP Address	Prefer	Action			Add	10.250.32.10	<input type="checkbox"/>	Remove	NTP Server IP Address	Prefer	Action	10.250.32.51	<input type="checkbox"/>	Remove	10.250.32.10	<input checked="" type="checkbox"/>	Remove
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## Procedure 10.1 Configuring the Database Processor Server (DP)

<p>37.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>1) The user should be presented with a banner information message stating “Pre-Validation passed”.</p> <p>2) Click the “Apply” dialogue button...</p>	 <p>The screenshot shows the 'Main Menu: Configuration -&gt; Servers [Insert]' window. A green information dialog box is displayed with the message 'Pre-Validation passed - Data NOT committed ...'. The 'Host Name' field contains 'so-cary-nc'. Below the dialog is a table for network interfaces:</p> <table border="1"> <thead> <tr> <th>Network</th> <th>IP Address</th> <th>Interface</th> <th></th> </tr> </thead> <tbody> <tr> <td>XMI (10.240.39.128/25)</td> <td>10.240.39.154</td> <td>bond1</td> <td><input type="checkbox"/> VLAN (3)</td> </tr> <tr> <td>IMI (10.240.38.64/26)</td> <td>10.240.38.82</td> <td>bond0</td> <td><input checked="" type="checkbox"/> VLAN (4)</td> </tr> </tbody> </table> <p>Buttons for 'Ok', 'Apply', and 'Cancel' are visible at the bottom of the interface.</p>	Network	IP Address	Interface		XMI (10.240.39.128/25)	10.240.39.154	bond1	<input type="checkbox"/> VLAN (3)	IMI (10.240.38.64/26)	10.240.38.82	bond0	<input checked="" type="checkbox"/> VLAN (4)
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<p>38.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>If the values provided match the network ranges assigned to the NE, the user will receive a banner information message showing that the data has been validated and committed to the DB.</p>	 <p>The screenshot shows the 'Main Menu: Configuration -&gt; Servers [Insert]' window. A green information dialog box is displayed with the message 'Data committed!'. The 'Host Name' field contains 'dp-carync-1'. Below the dialog is a table for network interfaces:</p> <table border="1"> <thead> <tr> <th>Network</th> <th>IP Address</th> <th>Interface</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>XMI (10.240.39.128/25)</td> <td>10.240.39.154</td> <td>bond1</td> <td><input type="checkbox"/> VLAN (3)</td> </tr> <tr> <td>IMI (10.240.38.64/26)</td> <td>10.240.38.82</td> <td>bond0</td> <td><input checked="" type="checkbox"/> VLAN (4)</td> </tr> </tbody> </table> <p>Buttons for 'Ok', 'Apply', and 'Cancel' are visible at the bottom of the interface.</p>	Network	IP Address	Interface	Description	XMI (10.240.39.128/25)	10.240.39.154	bond1	<input type="checkbox"/> VLAN (3)	IMI (10.240.38.64/26)	10.240.38.82	bond0	<input checked="" type="checkbox"/> VLAN (4)
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## Procedure 10.2 Applying the Database Processor Configuration file (DP)

<p>39.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>Select...</p> <p><b>Main Menu</b>          → Configuration          → Servers</p> <p>...as shown on the right.</p>	 <p>Tekelec Subscriber Database Server 3.0.0-3.0.0_10.7.1</p> <p>Connected using VIP to sds-mrsvnc-a (ACTIVE NETWORK OAM&amp;P)</p> <p>Main Menu: Configuration -&gt; Servers</p> <table border="1"> <thead> <tr> <th>Hostname</th> <th>Role</th> <th>Server Group</th> </tr> </thead> <tbody> <tr> <td>sds-mrsvnc-a</td> <td>Network OAM&amp;P</td> <td>sds_mrsvnc_grp</td> </tr> <tr> <td>sds-mrsvnc-b</td> <td>Network OAM&amp;P</td> <td>sds_mrsvnc_grp</td> </tr> </tbody> </table>	Hostname	Role	Server Group	sds-mrsvnc-a	Network OAM&P	sds_mrsvnc_grp	sds-mrsvnc-b	Network OAM&P	sds_mrsvnc_grp																																							
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sds-mrsvnc-b	Network OAM&P	sds_mrsvnc_grp																																																
<p>40.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>On the “Configuration → Servers” screen, find the newly added DP server in the list.</p> <p><b>Note:</b> The DP server will have a “MP” role.</p>	 <p>Main Menu: Configuration -&gt; Servers</p> <p>Fri Aug 17 13:58:41 2012</p> <table border="1"> <thead> <tr> <th>Hostname</th> <th>Role</th> <th>Server Group</th> <th>Network Element</th> <th>Location</th> <th>Details</th> </tr> </thead> <tbody> <tr> <td>sds-mrsvnc-a</td> <td>Network OAM&amp;P</td> <td>sds_mrsvnc_grp</td> <td>sds_mrsvnc</td> <td></td> <td>XMI: 10.250.55.124 IMI: 169.254.100.11</td> </tr> <tr> <td>sds-mrsvnc-b</td> <td>Network OAM&amp;P</td> <td>sds_mrsvnc_grp</td> <td>sds_mrsvnc</td> <td>Morrisville_NC</td> <td>XMI: 10.250.55.128 IMI: 169.254.100.12</td> </tr> <tr> <td>qs-mrsvnc-1</td> <td>Query Server</td> <td>sds_mrsvnc_grp</td> <td>sds_mrsvnc</td> <td>Morrisville_NC</td> <td>XMI: 10.250.55.127 IMI: 169.254.100.13</td> </tr> <tr> <td>drsds-dallastx-a</td> <td>Network OAM&amp;P</td> <td>drsds_dallastx_grp</td> <td>sds_mrsvnc</td> <td>Dallas_TX</td> <td>XMI: 10.250.55.161 IMI: 169.254.100.14</td> </tr> <tr> <td>so-carync-a</td> <td>System OAM</td> <td>so_carync_grp</td> <td>so_carync</td> <td>Cary_NC</td> <td>XMI: 10.240.39.150 IMI: 10.240.38.78</td> </tr> <tr> <td>so-carync-b</td> <td>System OAM</td> <td>so_carync_grp</td> <td>so_carync</td> <td>Cary_NC</td> <td>XMI: 10.240.39.151 IMI: 10.240.38.79</td> </tr> <tr> <td>dp-carync-1</td> <td>MP</td> <td></td> <td>so_carync</td> <td>Cary_NC</td> <td>XMI: 10.240.39.154 IMI: 10.240.38.82</td> </tr> </tbody> </table>	Hostname	Role	Server Group	Network Element	Location	Details	sds-mrsvnc-a	Network OAM&P	sds_mrsvnc_grp	sds_mrsvnc		XMI: 10.250.55.124 IMI: 169.254.100.11	sds-mrsvnc-b	Network OAM&P	sds_mrsvnc_grp	sds_mrsvnc	Morrisville_NC	XMI: 10.250.55.128 IMI: 169.254.100.12	qs-mrsvnc-1	Query Server	sds_mrsvnc_grp	sds_mrsvnc	Morrisville_NC	XMI: 10.250.55.127 IMI: 169.254.100.13	drsds-dallastx-a	Network OAM&P	drsds_dallastx_grp	sds_mrsvnc	Dallas_TX	XMI: 10.250.55.161 IMI: 169.254.100.14	so-carync-a	System OAM	so_carync_grp	so_carync	Cary_NC	XMI: 10.240.39.150 IMI: 10.240.38.78	so-carync-b	System OAM	so_carync_grp	so_carync	Cary_NC	XMI: 10.240.39.151 IMI: 10.240.38.79	dp-carync-1	MP		so_carync	Cary_NC	XMI: 10.240.39.154 IMI: 10.240.38.82
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dp-carync-1	MP		so_carync	Cary_NC	XMI: 10.240.39.154 IMI: 10.240.38.82																																													

## Procedure 10.2 Applying the Database Processor Configuration file (DP)

41.



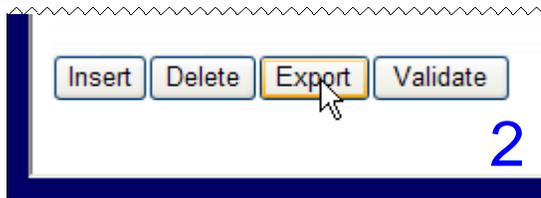
### Active SDS VIP:

1) Using the mouse, select the newly added DP server entry. The line entry containing the server with a “MP” role should now be highlighted in **GREEN**.

2) Select the “Export” dialogue button from the bottom left corner of the screen.

Hostname	Role	Server Group	Network Element	Location	Details
sds-mrsvnc-a	Network OAM&P	sds_mrsvnc_grp	sds_mrsvnc		XMI: 10.250.55.124 IMI: 169.254.100.11
sds-mrsvnc-b	Network OAM&P	sds_mrsvnc_grp	sds_mrsvnc	Morrisville_NC	XMI: 10.250.55.128 IMI: 169.254.100.12
qs-mrsvnc-1	Query Server	sds_mrsvnc_grp	sds_mrsvnc	Morrisville_NC	XMI: 10.250.55.127 IMI: 169.254.100.13
drdsds-dallastx-a	Network OAM&P	drdsds_dallastx_grp	sds_mrsvnc	Dallas_TX	XMI: 10.250.55.161 IMI: 169.254.100.14
so-carync-a	System OAM	so_carync_grp	so_carync	Cary_NC	XMI: 10.240.39.150 IMI: 10.240.38.78
so-carync-b	System OAM	so_carync_grp	so_carync	Cary_NC	XMI: 10.240.39.151 IMI: 10.240.38.79
dp-carync-1	MP		so_carync	Cary_NC	XMI: 10.240.39.154 IMI: 10.240.38.82

1



2

42.



### Active SDS VIP:

The user will receive a banner information message showing a download link for the “MP” configuration data.

Click on the word “downloaded” to download and save the file.

**Main Menu: Configuration -> Servers [Export]** Wed Dec 14 19:3

Filter  Info

Hostname	Role	IP	Port	Server Group	Network Element	Location
sds-mrsvnc-a	Network OAM&P	10.250.55.1	169.254.100	sds_mrsvnc_grp	sds_mrsvnc	Morrisville_NC
sds-mrsvnc-b	NETWORK OAM&P	10.250.55.1	169.254.100	sds_mrsvnc_grp	sds_mrsvnc	Morrisville_NC
drdsds-dallastx-a	NETWORK OAM&P	10.250.55.1	169.254.100	drdsds_dallastx_grp	dr_dallastx	Dallas_TX

**Info**

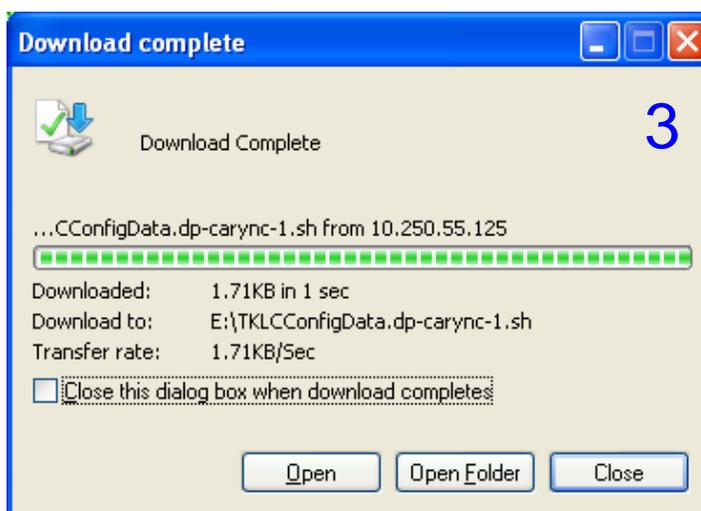
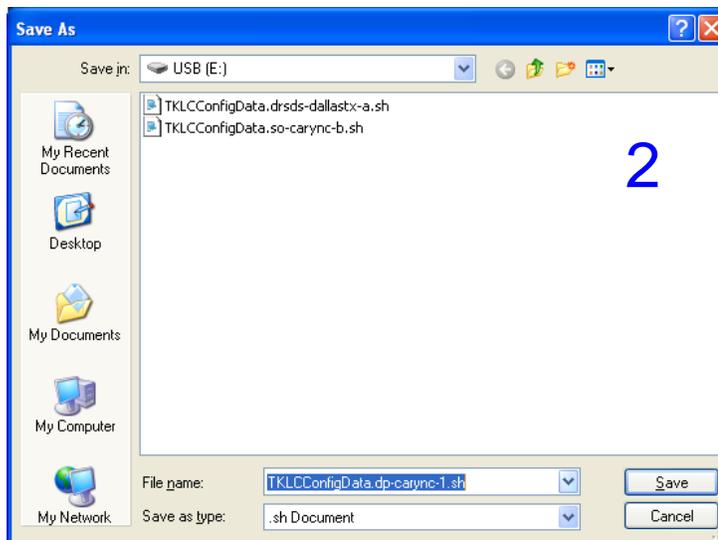
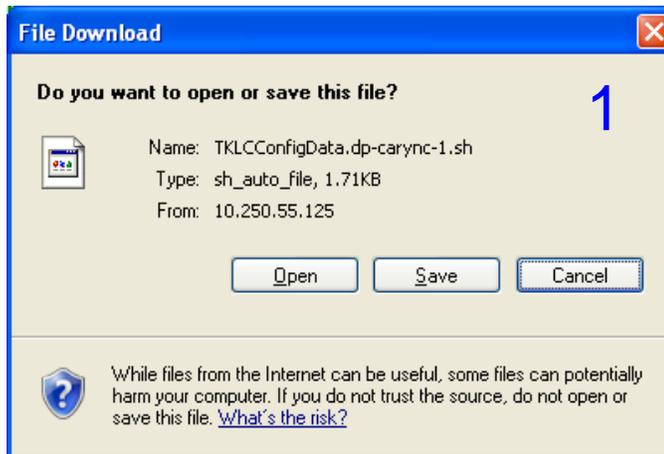
- Exported server data in TKLConfigData.dp-carync-1.sh may be **downloaded**

## Procedure 10.2 Applying the Database Processor Configuration file (DP)

43.

### Active SDS VIP:

- 1) Click the “Save” dialogue button.
- 2) Save the DP server configuration file to a USB flash drive.
- 3) Click the “Close” dialogue button



44.

Repeat this procedure for each additional DP Server.

- Repeat **Steps 27 - 43** of this procedure for each additional DP server installed in the DP-SOAM cabinet.

## Procedure 10.2 Applying the Database Processor Configuration file (DP)

<p>45.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Click the “Logout” link on the SDS server GUI.</p>	
<p>46.</p> <input type="checkbox"/>	<p><b>Active SDS Server:</b></p> <p>Access the server console.</p>	<ul style="list-style-type: none"> <li>Connect to the <b>Active SDS VIP</b> console using one of the access methods described in <b>Section 2.3</b>.</li> </ul>
<p>47.</p> <input type="checkbox"/>	<p><b>Active SDS Server:</b></p> <p>1) Access the command prompt.</p> <p>2) Log into the OAM server as the “root” user.</p>	<pre>CentOS release 5.6 (Final) Kernel 2.6.18-238.19.1.el5prere15.0.0_72.22.0 on an x86_64  hostname1260476035 login: root Password: &lt;root_password&gt;</pre>
<p>48.</p> <input type="checkbox"/>	<p><b>Active SDS Server:</b></p> <p>Output similar to that shown on the right will appear as the server access the command prompt.</p>	<pre>*** TRUNCATED OUTPUT *** VPATH=/opt/TKLCcomcol/runcm5.16:/opt/TKLCcomcol/cm5.16 PRODPATH= RELEASE=5.16 RUNID=00 VPATH=/var/TKLC/rundb:/usr/TKLC/appworks:/usr/TKLC/awpcommon:/usr/TKLC/comagent-gui:/usr/TKLC/comagent:/usr/TKLC/sds PRODPATH=/opt/comcol/prod RUNID=00 [root@sds-mrsvnc-a ~]#</pre>
<p>49.</p> <input type="checkbox"/>	<p><b>Active SDS Server:</b></p> <p>Change directory to filegmt</p>	<pre>[root@sds-mrsvnc-a ~]# cd /var/TKLC/db/filegmt</pre>
<p>50.</p> <input type="checkbox"/>	<p><b>Active SDS Server:</b></p> <p>Attain directory listing. Look for the configuration file(s) that have just been generated for the DP(s). This should appear toward the bottom of the output.</p>	<pre>[root@sds-mrsvnc-a filegmt]# ls -ltr TKLCConfigData*.sh  *** TRUNCATED OUTPUT *** -rw-rw-rw- 1 root root 2042 Dec 20 10:54 TKLCConfigData.dp-carync-1.sh -rw-rw-rw- 1 root root 2042 Dec 20 10:57 TKLCConfigData.dp-carync-2.sh</pre>

Procedure 10.2 Applying the Database Processor Configuration file (DP)		
51. <input type="checkbox"/>	<b>Active SDS Server:</b>  Use <b>scp</b> to copy the file(s) to the PMAC server.	<pre>[root@sds-mrsvnc-a filemgmt]# scp -p &lt;configuration_file-1&gt; &lt;configuration_file-2&gt; root@&lt;PMAC_IP&gt;:/tmp root@10.240.39.4's password: TKLCConfigData.dp-carync-1.sh                100% 1757      1.7KB/s   00:00 TKLCConfigData.dp-carync-2.sh                100% 1757      1.7KB/s 00:00[root@sds-mrsvnc-a filemgmt]#</pre>
52. <input type="checkbox"/>	<b>PMAC Server:</b>  Access the server console.	<ul style="list-style-type: none"> <li>• Connect to the <b>PMAC Server</b> console using one of the access methods described in <b>Section 2.3</b>.</li> </ul>
53. <input type="checkbox"/>	<b>PMAC Server:</b>  Copy the server configuration file to the Control IP for the DP.  <b>Note:</b> The Control IP for each DP is obtained in <b>Step 16</b> of this procedure.	<pre>[root@hostname1260476035 ~]# scp -p /tmp/&lt;configuration_file&gt; root@&lt;DP_Control_IP&gt;:/var/TKLC/db/filemgmt root@192.168.1.226's password: TKLCConfigData.dp-carync-1.sh                100% 1757      1.7KB/s   00:00 [root@pmac ~]#</pre>
54. <input type="checkbox"/>	<b>PMAC Server:</b>  Connect to the DP server console from the PMAC Server Console.	<pre>[root@pmac ~]# ssh &lt;DP_Control_IP&gt; root@192.168.1.226's password: &lt;root_password&gt;</pre>
55. <input type="checkbox"/>	<b>DP Server:</b>  Output similar to that shown on the right will appear as the server access the command prompt	<pre>*** TRUNCATED OUTPUT *** VPATH=/opt/TKLCComcol/runcm5.16:/opt/TKLCComcol/cm5.16 PRODPATH= RELEASE=5.16 RUNID=00 VPATH=/var/TKLC/rundb:/usr/TKLC/appworks:/usr/TKLC/awpcommon:/usr/TKLC/comagent-gui:/usr/TKLC/comagent:/usr/TKLC/sds PRODPATH=/opt/comcol/prod RUNID=00 [root@hostname1260476035 ~]#</pre>

## Procedure 10.2 Applying the Database Processor Configuration file (DP)

<p>56.</p> <input type="checkbox"/>	<p><b>DP Server:</b></p> <p>Copy the <b>SDS DP</b> configuration file to the “<b>/var/tmp</b>” directory on the server, making sure to rename the file by omitting the server hostname (shown in <b>red</b>) from the file name.</p> <p><b>NOTE:</b> <i>The server will poll the <b>/var/tmp</b> directory for the presence of the configuration file and automatically execute it when found.</i></p>	<p><b>Example:</b></p> <p>TKLCConfigData&lt;<b>.server_hostname</b>&gt;.sh → will translate to →TKLCConfigData.sh</p> <pre>[root@hostname1260476035 ~]# cp -p /var/TKLC/db/filemgmt/TKLCConfigData.dp-carync-1.sh /var/tmp/TKLCConfigData.sh</pre>
<p>57.</p> <input type="checkbox"/>	<p><b>DP Server:</b></p> <p>After the script completes, a broadcast message will be sent to the terminal.</p> <p><b>NOTE:</b> <i>The user should be aware that the time to complete this step varies by server and may take from 3-20 minutes to complete.</i></p>	<p><b>*** NO OUTPUT FOR ≈ 3-20 MINUTES ***</b></p> <p>Broadcast message from root (Mon Dec 14 15:47:33 2009):</p> <p>Server configuration completed successfully!</p> <p>See /var/TKLC/appw/logs/Process/install.log for details.</p> <p>Please remove the USB flash drive if connected and reboot the server.</p> <p>&lt;ENTER&gt;</p>

## Procedure 10.2 Applying the Database Processor Configuration file (DP)

<p>58.</p> <input type="checkbox"/>	<p>Accept upgrade to the Application Software.</p>	<pre>[root@hostname1260476035 ~]# /var/TKLC/backout/accept Called with options: --accept Loading Upgrade::Backout::RPM Accepting Upgrade Setting POST_UPGRADE_ACTION to ACCEPT in upgrade info. Cleaning backout directory. Clearing Upgrade Accept/Reject alarm. Cleaning message from MOTD. Cleaning up RPM config backup files... Checking / Checking /boot Checking /tmp Checking /usr Checking /var Checking /var/TKLC Checking /tmp/appworks_temp Checking /var/TKLC/appw/logs/Process Checking /var/TKLC/appw/logs/Security Checking /var/TKLC/db/filemgmt Checking /var/TKLC/rundb Starting cleanup of RCS repository.   INFO: Removing '/var/lib/prelink/force' from RCS repository   INFO: Removing '/etc/my.cnf' from RCS repository [root@hostname1260476035 ~]#</pre>
<p>59.</p>	<p><b>DP Server:</b> Configure the time zone.</p>	<pre>[root@hostname1260476035 ~]# set_ini_tz.pl &lt;time zone&gt;</pre> <p><b>Note: The following command example uses Etc/UTC time zone. Replace, as appropriate, with the time zone you have selected for this installation. See Appendix H for a list of valid time zones.</b></p> <pre>[root@hostname1260476035 ~]# set_ini_tz.pl "Etc/UTC"</pre>
<p>60.</p> <input type="checkbox"/>	<p><b>DP Server:</b> Initiate a reboot of the DP.</p>	<pre>[root@hostname1260476035 ~]# init 6</pre>
<p>61.</p> <input type="checkbox"/>	<p><b>DP Server:</b> Output similar to that shown on the right may be observed as the server initiates a reboot.</p>	<pre>[root@hostname1260476035 ~]# Connection to 192.168.1.226 closed by remote host. Connection to 192.168.1.226 closed. [root@pmac ~]#</pre>
<p>62.</p> <input type="checkbox"/>	<p><b>PMAC Server:</b> After the DP server has completed reboot...  Re-connect to the DP server console from the PMAC Server Console</p>	<pre>[root@pmac ~]# ssh &lt;DP_Control_IP&gt; root@192.168.1.226's password: &lt;root_password&gt;</pre>

## Procedure 10.2 Applying the Database Processor Configuration file (DP)

<p>63.</p> <input type="checkbox"/>	<p><b>DP Server:</b></p> <p>After the server has completed reboot...</p> <p>Verify that the server console returns to a login prompt.</p>	<p><b>*** TRUNCATED OUTPUT ***</b></p> <pre>VPATH=/var/TKLC/rundb:/usr/TKLC/appworks:/usr/TKLC/awpss7:/usr/TKLC/exhr PRODPATH=/opt/TKLCcomcol/cm5.13/prod RUNID=00 WARNING: There are not any servers to send notifications to. The subsys lock will be createdcompleteTasks started: Sun Dec 13 17:21:03 2009 LOG FILE: /var/TKLC/log/TaskMgr/completeTasks.log SysmgmtDB database tables exist  CentOS release 5.6 (Final) Kernel 2.6.18-238.19.1.el5prere15.0.0_72.20.0 on an x86_64  dp-carync-1 login: root Password: &lt;root_password&gt;</pre>
<p>64.</p> <input type="checkbox"/>	<p><b>DP Server:</b></p> <p>1) Verify that the <b>XMI IP address</b> input in <b>Step 35</b> has been applied to <b>“bond1”</b>.</p> <p>2) Verify that the <b>IMI IP address</b> input in <b>Step 35</b> has been applied to <b>“bond0.4”</b>.</p> <p><b>NOTE:</b> Exact bond configuration may vary for custom network implementations.</p>	<pre>[root@dp-carync-1 ~]# ifconfig  grep in  grep -v inet6 bond0    Link encap:Ethernet  HWaddr B4:99:BA:AC:BD:64           inet addr:192.168.1.226 Bcast:192.168.1.255 Mask:255.255.255.0 bond0.4  Link encap:Ethernet  HWaddr B4:99:BA:AC:BD:64           inet addr:10.240.38.82 Bcast:10.240.38.127 Mask:255.255.255.192 bond1    Link encap:Ethernet  HWaddr B4:99:BA:AC:BD:64           inet addr:10.240.39.154 Bcast:10.240.39.255 Mask:255.255.255.128 eth01    Link encap:Ethernet  HWaddr B4:99:BA:AC:BD:64 eth02    Link encap:Ethernet  HWaddr B4:99:BA:AC:BD:64 lo       Link encap:Local Loopback           inet addr:127.0.0.1 Mask:255.0.0.0  [root@dp-carync-1 ~]#</pre>
<p>65.</p> <input type="checkbox"/>	<p><b>DP Server:</b></p> <p>Use <b>“ping”</b> to verify that the <b>“bond1”</b> device now has connectivity to the <b>XMI Gateway address</b> associated with the NE.</p> <p><b>NOTE:</b> Use the <b>&lt;CTRL-C&gt;</b> key combination to terminate the <b>“ping”</b> process after a few seconds.</p>	<pre>[root@dp-carync-1 ~]# ping 10.240.39.154 PING 10.240.39.154 (10.240.39.154) 56(84) bytes of data. 64 bytes from 10.240.39.154: icmp_seq=1 ttl=64 time=0.034 ms 64 bytes from 10.240.39.154: icmp_seq=2 ttl=64 time=0.018 ms 64 bytes from 10.240.39.154: icmp_seq=3 ttl=64 time=0.019 ms 64 bytes from 10.240.39.154: icmp_seq=4 ttl=64 time=0.018 ms 64 bytes from 10.240.39.154: icmp_seq=5 ttl=64 time=0.021 ms 64 bytes from 10.240.39.154: icmp_seq=6 ttl=64 time=0.019 ms&lt;CTRL-C&gt;  --- 10.240.39.154 ping statistics --- 6 packets transmitted, 6 received, 0% packet loss, time 5000ms rtt min/avg/max/mdev = 0.018/0.021/0.034/0.007 ms [root@dp-carync-1 ~]#</pre>

## Procedure 10.2 Applying the Database Processor Configuration file (DP)

<p>66.</p> <input type="checkbox"/>	<p><b>DP Server:</b></p> <p>Use “ping” to verify that the “bond0.4” device now has connectivity to the <b>IMI Gateway address</b> associated with the NE.</p> <p><b>NOTE:</b> Use the <b>&lt;CTRL-C&gt;</b> key combination to terminate the “ping” process after a few seconds.</p>	<pre>[root@dp-carync-1 ~]# ping 10.240.38.82 PING 10.240.38.82 (10.240.38.82) 56(84) bytes of data. 64 bytes from 10.240.38.82: icmp_seq=1 ttl=64 time=0.038 ms 64 bytes from 10.240.38.82: icmp_seq=2 ttl=64 time=0.020 ms 64 bytes from 10.240.38.82: icmp_seq=3 ttl=64 time=0.019 ms 64 bytes from 10.240.38.82: icmp_seq=4 ttl=64 time=0.021 ms 64 bytes from 10.240.38.82: icmp_seq=5 ttl=64 time=0.018 ms 64 bytes from 10.240.38.82: icmp_seq=6 ttl=64 time=0.024 ms&lt;CTRL-C&gt;  --- 10.240.38.82 ping statistics --- 6 packets transmitted, 6 received, 0% packet loss, time 5000ms rtt min/avg/max/mdev = 0.018/0.023/0.038/0.007 ms [root@dp-carync-1 ~]#</pre>
<p>67.</p> <input type="checkbox"/>	<p><b>DP Server:</b></p> <p>Use the “ntpq” command to verify that the server has connectivity to the assigned Primary and Secondary NTP server(s).</p>	<pre>[root@dp-carync-1 ~]# ntpq -np       remote           refid      st t when poll reach  delay  offset  jitter ===== *10.250.32.10       192.5.41.209    2 u  15   64  377   0.238    4.384    1.405 +10.250.32.51       192.5.41.209    2 u  21   64  377   0.263    3.749    1.358 [root@dp-carync-1 ~]#</pre>



**IF CONNECTIVITY TO THE NTP SERVER(S) CANNOT BE ESTABLISHED, STOP AND EXECUTE THE FOLLOWING STEPS:**

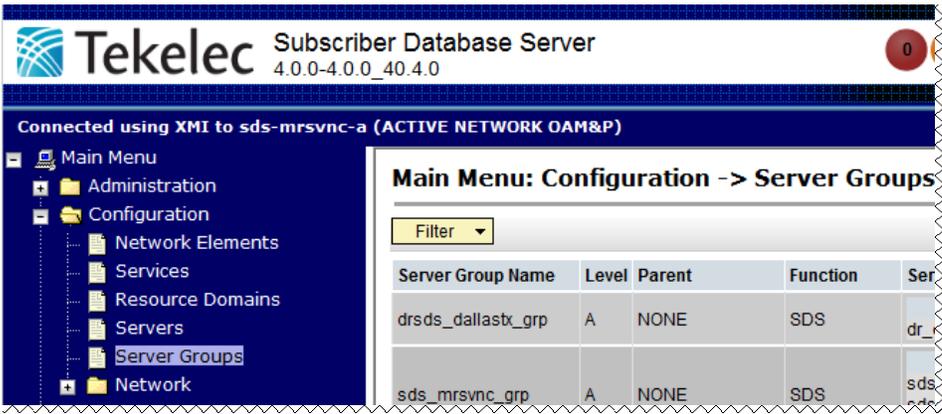
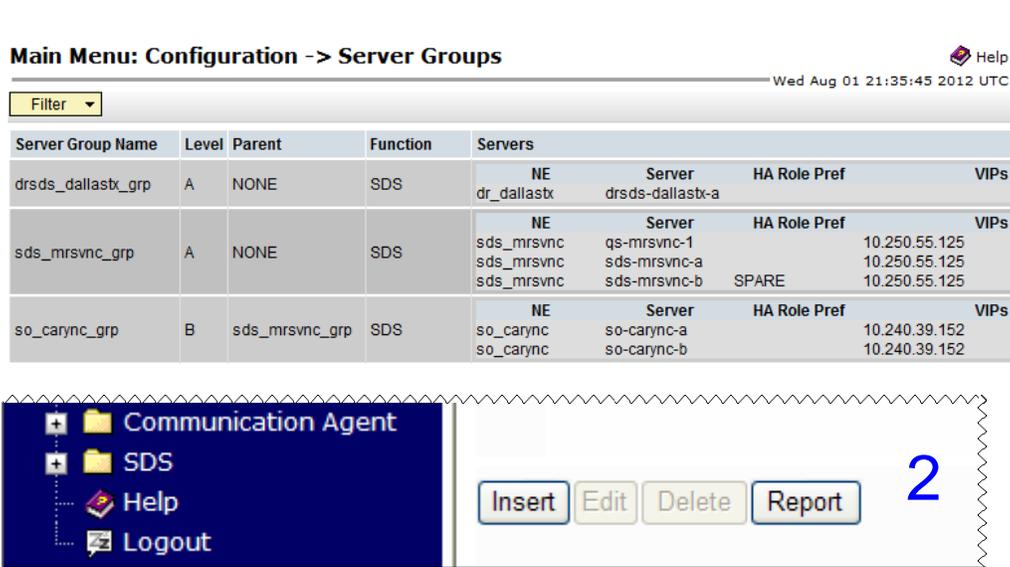
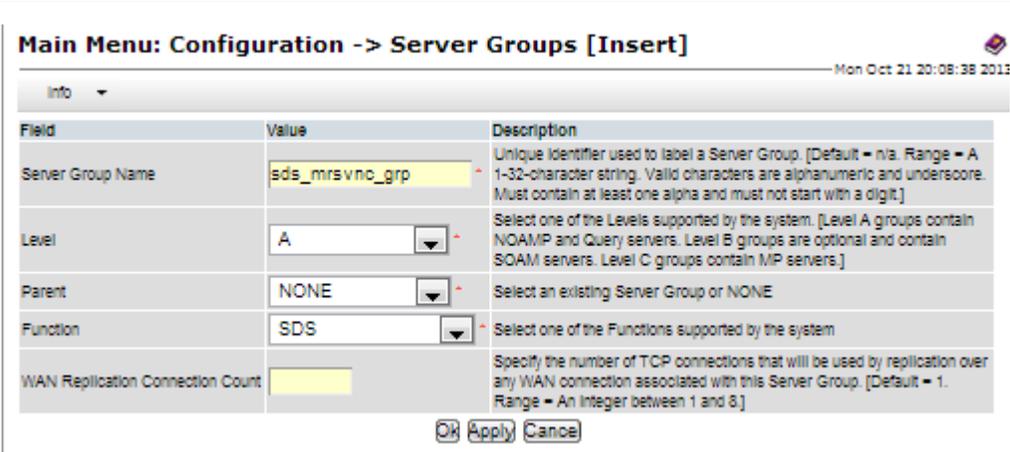
- 1) Contact the customer to verify that the IP addresses for the NTP server(s) are correct.
- 2) Have the customer IT group provide a network path from the OAM server IP to the assigned NTP IP addresses.

**ONCE NETWORK CONNECTIVITY IS ESTABLISHED TO THE ASSIGNED NTP IP ADDRESSES, THEN RESTART THIS PROCEDURE BEGINNING WITH STEP 67.**

## Procedure 10.2 Applying the Database Processor Configuration file (DP)

<p><b>68.</b> <input type="checkbox"/></p>	<p><b>DP Server:</b> Execute a “<b>syscheck</b>” to verify the current health of the server.</p>	<pre>[root@dp-carync-1 ~]# <b>syscheck</b> Running modules in class hardware...                                 OK  Running modules in class disk...                                 OK  Running modules in class net...                                 OK  Running modules in class system...                                 OK  Running modules in class proc...                                 OK  LOG LOCATION: /var/TKLC/log/syscheck/fail_log [root@dp-carync-1 ~]#</pre>
<p><b>69.</b> <input type="checkbox"/></p>	<p><b>DP Server::</b> Exit from the command line to return the server console to the login prompt.</p>	<pre>[root@dp-carync-1 ~]# <b>exit</b> Connection to 192.168.1.199 closed. [root@pmac ~]#</pre>
<p><b>70.</b> <input type="checkbox"/></p>	<p>Repeat <b>Steps 53 - 69</b> of this procedure for each subtending <b>DP</b> server installed in the same DP-SOAM enclosure.</p>	
<p><b>71.</b> <input type="checkbox"/></p>	<p><b>PMAC Server:</b> Exit from the PMAC server.</p>	<pre>[root@pmac ~]# <b>exit</b></pre>

## Procedure 10.3 Configuring the Database Processor Server Group (DP)

<p><b>72.</b> <input type="checkbox"/></p>	<p><b>Active SDS VIP:</b> Select...</p> <p><b>Main Menu</b> → Configuration → <b>Server Groups</b></p> <p>...as shown on the right.</p>	 <p style="text-align: center;"><b>Main Menu: Configuration -&gt; Server Groups</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Server Group Name</th> <th>Level</th> <th>Parent</th> <th>Function</th> <th>Ser</th> </tr> </thead> <tbody> <tr> <td>drsds_dallastx_grp</td> <td>A</td> <td>NONE</td> <td>SDS</td> <td>dr_</td> </tr> <tr> <td>sds_mrsvnc_grp</td> <td>A</td> <td>NONE</td> <td>SDS</td> <td>sds</td> </tr> </tbody> </table>	Server Group Name	Level	Parent	Function	Ser	drsds_dallastx_grp	A	NONE	SDS	dr_	sds_mrsvnc_grp	A	NONE	SDS	sds																																										
Server Group Name	Level	Parent	Function	Ser																																																							
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sds_mrsvnc_grp	A	NONE	SDS	sds																																																							
<p><b>73.</b> <input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>1) The user will be presented with the “<b>Server Groups</b>” configuration screen as shown on the right.</p> <p>2) Select the “<b>Insert</b>” dialogue button from the bottom left corner of the screen.</p> <p><b>NOTE:</b> The user may need to use the vertical scroll-bar in order to make the “<b>Insert</b>” dialogue button visible.</p>	 <p style="text-align: center;"><b>Main Menu: Configuration -&gt; Server Groups</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Server Group Name</th> <th>Level</th> <th>Parent</th> <th>Function</th> <th>Servers</th> <th>HA Role Pref</th> <th>VIPs</th> </tr> </thead> <tbody> <tr> <td rowspan="2">drsds_dallastx_grp</td> <td rowspan="2">A</td> <td rowspan="2">NONE</td> <td rowspan="2">SDS</td> <td>NE</td> <td>Server</td> <td></td> </tr> <tr> <td>dr_dallastx</td> <td>drsds-dallastx-a</td> <td></td> </tr> <tr> <td rowspan="3">sds_mrsvnc_grp</td> <td rowspan="3">A</td> <td rowspan="3">NONE</td> <td rowspan="3">SDS</td> <td>NE</td> <td>Server</td> <td>HA Role Pref</td> </tr> <tr> <td>sds_mrsvnc</td> <td>qs-mrsvnc-1</td> <td>10.250.55.125</td> </tr> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-a</td> <td>10.250.55.125</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>sds_mrsvnc</td> <td>sds-mrsvnc-b</td> <td>SPARE</td> <td>10.250.55.125</td> </tr> <tr> <td rowspan="2">so_carync_grp</td> <td rowspan="2">B</td> <td rowspan="2">sds_mrsvnc_grp</td> <td rowspan="2">SDS</td> <td>NE</td> <td>Server</td> <td>HA Role Pref</td> <td>VIPs</td> </tr> <tr> <td>so_carync</td> <td>so-carync-a</td> <td>10.240.39.152</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>so_carync</td> <td>so-carync-b</td> <td></td> <td>10.240.39.152</td> </tr> </tbody> </table> <p style="text-align: center;"><b>Communication Agent</b></p> <p style="text-align: center;"><b>SDS</b></p> <p style="text-align: center;"><b>Help</b></p> <p style="text-align: center;"><b>Logout</b></p> <p style="text-align: right;"><b>Insert</b> <b>Edit</b> <b>Delete</b> <b>Report</b></p>	Server Group Name	Level	Parent	Function	Servers	HA Role Pref	VIPs	drsds_dallastx_grp	A	NONE	SDS	NE	Server		dr_dallastx	drsds-dallastx-a		sds_mrsvnc_grp	A	NONE	SDS	NE	Server	HA Role Pref	sds_mrsvnc	qs-mrsvnc-1	10.250.55.125	sds_mrsvnc	sds-mrsvnc-a	10.250.55.125					sds_mrsvnc	sds-mrsvnc-b	SPARE	10.250.55.125	so_carync_grp	B	sds_mrsvnc_grp	SDS	NE	Server	HA Role Pref	VIPs	so_carync	so-carync-a	10.240.39.152					so_carync	so-carync-b		10.240.39.152
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drsds_dallastx_grp	A	NONE	SDS	NE	Server																																																						
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<p><b>74.</b> <input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>The user will be presented with the “<b>Server Groups [Insert]</b>” screen as shown on the right.</p> <p><b>NOTE:</b> Leave the “<b>WAN Replication Connection Count</b>” blank (it will default to 1).</p>	 <p style="text-align: center;"><b>Main Menu: Configuration -&gt; Server Groups [Insert]</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Field</th> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Server Group Name</td> <td>sds_mrsvnc_grp</td> <td>Unique Identifier used to label a Server Group. [Default = n/a. Range = A 1-32-character string. Valid characters are alphanumeric and underscore. Must contain at least one alpha and must not start with a digit.]</td> </tr> <tr> <td>Level</td> <td>A</td> <td>Select one of the Levels supported by the system. [Level A groups contain NOAMP and Query servers. Level B groups are optional and contain SOAM servers. Level C groups contain MP servers.]</td> </tr> <tr> <td>Parent</td> <td>NONE</td> <td>Select an existing Server Group or NONE</td> </tr> <tr> <td>Function</td> <td>SDS</td> <td>Select one of the Functions supported by the system</td> </tr> <tr> <td>WAN Replication Connection Count</td> <td></td> <td>Specify the number of TCP connections that will be used by replication over any WAN connection associated with this Server Group. [Default = 1. Range = An Integer between 1 and 8.]</td> </tr> </tbody> </table> <p style="text-align: center;"><b>OK</b> <b>Apply</b> <b>Cancel</b></p>	Field	Value	Description	Server Group Name	sds_mrsvnc_grp	Unique Identifier used to label a Server Group. [Default = n/a. Range = A 1-32-character string. Valid characters are alphanumeric and underscore. Must contain at least one alpha and must not start with a digit.]	Level	A	Select one of the Levels supported by the system. [Level A groups contain NOAMP and Query servers. Level B groups are optional and contain SOAM servers. Level C groups contain MP servers.]	Parent	NONE	Select an existing Server Group or NONE	Function	SDS	Select one of the Functions supported by the system	WAN Replication Connection Count		Specify the number of TCP connections that will be used by replication over any WAN connection associated with this Server Group. [Default = 1. Range = An Integer between 1 and 8.]																																							
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## Procedure 10.3 Configuring the Database Processor Server Group (DP)

<p>75.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Input the <b>Server Group Name</b>.</p> <p>Note: Each DP will have its own server group. Group names may be differentiated by assigning each a unique name.</p>	<table border="1"> <thead> <tr> <th>Field</th> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Server Group Name</td> <td>dp_carync_1_grp *</td> <td>Unique identifier used to label a Server Group character string. Valid characters are alphanumeric and must not start with a digit.</td> </tr> </tbody> </table>	Field	Value	Description	Server Group Name	dp_carync_1_grp *	Unique identifier used to label a Server Group character string. Valid characters are alphanumeric and must not start with a digit.						
Field	Value	Description												
Server Group Name	dp_carync_1_grp *	Unique identifier used to label a Server Group character string. Valid characters are alphanumeric and must not start with a digit.												
<p>76.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Select “C” on the “Level” pull-down menu.</p>	<table border="1"> <tbody> <tr> <td>Level</td> <td>- Select Level - *</td> <td>Select one of the Levels supported by the system. [Level A groups contain NOAMP and Query servers. Level B groups are optional and contain SOAM servers. Level C groups contain MP servers.]</td> </tr> <tr> <td>Parent</td> <td>B C *</td> <td>Select an existing Server Group or NONE</td> </tr> </tbody> </table>	Level	- Select Level - *	Select one of the Levels supported by the system. [Level A groups contain NOAMP and Query servers. Level B groups are optional and contain SOAM servers. Level C groups contain MP servers.]	Parent	B C *	Select an existing Server Group or NONE						
Level	- Select Level - *	Select one of the Levels supported by the system. [Level A groups contain NOAMP and Query servers. Level B groups are optional and contain SOAM servers. Level C groups contain MP servers.]												
Parent	B C *	Select an existing Server Group or NONE												
<p>77.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Select <b>System OAM group</b> on the “Parent” pull-down menu.</p>	<table border="1"> <tbody> <tr> <td>Parent</td> <td>- Select Parent - *</td> <td>Select an existing Server Group or NONE</td> </tr> <tr> <td>Function</td> <td>- Select Parent - sds_mrsync_grp so_carync_grp *</td> <td>Select one of the Functions supported by the system</td> </tr> </tbody> </table> <p>Ok Apply Cancel</p>	Parent	- Select Parent - *	Select an existing Server Group or NONE	Function	- Select Parent - sds_mrsync_grp so_carync_grp *	Select one of the Functions supported by the system						
Parent	- Select Parent - *	Select an existing Server Group or NONE												
Function	- Select Parent - sds_mrsync_grp so_carync_grp *	Select one of the Functions supported by the system												
<p>78.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Select “SDS” on the “Function” pull-down menu.</p>	<table border="1"> <tbody> <tr> <td>Function</td> <td>SDS - Select Function - NONE SDS *</td> <td>Select one of the Functions supported by the system</td> </tr> </tbody> </table> <p>Ok Apply Cancel</p>	Function	SDS - Select Function - NONE SDS *	Select one of the Functions supported by the system									
Function	SDS - Select Function - NONE SDS *	Select one of the Functions supported by the system												
<p>79.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>1) The user should be presented with a banner information message stating “Pre-Validation passed”.</p> <p>2) Select the “Apply” dialog button.</p>	<p><b>Main Menu: Configuration -&gt; Server Groups [Insert]</b></p> <p>Info</p> <p>Info</p> <p>• Pre-Validation passed - Data NOT committed ...</p> <p>1</p> <table border="1"> <tbody> <tr> <td>Level</td> <td>C *</td> <td>Select one of the Levels supported by Query servers. Level B groups are optional and contain MP servers.]</td> </tr> <tr> <td>Parent</td> <td>so_carync_grp *</td> <td>Select an existing Server Group</td> </tr> <tr> <td>Function</td> <td>SDS *</td> <td>Select one of the Functions supported by the system</td> </tr> <tr> <td>WAN Replication Connection Count</td> <td></td> <td>Specify the number of TCP connections associated with this Server Group</td> </tr> </tbody> </table> <p>Ok Apply Cancel</p> <p>2</p>	Level	C *	Select one of the Levels supported by Query servers. Level B groups are optional and contain MP servers.]	Parent	so_carync_grp *	Select an existing Server Group	Function	SDS *	Select one of the Functions supported by the system	WAN Replication Connection Count		Specify the number of TCP connections associated with this Server Group
Level	C *	Select one of the Levels supported by Query servers. Level B groups are optional and contain MP servers.]												
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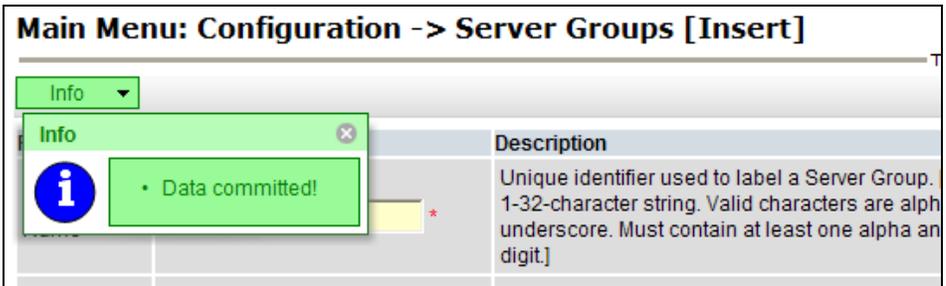
## Procedure 10.3 Configuring the Database Processor Server Group (DP)

80.

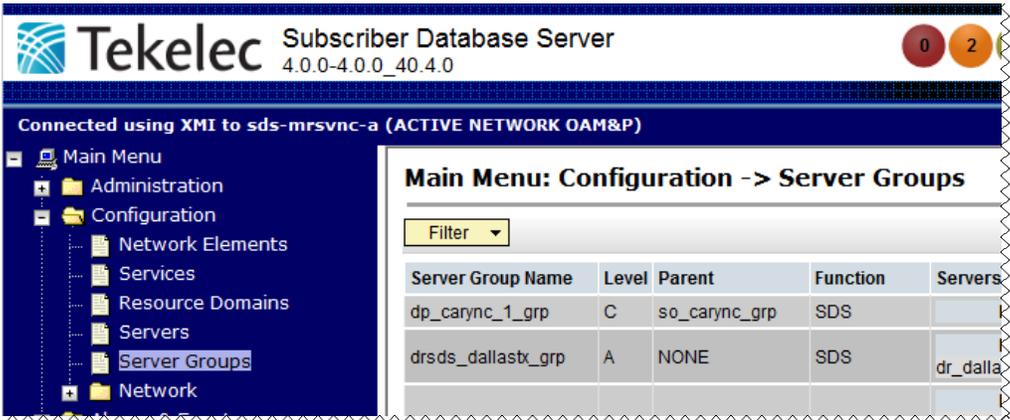
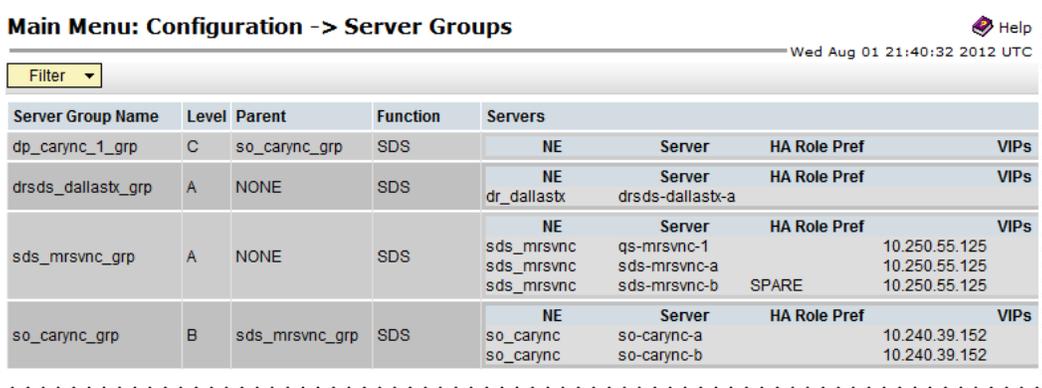
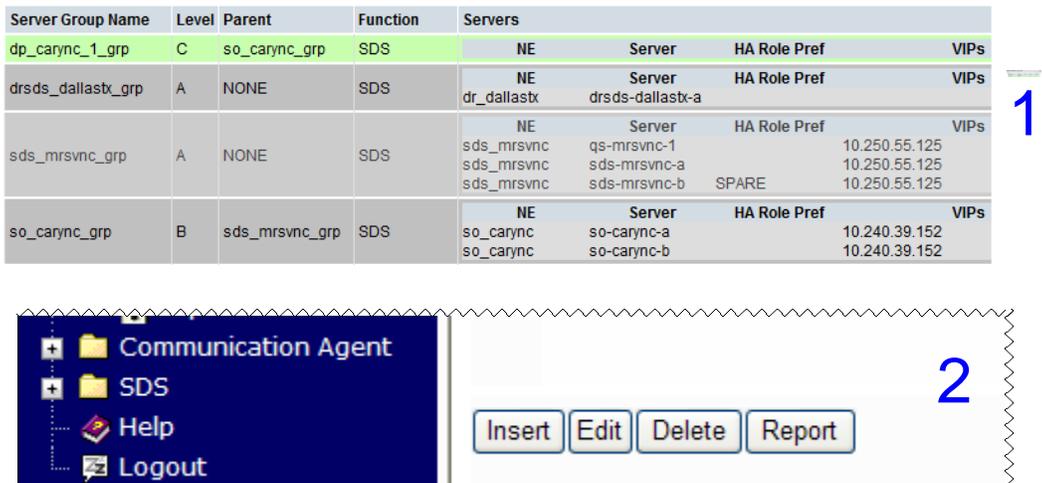


### Active SDS VIP:

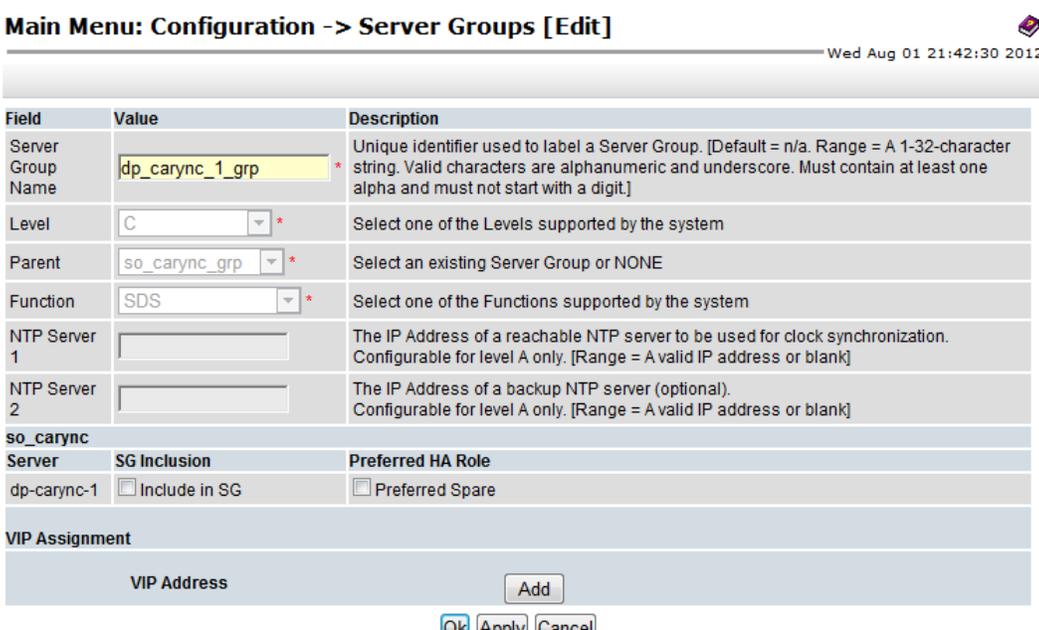
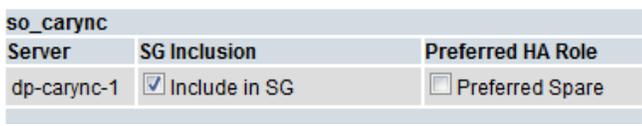
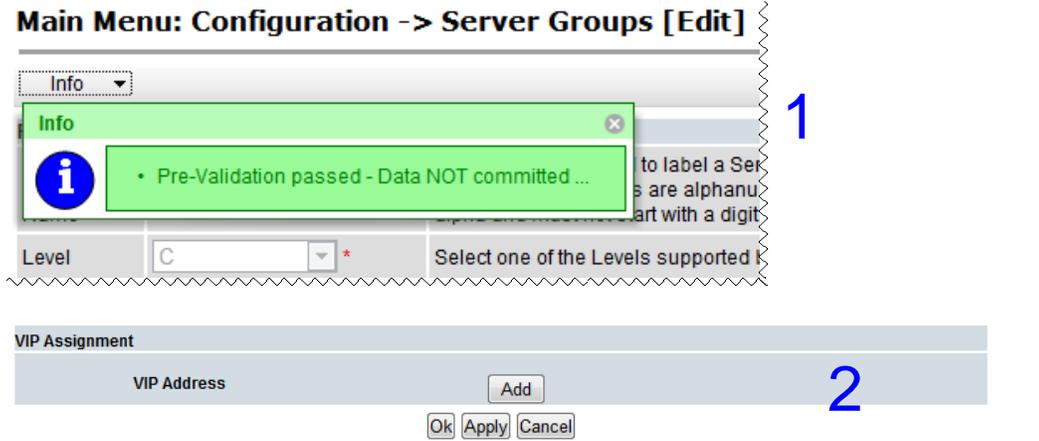
The user should be presented with a banner information message stating **"Data committed"**.



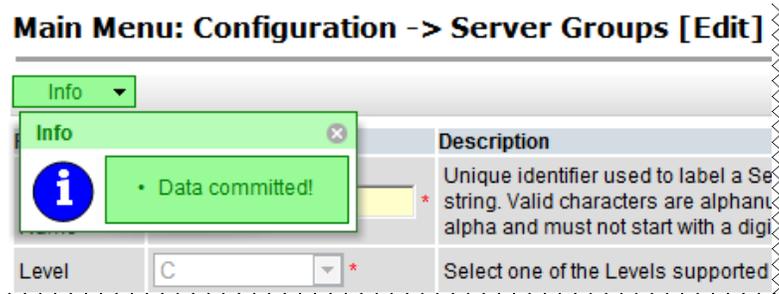
## Procedure 10.4 Adding the Database Processor into the DP Server Group (DP)

<p>81.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>Select...</p> <p><b>Main Menu</b>          → Configuration              → <i>Server Groups</i></p> <p>...as shown on the right.</p>	 <p>Tekelec Subscriber Database Server 4.0.0-4.0.0_40.4.0</p> <p>Connected using XMI to sds-mrsvnc-a (ACTIVE NETWORK OAM&amp;P)</p> <p>Main Menu: Configuration -&gt; Server Groups</p> <table border="1"> <thead> <tr> <th>Server Group Name</th> <th>Level</th> <th>Parent</th> <th>Function</th> <th>Servers</th> </tr> </thead> <tbody> <tr> <td>dp_carync_1_grp</td> <td>C</td> <td>so_carync_grp</td> <td>SDS</td> <td></td> </tr> <tr> <td>drdsds_dallastx_grp</td> <td>A</td> <td>NONE</td> <td>SDS</td> <td>dr_dalla</td> </tr> </tbody> </table>	Server Group Name	Level	Parent	Function	Servers	dp_carync_1_grp	C	so_carync_grp	SDS		drdsds_dallastx_grp	A	NONE	SDS	dr_dalla										
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dp_carync_1_grp	C	so_carync_grp	SDS																								
drdsds_dallastx_grp	A	NONE	SDS	dr_dalla																							
<p>82.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>The user will be presented with the “<b>Configuration</b> → <b>Server Groups</b>” screen as shown on the right</p>	 <p>Main Menu: Configuration -&gt; Server Groups</p> <p>Filter</p> <table border="1"> <thead> <tr> <th>Server Group Name</th> <th>Level</th> <th>Parent</th> <th>Function</th> <th>Servers</th> </tr> </thead> <tbody> <tr> <td>dp_carync_1_grp</td> <td>C</td> <td>so_carync_grp</td> <td>SDS</td> <td>NE Server HA Role Pref VIPs</td> </tr> <tr> <td>drdsds_dallastx_grp</td> <td>A</td> <td>NONE</td> <td>SDS</td> <td>dr_dallastx drsds-dallastx-a</td> </tr> <tr> <td>sds_mrsvnc_grp</td> <td>A</td> <td>NONE</td> <td>SDS</td> <td>sds_mrsvnc qs-mrsvnc-1 10.250.55.125 sds_mrsvnc sds-mrsvnc-a 10.250.55.125 sds_mrsvnc sds-mrsvnc-b SPARE 10.250.55.125</td> </tr> <tr> <td>so_carync_grp</td> <td>B</td> <td>sds_mrsvnc_grp</td> <td>SDS</td> <td>so_carync so-carync-a 10.240.39.152 so_carync so-carync-b 10.240.39.152</td> </tr> </tbody> </table>	Server Group Name	Level	Parent	Function	Servers	dp_carync_1_grp	C	so_carync_grp	SDS	NE Server HA Role Pref VIPs	drdsds_dallastx_grp	A	NONE	SDS	dr_dallastx drsds-dallastx-a	sds_mrsvnc_grp	A	NONE	SDS	sds_mrsvnc qs-mrsvnc-1 10.250.55.125 sds_mrsvnc sds-mrsvnc-a 10.250.55.125 sds_mrsvnc sds-mrsvnc-b SPARE 10.250.55.125	so_carync_grp	B	sds_mrsvnc_grp	SDS	so_carync so-carync-a 10.240.39.152 so_carync so-carync-b 10.240.39.152
Server Group Name	Level	Parent	Function	Servers																							
dp_carync_1_grp	C	so_carync_grp	SDS	NE Server HA Role Pref VIPs																							
drdsds_dallastx_grp	A	NONE	SDS	dr_dallastx drsds-dallastx-a																							
sds_mrsvnc_grp	A	NONE	SDS	sds_mrsvnc qs-mrsvnc-1 10.250.55.125 sds_mrsvnc sds-mrsvnc-a 10.250.55.125 sds_mrsvnc sds-mrsvnc-b SPARE 10.250.55.125																							
so_carync_grp	B	sds_mrsvnc_grp	SDS	so_carync so-carync-a 10.240.39.152 so_carync so-carync-b 10.240.39.152																							
<p>83.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>1) Using the mouse, select the MP Server Group associated with the DP being installed.</p> <p>2) Select the “<b>Edit</b>” dialogue button from the bottom left corner of the screen.</p>	 <table border="1"> <thead> <tr> <th>Server Group Name</th> <th>Level</th> <th>Parent</th> <th>Function</th> <th>Servers</th> </tr> </thead> <tbody> <tr style="background-color: #e0ffe0;"> <td>dp_carync_1_grp</td> <td>C</td> <td>so_carync_grp</td> <td>SDS</td> <td>NE Server HA Role Pref VIPs</td> </tr> <tr> <td>drdsds_dallastx_grp</td> <td>A</td> <td>NONE</td> <td>SDS</td> <td>dr_dallastx drsds-dallastx-a</td> </tr> <tr> <td>sds_mrsvnc_grp</td> <td>A</td> <td>NONE</td> <td>SDS</td> <td>sds_mrsvnc qs-mrsvnc-1 10.250.55.125 sds_mrsvnc sds-mrsvnc-a 10.250.55.125 sds_mrsvnc sds-mrsvnc-b SPARE 10.250.55.125</td> </tr> <tr> <td>so_carync_grp</td> <td>B</td> <td>sds_mrsvnc_grp</td> <td>SDS</td> <td>so_carync so-carync-a 10.240.39.152 so_carync so-carync-b 10.240.39.152</td> </tr> </tbody> </table> <p>Communication Agent          SDS          Help          Logout</p> <p>Insert Edit Delete Report</p>	Server Group Name	Level	Parent	Function	Servers	dp_carync_1_grp	C	so_carync_grp	SDS	NE Server HA Role Pref VIPs	drdsds_dallastx_grp	A	NONE	SDS	dr_dallastx drsds-dallastx-a	sds_mrsvnc_grp	A	NONE	SDS	sds_mrsvnc qs-mrsvnc-1 10.250.55.125 sds_mrsvnc sds-mrsvnc-a 10.250.55.125 sds_mrsvnc sds-mrsvnc-b SPARE 10.250.55.125	so_carync_grp	B	sds_mrsvnc_grp	SDS	so_carync so-carync-a 10.240.39.152 so_carync so-carync-b 10.240.39.152
Server Group Name	Level	Parent	Function	Servers																							
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drdsds_dallastx_grp	A	NONE	SDS	dr_dallastx drsds-dallastx-a																							
sds_mrsvnc_grp	A	NONE	SDS	sds_mrsvnc qs-mrsvnc-1 10.250.55.125 sds_mrsvnc sds-mrsvnc-a 10.250.55.125 sds_mrsvnc sds-mrsvnc-b SPARE 10.250.55.125																							
so_carync_grp	B	sds_mrsvnc_grp	SDS	so_carync so-carync-a 10.240.39.152 so_carync so-carync-b 10.240.39.152																							

## Procedure 10.4 Adding the Database Processor into the DP Server Group (DP)

<p>84.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>The user will be presented with the “<b>Configuration → Server Groups [Edit]</b>” screen as shown on the right</p>	
<p>85.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>Select the “<b>DP</b>” server from the list of “<b>Servers</b>” by clicking the check box next its name.</p>	
<p>86.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>1) The user should be presented with a banner information message stating “<b>Pre-Validation passed</b>”.</p> <p>2) Select the “<b>Apply</b>” dialogue button.</p>	

## Procedure 10.4 Adding the Database Processor into the DP Server Group (DP)

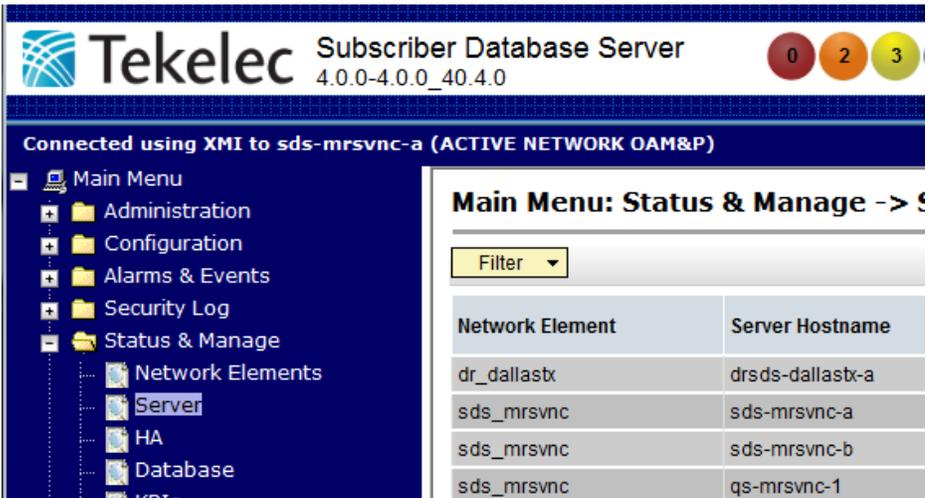
<p>87.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>The user should be presented with a banner information message stating “<b>Data committed</b>”.</p>	 <p>The screenshot shows a web-based configuration interface. At the top, it says "Main Menu: Configuration -&gt; Server Groups [Edit]". Below this is a form with several fields. A green information box with a white 'i' icon and the text "Data committed!" is overlaid on the form. The form fields include:         <ul style="list-style-type: none"> <li>An "Info" dropdown menu.</li> <li>A "Description" field with a text input and a red asterisk, containing the text: "Unique identifier used to label a Se string. Valid characters are alphan alpha and must not start with a digi".</li> <li>A "Level" dropdown menu with the value "C" selected and a red asterisk, with the label "Select one of the Levels supported".</li> </ul> </p>
<p>88.</p> <input type="checkbox"/>	<p>Repeat <b>Steps 72 - 87</b> of this procedure for each subtending <b>DP</b> server installed in the same DP-SOAM enclosure, <i>using a unique group for each DP</i>.</p>	
<p>89.</p> <input type="checkbox"/>	<p><b>IMPORTANT:</b></p> <p>Wait at least <b>5 minutes</b> before proceeding on to the next Step.</p>	<ul style="list-style-type: none"> <li>• Now that the Database Processor(s) have been placed within their respective Server Groups, each must establish DB replication with the Active DP-SOAM server at the NE. It may take several minutes for this process to be completed.</li> <li>• Allow a minimum of <b>5 minutes</b> before continuing to the next Step.</li> </ul>

## Procedure 10.5 Restarting the Database Processor Application (DP)

**90.**  **Active SDS VIP:**  
Select...

**Main Menu**  
→ Status & Manage  
→ Server

...as shown on the right.

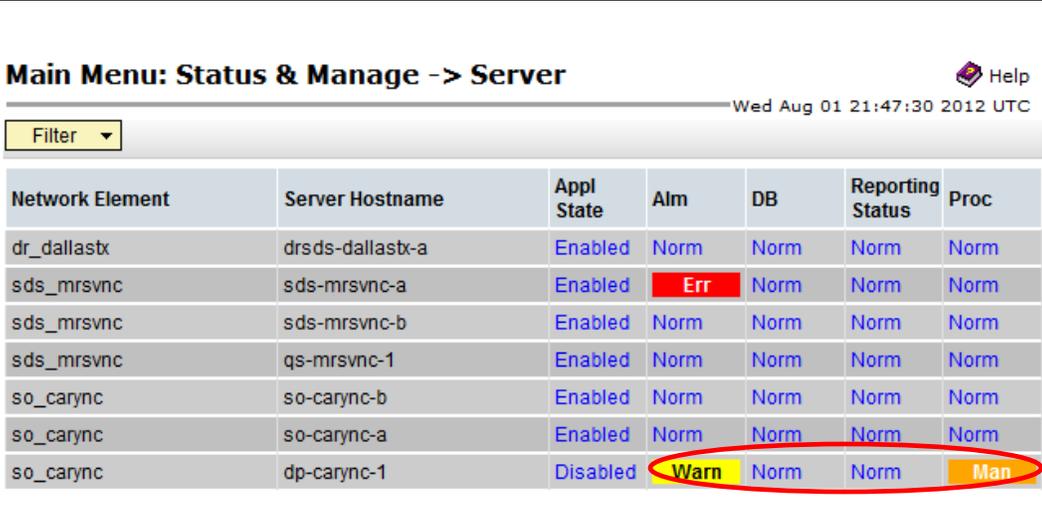


The screenshot shows the Tekelec Subscriber Database Server interface. The top header includes the Tekelec logo, the text "Subscriber Database Server 4.0.0-4.0.0\_40.4.0", and three status indicators (0, 2, 3). Below the header, it says "Connected using XMI to sds-mrsvnc-a (ACTIVE NETWORK OAM&P)". A navigation tree on the left shows "Main Menu" expanded to "Status & Manage", which is further expanded to "Server". The main content area shows "Main Menu: Status & Manage -> S" with a table of network elements and server hostnames.

Network Element	Server Hostname
dr_dallastx	drsds-dallastx-a
sds_mrsvnc	sds-mrsvnc-a
sds_mrsvnc	sds-mrsvnc-b
sds_mrsvnc	qs-mrsvnc-1

---

**91.**  **Active SDS VIP:**  
Verify that the “DB & Reporting” status columns all show “Norm” for the DP at this point. The “Proc” column should show “Man”.



The screenshot shows the "Main Menu: Status & Manage -> Server" page. It includes a "Filter" dropdown, a timestamp "Wed Aug 01 21:47:30 2012 UTC", and a "Help" icon. A table displays the status of various network elements across different columns: Network Element, Server Hostname, Appl State, Alm, DB, Reporting Status, and Proc. The "Proc" column for the last row is highlighted in yellow and circled in red.

Network Element	Server Hostname	Appl State	Alm	DB	Reporting Status	Proc
dr_dallastx	drsds-dallastx-a	Enabled	Norm	Norm	Norm	Norm
sds_mrsvnc	sds-mrsvnc-a	Enabled	Err	Norm	Norm	Norm
sds_mrsvnc	sds-mrsvnc-b	Enabled	Norm	Norm	Norm	Norm
sds_mrsvnc	qs-mrsvnc-1	Enabled	Norm	Norm	Norm	Norm
so_carync	so-carync-b	Enabled	Norm	Norm	Norm	Norm
so_carync	so-carync-a	Enabled	Norm	Norm	Norm	Norm
so_carync	dp-carync-1	Disabled	Warn	Norm	Norm	Man

## Procedure 10.5 Restarting the Database Processor Application (DP)

92.



### Active SDS VIP:

1) Using the mouse, select the “DP” hostname. The line entry should now be highlighted in **GREEN**.

2) Select the “Restart” dialogue button from the bottom left corner of the screen.

3) Click the “OK” button on the confirmation dialogue box.

4) The user should be presented with a confirmation message (in the banner area) for the “DP” stating: **“Successfully restarted application”**.

**NOTE:** The user may need to use the vertical scroll-bar in order to make the “Restart” dialogue button visible.

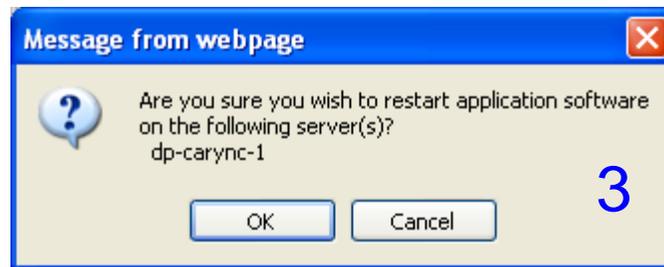
### Main Menu: Status & Manage -> Server



Wed Aug 01 21:51:48 2012 UTC

Network Element	Server Hostname	Appl State	Alm	DB	Reporting Status	Proc
dr_dallastx	drsds-dallastx-a	Enabled	Norm	Norm	Norm	Norm
sds_mrsvnc	sds-mrsvnc-a	Enabled	Err	Norm	Norm	Norm
sds_mrsvnc	sds-mrsvnc-b	Enabled	Norm	Norm	Norm	Norm
sds_mrsvnc	qs-mrsvnc-1	Enabled	Norm	Norm	Norm	Norm
so_carync	so-carync-b	Enabled	Norm	Norm	Norm	Norm
so_carync	so-carync-a	Enabled	Norm	Norm	Norm	Norm
so_carync	dp-carync-1	Disabled	Warn	Norm	Norm	Man

1



### Main Menu: Status & Manage -> Server [Restart]

Filter Status

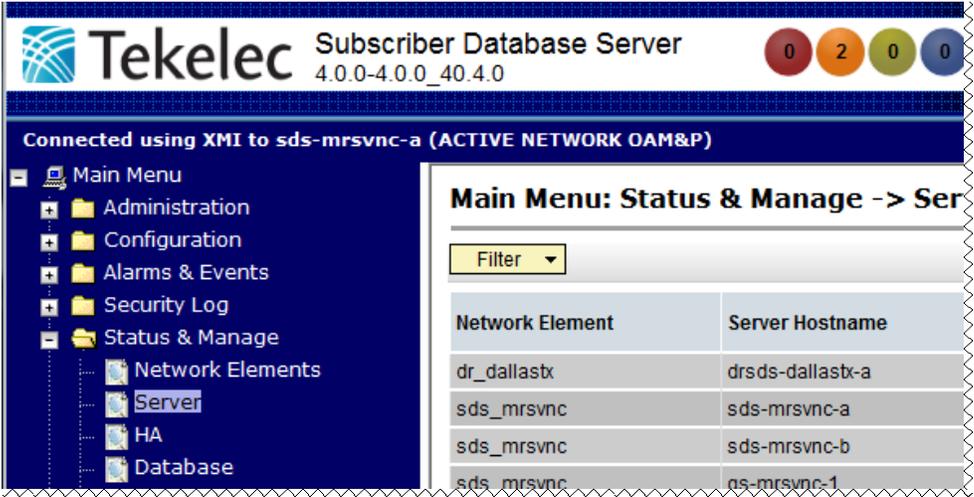
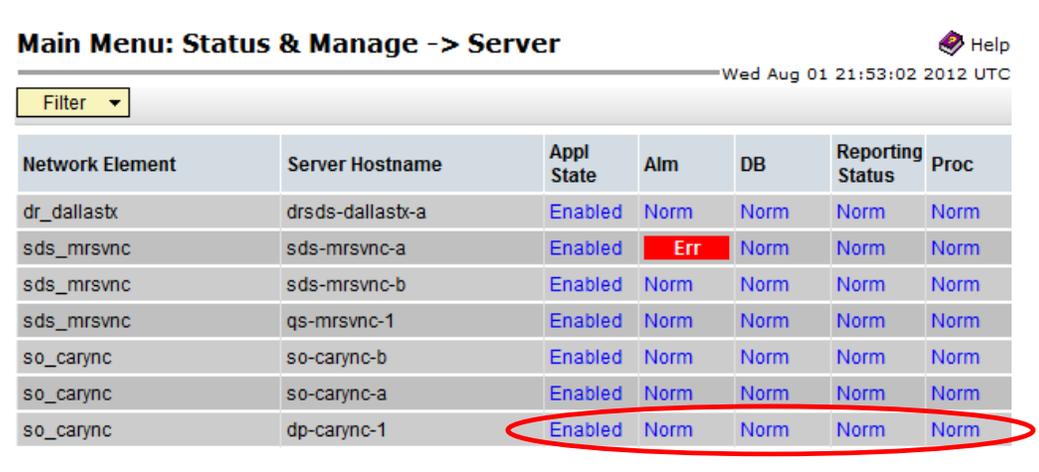
Status

- dp-carync-1: Successfully restarted application.

sds\_mrsvnc sds-mrsvnc-a Enabled Err

4

## Procedure 10.5 Restarting the Database Processor Application (DP)

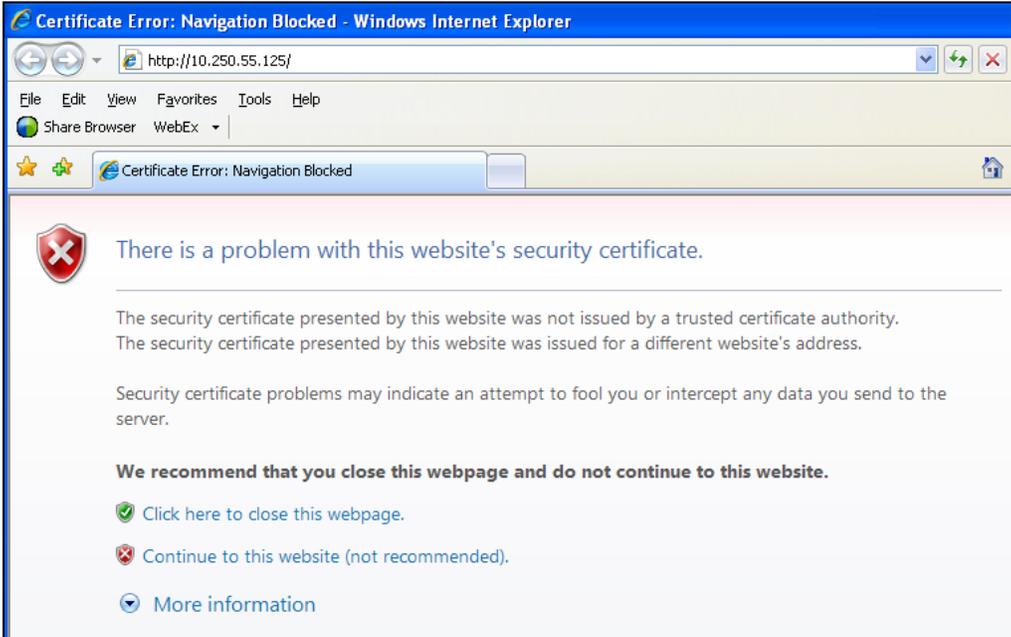
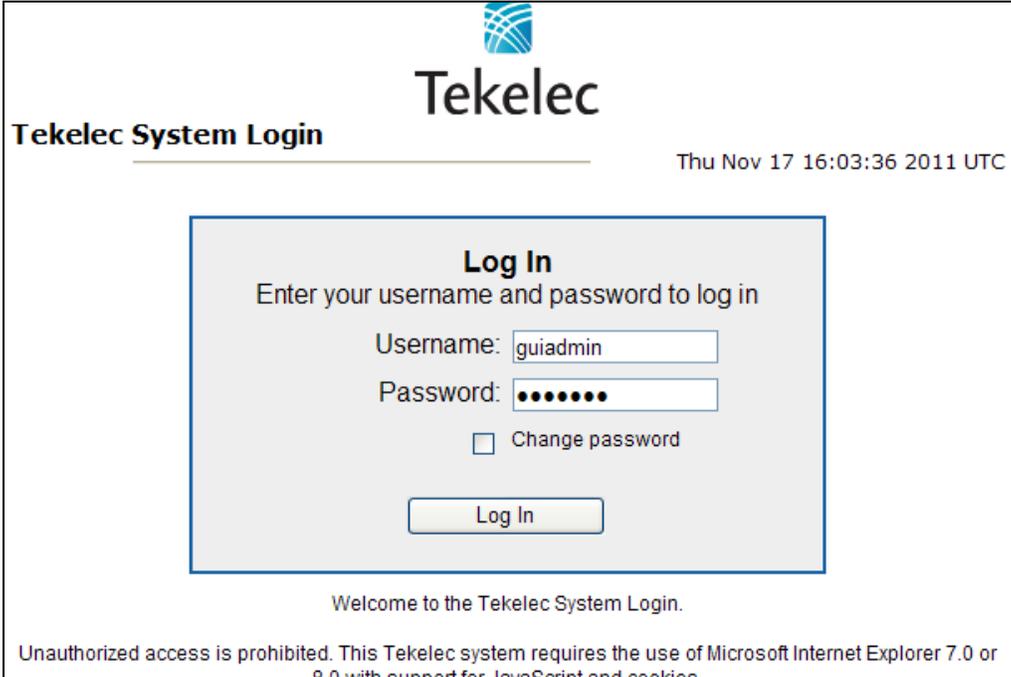
<p><b>93.</b> <input type="checkbox"/></p>	<p><b>Active SDS VIP:</b> Select...</p> <p><b>Main Menu</b> → Status &amp; Manage → Server</p> <p>...as shown on the right.</p>	 <p>The screenshot shows the Tekelec Subscriber Database Server interface. The title bar reads 'Tekelec Subscriber Database Server 4.0.0-4.0.0_40.4.0'. Below the title bar, it says 'Connected using XMI to sds-mrsvnc-a (ACTIVE NETWORK OAM&amp;P)'. A 'Main Menu' is displayed on the left with options: Administration, Configuration, Alarms &amp; Events, Security Log, Status &amp; Manage, Network Elements, Server (highlighted), HA, and Database. On the right, a window titled 'Main Menu: Status &amp; Manage -&gt; Ser' shows a table with columns 'Network Element' and 'Server Hostname'.</p>																																																								
<p><b>94.</b> <input type="checkbox"/></p>	<p><b>Active SDS VIP:</b> Verify that the “Appl State” now shows “Enabled” and that the “Alm, DB, Reporting Status &amp; Proc” status columns all show “Norm” for the “DP”.</p>	 <p>The screenshot shows the 'Main Menu: Status &amp; Manage -&gt; Server' window. It includes a 'Filter' dropdown, a timestamp 'Wed Aug 01 21:53:02 2012 UTC', and a 'Help' icon. A table displays the status of various network elements. The table has columns: Network Element, Server Hostname, Appl State, Alm, DB, Reporting Status, and Proc. The 'so_carync' row with 'dp-carync-1' as the server hostname is circled in red, showing 'Enabled' for Appl State and 'Norm' for all other status columns.</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th>Network Element</th> <th>Server Hostname</th> <th>Appl State</th> <th>Alm</th> <th>DB</th> <th>Reporting Status</th> <th>Proc</th> </tr> </thead> <tbody> <tr> <td>dr_dallastx</td> <td>drdsds-dallastx-a</td> <td>Enabled</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-a</td> <td>Enabled</td> <td>Err</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-b</td> <td>Enabled</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>sds_mrsvnc</td> <td>qs-mrsvnc-1</td> <td>Enabled</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>so_carync</td> <td>so-carync-b</td> <td>Enabled</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>so_carync</td> <td>so-carync-a</td> <td>Enabled</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr style="border: 2px solid red;"> <td>so_carync</td> <td>dp-carync-1</td> <td>Enabled</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> </tbody> </table>	Network Element	Server Hostname	Appl State	Alm	DB	Reporting Status	Proc	dr_dallastx	drdsds-dallastx-a	Enabled	Norm	Norm	Norm	Norm	sds_mrsvnc	sds-mrsvnc-a	Enabled	Err	Norm	Norm	Norm	sds_mrsvnc	sds-mrsvnc-b	Enabled	Norm	Norm	Norm	Norm	sds_mrsvnc	qs-mrsvnc-1	Enabled	Norm	Norm	Norm	Norm	so_carync	so-carync-b	Enabled	Norm	Norm	Norm	Norm	so_carync	so-carync-a	Enabled	Norm	Norm	Norm	Norm	so_carync	dp-carync-1	Enabled	Norm	Norm	Norm	Norm
Network Element	Server Hostname	Appl State	Alm	DB	Reporting Status	Proc																																																				
dr_dallastx	drdsds-dallastx-a	Enabled	Norm	Norm	Norm	Norm																																																				
sds_mrsvnc	sds-mrsvnc-a	Enabled	Err	Norm	Norm	Norm																																																				
sds_mrsvnc	sds-mrsvnc-b	Enabled	Norm	Norm	Norm	Norm																																																				
sds_mrsvnc	qs-mrsvnc-1	Enabled	Norm	Norm	Norm	Norm																																																				
so_carync	so-carync-b	Enabled	Norm	Norm	Norm	Norm																																																				
so_carync	so-carync-a	Enabled	Norm	Norm	Norm	Norm																																																				
so_carync	dp-carync-1	Enabled	Norm	Norm	Norm	Norm																																																				
<p><b>95.</b> <input type="checkbox"/></p>	<p>Repeat this procedure for each additional DP Server.</p>	<ul style="list-style-type: none"> <li>Repeat <b>Steps 90 - 94</b> of this procedure for each additional <b>DP</b> server installed in the DP-SOAM cabinet.</li> </ul>																																																								
<p><b>THIS PROCEDURE HAS BEEN COMPLETED</b></p>																																																										

**Note:** After all DP servers have been installed, the user can configure the ComAgent by following steps in Appendix F.

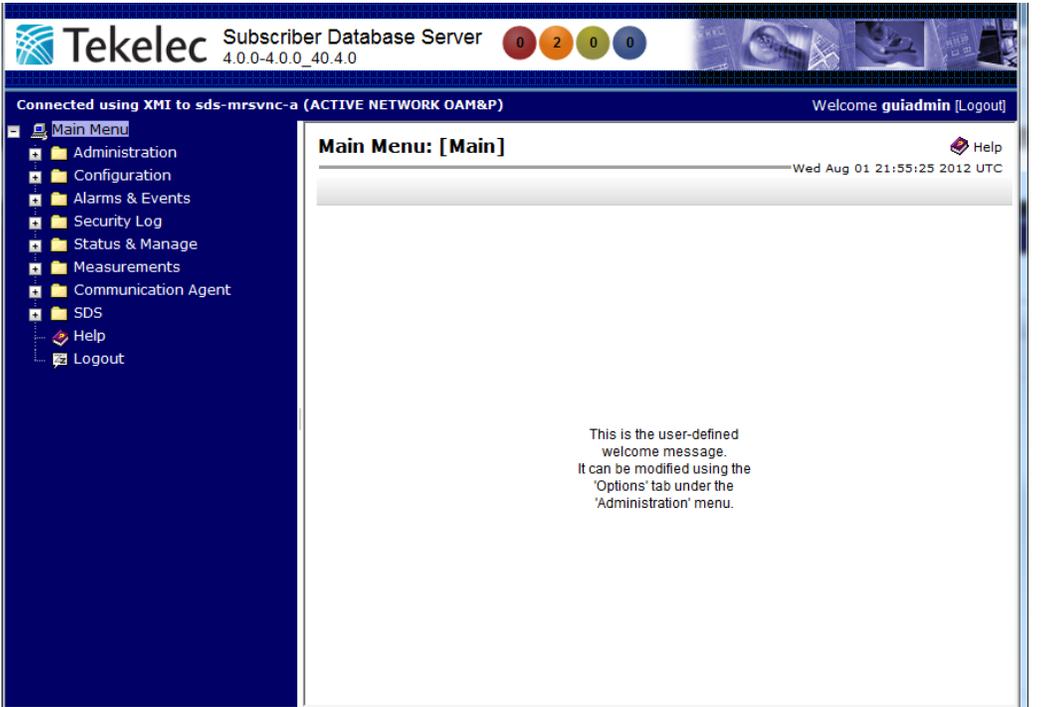
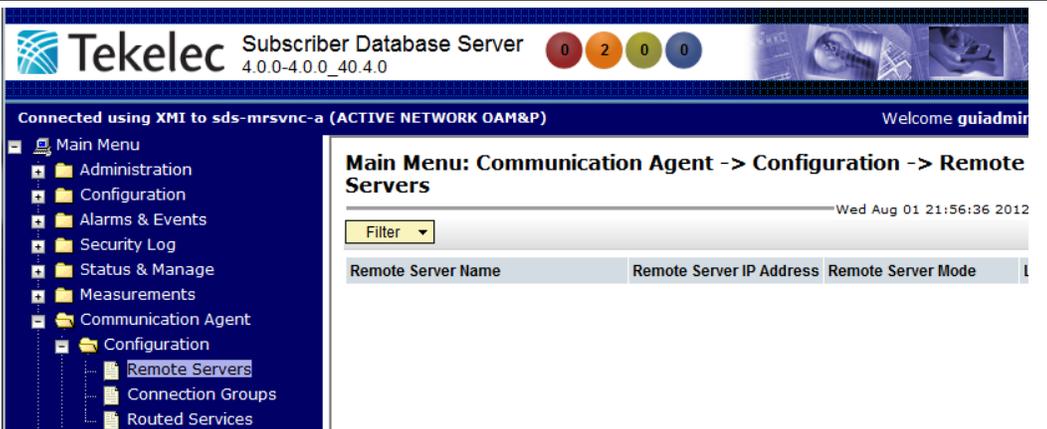
## 5.10 Configuring ComAgent

This procedure configures the ComAgent that allows the SDS Data Processor servers and the DSR Message Processor servers to communicate with each other. These steps cannot be executed until all SDS DP servers are configured.

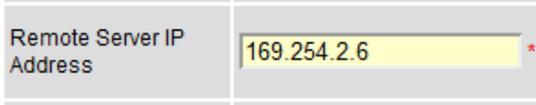
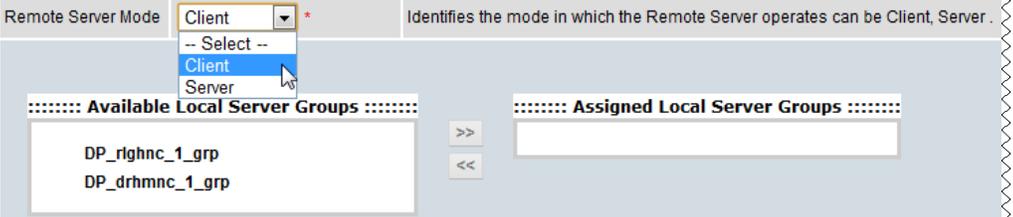
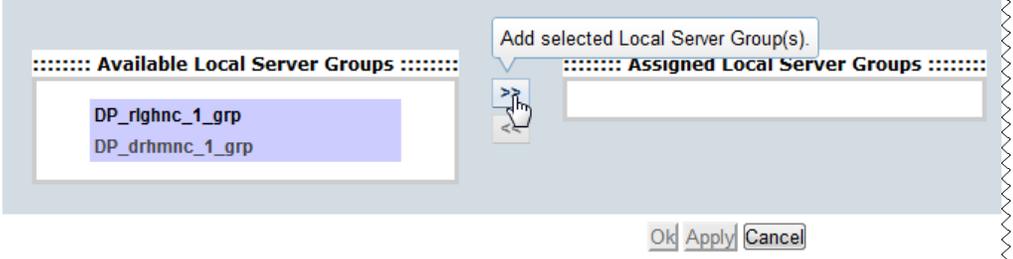
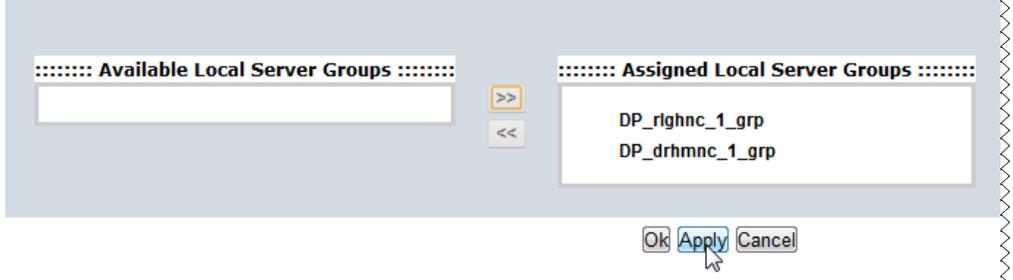
### Procedure 11: Configuring comAgent (All DP-SOAM sites)

Step	Procedure	Result
<p>1.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Launch an approved web browser and connect to the <b>XMI Virtual IP Address (VIP)</b> of the <b>Active SDS site</b> using "https://"</p>	
<p>2.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>The user should be presented the login screen shown on the right.</p> <p>Login to the GUI using the default user and password.</p>	

**Procedure 11: Configuring comAgent (All DP-SOAM sites)**

<p>3.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>The user should be presented the SDS Main Menu as shown on the right.</p>	 <p>The screenshot shows the Tekelec Subscriber Database Server interface. The top header includes the Tekelec logo, version information (4.0.0-4.0.0_40.4.0), and status indicators (0, 2, 0, 0). The main content area displays a 'Main Menu' with a tree view on the left containing folders for Administration, Configuration, Alarms &amp; Events, Security Log, Status &amp; Manage, Measurements, Communication Agent, and SDS. The right pane shows 'Main Menu: [Main]' with a welcome message: 'This is the user-defined welcome message. It can be modified using the 'Options' tab under the 'Administration' menu.'</p>						
<p>4.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>Select...</p> <p><b>Main Menu</b></p> <ul style="list-style-type: none"> <li>→ Communication Agent</li> <li>    → Configuration</li> <li>        → Remote Servers</li> </ul> <p>...as shown on the right.</p>	 <p>The screenshot shows the 'Remote Servers' configuration page. The left tree view is expanded to 'Communication Agent -&gt; Configuration -&gt; Remote Servers'. The main area has a 'Filter' dropdown and a table with columns: 'Remote Server Name', 'Remote Server IP Address', and 'Remote Server Mode'. The table is currently empty.</p>						
<p>5.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>Select the "Insert" dialogue button</p>	 <p>The screenshot shows a portion of the SDS menu with 'Help' and 'Logout' options. Below the menu, there are three buttons: 'Insert', 'Edit', and 'Delete'.</p>						
<p>6.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>Enter the "Remote Server Name" for the DSR Message Processor server</p>	<table border="1"> <thead> <tr> <th>Field</th> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Remote Server Name</td> <td>RDU08MP1 *</td> <td>Unique identifier used to label a Remote Server. [Default: n/a; Range: A 32-character string. Valid underscore. Must contain at least one alpha and</td> </tr> </tbody> </table>	Field	Value	Description	Remote Server Name	RDU08MP1 *	Unique identifier used to label a Remote Server. [Default: n/a; Range: A 32-character string. Valid underscore. Must contain at least one alpha and
Field	Value	Description						
Remote Server Name	RDU08MP1 *	Unique identifier used to label a Remote Server. [Default: n/a; Range: A 32-character string. Valid underscore. Must contain at least one alpha and						

**Procedure 11: Configuring comAgent (All DP-SOAM sites)**

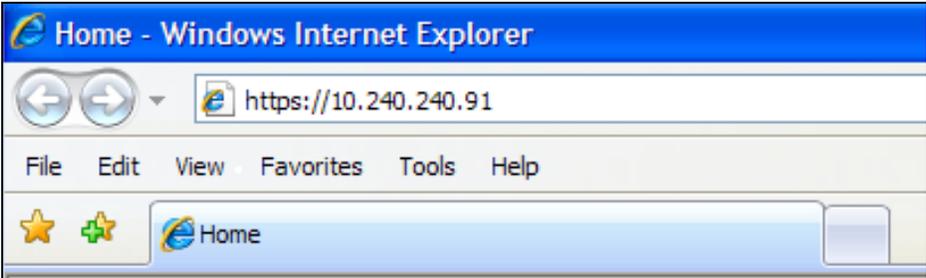
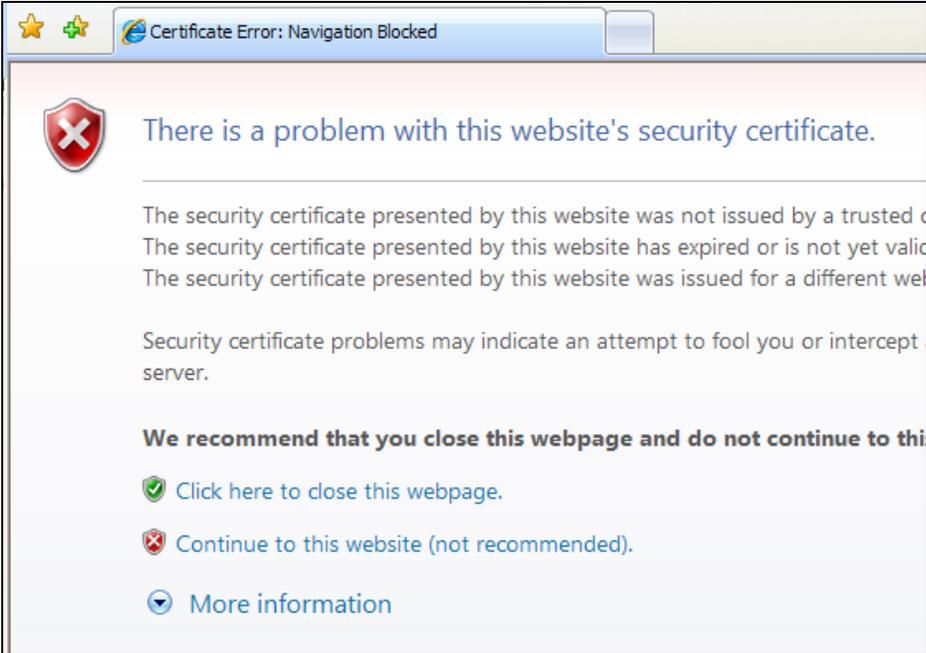
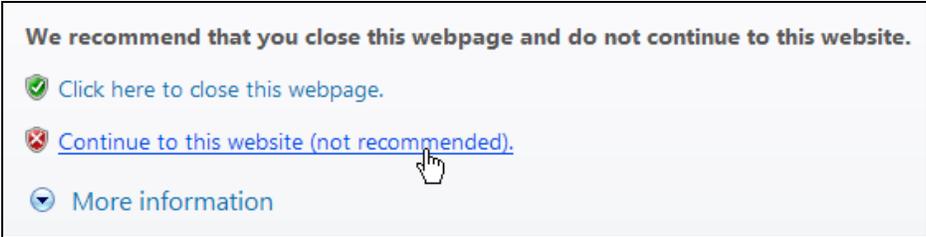
<p>7.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>Enter the “<b>Remote Server IMI IP Address</b>”.</p>	 <p>Remote Server IP Address: 169.254.2.6 *</p> <p>This is the IP address of the Remote Server. Default: n/a; Range: A valid IPv4 address.</p> <p><b>NOTE:</b> This should be the IMI IP address of the MP blade.</p>
<p>8.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>Select “<b>Client</b>” for the <b>Remote Server Mode</b> from the pull-down menu.</p>	 <p>Remote Server Mode: Client * Identifies the mode in which the Remote Server operates can be Client, Server.</p> <p>Available Local Server Groups: DP_rghnc_1_grp, DP_drhmc_1_grp</p> <p>Assigned Local Server Groups: (empty)</p>
<p>9.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>Select the <b>Local Server Group</b> for the SDS Data Processor server group</p>	 <p>Available Local Server Groups: DP_rghnc_1_grp, DP_drhmc_1_grp</p> <p>Assigned Local Server Groups: (empty)</p> <p>Add selected Local Server Group(s).</p> <p>Buttons: Ok, Apply, Cancel</p>
<p>10.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>Click the “<b>Apply</b>” dialogue button</p>	 <p>Available Local Server Groups: (empty)</p> <p>Assigned Local Server Groups: DP_rghnc_1_grp, DP_drhmc_1_grp</p> <p>Buttons: Ok, Apply, Cancel</p>

**Procedure 11: Configuring comAgent (All DP-SOAM sites)**

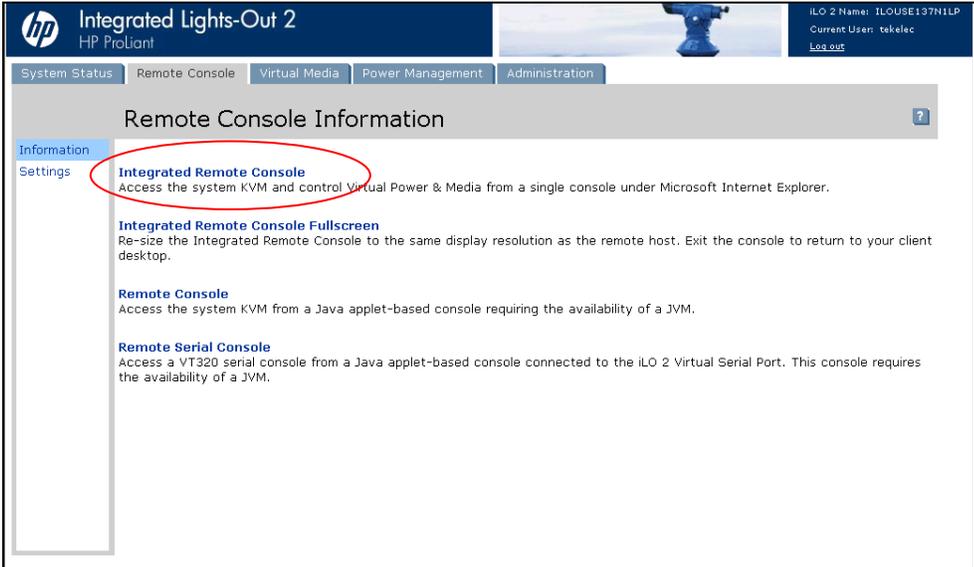
<p>11.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Under the "Info" banner option, the user should be presented with a message stating "Data committed"</p>	
<p>12.</p> <input type="checkbox"/>	<ul style="list-style-type: none"> <li>Repeat steps 5 - 11 of this procedure for each remote MP in the same SOAM NE.</li> </ul>	
<p><b>THIS PROCEDURE HAS BEEN COMPLETED</b></p>		

## Appendix A. Accessing the iLO VGA Redirection Window

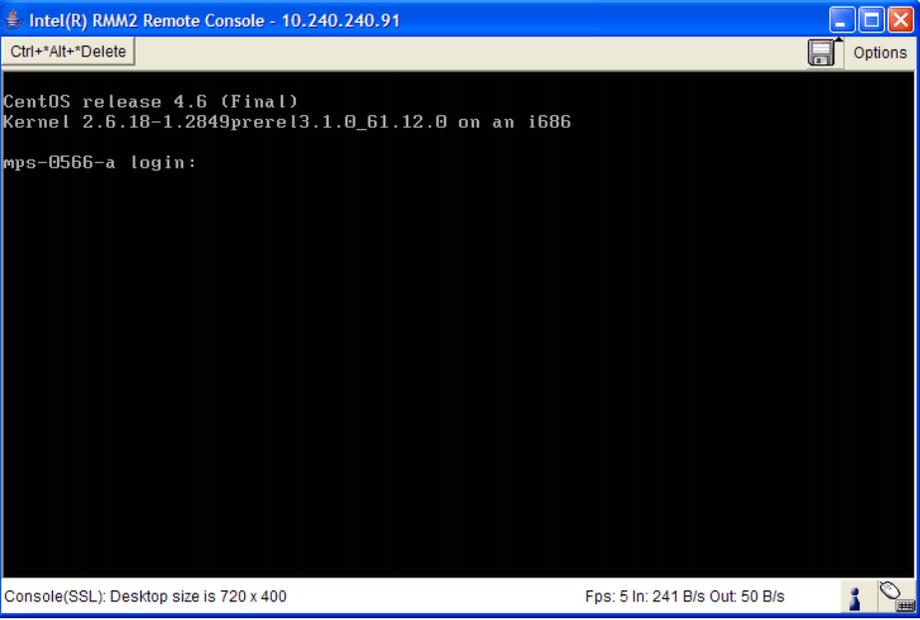
### Appendix A: Accessing the iLO VGA Redirection Window

Step	Procedure	Result
<p>1.</p> <input type="checkbox"/>	<p>Launch an approved web browser and connect to the iLO interface</p> <p><b>NOTE:</b> Always use <i>https://</i> for iLO GUI access.</p>	 <p>The screenshot shows the Internet Explorer browser window titled 'Home - Windows Internet Explorer'. The address bar contains the URL 'https://10.240.240.91'. The menu bar includes 'File', 'Edit', 'View', 'Favorites', 'Tools', and 'Help'. The address bar also shows a star icon and the text 'Home'.</p>
<p>2.</p> <input type="checkbox"/>	<p>The web browser will display a warning message regarding the Security Certificate.</p>	 <p>The screenshot shows a 'Certificate Error: Navigation Blocked' dialog box. It features a red shield icon with a white 'X'. The main text reads: 'There is a problem with this website's security certificate.' Below this, it lists three reasons: 'The security certificate presented by this website was not issued by a trusted...', 'The security certificate presented by this website has expired or is not yet valid', and 'The security certificate presented by this website was issued for a different web...'. A warning states: 'Security certificate problems may indicate an attempt to fool you or intercept server.' At the bottom, it says: 'We recommend that you close this webpage and do not continue to thi...'. There are three options: 'Click here to close this webpage.' (with a green checkmark), 'Continue to this website (not recommended).' (with a red 'X'), and 'More information' (with a blue downward arrow).</p>
<p>3.</p> <input type="checkbox"/>	<p>Select the option to "Continue to the website (not recommended)"</p>	 <p>This is a close-up of the 'Continue to this website (not recommended)' option from the previous screenshot. A mouse cursor is pointing at the text 'Continue to this website (not recommended)'.</p>

**Appendix A: Accessing the iLO VGA Redirection Window**

<p>4.</p> <p><input type="checkbox"/></p>	<p>Login to the iLO console as "admin"</p>	
<p>5.</p> <p><input type="checkbox"/></p>	<p>The admin GUI is displayed.</p> <p>Select the <b>"Remote Console"</b> tab in the upper left corner of the GUI.</p>	
<p>6.</p> <p><input type="checkbox"/></p>	<p>The Remote Console Information GUI is displayed</p> <p>Click on the <b>"Integrated Remote Console"</b> option</p>	

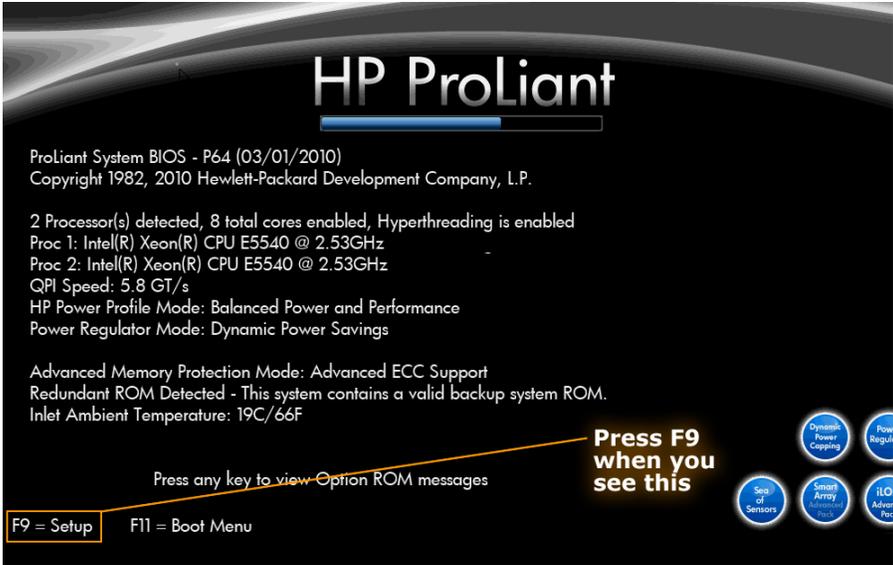
## Appendix A: Accessing the iLO VGA Redirection Window

<p>7.</p> <input type="checkbox"/>	<p>The iLO Console window is displayed.</p> <p><b>NOTE:</b> <i>The console window resembles an MS-DOS window but DOES NOT have a scroll-back buffer.</i></p>	 <p>The screenshot shows a remote console window titled "Intel(R) RMM2 Remote Console - 10.240.240.91". The window contains a terminal interface with the following text: "CentOS release 4.6 (Final)", "Kernel 2.6.18-1.2849prere13.1.0_61.12.0 on an i686", and "mps-0566-a login:". The window also features a status bar at the bottom with the text "Console(SSL): Desktop size is 720 x 400" and "Fps: 5 In: 241 B/s Out: 50 B/s".</p>
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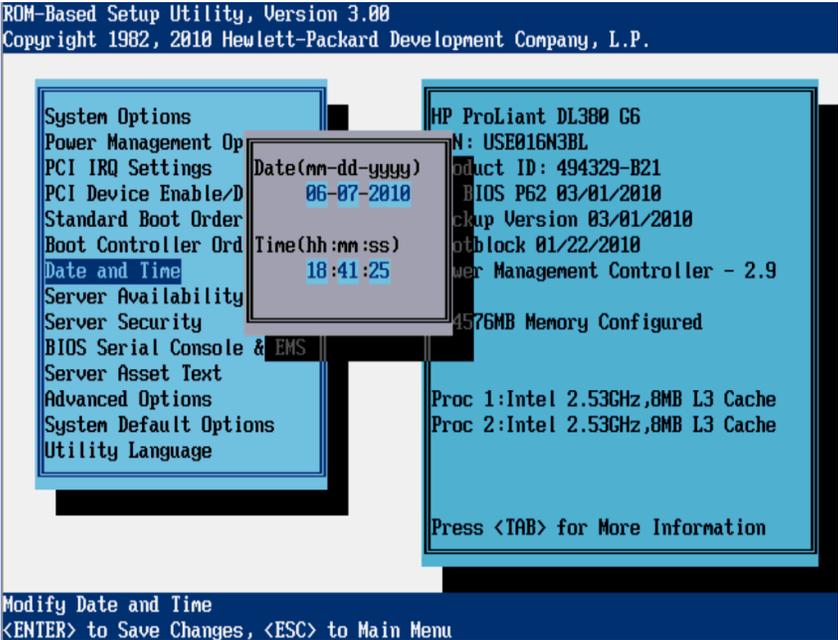
**THIS PROCEDURE HAS BEEN COMPLETED**

## Appendix B. HP DL360 BIOS Settings

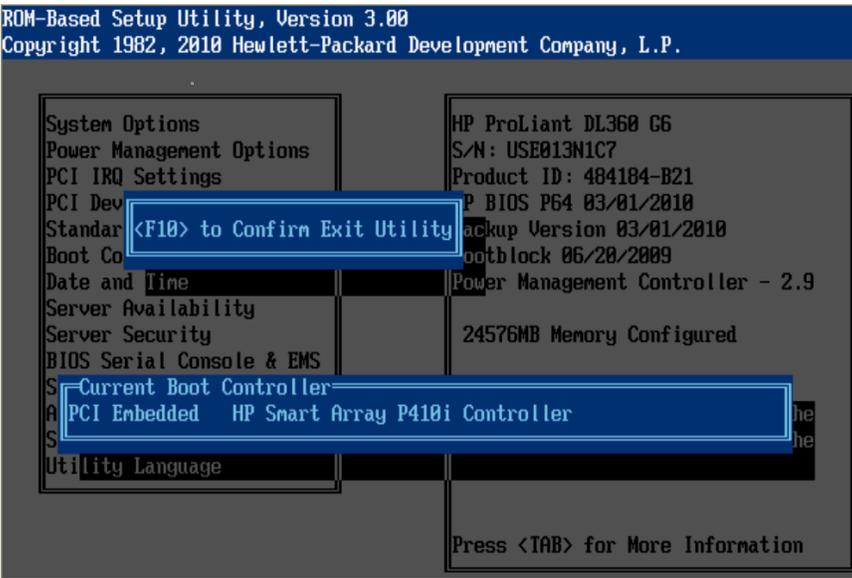
### Appendix B: HP DL360 BIOS Settings

Step	In this procedure you will configure BIOS settings and IPM each HP DL360 G6 server under test.	
<b>1.</b> <input type="checkbox"/>	Insert TPD Media into the server under test.	Open the CD/DVD media drive in the server to be tested. Insert the TPD media into the optical drive. The KVM should be connected and the screen for the server to be tested ready.
<b>2.</b> <input type="checkbox"/>	Access the Server BIOS	<p>Reboot the server. This can be achieved by pressing and holding the power button until the server turns off, then after approximately 5-10 seconds press the power button to enable power.</p> <p>As soon as you see <b>F9=Setup</b> in the lower left corner of the screen, press <b>[F9]</b> to access the BIOS setup screen. You may be required to press [F9] 2-3 times. The F9=Setup will change to F9 Pressed once it is accepted. See example below.</p>  <p><b>Expected Result:</b>            ROM-Based Setup Utility is accessed and the ROM-Based Setup Utility menu will be displayed.</p>

## Appendix B: HP DL360 BIOS Settings

<p>3.</p> <input type="checkbox"/>	<p>Set DL360 Server CMOS Clock</p>	<p>Scroll to <i>Date and Time</i> and press [ENTER]</p> <p>Set the date and time and press [ENTER].</p>  <p><b>Expected Result:</b> Correct Time &amp; Date is set.</p>
<p>4.</p> <input type="checkbox"/>	<p>Configure iLO serial port settings</p>	<p>The serial ports on HP DL360 G6 rack mount servers need to be configured so the serial port used by the BIOS and TPD are connected to the “VSP” on the iLO. This will allow the remote administration of the servers without the need for external terminal servers. If this configuration has not been completed correctly and the server rebooted, the syscheck “syscheck -v hardware serial” test will fail.</p> <p>Select System Options option and press [ENTER].</p> <p>Select Serial Port Options option and press [ENTER].</p> <p>Change Embedded Serial Port to COM2 and press [ENTER].</p> <p>Change Virtual Serial Port to COM1 and press [ENTER].</p> <p>Press &lt;ESC&gt; two times</p>

**Appendix B: HP DL360 BIOS Settings**

<p>5.</p> <input type="checkbox"/>	<p>Configure Power Management Options settings</p>	<p><b>The Power Management Options on HP DL360 G6 rack mount servers used in SDM need to be configured for optimum SDM software performance.</b></p> <p>Select Power Management Options option and press [ENTER].</p> <p>Select HP Power Profile option and press [ENTER].</p> <p>Change it to Maximum Performance and press [ENTER].</p> <p>Press &lt;ESC&gt; two times</p>
<p>6.</p> <input type="checkbox"/>	<p>Save Configuration and Exit</p>	<p>Press [F10] to save the configuration and exit. The server will reboot</p>  <p><b>Expected Result:</b> Settings are saved and server reboots.</p>
<p><b>THIS PROCEDURE HAS BEEN COMPLETED</b></p>		

**NOTE:** These settings are current as of ORACLE Communications Document 820-6641-01, Revision B. (Manufacturing Acceptance Test Plan, Subscriber Data Management Rack Mount Servers) [4]. Please refer to the latest revision for current values.

## Appendix C. Creating Temporary External IP Address for Accessing SDS GUI

This procedure creates a temporary external IP address that will be used for accessing the SDS GUI prior to configuring the first SDS server. This procedure assumes that the user has access to the ILO and can access an external (XMI) network at the customer site.

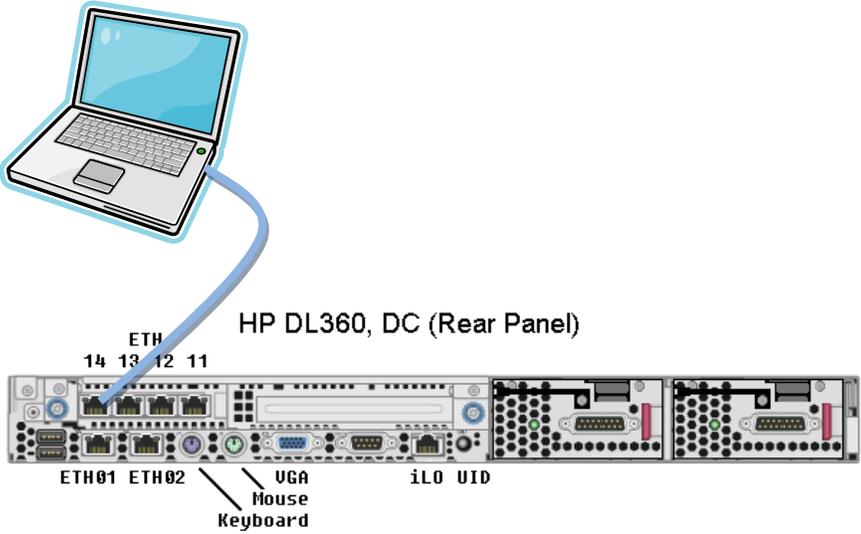
### Appendix C: Creating Temporary External IP Address for Accessing SDS GUI

Step	In this procedure you will configure a temporary external IP Address for SDS Server A for the 1 <sup>st</sup> SDS site. The user will use this IP Address in a web browser to access the GUI to configure the first SDS server.	
<b>1.</b> <input type="checkbox"/>	Log onto the SDS Server A ILO as indicated in Appendix A  <b>NOTE:</b> Output similar to that shown on the right will appear.	<pre>CentOS release 5.6 (Final) Kernel 2.6.18-238.19.1.el5prere15.0.0_72.22.0 on an x86_64  hostname1260476221 login: root Password: &lt;root_password&gt;</pre>
<b>2.</b> <input type="checkbox"/>	Delete bond0	<pre>[root@hostname1260476221 ~]# netAdm delete --device=bond0 Interface eth01 was updated. Interface eth02 was updated. Interface bond0 was removed [root@hostname1260476221 ~]#</pre>
<b>3.</b> <input type="checkbox"/>	Add XMI IP address to the first SDS server (SDS-A) and have it use interface eth02	<pre>[root@hostname1260476221 ~]# netAdm set --device=eth02 --onboot=yes --netmask=255.255.255.0 --address=&lt;XMI_IP_Address_for_SDS_A&gt; Interface eth02 was updated. Interface eth02 updated [root@hostname1260476221 ~]#</pre>
<b>4.</b> <input type="checkbox"/>	Add route to the default gateway for the first SDS site	<pre>[root@hostname1260476221 ~]# netAdm add --device=eth02 --route=default --gateway=&lt;XMI_IP_Address_for_default_gateway&gt; Route to eth02 added [root@hostname1260476221 ~]#</pre>
<b>5.</b> <input type="checkbox"/>	Wait a few minutes and then ping the default gateway to ensure connectivity.	<pre>[root@hostname1260476221 ~]# ping &lt;XMI_IP_Address_for_default_gateway&gt; [root@hostname1260476221 ~]#</pre>
<b>6.</b> <input type="checkbox"/>	Log off the ILO	<pre>[root@hostname1260476221 ~]# exit  CentOS release 5.6 (Final) Kernel 2.6.18-238.19.1.el5prere15.0.0_72.22.0 on an x86_64  [root@hostname1260476221 ~] login:</pre>
<b>7.</b> <input type="checkbox"/>	Important NOTE: This interface must be un-configured	NOTE: If this method is used, then the <b>eth02</b> interface must be un-configured in Step 41 of Procedure 2 in Section 5.1, “Configuring SDS Servers A and B (1st SDS site only)”:
<b>THIS PROCEDURE HAS BEEN COMPLETED</b>		

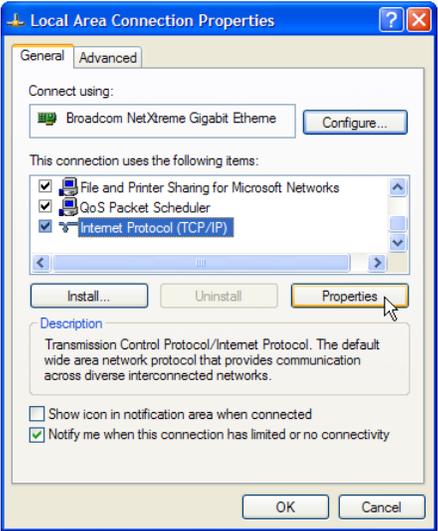
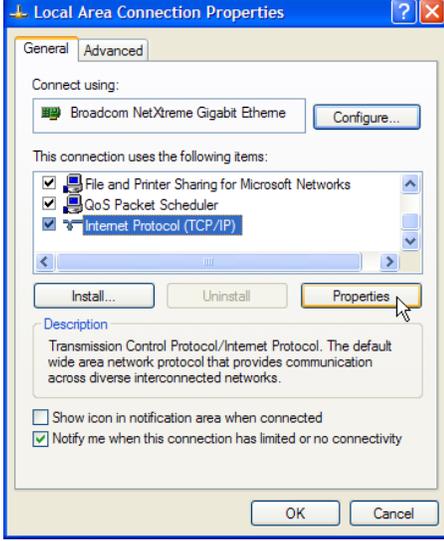
## Appendix D. Establishing a Local Connection for Accessing the SDS GUI

This procedure contains steps to connect a laptop to the SDS-A server via a directly cabled Ethernet connection and setting the IP address of the laptop. This procedure enables the user to use the laptop for accessing the SDS GUI prior to configuring the first SDS server.

### Appendix D: Establishing a Local Connection for Accessing SDS GUI

<b>Step</b>	In this procedure you will configure a temporary external IP Address for SDS Server A for the 1 <sup>st</sup> SDS site. The user will use this IP Address in a web browser to access the GUI to configure the first SDS server.	
1. <input type="checkbox"/>	Access the SDS-A server's console.	Connect to the SDS-A server's console using one of the access methods described in <b>Section 2.3</b> .
2. <input type="checkbox"/>	1) Access the command prompt.  2) Log into the SDS-A server as the "root" user.	CentOS release 5.6 (Final) Kernel 2.6.18-238.19.1.el5prere15.0.0_72.22.0 on an x86_64  hostname1260476221 login: <b>root</b> Password: <b>&lt;root_password&gt;</b>
3. <input type="checkbox"/>	Configure static IP 192.168.100.11 on the eth14 port of the SDS-A server.	<pre>[root@hostname1260476221 ~]# netAdm set --device=eth14 --address=192.168.100.11 --netmask=255.255.255.0 --onboot=yes [root@hostname1260476221 ~]#</pre>
4. <input type="checkbox"/>	1) Plug in one end of the Ethernet cable (straight-thru) into the back of SDS-A server ETH14 (top left port).  2) Plug the other end of the Ethernet cable into the laptop's Ethernet jack.	 <p>HP DL360, DC (Rear Panel)</p> <p>ETH 14 13 12 11</p> <p>ETH01 ETH02 UGA Mouse Keyboard iLO UID</p>

## Appendix D: Establishing a Local Connection for Accessing SDS GUI

<p>5.</p> <p><input type="checkbox"/></p>	<p>Access the laptop network interface card's TCP/IP "Properties" screen.</p> <p><b>NOTE:</b> For this step follow the instruction specific to the laptop's OS (XP, Vista or Win 7).</p>	<h3>Windows XP</h3> <ul style="list-style-type: none"> <li>Go to Control Panel</li> <li>Double-click on Network Connections</li> <li>Right-click the wired Ethernet Interface icon and select "Properties"</li> </ul> <p>Select "Internet Protocol (TCP/IP)" and select "Properties"</p> 	<h3>Windows Vista / Win 7</h3> <ul style="list-style-type: none"> <li>Go to Control Panel.</li> <li>Double-click on Network and Sharing Center</li> <li>Select Manage Network Connections (left menu)</li> <li>Right-click the wired Ethernet Interface icon and select "Properties"</li> </ul> <p>Select "Internet Protocol Version 4 (TCP/IPv4)"</p> 
<p>6.</p> <p><input type="checkbox"/></p>	<p>1) Set the IP address and netmask of the laptop's network interface card to an IP address within the same network subnet as the statically assigned IP address used in <b>Step 3</b> of this procedure (<b>192.168.100.100</b> is suggested) and click "OK".</p> <p>2) Click "Close" from the network interface card's main "Properties" screen.</p>	<h3>Internet Protocol (TCP/IP) Properties</h3> <p>General</p> <p>You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.</p> <p><input type="radio"/> Obtain an IP address automatically</p> <p><input checked="" type="radio"/> Use the following IP address:</p> <p>IP address: 192 . 168 . 100 . 100</p> <p>Subnet mask: 255 . 255 . 255 . 0</p> <p>Default gateway: . . .</p> <p><input type="radio"/> Obtain DNS server address automatically</p> <p><input checked="" type="radio"/> Use the following DNS server addresses:</p> <p>Preferred DNS server: . . .</p> <p>Alternate DNS server: . . .</p> <p>Advanced...</p> <p>OK</p> <p>1</p>	<h3>Local Area Connection Properties</h3> <p>General</p> <p>Connect using: Broadcom NetXtreme Gigabit Ethernet</p> <p>This connection uses the following items:</p> <ul style="list-style-type: none"> <li>Client for Microsoft Networks</li> <li>Deterministic Network Enhancer</li> <li>Wireless Intermediate Driver</li> <li>File and Printer Sharing for Microsoft Networks</li> </ul> <p>Install... Uninstall Properties</p> <p>Description: Allows your computer to access resources on a Microsoft network.</p> <p>Close</p> <p>2</p>
<p><b>THIS PROCEDURE HAS BEEN COMPLETED</b></p>			

- The user can now launch an approved web browser on this laptop and connect to <https://192.168.100.11> to access the SDS GUI using a temporary IP address.

## Appendix E. Configure Cisco 4948E-F Aggregation Switches

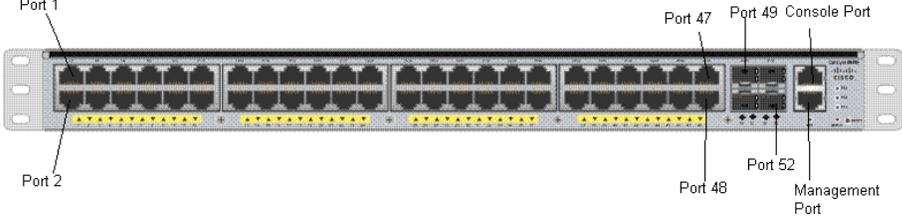
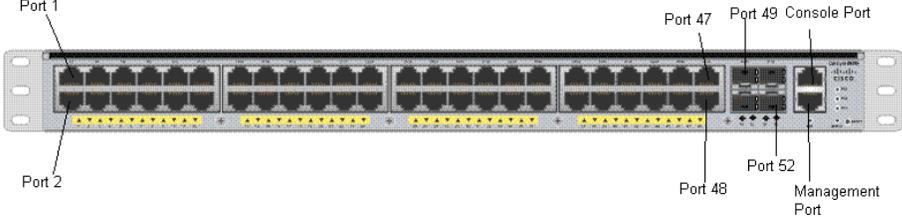
These switch configuration procedures require that the SDS hardware (servers and switches) are installed in a frame as indicated in the below picture:

U	SDS - DC- Seismic	
44	PDP-A	PWR
43		
42		
41		
40	FILLER PANEL	
39	FILLER PANEL	
38	FILLER PANEL	
37	FILLER PANEL	
36	FILLER PANEL	
35	FILLER PANEL	
34	FILLER PANEL	
33	FILLER PANEL	
32	FILLER PANEL	
31	SWITCH B (Cisco 4948E-F)	SW
30	FILLER PANEL	
29	SWITCH A (Cisco 4948E-F)	
28	FILLER PANEL	
27	FILLER PANEL	
26	FILLER PANEL	
25	FILLER PANEL	
24	FILLER PANEL	
23	FILLER PANEL	
22	FILLER PANEL	
21	FILLER PANEL	
20	FILLER PANEL	
19	FILLER PANEL	
18	FILLER PANEL	
17	FILLER PANEL	
16	FILLER PANEL	
15	FILLER PANEL	
14	FILLER PANEL	
13	FILLER PANEL	
12	FILLER PANEL	
11	FILLER PANEL	
10	FILLER PANEL	
9	FILLER PANEL	
8	FILLER PANEL	
7	FILLER PANEL	
6	SERVER C - QUERY (HP DL360 G6)	SERVERS
5	SERVER B - SDS NOAM (HP DL360 G6)	
4	SERVER A - SDS NOAM (HP DL360 G6)	
3	FILLER PANEL	
2	FILLER PANEL	
1	FILLER PANEL	

Figure 7 – SDS Frame Layout

## E.1 Verifying Cisco Switch Wiring (SDS sites)

### Appendix E.1: Verifying Cisco Switch Wiring (SDS sites)

Step	Procedure	Result
<p>1.</p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p>	<p>Set/Verify the following cable configuration at the <b>Cisco 4948E-F switches</b>:</p> <p>1) Verify that the ISL from... <b>switch1A, Port 1</b> to <b>switch1B, Port 1</b> is <b>CONNECTED</b>.</p> <p>2) Verify that the ISL from... <b>switch1A, Port 2</b> to <b>switch1B, Port 2</b> is <b>CONNECTED</b>.</p> <p>3) Verify that the ISL from... <b>switch1A, Port 3</b> to <b>switch1B, Port 3</b> is <b>CONNECTED</b>.</p> <p>4) Verify that the ISL from... <b>switch1A, Port 4</b> to <b>switch1B, Port 4</b> is <b>CONNECTED</b>.</p>	<div style="display: flex; flex-direction: column; align-items: center;"> <div style="display: flex; align-items: center; margin-bottom: 20px;"> <div style="font-size: 48px; margin-right: 20px;">1B</div> <div style="text-align: center;">  <p>switch1B (Top)</p> </div> </div> <div style="display: flex; align-items: center;"> <div style="font-size: 48px; margin-right: 20px;">1A</div> <div style="text-align: center;">  <p>switch1A (Bottom)</p> </div> </div> <p style="text-align: center; margin-top: 20px;">Figure 8 - Cisco 4948E-F Switches</p> </div>

## Appendix E.1: Verifying Cisco Switch Wiring (SDS sites)

Step	Procedure	Result
<p>2.</p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p>	<p>Verify that <b>server1A</b> and <b>server1B</b> have the MB Serial interface connected to the <b>Console Port</b> on the correct switch face.</p> <p>1) Verify that <b>switch1A, Console Port</b> to <b>server1A, Serial Port</b> is <b>CONNECTED</b> using Cable 830-1229-xx.</p> <p>2) Verify that <b>switch1B, Console Port</b> to <b>server1B, Serial Port</b> is <b>CONNECTED</b> using Cable 830-1229-xx.</p>	<div> </div> <p><b>Figure 9 - Cisco 4948E-F switches: Switch Console Port</b></p> <hr/> <div> </div> <p><b>Figure 10 - HP DL360 Rear Panel: Serial Port</b></p>

3. Verify that all servers have correct connectivity to switches.
- 1) Verify Ethernet cabling from... **switch1A, Port 5 to server1A, NIC2 is CONNECTED.**
  - 2) Verify Ethernet cabling from... **switch1B, Port 5 to server1A, ETH 4 is CONNECTED.**
  - 3) Verify Ethernet cabling from... **switch1A, Port 6 to server1B, NIC2 is CONNECTED.**
  - 4) Verify Ethernet cabling from... **switch1B, Port 6 to server1B, ETH 4 is CONNECTED.**
  - 5) Verify Ethernet cabling from... **switch1A, Port 7 to server1C, NIC2 is CONNECTED.**
  - 6) Verify Ethernet cabling from... **switch1B, Port 7 to server1C, ETH 4 is CONNECTED.**
  -

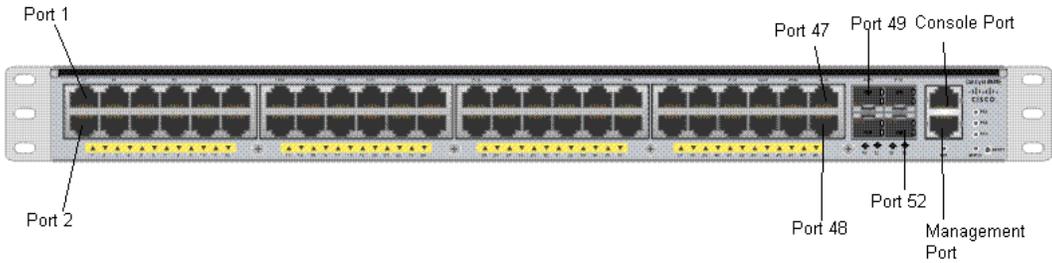


Figure 11 - Cisco 4948E-F switches: switch1A Console Port

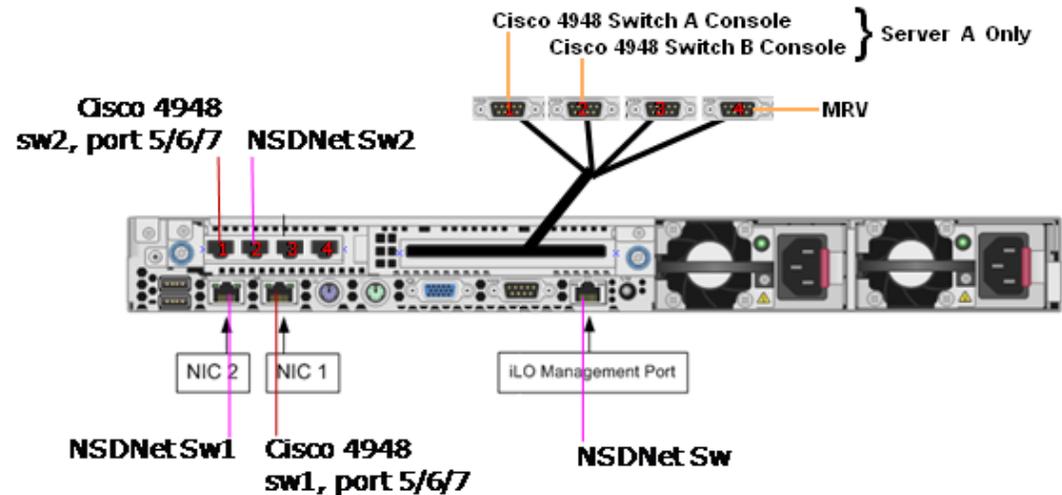


Figure 1 - HP DL360, DC (Rear Panel)

**THIS PROCEDURE HAS BEEN COMPLETED**

## E.2 Configure Cisco 4948E-F Aggregation Switches

Steps within this procedure may refer to variable data indicated by text within "<>". Refer to this table for the proper value to insert depending on your system type.

**CAUTION!!** All netConfig commands must be typed *exactly* as they are shown here! Input is case sensitive, there is no input validation, and some terminal clients will inject bad characters if you backspace! Use **Ctrl-C** to exit netConfig if you make a mistake on any field and re-run that command.

<b>Variable</b>	<b>management server</b>	<b>Serial Port (DL360)</b>
<switch1A_serial_port>	server1A	ttyS4
<switch1B_serial_port>	server1A	ttyS5
<b>Variable</b>	<b>Cisco WS-C4948E-F</b>	
<IOS_image_file>	Fill in the appropriate value from [6]: _____	
<b>Variable</b>	<b>Value</b>	
<switch_platform_username>	Contact Oracle's Tekelec Customer Support.	
<switch_platform_password>	Contact Oracle's Tekelec Customer Support.	
<switch_console_password>	Contact Oracle's Tekelec Customer Support.	
<switch_enable_password>	Contact Oracle's Tekelec Customer Support.	
<server1A_mgmtVLAN_ip_address >	<i>Primary SDS:</i> 169.254.1.11 <i>DR SDS:</i> 169.254.1.14	
<management_server1B_mgmtVLAN_ip_address>	<i>Primary SDS:</i> 169.254.1.12 <i>DR SDS:</i> 169.254.1.15	
<switch_mgmtVLAN_id>	2	
<switch1A_mgmtVLAN_ip_address>	169.254.1.1	
<netmask>	255.255.255.0	
<switch1B_mgmtVLAN_ip_address>	169.254.1.2	
<management_server_mgmtInterface>	bond0.2	
<server1A_iLO_ip> (See Site Survey)[2][3]	_____	
<management_server1B_iLO_ip> (See Site Survey) [2][3]	_____	
<b>Ethernet Interface</b>	<b>DL360</b>	
<ethernet_interface_1>	bond0.2 (eth01, eth11)	
<ethernet_interface_2>	bond0.4 (eth01, eth11)	

Variable	Value
<platcfg_password>	Contact Oracle's Tekelec Customer Support
<management_server_mgmtInterface>	bond0.2
<switch_backup_user>	Contact Oracle's Tekelec Customer Support.
<switch_backup_user_password>	Contact Oracle's Tekelec Customer Support.

**Note:** The onboard administrators are not available during the configuration of Cisco 4948E-F switches.

**Note:** Uplinks, if present, must be disconnected from the customer network prior to executing this procedure. One of the steps in this procedure will instruct when to reconnect these uplink cables. Refer to Section E.1 for determining which cables are used for customer uplink.

**Needed Material:**

- HP Misc. Firmware DVD
- HP Solutions Firmware Upgrade Pack Release Notes [6]
- Application specific documentation (documentation that referred to this procedure)
- Switch A and B initialization xml files and SDS switch configuration xml file in an application ISO on an application CD.
- Application ISO's with netConfig and its required RPMs.

**Note:** If a procedural STEP fails to execute successfully, STOP and contact the Customer Care Center by referring to the [Customer Care Center](#) section of this document.

## Appendix E.2: Configuring Cisco 4948E-F switches (SDS sites)

Step	Procedure	Result
1. <input type="checkbox"/>	<b>server1A:</b> Access the <b>server1A</b> console.	<ul style="list-style-type: none"> <li>Connect to the <b>server1A</b> console using one of the access methods described in <b>Section 2.3</b>.</li> </ul>
2. <input type="checkbox"/>	<b>server1A:</b> 1) Access the command prompt.  2) Log into the HP DL360 server as the "root" user.	<pre>CentOS release 5.6 (Final) Kernel 2.6.18-238.19.1.el5prere15.0.0_72.20.0 on an x86_64  hostname1260476221 login: root Password: &lt;root_password&gt;</pre>
3. <input type="checkbox"/>	<b>server1A:</b> Output similar to that shown on the right will appear as the server access the command prompt.	<p><b>*** TRUNCATED OUTPUT ***</b></p> <pre>VPATH=/opt/TKLCcomcol/runcm5.16:/opt/TKLCcomcol/cm5.16 PRODPATH= RELEASE=5.16 RUNID=00 VPATH=/var/TKLC/rundb:/usr/TKLC/appworks:/usr/TKLC/awpcommon:/usr/TKLC/comagent-gui:/usr/TKLC/comagent:/usr/TKLC/sds PRODPATH=/opt/comcol/prod RUNID=00 [root@hostname1260476221 ~]#</pre>
4. <input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>	<b>server1A:</b> Verify the switch1A initialization file exists  Verify the switch1B initialization file exists  Verify the switch configuration file exists	<pre># ls -l /usr/TKLC/plat/etc/switch/xml/switch1A_SDS_4948E_E-F_init.xml # ls -l /usr/TKLC/plat/etc/switch/xml/switch1B_SDS_4948E_E-F_init.xml # ls -l /usr/TKLC/plat/etc/switch/xml/switch_SDS_4948E_E-F_configure.xml</pre> <p>If any file does not exist, contact Customer Care Center for assistance.</p>

## Appendix E.2: Configuring Cisco 4948E-F switches (SDS sites)

Step	Procedure	Result
5. <input type="checkbox"/>	<b>server1A:</b> Verify quad-serial port mappings <i>(quad-dongle S1 = ttyS4, quad-dongle S2 = ttyS5)</i>	<pre># setserial -g /dev/ttyS{1..12} /dev/ttyS1, UART: 16550A, Port: 0x02f8, IRQ: 3 /dev/ttyS2, UART: unknown, Port: 0x03e8, IRQ: 4 /dev/ttyS3, UART: unknown, Port: 0x02e8, IRQ: 3 /dev/ttyS4, UART: 16950/954, Port: 0x0000, IRQ: 24 /dev/ttyS5, UART: 16950/954, Port: 0x0000, IRQ: 24 /dev/ttyS6, UART: 16950/954, Port: 0x0000, IRQ: 24 /dev/ttyS7, UART: 16950/954, Port: 0x0000, IRQ: 24 /dev/ttyS8, UART: unknown, Port: 0x0000, IRQ: 0 /dev/ttyS9, UART: unknown, Port: 0x0000, IRQ: 0 /dev/ttyS10, UART: unknown, Port: 0x0000, IRQ: 0 /dev/ttyS11, UART: unknown, Port: 0x0000, IRQ: 0 /dev/ttyS12, UART: unknown, Port: 0x0000, IRQ: 0 #</pre> <p>Output should match the example shown above; if not, contact Customer Care Center for assistance.</p>
6. <input type="checkbox"/>	<b>server1A:</b> Setup conserver serial access for switch1A	<pre># conserverAdm --addConsole --name=switch1A_console --device=/dev/ttyS4</pre> <p>You should be returned to the command line prompt. If so continue to the next step; if not, contact Customer Care Center for assistance.</p>
7. <input type="checkbox"/>	<b>server1A:</b> Add repository for console information	<pre># netConfig --repo addService name=switch1A_consvc Service type? (tftp, ssh, conserver, oa) conserver Service host? 169.254.1.11 Enter an option name (q to cancel): user Enter a value for user: platcfg Enter an option name(q to cancel): password Enter a value for password: &lt;platcfg_password&gt; Verify password: &lt;platcfg_password&gt; Enter an option name(q to cancel): q Add service for switch1A_consvc successful</pre>
8. <input type="checkbox"/>	<b>server1A:</b> Verify you have entered the information correctly	<pre># netConfig --repo showService name=switch1A_consvc Service Name:  switch1A_consvc                 Type:      conserver                 Host:      169.254.1.11                 Options:                     password: D8396824B3B2B9EE                     user: platcfg</pre>

## Appendix E.2: Configuring Cisco 4948E-F switches (SDS sites)

Step	Procedure	Result
9. <input type="checkbox"/>	<b>server1A:</b> Setup conserver serial access for switch1B	# <code>conserverAdm --addConsole --name=switch1B_console --device=/dev/ttyS5</code>
10. <input type="checkbox"/>	<b>server1A:</b> Add repository for switch1B console service	# <code>netConfig --repo addService name=switch1B_consvc</code> Service type? (tftp, ssh, conserver, oa) <code>conserver</code> Service host? <code>169.254.1.11</code> Enter an option name (q to cancel): <code>user</code> Enter a value for user: <code>platcfg</code> Enter an option name(q to cancel): <code>password</code> Enter a value for password: <code>&lt;platcfg_password&gt;</code> Verify password: <code>&lt;platcfg_password&gt;</code> Enter an option name(q to cancel): <code>q</code> Add service for console_service successful
11. <input type="checkbox"/>	<b>server1A:</b> Verify you have entered the information correctly	# <code>netConfig --repo showService name=switch1B_consvc</code> Service Name: <code>switch1B_consvc</code> Type: <code>conserver</code> Host: <code>169.254.1.11</code> Options: password: <code>D8396824B3B2B9EE</code> user: <code>platcfg</code>
12. <input type="checkbox"/>	<b>server1A:</b> Add repository for TFTP service	# <code>netConfig --repo addService name=tftp_service</code> Service type? (tftp, ssh, conserver, oa) <code>tftp</code> Service host? <code>169.254.1.11</code> Enter an option name (q to cancel): <code>dir</code> Enter a value for user: <code>/var/lib/tftpboot/</code> Enter an option name(q to cancel): <code>q</code> Add service for tftp_service successful
13. <input type="checkbox"/>	<b>server1A:</b> Verify you have entered the information correctly	# <code>netConfig --repo showService name=tftp_service</code> Service Name: <code>tftp_service</code> Type: <code>tftp</code> Host: <code>169.254.1.11</code> Options: dir: <code>/var/lib/tftpboot/</code>

## Appendix E.2: Configuring Cisco 4948E-F switches (SDS sites)

Step	Procedure	Result
14. <input type="checkbox"/>	server1A: Add repository for SSH service	<pre># netConfig --repo addService name=ssh_service Service type? (tftp, ssh, conserver, oa) ssh Service host? 169.254.1.11 Enter an option name &lt;q to cancel&gt;: user Enter the value for user: root Enter an option name &lt;q to cancel&gt;: password Enter the value for password: &lt;switch_backup_user_password&gt; Verify password: &lt;switch_backup_user_password&gt; Enter an option name &lt;q to cancel&gt;: q Add service for ssh_service successful</pre>
15. <input type="checkbox"/>	server1A: Verify you have entered the information correctly	<pre># netConfig --repo showService name=ssh_service  Service Name:    ssh_service Type:            ssh Host:            169.254.1.11 Options:   password: C20F7D639AE7E7   user: root  #</pre>
16. <input type="checkbox"/>	server1A: Add repository for switch1A	<pre># netConfig --repo addDevice name=switch1A --reuseCredentials Device Vendor? Cisco Device Model? 4948E-F  Should the init oob adapter be added (y/n)? y  Adding consoleInit protocol for switch1A using oob... What is the name of the service used for OOB access? switch1A_consvc What is the name of the console for OOB access? switch1A_console What is the device console password? &lt;switch_console_password&gt; What is the platform access username? platcfg What is the platform user password? &lt;platcfg_password&gt; Verify password: &lt;platcfg_password&gt; What is the device privileged mode password? &lt;switch_enable_password&gt; Verify password: &lt;switch_enable_password&gt;  Should the live network adapter be added (y/n)? y Adding cli protocol for switch1A using network... What is the address used for network device access? 169.254.1.1  Should the live oob adapter be added (y/n)? y Adding cli protocol for switch1A using oob... OOB device access already set: console_service  Device named switch1A successfully added.</pre>

## Appendix E.2: Configuring Cisco 4948E-F switches (SDS sites)

Step	Procedure	Result
<p>17.</p> <input type="checkbox"/>	<p><b>server1A:</b></p> <p>Verify you have entered the information correctly</p>	<pre># netConfig --repo listDevices Devices: Device: switch1A   Vendor:  Cisco   Model:   4948E-F   Access: Network: 169.254.1.1   Access: OOB:            Service: switch1A_consvc            Console: switch1A_console   Init Protocol Configured   Live Protocol Configured  Device: switch1B   Vendor:  Cisco   Model:   4948E-F   Access: Network: 169.254.1.2   Access: OOB:            Service: switch1B_consvc            Console: switch1B_console   Init Protocol Configured   Live Protocol Configured  #</pre>
<p>18.</p> <input type="checkbox"/>	<p><b>server1A:</b></p> <p>Add repository for switch1B</p>	<pre># netConfig --repo addDevice name=switch1B --reuseCredentials Device Vendor? Cisco Device Model? 4948E-F Should the init oob adapter be added (y/n)? y Adding consoleInit protocol for switch1B using oob... What is the name of the service used for OOB access? switch1B_consvc What is the name of the console for OOB access? switch1B_console What is the device console password? &lt;switch_console_password&gt; What is the platform access username? platcfg What is the platform user password? &lt;platcfg_password&gt; Verify password: &lt;platcfg_password&gt; What is the device privileged mode password? &lt;switch_enable_password&gt; Verify password: &lt;switch_enable_password&gt;  Should the live network adapter be added (y/n)? y Adding cli protocol for switch1A using network... What is the address used for network device access? 169.254.1.2  Should the live oob adapter be added (y/n)? y Adding cli protocol for switch1B using oob... OOB device access already set: switch1B_consvc  Device named switch1B successfully added.</pre>

## Appendix E.2: Configuring Cisco 4948E-F switches (SDS sites)

Step	Procedure	Result
<b>19.</b> <input type="checkbox"/>	<b>server1A:</b>  Verify you have entered the information correctly	<pre># netConfig --repo listDevices Devices: Device: switch1A   Vendor:  Cisco   Model:   4948E-F   Access:  Network: 169.254.1.1   Access:  OOB:             Service: switch1A_consvc             Console: switch1A_console   Init Protocol Configured   Live Protocol Configured  Device: switch1B   Vendor:  Cisco   Model:   4948E-F   Access:  Network: 169.254.1.2   Access:  OOB:             Service: switch1B_consvc             Console: switch1A_console   Init Protocol Configured   Live Protocol Configured #</pre>
<b>20.</b> <input type="checkbox"/>	<b>server1A:</b>  Log in to switch1A	<pre><b>Example:</b> console -M &lt;server1A_mgmtVLAN_ip_address&gt; -l platcfg switch1A_console # /usr/bin/console -M 169.254.1.11 -l platcfg switch1A_console  Enter platcfg@pmac5000101's password: &lt;platcfg_password&gt; [Enter `^Ec?' for help] Press &lt;Enter&gt;</pre>
<b>21.</b> <input type="checkbox"/>	<b>switch1A:</b>  Note the image version for comparison in a following step.	<pre>Switch&gt; show version   include image System image file is "bootflash:cat4500-ipbasek9-mz.122-54.WO.bin"</pre> <p>Note the image version for comparison in a following step.</p>



**IF THE SWITCH1A (4948E-F) IOS DOES NOT DISPLAY THE CORRECT VERSION IN THE ABOVE STEP, THEN STOP AND EXECUTE THE FOLLOWING STEPS:**

- 1) **Appendix E.3** Cisco 4948E-F IOS Upgrade (SDS sites)
- 2) Return to this Procedure and continue with the following Step. **Beginning with Step 40.**

**NOTE:** For each switch, compare the IOS version from previous steps with the IOS version specified in the Firmware Upgrade Pack Release Notes [5] for the switch model being used.

If the version from previous steps is equal or greater than the version from the release notes and has "k9" in the name, denoting support for crypto, then continue with the next step, there is no upgrade necessary for this switch.

Step	Procedure	Result
22. <input type="checkbox"/>	<b>Switch1A:</b>  Execute "show bootflash" to verify that only the correct bootflash is present.	Switch> <b>show bootflash</b> -#- --length-- -----date/time----- path 1 25771102 Nov 29 2011 08:53:46 cat4500e-entservicesk9-mz.122-54.XO.bin  95072256 bytes available (33210368 bytes used)  Note the image version for comparison in a following step
23. <input type="checkbox"/>	<b>Switch1A:</b>  Reset switch back to factory defaults by deleting the VLANs.	Switch> <b>en</b> Password: Switch# <b>write erase</b>  Erasing the nvram filesystem will remove all configuration files! Continue? [confirm] <b>&lt;ENTER&gt;</b> [OK] Erase of nvram: complete Switch# *Jan 26 12:53:06.547: %SYS-7-NV_BLOCK_INIT: Initialized the geometry of nvram <b>&lt;ENTER&gt;</b> Switch# <b>config t</b> Enter configuration commands, one per line. End with CNTL/Z. Switch(config)# <b>no vlan 2-1024</b> %Default VLAN 1002 may not be deleted. %Default VLAN 1003 may not be deleted. %Default VLAN 1004 may not be deleted. %Default VLAN 1005 may not be deleted. Switch(config)# <b>config-register 0x2101</b> Switch(config)# <b>end</b> Switch# *Jan 26 12:53:31.675: %SYS-5-CONFIG_I: Configured from console by console Switch#
24. <input type="checkbox"/>	<b>Switch1A:</b>  Reload the switch.	Switch# <b>reload</b>  System configuration has been modified. Save? [yes/no]: <b>no</b> Proceed with reload? [confirm] <b>&lt;ENTER&gt;</b>

Step	Procedure	Result
25. <input type="checkbox"/>	<b>Switch1A:</b>  Monitor the switch reboot until it returns to a login prompt.	cisco WS-C4948E-F (MPC8548) processor (revision 5) with 1048576K bytes of memory. Processor board ID CAT1529S91B MPC8548 CPU at 1GHz, Cisco Catalyst 4948E-F Last reset from Reload 1 Virtual Ethernet interface 48 Gigabit Ethernet interfaces 4 Ten Gigabit Ethernet interfaces 511K bytes of non-volatile configuration memory.  Press RETURN to get started! <b>&lt;ENTER&gt;</b>  Switch>
26. <input type="checkbox"/>	<b>Switch1A:</b>  Enter "enable" mode.	Switch# <b>enable</b> Switch#
27. <input type="checkbox"/>	<b>Switch1A:</b>  Verify that you see the correct IOS version listed in the bootflash.	Switch# <b>dir bootflash:</b> Directory of bootflash:/  7  -rw-      25771102  Jan 31 2012 07:45:56 +00:00  cat4500e-entservicesk9- mz.122-54.XO.bin  128282624 bytes total (72122368 bytes free) Switch#
28. <input type="checkbox"/>	<b>Switch1A:</b>  Close connection to switch.	Switch# <b>quit</b>  Switch con0 is now available  Press RETURN to get started.
29. <input type="checkbox"/>	<b>switch1A:</b>  Note the image version for comparison in a following step.	Exit from console by typing <b>CTRL+E+c+</b> . (combination control character and 'e' character, followed by sequence 'c' character, then 'period' character) and you will be returned to the server prompt.
30. <input type="checkbox"/>	<b>server1A:</b>  Log in to switch1B	<i>Example:</i> <b>console -M &lt;server1A_mgmtVLAN_ip_address&gt; -l platcfg switch1B_console</b>  <b># /usr/bin/console -M 169.254.1.11 -l platcfg switch1B_console</b>  Enter platcfg@pmac5000101's password: <b>&lt;platcfg_password&gt;</b> [Enter `^Ec?' for help] Press <Enter>
31. <input type="checkbox"/>	<b>Switch1B:</b>  Note the image version for comparison in a following step.	Switch> <b>show version   include image</b> System image file is "bootflash:cat4500e-entservicesk9-mz.122-54.XO.bin"  Note the image version for comparison in a following step.



**IF THE SWITCH1B IOS DOES NOT DISPLAY THE CORRECT VERSION IN THE ABOVE STEP, THEN STOP AND EXECUTE THE FOLLOWING STEPS:**

- 1) **Appendix E.3 Cisco 4948E-F IOS Upgrade (SDS sites); Beginning with Step 25.**
- 2) Return to this Procedure and continue with the following Step.

**NOTE:** For each switch, compare the IOS version from previous steps with the IOS version specified in the Firmware Upgrade Pack Release Notes [5] for the switch model being used.

If the version from previous steps is equal or greater than the version from the release notes and has "k9" in the name, denoting support for crypto, then continue with the next step, there is no upgrade necessary for this switch.

Step	Procedure	Result
32. <input type="checkbox"/>	<b>Switch1B:</b>  Execute "show bootflash" to verify that only the correct bootflash is present.	Switch> <b>show bootflash</b> -#- --length-- -----date/time----- path 1 25771102 Nov 29 2011 09:04:04 cat4500e-entservicesk9-mz.122-54.XO.bin  95072256 bytes available (33210368 bytes used)  Note the image version for comparison in a following step
33. <input type="checkbox"/>	<b>Switch1B:</b>  Reset switch back to factory defaults by deleting the VLANs.	Switch> <b>en</b> Password: Switch# <b>write erase</b>  Erasing the nvram filesystem will remove all configuration files! Continue? [confirm] <b>&lt;ENTER&gt;</b> [OK] Erase of nvram: complete Switch# *Jan 26 12:53:06.547: %SYS-7-NV_BLOCK_INIT: Initialized the geometry of nvram <b>&lt;ENTER&gt;</b> Switch# <b>config t</b> Enter configuration commands, one per line. End with CNTL/Z. Switch(config)# <b>no vlan 2-1024</b> %Default VLAN 1002 may not be deleted. %Default VLAN 1003 may not be deleted. %Default VLAN 1004 may not be deleted. %Default VLAN 1005 may not be deleted. Switch(config)# <b>config-register 0x2101</b> Switch(config)# <b>end</b> Switch# *Jan 26 12:53:31.675: %SYS-5-CONFIG_I: Configured from console by console Switch#
34. <input type="checkbox"/>	<b>Switch1B:</b>  Reload the switch.	Switch# <b>reload</b>  System configuration has been modified. Save? [yes/no]: <b>no</b> Proceed with reload? [confirm] <b>&lt;ENTER&gt;</b>

Step	Procedure	Result
<b>35.</b> <input type="checkbox"/>	<b>Switch1B:</b>  Monitor the switch reboot until it returns to a login prompt.	<pre> cisco WS-C4948E-F (MPC8548) processor (revision 5) with 1048576K bytes of memory. Processor board ID CAT1529S91B MPC8548 CPU at 1GHz, Cisco Catalyst 4948E-F Last reset from Reload 1 Virtual Ethernet interface 48 Gigabit Ethernet interfaces 4 Ten Gigabit Ethernet interfaces 511K bytes of non-volatile configuration memory.  Press RETURN to get started! &lt;ENTER&gt;  Switch&gt; </pre>
<b>36.</b> <input type="checkbox"/>	<b>Switch1B:</b>  Enter "enable" mode.	<pre> Switch#enable Switch# </pre>
<b>37.</b> <input type="checkbox"/>	<b>Switch1B:</b>  Verify that you see the correct IOS version listed in the bootflash.	<pre> Switch#dir bootflash: Directory of bootflash:/     7  -rw-     25771102  Jan 31 2012 07:45:56 +00:00  cat4500e-entservicesk9- mz.122-54.XO.bin  128282624 bytes total (72122368 bytes free) Switch# </pre>
<b>38.</b> <input type="checkbox"/>	<b>Switch1B:</b>  Close connection to switch.	<pre> Switch#quit  Switch con0 is now available  Press RETURN to get started. </pre>
<b>39.</b> <input type="checkbox"/>	<b>Switch1B:</b>  Note the image version for comparison in a following step.	<p>Exit from console by typing <b>CTRL+E+c+</b>. (combination control character and 'e' character, followed by sequence 'c' character, then 'period' character) and you will be returned to the server prompt.</p>
<b>40.</b> <input type="checkbox"/>	<b>server1A:</b>  Initialize switch 1A	<pre> # netConfig --file=/usr/TKLC/plat/etc/switch/xml/switch1A_SDS_4948E_E-F_init.xml Processing file: /usr/TKLC/plat/etc/switch/xml/switch1A_SDS_4948E-F_init.xml # </pre> <p>Note: This step takes about 2-3 minutes to complete</p> <p>Check the output of this command for any errors. If this fails for any reason, stop this procedure and contact Customer Care Center.</p> <p>A successful completion of netConfig will return the user to the prompt.</p>

Step	Procedure	Result
<b>41.</b> <input type="checkbox"/>	<b>server1A:</b> Initialize switch 1B	<pre># netConfig --file=/usr/TKLC/plat/etc/switch/xml/switch1B_SDS_4948E_E-F_init.xml</pre> <p>Processing file: /usr/TKLC/plat/etc/switch/xml/switch1B_SDS_4948E-F_init.xml</p> <pre>#</pre> <p>Note: This step takes about 2-3 minutes to complete</p> <p>Check the output of this command for any errors. If this fails for any reason, stop this procedure and contact Customer Care Center.</p> <p>A successful completion of netConfig will return the user to the prompt.</p>
<b>42.</b> <input type="checkbox"/>	<b>server1A:</b> Ping switch 1A's SVI (router interface) addresses to verify switch initialization.  <b>Note:</b> VIP addresses are not yet available.	<pre># ping -c 15 169.254.1.1</pre> <p>PING 169.254.1.1 (169.254.1.1) 56(84) bytes of data.</p> <pre>64 bytes from 169.254.1.1: icmp_seq=1 ttl=255 time=3.09 ms 64 bytes from 169.254.1.1: icmp_seq=2 ttl=255 time=0.409 ms 64 bytes from 169.254.1.1: icmp_seq=3 ttl=255 time=0.417 ms 64 bytes from 169.254.1.1: icmp_seq=4 ttl=255 time=0.418 ms 64 bytes from 169.254.1.1: icmp_seq=5 ttl=255 time=0.419 ms 64 bytes from 169.254.1.1: icmp_seq=6 ttl=255 time=0.419 ms 64 bytes from 169.254.1.1: icmp_seq=7 ttl=255 time=0.429 ms 64 bytes from 169.254.1.1: icmp_seq=8 ttl=255 time=0.423 ms 64 bytes from 169.254.1.1: icmp_seq=9 ttl=255 time=0.381 ms 64 bytes from 169.254.1.1: icmp_seq=10 ttl=255 time=0.416 ms 64 bytes from 169.254.1.1: icmp_seq=11 ttl=255 time=0.381 ms 64 bytes from 169.254.1.1: icmp_seq=12 ttl=255 time=0.426 ms 64 bytes from 169.254.1.1: icmp_seq=13 ttl=255 time=0.420 ms 64 bytes from 169.254.1.1: icmp_seq=14 ttl=255 time=0.415 ms 64 bytes from 169.254.1.1: icmp_seq=15 ttl=255 time=0.419 ms</pre> <pre>--- 169.254.1.1 ping statistics --- 15 packets transmitted, 15 received, 0% packet loss, time 14006ms rtt min/avg/max/mdev = 0.381/0.592/3.097/0.669 ms #</pre>

Step	Procedure	Result
<p>43.</p> <input type="checkbox"/>	<p><b>server1A:</b></p> <p>Ping switch 1B's SVI (router interface) addresses to verify switch initialization.</p> <p><b>Note:</b> VIP addresses are not yet available.</p>	<pre># ping -c 15 169.254.1.2</pre> <p>PING 169.254.1.2 (169.254.1.2) 56(84) bytes of data.</p> <p>From 169.254.1.11 icmp_seq=2 Destination Host Unreachable</p> <p>From 169.254.1.11 icmp_seq=3 Destination Host Unreachable</p> <p>From 169.254.1.11 icmp_seq=4 Destination Host Unreachable</p> <p>From 169.254.1.11 icmp_seq=6 Destination Host Unreachable</p> <p>From 169.254.1.11 icmp_seq=7 Destination Host Unreachable</p> <p>From 169.254.1.11 icmp_seq=8 Destination Host Unreachable</p> <p>64 bytes from 169.254.1.2: icmp_seq=9 ttl=255 time=2.76 ms</p> <p>64 bytes from 169.254.1.2: icmp_seq=10 ttl=255 time=0.397 ms</p> <p>64 bytes from 169.254.1.2: icmp_seq=11 ttl=255 time=0.448 ms</p> <p>64 bytes from 169.254.1.2: icmp_seq=12 ttl=255 time=0.382 ms</p> <p>64 bytes from 169.254.1.2: icmp_seq=13 ttl=255 time=0.426 ms</p> <p>64 bytes from 169.254.1.2: icmp_seq=14 ttl=255 time=0.378 ms</p> <p>64 bytes from 169.254.1.2: icmp_seq=15 ttl=255 time=0.431 ms</p> <p>---</p> <p>--- 169.254.1.2 ping statistics ---</p> <p>15 packets transmitted, 7 received, +6 errors, 53% packet loss, time 14003ms</p> <p>rtt min/avg/max/mdev = 0.378/0.747/2.769/0.825 ms, pipe 3</p> <p><b>! WARNING !: The user needs to verify that the above ping is successful before continuing on to the next step. If the ping continues to receive "Destination Host Unreachable", then stop this procedure and contact the Customer Care Center.</b></p>
<p>44.</p> <input type="checkbox"/>	<p><b>server1A:</b></p> <p>Configure both switches</p>	<pre># netConfig --file=/usr/TKLC/plat/etc/switch/xml/switch_SDS_4948E_E-F_configure.xml</pre> <p>Processing file: /usr/TKLC/plat/etc/switch/xml/switch_SDS_4948E-F_configure.xml</p> <pre>#</pre> <p>Note: This step takes about 2-3 minutes to complete.</p> <ul style="list-style-type: none"> <li>• Check the output of this command for any errors. If this fails for any reason, stop this procedure and contact Customer Care Center.</li> <li>• A successful completion of netConfig will return the user to the prompt.</li> </ul>

Step	Procedure	Result
<b>45.</b> <input type="checkbox"/>	<b>server1A:</b> Undo the temporary changes.	<pre># tpdProvd --client --noxml --ns=Xinetd stopXinetdService service tftp Login on Remote: platcfg Password of platcfg: &lt;platcfg_password&gt; 1</pre>
<b>46.</b> <input type="checkbox"/>	<b>server1A:</b> Verify the switch is using the correct IOS image per platform version.	<pre># netConfig --device=switch1A listFirmware Image: cat4500e-entservicesk9-mz.122-54.XO.bin # netConfig --device=switch1B listFirmware Image: cat4500e-entservicesk9-mz.122-54.XO.bin</pre>
<b>47.</b> <input type="checkbox"/>	<b>server1A:</b> Execute the “ <b>service network restart</b> ” to restore server1A networking to original state.  Output similar to that shown on the right may be observed.	<pre># service network restart Shutting down interface bond0.2:  Removed VLAN -:bond0.2:- [ OK ] Shutting down interface bond0.4:  Removed VLAN -:bond0.4:- [ OK ] Shutting down interface bond0:  [ OK ] Shutting down interface bond1:  [ OK ] Shutting down loopback interface:  [ OK ] Bringing up loopback interface:  [ OK ] Setting 802.1Q VLAN parameters:  Set name-type for VLAN subsystem. Should be visible in /proc/net/vlan/config [ OK ] Bringing up interface bond0:  RTNETLINK answers: No such device [ OK ] Bringing up interface bond1:  [ OK ] Bringing up interface bond0.2:  Added VLAN with VID == 2 to IF -:bond0:- [ OK ] Bringing up interface bond0.4:  Added VLAN with VID == 4 to IF -:bond0:- [ OK ] #</pre>

Step	Procedure	Result
<b>48.</b> <input type="checkbox"/>	<b>server1A:</b> Ping switch 1A's SVI (router interface) addresses to verify switch configuration.  <b>Note:</b> VIP addresses are not yet available.	<pre># ping -c 5 169.254.1.1 PING 169.254.1.1 (169.254.1.1) 56(84) bytes of data. 64 bytes from 169.254.1.1: icmp_seq=1 ttl=255 time=0.430 ms 64 bytes from 169.254.1.1: icmp_seq=2 ttl=255 time=0.426 ms 64 bytes from 169.254.1.1: icmp_seq=3 ttl=255 time=0.427 ms 64 bytes from 169.254.1.1: icmp_seq=4 ttl=255 time=0.426 ms 64 bytes from 169.254.1.1: icmp_seq=5 ttl=255 time=0.431 ms  --- 169.254.1.1 ping statistics --- 5 packets transmitted, 5 received, 0% packet loss, time 4003ms rtt min/avg/max/mdev = 0.426/0.428/0.431/0.002 ms #</pre>
<b>49.</b> <input type="checkbox"/>	<b>server1A:</b> Ping switch 1B's SVI (router interface) addresses to verify switch configuration.  <b>Note:</b> VIP addresses are not yet available	<pre># ping -c 5 169.254.1.2 PING 169.254.1.2 (169.254.1.2) 56(84) bytes of data. 64 bytes from 169.254.1.2: icmp_seq=1 ttl=255 time=0.401 ms 64 bytes from 169.254.1.2: icmp_seq=2 ttl=255 time=0.394 ms 64 bytes from 169.254.1.2: icmp_seq=3 ttl=255 time=0.407 ms 64 bytes from 169.254.1.2: icmp_seq=4 ttl=255 time=0.393 ms 64 bytes from 169.254.1.2: icmp_seq=5 ttl=255 time=0.401 ms  --- 169.254.1.2 ping statistics --- 5 packets transmitted, 5 received, 0% packet loss, time 3999ms rtt min/avg/max/mdev = 0.393/0.399/0.407/0.013 ms #</pre>
<b>50.</b> <input type="checkbox"/>	<b>server1A:</b> Verify SSH capability from server 1A to switch 1A.	<pre># ssh platcfg@169.154.1.1 The authenticity of host '169.254.1.1 (169.254.1.1)' can't be established. RSA key fingerprint is fd:83:32:34:3f:06:2f:12:e0:ea:e2:73:e2:c1:1e:6e. Are you sure you want to continue connecting (yes/no)? yes Warning: Permanently added '169.254.1.1' (RSA) to the list of known hosts. Password: &lt;switch_platform_password&gt;</pre>

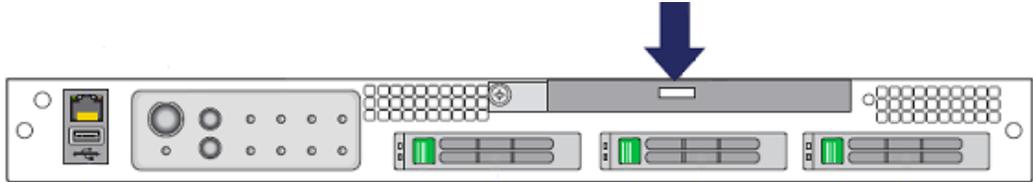
Step	Procedure	Result
<b>51.</b> <input type="checkbox"/>	<b>server1A:</b> Close SSH connection to switch 1A.	<pre># quit Connection to 169.254.1.1 closed.</pre>
<b>52.</b> <input type="checkbox"/>	<b>server1A:</b> Verify SSH capability from server 1A to switch 1B	<pre># ssh platcfg@169.154.1.2 The authenticity of host '169.254.1.2 (169.254.1.2)' can't be established. RSA key fingerprint is 3a:1b:e0:92:99:73:9d:04:92:3f:72:37:c0:1c:a6:95. Are you sure you want to continue connecting (yes/no)? yes Warning: Permanently added '169.254.1.2' (RSA) to the list of known hosts. Password: &lt;switch_platform_password&gt;</pre>
<b>53.</b> <input type="checkbox"/>	<b>server1A:</b> Close SSH connection to switch 1A.	<pre># quit Connection to 169.254.1.2 closed.</pre>
<b>54.</b> <input type="checkbox"/>	<b>server1B:</b> Execute the "service network restart" to restore server1B networking to original state.  Output similar to that shown on the right may be observed.	<pre># service network restart Shutting down interface bond0.2:  Removed VLAN --:bond0.2:-  [ OK ] Shutting down interface bond0.4:  Removed VLAN --:bond0.4:-  [ OK ] Shutting down interface bond0:    [ OK ] Shutting down interface bond1:    [ OK ] Shutting down loopback interface: [ OK ] Bringing up loopback interface:   [ OK ] Setting 802.1Q VLAN parameters:  Set name-type for VLAN subsystem. Should be visible in /proc/net/vlan/config [ OK ] Bringing up interface bond0:  RTNETLINK answers: No such device [ OK ] Bringing up interface bond1:  [ OK ] Bringing up interface bond0.2:  Added VLAN with VID == 2 to IF --:bond0:- [ OK ] Bringing up interface bond0.4:  Added VLAN with VID == 4 to IF --:bond0:- [ OK ] #</pre>

Step	Procedure	Result
<b>55.</b> <input type="checkbox"/>	<b>server1B:</b> Ping switch 1A's SVI (router interface) addresses to verify switch configuration.  <b>Note:</b> VIP addresses are not yet available.	<pre># ping -c 5 169.254.1.1 PING 169.254.1.1 (169.254.1.1) 56(84) bytes of data. 64 bytes from 169.254.1.1: icmp_seq=1 ttl=255 time=0.430 ms 64 bytes from 169.254.1.1: icmp_seq=2 ttl=255 time=0.426 ms 64 bytes from 169.254.1.1: icmp_seq=3 ttl=255 time=0.427 ms 64 bytes from 169.254.1.1: icmp_seq=4 ttl=255 time=0.426 ms 64 bytes from 169.254.1.1: icmp_seq=5 ttl=255 time=0.431 ms  --- 169.254.1.1 ping statistics --- 5 packets transmitted, 5 received, 0% packet loss, time 4003ms rtt min/avg/max/mdev = 0.426/0.428/0.431/0.002 ms #</pre>
<b>56.</b> <input type="checkbox"/>	<b>server1B:</b> Ping switch 1B's SVI (router interface) addresses to verify switch configuration.  <b>Note:</b> VIP addresses are not yet available	<pre># ping -c 5 169.254.1.2 PING 169.254.1.2 (169.254.1.2) 56(84) bytes of data. 64 bytes from 169.254.1.2: icmp_seq=1 ttl=255 time=0.401 ms 64 bytes from 169.254.1.2: icmp_seq=2 ttl=255 time=0.394 ms 64 bytes from 169.254.1.2: icmp_seq=3 ttl=255 time=0.407 ms 64 bytes from 169.254.1.2: icmp_seq=4 ttl=255 time=0.393 ms 64 bytes from 169.254.1.2: icmp_seq=5 ttl=255 time=0.401 ms  --- 169.254.1.2 ping statistics --- 5 packets transmitted, 5 received, 0% packet loss, time 3999ms rtt min/avg/max/mdev = 0.393/0.399/0.407/0.013 ms #</pre>
<b>57.</b> <input type="checkbox"/>	<b>server1B:</b> Verify SSH capability from server 1B to switch 1A.	<pre># ssh platcfg@169.154.1.1 The authenticity of host '169.254.1.1 (169.254.1.1)' can't be established. RSA key fingerprint is fd:83:32:34:3f:06:2f:12:e0:ea:e2:73:e2:c1:1e:6e. Are you sure you want to continue connecting (yes/no)? yes Warning: Permanently added '169.254.1.1' (RSA) to the list of known hosts. Password: &lt;switch_platform_password&gt;</pre>

Step	Procedure	Result
58. <input type="checkbox"/>	<b>server1B:</b> Close SSH connection to switch 1A.	# <b>quit</b> Connection to 169.254.1.1 closed.
59. <input type="checkbox"/>	<b>server1B:</b> Verify SSH capability from server 1B to switch 1B	# <b>ssh platcfg@169.154.1.2</b> The authenticity of host '169.254.1.2 (169.254.1.2)' can't be established. RSA key fingerprint is 3a:1b:e0:92:99:73:9d:04:92:3f:72:37:c0:1c:a6:95. Are you sure you want to continue connecting (yes/no)? yes Warning: Permanently added '169.254.1.2' (RSA) to the list of known hosts. Password: <switch_platform_password>
60. <input type="checkbox"/>	<b>server1B:</b> Close SSH connection to switch 1B.	# <b>quit</b> Connection to 169.254.1.2 closed.
61. <input type="checkbox"/>	<b>server1A:</b> <b>Run Appendix E.4 to backup switch configuration.</b>	
62. <input type="checkbox"/>	<b>server1A:</b> Exit from the command line to return the server console to the login prompt.	# <b>exit</b> logout  CentOS release 5.6 (Final) Kernel 2.6.18-238.19.1.el5prere15.0.0_72.22.0 on an x86_64  hostname1260476221 login:
<b>THIS PROCEDURE HAS BEEN COMPLETED</b>		

## E.3 Cisco 4948E-F IOS Upgrade (SDS sites)

### Appendix E.3: Cisco 4948E-F IOS Upgrade (SDS sites)

Step	Procedure	Result
1. <input type="checkbox"/>	<b>server1A:</b> Access the <b>server1A</b> console.	<ul style="list-style-type: none"> <li>Connect to the <b>server1A</b> console using one of the access methods described in <b>Section 2.3</b>.</li> </ul>
2. <input type="checkbox"/>	<b>server1A:</b> 1) Access the command prompt.  2) Log into the HP DL360 server as the "root" user.	<pre>CentOS release 5.6 (Final) Kernel 2.6.18-238.19.1.el5prere15.0.0_72.20.0 on an x86_64  hostname1260476221 login: root Password: &lt;root_password&gt;</pre>
3. <input type="checkbox"/>	<b>server1A:</b> Output similar to that shown on the right will appear as the server access the command prompt.	<p><b>*** TRUNCATED OUTPUT ***</b></p> <pre>VPATH=/opt/TKLCcomcol/runcm5.16:/opt/TKLCcomcol/cm5.16 PRODPATH= RELEASE=5.16 RUNID=00 VPATH=/var/TKLC/rundb:/usr/TKLC/appworks:/usr/TKLC/awpcommon:/usr/TKLC/comagent-gui:/usr/TKLC/comagent:/usr/TKLC/sds PRODPATH=/opt/comcol/prod RUNID=00 [root@hostname1260476221 ~]#</pre>
4. <input type="checkbox"/>	<b>server1A:</b> Verify IOS images on the system	<pre># ls /var/lib/tftpboot/ &lt;IOS_image_file&gt;</pre> <p>If the correct IOS version is displayed, skip forward to <b>Step 7</b>.</p>
5. <input type="checkbox"/>	<b>server1A:</b> Place the <b>HP Misc Firmware DVD</b> containing the correct version of the 4948E-F IOS into server1A's optical drive.	 <p><b>Figure 12 - HP DL360 Front Panel: Optical Drive</b></p>
6. <input type="checkbox"/>	<b>server1A:</b> Copy IOS image onto the system	<pre># mount /dev/scd0 /media/cdrom # cp /media/cdrom/files/&lt;New_IOS_image_file&gt; /var/lib/tftpboot/ # chmod 644 /var/lib/tftpboot/&lt;New_IOS_image_file&gt; # umount /media/cdrom</pre>

## Appendix E.3: Cisco 4948E-F IOS Upgrade (SDS sites)

Step	Procedure	Result
7. <input type="checkbox"/>	<b>server1A:</b> Prepare the system for IOS transfer.	<pre># tpdProvd --client --noxml --ns=Xinetd startXinetdService service tftp Login on Remote: platcfg Password of platcfg: &lt;platcfg_password&gt; 1 #</pre>
8. <input type="checkbox"/>	<b>server1A:</b> Verify the current bonded interface configuration.	<pre># ifconfig  grep bond bond0      Link encap:Ethernet  HWaddr 98:4B:E1:6E:87:6C bond0.2    Link encap:Ethernet  HWaddr 98:4B:E1:6E:87:6C bond0.4    Link encap:Ethernet  HWaddr 98:4B:E1:6E:87:6C bond1      Link encap:Ethernet  HWaddr 98:4B:E1:6E:87:6E #</pre> <p><b>Execute one of the following options:</b></p> <ul style="list-style-type: none"> <li>• If <b>bond0</b> &amp; <b>bond0.2</b> are both present, skip to <b>Step 10</b>.</li> <li>• If only <b>bond0</b> is present, continue with the following step.</li> </ul>
9. <input type="checkbox"/>	<b>server1A:</b> Create the bond0.2 and add interfaces eth01 & eth11 to it.	<pre># netAdm delete --device=bond0 # netAdm add --device=bond0 --onboot=yes --type=Bonding --mode=active- backup --miimon=100 --bootproto=none # netAdm set --device=eth01 --bootproto=none --type=Ethernet -- master=bond0 --slave=yes --onboot=yes # netAdm set --device=eth11 --bootproto=none --type=Ethernet -- master=bond0 --slave=yes --onboot=yes</pre> <p>Add the &lt;server1A_mgmtVLAN_IP_address&gt; to bond0.2</p> <pre># netAdm add --device=bond0.2 --address=169.254.1.11 -- netmask=255.255.255.0 --onboot=yes</pre>
10. <input type="checkbox"/>	<b>server1A:</b> Disable the bond0.2 interface to switch1B and verify the bond0.2 IP address.	<p>On server1A ensure that the interface connected to switch1A is the only interface available and obtain the IP address of &lt;server1A_mgmtVLAN_Interface&gt; by performing the following commands:</p> <pre># ifdown eth11 # ifup eth01 # ifconfig bond0.2 bond0.2  Link encap:Ethernet  HWaddr 98:4B:E1:6E:87:6C          inet addr:169.254.1.11  Bcast:169.254.1.255Mask:255.255.255.0          inet6 addr: fe80::9a4b:elff:fe6e:876c/64 Scope:Link          UP BROADCAST RUNNING MASTER MULTICAST MTU:1500 Metric:1          RX packets:99384 errors:0 dropped:0 overruns:0 frame:0          TX packets:105440 errors:0 dropped:0 overruns:0 carrier:0          collisions:0 txqueuelen:0          RX bytes:4603240 (4.3 MiB)  TX bytes:55536818 (52.9 MiB)</pre> <p>The command output should contain the IP address of the &lt;server1A_mgmtVLAN_ip_address&gt;.</p>

### Appendix E.3: Cisco 4948E-F IOS Upgrade (SDS sites)

Step	Procedure	Result
11. <input type="checkbox"/>	<b>server1A:</b> Connect to switch1A console	<pre>console -M &lt;server1A_mgmtVLAN_ip_address&gt; -l platcfg switch1A_console # /usr/bin/console -M 169.254.1.11 -l platcfg switch1A_console Enter platcfg@pmac5000101's password: &lt;platcfg_password&gt; [Enter `^Ec?' for help] Press &lt;Enter&gt;</pre>
12. <input type="checkbox"/>	<b>switch1A:</b> Enter enable mode	<pre>Switch&gt; enable Switch#</pre>
13. <input type="checkbox"/>	<b>switch1A:</b> Configure switch port with this sequence of commands	<pre>Switch# conf t Switch(config)# vlan 2 Switch(config)# int vlan 2 Switch(config-if)# ip address 169.254.1.1 255.255.255.0 Switch(config-if)# no shut Switch(config-if)# int gil/5 Switch(config-if)# switchport mode trunk Switch(config-if)# spanning-tree portfast trunk Switch(config-if)# end</pre>
14. <input type="checkbox"/>	<b>switch1A:</b> Test connectivity	<pre>ping &lt;server1A_mgmtVLAN_ip_address&gt;  Switch# ping 169.254.1.11 Type escape sequence to abort. Sending 5, 100-byte ICMP Echos to &lt;server1A_mgmtVLAN_ip_address&gt;, timeout is 2 seconds: !!!! Success rate is 100 percent (5/5), round trip min/avg/max = 1/1/4 ms  If ping is not 100% successful the first time, repeat the ping. If unsuccessful again, double check that the procedure was completed correctly by repeating all steps up to this point. If after repeating those steps, ping is still unsuccessful, contact Customer Care Center.</pre>
15. <input type="checkbox"/>	<b>switch1A:</b> Upload IOS image to switch	<pre>Switch# copy tftp: bootflash: Address or name of remote host []? &lt;server1A_mgmtVLAN_ip_address&gt; Source filename []? &lt;New_IOS_image_file&gt; Destination filename [&lt;New_IOS_image_file&gt;]? &lt;ENTER&gt;  Press &lt;Enter&gt; here, you do NOT want to change the filename  Accessing tftp://&lt;server1A_mgmtVLAN_ip address&gt;/&lt;IOS_image_file&gt;... Loading &lt;IOS_image_file&gt; from &lt;server1A_mgmtVLAN_ip_address&gt; (via Vlan2): !!! !! [OK - 45606 bytes]  45606 bytes copied in 3.240 secs (140759 bytes/sec)</pre>

### Appendix E.3: Cisco 4948E-F IOS Upgrade (SDS sites)

Step	Procedure	Result
16. <input type="checkbox"/>	switch1A: Locate old IOS image to be removed	<pre>Switch# dir bootflash: Directory of bootflash:/ 1  -rwx   17779888  May 11 2011 02:25:23 -05:00  cat4500-entservicesk9- mz.122-54.WO.bin 2  -rwx   17779888  May 11 2011 02:25:23 -05:00  cat4500-ipbasek9-mz.122- 54.WO.bin 60817408 bytes total (43037392 bytes free)</pre> <p>Here, you should note which IOS you uploaded, and the one which was already on the switch. Note the one that was already on the switch, this will be the one to delete, as notated by the variable &lt;OLD_IOS_image&gt;</p>
17. <input type="checkbox"/>	switch1A: Remove old IOS image	<pre>Switch# delete /force /recursive bootflash:&lt;OLD_IOS_image&gt; Switch#</pre>
18. <input type="checkbox"/>	switch1A: Locate old IOS image to be removed	<pre>Switch# dir bootflash: Directory of bootflash:/ 1  -rwx   17779888  May 11 2011 02:25:23 -05:00  cat4500-entservicesk9- mz.122-54.WO.bin 60817408 bytes total (43037392 bytes free)</pre> <p>Here, you should see only the IOS version you uploaded.</p>
19. <input type="checkbox"/>	Switch1A: Reset switch back to factory defaults by deleting the VLANs.	<pre>Switch#write erase  Erasing the nvram filesystem will remove all configuration files! Continue? [confirm] &lt;ENTER&gt; [OK] Erase of nvram: complete Switch# *Jan 26 12:53:06.547: %SYS-7-NV_BLOCK_INIT: Initialized the geometry of nvram Switch#config t Enter configuration commands, one per line.  End with CNTL/Z. Switch(config)#no vlan 2-1024 %Default VLAN 1002 may not be deleted. %Default VLAN 1003 may not be deleted. %Default VLAN 1004 may not be deleted. %Default VLAN 1005 may not be deleted. Switch(config)#config-register 0x2101 Switch(config)#end Switch# *Jan 26 12:53:31.675: %SYS-5-CONFIG_I: Configured from console by console Switch#</pre>
20. <input type="checkbox"/>	switch1A: Reload the switch	<pre>Switch#reload  System configuration has been modified. Save? [yes/no]: no Proceed with reload? [confirm] &lt;ENTER&gt;</pre> <p><b>! WARNING!: It is extremely important to answer "no" to the above "Save?" option.</b></p>

### Appendix E.3: Cisco 4948E-F IOS Upgrade (SDS sites)

Step	Procedure	Result
21. <input type="checkbox"/>	<b>switch1A:</b> After the reload, enter <i>enable</i> mode.	Switch> <b>enable</b> Switch#
22. <input type="checkbox"/>	<b>switch1A:</b> Wait until the switch is reloaded, then confirm the correct IOS image.	Switch> <b>show version   include image</b> System image file is "bootflash:cat4500-entservicesk9-mz.122-54.WO.bin" Switch>  Here, you should see only the IOS version you uploaded. If the IOS version is not at the correct version, stop here and contact Customer Care Center.
23. <input type="checkbox"/>	<b>switch1A:</b> Locate old IOS image to be removed.	Switch# <b>dir bootflash:</b> Directory of bootflash:/ 1 -rwx 17779888 May 11 2011 02:25:23 -05:00 cat4500-entservicesk9-mz.122-54.WO.bin 60817408 bytes total (43037392 bytes free)  Here, you should see only the IOS version you uploaded.
24. <input type="checkbox"/>	<b>switch1A:</b> Exit the switch1A console session.	Switch# <b>&lt;CTRL-e&gt;&lt;c&gt;&lt;. &gt;</b>  <b>Hot Key sequence:</b> Ctrl-E, C, period
25. <input type="checkbox"/>	<b>server1A:</b> Disable the bond0.2 interface to switch1A.	On server1A ensure that the interface of the server connected to switch1B is the only interface up and obtain the IP address of <i>&lt;server1A_mgmtInterface&gt;</i> by performing the following commands:  # <b>ifup eth11</b> # <b>ifdown eth01</b>  The command output should contain the IP address of the variable <i>&lt;server1A_mgmtVLAN_ip_address&gt;</i> .
26. <input type="checkbox"/>	<b>server1A:</b> Connect to switch1B console	<b>console -M &lt;server1A_mgmtVLAN_ip_address&gt; -l platcfg switch1B_console</b>  # <b>/usr/bin/console -M 169.254.1.11 -l platcfg switch1B_console</b>  Enter platcfg@pmac5000101's password: <b>&lt;platcfg_password&gt;</b> [Enter `^Ec?' for help] Press <b>&lt;Enter&gt;</b>
27. <input type="checkbox"/>	<b>switch1B:</b> Enter enable mode	Switch> <b>enable</b> Switch#

**Appendix E.3: Cisco 4948E-F IOS Upgrade (SDS sites)**

Step	Procedure	Result
<p><b>28.</b> <input type="checkbox"/></p>	<p><b>switch1B:</b> Configure switch port with this sequence of commands</p>	<pre>Switch# conf t Switch(config)# vlan 2 Switch(config)# int vlan 2 Switch(config-if)# ip address 169.254.1.2 255.255.255.0 Switch(config-if)# no shut Switch(config-if)# int gil/5 Switch(config-if)# switchport mode trunk Switch(config-if)# spanning-tree portfast trunk Switch(config-if)# end</pre>
<p><b>29.</b> <input type="checkbox"/></p>	<p><b>switch1B:</b> Test connectivity</p>	<pre>ping &lt;management_server1A_mgmtVLAN_ip_address&gt;</pre> <pre>Switch# ping 169.254.1.11 Type escape sequence to abort. Sending 5, 100-byte ICMP Echos to &lt;server1A_mgmtVLAN_ip_address&gt;, timeout is 2 seconds: !!!!!! Success rate is 100 percent (5/5), round trip min/avg/max = 1/1/4 ms</pre> <p>If ping is not 100% successful the first time, repeat the ping. If unsuccessful again, double check that the procedure was completed correctly by repeating all steps up to this point. If after repeating those steps, ping is still unsuccessful, contact Customer Care Center.</p>
<p><b>30.</b> <input type="checkbox"/></p>	<p><b>switch1B:</b> Upload IOS image to switch</p>	<pre>Switch# copy tftp: bootflash: Address or name of remote host []? &lt;management_server1A_mgmtVLAN_ip_address&gt;  Source filename []? &lt;New_IOS_image_file&gt;  Destination filename [&lt;New_IOS_image_file&gt;]? &lt;ENTER&gt;</pre> <p>Press &lt;Enter&gt; here, you do NOT want to change the filename</p> <pre>Accessing tftp://&lt;management_server1B_mgmtVLAN_ip address&gt;/&lt;IOS_image_file&gt;... Loading &lt;IOS_image_file&gt; from &lt;server1A_mgmtVLAN_ip_address&gt; (via Vlan2): !!! !! [OK - 45606 bytes]</pre> <p>45606 bytes copied in 3.240 secs (140759 bytes/sec)</p>

### Appendix E.3: Cisco 4948E-F IOS Upgrade (SDS sites)

Step	Procedure	Result
31. <input type="checkbox"/>	<b>switch1B:</b> Locate old IOS image to be removed	<pre>Switch# dir bootflash: Directory of bootflash:/  1  -rwx   17779888  May 11 2011 02:25:23 -05:00  cat4500-entservicesk9- mz.122-54.WO.bin  2  -rwx   17779888  May 11 2011 02:25:23 -05:00  cat4500-ipbasek9-mz.122- 54.WO.bin 60817408 bytes total (43037392 bytes free)</pre> <p>Here, you should note which IOS you uploaded, and the one which was already on the switch. Note the one that was already on the switch, this will be the one to delete, as notated by the variable &lt;OLD_IOS_image&gt;</p>
32. <input type="checkbox"/>	<b>switch1B:</b> Remove old IOS image	<pre>Switch# delete /force /recursive bootflash:&lt;OLD_IOS_image&gt; Switch#</pre>
33. <input type="checkbox"/>	<b>switch1B:</b> Locate old IOS image to be removed	<pre>Switch# dir bootflash: Directory of bootflash:/  1  -rwx   17779888  May 11 2011 02:25:23 -05:00  cat4500-entservicesk9- mz.122-54.WO.bin 60817408 bytes total (43037392 bytes free)</pre> <p>Here, you should see only the IOS version you uploaded.</p>
34. <input type="checkbox"/>	<b>Switch1B:</b> Reset switch back to factory defaults by deleting the VLANs.	<pre>Switch#write erase  Erasing the nvram filesystem will remove all configuration files! Continue? [confirm] &lt;ENTER&gt; [OK] Erase of nvram: complete Switch# *Jan 26 12:53:06.547: %SYS-7-NV_BLOCK_INIT: Initialized the geometry of nvram Switch#config t Enter configuration commands, one per line.  End with CNTL/Z. Switch(config)#no vlan 2-1024 %Default VLAN 1002 may not be deleted. %Default VLAN 1003 may not be deleted. %Default VLAN 1004 may not be deleted. %Default VLAN 1005 may not be deleted. Switch(config)#config-register 0x2101 Switch(config)#end Switch# *Jan 26 12:53:31.675: %SYS-5-CONFIG_I: Configured from console by console Switch#</pre>
35. <input type="checkbox"/>	<b>switch1B:</b> Reload the switch	<pre>Switch# reload Proceed with reload? [confirm] &lt;ENTER&gt; System config modified. save? &lt;y&gt;</pre>
36. <input type="checkbox"/>	<b>switch1B:</b> Wait until the switch is reloaded, then confirm the correct IOS image	<pre>Switch&gt; show version   include image System image file is "bootflash:cat4500-entservicesk9-mz.122-54.WO.bin" Switch&gt;</pre>

### Appendix E.3: Cisco 4948E-F IOS Upgrade (SDS sites)

Step	Procedure	Result
37. <input type="checkbox"/>	<b>switch1B:</b> Enter enable mode	Switch> <b>enable</b> Switch#
38. <input type="checkbox"/>	<b>switch1B:</b> Locate old IOS image to be removed	Switch# <b>dir bootflash:</b> Directory of bootflash:/ 1 -rwx 17779888 May 11 2011 02:25:23 -05:00 cat4500-entservicesk9-mz.122-54.WO.bin 60817408 bytes total (43037392 bytes free)  Here, you should see only the IOS version you uploaded.
39. <input type="checkbox"/>	<b>switch1A:</b> Exit the switch1A console session.	Switch# <b>&lt;CTRL-e&gt;&lt;c&gt;&lt;.&gt;</b>  <b>Hot Key sequence:</b> Ctrl-E, C, period
40. <input type="checkbox"/>	<b>server1A:</b> Re-enable the bond0.2 interface to switch1A.	On server1A ensure that the both bond0.2 interfaces are up: # <b>ifup eth11</b> # <b>ifup eth01</b>
41. <input type="checkbox"/>	<b>server1A:</b> Stop the "tftp" service.	# <b>tpdProvd --client --noxml --ns=Xinetd stopXinetdService service tftp</b>  Login on Remote: <b>placfg</b>  Password of placfg: <b>&lt;placfg_password&gt;</b>  <b>1</b>
<b>THIS PROCEDURE HAS BEEN COMPLETED</b>		

## E.4 Cisco 4948E-F Configuration Backup (SDS sites)

Variable	Value
<switch_backup_user> (also needed in switch configuration procedure)	
<switch_backup_user_password> (also needed in switch configuration procedure)	
<switch_name>	hostname of the switch
<switch_backup_directory>	/usr/TKLC/plat/etc/switch/backup

### Appendix E.4: Cisco 4948E-F Backup (SDS sites)

Step	Procedure	Result
1. <input type="checkbox"/>	<b>server1A:</b> Access the <b>server1A</b> console.	<ul style="list-style-type: none"> <li>Connect to the <b>server1A</b> console using one of the access methods described in <b>Section 2.3</b>.</li> </ul>
2. <input type="checkbox"/>	<b>server1A:</b> 1) Access the command prompt. 2) Log into the HP DL360 server as the "root" user.	<pre>CentOS release 5.6 (Final) Kernel 2.6.18-238.19.1.el5prere15.0.0_72.20.0 on an x86_64  hostname1260476221 login: root Password: &lt;root_password&gt;</pre>
3. <input type="checkbox"/>	<b>server1A:</b> Output similar to that shown on the right will appear as the server access the command prompt.	<p><b>*** TRUNCATED OUTPUT ***</b></p> <pre>VPATH=/opt/TKLCcomcol/runcm5.16:/opt/TKLCcomcol/cm5.16 PRODPATH= RELEASE=5.16 RUNID=00 VPATH=/var/TKLC/rundb:/usr/TKLC/appworks:/usr/TKLC/awpcommon:/usr/TKLC/comagent-gui:/usr/TKLC/comagent:/usr/TKLC/sds PRODPATH=/opt/comcol/prod RUNID=00 [root@hostname1260476221 ~]#</pre>
4. <input type="checkbox"/>	<b>server1A:</b> Verify connectivity	<pre># netConfig --device=&lt;switch_name&gt; getHostname Hostname: switch1A #</pre> <p><b>Note:</b> The value beside "Hostname:" should be the same as the &lt;switch_name&gt; variable</p>

## Appendix E.4: Cisco 4948E-F Backup (SDS sites)

Step	Procedure	Result
5. <input type="checkbox"/>	<b>server1A:</b> Verify SSH service	<pre># netConfig --repo showService name=ssh_service Service Name:    ssh_service Type:           ssh Host:           10.250.62.85 Options: password: C20F7D639AE7E7 user: root #</pre>
6. <input type="checkbox"/>	<b>server1A:</b> Change directory to root user	<pre># cd</pre>
7. <input type="checkbox"/>	<b>server1A:</b> Run backup command	<pre># netConfig --device=&lt;switch_name&gt; backupConfiguration service=ssh_service filename=&lt;switch_name&gt;-backup</pre>
8. <input type="checkbox"/>	<b>server1A:</b> Verify backup and inspect its contents to ensure they reflect the configured values	<pre># ls &lt;switch_name&gt;-backup* # # cat &lt;switch_name&gt;-backup</pre>
9. <input type="checkbox"/>	<b>Repeat steps 4 - 8 for switch1B.</b>	
10. <input type="checkbox"/>	<b>server1A:</b> Copy the switch1A backup files to the permanent backup storage directory	<pre># scp -p &lt;switch1A_name&gt;-backup* 169.254.1.12:/&lt;switch_backup_directory&gt;/</pre>
11. <input type="checkbox"/>	<b>server1A:</b> Copy the switch1B backup files to the permanent backup storage directory	<pre># scp -p &lt;switch1B_name&gt;-backup* 169.254.1.12:/&lt;switch_backup_directory&gt;/</pre>
12. <input type="checkbox"/>	<b>server1A:</b> Move the switch1A backup files to the permanent backup storage directory	<pre># mv *&lt;switch1A_name&gt;-backup* &lt;switch_backup_directory&gt;/</pre>
13. <input type="checkbox"/>	<b>server1A:</b> Move the switch1B backup files to the permanent backup storage directory	<pre># mv *&lt;switch1B_name&gt;-backup* &lt;switch_backup_directory&gt;/</pre>
<b>THIS PROCEDURE HAS BEEN COMPLETED</b>		

## Appendix F. Creating an XML file for Installing SDS Network Elements

SDS Network Elements can be created by using an XML configuration file. The SDS software image (\*.iso) contains two examples of XML configuration files for “NO” (Network OAM&P) and “SO” (System OAM) networks. These files are named **SDS\_NO\_NE.xml** and **SDS\_SO\_NE.xml** and are stored on the **/usr/TKLC/sds/vlan** directory. The customer is required to create individual XML files for each of their SDS Network Elements. The format for each of these XML files is identical.

Below is an example of the SDS\_NO\_NE.xml file. The highlighted values are values that the user must update.

**NOTE:** The **Description** column in this example includes comments for this document only. **Do not include** the Description column in the actual XML file used during installation.

**Table 4 - SDS XML SDS Network Element Configuration File**

XML File Text	Description
<?xml version="1.0"?>	
<networkelement>	
<name> <b>sds_mrvnc</b> </name>	Unique identifier used to label a Network Element. [Range = 1-32 character string. Valid characters are alphanumeric and underscore. Must contain at least one alpha and must not start with a digit.]
<ntpserver> <b>10.250.32.10</b> </ntpserver>	IP Address of the first NTP server. There must be at least one NTP server IP address defined.
<ntpserver> <b>10.250.32.51</b> </ntpserver>	IP Address of second NTP server, if it exists; otherwise, this line must be deleted.
</ntpserver>	
<network>	
<name>XMI</name>	Name of customer external network. <b>Note:</b> Do NOT change this name.
<vlanId> <b>3</b> </vlanId>	The VLAN ID to use for this VLAN. [Range = 2-4094.]
<ip> <b>10.250.55.0</b> </ip>	The network address of this VLAN [Range = A valid IP address]
<mask> <b>255.255.255.0</b> </mask>	Subnetting to apply to servers within this VLAN
<gateway> <b>10.250.55.1</b> </gateway>	The gateway router interface address associated with this network [Range = A valid IP address]
<isDefault>>true</isDefault>	Indicates whether this is the network with a default gateway. [Range = true/false]
</network>	
<network>	
<name>IMI</name>	Name of customer internal network. <b>Note:</b> Do NOT change this name.
<vlanId> <b>4</b> </vlanId>	The VLAN ID to use for this VLAN. [Range = 2-4094.]
<ip> <b>169.254.100.0</b> </ip>	The network address of this VLAN [Range = A valid IP address]
<mask> <b>255.255.255.0</b> </mask>	Subnetting to apply to servers within this VLAN
<gateway> <b>169.254.100.3</b> </gateway>	The gateway router interface address associated with this network [Range = A valid IP address]
</network>	
</networks>	
</networkelement>	

## Appendix G. Optional Configuring Procedures

This section contains procedures for configuration of additional services to Appworks-based application servers.

### Appendix G: NetBackup Client Installation

<p><b>Step</b></p>	<p>This procedure will download and install NetBackup Client software on the server.</p> <p>Location of the bpstart_notify and bpend_notify scripts is required for the execution of this procedure. For Appworks based applications the scripts are located as follows:</p> <p style="text-align: center;">/usr/TKLC/appworks/sbin/bpstart_notify /usr/TKLC/appworks/sbin/bpend_notify</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'S TEKELEC CUSTOMER SUPPORT AND ASK FOR ASSISTANCE.</p>	
<p>1.</p> <p><input type="checkbox"/></p>	<p><b>Install Netbackup Client Software</b></p>	<p>Execute Section 3.11.5 <i>Application NetBackup Client Procedures</i> of reference [7] to complete this step.</p> <p><b>NOTE:</b> If installing Netbackup client software, it must be installed and configured on all SDS servers (NOAM and DR servers only).</p>

## Appendix H. List of Frequently Used Time Zones

This table lists several valid timezone strings that can be used for the time zone setting in a CSV file, or as the time zone parameter when manually setting a DSR blade timezone. For an exhaustive list of **ALL** timezones, log onto the PMAC server console and view the text file: [/usr/share/zoneinfo/zone.tab](#)

**Table 5 - List of Selected Time Zone Values**

<b>Time Zone Value</b>	<b>Description</b>	<b>Universal Time Code (UTC) Offset</b>
<i>Etc/UTC</i>	Coordinated Universal Time	UTC-00
<i>America/New_York</i>	Eastern Time	UTC-05
<i>America/Chicago</i>	Central Time	UTC-06
<i>America/Denver</i>	Mountain Time	UTC-07
<i>America/Phoenix</i>	Mountain Standard Time - Arizona	UTC-07
<i>America/Los_Angeles</i>	Pacific Time	UTC-08
<i>America/Anchorage</i>	Alaska Time	UTC-09
<i>Pacific/Honolulu</i>	Hawaii	UTC-10
<i>Africa/Johannesburg</i>		UTC+02
<i>America/Mexico_City</i>	Central Time - most locations	UTC-06
<i>Africa/Monrovia</i>		UTC+00
<i>Asia/Tokyo</i>		UTC+09
<i>America/Jamaica</i>		UTC-05
<i>Europe/Rome</i>		UTC+01

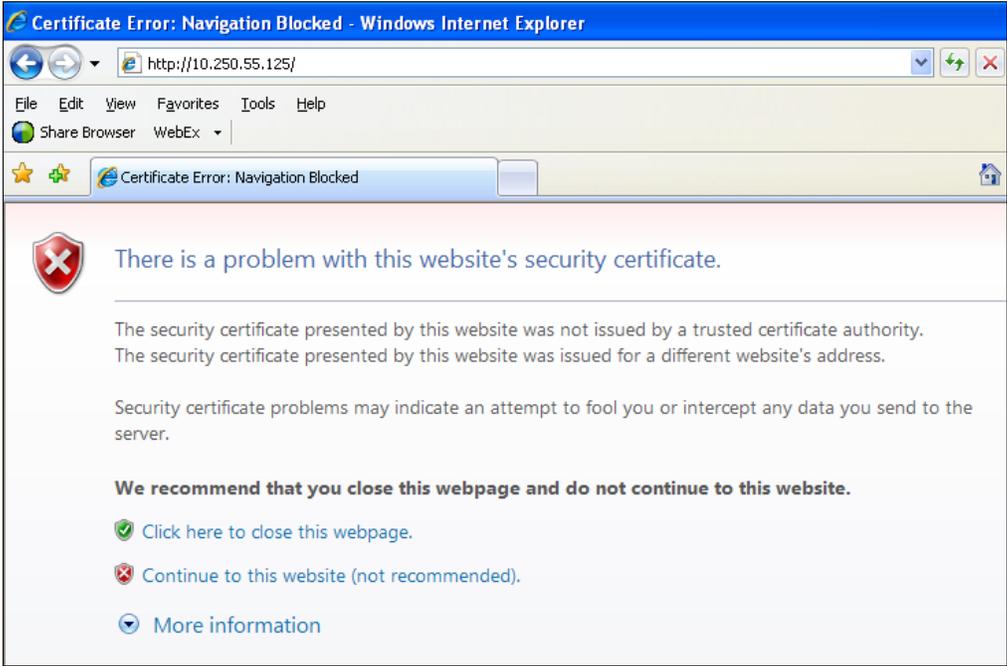
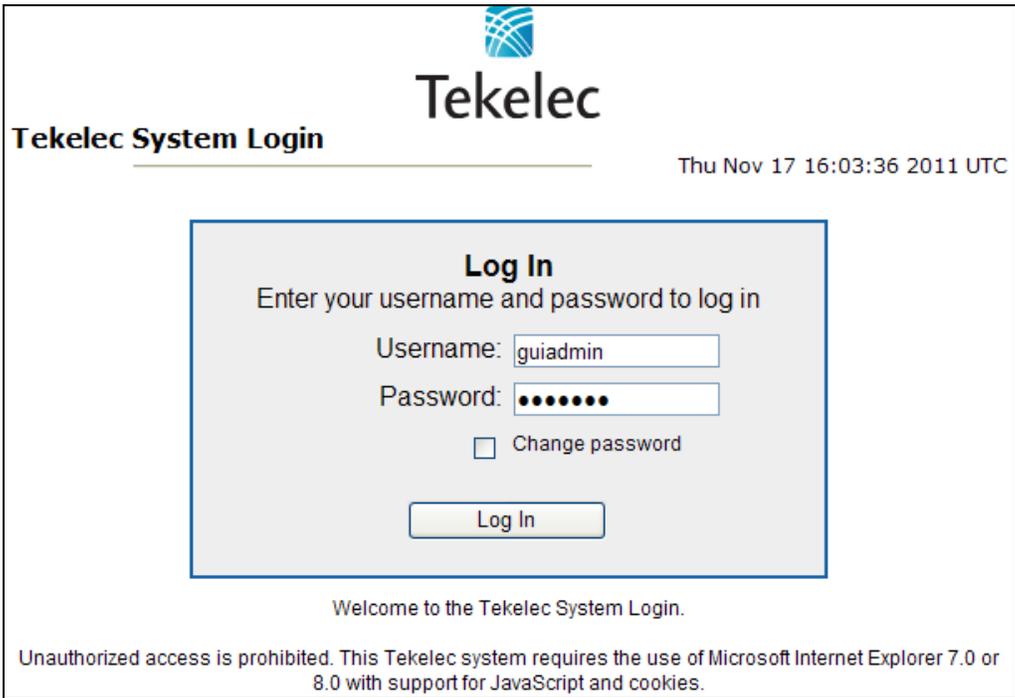
<i>Asia/Hong_Kong</i>		UTC+08
<i>Pacific/Guam</i>		UTC+10
<i>Europe/Athens</i>		UTC+02
<i>Europe/London</i>		UTC+00
<i>Europe/Paris</i>		UTC+01
<i>Europe/Madrid</i>	mainland	UTC+01
<i>Africa/Cairo</i>		UTC+02
<i>Europe/Copenhagen</i>		UTC+01
<i>Europe/Berlin</i>		UTC+01
<i>Europe/Prague</i>		UTC+01
<i>America/Vancouver</i>	Pacific Time - west British Columbia	UTC-08
<i>America/Edmonton</i>	Mountain Time - Alberta, east British Columbia & westSaskatchewan	UTC-07
<i>America/Toronto</i>	Eastern Time - Ontario - most locations	UTC-05
<i>America/Montreal</i>	Eastern Time - Quebec - most locations	UTC-05
<i>America/Sao_Paulo</i>	South & Southeast Brazil	UTC-03
<i>Europe/Brussels</i>		UTC+01
<i>Australia/Perth</i>	Western Australia - most locations	UTC+08

<i>Australia/Sydney</i>	New South Wales - most locations	UTC+10
<i>Asia/Seoul</i>		UTC+09
<i>Africa/Lagos</i>		UTC+01
<i>Europe/Warsaw</i>		UTC+01
<i>America/Puerto_Rico</i>		UTC-04
<i>Europe/Moscow</i>	Moscow+00 - west Russia	UTC+04
<i>Asia/Manila</i>		UTC+08
<i>Atlantic/Reykjavik</i>		UTC+00
<i>Asia/Jerusalem</i>		UTC+02

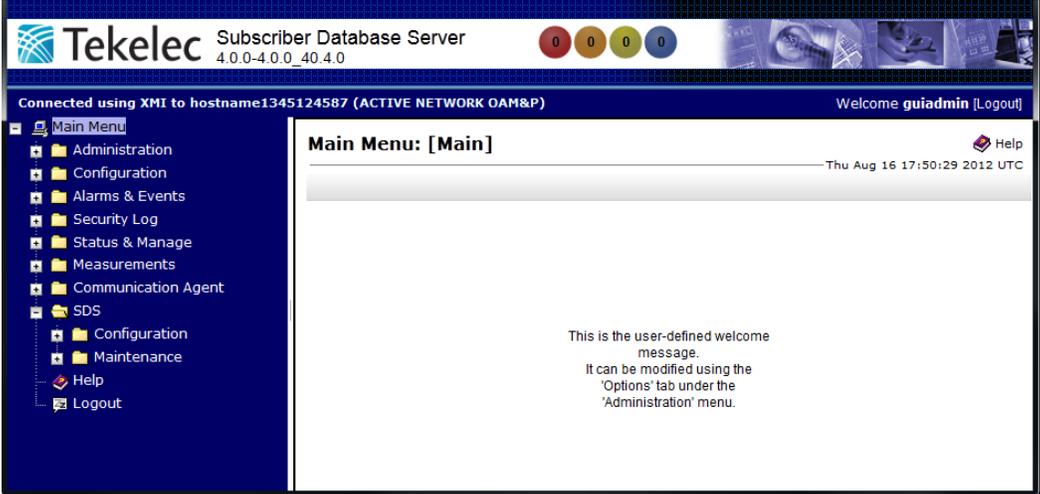
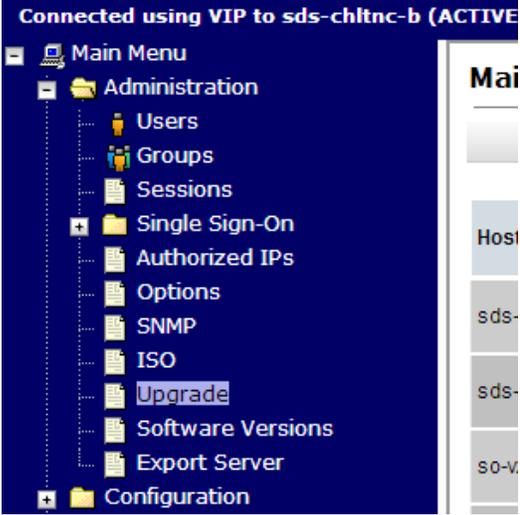
## Appendix I. Accepting Installation through SDS NOAM GUI

This section will accept an application installation through SDS NOAM GUI.

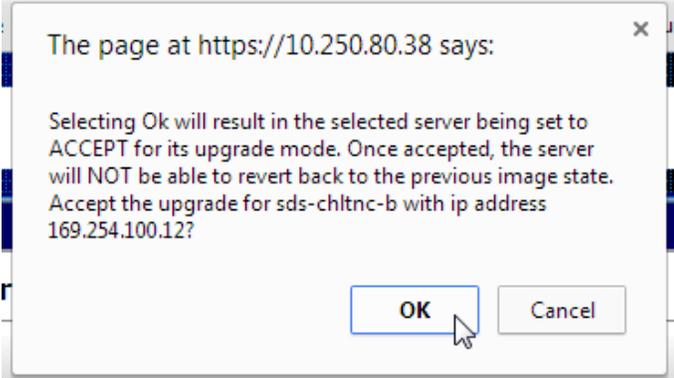
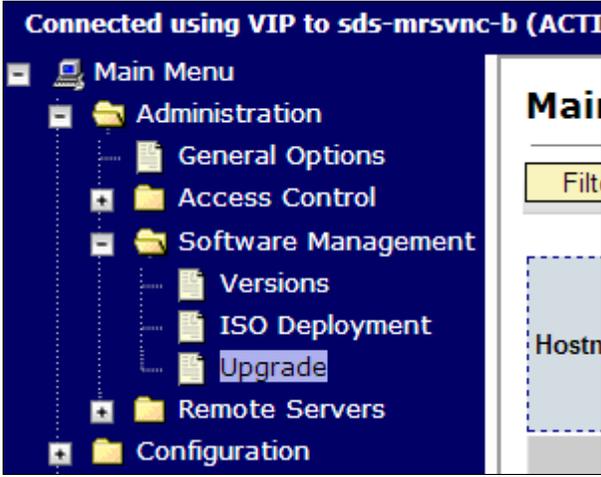
### Appendix I: Accepting Installation through SDS NOAM GUI

Step	Procedure	Result
<p>1.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Launch an approved web browser and connect to the <b>XMI Virtual IP Address (VIP)</b> of the <b>Active SDS site</b> using "https://"</p>	
<p>2.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>The user should be presented the login screen shown on the right.</p> <p>Login to the GUI using the default user and password.</p>	

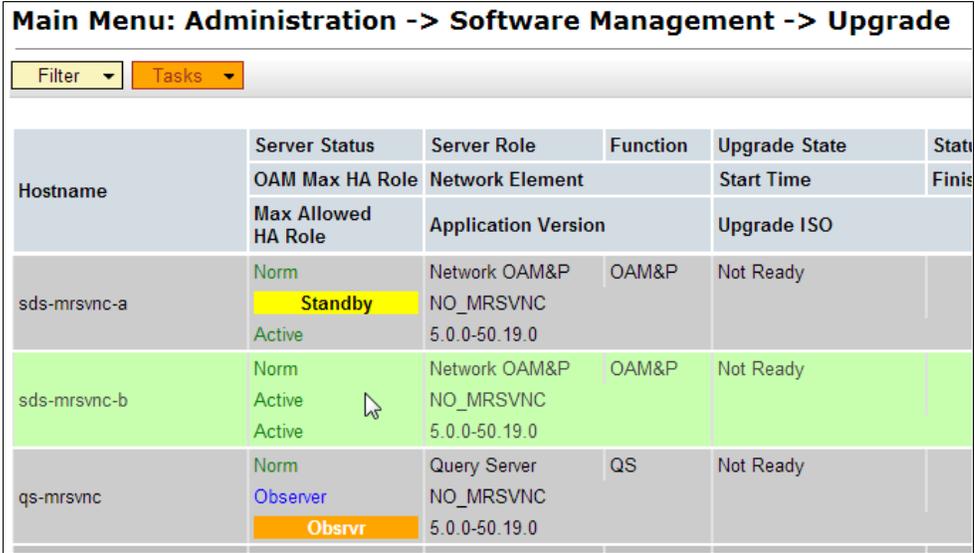
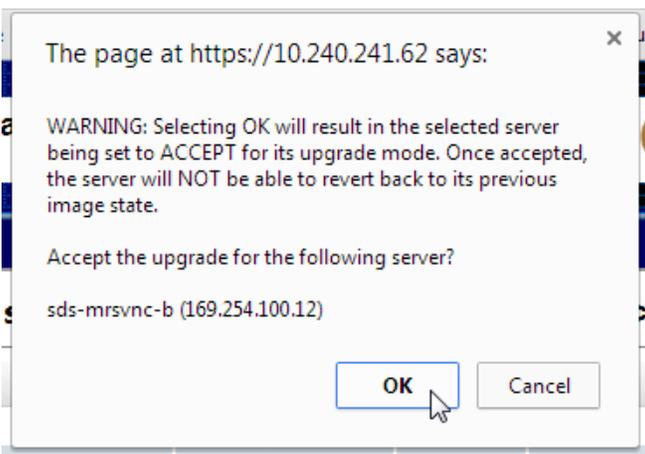
## Appendix I: Accepting Installation through SDS NOAM GUI

Step	Procedure	Result																			
<p>3.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>The user should be presented the SDS Main Menu as shown on the right.</p>																				
<p>4.</p> <input type="checkbox"/>	<p><b>EXECUTE THIS STEP FOR SDS 4.x SYSTEMS ONLY!!!</b></p> <p><b>Active SDS VIP:</b></p> <p>Select...</p> <p><b>Main Menu</b></p> <p>→ Administration</p> <p>    → Upgrade</p> <p>...as shown on the right.</p>																				
<p>5.</p> <input type="checkbox"/>	<p><b>EXECUTE THIS STEP FOR SDS 4.x SYSTEMS ONLY!!!</b></p> <p><b>Active SDS VIP:</b></p> <p>Using the cursor <b>left-click</b>, select the row containing the Server(s) for which you would like to “Accept” upgrade.</p> <p><b>NOTE:</b> Multi-select is available by holding down the “CTRL” key while using the cursor to <b>left-click</b> multiple rows.</p>	<p><b>Main Menu: Administration -&gt; Upgrade</b></p> <table border="1"> <thead> <tr> <th rowspan="2">Hostname</th> <th>Network Element</th> <th>Role</th> <th>Upgrade State</th> </tr> <tr> <th>Application Version</th> <th>Function</th> <th>Server Status</th> </tr> </thead> <tbody> <tr> <td>sds-chltn-c-a</td> <td>NO_CHLTNC 4.0.2-40.23.0</td> <td>NETWORK OAM&amp;P OAM&amp;P</td> <td>Not Ready Norm</td> </tr> <tr style="background-color: #e0ffe0;"> <td>sds-chltn-c-b</td> <td>NO_CHLTNC 4.0.2-40.23.0</td> <td>NETWORK OAM&amp;P OAM&amp;P</td> <td>Not Ready Norm</td> </tr> <tr> <td>so-vzwiotdsr1-a</td> <td>SO_VZW_IOT_DSR1 4.0.2-40.23.0</td> <td>SYSTEM OAM OAM</td> <td>Not Ready Norm</td> </tr> </tbody> </table>	Hostname	Network Element	Role	Upgrade State	Application Version	Function	Server Status	sds-chltn-c-a	NO_CHLTNC 4.0.2-40.23.0	NETWORK OAM&P OAM&P	Not Ready Norm	sds-chltn-c-b	NO_CHLTNC 4.0.2-40.23.0	NETWORK OAM&P OAM&P	Not Ready Norm	so-vzwiotdsr1-a	SO_VZW_IOT_DSR1 4.0.2-40.23.0	SYSTEM OAM OAM	Not Ready Norm
Hostname	Network Element	Role		Upgrade State																	
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sds-chltn-c-b	NO_CHLTNC 4.0.2-40.23.0	NETWORK OAM&P OAM&P	Not Ready Norm																		
so-vzwiotdsr1-a	SO_VZW_IOT_DSR1 4.0.2-40.23.0	SYSTEM OAM OAM	Not Ready Norm																		

**Appendix I: Accepting Installation through SDS NOAM GUI**

Step	Procedure	Result
<p>6.</p> <input type="checkbox"/>	<p><b>EXECUTE THIS STEP FOR SDS 4.x SYSTEMS ONLY!!!</b></p> <p><b>Active SDS VIP:</b></p> <p>Using the cursor <b>left-click</b>, select the <b>“Accept Upgrade”</b> dialogue button.</p>	
<p>7.</p> <input type="checkbox"/>	<p><b>EXECUTE THIS STEP FOR SDS 4.x SYSTEMS ONLY!!!</b></p> <p><b>Active SDS VIP:</b></p> <p>The user is presented with a dialogue box stating that the <b>“Accept Upgrade”</b> action is <b>irreversible</b> and locks the Server on the current software release (<i>i.e. Backout to the previous release is no longer allowed</i>).</p> <p>If the user wishes to continue, use the cursor <b>left-click</b> to select the <b>“OK”</b> dialogue button.</p>	
<p>8.</p> <input type="checkbox"/>	<p><b>EXECUTE THIS STEP FOR SDS 5.x SYSTEMS ONLY!!!</b></p> <p><b>Active SDS VIP:</b></p> <p>Select...</p> <p><b>Main Menu</b></p> <p>→ Administration</p> <p>    → Software Management</p> <p>        → Upgrade</p> <p>...as shown on the right.</p>	

**Appendix I: Accepting Installation through SDS NOAM GUI**

Step	Procedure	Result																								
<p>9.</p> <p><input type="checkbox"/></p>	<p><b>EXECUTE THIS STEP FOR SDS 5.x SYSTEMS ONLY!!!</b></p> <p><b>Active SDS VIP:</b></p> <p>Using the cursor <b>left-click</b>, select the row containing the Server(s) for which you would like to <b>“Accept”</b> upgrade.</p> <p><b>NOTE:</b> <i>Multi-select is available by holding down the “CTRL” key while using the cursor to left-click multiple rows.</i></p>	 <p><b>Main Menu: Administration -&gt; Software Management -&gt; Upgrade</b></p> <table border="1"> <thead> <tr> <th>Hostname</th> <th>Server Status</th> <th>Server Role</th> <th>Function</th> <th>Upgrade State</th> <th>Start Time</th> </tr> </thead> <tbody> <tr> <td>sds-mrsvnc-a</td> <td>Norm <b>Standby</b> Active</td> <td>Network OAM&amp;P NO_MRSVNC</td> <td>OAM&amp;P</td> <td>Not Ready</td> <td></td> </tr> <tr> <td>sds-mrsvnc-b</td> <td>Norm Active Active</td> <td>Network OAM&amp;P NO_MRSVNC</td> <td>OAM&amp;P</td> <td>Not Ready</td> <td></td> </tr> <tr> <td>qs-mrsvnc</td> <td>Norm Observer <b>Obsvr</b></td> <td>Query Server NO_MRSVNC</td> <td>QS</td> <td>Not Ready</td> <td></td> </tr> </tbody> </table>	Hostname	Server Status	Server Role	Function	Upgrade State	Start Time	sds-mrsvnc-a	Norm <b>Standby</b> Active	Network OAM&P NO_MRSVNC	OAM&P	Not Ready		sds-mrsvnc-b	Norm Active Active	Network OAM&P NO_MRSVNC	OAM&P	Not Ready		qs-mrsvnc	Norm Observer <b>Obsvr</b>	Query Server NO_MRSVNC	QS	Not Ready	
Hostname	Server Status	Server Role	Function	Upgrade State	Start Time																					
sds-mrsvnc-a	Norm <b>Standby</b> Active	Network OAM&P NO_MRSVNC	OAM&P	Not Ready																						
sds-mrsvnc-b	Norm Active Active	Network OAM&P NO_MRSVNC	OAM&P	Not Ready																						
qs-mrsvnc	Norm Observer <b>Obsvr</b>	Query Server NO_MRSVNC	QS	Not Ready																						
<p>10.</p> <p><input type="checkbox"/></p>	<p><b>EXECUTE THIS STEP FOR SDS 5.x SYSTEMS ONLY!!!</b></p> <p><b>Active SDS VIP:</b></p> <p>Using the cursor <b>left-click</b>, select the <b>“Accept”</b> dialogue button.</p>																									
<p>11.</p> <p><input type="checkbox"/></p>	<p><b>EXECUTE THIS STEP FOR SDS 5.x SYSTEMS ONLY!!!</b></p> <p><b>Active SDS VIP:</b></p> <p>The user is presented with a dialogue box stating that the <b>“Accept Upgrade”</b> action is <b>irreversible</b> and locks the Server on the current software release (<i>i.e. Backout to the previous release is no longer allowed</i>).</p> <p>If the user wishes to continue, use the cursor <b>left-click</b> to select the <b>“OK”</b> dialogue button.</p>																									
<p><b>THIS PROCEDURE HAS BEEN COMPLETED</b></p>																										

## Appendix J. Disable Hyperthreading (DP Only)

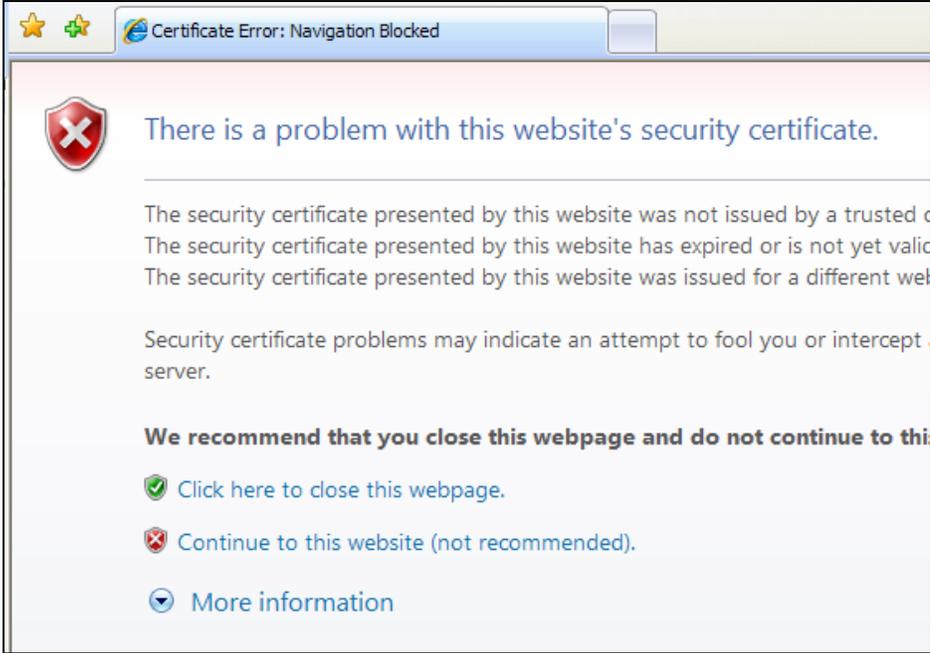
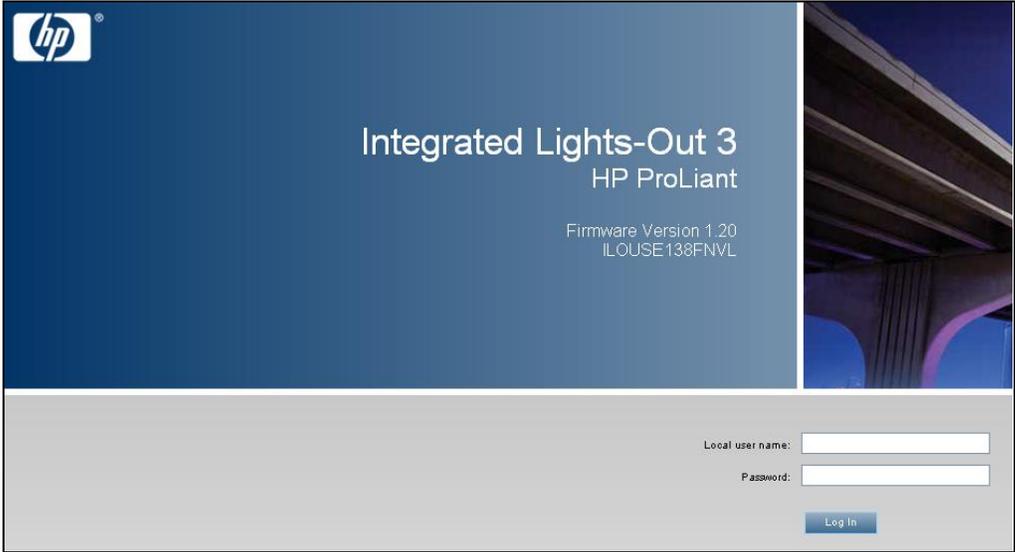
### Appendix J: Disable Hyperthreading (DP Only)

Step	Procedure	Result
<p>1.</p> <input type="checkbox"/>	<p><b>DP Server XMI IP (SSH):</b></p> <p><b>1) Using an SSH client such as putty,</b> access the command prompt via the server's <b>XMI IP</b> address.</p> <p><b>2) Log into the server</b> as the "root" user.</p> <p><b>NOTE:</b> <i>The XMI IP address may be viewed by locating the server hostname in the SDS GUI under...</i></p> <p><b>Main Menu</b>  → Configuration  → Servers</p>	<pre>CentOS release 4.6 (Final) Kernel 2.6.18-128.4.1.el5prere14.0.0_70.32.0 on an x86_64  dp-carync-2 login: root Password: &lt;root_password&gt;</pre>
<p>2.</p> <input type="checkbox"/>	<p><b>DP Server XMI IP (SSH):</b></p> <p>Output similar to that shown on the right will appear as the server access the command prompt.</p>	<pre>*** TRUNCATED OUTPUT ***  VPATH=/var/TKLC/rundb:/usr/TKLC/appworks:/usr/TKLC/awpss7 PRODPATH=/opt/TKLCcomcol/cm5.13/prod RUNID=00 VPATH=/opt/TKLCcomcol/runcm5.13:/opt/TKLCcomcol/cm5.13 PRODPATH= RELEASE=5.13 RUNID=00 VPATH=/var/TKLC/rundb:/usr/TKLC/appworks:/usr/TKLC/awpss7:/usr/TKLC/exhr PRODPATH=/opt/TKLCcomcol/cm5.13/prod RUNID=0 [root@dp-carync-2 ~]#</pre>

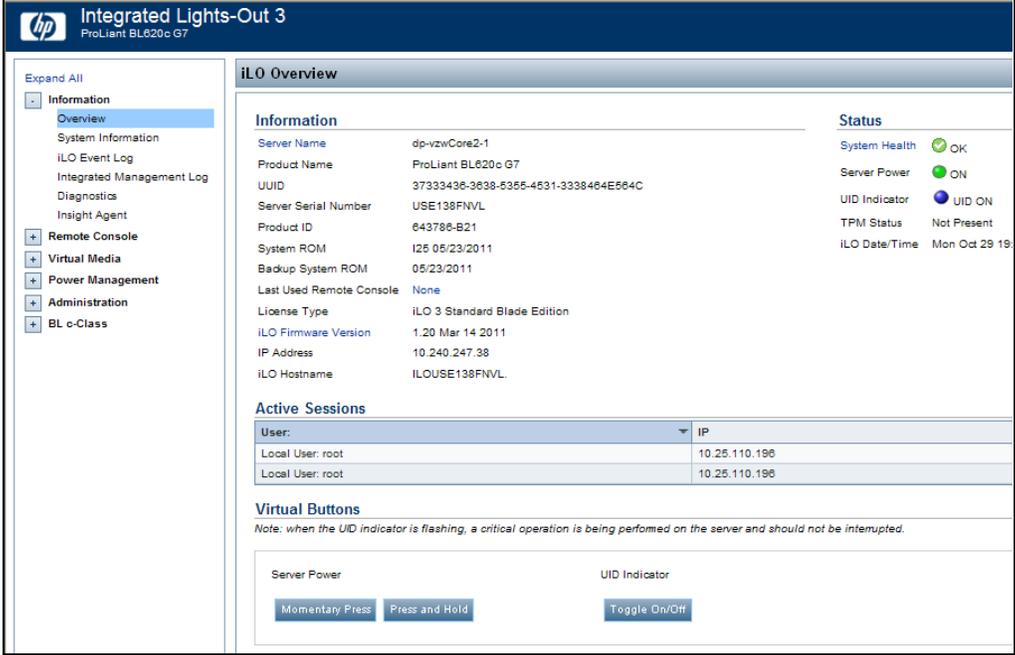
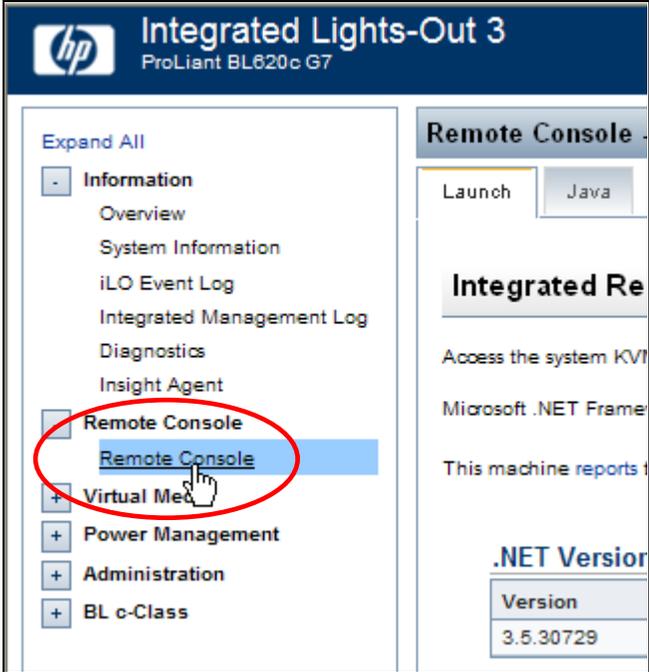
## Appendix J: Disable Hyperthreading (DP Only)

Step	Procedure	Result
<p>3.</p> <input type="checkbox"/>	<p><b>DP Server XMI IP (SSH):</b></p> <p>Execute the <b>“hpsasmcli”</b> command shown to determine the hyperthreading status for the DP blade.</p> <p><b>NOTE:</b> Output returned may state <b>“enabled”</b> or <b>“disabled”</b>.</p>	<pre>[root@dp-carync-2 ~]# hpsasmcli -s "show ht"  Processor hyper-threading is currently enabled.  [root@dp-carync-2 ~]#</pre>
<p>4.</p> <input type="checkbox"/>		<ul style="list-style-type: none"> <li>• If output from <b>Step 3</b> shows that hyperthreading is currently <b>“enabled”</b>, then proceed to <b>Step Error! Reference source not found.</b> and continue.</li> <li>• If output from <b>Step 3</b> shows that hyperthreading is currently <b>“disabled”</b>, then <b>STOP</b> and restart <b>Appendix J</b> for the next installed <b>DP</b> blade.</li> </ul>
<p>5.</p> <input type="checkbox"/>	<p>Launch the Internet Explorer web browser and connect to the <b>DP-iLO</b> GUI interface.</p> <p><b>NOTE:</b> Always use <b>https://</b> for iLO GUI access.</p> <p><b>!!! WARNING !!!</b></p> <p><b>Verify the DP-iLO IP address before proceeding. The user must login using the DP-iLO IP address only.</b></p>	

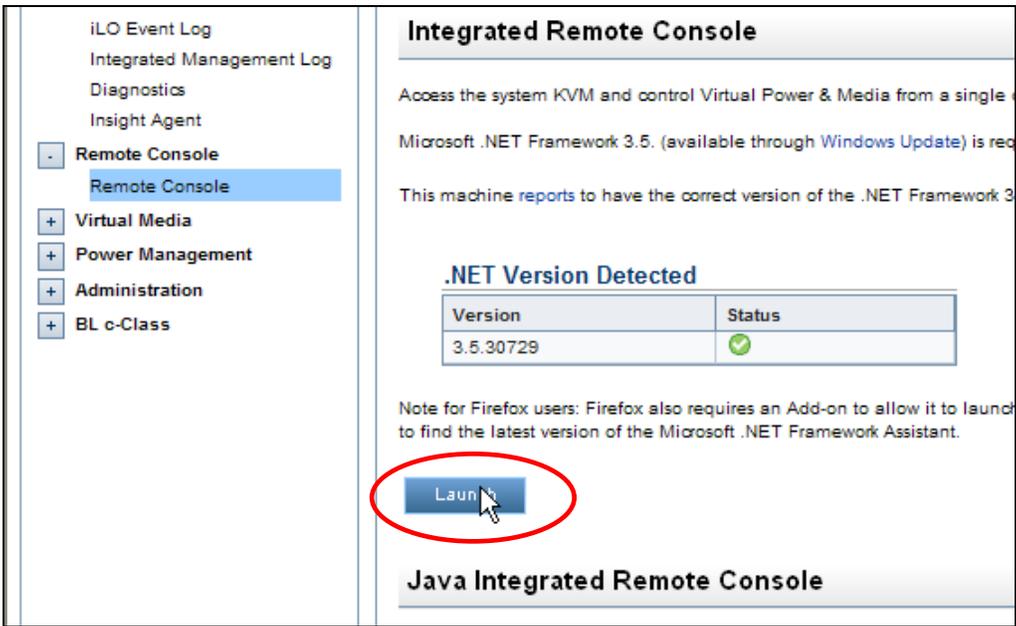
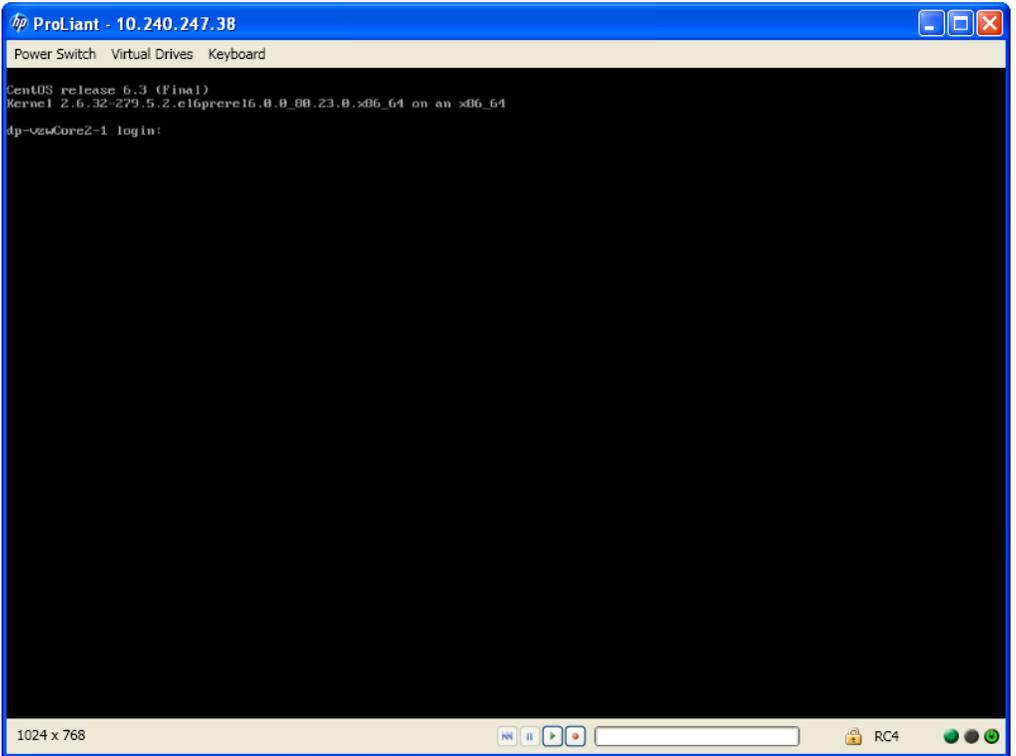
**Appendix J: Disable Hyperthreading (DP Only)**

Step	Procedure	Result
<p>6.</p> <input type="checkbox"/>	<p>The web browser will display a warning message regarding the Security Certificate.</p>	
<p>7.</p> <input type="checkbox"/>	<p>Select the option to "Continue to the website (not recommended)"</p>	
<p>8.</p> <input type="checkbox"/>	<p>Login to the iLO console as "root" and enter the configured password.</p>	

**Appendix J: Disable Hyperthreading (DP Only)**

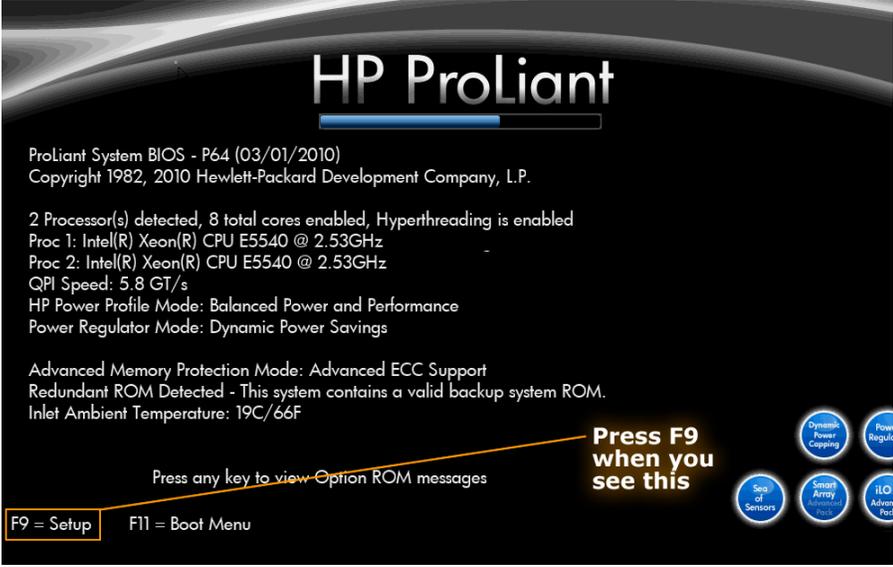
Step	Procedure	Result
<p>9.</p> <div style="border: 1px solid black; width: 20px; height: 20px; margin-left: 5px;"></div>	<p>The admin GUI is displayed.</p> <p>Select the <b>“Remote Console”</b> tab in the upper left corner of the GUI.</p>	
<p>10.</p> <div style="border: 1px solid black; width: 20px; height: 20px; margin-left: 5px;"></div>	<p>The Remote Console Information GUI is displayed</p> <p>Click on the <b>“Remote Console”</b> menu option</p>	

**Appendix J: Disable Hyperthreading (DP Only)**

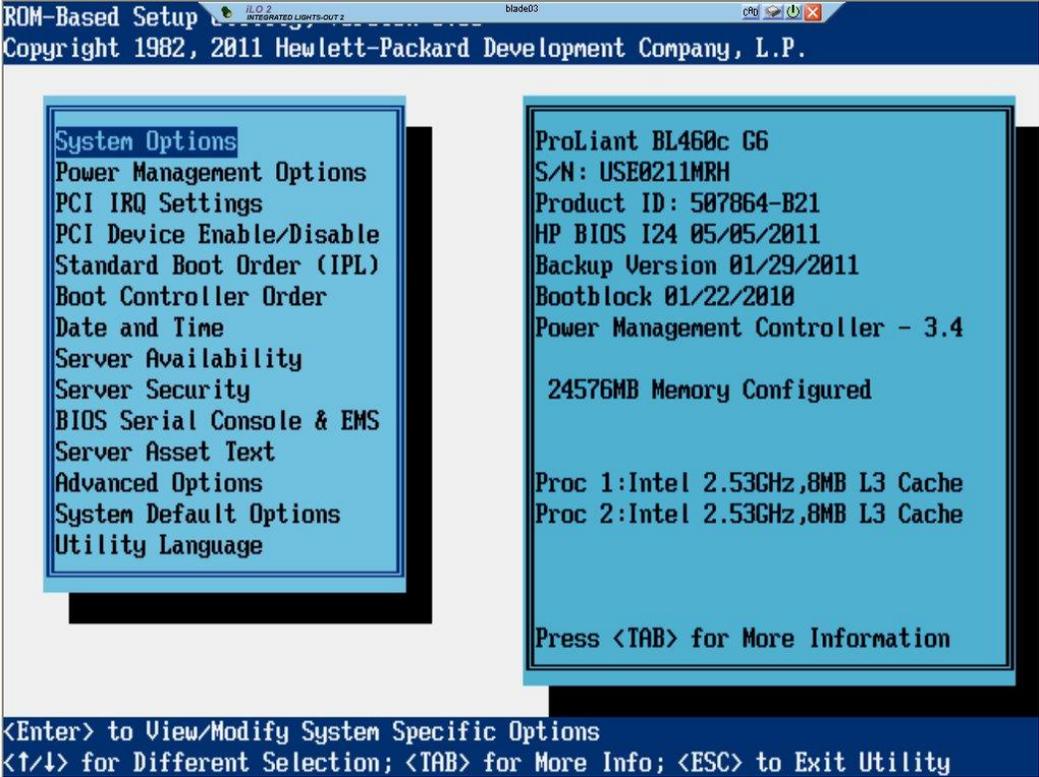
Step	Procedure	Result				
<p>11.</p> <p><input type="checkbox"/></p>	<p>Under the “<b>Integrated Remote Console</b>” section in the top of the right panel, click on the “<b>Launch</b>” dialogue button.</p> <p><b>NOTE:</b> Answer “<b>Yes/OK</b>” to any pop-up windows that might appear.</p>	 <p>The screenshot shows the 'Integrated Remote Console' interface. On the left, a sidebar menu includes 'iLO Event Log', 'Integrated Management Log', 'Diagnostics', 'Insight Agent', 'Remote Console' (selected), 'Virtual Media', 'Power Management', 'Administration', and 'BL c-Class'. The main content area has the title 'Integrated Remote Console' and text: 'Access the system KVM and control Virtual Power &amp; Media from a single... Microsoft .NET Framework 3.5. (available through Windows Update) is req... This machine reports to have the correct version of the .NET Framework 3...'. Below this is a table titled '.NET Version Detected':</p> <table border="1"> <thead> <tr> <th>Version</th> <th>Status</th> </tr> </thead> <tbody> <tr> <td>3.5.30729</td> <td>✓</td> </tr> </tbody> </table> <p>A note for Firefox users is present: 'Note for Firefox users: Firefox also requires an Add-on to allow it to launch to find the latest version of the Microsoft .NET Framework Assistant.' A blue 'Launch' button is circled in red.</p>	Version	Status	3.5.30729	✓
Version	Status					
3.5.30729	✓					
<p>12.</p> <p><input type="checkbox"/></p>	<p>The iLO Console window is displayed.</p> <p><b>NOTE:</b> The console window resembles an MS-DOS window but DOES NOT have a scroll-back buffer.</p>	 <p>The screenshot shows a terminal window titled 'hp ProLiant - 10.240.247.38'. The terminal content includes: 'Power Switch Virtual Drives Keyboard', 'CentOS release 6.3 (Final)', 'Kernel 2.6.32-279.5.2.el6ppc64le16.0.0.BB.23.0.x86_64 on an x86_64', and 'dp-vzaCore2-1 login:'. The window has a blue title bar and standard window controls. The bottom status bar shows '1024 x 768' and 'RC4'.</p>				



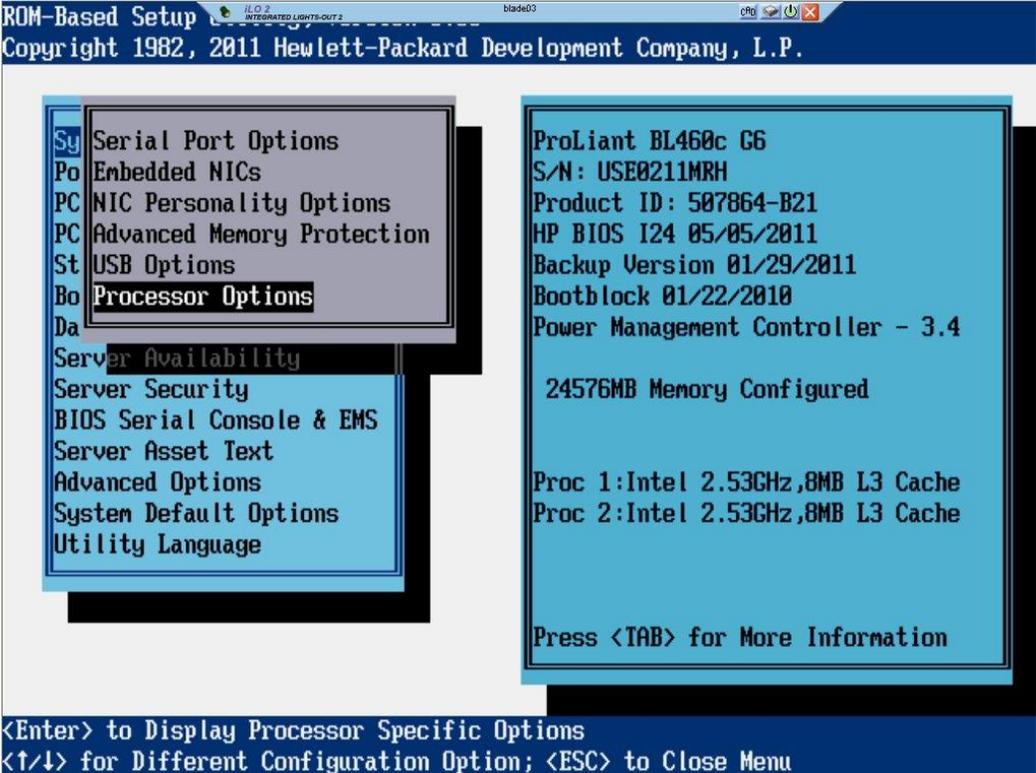
## Appendix J: Disable Hyperthreading (DP Only)

Step	Procedure	Result
<p>14.</p> <div style="border: 1px solid black; width: 20px; height: 20px; margin-left: 5px;"></div>	<p>Access the Server BIOS</p> <p><b>NOTE:</b> <i>It is normal for a period of 2 minutes or more to occur between pressing the F9 key and entering the Blade BIOS screen.</i></p>	<p>Reboot the server. This can be achieved by pressing and holding the power button until the server turns off, then after approximately 5-10 seconds press the power button to enable power.</p> <p>As soon as you see <b>F9=Setup</b> in the lower left corner of the screen, press <b>[F9]</b> to access the BIOS setup screen. You may be required to press [F9] 2-3 times. The F9=Setup will change to F9 Pressed once it is accepted. See example below.</p>  <p><b>Expected Result:</b> ROM-Based Setup Utility is accessed and the ROM-Based Setup Utility menu will be displayed.</p>

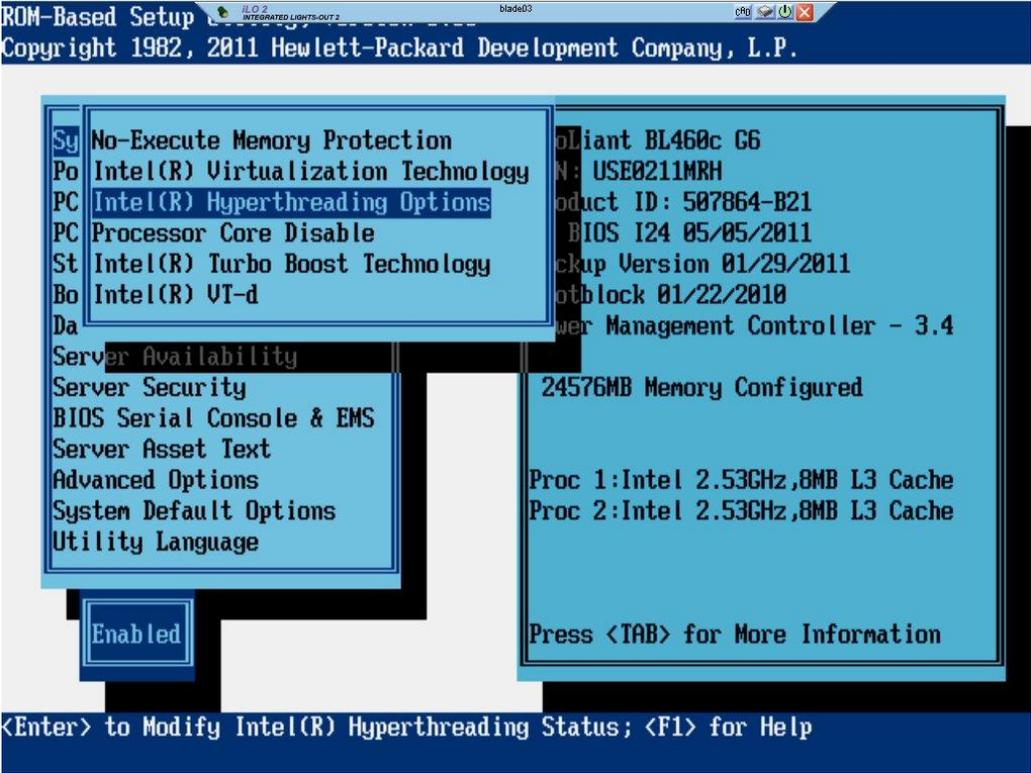
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Step	Procedure	Result
<p>15.</p> <input type="checkbox"/>	<p>Select System Options</p>	<p>Scroll to <i>System Options</i> and press [ENTER]</p>  <p>The screenshot shows the 'ROM-Based Setup' utility interface. At the top, it says 'Copyright 1982, 2011 Hewlett-Packard Development Company, L.P.'. The main menu is titled 'System Options' and lists the following items: Power Management Options, PCI IRQ Settings, PCI Device Enable/Disable, Standard Boot Order (IPL), Boot Controller Order, Date and Time, Server Availability, Server Security, BIOS Serial Console &amp; EMS, Server Asset Text, Advanced Options, System Default Options, and Utility Language. To the right, system information is displayed: ProLiant BL460c G6, S/N: USE0211MRH, Product ID: 507864-B21, HP BIOS I24 05/05/2011, Backup Version 01/29/2011, Bootblock 01/22/2010, Power Management Controller - 3.4, and 24576MB Memory Configured. Below this, it shows 'Proc 1: Intel 2.53GHz, 8MB L3 Cache' and 'Proc 2: Intel 2.53GHz, 8MB L3 Cache'. At the bottom, it says 'Press &lt;TAB&gt; for More Information'. A footer bar contains the instructions: '&lt;Enter&gt; to View/Modify System Specific Options', '&lt;↑/↓&gt; for Different Selection; &lt;TAB&gt; for More Info; &lt;ESC&gt; to Exit Utility'.</p>

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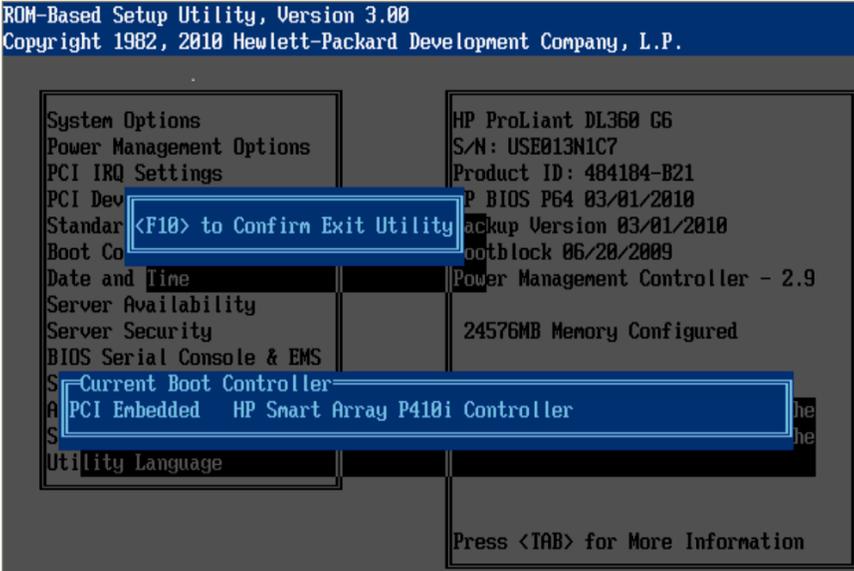
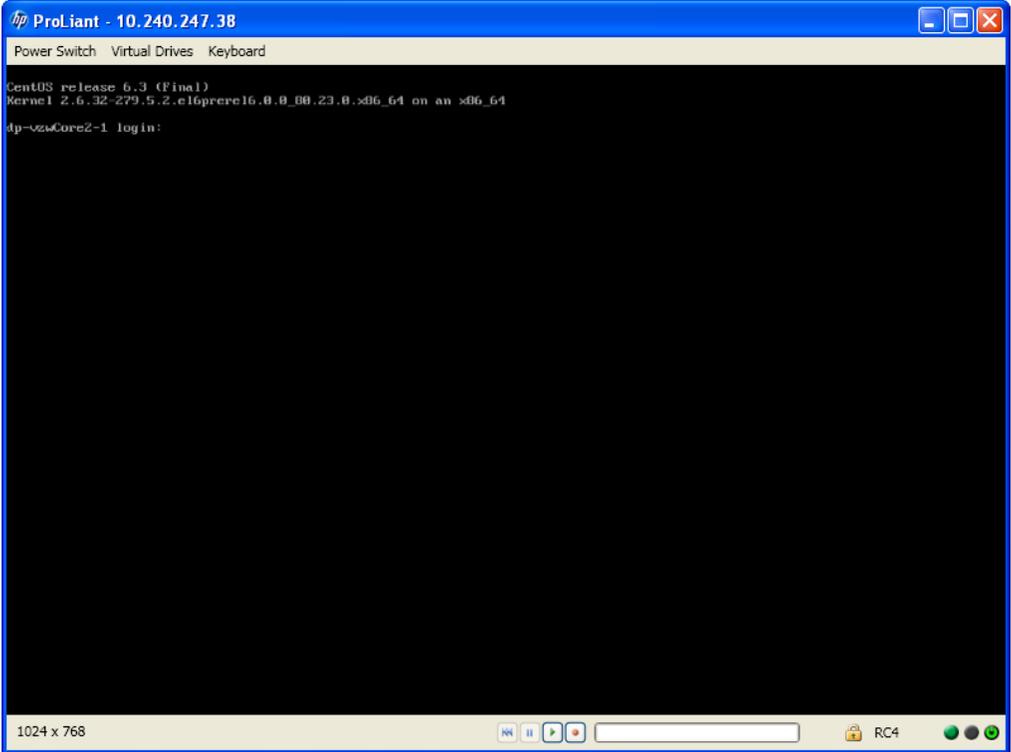
Step	Procedure	Result
<p><b>16.</b></p> <p><input type="checkbox"/></p>	<p>Select Processor Options</p>	<p><b>Select Processor Options option and press [ENTER]</b></p>  <p>&lt;Enter&gt; to Display Processor Specific Options &lt;↑/↓&gt; for Different Configuration Option; &lt;ESC&gt; to Close Menu</p>

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Step	Procedure	Result
<p>17.</p> <p><input type="checkbox"/></p>	<p>Select Hyperthreading Options</p>	<p><b>Select Intel® Hyperthreading Options option and press [ENTER].</b></p>  <p>The screenshot shows the 'ROM-Based Setup' utility interface. At the top, it says 'Copyright 1982, 2011 Hewlett-Packard Development Company, L.P.'. The main menu lists several options: 'No-Execute Memory Protection', 'Intel(R) Virtualization Technology', 'Intel(R) Hyperthreading Options' (highlighted), 'Processor Core Disable', 'Intel(R) Turbo Boost Technology', and 'Intel(R) VT-d'. Below these are 'Server Availability', 'Server Security', 'BIOS Serial Console &amp; EMS', 'Server Asset Text', 'Advanced Options', 'System Default Options', and 'Utility Language'. A sub-menu for 'Intel(R) Hyperthreading Options' is open, showing 'Enabled'. To the right, system information is displayed: 'Hewlett-Packard ProLiant BL460c G6', 'Part Number: USE0211MRH', 'Product ID: 507864-B21', 'BIOS I24 05/05/2011', 'Firmware Version 01/29/2011', 'Firmware Hotblock 01/22/2010', and 'Power Management Controller - 3.4'. It also shows '24576MB Memory Configured' and 'Proc 1: Intel 2.53GHz, 8MB L3 Cache' and 'Proc 2: Intel 2.53GHz, 8MB L3 Cache'. At the bottom, it says 'Press &lt;TAB&gt; for More Information' and '&lt;Enter&gt; to Modify Intel(R) Hyperthreading Status; &lt;F1&gt; for Help'.</p>



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Step	Procedure	Result
<p>19.</p> <input type="checkbox"/>	<p>Save Configuration and Exit.</p> <p><b>NOTE:</b> <i>It is normal for the Remote Console window to stay blank for up to 3 minutes before initial output appears.</i></p>	<p>Press [F10] to save the configuration and exit. The server will reboot</p>  <p><b>Expected Result:</b> Settings are saved and server reboots.</p>
<p>20.</p> <input type="checkbox"/>	<p>Continue to monitor the server boot process until the screen returns to the login prompt.</p>	

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Step	Procedure	Result
21. <input type="checkbox"/>	Close the Remote Console window.	
22. <input type="checkbox"/>	<p><b>DP Server XMI IP (SSH):</b></p> <p>1) Access the command prompt via the server's <b>XMI IP</b></p> <p>2) Log into the server as the "root" user.</p> <p><b>NOTE:</b> <i>The XMI IP address may be viewed by locating the server hostname under...</i></p> <p><b>Main Menu</b>            → Configuration            → Servers</p>	<pre>CentOS release 4.6 (Final) Kernel 2.6.18-128.4.1.e15prere14.0.0_70.32.0 on an x86_64  dp-carync-1 login: root Password: &lt;root_password&gt;</pre>
23. <input type="checkbox"/>	<p><b>DP Server XMI IP (SSH):</b></p> <p>Output similar to that shown on the right will appear as the server access the command prompt.</p>	<pre>*** TRUNCATED OUTPUT ***  VPATH=/var/TKLC/rundb:/usr/TKLC/appworks:/usr/TKLC/awpss7 PRODPATH=/opt/TKLCcomcol/cm5.13/prod RUNID=00 VPATH=/opt/TKLCcomcol/runcm5.13:/opt/TKLCcomcol/cm5.13 PRODPATH= RELEASE=5.13 RUNID=00 VPATH=/var/TKLC/rundb:/usr/TKLC/appworks:/usr/TKLC/awpss7:/usr/TKLC/exhr PRODPATH=/opt/TKLCcomcol/cm5.13/prod RUNID=0 [root@dp-carync-1 ~]#</pre>

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Step	Procedure	Result
<p>24.</p> <input type="checkbox"/>	<p><b>DP Server XMI IP (SSH):</b></p> <p>1) Execute “syscheck”.</p> <p>2) Record the number of “found” CPU(s) below.</p> <p>“found” CPU(s): _____</p>	<pre>[root@dp-carync-1 ~]# syscheck Running modules in class disk... OK Running modules in class hardware... OK Running modules in class net... OK Running modules in class proc... OK Running modules in class system... *      cpu: FAILURE:: MINOR::5000000000000004 -- Server Hardware Configuration Error *      cpu: FAILURE:: 40 CPU(s) on the system found "20" instead. One or more module in class "system" FAILED  LOG LOCATION: /var/TKLC/log/syscheck/fail_log [root@dp-carync-1 ~]#</pre>
<p>25.</p> <input type="checkbox"/>	<p><b>DP Server XMI IP (SSH):</b></p> <p>Modify the “EXPECTED_CPUS” value to the number of “found” CPU(s) in the previous Step 24 of this Procedure.</p>	<pre># syscheckAdm system cpu --set --var='EXPECTED_CPUS' --val='20'</pre>
<p>26.</p> <input type="checkbox"/>	<p><b>DP Server XMI IP (SSH):</b></p> <p>Verify that the “EXPECTED_CPUS” value has been updated to the number of “found” CPU(s) in the previous Step 9 of this Procedure.</p>	<pre># syscheckAdm system cpu -get -var='EXPECTED_CPUS' 20</pre>

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Step	Procedure	Result
27. <input type="checkbox"/>	<p><b>EXECUTE THIS STEP FOR SDS 5.x SYSTEMS ONLY!!!</b></p> <p>DP Server XMI IP (SSH):</p> <p>Restart the “syscheck” service.</p> <p><b>NOTE:</b> Output to the right may differ depending on the OS version.</p>	<pre>[root@dp-carync-2 ~]# <b>restart syscheck</b> syscheck start/running, process 41789 [root@dp-carync-2 ~]#</pre>
28. <input type="checkbox"/>	<p><b>EXECUTE THIS STEP FOR SDS 4.x SYSTEMS ONLY!!!</b></p> <p>DP Server XMI IP (SSH):</p> <p>Restart the “syscheck” service.</p> <p><b>NOTE:</b> Output to the right may differ depending on the OS version.</p>	<pre>[root@dp-carync-2 ~]# <b>service syscheck restart</b> *** TRUNCATED OUTPUT *** RUNID=00 VPATH=/var/TKLC/rundb:/usr/TKLC/appworks:/usr/TKLC/awpcommon:/usr/TKLC/comagent-gui:/usr/TKLC/comagent:/usr/TKLC/sds PRODPATH=/opt/comcol/prod RUNID=00 Stopping syscheck: [ OK ] Starting syscheck: [ OK ] [root@dp-carync-2 ~]#</pre>
29. <input type="checkbox"/>	<p>DP Server XMI IP (SSH):</p> <p>Modify the number of CPUs recorded at OS installation to the number of “<b>found</b>” CPU(s) in the previous <b>Step 9</b> of this Procedure.</p>	<pre># <b>echo 20 &gt; /usr/TKLC/awpcommon/prod/bin/NumOriginalCpus</b></pre>
30. <input type="checkbox"/>	<p>DP Server XMI IP (SSH):</p> <p>Verify the number of CPUs has been updated to the number of “<b>found</b>” CPU(s) in the previous <b>Step 9</b> of this Procedure.</p>	<pre># <b>cat /usr/TKLC/awpcommon/prod/bin/NumOriginalCpus</b> 20</pre>

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Step	Procedure	Result
31. <input type="checkbox"/>	<p><b>DP Server XMI IP (SSH):</b></p> <p>Execute “<b>syscheck</b>” to verify that the previous CPU alarms have been cleared.</p>	<pre>[root@dp-carync-1 ~]# <b>syscheck</b> Running modules in class disk...                                 OK Running modules in class hardware...                                 OK Running modules in class net...                                 OK Running modules in class proc...                                 OK Running modules in class system...                                 OK LOG LOCATION: /var/TKLC/log/syscheck/fail_log [root@dp-carync-1 ~]#</pre>
32. <input type="checkbox"/>	<p><b>DP Server XMI IP (SSH):</b></p> <p>Exit from the server command line.</p>	<pre>[root@dp-carync-1 ~]# <b>exit</b> logout</pre>
33. <input type="checkbox"/>	<ul style="list-style-type: none"> <li>Repeat this procedure until hyperthreading has been “<b>disabled</b>” for all installed <b>DP</b> blades.</li> </ul>	
<b>THIS PROCEDURE HAS BEEN COMPLETED</b>		