

**Oracle® Communications**

**Diameter Signal Router Full Address  
Resolution**

SDS 8.0 Initial Installation and Configuration Guide

**E79531, Revision 01**

May 2017

**ORACLE®**

Oracle® Communications Diameter Signal Router Full Address Resolution, SDS 8.0 Initial Installation and Configuration Guide , Release 8.0.

Copyright © 2011,2017 Oracle and/or its affiliates. All rights reserved.

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish, or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

If this is software or related documentation that is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, then the following notice is applicable:

U.S. GOVERNMENT END USERS: Oracle programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, delivered to U.S. Government end users are "commercial computer software" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, use, duplication, disclosure, modification, and adaptation of the programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, shall be subject to license terms and license restrictions applicable to the programs. No other rights are granted to the U.S. Government.

This software or hardware is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications that may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Intel and Intel Xeon are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. AMD, Opteron, the AMD logo, and the AMD Opteron logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group.

This software or hardware and documentation may provide access to or information about content, products, and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services unless otherwise set forth in an applicable agreement between you and Oracle. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services, except as set forth in an applicable agreement between you and Oracle.



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

**Before upgrading any system, please access My Oracle Support (MOS) (<https://support.oracle.com>) and review any Technical Service Bulletins (TSBs) that relate to this upgrade.**

My Oracle Support (MOS) (<https://support.oracle.com>) is your initial point of contact for all product support and training needs. A representative at Customer Access Support (CAS) can assist you with MOS registration.

Call the CAS main number at 1-800-223-1711 (toll-free in the US), or call the Oracle Support hotline for your local country from the list at <http://www.oracle.com/us/support/contact/index.html>.

## Table of Contents

<b>1. Introduction .....</b>	<b>8</b>
1.1 Purpose and Scope .....	8
1.2 References .....	8
1.3 Acronyms .....	8
1.4 Assumptions .....	9
1.5 XML Files .....	9
1.6 How to Use this Document .....	9
<b>2. Pre-Installation Setup .....</b>	<b>10</b>
2.1 Installation Prerequisites .....	10
2.2 Physical Connections .....	10
2.3 Access Alternatives for Application Install .....	11
2.4 Activity Logging .....	12
2.5 Firmware and BIOS Settings .....	12
2.6 Configure the CMOS Clock, BIOS Settings, and iLO IP Address and Upgrade Firmware .....	13
<b>3. Installation Matrix .....</b>	<b>15</b>
3.1 Installing SDS on the Customer Network .....	15
<b>4. Application Installation .....</b>	<b>16</b>
4.1 Installing the SDS Application (All SDS NOAM Sites) .....	16
<b>5. Configuration Procedures .....</b>	<b>24</b>
5.1 Configuring SDS Servers A and B (1 <sup>st</sup> SDS NOAM site only) .....	24
5.2 OAM Pairing (1st SDS NOAM Site Only) .....	46
5.3 Query Server Installation (All SDS NOAM Sites) .....	64
5.4 OAM Installation for the DR SDS NOAM Site .....	83
5.5 OAM Pairing for DR SDS NOAM Site .....	100
5.6 Add SDS Software Images to PMAC Servers (All SOAM Sites) .....	114
5.7 OAM Installation for SOAM Sites (All SOAM Sites) .....	118
5.8 OAM Pairing for SDS SOAM Sites (All SOAM Sites) .....	145
5.9 DP Installation (All SOAM Sites) .....	159
5.10 Configuring ComAgent .....	191
<b>Appendix A. Accessing the iLO VGA Redirection Window .....</b>	<b>194</b>

<b>Appendix B. Creating Temporary External IP Address for Accessing SDS GUI.....</b>	<b>196</b>
<b>Appendix C. Establish a Local Connection for Accessing the SDS GUI .....</b>	<b>197</b>
<b>Appendix D. Configure Cisco 4948E-F Aggregation Switches.....</b>	<b>200</b>
D-1. Verifying Cisco Switch Wiring (All SDS NOAM Sites).....	201
D-2. Configure Cisco 4948E-F Aggregation Switches.....	206
D-3. Cisco 4948E-F IOS Upgrade (All SDS NOAM Sites).....	229
D-4. Cisco 4948E-F Configuration Backup (All SDS NOAM sites) .....	238
<b>Appendix E. Creating an XML File for Installing Network Elements.....</b>	<b>240</b>
<b>Appendix F. NetBackup Client Installation.....</b>	<b>243</b>
<b>Appendix G. List of Frequently Used Time Zones.....</b>	<b>244</b>
<b>Appendix H. Accepting Installation Through SDS NOAM GUI .....</b>	<b>245</b>
<b>Appendix I. Disable Hyperthreading for GEN8 and GEN9 (DP Only).....</b>	<b>248</b>
<b>Appendix J. Configure the HP DL380 (GEN8 &amp; GEN9) Server CMOS Clock/BIOS Settings .....</b>	<b>266</b>
J-1. GEN8: Configure the ILO for Rack Mount Server.....	266
J-2. GEN9: RMS Configure iLO .....	282
<b>Appendix K. Accessing My Oracle Support (MOS) .....</b>	<b>304</b>

## List of Tables

Table 1 – Acronyms .....	8
Table 2 – SDS Installation Matrix.....	15
Table 3 – SDS Installation – List of Procedures .....	15
Table 4 – SDS Network Element Configuration File (IPv4) .....	241
Table 5 – SDS Network Element Configuration File (IPv6) .....	242
Table 6 – List of Selected Time Zone Values .....	244

## List of Figures

Figure 1 – HP DL380 GEN8: DC (Rear Panel).....	10
Figure 2 – HP DL380 GEN9: DC (Rear Panel).....	11
Figure 3 – HP DL380 GEN8: Front Panel (USB Port) .....	18
Figure 4 – HP DL380 GEN9: Front Panel (USB Port) .....	18
Figure 5 – HP DL380 GEN8: Rear Panel (Ethernet) .....	44
Figure 6 – HP DL380 GEN9: DC (Rear Panel).....	44
Figure 7 – Cisco 4948E-F Switch (Maintenance Access Port).....	45
Figure 8 – HP DL380 GEN8: Front Panel (USB Port) .....	73



Figure 9 – HP DL380 GEN9: Front Panel (USB Port) .....	73
Figure 10 – HP DL380 GEN8: Front Panel (USB Port) .....	74
Figure 11 – HP DL380 GEN9: Front Panel (USB Port) .....	74
Figure 12 – HP DL380 GEN8: Front Panel (USB Port) .....	94
Figure 13 – HP DL380 GEN9: Front Panel (USB Port) .....	94
Figure 14 – HP DL380 GEN8: Front Panel (USB Port) .....	96
Figure 15 – HP DL380 GEN9: Front Panel (USB Port) .....	96
Figure 16 – HP DL380 GEN9: DC (Rear Panel).....	198
Figure 17 – SDS Frame Layout .....	200
Figure 18 – Cisco 4948E-F Switch ISL Connections .....	201
Figure 19 – Cisco 4948E-F Switch (Console Port).....	201
Figure 20 – HP DL380 GEN8: Rear Panel (Quad-Serial Ports) .....	202
Figure 21 – HP DL380 GEN8: Rear Panel (Ethernet) .....	203
Figure 22 – Cisco 4948E-F Switch (Console Port).....	204
Figure 23 – HP DL380 GEN9: DC (Rear Panel).....	204
Figure 24 – HP DL380 GEN9: DC (Rear Panel).....	205
Figure 25 – HP DL380 GEN8: Front Panel (USB Port) .....	230
Figure 26 – HP DL380 GEN9: Front Panel (USB Port) .....	230
Figure 27 – iLO Configuration – GEN8: Press [F8] to configure.....	266
Figure 28 – iLO Configuration – Initial iLO Configuration Screen.....	267
Figure 29 – iLO Configuration – Select Network->DNS/DHCP .....	267
Figure 30 – iLO Configuration – press [SPACE BAR] to turn DHCP OFF .....	268
Figure 31 – iLO Configuration – Select NIC and TCP/IP.....	268
Figure 32 – iLO Configuration – Select NIC and TCP/IP and configure Network.....	269
Figure 33 – iLO Configuration – Select User – Add.....	269
Figure 34 – RBSU – Enter RBSU – F9 Pressed indicated in HP Splash Screen.....	271
Figure 35 – iLO Configuration – Initial iLO Configuration Screen.....	271
Figure 36 – ROM-Based Setup Utility – Initial Screen .....	272
Figure 37 – ROM-Based Setup Utility – Serial Port Options .....	272
Figure 38 – Verify Embedded Serial Port Setting .....	273
Figure 39 – RBSU – Select Power Management Options .....	274
Figure 40 – RBSU – Select HP Power Profile and Maximum.....	275
Figure 41 – Select Standard Boot Order.....	276
Figure 42 – Select Set the IP Device Boot Order to 1 .....	276
Figure 43 – IPL:1 is Now USB DriveKey (C:).....	276
Figure 44 – Select Date and Time .....	277
Figure 45 – Set Date and Time (UTC).....	277
Figure 46 – RBSU – Select Server Availability .....	278
Figure 47 – RBSU – Verify ASR Status is Set to Enabled.....	279
Figure 48 – RBSU – Verify Automatic Power-On is Set to Enabled .....	279
Figure 49 – RBSU – Verify Power-On Delay is Set to No Delay .....	280
Figure 50 – RBSU – Exit ROM-Based Setup Utility.....	281
Figure 51 – GEN9: iLO Configuration – GEN9: Press [F9] to configure.....	282
Figure 52 – GEN9: iLO4 Select System Configuration.....	283
Figure 53 – GEN9: iLO: Select iLO4 Configuration Utility .....	283
Figure 54 – GEN9: iLO Configuration – User Management .....	283
Figure 55 – GEN9: iLO Configuration – Add User .....	284
Figure 56 – GEN9: iLO Configuration – Add New User Name: tekelec .....	284

Figure 57 – GEN9: iLO Configuration – Select Network Options .....	285
Figure 58 – GEN9: iLO Configuration – DHCP Enable to OFF .....	285
Figure 59 – GEN9: iLO Configuration – Network Configuration IP, Subnet, Gateway .....	286
Figure 60 – GEN9: iLO Configuration – F10 Save Changes .....	287
Figure 61 – GEN9: iLO Configuration – Change Reboot Message .....	287
Figure 62 – GEN9 RBSU – Enter RBSU – F9 Pressed indicated in HP Splash Screen .....	288
Figure 63 – GEN9: Select System Configuration .....	289
Figure 64 – GEN9: Select BIOS/Platform Configuration (RBSU) .....	289
Figure 65 – GEN9: ROM-Based Setup Utility – System Options .....	290
Figure 66 – GEN9: ROM-Based Setup Utility – Serial Port Options .....	290
Figure 67 – GEN9: Verify Embedded Serial Port Setting .....	291
Figure 68 – GEN9: Verify Virtual Serial Port Setting .....	291
Figure 69 – GEN9: RBSU – Select Power Management .....	292
Figure 70 – GEN9: RBSU – Select HP Power Profile and Maximum Performance .....	292
Figure 71 – GEN9: Select Boot Options .....	294
Figure 72 – GEN9: Select Legacy BIOS Boot Order .....	294
Figure 73 – Select Set the IP Device Boot Order USB DriveKey .....	295
Figure 74 – Select Set the IP Device Boot Order Embedded LOM 1 Port 1 .....	295
Figure 75 – GEN9: Select Date and Time .....	296
Figure 76 – GEN9: Set Date and Time (UTC) .....	296
Figure 77 – GEN9: RBSU – Select Server Availability .....	297
Figure 78 – GEN9: RBSU – Verify ASR Status is Set to Enabled .....	298
Figure 79 – GEN9: RBSU – Verify Automatic Power-On is Set to Restore Last Power State .....	298
Figure 80 – GEN9: RBSU – Verify Power-On Delay is Set to No Delay .....	298
Figure 81 – GEN9: RBSU – Verify Post F1 Prompt is Set to Delayed 20 Seconds .....	299
Figure 82 – GEN9: RBSU – Verify Advanced Options .....	300
Figure 83 – GEN9: RBSU – Verify Fan and Thermal Options .....	301
Figure 84 – GEN9: RBSU – Save Changes and Confirm .....	302
Figure 85 – GEN9: RBSU – Changes Saved .....	302
Figure 86 – GEN9: Exit System Utilities .....	303

## List of Procedures

Procedure 1. Configure the CMOS Clock, BIOS Settings, and iLO IP Address and Upgrade Firmware .....	13
Procedure 2. Installing the SDS Application (All SDS NOAM Sites) .....	16
Procedure 3. Configuring SDS Servers A and B (1 <sup>st</sup> SDS NOAM Site Only) .....	24
Procedure 4. Pairing the SDS NOAM Servers (1 <sup>st</sup> SDS NOAM Site Only) .....	46
Procedure 5. Configuring the Query Server (All SDS NOAM Sites) .....	64
Procedure 6. Configuring the DR NOAM Servers (DR SDS NOAM Site Only) .....	83
Procedure 7. Pairing the DR SDS NOAM Servers (DR SDS NOAM Site Only) .....	100
Procedure 8. Add SDS Software Images to PMAC Servers for DSR Signaling Sites .....	114
Procedure 9. Configuring the SDS SOAM Servers (All SOAM Sites) .....	118
Procedure 10. Pairing the SDS SOAM Servers (All SOAM Sites) .....	145
Procedure 11. Installing the Data Processor Blade (All SOAM Sites) .....	159
Procedure 12. Configuring ComAgent (All SOAM Sites) .....	191
Procedure 13. Accessing the iLO VGA Redirection Window .....	194
Procedure 14. Creating Temporary External IP Address for Accessing SDS GUI .....	196

Procedure 15.	Establish a Local Connection for Accessing SDS GUI .....	197
Procedure 16.	Verifying Cisco Switch Wiring (SDS Sites) .....	201
Procedure 17.	Configuring Cisco 4948E-F Switches (All SDS NOAM Sites) .....	207
Procedure 18.	Configure Cisco 4948E-F Aggregation Switches (All SDS NOAM Sites).....	218
Procedure 19.	Cisco 4948E-F IOS Upgrade (SDS Sites) .....	229
Procedure 20.	Cisco 4948E-F Backup (SDS Sites) .....	239
Procedure 21.	NetBackup Client Installation .....	243
Procedure 22.	Accepting Installation Through SDS NOAM GUI .....	245
Procedure 23.	GEN8: Disable Hyperthreading (DP Only).....	248
Procedure 24.	GEN9: Disable Hyperthreading (DP Only).....	256
Procedure 25.	GEN8: Configure the iLO for Rack Mount Server .....	266
Procedure 26.	Enter the ROM-Based Setup Utility (RBSU) .....	271
Procedure 27.	Verify/Configure Serial Port Options .....	272
Procedure 28.	Verify/Set Power Management .....	274
Procedure 29.	Verify/Set Standard Boot Order (IPL) .....	276
Procedure 30.	Verify/Set System Date and Time.....	277
Procedure 31.	Verify/Set Server Availability .....	278
Procedure 32.	Exit the RBSU .....	281
Procedure 33.	GEN8: Configure the iLO for Rack Mount Server .....	282
Procedure 34.	GEN9: Enter the ROM-Based Setup Utility (RBSU) .....	288
Procedure 35.	GEN9: Verify/Configure Serial Port Options .....	289
Procedure 36.	GEN9: Verify/Set Power Management .....	292
Procedure 37.	GEN9: Verify/Set Standard Boot Order (IPL) .....	294
Procedure 38.	GEN9: Verify/Set System Date and Time.....	296
Procedure 39.	GEN9: Verify/Set Server Availability .....	297
Procedure 40.	GEN9: Verify Advanced Options.....	300
Procedure 41.	GEN9: Save and Exit the RBSU .....	302

## 1. Introduction

### 1.1 Purpose and Scope

This document describes how to install the Oracle® Communications Diameter Signal Router Full Address Resolution product also known as “Eagle XG Subscriber Data Server (SDS)” within a customer network. It makes use of the Platform 7.3 network installation and is intended to cover the initial network configuration steps for a SDS/Query Server NE and a SOAM/DP (Blade) NE for production use as part of the DSR 8.0 solution. This document includes switch configuration (Cisco 4948E-F) and validation of the initial SDS configuration. This document only describes the SDS product installation on the HP DL380 GEN8 and GEN9 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 sources cited in Section 1.2 References.

### 1.2 References

#### External (Customer Facing)

- [1] TEKELEC Acronym Guide, MS005077, Latest Revision
- [2] DSR Hardware Site Survey, WI006083, Latest Revision
- [3] DSR 8.0 Base Hardware and Software Installation Procedure 1/2, E76180, Latest Revision
- [4] DSR 8.0 Software Installation & Configuration Procedure 2/2, E76181, Latest Revision

#### Internal (ORACLE Communications Personnel Only)

- [5] HP Solutions Firmware Upgrade Pack Release Notes, 795-000-4xx, latest version (2.2.8 or higher)
- [6] Platform 7.0 Configuration Guide, E53486
- [7] Manufacturing Acceptance Test Procedure Subscriber Data Management Rack Mount Servers, 820-6641-01
- [8] Network Architecture Planning Document, cgbu\_010618, Latest Revision
- [9] TPD Initial Product Manufacture, Software Installation Procedure, Release 7.0+, E53017-09
- [10] Site Survey-Oracle Eagle XG Rackmount Equipment, SS006026

### 1.3 Acronyms

**Table 1 – Acronyms**

Acronym	Description
DP	Data Processor blade
DR	Disaster Recovery
IMI	Internal Management Interface
ISL	Inter-Switch-Link
NE	Network Element
NOAM	Network Operations, Administration & Maintenance
iLO	HP Integrated Lights-Out
IPM	Initial Product Manufacture

Acronym	Description
SDS	Subscriber Data Server
SOAM	Systems Operations, Administration & Maintenance
TPD	Tekelec Platform Distribution (Linux OS)
VIP	Virtual IP
XMI	External Management Interface
XML	Exensible Markup Language

### 1.4 Assumptions

This procedure assumes the following;

- The user has reviewed the latest Network Architecture Planning Document (NAPD) [8] and has received assigned values for all requested information related to SDS, Query Server, SOAM and DP installation.
- The user has taken assigned values from the latest Customer specific DSR Network Planning document [8] and used them to compile XML files (See **Appendix E**) for each SDS and 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 [8].
- The user has at least an intermediate skill set with command prompt activities on an Open Systems computing environment such as Linux or TPD.
- All SDS servers were IPM'ed with TPD Platform 7.4 of correct version as described in [9].

### 1.5 XML Files

The XML files compiled for installation of the each of the SDS NOAM and SOAM site Network Elements must be maintained and accessible for use in Disaster Recovery procedures.

If engaged by the customer, the ORACLE Consulting Services Engineer 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 Customer Service 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 Customer Service for assistance before attempting to continue. See Appendix K – Accessing My Oracle Support (MOS) for information on contacting Oracle Customer Support.

## 2. Pre-Installation Setup

### 2.1 Installation Prerequisites

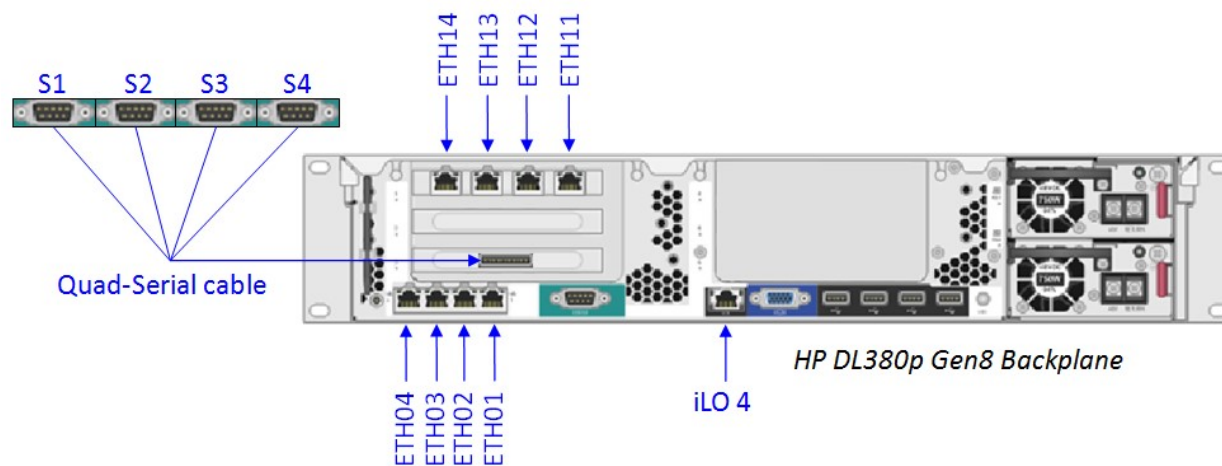
The following items/settings are required in order to perform installation for HP DL380 based SDS HW:

- 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 10.x or 11.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.
- TPD “admusr” 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 DL Server rear panel or a connection to the iLO is required to initiate and monitor the progress of SDS installation procedures.



**Figure 1 – HP DL380 GEN8: DC (Rear Panel)**

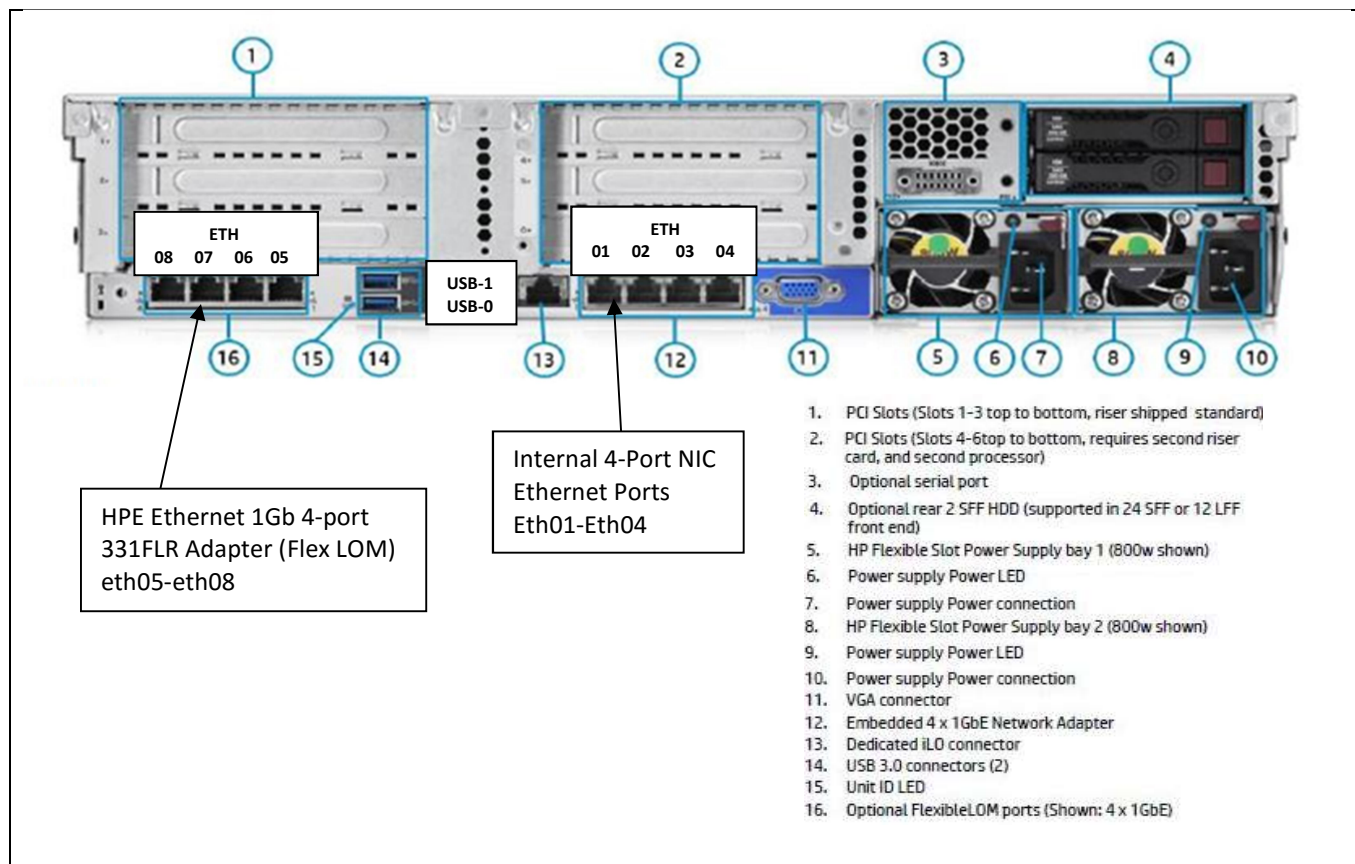



Figure 2 – HP DL380 GEN9: DC (Rear Panel)

## 2.3 Access Alternatives for Application Install

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

<p>One of the <b>Access Methods</b> shown to the right may be used to initiate and monitor SDS installation.</p>	<input type="checkbox"/> <b>Method 1)</b> VGA Monitor and PS2 Keyboard.
<p><b>NOTE:</b> Methods 3 &amp; 4 may only be used on an DL380 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.</p>	<input type="checkbox"/> <b>Method 2)</b> Laptop +  KVM2USB switch. <a href="http://www.epiphan.com/products/frame-grabbers/kvm2usb/">http://www.epiphan.com/products/frame-grabbers/kvm2usb/</a>
	<input type="checkbox"/> <b>Method 3)</b> iLO VGA Redirection Window, IE8 (or IE9 with Document Mode “IE8 Standards”), Ethernet cable. (See <b>Appendix A</b> )
	<input type="checkbox"/> <b>Method 4)</b> 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.).

### 2.5 Firmware and BIOS Settings

Prior to upgrading the Firmware of the DL380 (GEN8 & GEN9) servers the CMOS Clock, BIOS Settings, and iLO IP Address needed to be configured. These configuration procedures are defined in **Appendix J** of this document.

Several procedures in this document pertain to the upgrading of firmware on DL380 servers and Cisco 4948 E-F switches that are part of the Platform 7.3.x configuration.

The required firmware and documentation for upgrading the firmware on HP hardware systems and related components are distributed as the *HP Solutions Firmware Upgrade Pack*. The minimum firmware release required for Platform 7.3.x is *HP Solutions Firmware Upgrade Pack 2.2.9 or higher*. If a firmware upgrade is needed, the current GA release of the *HP Solutions Firmware Upgrade Pack* should be used.

Each version of the *HP Solutions Firmware Upgrade Pack* contains multiple items including media and documentation. If an HP FUP 2.x.x version newer than the Platform 7.0.x minimum of HP FUP 2.2.9 is used, then the *HP Solutions Firmware Upgrade Guide* should be used to upgrade the firmware. Otherwise, the *HP Solutions Firmware Upgrade Guide*, Release 2.x.x should be used.

The three pieces of required firmware media provided in the *HP Solutions Firmware Upgrade Pack* releases are:

- HP Service Pack for ProLiant (SPP) firmware ISO image
- HP Service Pack for ProLiant (SPP) firmware USB image
- HP MISC Firmware ISO image

Refer to the Release Notes of the [5] *HP Solutions Firmware Upgrade Pack Release Notes, Release 2.x.x, (Min 2.2.9)* to determine specific firmware versions needed.

Contact Accessing My Oracle Support (MOS) for more information on obtaining the HP Firmware Upgrade Packs.



## 2.6 Configure the CMOS Clock, BIOS Settings, and iLO IP Address and Upgrade Firmware

The following procedure explains the steps needed to configure the CMOS Clock, BIOS Settings, and iLO IP address of the DL80 RMS servers and upgrade the firmware (if needed).

### Procedure 1. Configure the CMOS Clock, BIOS Settings, and iLO IP Address and Upgrade Firmware

<b>S</b> <b>T</b> <b>E</b> <b>P</b> <b>#</b>	<p>The following procedure explains the steps needed to configure the CMOS Clock, BIOS Settings, and iLO IP Address of the DL380 RMS servers and upgrade the firmware. (If needed).</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 <b>Appendix K My Oracle Support</b> and ask for assistance.</p>	
1 <input type="checkbox"/>	<b>Configure RMS Server.</b>	<p>Connect to the RMS Server using a VGA Display and USB Keyboard.</p> <p><b>For HP DL 380 (G8) Servers execute:</b></p> <p>Appendix J.1.1 RMS: Configure ILO</p> <p>Appendix J.1.2 GEN8: RMS BIOS Configuration, Verify Processor and Memory</p> <p><b>For HP DL 380 (G9) Servers execute:</b></p> <p>Appendix J.2.1 RMS: Configure iL</p> <p>Appendix J.2.2 GEN9: RMS BIOS Configuration, verify processor &amp; memory</p>
2 <input type="checkbox"/>	<b>RMS Server:</b> Verify/Upgrade Firmware	<p>Follow the appropriate procedure for the ProLiant DL380(G8/G9) hardware type to verify and upgrade the HP server firmware using the procedures in [7] HP Solutions Firmware Upgrade Pack Upgrade Guide, Release 2.x.x, (Min 2.2.9)</p> <p>Check-off the associated Check Box in step 3 as the RMS server's CMOS Clock, BIOS Settings, and iLO IP Address has been configured and firmware is updated:</p>

**Procedure 1. Configure the CMOS Clock, BIOS Settings, and iLO IP Address and Upgrade Firmware**

<p>3</p> <p><input type="checkbox"/></p>	<p><b>RMS Server:</b> CMOS Clock, BIOS Settings, and iLO IP Address have been configured and firmware updated</p>	<p>Check-off the associated <b>Check Box</b> as the RMS server's CMOS Clock, BIOS Settings, and iLO IP Address has been configured and firmware is updated:</p> <p><b>Primary Site:</b></p> <p><input type="checkbox"/> RMS-1: _____ <input type="checkbox"/> RMS-2: _____</p> <p><input type="checkbox"/> RMS-3: _____ <input type="checkbox"/> RMS-4: _____</p> <p><input type="checkbox"/> RMS-5: _____ <input type="checkbox"/> RMS-6: _____</p> <p><input type="checkbox"/> RMS-7: _____ <input type="checkbox"/> RMS-8: _____</p> <p><input type="checkbox"/> RMS-9: _____ <input type="checkbox"/> RMS-10: _____</p> <p><b>Disaster Recover Site: (Optional)</b></p> <p><input type="checkbox"/> RMS-1: _____ <input type="checkbox"/> RMS-2: _____</p> <p><input type="checkbox"/> RMS-3: _____ <input type="checkbox"/> RMS-4: _____</p> <p><input type="checkbox"/> RMS-5: _____ <input type="checkbox"/> RMS-6: _____</p> <p><input type="checkbox"/> RMS-7: _____ <input type="checkbox"/> RMS-8: _____</p> <p><input type="checkbox"/> RMS-9: _____ <input type="checkbox"/> RMS-10: _____</p>
<p>4</p> <p><input type="checkbox"/></p>	<p><b>Optional: Repeat on the Disaster Recovery RMS servers.</b></p>	

### 3. 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 server 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 Accessing My Oracle Support (MOS) 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 1st installation of a SDS pair on the customer network while references to the “DR SDS” site refers to the 2nd SDS pair to be installed.

Table 2 – SDS Installation Matrix

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

Table 3 – SDS Installation – List of Procedures

Procedure No.	Title	Page No.
Procedure 2	Installing the SDS Application (All SDS NOAM Sites)	16
Procedure 3	Configuring SDS Servers A and B (1st SDS NOAM site only)	24
Procedure 4	Pairing the SDS NOAM Servers (1 <sup>st</sup> SDS NOAM Site Only)	46
Procedure 5	Configuring the Query Server (All SDS NOAM Sites)	64
Procedure 6	Configuring the DR NOAM Servers (DR SDS NOAM Site Only)	83
Procedure 7	Pairing the DR SDS NOAM Servers (DR SDS NOAM Site Only)	100
Procedure 8	Add SDS Software Images to PMAC Servers for DSR Signaling Sites	114

Procedure No.	Title	Page No.
Procedure 9	Configuring the SDS SOAM Servers (All SOAM Sites)	118
Procedure 10	Pairing the SDS SOAM Servers (All SOAM Sites)	145
Procedure 11	Installing the Data Processor Blade (All SOAM Sites)	159
Procedure 12	Configuring ComAgent (All SOAM Sites)	191
D-1	Verifying Cisco Switch Wiring (All SDS NOAM Sites)	201
D-2	Configure Cisco 4948E-F Aggregation Switches	218
D-3	Cisco 4948E-F IOS Upgrade (All SDS NOAM Sites)	229
D-4	Cisco 4948E-F Configuration Backup (All SDS NOAM sites)	238
Appendix J	Configure the HP DL380 (GEN8 & GEN9) Server CMOS Clock/BIOS Settings	266

## 4. Application Installation

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

The user should confirm that the server has been verified through the SDS Hardware Verification Plan [2] DSR Hardware Site Survey, WI006083, Latest Revision before beginning this procedure.

#### Procedure 2. Installing the SDS Application (All SDS NOAM Sites)

Step	Procedure	Result
1. <input type="checkbox"/>	Access the HP server's console.	Connect to the HP DL 380 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 HP server as the "admusr" user.	login: <b>admusr</b> Using keyboard-interactive authentication. Password: <b>&lt;admusr_password&gt;</b>
3. <input type="checkbox"/>	Verify that Date & Time are displayed in <b>GMT</b> (+/- 4 min.).	\$ <b>date -u</b> Wed Oct 22 14:07:12 UTC 2014 \$



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



- 1) Execute **Appendix J- CONFIGURE THE HP DL380 (GEN8 & GEN9) SERVER CMOS CLOCK/BIOS SETTINGS**
- 2) Restart **Procedure 1** beginning with **Step 1**.

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



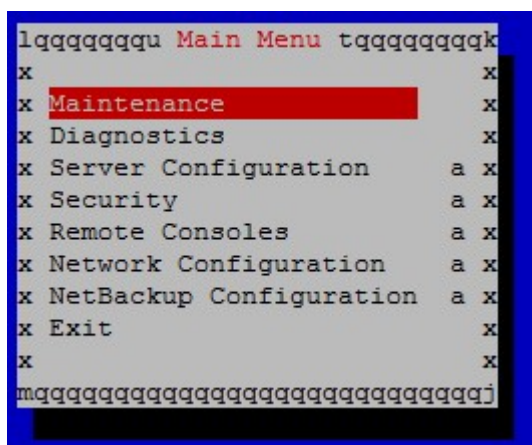
## Procedure 2. Installing the SDS Application (All SDS NOAM Sites)

Step	Procedure	Result
4. <input type="checkbox"/>	Verify that the TPD release is 7.4	\$ <b>getPlatRev</b> 7.4.0.0.0-88.30.0
5. <input type="checkbox"/>	Execute <b>alarmMgr</b> command to verify any alarms of the server before the application install.	\$ <b>alarmMgr --alarmStatus</b>  <i><b>NOTE:</b> This command should return no output on a healthy system. If any alarms are reported as SNMP traps, please stop and contact Accessing My Oracle Support (MOS) for the assistance.</i>
6. <input type="checkbox"/>	Execute <b>"syscheck"</b> to verify the state of the server before Application install.	\$ <b>sudo 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  <i><b>NOTE:</b> The user should stop and resolve any errors returned from "syscheck" before continuing on to the next step.</i>
7. <input type="checkbox"/>	Execute <b>verifyUpgrade</b> command to verify health of the server before the application install.	\$ <b>sudo verifyUpgrade</b>  <i><b>NOTE:</b> This command should return no output on a healthy system. If any error are reported, please stop and contact Accessing My Oracle Support (MOS) for the assistance.</i>
8. <input type="checkbox"/>	Verify Hardware ID is ProLiant DL380 GEN8 or GEN9.	\$ <b>hardwareInfo   grep Hardware</b> Hardware ID: ProLiantDL380pGEN8 - Or - Hardware ID: ProLiantDL380GEN9

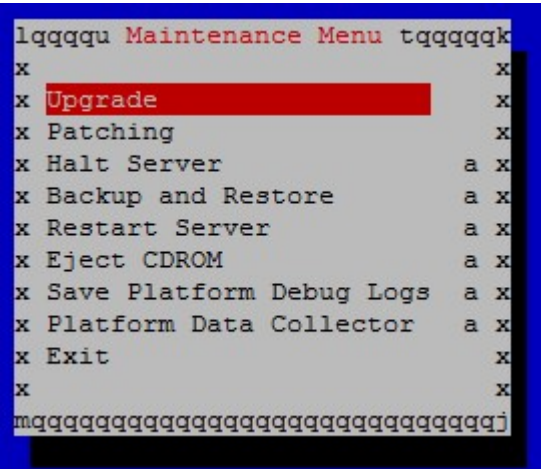
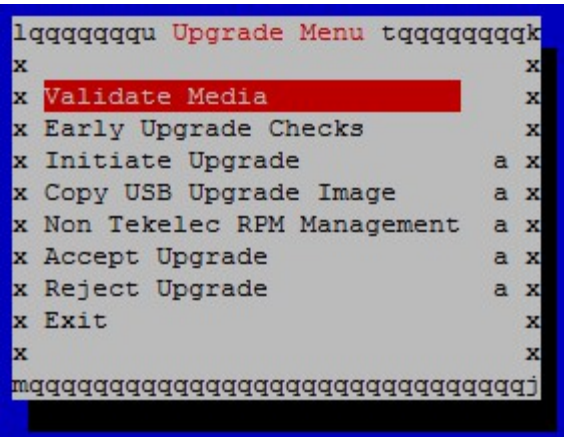
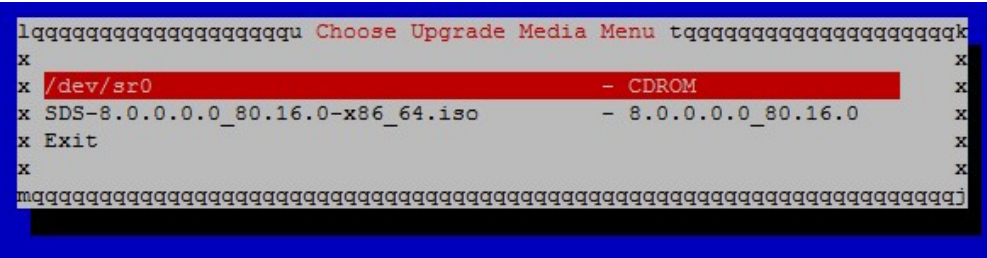
**Procedure 2. Installing the SDS Application (All SDS NOAM Sites)**

Step	Procedure	Result
<b>9.</b> <input type="checkbox"/>	Place the <b>USB drive</b> containing the <b>SDS Application software</b> into the server's USB port.	 <p><b>Figure 3 – HP DL380 GEN8: Front Panel (USB Port)</b></p>  <p><b>Figure 4 – HP DL380 GEN9: Front Panel (USB Port)</b></p>
<b>10.</b> <input type="checkbox"/>	Verify that the USB drive has been mounted under the <b>/media</b> directory.	<pre>\$ df  grep sdb /dev/sdb1          2003076          8    2003068    1% /media/sdb1</pre>
<b>11.</b> <input type="checkbox"/>	Verify that the <b>target release</b> is present on the USB drive.	<pre>\$ ls /media/sdb1/ SDS-8.0.0.0.0_80.16.0-x86_64.iso</pre>
<b>12.</b> <input type="checkbox"/>	Copy the target release to the server's hard disk under the <b>/var/TKLC/upgrade</b> directory.	<pre>\$ cp -p /media/sdb1/SDS-8.0.0.0.0_80.16.0-x86_64.iso /var/TKLC/upgrade/</pre>
<b>13.</b> <input type="checkbox"/>	Unmount the USB drive partition.	<pre>\$ sudo umount /media/sdb1 \$</pre>

**Procedure 2. Installing the SDS Application (All SDS NOAM Sites)**

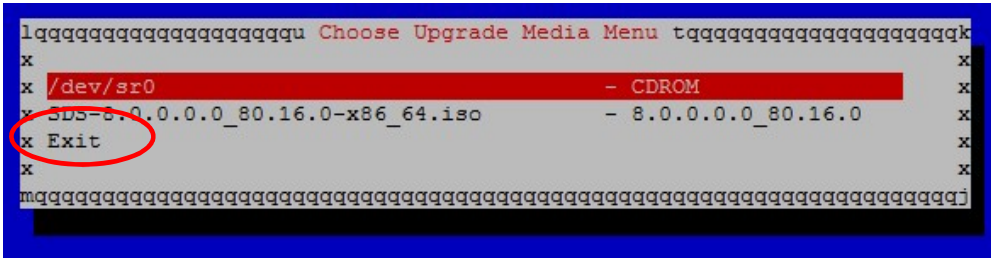
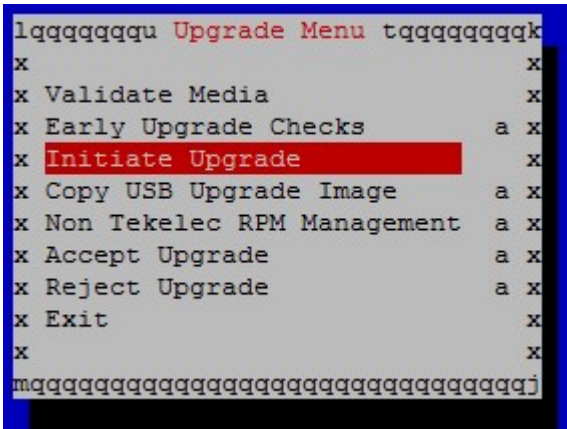
Step	Procedure	Result
<b>14.</b> <input type="checkbox"/>	Remove the <b>USB drive</b> from the server's front panel.	 <p>Figure 3 – HP DL380 GEN8: Front Panel (USB Port)</p>  <p>Figure 4 – HP DL380 GEN9: Front Panel (USB Port)</p>
<b>15.</b> <input type="checkbox"/>	Login to the “ <b>platcfg</b> ” utility.	\$ sudo <b>su - platcfg</b>
<b>16.</b> <input type="checkbox"/>	From the “ <b>platcfg</b> ” Main Menu...  Select <b>Maintenance</b> then press the <b>&lt;ENTER&gt;</b> key	

## Procedure 2. Installing the SDS Application (All SDS NOAM Sites)

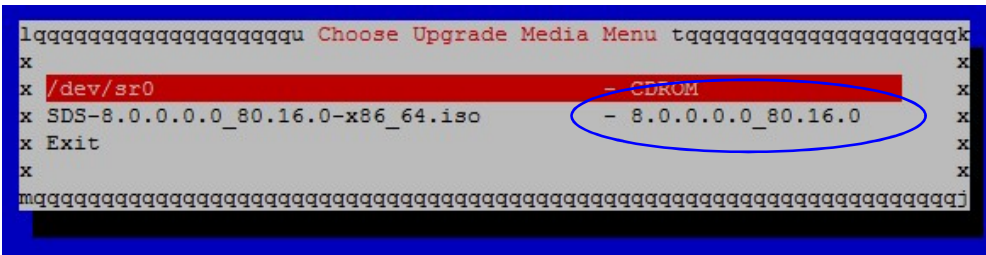
Step	Procedure	Result
17.	From the “platcfg” Main Menu...	
<input type="checkbox"/>	Select <b>Upgrade</b> then press the <b>&lt;ENTER&gt;</b> key	
<input type="checkbox"/>	Select <b>Validate</b> then press the <b>&lt;ENTER&gt;</b> key	
<input type="checkbox"/>	Select <b>ISO</b> then press the <b>&lt;ENTER&gt;</b> key	
<input type="checkbox"/>	Screen will show ISO is <b>Validated</b> then press the <b>ANY</b> key.	
		<p>Validating cdrom...</p> <pre>##### ##### ##### ##### ##### ##### #####</pre>



Procedure 2. Installing the SDS Application (All SDS NOAM Sites)

Step	Procedure	Result
	<div> <input type="checkbox"/> </div> <p>Select <b>Exit</b> then press the <b>&lt;ENTER&gt;</b> key</p>	<pre>##### ##### ##### ##### ##### ##### ##### UMVT Validate Utility v2.3.4, (c)Tekelec, May 2014 Validating /var/TKLC/upgrade/SDS-8.0.0.0.0_80.16.0-x86_64.iso Date&amp;Time: 2016-08-09 08:20:01 Volume ID: 8.0.0.0.0_80.16.0 Part Number: N/A Version: 8.0.0.0.0_80.16.0 Disc Label: DSR Disc description: DSR The media validation is complete, the result is: PASS  CDROM is Valid  PRESS ANY KEY TO RETURN TO THE PLATCFG MENU.</pre> 
<p>18.</p> <div> <input type="checkbox"/> </div>	<p>From the “platcfg” Main Menu...</p> <p>Select <b>Initiate Upgrade</b> then press the <b>&lt;ENTER&gt;</b> key</p>	

## Procedure 2. Installing the SDS Application (All SDS NOAM Sites)

Step	Procedure	Result
19. <input type="checkbox"/>	<p>Verify that SDS application release shown matches the target release.</p> <p>Press the <b>&lt;ENTER&gt;</b> key to start the SDS application install</p>	
20. <input type="checkbox"/>	<p>Output similar to that shown on the right may be observed as the SDS 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/MySQL_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>
21. <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>
22. <input type="checkbox"/>	<p>After the server has completed reboot, log into the HP server as the "admusr" user.</p>	<pre> login: admusr Using keyboard-interactive authentication. Password: &lt;admusr_password&gt; </pre>
23. <input type="checkbox"/>	<p>Verify that the output contains the line shown to the right indicating a successful installation of SDS application software.</p>	<pre> \$ grep COMPLETE /var/TKLC/log/upgrade/upgrade.log 1321462900:: UPGRADE IS COMPLETE </pre>

**Procedure 2. Installing the SDS Application (All SDS NOAM Sites)**

Step	Procedure	Result
24. <div><input type="checkbox"/></div>	<p>Execute <b>verifyUpgrade</b> command to verify status of upgrade.</p> <p>Verify that SDS application release shown matches the target release</p>	<pre>\$ sudo verifyUpgrade</pre> <p><b>NOTE:</b> This command should return no output on a healthy system. If any error are reported, please stop and contact Accessing My Oracle Support (MOS) for the assistance</p> <pre>\$ rpm -qa  grep sds</pre> <pre>TKLCSds-8.0.0.0.0_80.16.0.x86_64</pre>
25. <div><input type="checkbox"/></div>	<p>Accept upgrade to the Application Software.</p>	<pre>\$ sudo /var/TKLC/backout/accept</pre> <pre>Called with options: --accept</pre> <pre>Loading Upgrade::Backout::RPM</pre> <pre>Accepting Upgrade</pre> <pre>Setting POST_UPGRADE_ACTION to ACCEPT in upgrade info.</pre> <pre>Cleaning backout directory.</pre> <pre>Clearing Upgrade Accept/Reject alarm.</pre> <pre>Cleaning message from MOTD.</pre> <pre>Cleaning up RPM config backup files...</pre> <pre>Checking /</pre> <pre>Checking /boot</pre> <pre>Checking /tmp</pre> <pre>Checking /usr</pre> <pre>Checking /var</pre> <pre>Checking /var/TKLC/rundb</pre> <pre>Starting cleanup of RCS repository.</pre> <pre>INFO: Removing '/var/lib/prelink/force' from RCS repository</pre> <pre>INFO: Removing '/etc/my.cnf' from RCS repository</pre>
26. <div><input type="checkbox"/></div>	<p>Put the server in trusted time mode</p>	<pre>\$ tw.setdate -trusted</pre> <pre>Current time: 10/22/2014 16:25:07.869</pre>
27. <div><input type="checkbox"/></div>	<p>Exit from the command line to return the server console to the login prompt.</p>	<pre>\$ exit</pre>
28. <div><input type="checkbox"/></div>	<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 (e.g., SDS NOAM A, SDS NOAM B, Query Server).</li></ul>	
THIS PROCEDURE HAS BEEN COMPLETED		

## 5. Configuration Procedures

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

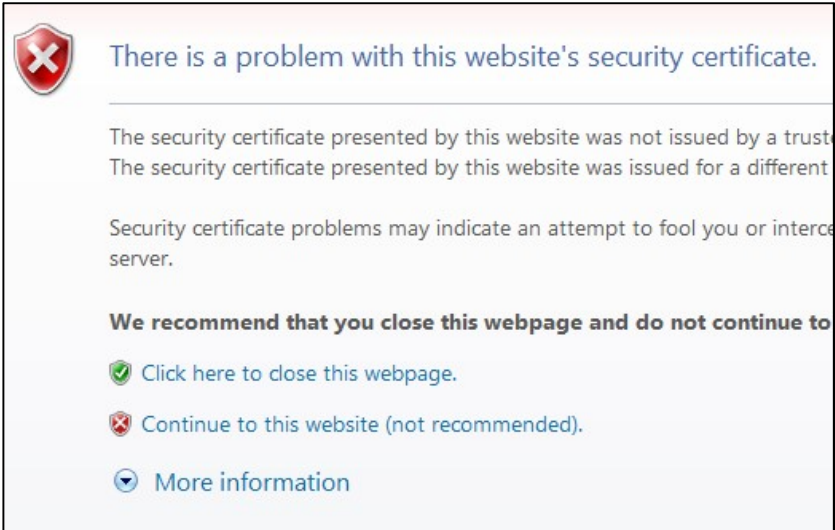
Assumptions:

- This procedure assumes that the SDS Network Element XML file for the Primary Provisioning SDS site has previously been created, as described in **Appendix E**.
- 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.




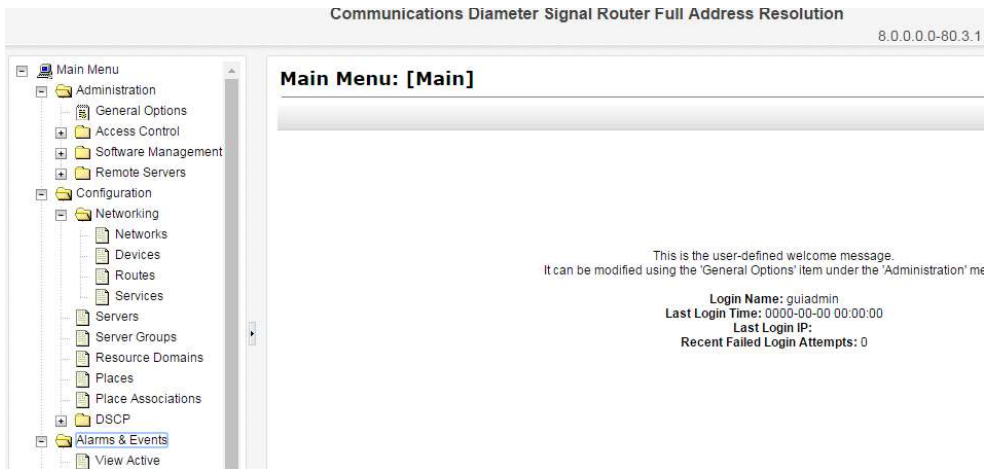

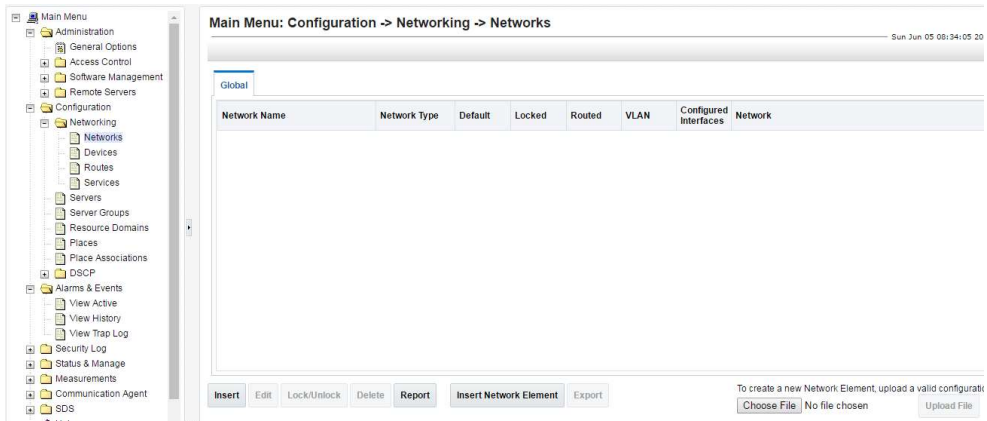
This procedure requires that the user connects to the SDS GUI prior to configuring the first SDS server. This can be done either by one of two procedures:

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

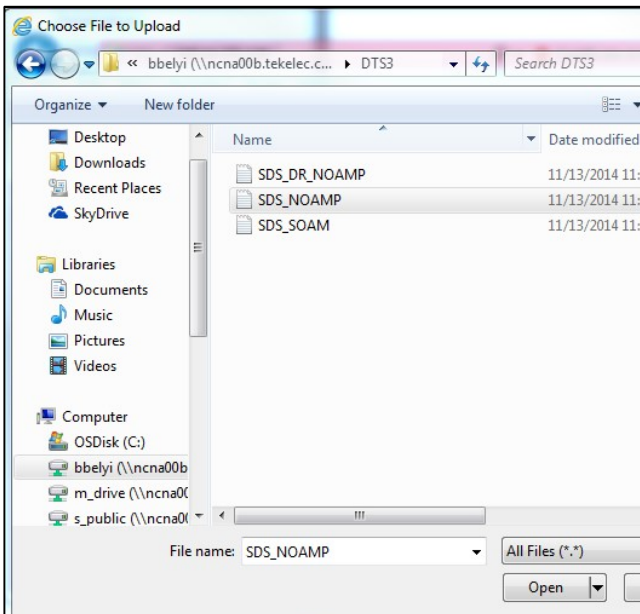

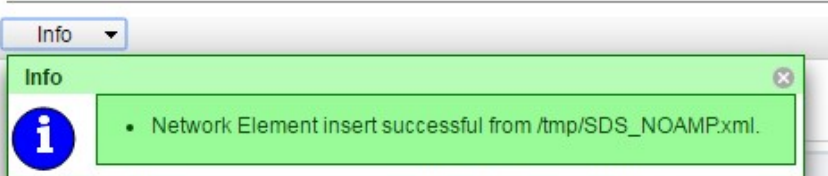
#### Procedure 3. Configuring SDS Servers A and B (1<sup>st</sup> SDS NOAM Site Only)

Step	Procedure	Result
1. <input type="checkbox"/>	<b>SDS NOAM A:</b> Connect to the SDS GUI.	<ul style="list-style-type: none"> <li>• Execute <b>Appendix C</b>. <i>Establishing a Local Connection for Accessing the SDS GUI</i></li> </ul>
2. <input type="checkbox"/>	<b>SDS NOAM A:</b> Launch an approved web browser and connect to the SDS NOAM A IP address using <a href="https://192.168.100.11">https://192.168.100.11</a>  <b>NOTE:</b> <i>If presented with the "security certificate" warning screen shown to the right, choose the following option:</i>  <i>"Continue to this website (not recommended)".</i>	

Procedure 3. Configuring SDS Servers A and B (1<sup>st</sup> SDS NOAM Site Only)

Step	Procedure	Result
3. 	<p><b>SDS NOAM 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>	 <p>The screenshot shows the Oracle System Login page. At the top is the Oracle logo. Below it is the title 'Oracle System Login' and the date/time 'Tue May 31 14:34:34 2016 EDT'. A central box contains the 'Log In' form with fields for 'Username:' and 'Password:', a 'Change password' checkbox, and a 'Log In' button. Below the form, it says 'Welcome to the Oracle System Login.' and 'This application is designed to work with most modern HTML5 compliant browsers and uses both JavaScript and cookies. Please refer to the <a href="#">Oracle Software Web Browser Support Policy</a> for details.' At the bottom, it states 'Unauthorized access is prohibited.' and includes copyright information for Oracle Corporation.</p>
4. 	<p><b>SDS NOAM A:</b></p> <p>The user should be presented the SDS Main Menu as shown on the right.</p>	 <p>The screenshot shows the 'Communications Diameter Signal Router Full Address Resolution' main menu. On the left is a tree view with categories like Administration, Configuration, Networking, Servers, and Alarms &amp; Events. The 'Main Menu: [Main]' area on the right displays a user-defined welcome message: 'Login Name: guidadmin, Last Login Time: 0000-00-00 00:00:00, Last Login IP: , Recent Failed Login Attempts: 0'. The version number '8.0.0.0-0-80.3.1' is shown in the top right.</p>
5. 	<p><b>SDS NOAM A:</b></p> <p>1) Select...</p> <p><b>Main Menu</b></p> <p>→ Configuration</p> <p>→ Networking</p> <p>→ Networks</p> <p>...as shown on the right.</p> <p>2) Select the "Browse" dialogue button (scroll to bottom left corner of screen).</p>	 <p>The screenshot shows the same SDS Main Menu as in step 4, but with the 'Configuration' path selected in the left tree view. The main area now displays 'Main Menu: Configuration -&gt; Networking -&gt; Networks'. It shows a table with columns: Network Name, Network Type, Default, Locked, Routed, VLAN, Configured Interfaces, and Network. At the bottom, there are buttons for 'Insert', 'Edit', 'Lock/Unlock', 'Delete', 'Report', 'Insert Network Element', and 'Export'. A note at the bottom right says 'To create a new Network Element, upload a valid configuration file' with a 'Choose File' button and 'No file chosen' text.</p>

**Procedure 3. Configuring SDS Servers A and B (1<sup>st</sup> SDS NOAM Site Only)**


Step	Procedure	Result																								
6. <div></div>	<p><b>SDS NOAM A:</b></p> <p><b>Note:</b> This step assumes that the <b>xml</b> files were previously prepared, as described in <b>Appendix E</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>																									
7. <div></div>	<p><b>SDS NOAM A:</b></p> <p>Select the “<b>Upload File</b>” dialogue button (bottom left corner of screen).</p>																									
8. <div></div>	<p><b>SDS NOAM 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>	<div><p><b>Main Menu: Configuration -&gt; Networking -&gt; Networks</b></p></div> <div><p><b>Main Menu: Configuration -&gt; Networking -&gt; Networks</b></p><p>Sun Jun 05 08:38:1</p><p>Info ▾</p><p>Global <b>SDS_NE</b> ✕</p><table><tr><th>Network Name</th><th>Network Type</th><th>Default</th><th>Locked</th><th>Routed</th><th>VLAN</th><th>Configured Interfaces</th><th>Network</th></tr><tr><td>XMI</td><td>OAM</td><td>Yes</td><td>Yes</td><td>Yes</td><td>14</td><td>0</td><td>10.240.108.0/26</td></tr><tr><td>IMI</td><td>OAM</td><td>No</td><td>Yes</td><td>No</td><td>15</td><td>0</td><td>169.254.2.0/26</td></tr></table></div>	Network Name	Network Type	Default	Locked	Routed	VLAN	Configured Interfaces	Network	XMI	OAM	Yes	Yes	Yes	14	0	10.240.108.0/26	IMI	OAM	No	Yes	No	15	0	169.254.2.0/26
Network Name	Network Type	Default	Locked	Routed	VLAN	Configured Interfaces	Network																			
XMI	OAM	Yes	Yes	Yes	14	0	10.240.108.0/26																			
IMI	OAM	No	Yes	No	15	0	169.254.2.0/26																			

Procedure 3. Configuring SDS Servers A and B (1<sup>st</sup> SDS NOAM Site Only)

Step	Procedure	Result																								
9. <div></div>	<p><b>SDS NOAM A:</b></p> <p>1) Select...</p> <p><b>Main Menu</b></p> <p>→ <b>Configuration</b></p> <p>-&gt;<b>Networking</b></p> <p>→ <b>Services</b></p> <p>...as shown on the right.</p> <p>2) The user will be presented with the <b>“Services”</b> configuration screen as shown on the right.</p> <p>3) Select the <b>“Edit”</b> dialogue button.</p>	<div><div><div><div><div></div><div>Main Menu</div></div><div><div>Administration</div><div>General Options</div><div>Access Control</div><div>Software Management</div><div>Remote Servers</div><div>Configuration</div><div>Networking</div><div>Networks</div><div>Devices</div><div>Routes</div><div>Services</div><div>Servers</div><div>Server Groups</div><div>Resource Domains</div><div>Places</div><div>Place Associations</div><div>DSCP</div></div></div></div></div> <div><div>Main Menu: Configuration -&gt; Networking -&gt; Services</div><table><tr><th>Name</th><th>Intra-NE Network</th><th>Inter-NE Network</th></tr><tr><td>OAM</td><td>Unspecified</td><td>Unspecified</td></tr><tr><td>Replication</td><td>Unspecified</td><td>Unspecified</td></tr><tr><td>Signalling</td><td>Unspecified</td><td>Unspecified</td></tr><tr><td>HA_Secondary</td><td>Unspecified</td><td>Unspecified</td></tr><tr><td>HA_MP_Secondary</td><td>Unspecified</td><td>Unspecified</td></tr><tr><td>Replication_MP</td><td>Unspecified</td><td>Unspecified</td></tr><tr><td>ComAgent</td><td>Unspecified</td><td>Unspecified</td></tr></table><div>EditReport</div></div>	Name	Intra-NE Network	Inter-NE Network	OAM	Unspecified	Unspecified	Replication	Unspecified	Unspecified	Signalling	Unspecified	Unspecified	HA_Secondary	Unspecified	Unspecified	HA_MP_Secondary	Unspecified	Unspecified	Replication_MP	Unspecified	Unspecified	ComAgent	Unspecified	Unspecified
Name	Intra-NE Network	Inter-NE Network																								
OAM	Unspecified	Unspecified																								
Replication	Unspecified	Unspecified																								
Signalling	Unspecified	Unspecified																								
HA_Secondary	Unspecified	Unspecified																								
HA_MP_Secondary	Unspecified	Unspecified																								
Replication_MP	Unspecified	Unspecified																								
ComAgent	Unspecified	Unspecified																								

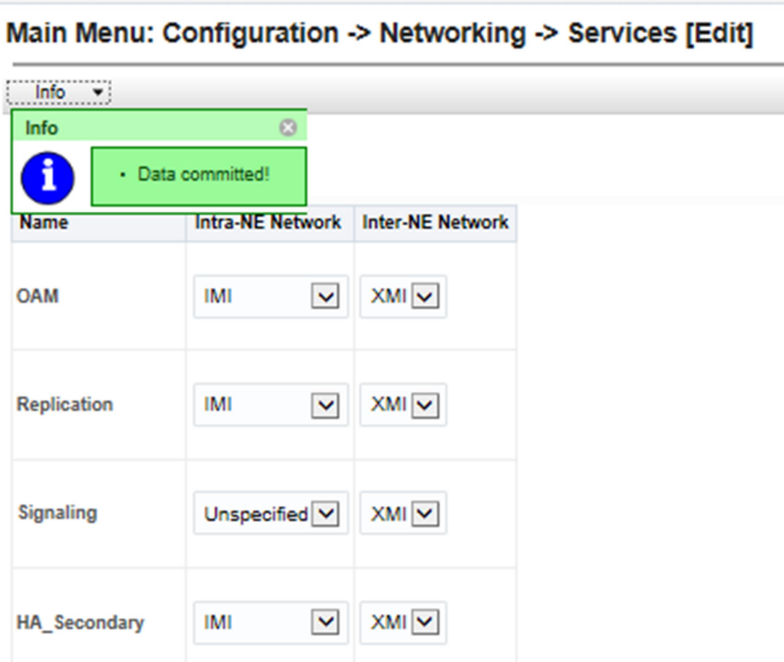
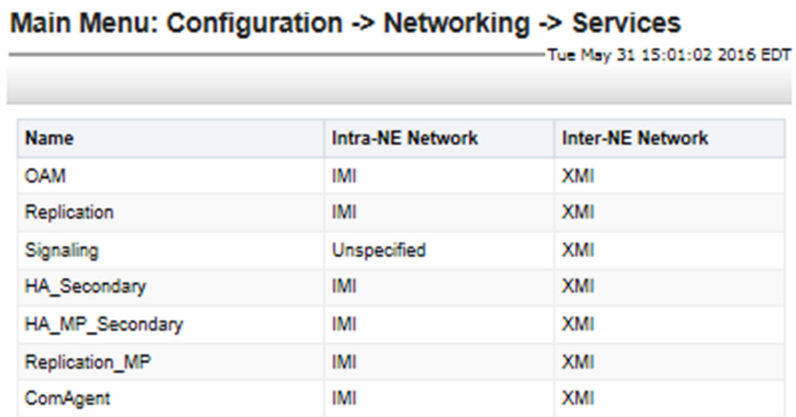


**Procedure 3. Configuring SDS Servers A and B (1<sup>st</sup> SDS NOAM Site Only)**

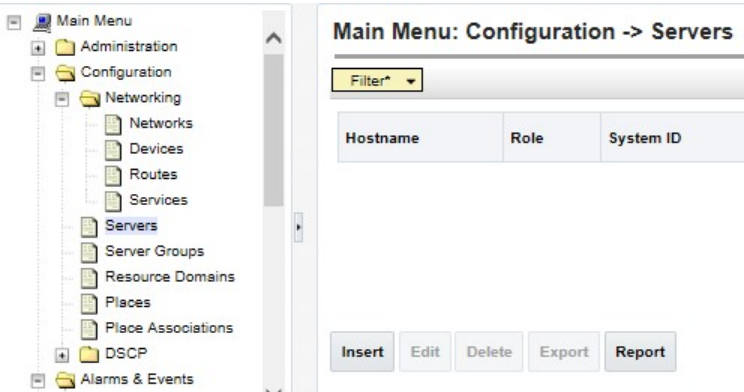
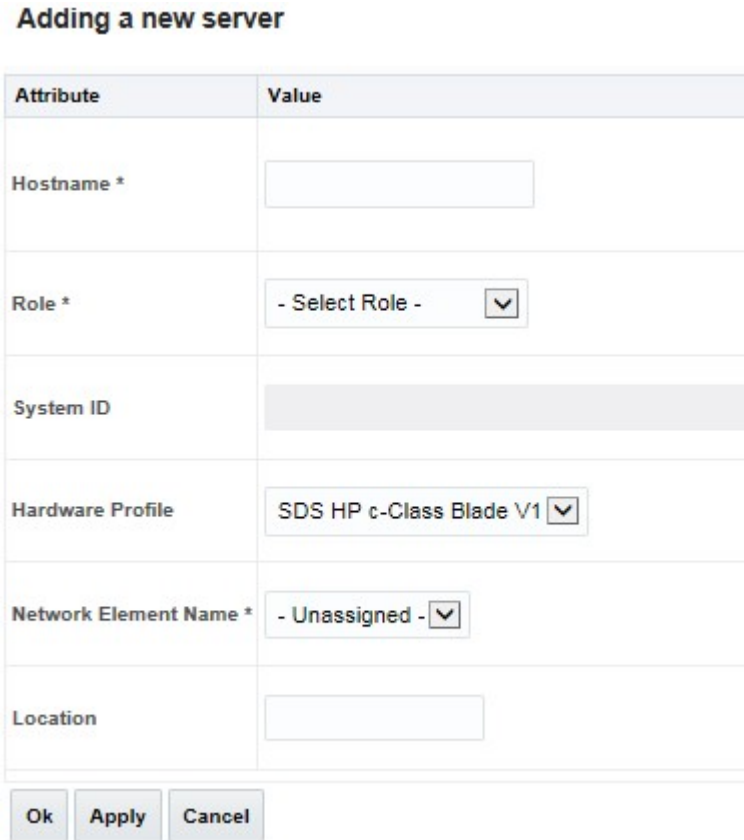
Step	Procedure	Result																								
10. 	<p><b>SDS NOAM A:</b></p> <p>1) With the exception of “<b>Signaling</b>” which is left “<b>Unspecified</b>”, set other services values so that all <b>Intra-NE Network</b> traffic is directed across <b>IMI</b> and all <b>Inter-NE Network</b> traffic is across <b>XMI</b>.</p> <p>2) Select the “<b>Apply</b>” dialogue button.</p> <p>3) Select “<b>OK</b>” in new pop up GUI to change the effect</p>	<p><b>Main Menu: Configuration -&gt; Networking -&gt; Services [Edit]</b></p> <hr/> <p><b>Services</b></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>INTERNALIMI ▼</td><td>INTERNALXMI ▼</td></tr> <tr> <td>Replication</td><td>INTERNALIMI ▼</td><td>INTERNALXMI ▼</td></tr> <tr> <td>Signaling</td><td>Unspecified ▼</td><td>Unspecified ▼</td></tr> <tr> <td>HA_Secondary</td><td>INTERNALIMI ▼</td><td>INTERNALXMI ▼</td></tr> <tr> <td>HA_MP_Secondary</td><td>INTERNALIMI ▼</td><td>INTERNALXMI ▼</td></tr> <tr> <td>Replication_MP</td><td>INTERNALIMI ▼</td><td>INTERNALXMI ▼</td></tr> <tr> <td>ComAgent</td><td>INTERNALIMI ▼</td><td>INTERNALXMI ▼</td></tr> </tbody> </table> <p>Ok Apply Cancel</p> <hr/> <p>100.65.33.69 says: <span>×</span></p> <p>You must restart the applications running on all servers to apply any services changes.          TO RESTART: Use "Restart" button under Status &amp; Manage-&gt;Server tab, ComAgent</p> <p>OK Cancel</p>	Name	Intra-NE Network	Inter-NE Network	OAM	INTERNALIMI ▼	INTERNALXMI ▼	Replication	INTERNALIMI ▼	INTERNALXMI ▼	Signaling	Unspecified ▼	Unspecified ▼	HA_Secondary	INTERNALIMI ▼	INTERNALXMI ▼	HA_MP_Secondary	INTERNALIMI ▼	INTERNALXMI ▼	Replication_MP	INTERNALIMI ▼	INTERNALXMI ▼	ComAgent	INTERNALIMI ▼	INTERNALXMI ▼
Name	Intra-NE Network	Inter-NE Network																								
OAM	INTERNALIMI ▼	INTERNALXMI ▼																								
Replication	INTERNALIMI ▼	INTERNALXMI ▼																								
Signaling	Unspecified ▼	Unspecified ▼																								
HA_Secondary	INTERNALIMI ▼	INTERNALXMI ▼																								
HA_MP_Secondary	INTERNALIMI ▼	INTERNALXMI ▼																								
Replication_MP	INTERNALIMI ▼	INTERNALXMI ▼																								
ComAgent	INTERNALIMI ▼	INTERNALXMI ▼																								



### Procedure 3. Configuring SDS Servers A and B (1<sup>st</sup> SDS NOAM Site Only)

Step	Procedure	Result																								
11. <input type="checkbox"/>	<p><b>SDS NOAM A:</b></p> <p>1) The user should now click the “Info” tab to be presented with a banner information message stating “<b>Data committed</b>”</p> <p>2) Select the “Ok” dialogue button.</p>	 <p>The screenshot shows the 'Main Menu: Configuration -&gt; Networking -&gt; Services [Edit]' window. The 'Info' tab is selected, displaying a green banner with an information icon and the text 'Data committed!'. Below the banner is a table with columns 'Name', 'Intra-NE Network', and 'Inter-NE Network'. The table contains four rows: 'OAM', 'Replication', 'Signaling', and 'HA_Secondary'. Each row has dropdown menus for the network types, with 'IMI' selected for Intra-NE and 'XMI' selected for Inter-NE.</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>IMI</td><td>XMI</td></tr> <tr> <td>Replication</td><td>IMI</td><td>XMI</td></tr> <tr> <td>Signaling</td><td>Unspecified</td><td>XMI</td></tr> <tr> <td>HA_Secondary</td><td>IMI</td><td>XMI</td></tr> </tbody> </table>	Name	Intra-NE Network	Inter-NE Network	OAM	IMI	XMI	Replication	IMI	XMI	Signaling	Unspecified	XMI	HA_Secondary	IMI	XMI									
Name	Intra-NE Network	Inter-NE Network																								
OAM	IMI	XMI																								
Replication	IMI	XMI																								
Signaling	Unspecified	XMI																								
HA_Secondary	IMI	XMI																								
12. <input type="checkbox"/>	<p><b>SDS NOAM A:</b></p> <p>The user will be presented with the “Services” configuration screen as shown on the right</p>	 <p>The screenshot shows the 'Main Menu: Configuration -&gt; Networking -&gt; Services' window. The date and time 'Tue May 31 15:01:02 2016 EDT' are displayed. Below is a table with columns 'Name', 'Intra-NE Network', and 'Inter-NE Network'. The table contains seven rows: 'OAM', 'Replication', 'Signaling', 'HA_Secondary', 'HA_MP_Secondary', 'Replication_MP', and 'ComAgent'. Each row has dropdown menus for the network types, with 'IMI' selected for Intra-NE and 'XMI' selected for Inter-NE.</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>IMI</td><td>XMI</td></tr> <tr> <td>Replication</td><td>IMI</td><td>XMI</td></tr> <tr> <td>Signaling</td><td>Unspecified</td><td>XMI</td></tr> <tr> <td>HA_Secondary</td><td>IMI</td><td>XMI</td></tr> <tr> <td>HA_MP_Secondary</td><td>IMI</td><td>XMI</td></tr> <tr> <td>Replication_MP</td><td>IMI</td><td>XMI</td></tr> <tr> <td>ComAgent</td><td>IMI</td><td>XMI</td></tr> </tbody> </table>	Name	Intra-NE Network	Inter-NE Network	OAM	IMI	XMI	Replication	IMI	XMI	Signaling	Unspecified	XMI	HA_Secondary	IMI	XMI	HA_MP_Secondary	IMI	XMI	Replication_MP	IMI	XMI	ComAgent	IMI	XMI
Name	Intra-NE Network	Inter-NE Network																								
OAM	IMI	XMI																								
Replication	IMI	XMI																								
Signaling	Unspecified	XMI																								
HA_Secondary	IMI	XMI																								
HA_MP_Secondary	IMI	XMI																								
Replication_MP	IMI	XMI																								
ComAgent	IMI	XMI																								

**Procedure 3. Configuring SDS Servers A and B (1<sup>st</sup> SDS NOAM Site Only)**

Step	Procedure	Result
13. <input type="checkbox"/>	<p><b>SDS NOAM A:</b></p> <p>1) Select... <b>Main Menu</b> → <b>Configuration</b> → <b>Servers</b> ...as shown on the right.</p> <p>2) Select the <b>“Insert”</b> dialogue button.</p>	 <p><b>Note:</b> This step thru the last step of this procedure need to be done for both servers SDS NOAM A and SDS NOAM B.</p>
14. <input type="checkbox"/>	<p><b>SDS NOAM A:</b></p> <p>The user is now presented with the <b>“Adding a new server”</b> configuration screen.</p>	

**Procedure 3. Configuring SDS Servers A and B (1<sup>st</sup> SDS NOAM Site Only)**

Step	Procedure	Result						
15. <input type="checkbox"/>	<b>SDS NOAM A:</b> Input the assigned <b>“hostname”</b> for the SDS NOAM (A or B).	<table border="1"> <thead> <tr> <th>Attribute</th><th>Value</th><th>Description</th></tr> </thead> <tbody> <tr> <td>Hostname *</td><td>sds-no-a</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.] [A value is required.]</td></tr> </tbody> </table>	Attribute	Value	Description	Hostname *	sds-no-a	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.] [A value is required.]
Attribute	Value	Description						
Hostname *	sds-no-a	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.] [A value is required.]						
16. <input type="checkbox"/>	<b>SDS NOAM A:</b> Select <b>“NETWORK OAM&amp;P”</b> for the server <b>“Role”</b> from the pull-down menu.	<table border="1"> <tbody> <tr> <td>Role *</td><td> <div>           - Select Role -            NETWORK OAM&amp;P            SYSTEM OAM            MP            QUERY SERVER         </div> </td><td>Select the function of the server [A value is required.]</td></tr> </tbody> </table>	Role *	<div>           - Select Role -            NETWORK OAM&amp;P            SYSTEM OAM            MP            QUERY SERVER         </div>	Select the function of the server [A value is required.]			
Role *	<div>           - Select Role -            NETWORK OAM&amp;P            SYSTEM OAM            MP            QUERY SERVER         </div>	Select the function of the server [A value is required.]						
17. <input type="checkbox"/>	<b>SDS NOAM A:</b> Input the assigned hostname again as the <b>“System ID”</b> for the SDS NOAM (A or B).	<table border="1"> <tbody> <tr> <td>System ID</td><td>sds-no-a</td><td>System ID for the NOAMP or SOAM server. [Default = n/a. Range = A 64-character string. Valid value is any text string.]</td></tr> </tbody> </table>	System ID	sds-no-a	System ID for the NOAMP or SOAM server. [Default = n/a. Range = A 64-character string. Valid value is any text string.]			
System ID	sds-no-a	System ID for the NOAMP or SOAM server. [Default = n/a. Range = A 64-character string. Valid value is any text string.]						
18. <input type="checkbox"/>	<b>SDS NOAM A:</b>  For GEN8: Select <b>“SDS HP Rack Mount”</b> for the <b>Hardware Profile</b> for the SDS from the pull-down menu.  For GEN9: Select <b>“SDS HP GEN9 Rack Mount”</b> for the <b>Hardware Profile</b> for the SDS from the pull-down menu.	<p>For GEN8 select <b>“SDS HP Rack Mount”</b> from the <b>Hardware Profile</b> pull-down menu.</p> <table border="1"> <tbody> <tr> <td>Hardware Profile</td><td> <div>           SDS HP c-Class Blade V1            SDS HP Rack Mount            SDS Cloud Guest            SDS TVOE Guest            SDS HP c-Class Blade V2            SDS HP c-Class Blade V0         </div> </td><td>Valid value is any text string.]</td></tr> </tbody> </table> <p>For GEN9 Select <b>“SDS HP GEN9 Rack Mount”</b> from the <b>Hardware Profile</b> pull-down menu.</p> <table border="1"> <tbody> <tr> <td>Hardware Profile</td><td> <div>           SDS TVOE Guest            SDS TVOE Guest            SDS HP c-Class Blade V0            SDS HP c-Class Blade V2            SDS Cloud Guest            SDS HP Gen9 Rack Mount            SDS HP c-Class Blade V1            SDS ESXI Guest            SDS HP Rack Mount         </div> </td><td></td></tr> </tbody> </table>	Hardware Profile	<div>           SDS HP c-Class Blade V1            SDS HP Rack Mount            SDS Cloud Guest            SDS TVOE Guest            SDS HP c-Class Blade V2            SDS HP c-Class Blade V0         </div>	Valid value is any text string.]	Hardware Profile	<div>           SDS TVOE Guest            SDS TVOE Guest            SDS HP c-Class Blade V0            SDS HP c-Class Blade V2            SDS Cloud Guest            SDS HP Gen9 Rack Mount            SDS HP c-Class Blade V1            SDS ESXI Guest            SDS HP Rack Mount         </div>	
Hardware Profile	<div>           SDS HP c-Class Blade V1            SDS HP Rack Mount            SDS Cloud Guest            SDS TVOE Guest            SDS HP c-Class Blade V2            SDS HP c-Class Blade V0         </div>	Valid value is any text string.]						
Hardware Profile	<div>           SDS TVOE Guest            SDS TVOE Guest            SDS HP c-Class Blade V0            SDS HP c-Class Blade V2            SDS Cloud Guest            SDS HP Gen9 Rack Mount            SDS HP c-Class Blade V1            SDS ESXI Guest            SDS HP Rack Mount         </div>							
19. <input type="checkbox"/>	<b>SDS NOAM A:</b> Select the <b>Network Element Name</b> for the SDS from the pull-down menu.	<table border="1"> <tbody> <tr> <td>Network Element Name *</td><td>SDS_NE</td><td>Select the network element [A value is required.]</td></tr> </tbody> </table>	Network Element Name *	SDS_NE	Select the network element [A value is required.]			
Network Element Name *	SDS_NE	Select the network element [A value is required.]						

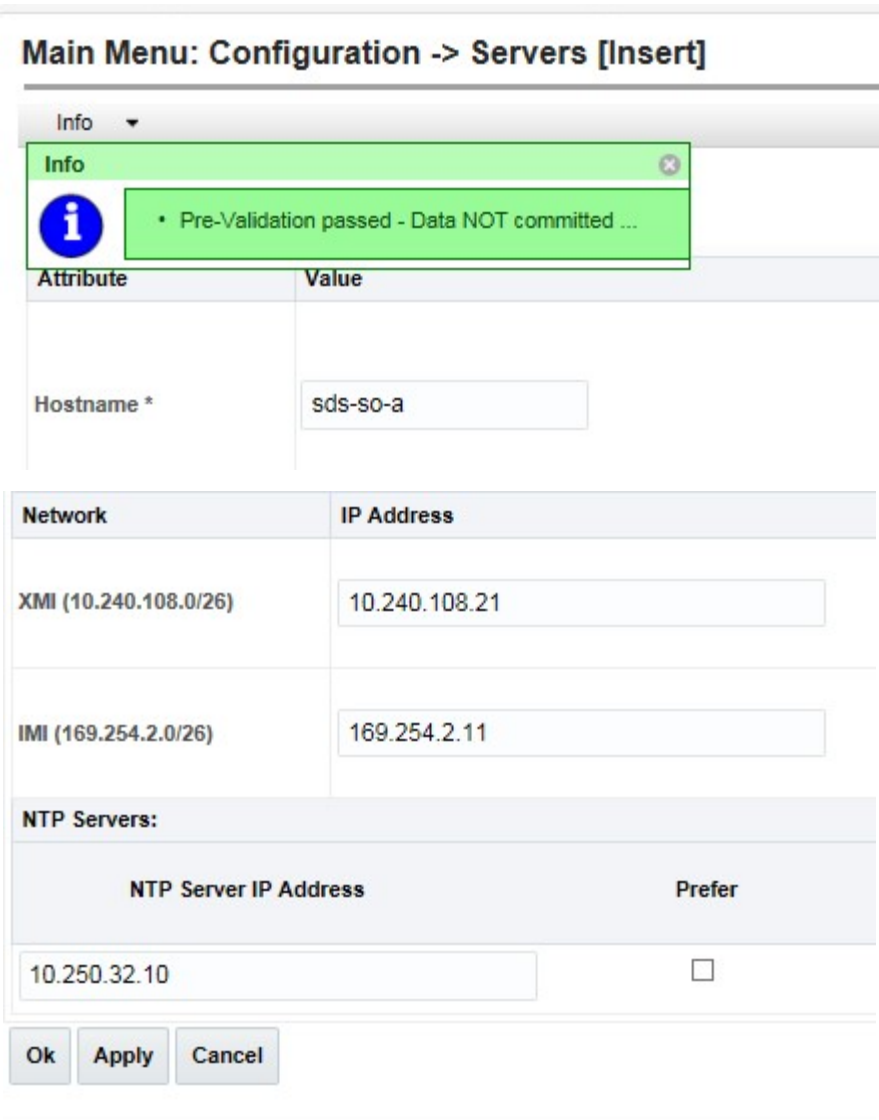
**Procedure 3. Configuring SDS Servers A and B (1<sup>st</sup> SDS NOAM Site Only)**

Step	Procedure	Result																															
20. <div></div>	<b>SDS NOAM A:</b>  Enter the site location.  <b>NOTE:</b> <i>Location is an optional field.</i>	<div><div>Location</div><div>Bangalore</div></div> <div>Location description [Default = "". Range = A 15-character string. Valid value is any text string.]</div>																															
21. <div></div>	<b>SDS NOAM A:</b>  1) Enter the <b>MGMT_VLAN</b> IP address for the SDS Server.  2) Set the <b>MGMT_VLAN</b> Interface to “bond0” and “check” the VLAN checkbox.  3) Enter the IMI IP address for the SDS Server.  4) Set the IMI Interface to “bond0” and “check” the VLAN checkbox.	<div>OAM Interfaces [At least one interface is required.]:</div> <table><thead><tr><th>Network</th><th>IP Address</th><th>Interface</th></tr></thead><tbody><tr><td>MGMT_VLAN (191.168.1.0/22)</td><td>191.240.1.11</td><td>bond0 <input type="checkbox"/> VLAN (2)</td></tr><tr><td>INTERNALXMI (10.240.20.0/22)</td><td>10.240.20.2</td><td>bond1 <input type="checkbox"/> VLAN (3)</td></tr><tr><td>INTERNALIMI (192.168.2.0/24)</td><td>192.168.2.100</td><td>bond0 <input type="checkbox"/> VLAN (4)</td></tr></tbody></table> <table><thead><tr><th>SDS Server (Primary NOAM)</th><th>Network</th><th>IP Address</th><th>Interface</th><th>VLAN Checkbox</th></tr></thead><tbody><tr><td rowspan="2">SDS-A</td><td>MGMT_VLAN</td><td>169.254.1.11</td><td rowspan="2">bond0</td><td rowspan="2"></td></tr><tr><td>IMI</td><td>169.254.100.11</td></tr><tr><td rowspan="2">SDS-B</td><td>MGMT_VLAN</td><td>169.254.1.12</td><td rowspan="2">bond0</td><td rowspan="2"></td></tr><tr><td>IMI</td><td>169.254.100.12</td></tr></tbody></table> <p><b>NOTE_1:</b> These IP addresses are based on the info in the NAPD and the Network Element Config file</p> <p><b>NOTE_2:</b> The <b>MGMT_VLAN</b> should only be present when 4948E-F AggregationSwitches are deployed with SDS NOAM / Query Server RMS. If the <b>MGMT_VLAN</b> is not present, the <b>IMI</b> network values shown above still apply.</p>	Network	IP Address	Interface	MGMT_VLAN (191.168.1.0/22)	191.240.1.11	bond0 <input type="checkbox"/> VLAN (2)	INTERNALXMI (10.240.20.0/22)	10.240.20.2	bond1 <input type="checkbox"/> VLAN (3)	INTERNALIMI (192.168.2.0/24)	192.168.2.100	bond0 <input type="checkbox"/> VLAN (4)	SDS Server (Primary NOAM)	Network	IP Address	Interface	VLAN Checkbox	SDS-A	MGMT_VLAN	169.254.1.11	bond0		IMI	169.254.100.11	SDS-B	MGMT_VLAN	169.254.1.12	bond0		IMI	169.254.100.12
Network	IP Address	Interface																															
MGMT_VLAN (191.168.1.0/22)	191.240.1.11	bond0 <input type="checkbox"/> VLAN (2)																															
INTERNALXMI (10.240.20.0/22)	10.240.20.2	bond1 <input type="checkbox"/> VLAN (3)																															
INTERNALIMI (192.168.2.0/24)	192.168.2.100	bond0 <input type="checkbox"/> VLAN (4)																															
SDS Server (Primary NOAM)	Network	IP Address	Interface	VLAN Checkbox																													
SDS-A	MGMT_VLAN	169.254.1.11	bond0																														
	IMI	169.254.100.11																															
SDS-B	MGMT_VLAN	169.254.1.12	bond0																														
	IMI	169.254.100.12																															

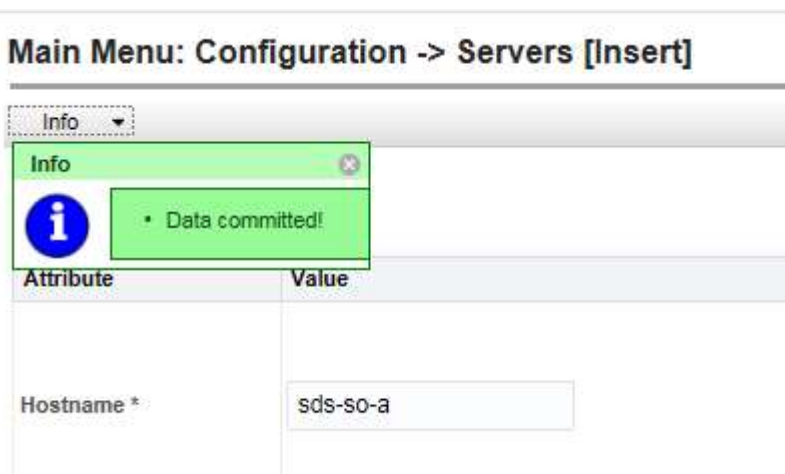
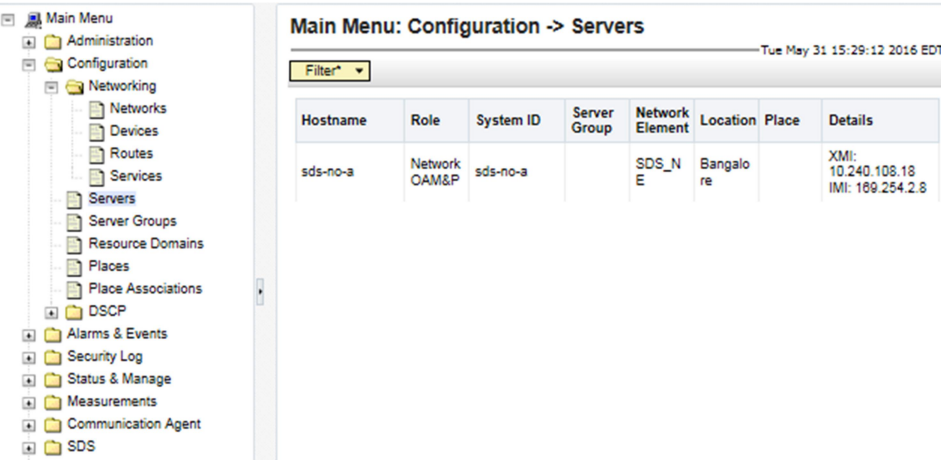
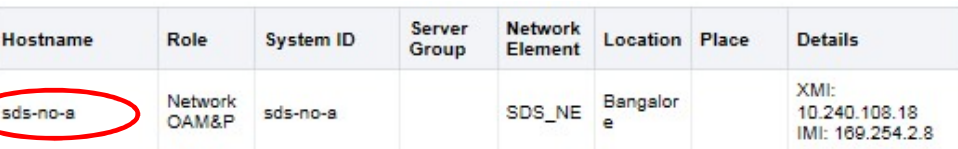
**Procedure 3. Configuring SDS Servers A and B (1<sup>st</sup> SDS NOAM Site Only)**

Step	Procedure	Result													
22. <div></div>	<p>1) Enter the customer assigned <b>XMI</b> IP address for the SDS Server.</p> <p>Layer 3 (No VLAN tagging used for XMI)</p> <p>2) Set the <b>XMI</b> Interface to “<b>bond1</b>” and “<b>DO NOT check</b>” the VLAN checkbox.</p> <p>- OR -</p> <p>Layer 2 (VLAN tagging used for XMI)</p> <p>2) Set the <b>XMI</b> Interface to “<b>bond0</b>” and “<b>check</b>” the VLAN checkbox.</p>	<div><div>INTERNALXMI (10.240.20.0/22)</div><div>10.240.20.2</div><div>bond1 <input type="checkbox"/> VLAN (3)</div></div> <table><tr><th>SDS Server (Primary NOAM)</th><th>Network</th><th>VLAN tagging (on XMI network)</th><th>Interface</th><th>VLAN Checkbox</th></tr><tr><td rowspan="2">SDS NOAM Server (A or B)</td><td rowspan="2">XMI</td><td>No</td><td>bond1</td><td>✗</td></tr><tr><td>Yes</td><td>bond0</td><td>✓</td></tr></table> <p><b>!!! CAUTION !!!</b></p> <p>It is crucial that the correct network configuration be selected in <b>Steps 21 &amp; 22</b> of this procedure. Choosing an incorrect configuration will result in the need to re-install the OS and restart SDS instalation procedures over from the beginning.</p>	SDS Server (Primary NOAM)	Network	VLAN tagging (on XMI network)	Interface	VLAN Checkbox	SDS NOAM Server (A or B)	XMI	No	bond1	✗	Yes	bond0	✓
SDS Server (Primary NOAM)	Network	VLAN tagging (on XMI network)	Interface	VLAN Checkbox											
SDS NOAM Server (A or B)	XMI	No	bond1	✗											
		Yes	bond0	✓											
23. <div></div>	<p><b>SDS NOAM 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) Enter 3 NTP Server <b>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>	<div><div>NTP Servers:</div><div><div>NTP Server IP Address</div><div>Prefer</div><div><div>Add</div></div></div></div> <div><div>NTP Servers:</div><div><div>NTP Server IP Address</div><div>Prefer</div><div><div>Add</div></div></div><div><div>10.240.21.191</div><div><input type="checkbox"/></div><div><div>Remove</div></div></div></div> <div><div>NTP Servers:</div><div><div>NTP Server IP Address</div><div>Prefer</div><div><div>Add</div></div></div><div><div>10.240.21.191</div><div><input type="checkbox"/></div><div><div>Remove</div></div></div><div><div>10.240.21.192</div><div><input type="checkbox"/></div><div><div>Remove</div></div></div><div><div>10.240.21.193</div><div><input checked="" type="checkbox"/></div><div><div>Remove</div></div></div></div>													

**Procedure 3. Configuring SDS Servers A and B (1<sup>st</sup> SDS NOAM Site Only)**

Step	Procedure	Result
<p>24.</p> <div></div>	<p><b>SDS NOAM A:</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>	

**Procedure 3. Configuring SDS Servers A and B (1<sup>st</sup> SDS NOAM Site Only)**

Step	Procedure	Result
25. <div></div>	<b>SDS NOAM A:</b> 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.	
26. <div></div>	<b>SDS NOAM A:</b> Select... <b>Main Menu</b> → <b>Configuration</b> → <b>Servers</b> ...as shown on the right.	
27. <div></div>	<b>SDS NOAM A:</b> The “Configuration → Servers” screen should now show the newly added <b>SDS Server</b> in the list.	





**Procedure 3. Configuring SDS Servers A and B (1<sup>st</sup> SDS NOAM Site Only)**

Step	Procedure	Result																
28. <div></div>	<p><b>SDS NOAM A:</b></p> <p>1) Use the cursor to select the <b>SDS Server</b> entry added in <b>Steps 13 – 25</b>.</p> <p>The row containing the desired <b>SDS Server</b> should now be highlighted in <b>BLUE</b>.</p> <p>2) Select the “<b>Export</b>” dialogue button.</p>	<p><b>Main Menu: Configuration -&gt; Servers</b></p> <div><div>Filter*</div><div><table><tr><th>Hostname</th><th>Role</th><th>System ID</th><th>Server Group</th><th>Network Element</th><th>Location</th><th>Place</th><th>Details</th></tr><tr><td>sds-no-a</td><td>Network OAM&amp;P</td><td>sds-no-a</td><td></td><td>SDS_NE</td><td>Bangalore</td><td></td><td>XMI: 10.240.108.18 IMI: 189.254.2.8</td></tr></table></div></div> <div><div>Insert</div><div>Edit</div><div>Delete</div><div>Export</div><div>Report</div></div>	Hostname	Role	System ID	Server Group	Network Element	Location	Place	Details	sds-no-a	Network OAM&P	sds-no-a		SDS_NE	Bangalore		XMI: 10.240.108.18 IMI: 189.254.2.8
Hostname	Role	System ID	Server Group	Network Element	Location	Place	Details											
sds-no-a	Network OAM&P	sds-no-a		SDS_NE	Bangalore		XMI: 10.240.108.18 IMI: 189.254.2.8											
29. <div></div>	<p><b>SDS NOAM A:</b></p> <p>The user will receive a banner information message showing a download link for the <b>SDS Server</b> configuration data.</p> <p>Click on the word “<b>downloaded</b>” to download and save the configuration file.</p>	<p><b>Main Menu: Configuration -&gt; Servers</b></p> <div><div>Filter*</div><div>Info</div><div><div>Info</div><div><div>Exported server data in TKLCConfigData.sds-no-a.sh may be downloaded</div></div></div></div> <div><div>Hostname</div><div>sds-no-a</div><div>OAM&amp;P</div><div>SDS-NO-A</div><div>SDS_NE</div><div>Bangalore</div></div> <p><b>Note:</b> You may be required to click the <b>Info</b> tab to display the Info banner shown here.</p>																
30. <div></div>	<p><b>SDS NOAM A:</b></p> <p>1) Click the “<b>Save</b>” dialogue button.</p> <p>2) Save the <b>SDS Server</b> configuration file to a USB flash drive.</p>	<div><div><div>File Download</div><div>Do you want to open or save this file?</div><div><div></div><div>Name: TKLCConfigData.sds-mrsvnc-a.sh Type: sh_auto_file From: 10.250.55.124</div><div><div>Open</div><div>Save</div><div>Cancel</div></div></div><div><div></div><div>While files from the Internet can be useful, some files can potentially harm your computer. If you do not trust the source, do not open or save this file. <a href="#">What's the risk?</a></div></div></div><div><div>Save As</div><div>Save to: USB (E:)</div><div><div></div><div>My Recent Documents</div><div></div><div>Desktop</div><div></div><div>My Documents</div><div></div><div>My Computer</div><div></div><div>My Network</div></div><div><div>File name: TKLCConfigData.sds-mrsvnc-a.sh</div><div>Save as type: .sh Document</div><div><div>Save</div><div>Cancel</div></div></div></div></div>																
31. <div></div>	<p><b>SDS Server NOAM A or B:</b></p> <p>Access the server console.</p>	<p>Connect to the <b>SDS NOAM-A</b> and <b>SDS NOAM-B</b> console using one of the access methods described in <b>Section 2.3</b>.</p>																





**Procedure 3. Configuring SDS Servers A and B (1<sup>st</sup> SDS NOAM Site Only)**

Step	Procedure	Result
32. <input type="checkbox"/>	<b>SDS Server NOAM A or B:</b>  1) Access the command prompt.  2) Log into the server as the “ <b>admusr</b> ” user.	login: <b>admusr</b> Using keyboard-interactive authentication. Password: <b>&lt;admusr_password&gt;</b>
33. <input type="checkbox"/>	<b>SDS Server NOAM A or B:</b>  Insert the USB flash drive containing the server configuration file into the USB port on the front panel of <b>SDS Server</b> .	 Figure 3 – HP DL380 GEN8: Front Panel (USB Port)   Figure 4 – HP DL380 GEN9: Front Panel (USB Port)
34. <input type="checkbox"/>	<b>SDS Server NOAM A or B:</b>  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.	<pre>\$ sd 3:0:0:0: [sdb] Assuming drive cache: write through sd 3:0:0:0: [sdb] Assuming drive cache: write through <b>&lt;ENTER&gt;</b></pre> <p><b>NOTE:</b> Press the <b>&lt;ENTER&gt;</b> key to return to the command prompt.</p>
35. <input type="checkbox"/>	<b>SDS Server NOAM A or B:</b>  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.	<pre>\$ df  grep sdb /dev/sdb1          2003076            8    2003068    1% /media/sdb1</pre>

**Procedure 3. Configuring SDS Servers A and B (1<sup>st</sup> SDS NOAM Site Only)**

Step	Procedure	Result
36. <input type="checkbox"/>	<p><b>SDS Server NOAM A or B:</b></p> <p>Copy the configuration file to the SDS server</p> <p><b>NOTE:</b> This step can be skipped for SDS Server A because the file should already exist.</p>	<pre>\$ sudo cp -p /media/sdb1/TKLCConfigData.sds-mrsvnc-a.sh /var/TKLC/db/filemgmt/.</pre> <p><b>NOTE:</b> If <b>Appendix C</b> was used to create this interface, un-configure the interface before copying this file.</p>
37. <input type="checkbox"/>	<p>Unmount the USB drive partition.</p>	<pre>\$ sudo umount /media/sdb1</pre> <pre>\$</pre>
38. <input type="checkbox"/>	<p><b>SDS Server NOAM A or B:</b></p> <p>Copy the <b>server</b> 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>Example:</b> TKLCConfigData&lt;server_hostname&gt;.sh → will translate to →TKLCConfigData.sh</p> <pre>\$ sudo cp -p /var/TKLC/db/filemgmt/TKLCConfigData.sds-mrsvnc-a.sh /var/tmp/TKLCConfigData.sh</pre> <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>
39. <input type="checkbox"/>	<p><b>SDS Server NOAM A or B:</b></p> <p>After the script completes, a broadcast message will be sent to the terminal.</p>	<p><b>*** NO OUTPUT FOR ≈ 3–20 MINUTES ***</b></p> <pre>Broadcast message from admusr (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><b>NOTE:</b> The user should be aware that the time to complete this step varies by server and may take 3 ...20 minutes to complete.</p>


**Procedure 3. Configuring SDS Servers A and B (1<sup>st</sup> SDS NOAM Site Only)**

Step	Procedure	Result
<b>40.</b> <input type="checkbox"/>	<p><b>SDS Server NOAM 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 <b>REMOVED</b> from the server before continuing on to the next step.</i></p>	 <p>Figure 3 – HP DL380 GEN8: Front Panel (USB Port)</p>  <p>Figure 4 – HP DL380 GEN9: Front Panel (USB Port)</p>
<b>41.</b> <input type="checkbox"/>	<p><b>SDS Server NOAM 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 admusr (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;</pre>
<b>42.</b> <input type="checkbox"/>	<p><b>SDS Server NOAM A or B:</b></p> <p>Verify that the desired Time Zone is currently in use.</p>	<pre>\$ date Mon Aug 10 19:34:51 UTC 2015</pre>
<b>43.</b> <input type="checkbox"/>	<p><b>SDS Server NOAM A or B:</b></p> <p>If the desired Time Zone was not presented in the previous step...</p> <p><b>Configure the Time Zone.</b></p> <p>Otherwise, skip to the next step.</p>	<p><b>Example:</b> <code>\$ sudo set_ini_tz.pl &lt;time_zone&gt;</code></p> <p><b>NOTE:</b> <i>The following command example sets the time to the “UTC” (aka GMT) time zone which is recommended for all sites. The user may replace, as appropriate, with the customer requested time zone for this site installation. See <b>Appendix G</b> for a list of valid time zones.</i></p> <pre>\$ sudo set_ini_tz.pl "Etc/UTC"</pre>
<b>44.</b> <input type="checkbox"/>	<p><b>SDS Server NOAM A or B:</b></p> <p>Initiate a reboot of the SDS Server.</p>	<pre>\$ sudo init 6</pre>

**Procedure 3. Configuring SDS Servers A and B (1<sup>st</sup> SDS NOAM Site Only)**

Step	Procedure	Result
45. <input type="checkbox"/>	<b>SDS Server NOAM A or B:</b>  Wait ~9 minutes  Output similar to that shown on the right may be observed as the server initiates a reboot.	<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>
46. <input type="checkbox"/>	<b>SDS Server NOAM A or B:</b>  After the server has completed reboot, log into the server as the "admusr" user.	<pre> login: admusr Using keyboard-interactive authentication. Password: &lt;admusr_password&gt; </pre>
47.	Run Accepting script.	<pre> [admusr@nassau-sds-so-b ~]\$ sudo /var/TKLC/backout/accept Called with options: --accept Loading Backout::BackoutType::RPM Accepting Upgrade Executing common accept tasks Setting POST_UPGRADE_ACTION to ACCEPT in upgrade info. Cleaning backout directory. Clearing Upgrade Accept/Reject alarm. Cleaning message from MOTD. No patch pending alarm on server so no MOTD update. Cleaning up RPM config backup files... Checking / Checking /boot Checking /tmp Checking /usr Checking /var Checking /var/TKLC Checking /tmp/appworks_temp Checking /usr/openv 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 '/etc/my.cnf' from RCS repository INFO: Removing '/etc/pam.d/password-auth' from RCS repository INFO: Removing '/etc/pam.d/system-auth' from RCS repository INFO: Removing '/etc/sysconfig/network-scripts/ifcfg-eth0' from RCS repository INFO: Removing '/etc/php.d/zip.ini' from RCS repository INFO: Removing '/var/lib/prelink/force' from RCS repository [admusr@nassau-sds-so-b ~]\$ </pre>

**Procedure 3. Configuring SDS Servers A and B (1<sup>st</sup> SDS NOAM Site Only)**

Step	Procedure	Result
<b>48.</b> <input type="checkbox"/>	<p><b>SDS Server NOAM A or B:</b></p> <p><b>1) Verify that the IMI IP address and the bond VLAN configuration input in Step 21 has been correctly applied.</b></p> <p><b>2) Verify that the XMI IP address and the bond configuration input in Step 22 has been correctly applied.</b></p> <p><b>NOTE:</b> The server's <b>XMI &amp; IMI</b> addresses can also be verified by reviewing the server configuration through the SDS GUI under <b>[Main Menu → Configuration → Server]</b> screen.</p>	<pre>\$ ifconfig  grep in 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</pre>
<b>49.</b> <input type="checkbox"/>	<p><b>SDS Server NOAM 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>\$ ntpq -np remote           refid           st t when poll reach  delay  offset  jitter ===== *10.250.32.10     192.5.41.209    2 u   1   64    1    0.176  -0.446 0.053  10.250.32.51     192.5.41.209    2 u   2   64    1    0.174  -0.445 0.002</pre>
<div>  <p><b>IF CONNECTIVITY TO THE NTP SERVER(S) CANNOT BE ESTABLISHED, STOP AND EXECUTE THE FOLLOWING STEPS:</b></p> <ol style="list-style-type: none"> <li><b>1) Have the Customer IT group provide a network path from the SDS NOAM Server XMI IP to the assigned NTP Server IP addresses.</b></li> <li><b>2) Once network connectivity is established to the configured NTP Servers, then restart this procedure beginning with STEP 49.</b></li> </ol> </div>		

### Procedure 3. Configuring SDS Servers A and B (1<sup>st</sup> SDS NOAM Site Only)

Step	Procedure	Result
50. <div><div></div></div>	<b>SDS Server NOAM A or B:</b>  Execute a “ <b>syscheck</b> ” to verify the current health of the server.	<pre>\$ sudo 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</pre>
51. <div><div></div></div>	<b>SDS Server NOAM A or B:</b>  Exit to return to the login prompt.	<pre>\$ exit</pre>
52. <div><div></div></div>	<ul style="list-style-type: none"><li>• <b>Configure SDS Server B by repeating steps 13 – 50 of this procedure.</b></li></ul>	
<div><div><div><div></div></div></div><div><div><div><b>IF AGGREGATION SWITCHES ARE INSTALLED AND 4948E-F SWITCH CONFIGURATION HAS NOT BEEN COMPLETED PRIOR TO THIS STEP, STOP AND EXECUTE THE FOLLOWING PROCEDURES:</b></div><div><div>1) <b>APPENDIX D-1</b></div><div>2) <b>APPENDIX D-2</b> <i>(Appendix E.2 references Appendix E.3 where applicable).</i></div><div>3) <b>APPENDIX D-4</b></div></div></div></div></div>		
53. <div><div></div></div>	<b>SDS Server NOAM A:</b>  From <b>SDS Server NOAM A</b> , “ping” the <b>IMI IP address</b> configured for on <b>SDS Server B</b> .	<pre>\$ ping -c 5 169.254.100.12 PING 169.254.100.12 (169.254.100.12) 56(84) bytes of data. 64 bytes from 169.254.100.12: icmp_seq=1 ttl=64 time=0.020 ms 64 bytes from 169.254.100.12: icmp_seq=2 ttl=64 time=0.026 ms 64 bytes from 169.254.100.12: icmp_seq=3 ttl=64 time=0.025 ms 64 bytes from 169.254.100.12: icmp_seq=4 ttl=64 time=0.025 ms 64 bytes from 169.254.100.12: icmp_seq=5 ttl=64 time=0.026 ms  --- 169.254.100.12 ping statistics --- 5 packets transmitted, 5 received, 0% packet loss, time 4000ms rtt min/avg/max/mdev = 0.020/0.024/0.026/0.005 ms</pre>

### Procedure 3. Configuring SDS Servers A and B (1<sup>st</sup> SDS NOAM Site Only)

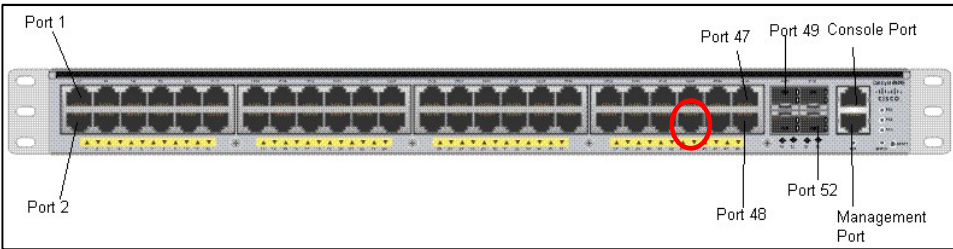
Step	Procedure	Result
54. <input type="checkbox"/>	<b>SDS Server NOAM A:</b>  From <b>SDS Server NOAM A</b> , “ping” the <b>XMI IP address</b> configured for on <b>SDS Server B</b> .	<pre>\$ ping -c 5 10.250.55.125 PING 10.250.55.125 (10.250.55.125) 56(84) bytes of data. 64 bytes from 10.250.55.125: icmp_seq=1 ttl=64 time=0.166 ms 64 bytes from 10.250.55.125: icmp_seq=2 ttl=64 time=0.139 ms 64 bytes from 10.250.55.125: icmp_seq=3 ttl=64 time=0.176 ms 64 bytes from 10.250.55.125: icmp_seq=4 ttl=64 time=0.209 ms 64 bytes from 10.250.55.125: icmp_seq=5 ttl=64 time=0.179 ms  --- 10.250.55.125 ping statistics --- 5 packets transmitted, 5 received, 0% packet loss, time 4000ms rtt min/avg/max/mdev = 0.139/0.173/0.209/0.028 ms</pre>
55.	<b>SDS Server NOAM A:</b>  Use “ping” to verify that <b>SDS Server NOAM A</b> can reach the configured <b>XMI Gateway address</b>	<pre>\$ ping -c 5 10.250.55.1 PING 10.250.55.1 (10.250.55.1) 56(84) bytes of data. 64 bytes from 10.250.55.1: icmp_seq=1 ttl=64 time=0.166 ms 64 bytes from 10.250.55.1: icmp_seq=2 ttl=64 time=0.139 ms 64 bytes from 10.250.55.1: icmp_seq=3 ttl=64 time=0.176 ms 64 bytes from 10.250.55.1: icmp_seq=4 ttl=64 time=0.209 ms 64 bytes from 10.250.55.1: icmp_seq=5 ttl=64 time=0.179 ms  --- 10.250.55.1 ping statistics --- 5 packets transmitted, 5 received, 0% packet loss, time 4000ms rtt min/avg/max/mdev = 0.139/0.173/0.209/0.028 ms</pre>
56.	<b>SDS Server B:</b>  Use “ping” to verify that <b>SDS Server B</b> can reach the configured <b>XMI Gateway address</b>	<pre>\$ ping -c 5 10.250.55.1 PING 10.250.55.1 (10.250.55.1) 56(84) bytes of data. 64 bytes from 10.250.55.1: icmp_seq=1 ttl=64 time=0.166 ms 64 bytes from 10.250.55.1: icmp_seq=2 ttl=64 time=0.139 ms 64 bytes from 10.250.55.1: icmp_seq=3 ttl=64 time=0.176 ms 64 bytes from 10.250.55.1: icmp_seq=4 ttl=64 time=0.209 ms 64 bytes from 10.250.55.1: icmp_seq=5 ttl=64 time=0.179 ms  --- 10.250.55.1 ping statistics --- 5 packets transmitted, 5 received, 0% packet loss, time 4000ms rtt min/avg/max/mdev = 0.139/0.173/0.209/0.028 ms</pre>

### Procedure 3. Configuring SDS Servers A and B (1<sup>st</sup> SDS NOAM Site Only)

Step	Procedure	Result
57.	<p><b>SDS Server NOAM A:</b></p> <p>Disconnect the laptop from the <b>Server NOAM A, eth14</b> Ethernet port.</p>	<p>HP DL380p Gen8 Backplane</p> <p>ETH14 ETH13 ETH12 ETH11</p> <p>ETH04 ETH03 ETH02 ETH01</p> <p>iLO 4</p>
	<p>For GEN9: Disconnect the laptop from the <b>Server NOAM A, eth08</b> Ethernet port.</p>	<p>ETH 08 07 06 05</p> <p>ETH 01 02 03 04</p> <p>USB-1 USB-0</p> <p>HPE Ethernet 1Gb 4-port 331FLR Adapter (Flex LOM) eth05-eth08</p> <p>Internal 4-Port NIC Ethernet Ports Eth01-Eth04</p>



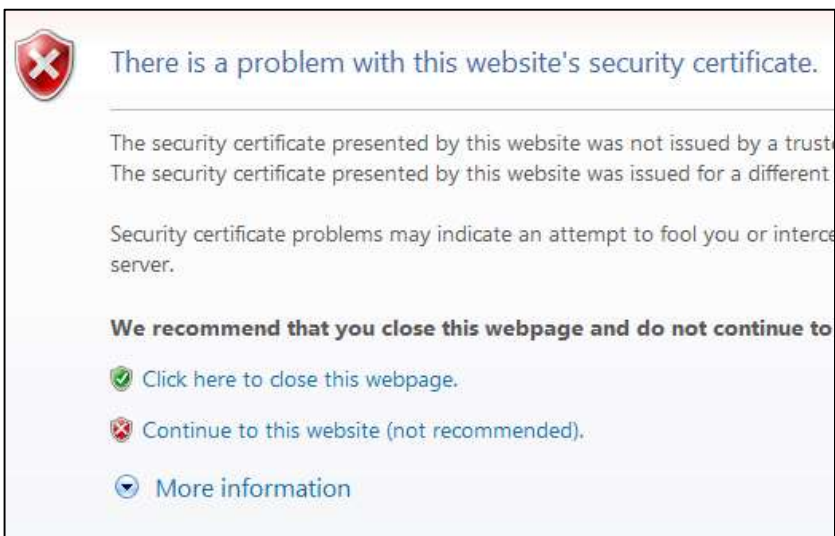
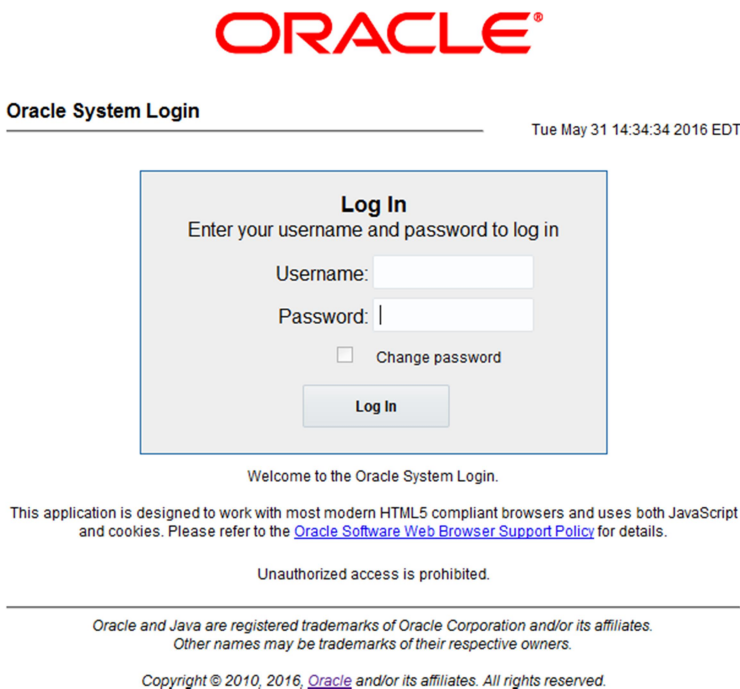
**Procedure 3. Configuring SDS Servers A and B (1<sup>st</sup> SDS NOAM Site Only)**

Step	Procedure	Result
<b>58.</b> <input type="checkbox"/>	<b>switch1A:</b> Connect the laptop to <b>Port 44</b> of <b>switch1A</b> (bottom switch).	 <p><b>Figure 7 – Cisco 4948E-F Switch (Maintenance Access Port)</b></p> <p><b>To Configure Port 44</b></p> <pre>\$ sudo netConfig --device=&lt;device name&gt; setSwitchport interface=&lt;interface name&gt; type=trunk</pre> <pre>\$sudo netConfig --device=&lt;device name&gt; setSwitchport interface=&lt;interface name&gt; type=access</pre> <p>&lt;device name&gt;: The device name should be the name of switch.                      &lt;interface name&gt;: GE44</p>
<b>59.</b> <input type="checkbox"/>	<b>Laptop:</b> 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).	<ul style="list-style-type: none"> <li>Reference <b>Appendix C. Steps 6-7</b> if assistance is needed in modifying the laptop's network configuration.</li> </ul>
<b>60.</b> <input type="checkbox"/>	<b>SDS Server NOAM A:</b> Using <b>SSH</b> , login to <b>Server NOAM A</b> using its Management VLAN IP address <b>169.254.1.11</b>	<pre>login: <b>admusr</b></pre> <p>Using keyboard-interactive authentication.</p> <pre>Password: <b>&lt;admusr_password&gt;</b></pre>
<b>61.</b> <input type="checkbox"/>	<b>SDS Server NOAM A:</b> For GEN8: Delete eth14  For GEN9: Delete eth08	<p>For GEN8</p> <pre>\$ sudo netAdm delete --device=eth14 Interface eth14 removed</pre> <p>For GEN9</p> <pre>\$ sudo netAdm delete --device=eth08 Interface eth08 removed</pre>
<p align="center"><b>THIS PROCEDURE HAS BEEN COMPLETED</b></p>		

## 5.2 OAM Pairing (1st SDS NOAM 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.


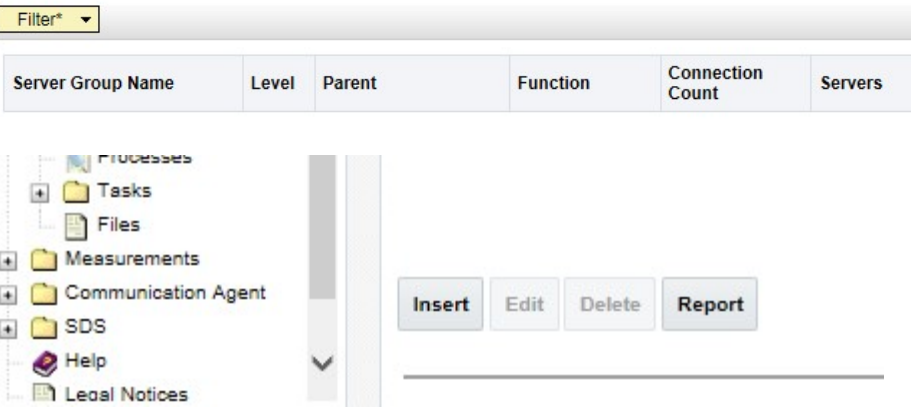
### Procedure 4. Pairing the SDS NOAM Servers (1<sup>st</sup> SDS NOAM Site Only)

Step	Procedure	Result
1. <input type="checkbox"/>	<p><b>SDS Server NOAM A:</b></p> <p>Launch an approved web browser and connect to the SDS Server NOAM A IP XML address</p> <p><b>NOTE:</b> <i>If presented with the "security certificate" warning screen shown to the right, choose the following option: "Continue to this website (not recommended)".</i></p>	
2. <input type="checkbox"/>	<p><b>SDS Server NOAM 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 4. Pairing the SDS NOAM Servers (1<sup>st</sup> SDS NOAM Site Only)

Step	Procedure	Result			
3. <div></div>	<p><b>SDS Server NOAM A:</b></p> <p>The user should be presented the SDS Main Menu as shown on the right.</p>	<div><div>Communications Diameter Signal Router Full Address Resolution8.0.0.0.0-80.3.1</div><div><div><div>Main Menu</div><div><div>Administration</div><div>Configuration</div><div>Networking</div><div>Servers</div><div>Server Groups</div><div>Resource Domains</div><div>Places</div><div>Place Associations</div><div>DSCP</div><div>Alarms &amp; Events</div><div>Security Log</div><div>Status &amp; Manage</div><div>Measurements</div><div>Communication Agent</div><div>SDS</div></div></div><div><div>Main Menu: [Main]</div><div></div><div>This is the user-defined welcome message. It can be modified using the 'General Options' item under the 'Administ</div><div>Login Name: guiadmin Last Login Time: 0000-00-00 00:00:00 Last Login IP: Recent Failed Login Attempts: 0</div></div></div></div>			
4. <div></div>	<p><b>SDS Server NOAM A:</b></p> <p>Select...</p> <p><u>Main Menu</u> → Configuration → Server Groups</p> <p>...as shown on the right.</p>	<div><div><div>Main Menu</div><div><div>Administration</div><div>Configuration</div><div>Networking</div><div>Servers</div><div>Server Groups</div><div>Resource Domains</div><div>Places</div><div>Place Associations</div><div>DSCP</div><div>Alarms &amp; Events</div><div>Security Log</div><div>Status &amp; Manage</div><div>Measurements</div><div>Communication Agent</div><div>SDS</div><div>Help</div><div>Legal Notices</div><div>Logout</div></div></div><div><div>Main Menu: Configuration -&gt; Server Group</div><div>Filter*</div><table><thead><tr><th>Server Group Name</th><th>Level</th><th>Parent</th></tr></thead></table></div></div>	Server Group Name	Level	Parent
Server Group Name	Level	Parent			



**Procedure 4. Pairing the SDS NOAM Servers (1<sup>st</sup> SDS NOAM Site Only)**

Step	Procedure	Result
5. 	<p><b>SDS Server NOAM 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>Main Menu: Configuration -&gt; Server Groups</b></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>


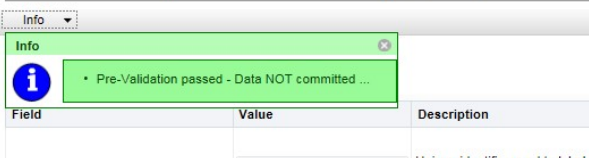
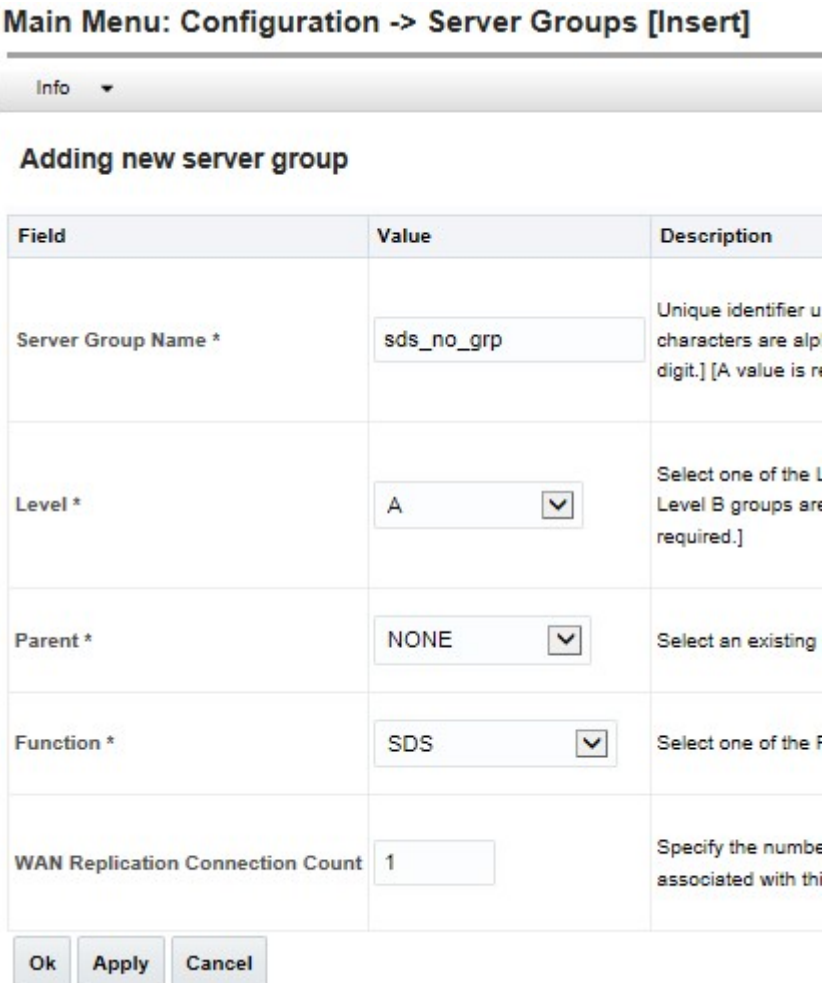
**Procedure 4. Pairing the SDS NOAM Servers (1<sup>st</sup> SDS NOAM Site Only)**

Step	Procedure	Result																		
6. <input type="checkbox"/>	<p><b>SDS Server NOAM 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> <hr/> <p><b>Adding new server group</b></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><input type="text"/></td><td>Unique identifier used to characters are alphanumeric digit.] [A value is required.]</td></tr> <tr> <td>Level *</td><td>- Select Level - <input type="button" value="v"/></td><td>Select one of the Levels Level B groups are optional required.]</td></tr> <tr> <td>Parent *</td><td>- Select Parent - <input type="button" value="v"/></td><td>Select an existing Server</td></tr> <tr> <td>Function *</td><td>- Select Function - <input type="button" value="v"/></td><td>Select one of the Functions</td></tr> <tr> <td>WAN Replication Connection Count</td><td><input type="text" value="1"/></td><td>Specify the number of T associated with this Server</td></tr> </tbody> </table> <p>Ok Apply Cancel</p>	Field	Value	Description	Server Group Name *	<input type="text"/>	Unique identifier used to characters are alphanumeric digit.] [A value is required.]	Level *	- Select Level - <input type="button" value="v"/>	Select one of the Levels Level B groups are optional required.]	Parent *	- Select Parent - <input type="button" value="v"/>	Select an existing Server	Function *	- Select Function - <input type="button" value="v"/>	Select one of the Functions	WAN Replication Connection Count	<input type="text" value="1"/>	Specify the number of T associated with this Server
Field	Value	Description																		
Server Group Name *	<input type="text"/>	Unique identifier used to characters are alphanumeric digit.] [A value is required.]																		
Level *	- Select Level - <input type="button" value="v"/>	Select one of the Levels Level B groups are optional required.]																		
Parent *	- Select Parent - <input type="button" value="v"/>	Select an existing Server																		
Function *	- Select Function - <input type="button" value="v"/>	Select one of the Functions																		
WAN Replication Connection Count	<input type="text" value="1"/>	Specify the number of T associated with this Server																		
7. <input type="checkbox"/>	<p><b>SDS Server NOAM A:</b></p> <p>Input the <b>Server Group Name</b>.</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_no_grp</td><td>Unique identifier used characters are alphanumeric digit.] [A value is required.]</td></tr> </tbody> </table>	Field	Value	Description	Server Group Name *	sds_no_grp	Unique identifier used characters are alphanumeric digit.] [A value is required.]												
Field	Value	Description																		
Server Group Name *	sds_no_grp	Unique identifier used characters are alphanumeric digit.] [A value is required.]																		
8. <input type="checkbox"/>	<p><b>SDS Server NOAM A:</b></p> <p>Select “<b>A</b>” on the “<b>Level</b>” pull-down menu.</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_no_grp</td><td>Unique identifier used characters are alphanumeric digit.] [A value is required.]</td></tr> </tbody> </table>	Field	Value	Description	Server Group Name *	sds_no_grp	Unique identifier used characters are alphanumeric digit.] [A value is required.]												
Field	Value	Description																		
Server Group Name *	sds_no_grp	Unique identifier used characters are alphanumeric digit.] [A value is required.]																		

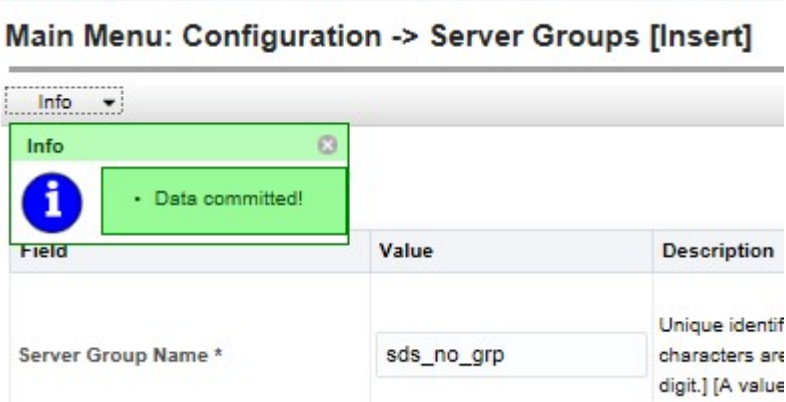
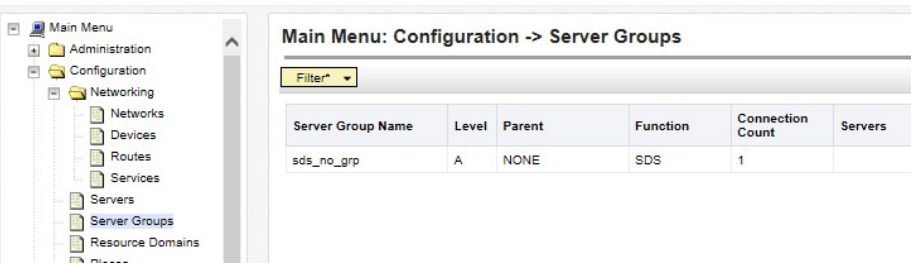
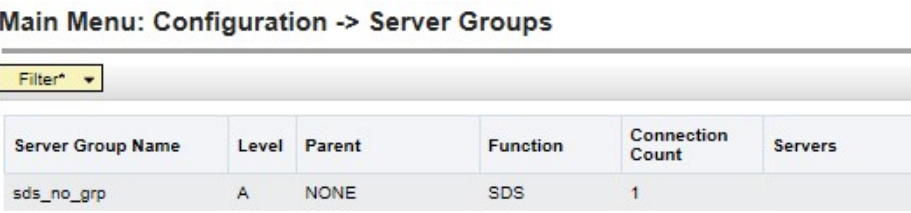
**Procedure 4. Pairing the SDS NOAM Servers (1<sup>st</sup> SDS NOAM Site Only)**

Step	Procedure	Result
<b>9.</b> <input type="checkbox"/>	<b>SDS Server NOAM A:</b>  Select “None” on the “Parent” pull-down menu.	 <p>Parent *</p> <p>Select an existing Server Group or NONE [A value is required]</p>
<b>10.</b> <input type="checkbox"/>	<b>SDS Server NOAM A:</b>  Select “SDS” on the “Function” pull-down menu.	 <p>Function *</p> <p>Select one of the Functions supported by</p>

**Procedure 4. Pairing the SDS NOAM Servers (1<sup>st</sup> SDS NOAM Site Only)**

Step	Procedure	Result																		
11. 	<p><b>SDS Server NOAM A:</b></p> <p>1) The user should be presented with a banner information message stating “Pre-Validation passed”.</p> <p>2) Select the “Apply” dialogue button.</p>	<p>Main Menu: Configuration -&gt; Server Groups [Insert]</p>  <p>Main Menu: Configuration -&gt; Server Groups [Insert]</p>  <p><b>Adding new server group</b></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_no_grp</td><td>Unique identifier u characters are alpi digit.] [A value is r</td></tr> <tr> <td>Level *</td><td>A</td><td>Select one of the l Level B groups are required.]</td></tr> <tr> <td>Parent *</td><td>NONE</td><td>Select an existing</td></tr> <tr> <td>Function *</td><td>SDS</td><td>Select one of the f</td></tr> <tr> <td>WAN Replication Connection Count</td><td>1</td><td>Specify the numbe associated with thi</td></tr> </tbody> </table> <p>Ok Apply Cancel</p>	Field	Value	Description	Server Group Name *	sds_no_grp	Unique identifier u characters are alpi digit.] [A value is r	Level *	A	Select one of the l Level B groups are required.]	Parent *	NONE	Select an existing	Function *	SDS	Select one of the f	WAN Replication Connection Count	1	Specify the numbe associated with thi
Field	Value	Description																		
Server Group Name *	sds_no_grp	Unique identifier u characters are alpi digit.] [A value is r																		
Level *	A	Select one of the l Level B groups are required.]																		
Parent *	NONE	Select an existing																		
Function *	SDS	Select one of the f																		
WAN Replication Connection Count	1	Specify the numbe associated with thi																		

#### Procedure 4. Pairing the SDS NOAM Servers (1<sup>st</sup> SDS NOAM Site Only)

Step	Procedure	Result
12. <input type="checkbox"/>	<b>SDS Server NOAM A:</b> The user should be presented with a banner information message stating “Data committed”.	
13. <input type="checkbox"/>	<b>SDS Server NOAM A:</b> Select... <b>Main Menu</b> → <b>Configuration</b> → <b>Server Groups</b> ...as shown on the right.	
14. <input type="checkbox"/>	<b>SDS Server NOAM A:</b> 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.	



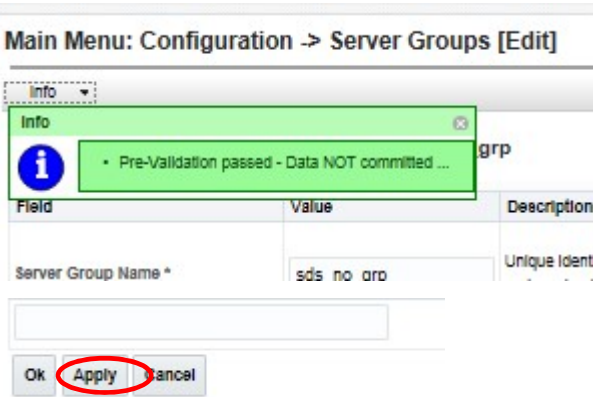
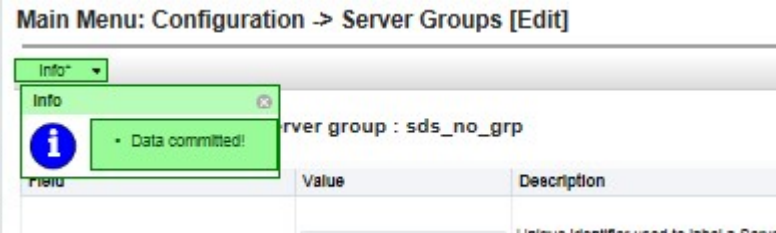
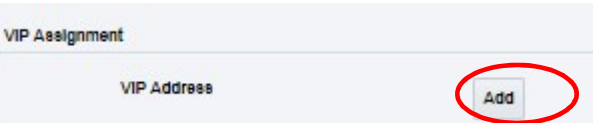
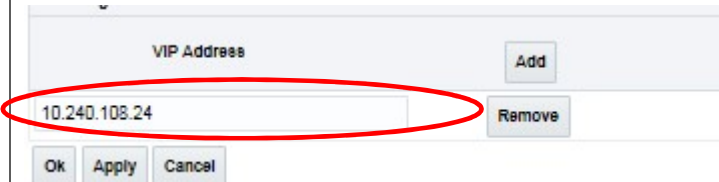
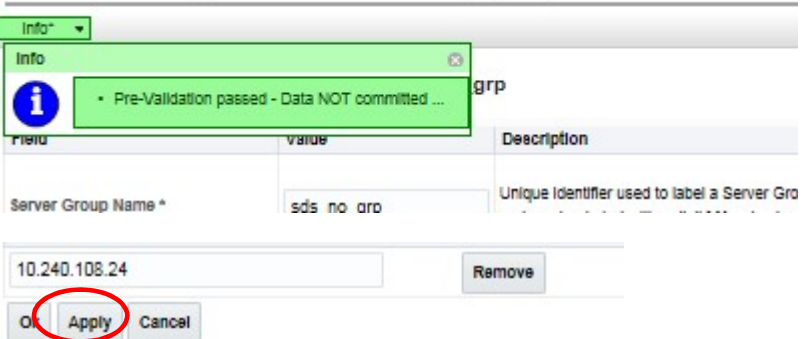
**Procedure 4. Pairing the SDS NOAM Servers (1<sup>st</sup> SDS NOAM Site Only)**

Step	Procedure	Result												
15. <div></div>	<p><b>SDS Server NOAM 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>Main Menu: Configuration -&gt; Server Groups</b></p> <div><div>Filter* ▼</div><table><thead><tr><th>Server Group Name</th><th>Level</th><th>Parent</th><th>Function</th><th>Connection Count</th><th>Servers</th></tr></thead><tbody><tr><td>sds_no_grp</td><td>A</td><td>NONE</td><td>SDS</td><td>1</td><td></td></tr></tbody></table><div><div><div><div>Resource Domains</div><div>Places</div><div>Place Associations</div><div>DSCP</div><div>Alarms &amp; Events</div></div><div></div></div><div><div>Insert</div><div>Edit</div><div>Delete</div><div>Report</div></div></div></div> <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>	Server Group Name	Level	Parent	Function	Connection Count	Servers	sds_no_grp	A	NONE	SDS	1	
Server Group Name	Level	Parent	Function	Connection Count	Servers									
sds_no_grp	A	NONE	SDS	1										

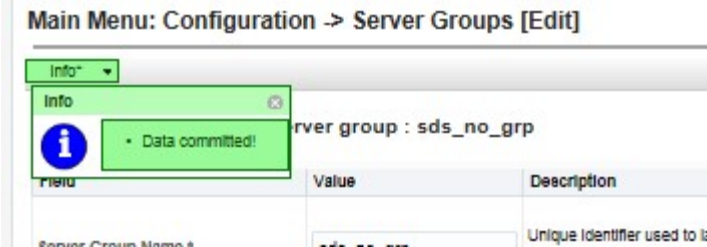
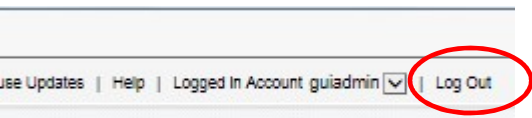
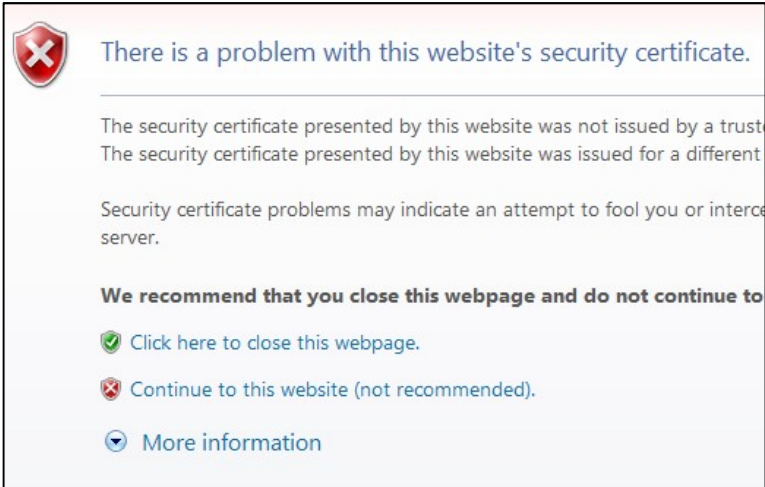
**Procedure 4. Pairing the SDS NOAM Servers (1<sup>st</sup> SDS NOAM Site Only)**

Step	Procedure	Result																											
16. <input type="checkbox"/>	<p><b>SDS Server NOAM 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> <hr/> <p>Modifying attributes of server group : sds_no_grp</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_no_grp</td><td>Unique Identifier used to label a Server Group. [Default and must not start with a digit.] [A value is required.]</td></tr> <tr> <td>Level *</td><td>A <input type="button" value="v"/></td><td>Select one of the Levels supported by the system [A v</td></tr> <tr> <td>Parent *</td><td>NONE <input type="button" value="v"/></td><td>Select an existing Server Group [A value is required.]</td></tr> <tr> <td>Function *</td><td>SDS <input type="button" value="v"/></td><td>Select one of the Functions supported by the system [</td></tr> <tr> <td>WAN Replication Connection Count</td><td>1</td><td>Specify the number of TCP connections that will be us and 8.]</td></tr> </tbody> </table> <p>SDS_NE <input type="checkbox"/> Prefer Network Element as spare</p> <table border="1"> <thead> <tr> <th>Server</th><th>SG Inclusion</th><th>Preferred HA Role</th></tr> </thead> <tbody> <tr> <td>sds-no-a</td><td><input type="checkbox"/> Include in SG</td><td><input type="checkbox"/> Prefer server as spare</td></tr> <tr> <td>sds-no-b</td><td><input type="checkbox"/> Include in SG</td><td><input type="checkbox"/> Prefer server as spare</td></tr> </tbody> </table> <p>VIP Assignment</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 *	sds_no_grp	Unique Identifier used to label a Server Group. [Default and must not start with a digit.] [A value is required.]	Level *	A <input type="button" value="v"/>	Select one of the Levels supported by the system [A v	Parent *	NONE <input type="button" value="v"/>	Select an existing Server Group [A value is required.]	Function *	SDS <input type="button" value="v"/>	Select one of the Functions supported by the system [	WAN Replication Connection Count	1	Specify the number of TCP connections that will be us and 8.]	Server	SG Inclusion	Preferred HA Role	sds-no-a	<input type="checkbox"/> Include in SG	<input type="checkbox"/> Prefer server as spare	sds-no-b	<input type="checkbox"/> Include in SG	<input type="checkbox"/> Prefer server as spare
Field	Value	Description																											
Server Group Name *	sds_no_grp	Unique Identifier used to label a Server Group. [Default and must not start with a digit.] [A value is required.]																											
Level *	A <input type="button" value="v"/>	Select one of the Levels supported by the system [A v																											
Parent *	NONE <input type="button" value="v"/>	Select an existing Server Group [A value is required.]																											
Function *	SDS <input type="button" value="v"/>	Select one of the Functions supported by the system [																											
WAN Replication Connection Count	1	Specify the number of TCP connections that will be us and 8.]																											
Server	SG Inclusion	Preferred HA Role																											
sds-no-a	<input type="checkbox"/> Include in SG	<input type="checkbox"/> Prefer server as spare																											
sds-no-b	<input type="checkbox"/> Include in SG	<input type="checkbox"/> Prefer server as spare																											
17. <input type="checkbox"/>	<p><b>SDS Server NOAM 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-no-a</td><td><input type="checkbox"/> Include in SG</td><td><input type="checkbox"/> Prefer server as spare</td></tr> <tr> <td>sds-no-b</td><td><input type="checkbox"/> Include in SG</td><td><input type="checkbox"/> Prefer server as spare</td></tr> </tbody> </table>	Server	SG Inclusion	Preferred HA Role	sds-no-a	<input type="checkbox"/> Include in SG	<input type="checkbox"/> Prefer server as spare	sds-no-b	<input type="checkbox"/> Include in SG	<input type="checkbox"/> Prefer server as spare																		
Server	SG Inclusion	Preferred HA Role																											
sds-no-a	<input type="checkbox"/> Include in SG	<input type="checkbox"/> Prefer server as spare																											
sds-no-b	<input type="checkbox"/> Include in SG	<input type="checkbox"/> Prefer server as spare																											


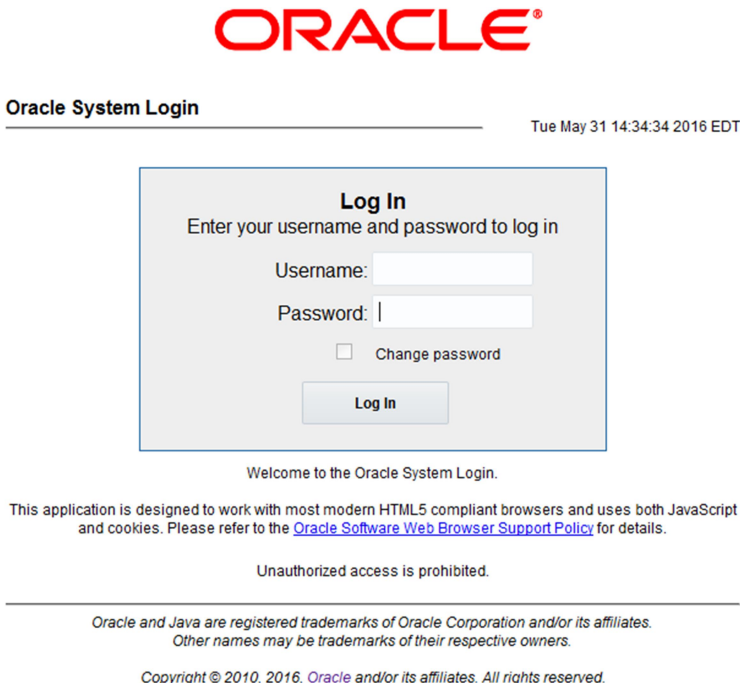
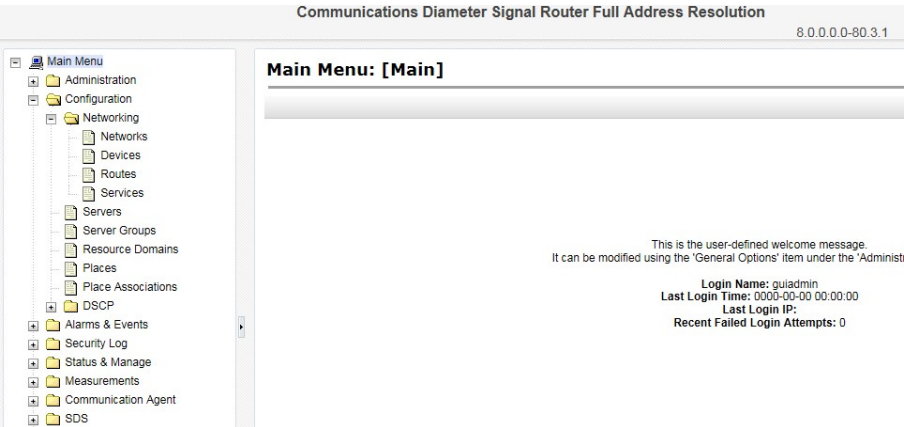
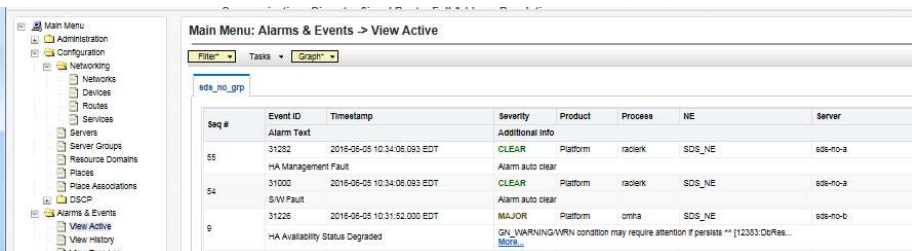
**Procedure 4. Pairing the SDS NOAM Servers (1<sup>st</sup> SDS NOAM Site Only)**

Step	Procedure	Result
18. <input type="checkbox"/>	<p><b>SDS Server NOAM 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>	
19. <input type="checkbox"/>	<p><b>SDS Server NOAM A:</b></p> <p>The user should be presented with a banner information message stating <b>“Data committed”</b>.</p>	
20. <input type="checkbox"/>	<p><b>SDS Server NOAM A:</b></p> <p>Click the <b>“Add”</b> dialogue button for the <b>VIP Address</b></p>	
21. <input type="checkbox"/>	<p><b>SDS Server NOAM A:</b></p> <p>Input the <b>VIP Address</b></p>	
22. <input type="checkbox"/>	<p><b>SDS Server NOAM 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>	


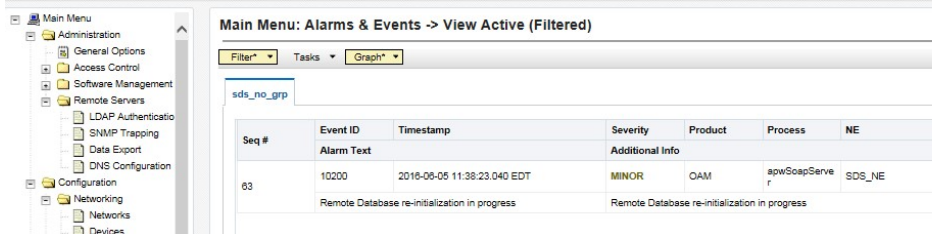


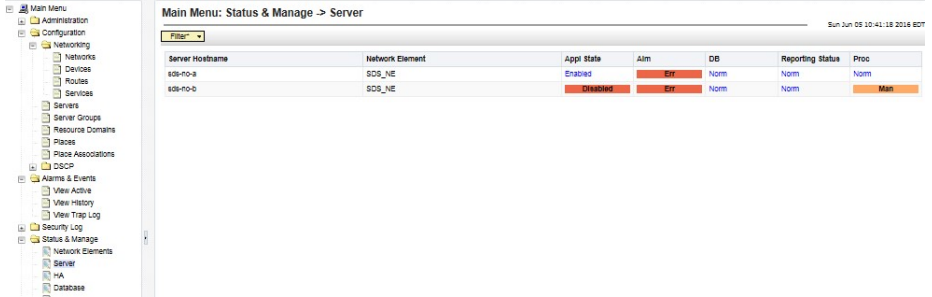

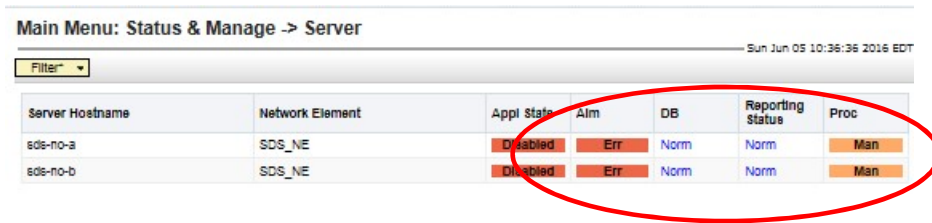
**Procedure 4. Pairing the SDS NOAM Servers (1<sup>st</sup> SDS NOAM Site Only)**

Step	Procedure	Result
23. <input type="checkbox"/>	<b>SDS Server NOAM A:</b>  The user should be presented with a banner information message stating <b>"Data committed"</b>	 <p>Main Menu: Configuration -&gt; Server Groups [Edit]</p> <p>Info</p> <p>Info</p> <p>Data committed!</p> <p>server group : sds_no_grp</p> <p>Field Value Description</p> <p>Unique Identifier used to is</p>
24. <input type="checkbox"/>	<b>SDS Server NOAM A:</b>  Click the <b>"Logout"</b> link on the OAM A server GUI	 <p>Use Updates   Help   Logged In Account: guiadmin   Log Out</p>
25. <input type="checkbox"/>	<b>IMPORTANT:</b>  Wait at least <b>5 minutes</b> before proceeding on to the next Step.	<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>
26. <input type="checkbox"/>	<b>SDS VIP:</b>  Launch an approved web browser and connect to the <b>XMI Virtual IP Address (VIP)</b> assigned in <b>STEP 21</b> to the SDS Server Group	 <p>There is a problem with this website's security certificate.</p> <p>The security certificate presented by this website was not issued by a trust</p> <p>The security certificate presented by this website was issued for a different</p> <p>Security certificate problems may indicate an attempt to fool you or interce</p> <p>server.</p> <p><b>We recommend that you close this webpage and do not continue to</b></p> <p>Click here to close this webpage.</p> <p>Continue to this website (not recommended).</p> <p>More information</p>

#### Procedure 4. Pairing the SDS NOAM Servers (1<sup>st</sup> SDS NOAM Site Only)

Step	Procedure	Result
27. 	<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>The screenshot shows the Oracle System Login page. At the top is the Oracle logo. Below it is the title 'Oracle System Login' and the date/time 'Tue May 31 14:34:34 2016 EDT'. The main content area is a 'Log In' box with the text 'Enter your username and password to log in'. It contains fields for 'Username:' and 'Password:', a 'Change password' checkbox, and a 'Log In' button. Below the login box, it says 'Welcome to the Oracle System Login.' and 'This application is designed to work with most modern HTML5 compliant browsers and uses both JavaScript and cookies. Please refer to the <a href="#">Oracle Software Web Browser Support Policy</a> for details.' At the bottom, it states 'Unauthorized access is prohibited.' and 'Oracle and Java are registered trademarks of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners.' The footer says 'Copyright © 2010, 2016, <a href="#">Oracle</a> and/or its affiliates. All rights reserved.'</p>
28.	<p><b>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 SDS Main Menu. On the left is a tree view with categories: Main Menu, Administration, Configuration, Networking (Networks, Devices, Routes, Services), Servers, Server Groups, Resource Domains, Places, Place Associations, DSCP, Alarms &amp; Events, Security Log, Status &amp; Manage, Measurements, Communication Agent, and SDS. The main area is titled 'Main Menu: [Main]' and shows a user-defined welcome message: 'This is the user-defined welcome message. It can be modified using the 'General Options' item under the 'Administ...'. Below this, it displays login information: 'Login Name: guidadmin', 'Last Login Time: 0000-00-00 00:00:00', 'Last Login IP:', and 'Recent Failed Login Attempts: 0'. The version '8.0.0.0.0-80.3.1' is shown in the top right.</p>
29.	<p><b>SDS VIP:</b></p> <p>Select...</p> <p><b>Main Menu</b> → <b>Alarms &amp; Events</b> → <b>View Active</b></p> <p>...as shown on the right.</p>	 <p>The screenshot shows the 'Main Menu: Alarms &amp; Events -&gt; View Active' screen. It has a table with columns: Seq #, Event ID, Timestamp, Severity, Product, Process, NE, and Server. The table contains three rows of data. The first row has Seq # 55, Event ID 31252, Timestamp 2016-05-05 10:34:06.093 EDT, Severity CLEAR, Product Platform, Process racierk, NE SDS_NE, and Server sds-to-a. The second row has Seq # 54, Event ID 31000, Timestamp 2016-05-05 10:34:06.093 EDT, Severity CLEAR, Product Platform, Process racierk, NE SDS_NE, and Server sds-to-a. The third row has Seq # 9, Event ID 31226, Timestamp 2016-05-05 10:31:52.000 EDT, Severity MAJOR, Product Platform, Process omha, NE SDS_NE, and Server sds-to-b. The table also includes an 'Additional Info' column with details like 'Alarm auto clear' and 'HA Availability Status Degraded'.</p>

**Procedure 4. Pairing the SDS NOAM Servers (1<sup>st</sup> SDS NOAM Site Only)**


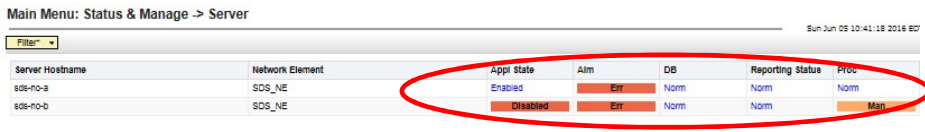

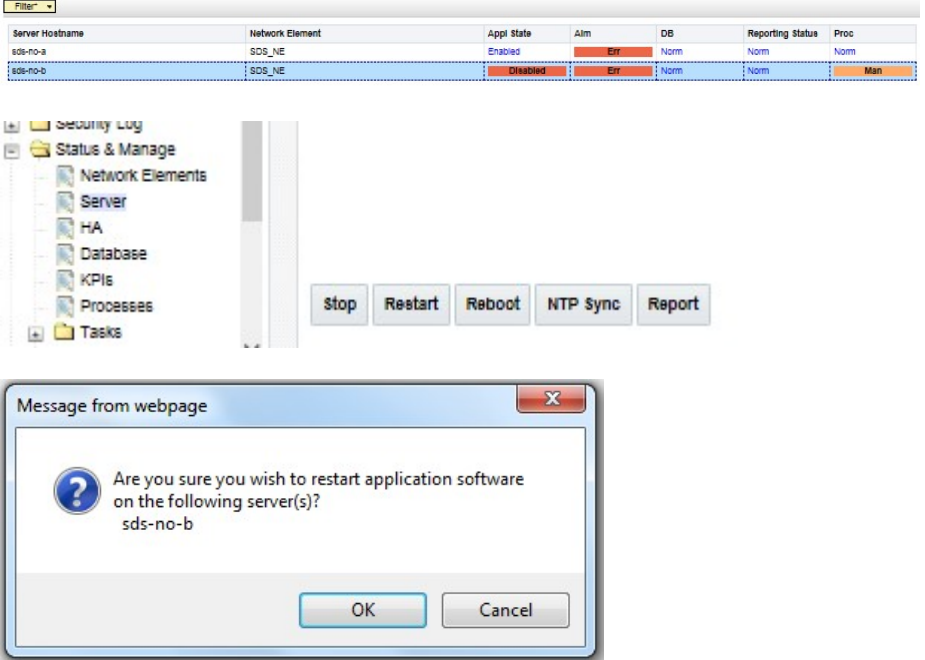
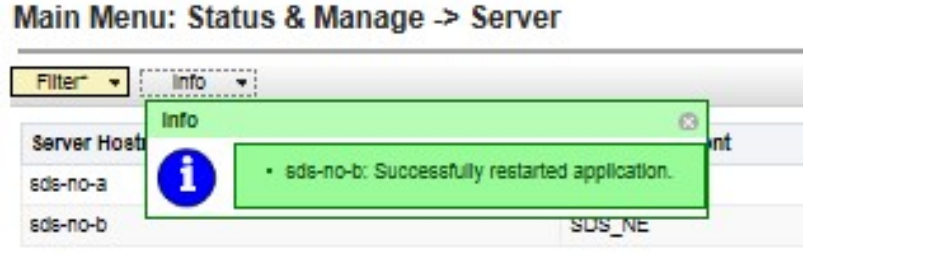
Step	Procedure	Result
30. 	<b>SDS VIP:</b> Verify whether or not <b>Event ID 10200</b> ( <i>Remote Database re-initialization in progress</i> ) is present.	
<div>  <p><b>IF EVENT ID 10200 (<i>Remote Database re-initialization in progress</i>) IS PRESENT, DO NOT PROCEED TO THE NEXT STEP UNTIL THE ALARM CLEAR IS RECEIVED.</b></p> </div>		
31. 	<b>SDS VIP:</b> Select... <b>Main Menu</b> → <b>Status &amp; Manage</b> → <b>Server</b> ...as shown on the right.	
32. 	<b>SDS VIP:</b> 1) The “A” and “B” SDS servers should now appear in the right panel. 2) Verify that the “DB” status shows “Norm” and the “Proc” status shows “Man” for both servers before proceeding to the next Step.	



**Procedure 4. Pairing the SDS NOAM Servers (1<sup>st</sup> SDS NOAM Site Only)**

Step	Procedure	Result																																				
33. <div></div>	<p><b>SDS VIP:</b></p> <p>1) Using the mouse, select <b>SDS Server NOAM 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 NOAM A</b> stating: <b>“Successfully restarted application”</b>.</p>	<div><table><tr><th>Server Hostname</th><th>Network Element</th><th>Appl State</th><th>Alm</th><th>DB</th><th>Reporting Status</th><th>Proc</th></tr><tr><td>sds-no-a</td><td>SDS_NE</td><td>Disabled</td><td>Err</td><td>Norm</td><td>Norm</td><td>Man</td></tr><tr><td>sds-no-b</td><td>SDS_NE</td><td>Disabled</td><td>Err</td><td>Norm</td><td>Norm</td><td>Man</td></tr></table></div> <div><div><div>Security Log</div><div>Status &amp; Manage</div><div>Network Elements</div><div>Server</div><div>HA</div><div>Database</div><div>KPIs</div><div>Processes</div><div>Tasks</div></div><div><div>Stop</div><div>Restart</div><div>Reboot</div><div>NTP Sync</div><div>Report</div></div></div> <div><div>Message from webpage</div><div><div>?</div><div>Are you sure you wish to restart application software on the following server(s)? sds-no-a</div></div><div><div>OK</div><div>Cancel</div></div></div> <div><div>Main Menu: Status &amp; Manage -&gt; Server</div><div><div>Filter</div><div>Info</div><div><div>Info</div><div>• sds-no-a: Successfully restarted application.</div></div><table><tr><th>Server Hostname</th><th>Network Element</th><th>Appl State</th><th>Alm</th><th>DB</th></tr><tr><td>sds-no-a</td><td></td><td>Enabled</td><td>Err</td><td>Norm</td></tr><tr><td>sds-no-b</td><td>SDS_NE</td><td>Disabled</td><td>Err</td><td>Norm</td></tr></table></div></div>	Server Hostname	Network Element	Appl State	Alm	DB	Reporting Status	Proc	sds-no-a	SDS_NE	Disabled	Err	Norm	Norm	Man	sds-no-b	SDS_NE	Disabled	Err	Norm	Norm	Man	Server Hostname	Network Element	Appl State	Alm	DB	sds-no-a		Enabled	Err	Norm	sds-no-b	SDS_NE	Disabled	Err	Norm
Server Hostname	Network Element	Appl State	Alm	DB	Reporting Status	Proc																																
sds-no-a	SDS_NE	Disabled	Err	Norm	Norm	Man																																
sds-no-b	SDS_NE	Disabled	Err	Norm	Norm	Man																																
Server Hostname	Network Element	Appl State	Alm	DB																																		
sds-no-a		Enabled	Err	Norm																																		
sds-no-b	SDS_NE	Disabled	Err	Norm																																		
34. <div></div>	<p><b>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>	<div><div><div>Main Menu</div><div>Administration</div><div>Configuration</div><div>Networking</div><div>Networks</div><div>Devices</div><div>Routes</div><div>Services</div><div>Servers</div><div>Server Groups</div><div>Resource Domains</div><div>Places</div><div>Place Associations</div><div>DSCP</div><div>Alarms &amp; Events</div><div>View Active</div><div>View History</div><div>View Trap Log</div><div>Security Log</div><div>Status &amp; Manage</div><div>Network Elements</div><div>Server</div><div>HA</div><div>Database</div></div><div><div>Main Menu: Status &amp; Manage -&gt; Server</div><div><div>Filter</div><table><tr><th>Server Hostname</th><th>Network Element</th><th>Appl State</th><th>Alm</th><th>DB</th><th>Reporting Status</th><th>Proc</th></tr><tr><td>sds-no-a</td><td>SDS_NE</td><td>Enabled</td><td>Err</td><td>Norm</td><td>Norm</td><td>Man</td></tr><tr><td>sds-no-b</td><td>SDS_NE</td><td>Disabled</td><td>Err</td><td>Norm</td><td>Norm</td><td>Man</td></tr></table></div><div>Sun Jun 09 10:41:18 2016 EDT</div></div></div>	Server Hostname	Network Element	Appl State	Alm	DB	Reporting Status	Proc	sds-no-a	SDS_NE	Enabled	Err	Norm	Norm	Man	sds-no-b	SDS_NE	Disabled	Err	Norm	Norm	Man															
Server Hostname	Network Element	Appl State	Alm	DB	Reporting Status	Proc																																
sds-no-a	SDS_NE	Enabled	Err	Norm	Norm	Man																																
sds-no-b	SDS_NE	Disabled	Err	Norm	Norm	Man																																

**Procedure 4. Pairing the SDS NOAM Servers (1<sup>st</sup> SDS NOAM Site Only)**

Step	Procedure	Result
35. 	<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 NOAM A</b> before proceeding to the next Step.</p>	
36. 	<p><b>SDS VIP:</b></p> <p>1) Using the mouse, select <b>SDS Server B</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 B</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>	 



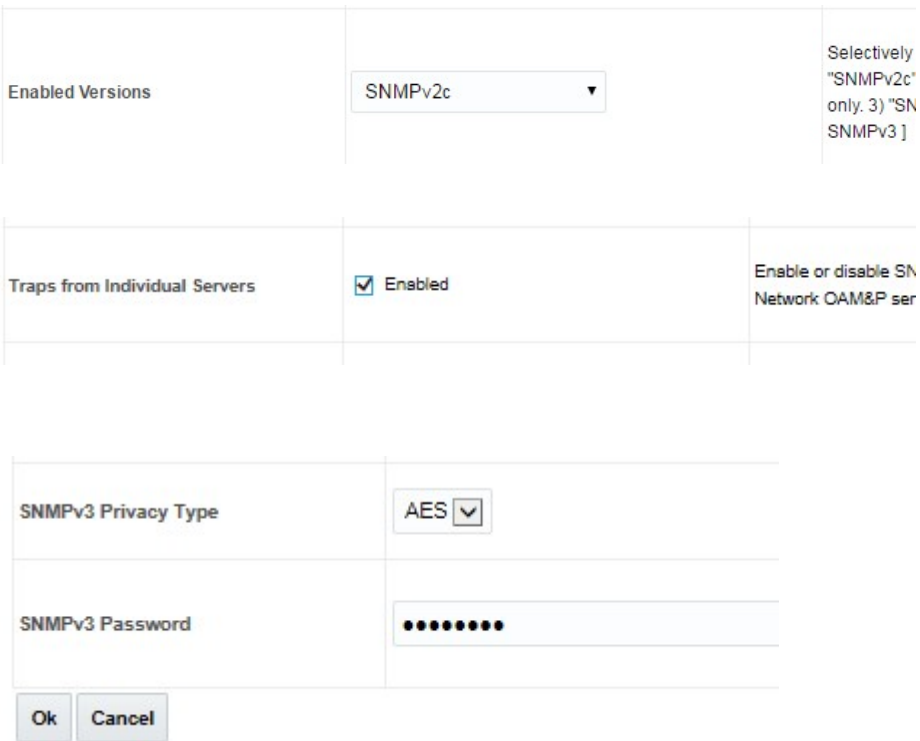
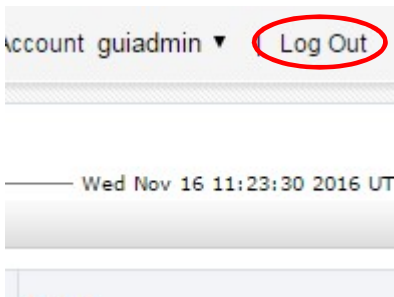
#### Procedure 4. Pairing the SDS NOAM Servers (1<sup>st</sup> SDS NOAM Site Only)

Step	Procedure	Result																					
37. <div></div>	<b>SDS VIP:</b>  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 NOAM A</b> and <b>SDS Server NOAM B</b> before proceeding to the next Step.	<div>Main Menu: Status &amp; Manage -&gt; Server</div> <div><div>Filter</div><table><tr><th>Server Hostname</th><th>Network Element</th><th>Appl State</th><th>Alm</th><th>DB</th><th>Reporting Status</th><th>Proc</th></tr><tr><td>SDS-NO-A</td><td>SDS_NE</td><td>Enabled</td><td>Err</td><td>Norm</td><td>Norm</td><td>Norm</td></tr><tr><td>SDS-NO-B</td><td>SDS_NE</td><td>Enabled</td><td>Warn</td><td>Norm</td><td>Norm</td><td>Norm</td></tr></table></div>	Server Hostname	Network Element	Appl State	Alm	DB	Reporting Status	Proc	SDS-NO-A	SDS_NE	Enabled	Err	Norm	Norm	Norm	SDS-NO-B	SDS_NE	Enabled	Warn	Norm	Norm	Norm
Server Hostname	Network Element	Appl State	Alm	DB	Reporting Status	Proc																	
SDS-NO-A	SDS_NE	Enabled	Err	Norm	Norm	Norm																	
SDS-NO-B	SDS_NE	Enabled	Warn	Norm	Norm	Norm																	
38. <div></div>	<b>IMPORTANT:</b>  Wait at least <b>5 minutes</b> before proceeding on to the next Step.	<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>																					
39. <div></div>	<b>SDS VIP:</b>  If there is a context switch, you may be required to login again.  Login to the GUI using the default user and password.	<div><div>ORACLE®</div><div>Oracle System Login</div><div>Tue May 31 14:34:34 2016 EDT</div><div><div>Log In</div><div>Enter your username and password to log in</div><div>Username: <input type="text"/></div><div>Password: <input type="password"/></div><div><input type="checkbox"/> Change password</div><div>Log In</div></div><div>Welcome to the Oracle System Login.</div><div>This application is designed to work with most modern HTML5 compliant browsers and uses both JavaScript and cookies. Please refer to the <a href="#">Oracle Software Web Browser Support Policy</a> for details.</div><div>Unauthorized access is prohibited.</div><div>Oracle and Java are registered trademarks of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners.</div><div>Copyright © 2010, 2016, <a href="#">Oracle</a> and/or its affiliates. All rights reserved.</div></div>																					

**Procedure 4. Pairing the SDS NOAM Servers (1<sup>st</sup> SDS NOAM Site Only)**

Step	Procedure	Result
40. <div></div>	<p><b>SDS VIP:</b></p> <p>Select...</p> <p><u><b>Main Menu</b></u> → <b>Alarms &amp; Events</b> → <b>View Active</b></p> <p>...as shown on the right.</p>	<div><div><div><div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div>&lt;</div></div></div></div></div>

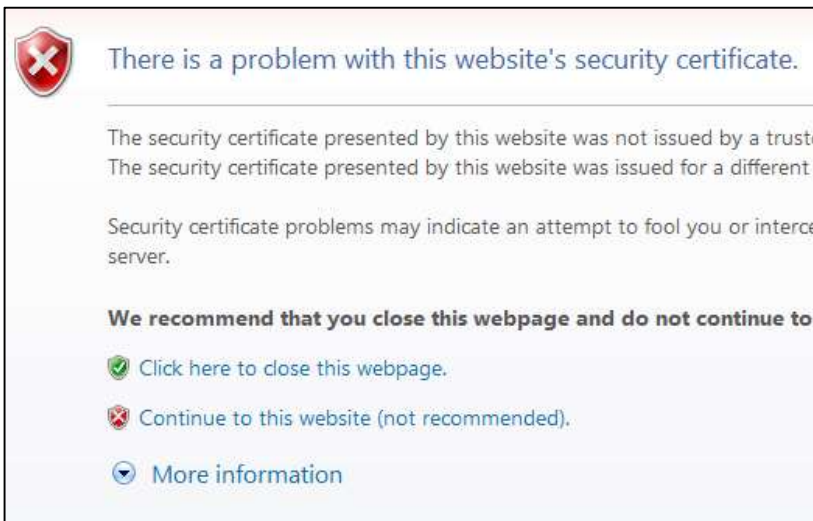

**Procedure 4. Pairing the SDS NOAM Servers (1<sup>st</sup> SDS NOAM Site Only)**

Step	Procedure	Result
<b>43.</b> <input type="checkbox"/>	<b>SDS VIP:</b>  <b>1)</b> Enable Version field changed to SNMPv2c before you select OK  <b>2)</b> Using the cursor, place a “check” in the check box for “ <b>Traps from Individual Servers</b> ”.  <b>3)</b> Click the “ <b>Ok</b> ” dialogue button located at the bottom of the right panel.	 <p>Enabled Versions: SNMPv2c</p> <p>Traps from Individual Servers: <input checked="" type="checkbox"/> Enabled</p> <p>SNMPv3 Privacy Type: AES</p> <p>SNMPv3 Password: .....</p> <p>Ok Cancel</p> <p>Selectively "SNMPv2c" only. 3) "SNMPv3"]</p> <p>Enable or disable SN Network OAM&amp;P ser</p>
<b>44.</b> <input type="checkbox"/>	<b>SDS VIP:</b>  Click the “ <b>Logout</b> ” link on the server GUI.	 <p>account guiadmin ▼ Log Out</p> <p>Wed Nov 16 11:23:30 2016 UT</p>
THIS PROCEDURE HAS BEEN COMPLETED		


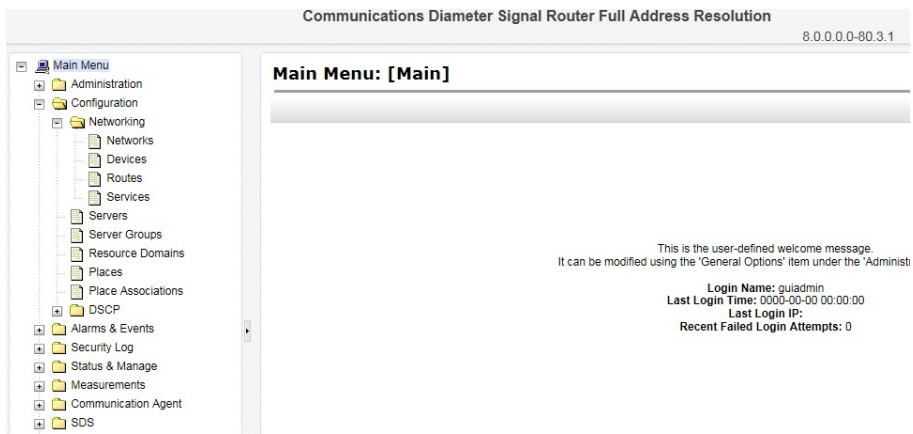

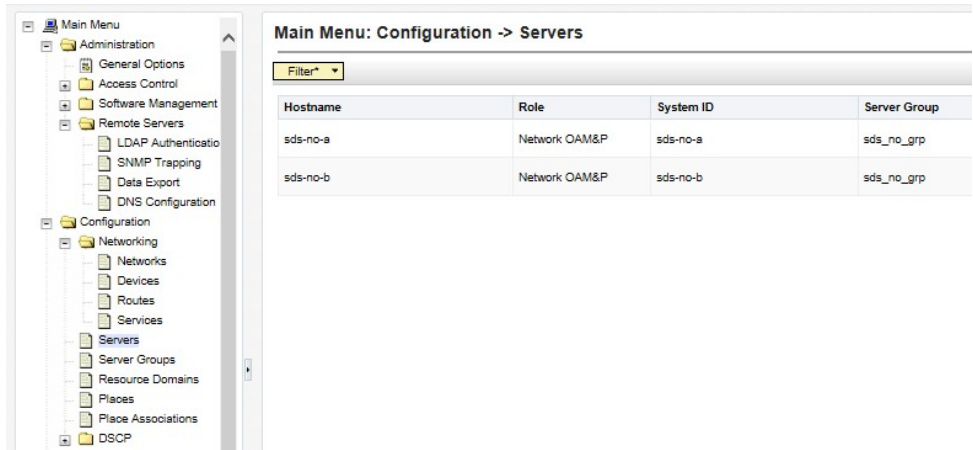

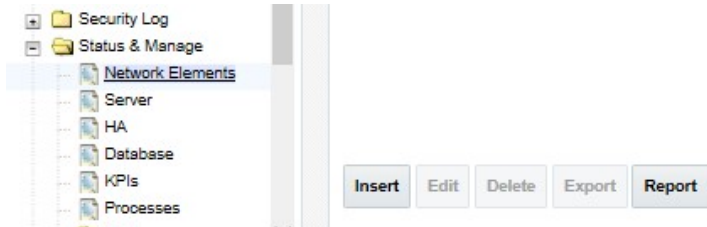
### 5.3 Query Server Installation (All SDS NOAM Sites)

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.

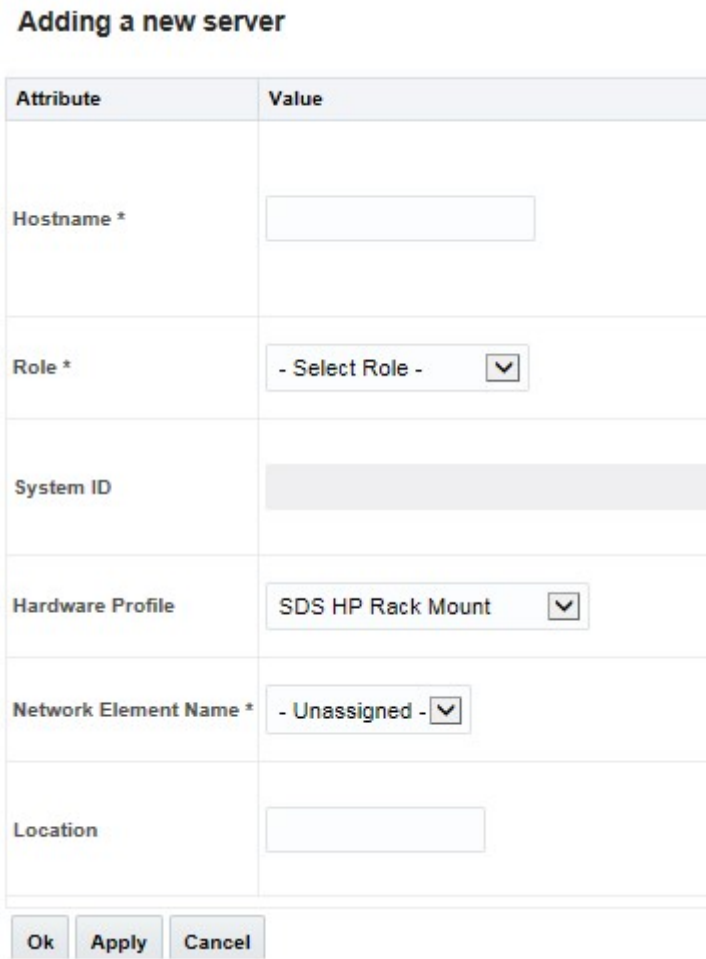
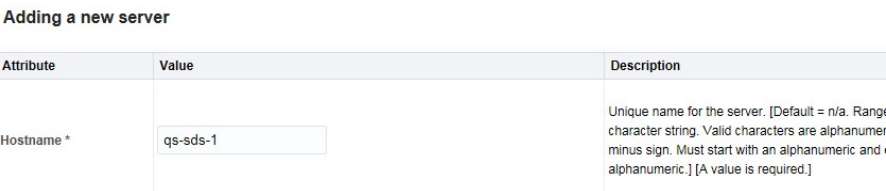

#### Procedure 5. Configuring the Query Server (All SDS NOAM Sites)

Step	Procedure	Result
1. <input type="checkbox"/>	<p><b>Primary SDS VIP:</b></p> <p>Launch an approved web browser and connect to the XML Virtual IP address (VIP) assigned to Active SDS site</p> <p><b>NOTE:</b> <i>If presented with the "security certificate" warning screen shown to the right, choose the following option: "Continue to this website (not recommended)".</i></p>	
2. <input type="checkbox"/>	<p><b>Primary 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>	

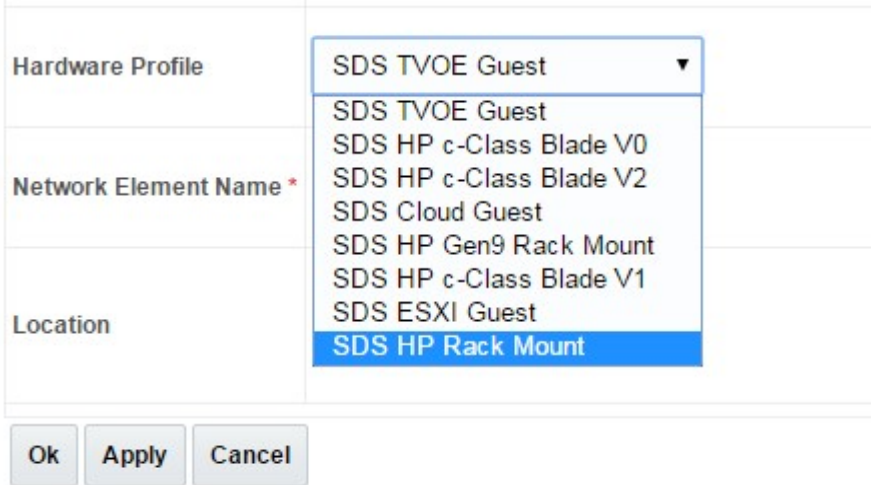
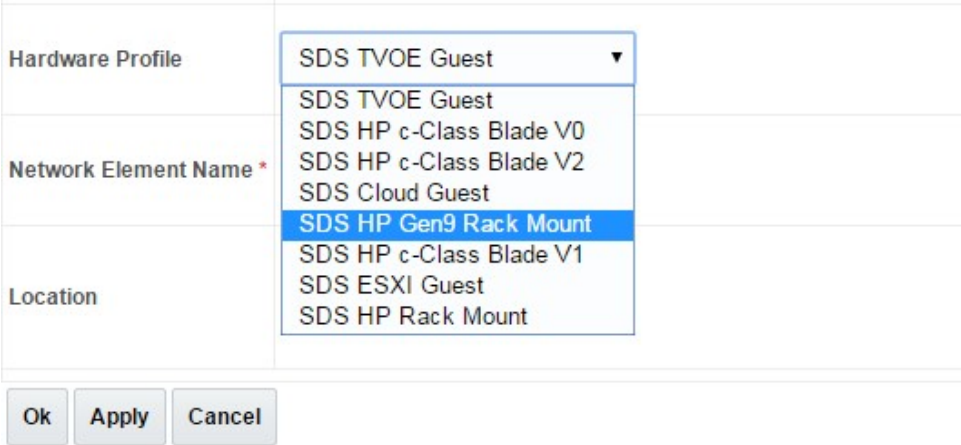

### Procedure 5. Configuring the Query Server (All SDS NOAM Sites)

Step	Procedure	Result
3. 	<b>Primary SDS VIP:</b>  The user should be presented the SDS Main Menu as shown on the right.	
4. 	<b>Primary SDS VIP:</b>  Select...  <u>Main Menu</u> → Configuration → Servers  ...as shown on the right.	
5. 	<b>Primary SDS VIP:</b>  Select the “Insert” dialogue button.	

**Procedure 5. Configuring the Query Server (All SDS NOAM Sites)**

Step	Procedure	Result
6. <input type="checkbox"/>	<b>Primary SDS VIP:</b> The user is now presented with the “Adding a new server” configuration screen.	
7. <input type="checkbox"/>	<b>Primary SDS VIP:</b> Input the assigned “hostname” for the Query Server.	
8. <input type="checkbox"/>	<b>Primary SDS VIP:</b> Select “QUERY SERVER” for the server “Role” from the pull-down menu.	

# Procedure 5. Configuring the Query Server (All SDS NOAM Sites)

Step	Procedure	Result
9. <input type="checkbox"/>	<p><b>Primary SDS VIP:</b></p> <p>For <b>GEN8</b> Server Select "<b>SDS HP Rack Mount</b>" for the <b>Hardware Profile</b> for the SDS from the pull-down menu.</p> <p>For <b>GEN9</b> Server: Select "<b>SDS HP GEN9 Rack Mount</b>" for the <b>Hardware Profile</b> for the SDS from the pull-down menu.</p>	<p>For <b>GEN8</b> select "<b>SDS HP Rack Mount</b>" from the <b>Hardware Profile</b> pull-down menu.</p>  <p>For <b>GEN9</b> Server, Select "<b>SDS HP GEN9 Rack Mount</b>" from the <b>Hardware Profile</b> pull-down menu.</p> 
10. <input type="checkbox"/>	<p><b>Primary SDS VIP:</b></p> <p>Select the <b>Network Element Name</b> of the SDS site where the Query Server is physically located.</p>	 <p>Select the network element [A value is required.]</p>
11. <input type="checkbox"/>	<p><b>Primary SDS VIP:</b></p> <p>Enter the site location.</p>	<p>Location: Bangalore</p> <p>Location description [Default = "", Range = A 15-character string. Valid value is any text string.]</p> <p><b>Note:</b> Location is an optional field.</p>



**Procedure 5. Configuring the Query Server (All SDS NOAM Sites)**

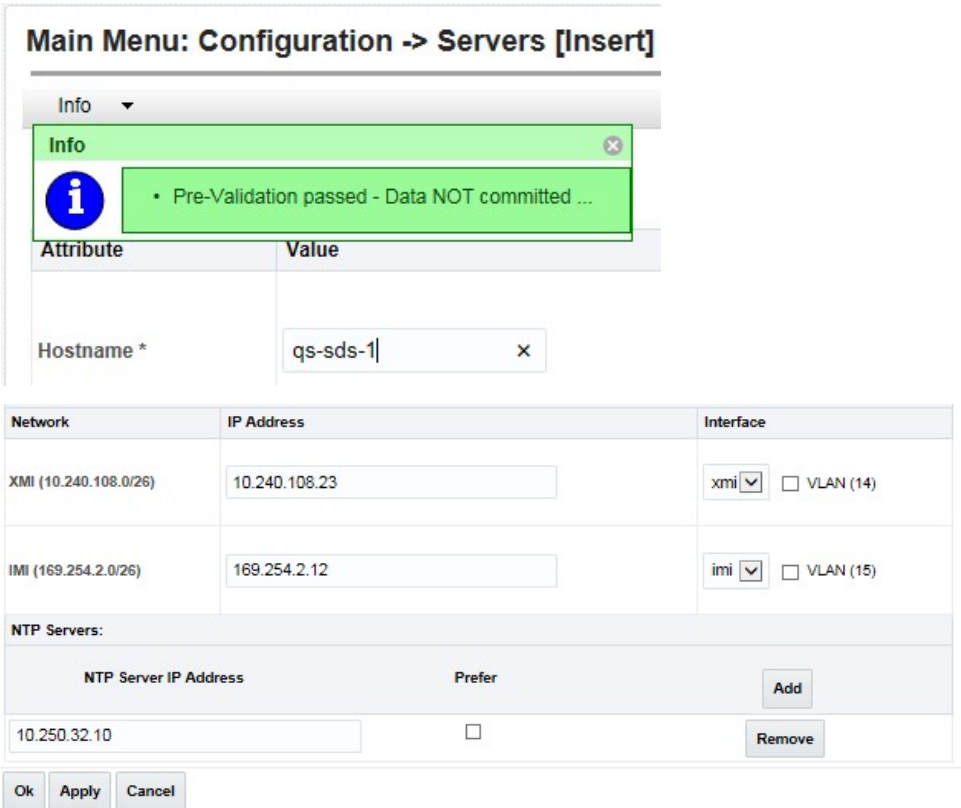

Step	Procedure	Result																															
12. <div></div>	<p><b>SDS Server NOAM A:</b></p> <p>1) Enter the <b>MGMNT_VLAN</b> IP address for the Query Server.</p> <p>2) Set the <b>MGMNT_VLAN</b> Interface to “<b>bond0</b>” and “<b>check</b>” the VLAN checkbox.</p> <p>3) Enter the <b>IMI</b> IP address for the Query Server.</p> <p>4) Set the <b>IMI</b> Interface to “<b>bond0</b>” and “<b>check</b>” the VLAN checkbox.</p>	<div><div>OAM Interfaces [At least one interface is required.]:</div><table><thead><tr><th>Network</th><th>IP Address</th><th>Interface</th></tr></thead><tbody><tr><td>MGMNT_VLAN (191.168.1.0/22)</td><td>191.240.1.11</td><td><div>bond0</div><div><input type="checkbox"/> VLAN (2)</div></td></tr><tr><td>INTERNALXMI (10.240.20.0/22)</td><td>10.240.20.2</td><td><div>bond1</div><div><input type="checkbox"/> VLAN (3)</div></td></tr><tr><td>INTERNALIMI (192.168.2.0/24)</td><td>192.168.2.100</td><td><div>bond0</div><div><input type="checkbox"/> VLAN (4)</div></td></tr></tbody></table></div> <table><thead><tr><th>Query Server</th><th>Network</th><th>IP Address</th><th>Interface</th><th>VLAN Checkbox</th></tr></thead><tbody><tr><td rowspan="2">SDS-QS (Primary NE)</td><td>MGMNT_VLAN</td><td>169.254.1.13</td><td rowspan="2">bond0</td><td rowspan="2"></td></tr><tr><td>IMI</td><td>169.254.100.13</td></tr><tr><td rowspan="2">SDS-QS (DR NE)</td><td>MGMNT_VLAN</td><td>169.254.1.16</td><td rowspan="2">bond0</td><td rowspan="2"></td></tr><tr><td>IMI</td><td>169.254.100.16</td></tr></tbody></table> <p><b>NOTE_1:</b> These IP addresses are based on the info in the NAPD and the Network Element Config file.</p> <p><b>NOTE_2:</b> The <b>MGMNT_VLAN</b> should only be present when 4948E-F AggregationSwitches are deployed with SDS NOAM / Query Server RMS. If the <b>MGMNT_VLAN</b> is not present, the <b>IMI</b> network values shown above still apply.</p>	Network	IP Address	Interface	MGMNT_VLAN (191.168.1.0/22)	191.240.1.11	<div>bond0</div> <div><input type="checkbox"/> VLAN (2)</div>	INTERNALXMI (10.240.20.0/22)	10.240.20.2	<div>bond1</div> <div><input type="checkbox"/> VLAN (3)</div>	INTERNALIMI (192.168.2.0/24)	192.168.2.100	<div>bond0</div> <div><input type="checkbox"/> VLAN (4)</div>	Query Server	Network	IP Address	Interface	VLAN Checkbox	SDS-QS (Primary NE)	MGMNT_VLAN	169.254.1.13	bond0		IMI	169.254.100.13	SDS-QS (DR NE)	MGMNT_VLAN	169.254.1.16	bond0		IMI	169.254.100.16
Network	IP Address	Interface																															
MGMNT_VLAN (191.168.1.0/22)	191.240.1.11	<div>bond0</div> <div><input type="checkbox"/> VLAN (2)</div>																															
INTERNALXMI (10.240.20.0/22)	10.240.20.2	<div>bond1</div> <div><input type="checkbox"/> VLAN (3)</div>																															
INTERNALIMI (192.168.2.0/24)	192.168.2.100	<div>bond0</div> <div><input type="checkbox"/> VLAN (4)</div>																															
Query Server	Network	IP Address	Interface	VLAN Checkbox																													
SDS-QS (Primary NE)	MGMNT_VLAN	169.254.1.13	bond0																														
	IMI	169.254.100.13																															
SDS-QS (DR NE)	MGMNT_VLAN	169.254.1.16	bond0																														
	IMI	169.254.100.16																															



**Procedure 5. Configuring the Query Server (All SDS NOAM Sites)**

Step	Procedure	Result													
13.	<p>1) Enter the customer assigned <b>XMI</b> IP address for the Query Server.</p> <p>Layer 3 (No VLAN tagging used for XMI)</p> <p>2) Set the <b>XMI</b> Interface to “<b>bond1</b>” and “<b>DO NOT check</b>” the VLAN checkbox.</p> <p>- OR -</p> <p>Layer 2 (VLAN tagging used for XMI)</p> <p>2) Set the <b>XMI</b> Interface to “<b>bond0</b>” and “<b>check</b>” the VLAN checkbox.</p>	<div><div>INTERNALXMI (10.240.20.0/22)</div><div>10.240.20.2</div><div>bond1 <input type="checkbox"/> VLAN (3)</div></div> <table><tr><th>Query Server</th><th>Network</th><th>VLAN tagging (on XMI network)</th><th>Interface</th><th>VLAN Checkbox</th></tr><tr><td rowspan="2">SDS-QS (Primary &amp; DR)</td><td rowspan="2">XMI</td><td>No</td><td>bond1</td><td>✗</td></tr><tr><td>Yes</td><td>bond0</td><td>✓</td></tr></table> <div><div>!!! CAUTION !!!</div><div>It is crucial that the correct network configuration be selected in <b>Steps 12 &amp; 13</b> of this procedure. Choosing an incorrect configuration will result in the need to re-install the OS and restart the Query Server installation procedure over from the beginning.</div></div>	Query Server	Network	VLAN tagging (on XMI network)	Interface	VLAN Checkbox	SDS-QS (Primary & DR)	XMI	No	bond1	✗	Yes	bond0	✓
Query Server	Network	VLAN tagging (on XMI network)	Interface	VLAN Checkbox											
SDS-QS (Primary & DR)	XMI	No	bond1	✗											
		Yes	bond0	✓											
14. <input type="checkbox"/>	<p><b>SDS Server NOAM 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) Enter 3 NTP Server <b>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>	<div><div>NTP Servers:</div><div><div>NTP Server IP Address</div><div>Prefer</div><div>Add</div></div></div> <div><div>NTP Servers:</div><div><div>NTP Server IP Address</div><div>Prefer</div><div>Add</div></div><div><div>10.250.32.10</div><div><input type="checkbox"/></div><div>Remove</div></div></div> <div><div>NTP Servers:</div><div><div>NTP Server IP Address</div><div>Prefer</div><div>Add</div></div><div><div>10.250.32.51</div><div><input type="checkbox"/></div><div>Remove</div></div><div><div>10.250.32.10</div><div><input checked="" type="checkbox"/></div><div>Remove</div></div></div>													


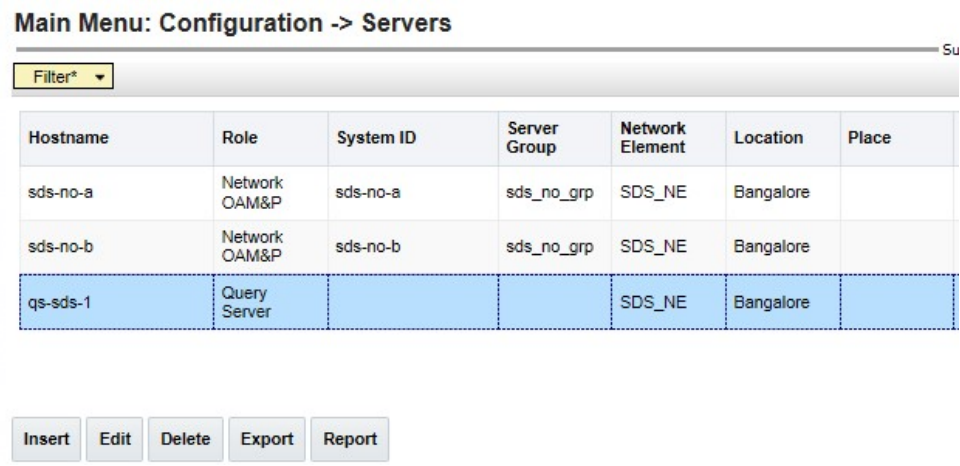

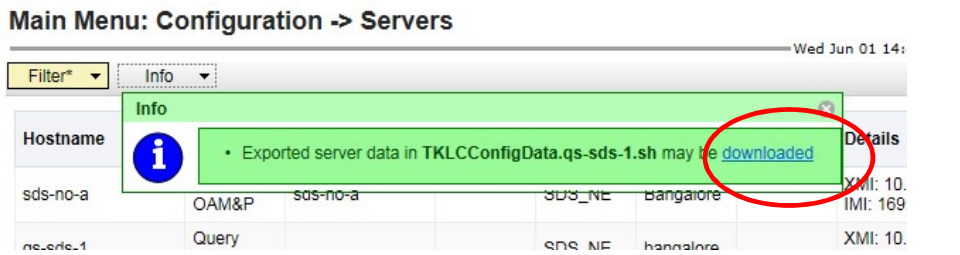

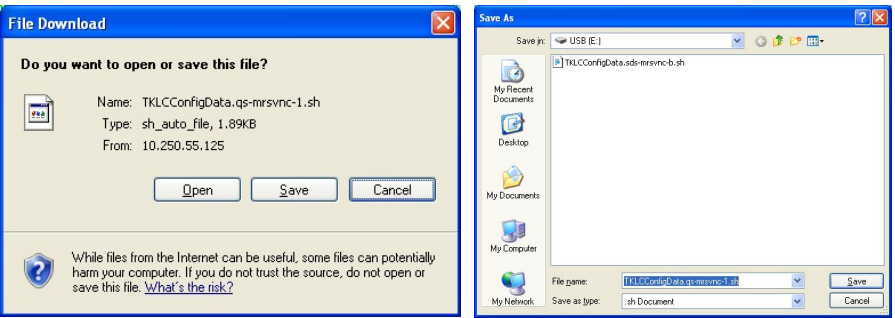

**Procedure 5. Configuring the Query Server (All SDS NOAM Sites)**

Step	Procedure	Result
15. <input type="checkbox"/>	<p><b>Primary 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>	
16. <input type="checkbox"/>	<p><b>Primary 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</p>	



**Procedure 5. Configuring the Query Server (All SDS NOAM Sites)**

Step	Procedure	Result																																
17. <div></div>	<p><b>Primary SDS VIP:</b></p> <p>Select...</p> <p><b>Main Menu</b> → <b>Configuration</b> → <b>Servers</b></p> <p>...as shown on the right.</p>	<div><div><div><div><div><div></div><div>Main Menu</div></div><div><div><div>Administration</div><div><div>General Options</div><div>Access Control</div><div>Software Management</div><div>Remote Servers</div><div>LDAP Authentication</div><div>SNMP Trapping</div><div>Data Export</div><div>DNS Configuration</div></div></div><div><div>Configuration</div><div><div>Networking</div><div><div>Networks</div><div>Devices</div><div>Routes</div><div>Services</div><div>Servers</div><div>Server Groups</div><div>Resource Domains</div><div>Places</div></div></div></div></div></div></div><div><div><div><div><div></div><div>Main Menu: Configuration -&gt; Servers</div></div><div><div>Filter*</div><div></div></div><table><tr><th>Hostname</th><th>Role</th><th></th></tr><tr><td>sds-no-a</td><td>Network OAM&amp;P</td><td>s</td></tr><tr><td>sds-no-b</td><td>Network OAM&amp;P</td><td>s</td></tr><tr><td>qs-sds-1</td><td>Query Server</td><td></td></tr></table></div></div></div></div></div>	Hostname	Role		sds-no-a	Network OAM&P	s	sds-no-b	Network OAM&P	s	qs-sds-1	Query Server																					
Hostname	Role																																	
sds-no-a	Network OAM&P	s																																
sds-no-b	Network OAM&P	s																																
qs-sds-1	Query Server																																	
18. <div></div>	<p><b>Primary SDS VIP:</b></p> <p>The “<b>Configuration</b> →<b>Servers</b>” screen now shows the newly added Query Server in the list.</p>	<div><div><div><div><div></div><div>Main Menu: Configuration -&gt; Servers</div></div><div><div>Filter*</div><div></div></div><table><tr><th>Hostname</th><th>Role</th><th>System ID</th><th>Server Group</th><th>Network Element</th><th>Location</th><th>Place</th><th>Details</th></tr><tr><td>sds-no-a</td><td>Network OAM&amp;P</td><td>sds-no-a</td><td>sds_no_grp</td><td>SDS_NE</td><td>Bangalore</td><td></td><td>XMI: 10.240.1.1 IMI: 169.254.1.1</td></tr><tr><td>sds-no-b</td><td>Network OAM&amp;P</td><td>sds-no-b</td><td>sds_no_grp</td><td>SDS_NE</td><td>Bangalore</td><td></td><td>XMI: 10.240.1.1 IMI: 169.254.1.1</td></tr><tr><td>qs-sds-1</td><td>Query Server</td><td></td><td></td><td>SDS_NE</td><td>Bangalore</td><td></td><td>XMI: 10.240.1.1 IMI: 169.254.1.1</td></tr></table></div></div></div>	Hostname	Role	System ID	Server Group	Network Element	Location	Place	Details	sds-no-a	Network OAM&P	sds-no-a	sds_no_grp	SDS_NE	Bangalore		XMI: 10.240.1.1 IMI: 169.254.1.1	sds-no-b	Network OAM&P	sds-no-b	sds_no_grp	SDS_NE	Bangalore		XMI: 10.240.1.1 IMI: 169.254.1.1	qs-sds-1	Query Server			SDS_NE	Bangalore		XMI: 10.240.1.1 IMI: 169.254.1.1
Hostname	Role	System ID	Server Group	Network Element	Location	Place	Details																											
sds-no-a	Network OAM&P	sds-no-a	sds_no_grp	SDS_NE	Bangalore		XMI: 10.240.1.1 IMI: 169.254.1.1																											
sds-no-b	Network OAM&P	sds-no-b	sds_no_grp	SDS_NE	Bangalore		XMI: 10.240.1.1 IMI: 169.254.1.1																											
qs-sds-1	Query Server			SDS_NE	Bangalore		XMI: 10.240.1.1 IMI: 169.254.1.1																											
19. <div></div>	<p><b>Primary SDS VIP:</b></p> <p>Using the mouse, select the Query Server. The line entry containing the Query Server should now be highlighted in <b>BLUE</b>.</p>	<div><div><div><div><div></div><div>Main Menu: Configuration -&gt; Servers</div></div><div><div>Filter*</div><div></div></div><table><tr><th>Hostname</th><th>Role</th><th>System ID</th><th>Server Group</th><th>Network Element</th><th>Location</th><th>Place</th></tr><tr><td>sds-no-a</td><td>Network OAM&amp;P</td><td>sds-no-a</td><td>sds_no_grp</td><td>SDS_NE</td><td>Bangalore</td><td></td></tr><tr><td>sds-no-b</td><td>Network OAM&amp;P</td><td>sds-no-b</td><td>sds_no_grp</td><td>SDS_NE</td><td>Bangalore</td><td></td></tr><tr><td>qs-sds-1</td><td>Query Server</td><td></td><td></td><td>SDS_NE</td><td>Bangalore</td><td></td></tr></table></div></div></div>	Hostname	Role	System ID	Server Group	Network Element	Location	Place	sds-no-a	Network OAM&P	sds-no-a	sds_no_grp	SDS_NE	Bangalore		sds-no-b	Network OAM&P	sds-no-b	sds_no_grp	SDS_NE	Bangalore		qs-sds-1	Query Server			SDS_NE	Bangalore					
Hostname	Role	System ID	Server Group	Network Element	Location	Place																												
sds-no-a	Network OAM&P	sds-no-a	sds_no_grp	SDS_NE	Bangalore																													
sds-no-b	Network OAM&P	sds-no-b	sds_no_grp	SDS_NE	Bangalore																													
qs-sds-1	Query Server			SDS_NE	Bangalore																													



**Procedure 5. Configuring the Query Server (All SDS NOAM Sites)**

Step	Procedure	Result
20. 	<b>Primary SDS VIP:</b>  Select the “ <b>Export</b> ” dialogue button.	
21. 	<b>Primary SDS VIP:</b>  The user will receive a banner information message showing a download link for the Query Server configuration data.  Click on the word “ <b>downloaded</b> ” to download and save the file.	
22. 	<b>Primary SDS VIP:</b>  1) Click the “ <b>Save</b> ” dialogue button.  2) Save the Query Server configuration file to a USB flash drive.	
23. 	<b>Query Server:</b>  Access the server console.	Connect to the <b>Query Server</b> console using one of the access methods described in <b>Section 2.3</b> .

**Procedure 5. Configuring the Query Server (All SDS NOAM Sites)**

Step	Procedure	Result
24. <input type="checkbox"/>	<b>Query Server:</b>  1) Access the command prompt.  2) Log into the server as the "admusr" user.	<pre>login: admusr Using keyboard-interactive authentication. Password: &lt;admusr_password&gt;</pre>
25. <input type="checkbox"/>	<b>Query Server:</b>  Insert the USB flash drive containing the server configuration file into the USB port on the front panel of the Query Server.	 <p><b>Figure 8 – HP DL380 GEN8: Front Panel (USB Port)</b></p>  <p><b>Figure 9 – HP DL380 GEN9: Front Panel (USB Port)</b></p>
26. <input type="checkbox"/>	<b>Query Server:</b>  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.	<pre>\$ 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;</pre> <p><b>NOTE:</b> Press the &lt;ENTER&gt; key to return to the command prompt.</p>
27. <input type="checkbox"/>	<b>Query Server:</b>  Verify that the USB flash drive's partition has been mounted by the OS	<pre>\$ df  grep sdb /dev/sdb1          2003076          8    2003068    1% /media/sdb1</pre> <p><b>NOTE:</b> Search <b>df</b> for the device named in the previous step's output.</p>
28. <input type="checkbox"/>	<b>Query Server:</b>  Copy the configuration file	<pre>\$ sudo cp -p /media/sdb1/TKLCConfigData.qs-mrsvnc-1.sh /var/TKLC/db/filemgmt/</pre>

**Procedure 5. Configuring the Query Server (All SDS NOAM Sites)**

Step	Procedure	Result
29. <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>Example:</b></p> <p>TKLCConfigData&lt;.server_hostname&gt;.sh → will translate to →TKLCConfigData.sh</p> <pre>\$ sudo cp -p /var/TKLC/db/filemgmt/TKLCConfigData.qs-mrsvnc-1.sh /var/tmp/TKLCConfigData.sh</pre> <p><b>NOTE:</b> The server will poll the <b>/var/tmp</b> directory for the presence of the configuration file and automatically execute it when found.</p>
30. <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> This step varies by server and may take 3...20 minutes to complete.</p>	<p><b>*** NO OUTPUT FOR ≈ 3-20 MINUTES ***</b></p> <p>Broadcast message from admusr (Mon Dec 14 16:17:13 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>
31. <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> It is important that the USB flash drive be removed from the server before continuing on to the next step.</p>	 <p><b>Figure 10 – HP DL380 GEN8: Front Panel (USB Port)</b></p>  <p><b>Figure 11 – HP DL380 GEN9: Front Panel (USB Port)</b></p>
32. <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>	<p>Broadcast message from admusr (Mon Dec 14 16:17:13 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. <b>&lt;ENTER&gt;</b></p>



# Procedure 5. Configuring the Query Server (All SDS NOAM Sites)

Step	Procedure	Result
33.	<b>SDS Server NOAM A or B:</b>  Verify that the desired Time Zone is currently in use.	<pre>\$ date Mon Aug 10 19:34:51 UTC 2015</pre>
34. <input type="checkbox"/>	<b>SDS Server NOAM A or B:</b>  If the desired Time Zone was not presented in the previous step...  <b>Configure the Time Zone.</b>  Otherwise, skip to the next step.	<p><b>Example:</b> <code>\$ sudo set_ini_tz.pl &lt;time_zone&gt;</code></p> <p><b>NOTE:</b> The following command example sets the time to the “UTC” (aka GMT) time zone which is recommended for all sites.</p> <p>The user may replace, as appropriate, with the customer requested time zone for this site installation. See <b>Appendix G</b> for a list of valid time zones.</p> <pre>\$ sudo set_ini_tz.pl "Etc/UTC"</pre>
35. <input type="checkbox"/>	<b>Query Server:</b>  Initiate a reboot of the Query Server.	<pre>\$ sudo init 6</pre>
36. <input type="checkbox"/>	<b>Query Server:</b>  Output similar to that shown on the right may be observed as the server initiates a reboot.	<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>
37. <input type="checkbox"/>	<b>Query Server:</b>  1) Access the command prompt.  2) Login as the “ <b>admusr</b> ” user.	<pre>login: admusr Using keyboard-interactive authentication. Password: &lt;admusr_password&gt;</pre>

**Procedure 5. Configuring the Query Server (All SDS NOAM Sites)**

Step	Procedure	Result
38.	<b>Query Server:</b>  Accept upgrade to the Application Software..	<pre>[admusr@rlghnc-sds-QS ~]\$ sudo /var/TKLC/backout/accept Called with options: --accept Loading Backout::BackoutType::RPM Accepting Upgrade Executing common accept tasks Setting POST_UPGRADE_ACTION to ACCEPT in upgrade info. Cleaning backout directory. Clearing Upgrade Accept/Reject alarm. Cleaning message from MOTD. No patch pending alarm on server so no MOTD update. Cleaning up RPM config backup files... Checking / Checking /boot Checking /tmp Checking /usr Checking /var Checking /var/TKLC Checking /tmp/appworks_temp Checking /usr/openv 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 '/etc/my.cnf' from RCS repository INFO: Removing '/etc/pam.d/password-auth' from RCS repository INFO: Removing '/etc/pam.d/system-auth' from RCS repository INFO: Removing '/etc/sysconfig/network-scripts/ifcfg-eth0' from RCS repository INFO: Removing '/etc/php.d/zip.ini' from RCS repository INFO: Removing '/var/lib/prelink/force' from RCS repository [admusr@rlghnc-sds-QS ~]\$</pre>
39.	<b>Query Server:</b>  1) Verify that the IMI IP address input in Step 12 has been applied to “bond0.4”.  2) Verify that the XMI IP address input in Step 13 has been applied to “bond1”.	<pre>\$ ifconfig  grep in 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</pre>



**Procedure 5. Configuring the Query Server (All SDS NOAM Sites)**

Step	Procedure	Result
40. <input type="checkbox"/>	<b>Query Server:</b>  From the <b>Query Server</b> , “ping” the <b>IMI IP address</b> configured for <b>SDS Server NOAM A</b> .	<pre>\$ ping -c 5 169.254.100.11 PING 169.254.100.11 (169.254.100.11) 56(84) bytes of data. 64 bytes from 169.254.100.11: icmp_seq=1 ttl=64 time=0.021 ms 64 bytes from 169.254.100.11: icmp_seq=2 ttl=64 time=0.019 ms 64 bytes from 169.254.100.11: icmp_seq=3 ttl=64 time=0.006 ms 64 bytes from 169.254.100.11: icmp_seq=4 ttl=64 time=0.019 ms 64 bytes from 169.254.100.11: icmp_seq=5 ttl=64 time=0.006 ms  --- 169.254.100.11 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</pre>
41. <input type="checkbox"/>	<b>Query Server:</b>  Use “ping” to verify that the <b>Query Server</b> can reach the configured <b>XMI Gateway address</b> .	<pre>\$ ping -c 5 10.250.55.1 PING 10.250.55.1 (10.250.55.1) 56(84) bytes of data. 64 bytes from 10.250.55.1: icmp_seq=1 ttl=64 time=0.018 ms 64 bytes from 10.250.55.1: icmp_seq=2 ttl=64 time=0.016 ms 64 bytes from 10.250.55.1: icmp_seq=3 ttl=64 time=0.013 ms 64 bytes from 10.250.55.1: icmp_seq=4 ttl=64 time=0.016 ms 64 bytes from 10.250.55.1: icmp_seq=5 ttl=64 time=0.011 ms  --- 10.250.55.1 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</pre>
42. <input type="checkbox"/>	<b>Query Server:</b>  Use the “ntpq” command to verify that the server has connectivity to the assigned NTP server(s).	<pre>\$ 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</pre>
43. <input type="checkbox"/>	<b>Query Server:</b>  Execute a “syscheck” to verify the current health of the server.	<pre>\$ sudo 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 \$</pre>

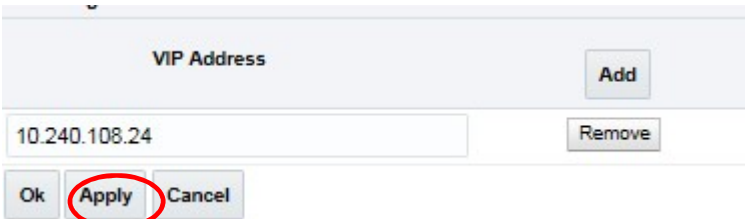
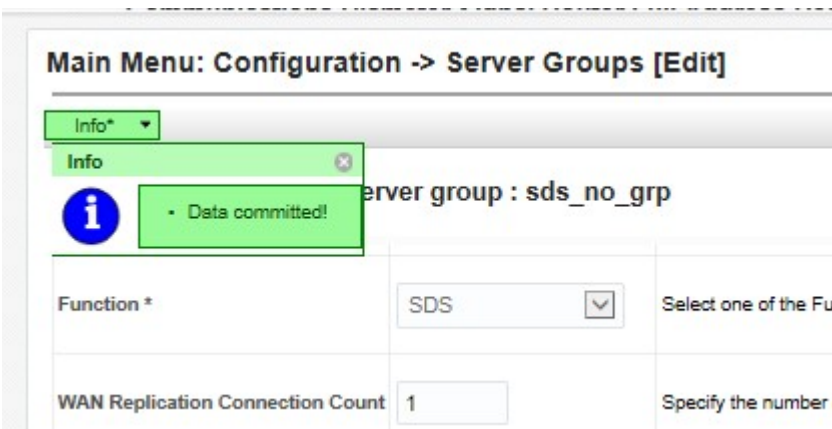
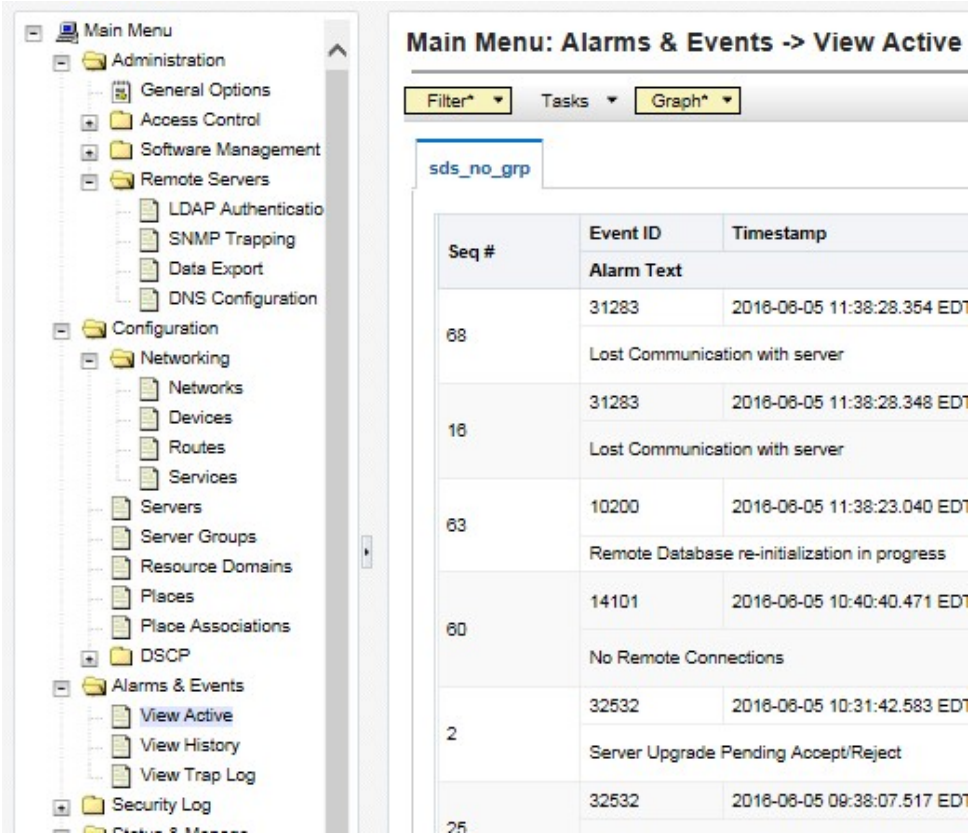
## Procedure 5. Configuring the Query Server (All SDS NOAM Sites)

Step	Procedure	Result																					
44. <div></div>	<b>Query Server:</b>  Exit to the login prompt.	\$ <b>exit</b>																					
45. <div></div>	<b>Primary SDS VIP:</b>  Select...  <b>Main Menu</b> → <b>Configuration</b> → <b>Server Groups</b>  ...as shown on the right.	<div><div><div><div><div><div></div><div>Main Menu</div></div><div><div><div>Administration</div><div><div>General Options</div><div>Access Control</div><div>Software Management</div><div>Remote Servers</div><div><div>LDAP Authentication</div><div>SNMP Trapping</div><div>Data Export</div><div>DNS Configuration</div></div></div></div><div><div>Configuration</div><div><div>Networking</div><div><div>Networks</div><div>Devices</div><div>Routes</div><div>Services</div><div>Servers</div><div>Server Groups</div><div>Resource Domains</div><div>Places</div></div></div></div></div></div></div><div><div>Main Menu: Configuration -&gt; Server Groups</div><div><div>Filter*</div><div></div></div><table><tr><th>Server Group Name</th><th>Level</th><th>Parent</th><th>Function</th></tr><tr><td>sds_no_grp</td><td>A</td><td>NONE</td><td>SDS</td></tr></table></div></div></div>	Server Group Name	Level	Parent	Function	sds_no_grp	A	NONE	SDS													
Server Group Name	Level	Parent	Function																				
sds_no_grp	A	NONE	SDS																				
46. <div></div>	<b>Primary SDS VIP:</b>  The user will be presented with the “ <b>Configuration → Server Groups</b> ” screen as shown on the right	<div><div>Main Menu: Configuration -&gt; Server Groups</div><div><div>Filter*</div><div></div></div><table><tr><th>Server Group Name</th><th>Level</th><th>Parent</th><th>Function</th><th>Connection Count</th><th>Servers</th></tr><tr><td>sds_no_grp</td><td>A</td><td>NONE</td><td>SDS</td><td>1</td><td><div>Network Element: SDS_NE NE HA Pref: DEFAULT</div><table><tr><th>Server</th><th>Node HA Pref</th><th>VIPs</th></tr><tr><td>sds-no-a</td><td></td><td>10.240.108.24</td></tr><tr><td>sds-no-b</td><td></td><td>10.240.108.24</td></tr></table></td></tr></table></div>	Server Group Name	Level	Parent	Function	Connection Count	Servers	sds_no_grp	A	NONE	SDS	1	<div>Network Element: SDS_NE NE HA Pref: DEFAULT</div> <table><tr><th>Server</th><th>Node HA Pref</th><th>VIPs</th></tr><tr><td>sds-no-a</td><td></td><td>10.240.108.24</td></tr><tr><td>sds-no-b</td><td></td><td>10.240.108.24</td></tr></table>	Server	Node HA Pref	VIPs	sds-no-a		10.240.108.24	sds-no-b		10.240.108.24
Server Group Name	Level	Parent	Function	Connection Count	Servers																		
sds_no_grp	A	NONE	SDS	1	<div>Network Element: SDS_NE NE HA Pref: DEFAULT</div> <table><tr><th>Server</th><th>Node HA Pref</th><th>VIPs</th></tr><tr><td>sds-no-a</td><td></td><td>10.240.108.24</td></tr><tr><td>sds-no-b</td><td></td><td>10.240.108.24</td></tr></table>	Server	Node HA Pref	VIPs	sds-no-a		10.240.108.24	sds-no-b		10.240.108.24									
Server	Node HA Pref	VIPs																					
sds-no-a		10.240.108.24																					
sds-no-b		10.240.108.24																					
47. <div></div>	<b>Primary SDS VIP:</b>  1) Using the mouse, select the SDS Server Group associated with the Query Server being installed.  2) Select the “ <b>Edit</b> ” dialogue button from the bottom left corner of the screen.	<div><div>Main Menu: Configuration -&gt; Server Groups</div><div><div>Filter*</div><div></div></div><table><tr><th>Server Group Name</th><th>Level</th><th>Parent</th><th>Function</th><th>Connection Count</th><th>Servers</th></tr><tr><td>sds_no_grp</td><td>A</td><td>NONE</td><td>SDS</td><td>1</td><td><div>Network Element: SDS_NE N</div><table><tr><th>Server</th><th>Node HA P</th></tr><tr><td>sds-no-a</td><td></td></tr><tr><td>sds-no-b</td><td></td></tr></table></td></tr></table><div><div>&lt;</div><div>InsertEditDeleteReport</div></div></div>	Server Group Name	Level	Parent	Function	Connection Count	Servers	sds_no_grp	A	NONE	SDS	1	<div>Network Element: SDS_NE N</div> <table><tr><th>Server</th><th>Node HA P</th></tr><tr><td>sds-no-a</td><td></td></tr><tr><td>sds-no-b</td><td></td></tr></table>	Server	Node HA P	sds-no-a		sds-no-b				
Server Group Name	Level	Parent	Function	Connection Count	Servers																		
sds_no_grp	A	NONE	SDS	1	<div>Network Element: SDS_NE N</div> <table><tr><th>Server</th><th>Node HA P</th></tr><tr><td>sds-no-a</td><td></td></tr><tr><td>sds-no-b</td><td></td></tr></table>	Server	Node HA P	sds-no-a		sds-no-b													
Server	Node HA P																						
sds-no-a																							
sds-no-b																							

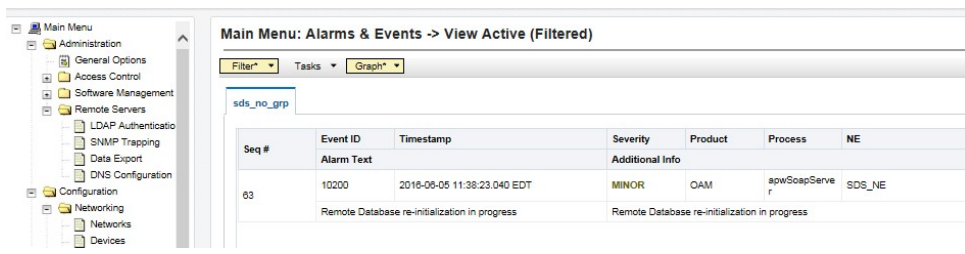

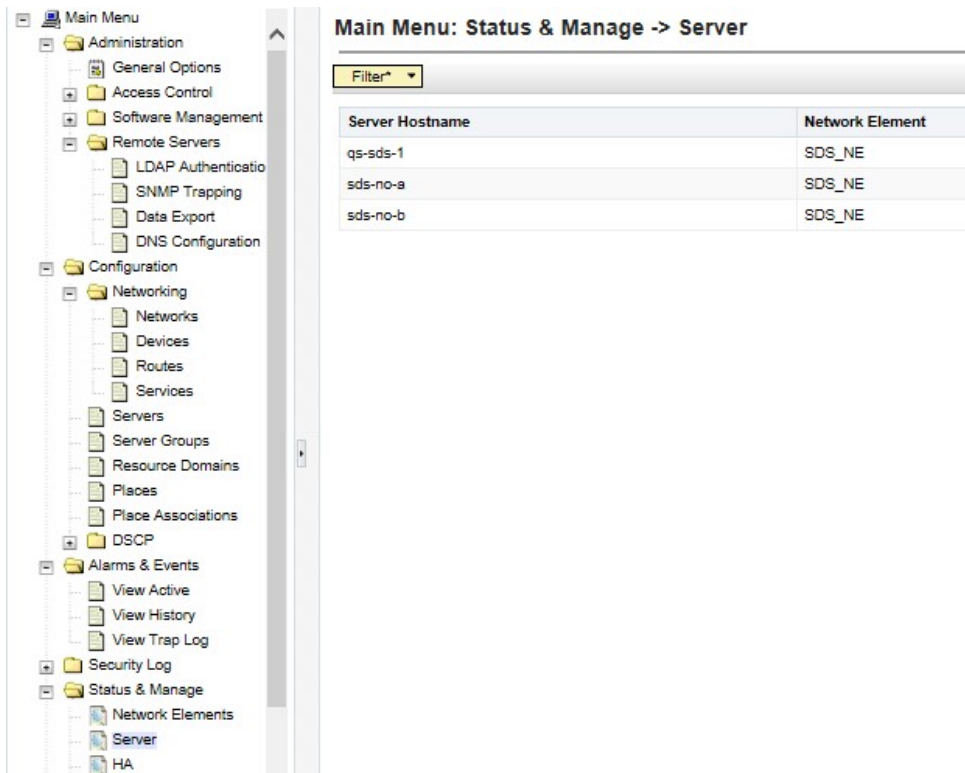
**Procedure 5. Configuring the Query Server (All SDS NOAM Sites)**

Step	Procedure	Result																														
48. <div></div>	<p><b>Primary SDS VIP:</b></p> <p>The user will be presented with the “<b>Server Groups [Edit]</b>” screen as shown on the right.</p>	<div><div>Main Menu: Configuration → Server Groups [Edit]</div><div></div><div>Modifying attributes of server group : sds_no_grp</div><table><thead><tr><th>Field</th><th>Value</th><th>Description</th></tr></thead><tbody><tr><td>Server Group Name *</td><td>sds_no_grp</td><td>Unique Identifier used to label a Server Group. [Defa</td></tr><tr><td>Level *</td><td>A <div></div></td><td>Select one of the Levels supported by the system [A</td></tr><tr><td>Parent *</td><td>NONE <div></div></td><td>Select an existing Server Group [A value is required.</td></tr><tr><td>Function *</td><td>SDS <div></div></td><td>Select one of the Functions supported by the system</td></tr><tr><td>WAN Replication Connection Count</td><td>1</td><td>Specify the number of TCP connections that will be u</td></tr></tbody></table><div><div>SDS_NE</div><div><input type="checkbox"/> Prefer Network Element as spare</div></div><table><thead><tr><th>Server</th><th>SG Inclusion</th><th>Preferred HA Role</th></tr></thead><tbody><tr><td>sds-no-a</td><td><input checked="" type="checkbox"/> Include in SG</td><td><input type="checkbox"/> Prefer server as spare</td></tr><tr><td>sds-no-b</td><td><input checked="" type="checkbox"/> Include in SG</td><td><input type="checkbox"/> Prefer server as spare</td></tr><tr><td>qs-sds-1</td><td><input type="checkbox"/> Include in SG</td><td><input type="checkbox"/> Prefer server as spare</td></tr></tbody></table><div>VIP Assignment</div><div><div>VIP Address</div><div>Add</div></div></div>	Field	Value	Description	Server Group Name *	sds_no_grp	Unique Identifier used to label a Server Group. [Defa	Level *	A <div></div>	Select one of the Levels supported by the system [A	Parent *	NONE <div></div>	Select an existing Server Group [A value is required.	Function *	SDS <div></div>	Select one of the Functions supported by the system	WAN Replication Connection Count	1	Specify the number of TCP connections that will be u	Server	SG Inclusion	Preferred HA Role	sds-no-a	<input checked="" type="checkbox"/> Include in SG	<input type="checkbox"/> Prefer server as spare	sds-no-b	<input checked="" type="checkbox"/> Include in SG	<input type="checkbox"/> Prefer server as spare	qs-sds-1	<input type="checkbox"/> Include in SG	<input type="checkbox"/> Prefer server as spare
Field	Value	Description																														
Server Group Name *	sds_no_grp	Unique Identifier used to label a Server Group. [Defa																														
Level *	A <div></div>	Select one of the Levels supported by the system [A																														
Parent *	NONE <div></div>	Select an existing Server Group [A value is required.																														
Function *	SDS <div></div>	Select one of the Functions supported by the system																														
WAN Replication Connection Count	1	Specify the number of TCP connections that will be u																														
Server	SG Inclusion	Preferred HA Role																														
sds-no-a	<input checked="" type="checkbox"/> Include in SG	<input type="checkbox"/> Prefer server as spare																														
sds-no-b	<input checked="" type="checkbox"/> Include in SG	<input type="checkbox"/> Prefer server as spare																														
qs-sds-1	<input type="checkbox"/> Include in SG	<input type="checkbox"/> Prefer server as spare																														
49.	<p><b>Primary 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>	<table><thead><tr><th>Server</th><th>SG Inclusion</th><th>Preferred HA Role</th></tr></thead><tbody><tr><td>sds-no-a</td><td><input checked="" type="checkbox"/> Include in SG</td><td><input type="checkbox"/> Prefer server as spare</td></tr><tr><td>sds-no-b</td><td><input checked="" type="checkbox"/> Include in SG</td><td><input type="checkbox"/> Prefer server as spare</td></tr><tr><td>qs-sds-1</td><td><input checked="" type="checkbox"/> Include in SG</td><td><input type="checkbox"/> Prefer server as spare</td></tr></tbody></table>	Server	SG Inclusion	Preferred HA Role	sds-no-a	<input checked="" type="checkbox"/> Include in SG	<input type="checkbox"/> Prefer server as spare	sds-no-b	<input checked="" type="checkbox"/> Include in SG	<input type="checkbox"/> Prefer server as spare	qs-sds-1	<input checked="" type="checkbox"/> Include in SG	<input type="checkbox"/> Prefer server as spare																		
Server	SG Inclusion	Preferred HA Role																														
sds-no-a	<input checked="" type="checkbox"/> Include in SG	<input type="checkbox"/> Prefer server as spare																														
sds-no-b	<input checked="" type="checkbox"/> Include in SG	<input type="checkbox"/> Prefer server as spare																														
qs-sds-1	<input checked="" type="checkbox"/> Include in SG	<input type="checkbox"/> Prefer server as spare																														

**Procedure 5. Configuring the Query Server (All SDS NOAM Sites)**

Step	Procedure	Result																												
50. <div></div>	<b>Primary SDS VIP:</b>  Click the “ <b>Apply</b> ” dialogue button from the bottom of the screen.																													
51. <div></div>	<b>Primary SDS VIP:</b>  The user should be presented with a banner information message stating “ <b>Data committed</b> ”.																													
52. <div></div>	<b>Primary SDS VIP:</b>  Select...  <u><b>Main Menu</b></u> → <b>Alarms &amp; Events</b> → <b>View Active</b>  ...as shown on the right.	 <table><tr><th>Seq #</th><th>Event ID</th><th>Timestamp</th><th>Alarm Text</th></tr><tr><td>68</td><td>31283</td><td>2016-08-05 11:38:28.354 EDT</td><td>Lost Communication with server</td></tr><tr><td>16</td><td>31283</td><td>2016-08-05 11:38:28.348 EDT</td><td>Lost Communication with server</td></tr><tr><td>63</td><td>10200</td><td>2016-08-05 11:38:23.040 EDT</td><td>Remote Database re-initialization in progress</td></tr><tr><td>60</td><td>14101</td><td>2016-08-05 10:40:40.471 EDT</td><td>No Remote Connections</td></tr><tr><td>2</td><td>32532</td><td>2016-08-05 10:31:42.583 EDT</td><td>Server Upgrade Pending Accept/Reject</td></tr><tr><td>25</td><td>32532</td><td>2016-08-05 09:38:07.517 EDT</td><td></td></tr></table>	Seq #	Event ID	Timestamp	Alarm Text	68	31283	2016-08-05 11:38:28.354 EDT	Lost Communication with server	16	31283	2016-08-05 11:38:28.348 EDT	Lost Communication with server	63	10200	2016-08-05 11:38:23.040 EDT	Remote Database re-initialization in progress	60	14101	2016-08-05 10:40:40.471 EDT	No Remote Connections	2	32532	2016-08-05 10:31:42.583 EDT	Server Upgrade Pending Accept/Reject	25	32532	2016-08-05 09:38:07.517 EDT	
Seq #	Event ID	Timestamp	Alarm Text																											
68	31283	2016-08-05 11:38:28.354 EDT	Lost Communication with server																											
16	31283	2016-08-05 11:38:28.348 EDT	Lost Communication with server																											
63	10200	2016-08-05 11:38:23.040 EDT	Remote Database re-initialization in progress																											
60	14101	2016-08-05 10:40:40.471 EDT	No Remote Connections																											
2	32532	2016-08-05 10:31:42.583 EDT	Server Upgrade Pending Accept/Reject																											
25	32532	2016-08-05 09:38:07.517 EDT																												

**Procedure 5. Configuring the Query Server (All SDS NOAM Sites)**

Step	Procedure	Result
53.	<p><b>SDS VIP:</b></p> <p>Verify that <b>Event ID 10200</b> (<i>Remote Database re-initialization in progress</i>) is present with the <b>Query Server hostname</b> in the “<b>Instance</b>” field..</p>	
<div>  <p><b>MONITOR EVENT ID 10200 (<i>Remote Database re-initialization in progress</i>).</b>  <b>DO NOT PROCEED TO THE NEXT STEP UNTIL THE ALARM CLEAR IS RECEIVED.</b></p> </div>		
54.	<p><b>Primary 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>	

Procedure 5. Configuring the Query Server (All SDS NOAM Sites)

Step	Procedure	Result																												
55. <div></div>	<b>Primary SDS VIP:</b>  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> ”.	<div>Main Menu: Status &amp; Manage -&gt; Server</div> <div><div>Filter*</div><table><thead><tr><th>Server Hostname</th><th>Network Element</th><th>Appl State</th><th>Alm</th><th>DB</th><th>Reporting Status</th><th>Proc</th></tr></thead><tbody><tr><td>qs-sds-1</td><td>SDS_NE</td><td>Disabled</td><td>Err</td><td>Norm</td><td>Norm</td><td>Man</td></tr><tr><td>sds-no-a</td><td>SDS_NE</td><td>Enabled</td><td>Err</td><td>Norm</td><td>Norm</td><td>Norm</td></tr><tr><td>sds-no-b</td><td>SDS_NE</td><td>Enabled</td><td>Warn</td><td>Norm</td><td>Norm</td><td>Norm</td></tr></tbody></table></div>	Server Hostname	Network Element	Appl State	Alm	DB	Reporting Status	Proc	qs-sds-1	SDS_NE	Disabled	Err	Norm	Norm	Man	sds-no-a	SDS_NE	Enabled	Err	Norm	Norm	Norm	sds-no-b	SDS_NE	Enabled	Warn	Norm	Norm	Norm
Server Hostname	Network Element	Appl State	Alm	DB	Reporting Status	Proc																								
qs-sds-1	SDS_NE	Disabled	Err	Norm	Norm	Man																								
sds-no-a	SDS_NE	Enabled	Err	Norm	Norm	Norm																								
sds-no-b	SDS_NE	Enabled	Warn	Norm	Norm	Norm																								
56. <div></div>	<b>Primary SDS VIP:</b>  1) Using the mouse, select the “ <b>Query Server</b> ” hostname. The line entry should now be highlighted in <b>GREEN</b> .  2) Select the “ <b>Restart</b> ” dialogue button from the bottom left corner of the screen.  3) Click the “ <b>OK</b> ” button on the confirmation dialogue box.  4) The user should be presented with a confirmation message (in the banner area) for the “ <b>Query Server</b> ” stating: “ <b>Successfully restarted application</b> ”.	<div><div><div>Networks</div><div>Devices</div><div>Routes</div><div>Services</div><div>Servers</div><div>Server Groups</div><div>Resource Domains</div><div>Places</div></div><div><div>Stop</div><div>Restart</div><div>Reboot</div><div>NTP Sync</div><div>Report</div></div></div> <div><div>Message from webpage</div><div><div>?</div><div>Are you sure you wish to restart application software on the following server(s)? qs-sds-1</div><div><div>OK</div><div>Cancel</div></div></div></div> <div><div>Main Menu: Status &amp; Manage -&gt; Server</div><div><div>Filter*</div><div>Info</div><div><div>Info</div><div>qs-sds-1: Successfully restarted application.</div></div><table><thead><tr><th>Server Host</th><th>Network Element</th><th>Appl State</th><th>Alm</th><th>DB</th></tr></thead><tbody><tr><td>qs-sds-1</td><td></td><td>Enabled</td><td>Warn</td><td>Norm</td></tr><tr><td>sds-no-a</td><td>SDS_NE</td><td>Enabled</td><td>Err</td><td>Norm</td></tr><tr><td>sds-no-b</td><td>SDS_NE</td><td>Enabled</td><td>Warn</td><td>Norm</td></tr></tbody></table></div></div>	Server Host	Network Element	Appl State	Alm	DB	qs-sds-1		Enabled	Warn	Norm	sds-no-a	SDS_NE	Enabled	Err	Norm	sds-no-b	SDS_NE	Enabled	Warn	Norm								
Server Host	Network Element	Appl State	Alm	DB																										
qs-sds-1		Enabled	Warn	Norm																										
sds-no-a	SDS_NE	Enabled	Err	Norm																										
sds-no-b	SDS_NE	Enabled	Warn	Norm																										

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



**Procedure 5. Configuring the Query Server (All SDS NOAM Sites)**

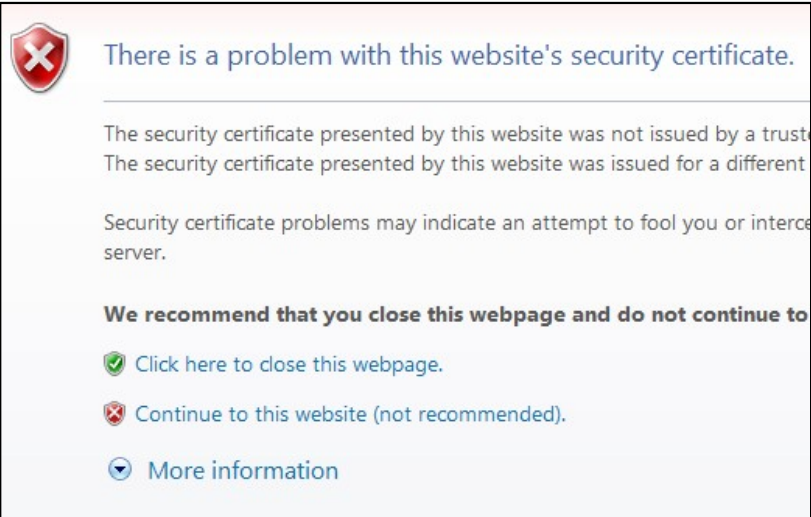
Step	Procedure	Result																												
57. <div></div>	<b>Primary SDS VIP:</b>  Verify that the “ <b>Appl State</b> ” now shows “ <b>Enabled</b> ” and that the “ <b>Alm, DB, Reporting Status &amp; Proc</b> ” status columns all show “ <b>Norm</b> ” for the “ <b>Query Server</b> ”.	<table><tr><th>Server Hostname</th><th>Network Element</th><th>Appl State</th><th>Alm</th><th>DB</th><th>Reporting Status</th><th>Proc</th></tr><tr><td>qs-sds-1</td><td>SDS_NE</td><td>Enabled</td><td>Warn</td><td>Norm</td><td>Norm</td><td>Norm</td></tr><tr><td>sds-no-a</td><td>SDS_NE</td><td>Enabled</td><td>Err</td><td>Norm</td><td>Norm</td><td>Norm</td></tr><tr><td>sds-no-b</td><td>SDS_NE</td><td>Enabled</td><td>Warn</td><td>Norm</td><td>Norm</td><td>Norm</td></tr></table>	Server Hostname	Network Element	Appl State	Alm	DB	Reporting Status	Proc	qs-sds-1	SDS_NE	Enabled	Warn	Norm	Norm	Norm	sds-no-a	SDS_NE	Enabled	Err	Norm	Norm	Norm	sds-no-b	SDS_NE	Enabled	Warn	Norm	Norm	Norm
Server Hostname	Network Element	Appl State	Alm	DB	Reporting Status	Proc																								
qs-sds-1	SDS_NE	Enabled	Warn	Norm	Norm	Norm																								
sds-no-a	SDS_NE	Enabled	Err	Norm	Norm	Norm																								
sds-no-b	SDS_NE	Enabled	Warn	Norm	Norm	Norm																								
58. <div></div>	<b>Primary SDS VIP:</b>  Click the “ <b>Logout</b> ” link on the SDS server GUI.	<div></div> <div><div><div></div>Pause Updates</div><div> </div><div><a href="#">Help</a></div><div> </div><div>Logged in Account <div>guidadmin</div></div><div> </div><div><a href="#">Log Out</a></div></div> <div></div>																												
THIS PROCEDURE HAS BEEN COMPLETED																														

## 5.4 OAM Installation for the DR SDS NOAM Site


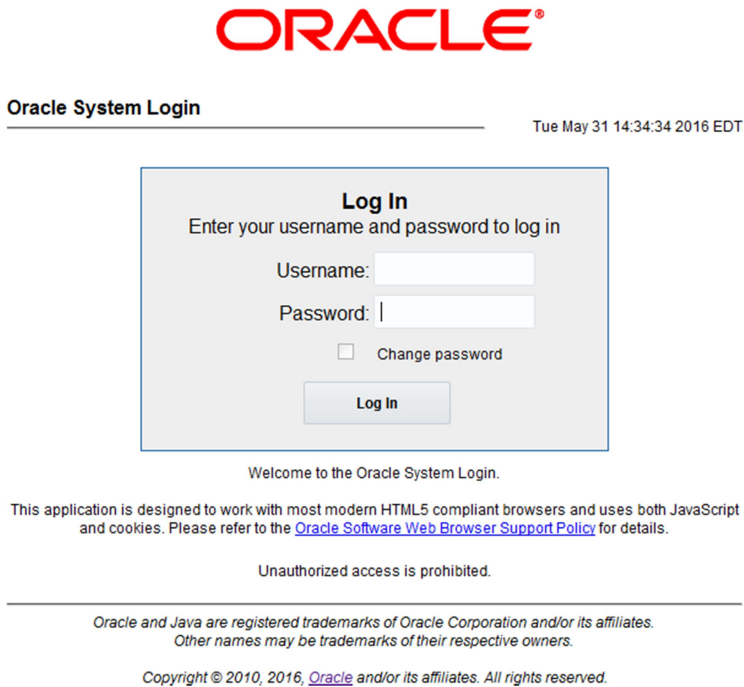

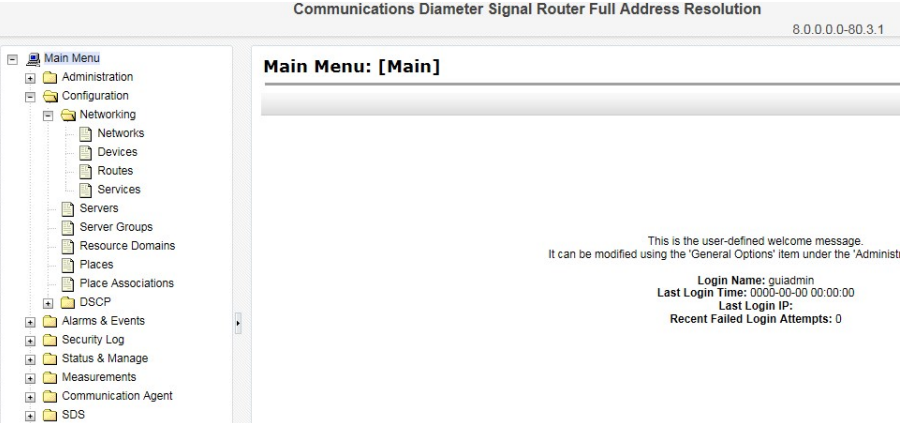
**Assumptions:**

- 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 E**.
- 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 6. Configuring the DR NOAM Servers (DR SDS NOAM Site Only)**

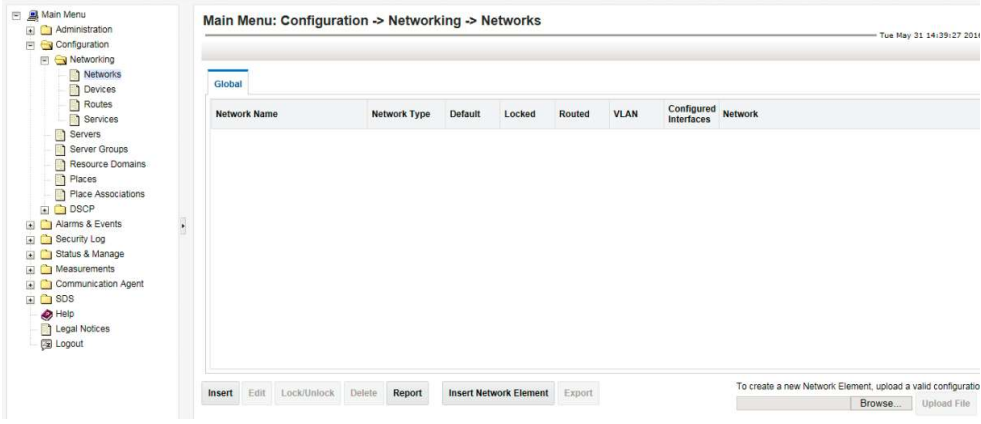
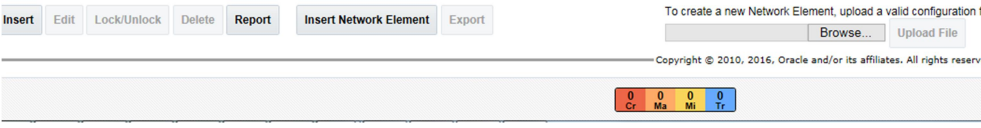
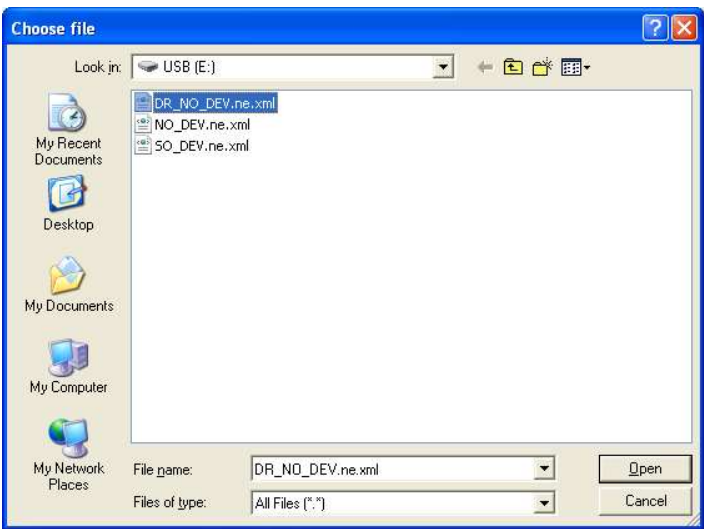
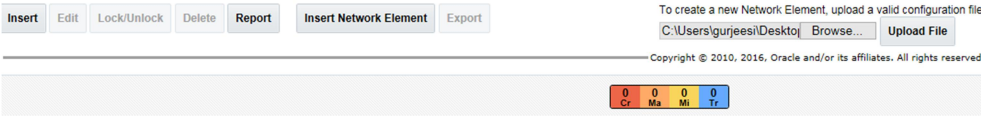
Step	Procedure	Result
1. <input type="checkbox"/>	<b>Primary SDS VIP:</b> Launch an approved web browser and connect to the XML Virtual IP Address (VIP) of the Active SDS site  <b>NOTE:</b> <i>If presented with the “security certificate” warning screen shown to the right, choose the following option: “Continue to this website (not recommended)”.</i>	

## Procedure 6. Configuring the DR NOAM Servers (DR SDS NOAM Site Only)

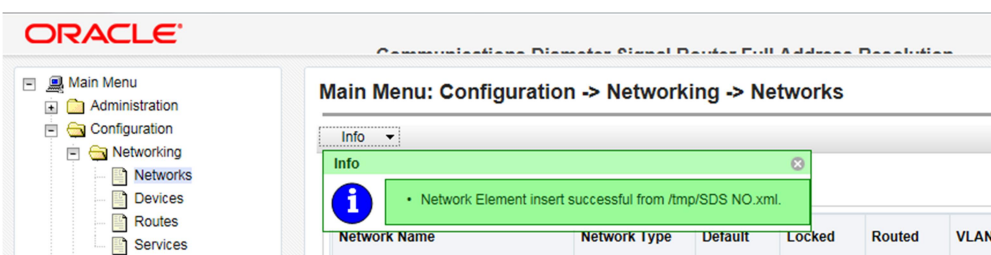
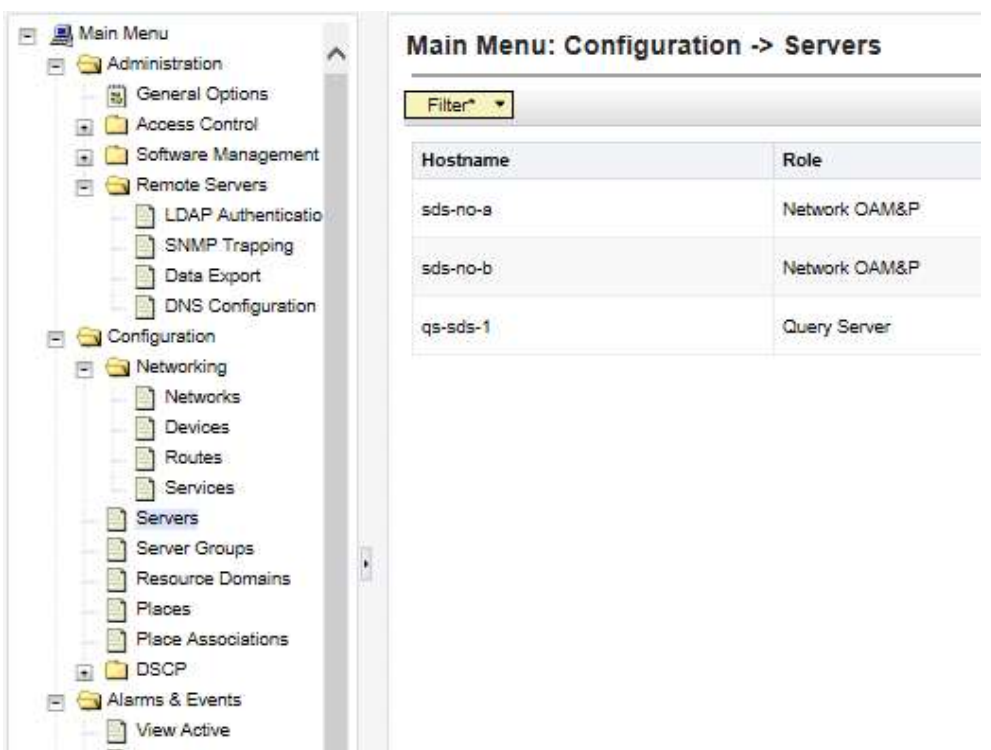
Step	Procedure	Result
2. 	<b>Primary SDS VIP:</b>  The user should be presented the login screen shown on the right.  Login to the GUI using the default user and password.	 <p>The screenshot shows the Oracle System Login page. At the top is the Oracle logo. Below it is the title 'Oracle System Login' and the date 'Tue May 31 14:34:34 2016 EDT'. The main content area contains a 'Log In' box with fields for 'Username:' and 'Password:', a 'Change password' checkbox, and a 'Log In' button. Below the box, it says 'Welcome to the Oracle System Login.' and 'This application is designed to work with most modern HTML5 compliant browsers and uses both JavaScript and cookies. Please refer to the <a href="#">Oracle Software Web Browser Support Policy</a> for details.' At the bottom, it states 'Unauthorized access is prohibited.' and 'Oracle and Java are registered trademarks of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners. Copyright © 2010, 2016, Oracle and/or its affiliates. All rights reserved.'</p>
3. 	<b>Primary SDS VIP:</b>  The user should be presented the SDS Main Menu as shown on the right.	 <p>The screenshot shows the SDS Main Menu. The title bar reads 'Communications Diameter Signal Router Full Address Resolution' with the version '8.0.0.0-80.3.1'. On the left is a tree view of the 'Main Menu' with categories like Administration, Configuration, Networking, Servers, and Alarms &amp; Events. The main area is titled 'Main Menu: [Main]' and contains a message: 'This is the user-defined welcome message. It can be modified using the "General Options" item under the "Administ...'. Below this, it shows 'Login Name: guiadmin', 'Last Login Time: 0000-00-00 00:00:00', 'Last Login IP:', and 'Recent Failed Login Attempts: 0'.</p>



## Procedure 6. Configuring the DR NOAM Servers (DR SDS NOAM Site Only)

Step	Procedure	Result
4.	<p><b>Primary SDS VIP:</b></p> <p>Select...</p> <p><b>Main Menu</b> → Configuration → Network Elements</p> <p>...as shown on the right.</p>	
5.	<p><b>Primary 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>	
6.	<p><b>Primary 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 E</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>	
7.	<p><b>Primary SDS VIP:</b></p> <p>Select the <b>“Upload File”</b> dialogue button (bottom left corner of screen).</p>	

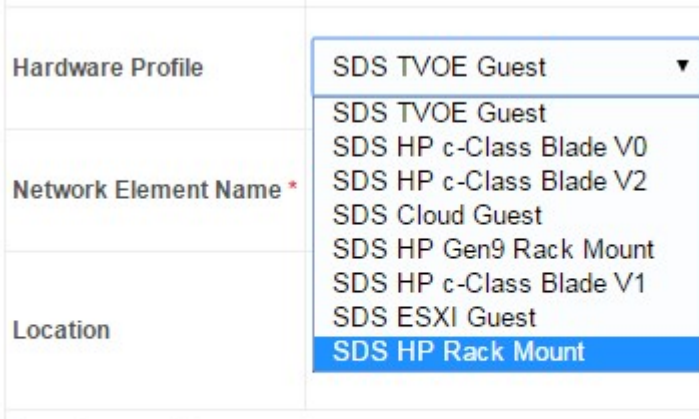
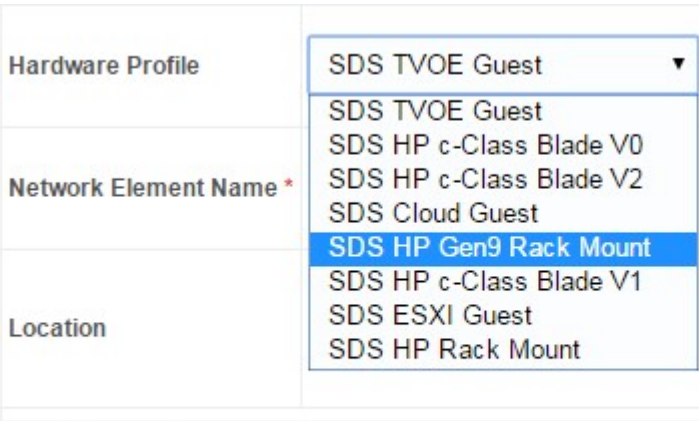
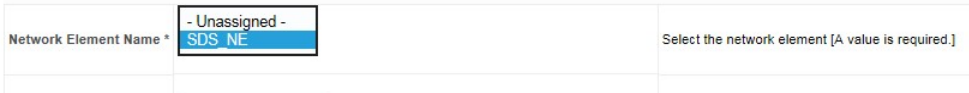
**Procedure 6. Configuring the DR NOAM Servers (DR SDS NOAM Site Only)**

Step	Procedure	Result																		
8. <div></div>	<p><b>Primary SDS VIP:</b></p> <p>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.</p>	<div></div> <div><p>Main Menu: Configuration -&gt; Networking -&gt; Networks</p><p>Info</p><table><thead><tr><th>Network Name</th><th>Network Type</th><th>Default</th><th>Locked</th><th>Routed</th><th>VLAN</th></tr></thead><tbody><tr><td>XMI</td><td>OAM</td><td>Yes</td><td>Yes</td><td>Yes</td><td>14</td></tr><tr><td>IMI</td><td>OAM</td><td>No</td><td>Yes</td><td>No</td><td>15</td></tr></tbody></table></div>	Network Name	Network Type	Default	Locked	Routed	VLAN	XMI	OAM	Yes	Yes	Yes	14	IMI	OAM	No	Yes	No	15
Network Name	Network Type	Default	Locked	Routed	VLAN															
XMI	OAM	Yes	Yes	Yes	14															
IMI	OAM	No	Yes	No	15															
9. <div></div>	<p><b>Primary SDS VIP:</b></p> <p>1) Select...</p> <p><b>Main Menu</b> → <b>Configuration</b> → <b>Servers</b></p> <p>...as shown on the right.</p> <p>2) Select the “Insert” dialogue button (bottom left corner of screen).</p>	<div></div> <div><p>Main Menu: Configuration -&gt; Servers</p><p>Filter*</p><table><thead><tr><th>Hostname</th><th>Role</th></tr></thead><tbody><tr><td>sds-no-a</td><td>Network OAM&amp;P</td></tr><tr><td>sds-no-b</td><td>Network OAM&amp;P</td></tr><tr><td>qs-sds-1</td><td>Query Server</td></tr></tbody></table></div>	Hostname	Role	sds-no-a	Network OAM&P	sds-no-b	Network OAM&P	qs-sds-1	Query Server										
Hostname	Role																			
sds-no-a	Network OAM&P																			
sds-no-b	Network OAM&P																			
qs-sds-1	Query Server																			

**Procedure 6. Configuring the DR NOAM Servers (DR SDS NOAM Site Only)**

Step	Procedure	Result																					
10. <input type="checkbox"/>	<b>Primary SDS VIP:</b> The user is now presented with the “Adding a new server” configuration screen.	<p><b>Adding a new server</b></p> <table border="1"> <thead> <tr> <th>Attribute</th><th>Value</th><th>Description</th></tr> </thead> <tbody> <tr> <td>Hostname *</td><td><input type="text"/></td><td>Unique name for the server. [Default alphanumeric and end with an alpha]</td></tr> <tr> <td>Role *</td><td>- Select Role - <input type="button" value="v"/></td><td>Select the role for the server.</td></tr> <tr> <td>System ID</td><td><input type="text"/></td><td>System ID for the server.</td></tr> <tr> <td>Hardware Profile</td><td>SDS HP Rack Mount <input type="button" value="v"/></td><td>Hardware profile for the server.</td></tr> <tr> <td>Network Element Name *</td><td>- Unassigned - <input type="button" value="v"/></td><td>Select the network element name for the server.</td></tr> <tr> <td>Location</td><td><input type="text"/></td><td>Location for the server.</td></tr> </tbody> </table> <p>Ok Apply Cancel</p>	Attribute	Value	Description	Hostname *	<input type="text"/>	Unique name for the server. [Default alphanumeric and end with an alpha]	Role *	- Select Role - <input type="button" value="v"/>	Select the role for the server.	System ID	<input type="text"/>	System ID for the server.	Hardware Profile	SDS HP Rack Mount <input type="button" value="v"/>	Hardware profile for the server.	Network Element Name *	- Unassigned - <input type="button" value="v"/>	Select the network element name for the server.	Location	<input type="text"/>	Location for the server.
Attribute	Value	Description																					
Hostname *	<input type="text"/>	Unique name for the server. [Default alphanumeric and end with an alpha]																					
Role *	- Select Role - <input type="button" value="v"/>	Select the role for the server.																					
System ID	<input type="text"/>	System ID for the server.																					
Hardware Profile	SDS HP Rack Mount <input type="button" value="v"/>	Hardware profile for the server.																					
Network Element Name *	- Unassigned - <input type="button" value="v"/>	Select the network element name for the server.																					
Location	<input type="text"/>	Location for the server.																					
11. <input type="checkbox"/>	<b>Primary SDS VIP:</b> Input the assigned “hostname” for DR NOAM Server.	<table border="1"> <tbody> <tr> <td>Hostname *</td><td>dr-sds-no-a</td><td>Unique name for the server. [Default alphanumeric and end with an alpha]</td></tr> </tbody> </table>	Hostname *	dr-sds-no-a	Unique name for the server. [Default alphanumeric and end with an alpha]																		
Hostname *	dr-sds-no-a	Unique name for the server. [Default alphanumeric and end with an alpha]																					
12. <input type="checkbox"/>	<b>Primary SDS VIP:</b> Select “ <b>NETWORK OAM&amp;P</b> ” for the server “Role” from the pull-down menu.	<table border="1"> <tbody> <tr> <td>Role *</td><td> <div>           - Select Role -  <b>NETWORK OAM&amp;P</b>            SYSTEM OAM            MP            QUERY SERVER         </div> </td><td>Select the role for the server.</td></tr> <tr> <td>System ID</td><td><input type="text"/></td><td>System ID for the server.</td></tr> </tbody> </table>	Role *	<div>           - Select Role -  <b>NETWORK OAM&amp;P</b>            SYSTEM OAM            MP            QUERY SERVER         </div>	Select the role for the server.	System ID	<input type="text"/>	System ID for the server.															
Role *	<div>           - Select Role -  <b>NETWORK OAM&amp;P</b>            SYSTEM OAM            MP            QUERY SERVER         </div>	Select the role for the server.																					
System ID	<input type="text"/>	System ID for the server.																					
13. <input type="checkbox"/>	<b>Primary SDS VIP:</b> Input the assigned hostname again as the “System ID” for the SDS DR Server (A or B).	<table border="1"> <tbody> <tr> <td>System ID</td><td>dr-sds-no-a</td><td>System ID for the server.</td></tr> </tbody> </table>	System ID	dr-sds-no-a	System ID for the server.																		
System ID	dr-sds-no-a	System ID for the server.																					

## Procedure 6. Configuring the DR NOAM Servers (DR SDS NOAM Site Only)

Step	Procedure	Result
14. <input type="checkbox"/>	<p><b>Primary SDS VIP:</b></p> <p>For <b>GEN8 Server:</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>For <b>GEN9 Server:</b></p> <p>Select “<b>SDS HP GEN9 Rack Mount</b>” for the <b>Hardware Profile</b> for the SDS from the pull-down menu.</p>	<p>For GEN8 select “<b>SDS HP Rack Mount</b>” from the <b>Hardware Profile</b> pull-down menu.</p>  <p>Ok Apply Cancel</p> <p>For GEN9 select “<b>SDS HP GEN9 Rack Mount</b>” from the <b>Hardware Profile</b> pull-down menu.</p>  <p>Ok Apply Cancel</p>
15. <input type="checkbox"/>	<p><b>Primary 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 Network Element Name is selected, the Interfaces fields will be displayed, as seen in <b>Step 17</b>.</p>


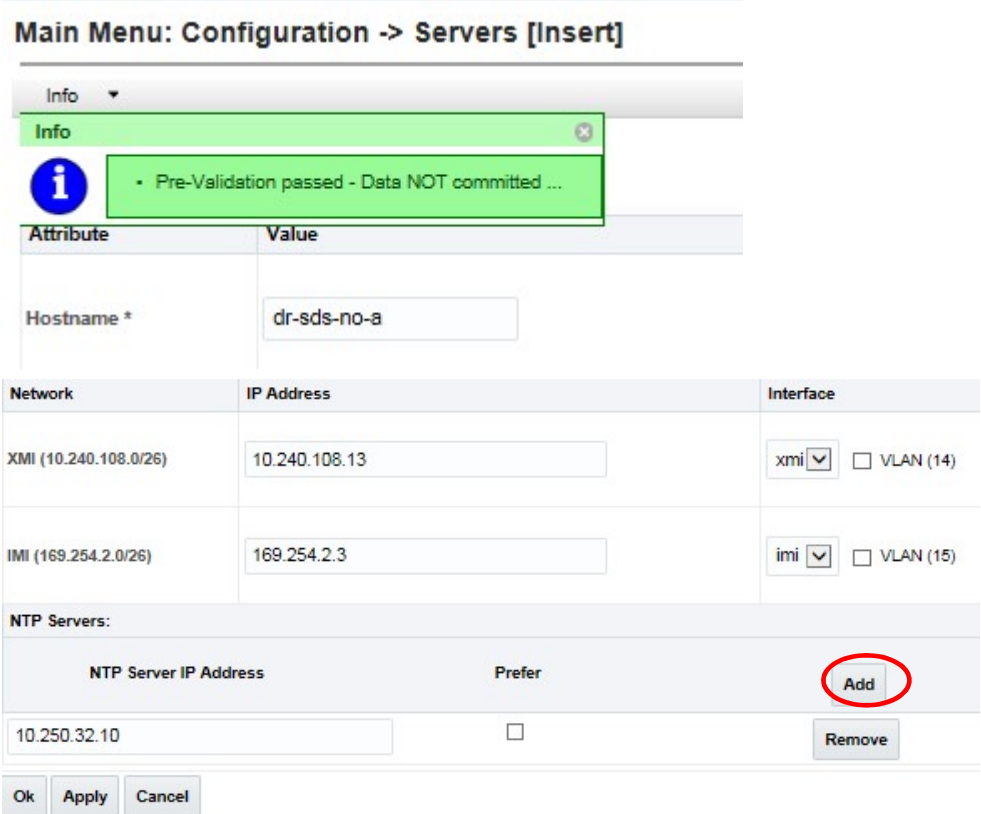


**Procedure 6. Configuring the DR NOAM Servers (DR SDS NOAM Site Only)**

Step	Procedure	Result																			
16. <div></div>	<b>Primary SDS VIP:</b>  Enter the site location.	<div><div>Location</div><div>bangalore</div><div>Location description [Default]</div></div> <b>NOTE:</b> <i>Location is an optional field.</i>																			
17.	<b>SDS Server NOAM A:</b>  1) Enter the <b>MGMNT_VLAN</b> IP address for the DR SDS Server.  2) Set the <b>MGMNT_VLAN</b> Interface to “ <b>bond0</b> ” and “ <b>check</b> ” the VLAN checkbox.  3) Enter the <b>IMI</b> IP address for the DR SDS Server.  4) Set the <b>IMI</b> Interface to “ <b>bond0</b> ” and “ <b>check</b> ” the VLAN checkbox.	<div><div><div>XMI (10.240.108.0/26)</div><div>10.240.108.13</div><div>xmi <input type="checkbox"/> VLAN (14)</div></div><div><div>IMI (169.254.2.0/26)</div><div>169.254.2.3</div><div>imi <input type="checkbox"/> VLAN (15)</div></div></div> <table><thead><tr><th>SDS Server (DR NOAM)</th><th>Network</th><th>IP Address</th><th>Interface</th><th>VLAN Checkbox</th></tr></thead><tbody><tr><td rowspan="2">DR SDS-A</td><td>MGMNT_VLAN</td><td>169.254.1.14</td><td rowspan="2">bond0</td><td rowspan="2"></td></tr><tr><td>IMI</td><td>169.254.100.14</td></tr><tr><td rowspan="2">DR SDS-B</td><td>MGMNT_VLAN</td><td>169.254.1.15</td><td rowspan="2">bond0</td><td rowspan="2"></td></tr><tr><td>IMI</td><td>169.254.100.15</td></tr></tbody></table> <b>NOTE_1:</b> <i>These IP addresses are based on the info in the NAPD and the Network Element Config file.</i>  <b>NOTE_2:</b> <i>The <b>MGMT_VLAN</b> should only be present when 4948E-F AggregationSwitches are deployed with SDS NOAM / Query Server RMS. If the <b>MGMT_VLAN</b> is not present, the <b>IMI</b> network values shown above still apply.</i>	SDS Server (DR NOAM)	Network	IP Address	Interface	VLAN Checkbox	DR SDS-A	MGMNT_VLAN	169.254.1.14	bond0		IMI	169.254.100.14	DR SDS-B	MGMNT_VLAN	169.254.1.15	bond0		IMI	169.254.100.15
SDS Server (DR NOAM)	Network	IP Address	Interface	VLAN Checkbox																	
DR SDS-A	MGMNT_VLAN	169.254.1.14	bond0																		
	IMI	169.254.100.14																			
DR SDS-B	MGMNT_VLAN	169.254.1.15	bond0																		
	IMI	169.254.100.15																			

**Procedure 6. Configuring the DR NOAM Servers (DR SDS NOAM Site Only)**


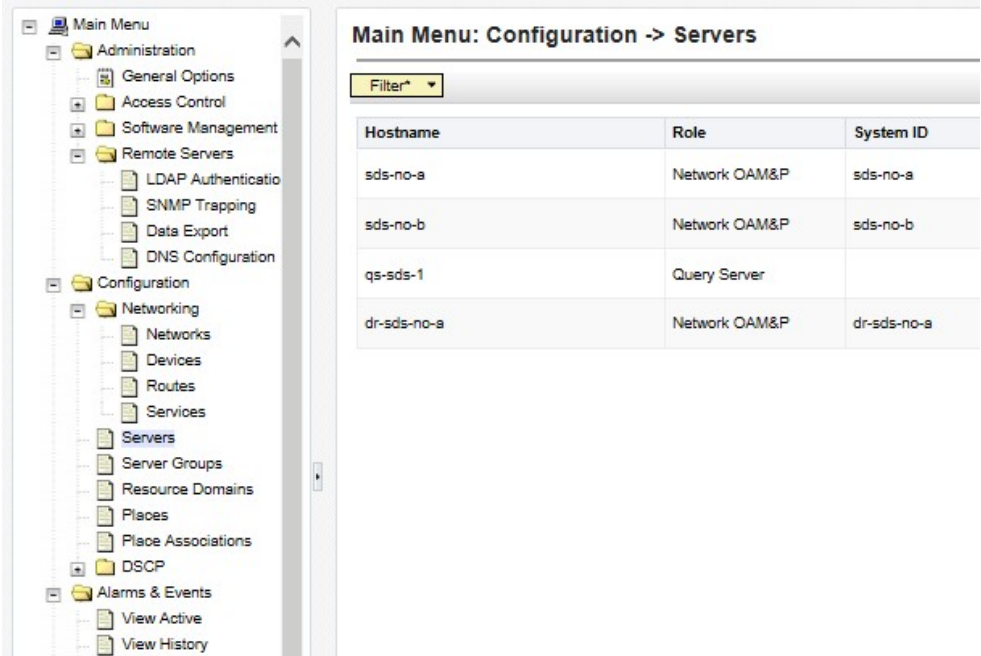

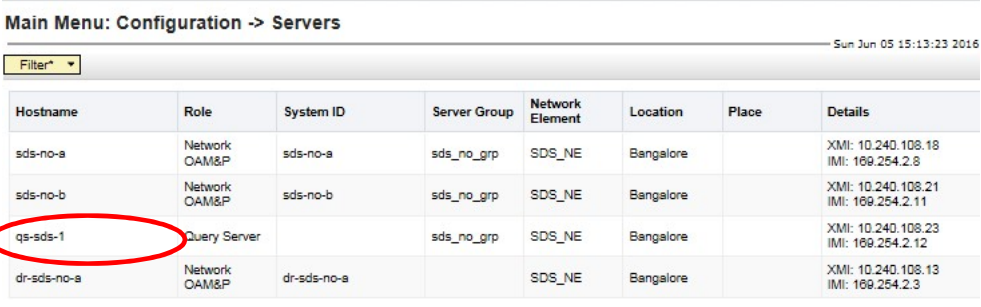

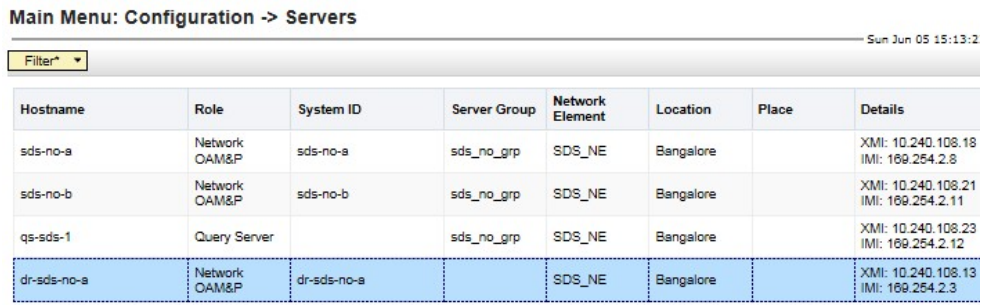

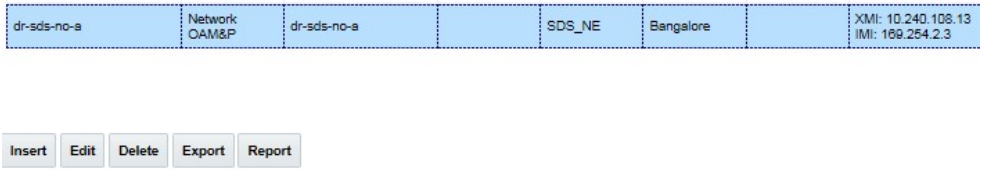
Step	Procedure	Result																								
18.	<p>1) Enter the customer assigned <b>XMI</b> IP address for the DR SDS Server.</p> <p><b>Layer 3</b> (No VLAN tagging used for XMI)</p> <p>2) Set the <b>XMI</b> Interface to “<b>bond1</b>” and “<b>DO NOT check</b>” the VLAN checkbox.</p> <p>- OR -</p> <p><b>Layer 2</b> (VLAN tagging used for XMI)</p> <p>2) Set the <b>XMI</b> Interface to “<b>bond0</b>” and “<b>check</b>” the VLAN checkbox.</p>	<table><tr><th>SDS Server (DR NOAM)</th><th>Network</th><th>VLAN tagging (on XMI network)</th><th>Interface</th><th>VLAN Checkbox</th></tr><tr><td rowspan="2">DR SDS NOAM Server (A or B)</td><td rowspan="2">XMI</td><td>No</td><td>bond1</td><td>✗</td></tr><tr><td>Yes</td><td>bond0</td><td>✓</td></tr></table> <p><b>!!! CAUTION !!!</b> It is crucial that the correct network configuration be selected in <b>Steps 17 &amp; 18</b> of this procedure. Choosing an incorrect configuration will result in the need to re-install the OS and restart the DR SDS instalation procedures over from the beginning.</p>	SDS Server (DR NOAM)	Network	VLAN tagging (on XMI network)	Interface	VLAN Checkbox	DR SDS NOAM Server (A or B)	XMI	No	bond1	✗	Yes	bond0	✓											
SDS Server (DR NOAM)	Network	VLAN tagging (on XMI network)	Interface	VLAN Checkbox																						
DR SDS NOAM Server (A or B)	XMI	No	bond1	✗																						
		Yes	bond0	✓																						
19. <div></div>	<p><b>SDS Server NOAM 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) Enter 3 NTP Server <b>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>	<div><p>NTP Servers:</p><table><tr><th>NTP Server IP Address</th><th>Prefer</th><th>Add</th></tr><tr><td></td><td></td><td></td></tr></table></div> <div><p>NTP Servers:</p><table><tr><th>NTP Server IP Address</th><th>Prefer</th><th>Add</th></tr><tr><td>10.250.32.10</td><td><input type="checkbox"/></td><td>Remove</td></tr></table></div> <div><p>NTP Servers:</p><table><tr><th>NTP Server IP Address</th><th>Prefer</th><th>Add</th></tr><tr><td>10.250.32.10</td><td><input type="checkbox"/></td><td>Remove</td></tr><tr><td>10.250.32.51</td><td><input type="checkbox"/></td><td>Remove</td></tr><tr><td>10.250.32.129</td><td><input checked="" type="checkbox"/></td><td>Remove</td></tr></table><div><div>Ok</div><div>Apply</div><div>Cancel</div></div></div>	NTP Server IP Address	Prefer	Add				NTP Server IP Address	Prefer	Add	10.250.32.10	<input type="checkbox"/>	Remove	NTP Server IP Address	Prefer	Add	10.250.32.10	<input type="checkbox"/>	Remove	10.250.32.51	<input type="checkbox"/>	Remove	10.250.32.129	<input checked="" type="checkbox"/>	Remove
NTP Server IP Address	Prefer	Add																								
NTP Server IP Address	Prefer	Add																								
10.250.32.10	<input type="checkbox"/>	Remove																								
NTP Server IP Address	Prefer	Add																								
10.250.32.10	<input type="checkbox"/>	Remove																								
10.250.32.51	<input type="checkbox"/>	Remove																								
10.250.32.129	<input checked="" type="checkbox"/>	Remove																								

**Procedure 6. Configuring the DR NOAM Servers (DR SDS NOAM Site Only)**

Step	Procedure	Result															
20. 	<p><b>Primary 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>	 <p>Main Menu: Configuration -&gt; Servers [Insert]</p> <p>Info</p> <p>Info</p> <p>• Pre-Validation passed - Data NOT committed ...</p> <p>Attribute Value</p> <p>Hostname * dr-sds-no-a</p> <table border="1"> <thead> <tr> <th>Network</th> <th>IP Address</th> <th>Interface</th> </tr> </thead> <tbody> <tr> <td>XMI (10.240.108.0/26)</td> <td>10.240.108.13</td> <td>xmi <input type="checkbox"/> VLAN (14)</td> </tr> <tr> <td>IMI (169.254.2.0/26)</td> <td>169.254.2.3</td> <td>imi <input type="checkbox"/> VLAN (15)</td> </tr> </tbody> </table> <p>NTP Servers:</p> <table border="1"> <thead> <tr> <th>NTP Server IP Address</th> <th>Prefer</th> <th></th> </tr> </thead> <tbody> <tr> <td>10.250.32.10</td> <td><input type="checkbox"/></td> <td><b>Add</b> Remove</td> </tr> </tbody> </table> <p>Ok Apply Cancel</p>	Network	IP Address	Interface	XMI (10.240.108.0/26)	10.240.108.13	xmi <input type="checkbox"/> VLAN (14)	IMI (169.254.2.0/26)	169.254.2.3	imi <input type="checkbox"/> VLAN (15)	NTP Server IP Address	Prefer		10.250.32.10	<input type="checkbox"/>	<b>Add</b> Remove
Network	IP Address	Interface															
XMI (10.240.108.0/26)	10.240.108.13	xmi <input type="checkbox"/> VLAN (14)															
IMI (169.254.2.0/26)	169.254.2.3	imi <input type="checkbox"/> VLAN (15)															
NTP Server IP Address	Prefer																
10.250.32.10	<input type="checkbox"/>	<b>Add</b> Remove															
21. 	<p><b>Primary 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 committed to the DB.</p>	 <p>Main Menu: Configuration -&gt; Servers [Insert]</p> <p>Info</p> <p>Info</p> <p>• Data committed!</p> <p>Attribute Value</p> <p>Hostname * dr-sds-no-a</p>															


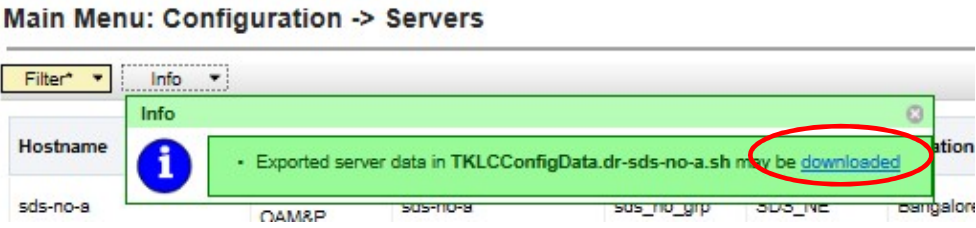

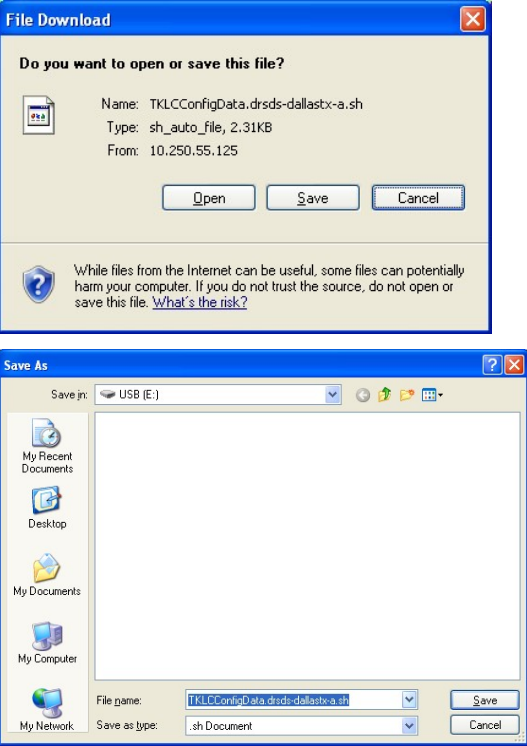



**Procedure 6. Configuring the DR NOAM Servers (DR SDS NOAM Site Only)**



Step	Procedure	Result
22. 	<p><b>Primary SDS VIP:</b></p> <p>Select...</p> <p><b>Main Menu</b> → <b>Configuration</b> → <b>Servers</b></p> <p>...as shown on the right.</p>	
23. 	<p><b>Primary SDS VIP:</b></p> <p>On the “<b>Configuration</b> → <b>Servers</b>” screen, find the newly added DR NOAM server in the list.</p>	
24. 	<p><b>Primary SDS VIP:</b></p> <p>Use the cursor to select the new DR NOAM server entry added in the <b>Steps 10 – 21</b>.</p> <p>The row containing the server should now be highlighted.</p>	
25. 	<p><b>Primary SDS VIP:</b></p> <p>Select the “<b>Export</b>” dialogue button (bottom left corner of screen).</p>	



**Procedure 6. Configuring the DR NOAM Servers (DR SDS NOAM Site Only)**

Step	Procedure	Result
26. 	<p><b>Primary SDS VIP:</b></p> <p>The user will receive a banner information message showing a download link for the Server configuration data.</p> <p>Click on the word “<b>downloaded</b>” to download and save the <b>SDS DR NOAM</b> server configuration file.</p>	
27. 	<p><b>Primary SDS VIP:</b></p> <ol style="list-style-type: none"> <li>1) Click the “Save” dialogue button.</li> <li>2) Save the <b>SDS DR NOAM</b> server configuration file to a USB flash drive.</li> </ol>	
28. 	<p><b>SDS DR NOAM Server:</b></p> <p>Access the server console.</p>	<p>Connect to the <b>SDS DR NOAM Server</b> console using one of the access methods described in <b>Section 2.3</b>.</p>



**Procedure 6. Configuring the DR NOAM Servers (DR SDS NOAM Site Only)**

Step	Procedure	Result
29. <input type="checkbox"/>	<b>SDS DR NOAM Server:</b>  1) Access the command prompt.  2) Log into the server as the "admusr" user.	login: <b>admusr</b> Using keyboard-interactive authentication. Password: <b>&lt;admusr_password&gt;</b>
30. <input type="checkbox"/>	<b>SDS DR NOAM Server:</b>  Insert the USB flash drive containing the server configuration file into the USB port on the front panel of the server.	 <p><b>Figure 12 – HP DL380 GEN8: Front Panel (USB Port)</b></p>  <p><b>Figure 13 – HP DL380 GEN9: Front Panel (USB Port)</b></p>
31. <input type="checkbox"/>	<b>SDS DR NOAM Server:</b>  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.	<pre>\$ sd 3:0:0:0: [sdb] Assuming drive cache: write through sd 3:0:0:0: [sdb] Assuming drive cache: write through <b>&lt;ENTER&gt;</b></pre> <p><b>NOTE:</b> Press the <b>&lt;ENTER&gt;</b> key to return to the command prompt.</p>
32. <input type="checkbox"/>	<b>SDS DR NOAM Server:</b>  Verify that the USB flash drive's partition has been mounted by the OS	<pre>\$ df  grep sdb /dev/sdb1          2003076          8    2003068    1% /media/sdb1</pre>

**Procedure 6. Configuring the DR NOAM Servers (DR SDS NOAM Site Only)**

Step	Procedure	Result
33. <input type="checkbox"/>	<b>SDS DR NOAM Server:</b>  Copy the configuration file to the SDS server with the server name as shown in red	<pre>\$ sudo cp -p /media/sdb1/TKLCConfigData.dr-sds-no-a.sh /var/TKLC/db/filemgmt/.</pre>
34. <input type="checkbox"/>	<b>SDS DR NOAM Server:</b>  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><b>Example:</b> TKLCConfigData&lt;.server_hostname&gt;.sh → will translate to →TKLCConfigData.sh</p> <pre>\$ sudo cp -p /var/TKLC/db/filemgmt/TKLCConfigData.dr-sds-no-a.sh /var/tmp/TKLCConfigData.sh</pre> <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>
35. <input type="checkbox"/>	<b>SDS DR NOAM Server:</b>  After the script completes, a broadcast message will be sent to the terminal.	<p><b>*** NO OUTPUT FOR ≈ 3-20 MINUTES ***</b></p> <pre>Broadcast message from admusr (Mon Dec 14 15:47:33 2009):</pre> <pre>Server configuration completed successfully!</pre> <pre>See /var/TKLC/appw/logs/Process/install.log for details.</pre> <pre>Please remove the USB flash drive if connected and reboot the server.</pre> <pre>&lt;ENTER&gt;</pre> <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>



**Procedure 6. Configuring the DR NOAM Servers (DR SDS NOAM Site Only)**

Step	Procedure	Result
<b>36.</b> <input type="checkbox"/>	<p><b>SDS DR NOAM 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> <i>It is important that the USB flash drive be removed from the server before continuing on to the next step.</i></p>	 <p><b>Figure 14 – HP DL380 GEN8: Front Panel (USB Port)</b></p>  <p><b>Figure 15 – HP DL380 GEN9: Front Panel (USB Port)</b></p>
<b>37.</b> <input type="checkbox"/>	<p><b>SDS Server NOAM A or B:</b></p> <p>Verify that the desired Time Zone is currently in use.</p>	<pre>\$ date Mon Aug 10 19:34:51 UTC 2015</pre>
<b>38.</b> <input type="checkbox"/>	<p><b>SDS Server NOAM A or B:</b></p> <p>If the desired Time Zone was not presented in the previous step...</p> <p><b>Configure the Time Zone.</b></p> <p>Otherwise, skip to the next step.</p>	<p><b>Example:</b> <code>\$ sudo set_ini_tz.pl &lt;time_zone&gt;</code></p> <p><b>NOTE:</b> <i>The following command example sets the time to the “UTC” (aka GMT) time zone which is recommended for all sites.</i></p> <p><i>The user may replace, as appropriate, with the customer requested time zone for this site installation. See <b>Appendix G</b> for a list of valid time zones.</i></p> <pre>\$ sudo set_ini_tz.pl "Etc/UTC"</pre>
<b>39.</b> <input type="checkbox"/>	<p><b>Server NOAM A:</b></p> <p>Initiate a reboot of the OAM server.</p>	<pre>\$ sudo init 6</pre>

**Procedure 6. Configuring the DR NOAM Servers (DR SDS NOAM Site Only)**

Step	Procedure	Result
40. <input type="checkbox"/>	<b>SDS DR NOAM Server:</b>  Wait ~9 minutes  Output similar to that shown on the right may be observed as the server initiates a reboot.	<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 - still in use by bond0. Set the HWaddr of eth02 to a different address to avoid conflicts. 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>
41. <input type="checkbox"/>	<b>SDS DR NOAM Server:</b>  1) After the reboot, access the command prompt.  2) Log into the server as the “admusr” user.	<pre>login: admusr Using keyboard-interactive authentication. Password: &lt;admusr_password&gt;</pre>
42. <input type="checkbox"/>	<b>SDS DR NOAM Server:</b>  1) Verify that the <b>IMI IP address</b> input in <b>Step 18</b> has been applied to “bond0.4”.  2) Verify that the <b>XMI IP address</b> input in <b>Step 17</b> has been applied to “bond1”.	<pre>\$ ifconfig  grep in 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</pre>
43. <input type="checkbox"/>	<b>SDS DR NOAM Server B:</b>  Use the “ntpq” command to verify that the server has connectivity to the assigned Primary and Secondary NTP server(s).	<pre>\$ 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</pre>

**Procedure 6. Configuring the DR NOAM Servers (DR SDS NOAM Site Only)**

Step	Procedure	Result
<div> IF CONNECTIVITY TO THE NTP SERVER(S) CANNOT BE ESTABLISHED, STOP AND EXECUTE THE FOLLOWING STEPS:</div> <div><div>1)</div>Contact the customer to verify that the IP addresses for the NTP server(s) are correct.</div> <div><div>2)</div>Have the customer IT group provide a network path from the OAM server IP to the assigned NTP IP addresses.</div> <div>ONCE NETWORK CONNECTIVITY IS ESTABLISHED TO THE ASSIGNED NTP IP ADDRESSES, THEN RESTART THIS PROCEDURE BEGINNING WITH STEP 44.</div>		
<div>44.</div> <div><div></div></div>	<div>SDS DR NOAM Server:</div> <div>Execute a “syscheck” to verify the current health of the server.</div>	<div><div>\$ sudo syscheck</div><div>Running modules in class hardware...OK</div><div>Running modules in class disk...OK</div><div>Running modules in class net...OK</div><div>Running modules in class system...OK</div><div>Running modules in class proc...OK</div><div>LOG LOCATION: /var/TKLC/log/syscheck/fail_log</div></div>
<div>45.</div> <div><div></div></div>	<div>SDS DR NOAM Server:</div> <div>Exit from the command line to return the server console</div>	<div><div>\$ exit</div><div>logout</div></div>
<div>46.</div> <div><div></div></div>	<div><div>•</div>Configure DR SDS Server B by repeating steps 9 – 45 of this procedure.</div>	
<div> IF 4948E-F SWITCH CONFIGURATION HAS NOT BEEN COMPLETED PRIOR TO THIS STEP, STOP AND EXECUTE THE FOLLOWING STEPS:</div> <div><div>4)</div>APPENDIX D-1</div> <div><div>5)</div>APPENDIX D-2 (Appendix D.2 references Appendix D.3 where applicable).</div> <div><div>6)</div>APPENDIX D-4</div>		
<div>47.</div> <div><div></div></div>	<div>DR SDS Server NOAM A:</div> <div>From DR SDS Server NOAM A, “ping” the IMI IP address DR SDS NOAM Server B.</div>	<div><div>\$ ping -c 5 169.254.100.15</div><div>PING 169.254.100.14 (169.254.100.15) 56(84) bytes of data.</div><div>64 bytes from 169.254.100.15: icmp_seq=1 ttl=64 time=0.021 ms</div><div>64 bytes from 169.254.100.15: icmp_seq=2 ttl=64 time=0.011 ms</div><div>64 bytes from 169.254.100.15: icmp_seq=3 ttl=64 time=0.020 ms</div><div>64 bytes from 169.254.100.15: icmp_seq=4 ttl=64 time=0.011 ms</div><div>64 bytes from 169.254.100.15: icmp_seq=5 ttl=64 time=0.023 ms&lt;CTRL-C&gt;</div><div>---</div><div>169.254.100.15 ping statistics ---</div><div>5 packets transmitted, 5 received, 0% packet loss, time 3999ms</div><div>rtt min/avg/max/mdev = 0.011/0.017/0.023/0.005 ms</div></div>

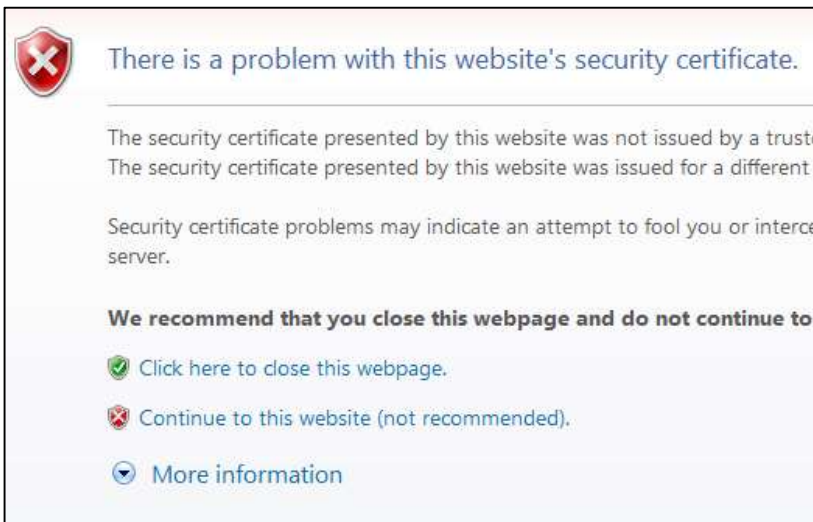

**Procedure 6. Configuring the DR NOAM Servers (DR SDS NOAM Site Only)**

Step	Procedure	Result
48. <input type="checkbox"/>	<p><b>DR SDS NOAM Server(s): A &amp; B</b></p> <p>Use “ping” to verify that the <b>DR SDS NOAM Server</b> can now reach the local <b>XMI Gateway</b> address.</p>	<pre>\$ 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</pre>
49.	<p><b>DR SDS Server(s): A &amp; B</b></p> <p>Use “ping” to verify that the <b>DR SDS Server</b> can now reach the <b>Primary SDS VIP</b> address.</p>	<pre>\$ ping -c 5 10.250.55.126 PING 10.250.55.126 (10.250.55.126) 56(84) bytes of data. 64 bytes from 10.250.55.126: icmp_seq=1 ttl=64 time=0.021 ms 64 bytes from 10.250.55.126: icmp_seq=2 ttl=64 time=0.017 ms 64 bytes from 10.250.55.126: icmp_seq=3 ttl=64 time=0.017 ms 64 bytes from 10.250.55.126: icmp_seq=4 ttl=64 time=0.022 ms 64 bytes from 10.250.55.126: icmp_seq=5 ttl=64 time=0.012 ms&lt;CTRL-C&gt;  --- 10.250.55.126 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</pre>
<b>THIS PROCEDURE HAS BEEN COMPLETED</b>		

## 5.5 OAM Pairing for DR SDS NOAM Site


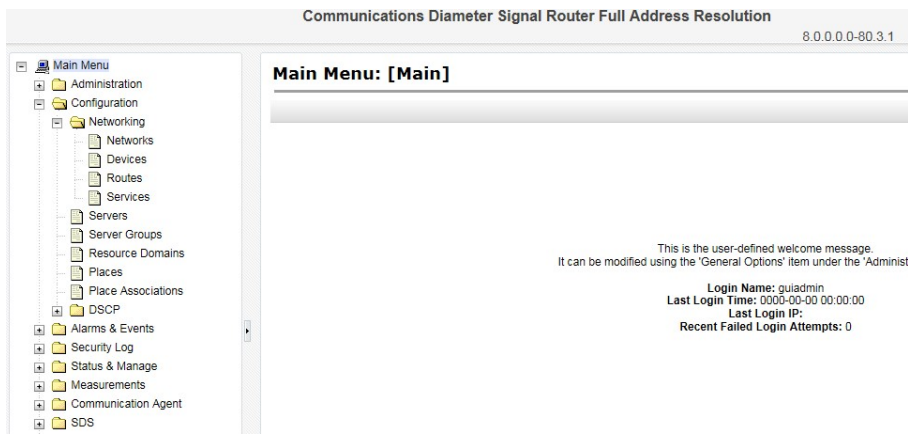

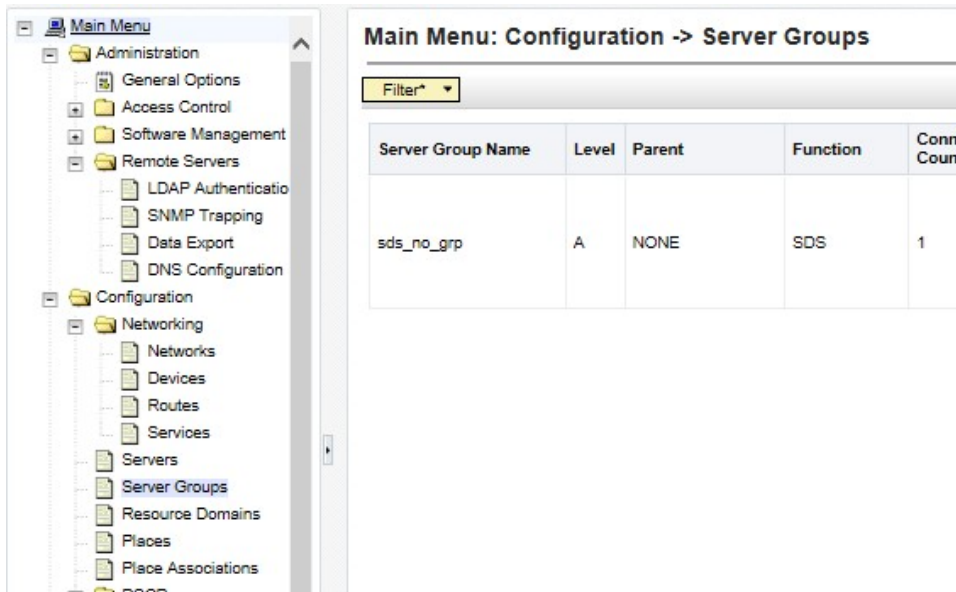
The user should be aware that during the OAM Pairing procedure, various errors may be seen at different stages of the procedure. During the execution of a step, the user is directed to ignore errors related to values other than the ones referenced by that step.

### Procedure 7. Pairing the DR SDS NOAM Servers (DR SDS NOAM Site Only)

Step	Procedure	Result
1. <input type="checkbox"/>	<p><b>Primary SDS VIP:</b></p> <p>Launch an approved web browser and connect to the XML Virtual IP Address (VIP) of the Active SDS site</p> <p><b>NOTE:</b> <i>If presented with the "security certificate" warning screen shown to the right, choose the following option: "Continue to this website (not recommended)".</i></p>	
2. <input type="checkbox"/>	<p><b>Primary 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 7. Pairing the DR SDS NOAM Servers (DR SDS NOAM Site Only)**

Step	Procedure	Result
3. 	<b>Primary SDS VIP:</b>  The user should be presented the SDS Main Menu as shown on the right.	
4. 	<b>Primary SDS VIP:</b>  Select...  <b>Main Menu</b> → Configuration → <i>Server Groups</i>  ...as shown on the right.	

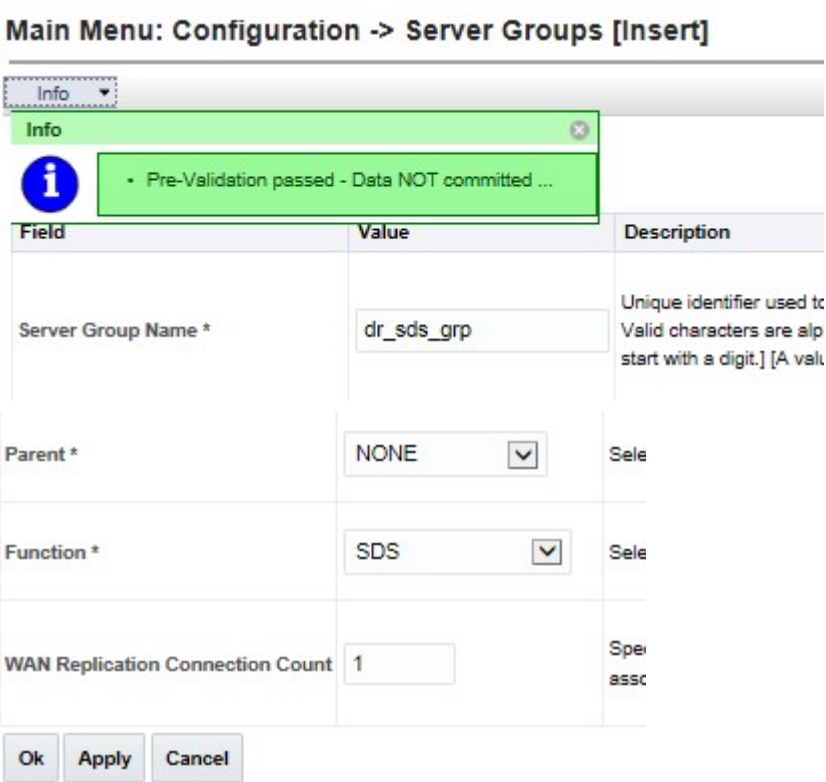
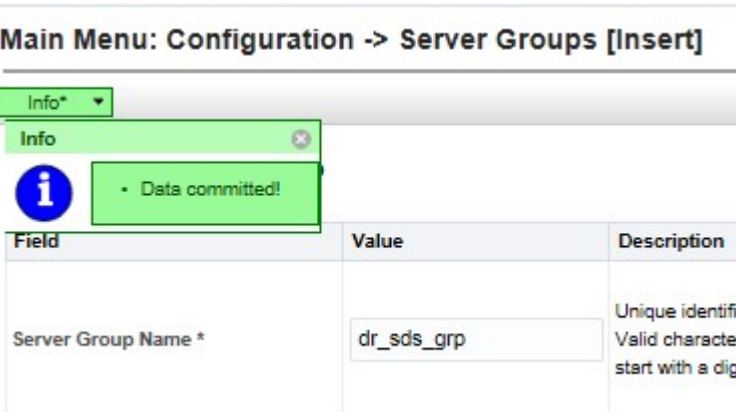
**Procedure 7. Pairing the DR SDS NOAM Servers (DR SDS NOAM Site Only)**

Step	Procedure	Result																								
5. <div></div>	<p><b>Primary 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>	<div><div>Main Menu: Configuration -&gt; Server Groups<div>Sun Jun 05 15:28:42 2016</div><div>Filter*</div><table><thead><tr><th>Server Group Name</th><th>Level</th><th>Parent</th><th>Function</th><th>Connection Count</th><th>Servers</th></tr></thead><tbody><tr><td>sds_no_grp</td><td>A</td><td>NONE</td><td>SDS</td><td>1</td><td><div>Network Element: SDS_NE NE HA Pref: DEFAULT<table><thead><tr><th>Server</th><th>Node HA Pref</th><th>VIPs</th></tr></thead><tbody><tr><td>qs-sds-1</td><td></td><td>10.240.108.24</td></tr><tr><td>sds-no-a</td><td></td><td>10.240.108.24</td></tr><tr><td>sds-no-b</td><td></td><td>10.240.108.24</td></tr></tbody></table></div></td></tr></tbody></table><div><div><div>Alarms &amp; Events</div><div>View Active</div><div>View History</div><div>View Trap Log</div><div>Security Log</div><div>Status &amp; Manage</div><div>Network Elements</div><div>Server</div><div>IIA</div></div><div><div>Insert</div><div>Edit</div><div>Delete</div><div>Report</div></div></div></div></div>	Server Group Name	Level	Parent	Function	Connection Count	Servers	sds_no_grp	A	NONE	SDS	1	<div>Network Element: SDS_NE NE HA Pref: DEFAULT<table><thead><tr><th>Server</th><th>Node HA Pref</th><th>VIPs</th></tr></thead><tbody><tr><td>qs-sds-1</td><td></td><td>10.240.108.24</td></tr><tr><td>sds-no-a</td><td></td><td>10.240.108.24</td></tr><tr><td>sds-no-b</td><td></td><td>10.240.108.24</td></tr></tbody></table></div>	Server	Node HA Pref	VIPs	qs-sds-1		10.240.108.24	sds-no-a		10.240.108.24	sds-no-b		10.240.108.24
Server Group Name	Level	Parent	Function	Connection Count	Servers																					
sds_no_grp	A	NONE	SDS	1	<div>Network Element: SDS_NE NE HA Pref: DEFAULT<table><thead><tr><th>Server</th><th>Node HA Pref</th><th>VIPs</th></tr></thead><tbody><tr><td>qs-sds-1</td><td></td><td>10.240.108.24</td></tr><tr><td>sds-no-a</td><td></td><td>10.240.108.24</td></tr><tr><td>sds-no-b</td><td></td><td>10.240.108.24</td></tr></tbody></table></div>	Server	Node HA Pref	VIPs	qs-sds-1		10.240.108.24	sds-no-a		10.240.108.24	sds-no-b		10.240.108.24									
Server	Node HA Pref	VIPs																								
qs-sds-1		10.240.108.24																								
sds-no-a		10.240.108.24																								
sds-no-b		10.240.108.24																								
6. <div></div>	<p><b>Primary 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><div>Main Menu: Configuration -&gt; Server Groups [Insert]</div><div>Adding new server group</div><table><thead><tr><th>Field</th><th>Value</th><th>Description</th></tr></thead><tbody><tr><td>Server Group Name *</td><td><div></div></td><td>Unique identifier used to label servers. Valid characters are alphanumeric and start with a digit. [A value is required]</td></tr><tr><td>Level *</td><td><div>- Select Level - <div></div></div></td><td>Select one of the Levels supported by the servers. Level B groups are for backup servers. [A value is required]</td></tr><tr><td>Parent *</td><td><div>- Select Parent - <div></div></div></td><td>Select an existing Server Group</td></tr><tr><td>Function *</td><td><div>- Select Function - <div></div></div></td><td>Select one of the Functions supported by the servers</td></tr><tr><td>WAN Replication Connection Count</td><td><div>1</div></td><td>Specify the number of TCP connections associated with this Server Group</td></tr></tbody></table><div><div>Ok</div><div>Apply</div><div>Cancel</div></div></div>	Field	Value	Description	Server Group Name *	<div></div>	Unique identifier used to label servers. Valid characters are alphanumeric and start with a digit. [A value is required]	Level *	<div>- Select Level - <div></div></div>	Select one of the Levels supported by the servers. Level B groups are for backup servers. [A value is required]	Parent *	<div>- Select Parent - <div></div></div>	Select an existing Server Group	Function *	<div>- Select Function - <div></div></div>	Select one of the Functions supported by the servers	WAN Replication Connection Count	<div>1</div>	Specify the number of TCP connections associated with this Server Group						
Field	Value	Description																								
Server Group Name *	<div></div>	Unique identifier used to label servers. Valid characters are alphanumeric and start with a digit. [A value is required]																								
Level *	<div>- Select Level - <div></div></div>	Select one of the Levels supported by the servers. Level B groups are for backup servers. [A value is required]																								
Parent *	<div>- Select Parent - <div></div></div>	Select an existing Server Group																								
Function *	<div>- Select Function - <div></div></div>	Select one of the Functions supported by the servers																								
WAN Replication Connection Count	<div>1</div>	Specify the number of TCP connections associated with this Server Group																								

### Procedure 7. Pairing the DR SDS NOAM Servers (DR SDS NOAM Site Only)

Step	Procedure	Result		
7. <input type="checkbox"/>	<b>Primary SDS VIP:</b> Input the <b>Server Group Name</b> .	Field	Value	Description
		Server Group Name *	dr_sds_grp	Unique identifier used Valid characters are a start with a digit.] [A v
8. <input type="checkbox"/>	<b>Primary SDS VIP:</b> Select “A” on the “ <b>Level</b> ” pull-down menu.	Level *	- Select Level - A B C	Select one of the Levels supported by the s contain SOAM servers. Level C groups con
9. <input type="checkbox"/>	<b>Primary SDS VIP:</b> Select Parent “ <b>NONE</b> ” on the pull- down menu.	Parent *	- Select Parent - NONE	Select an existing Server Group or NONE [A value is required.]
10. <input type="checkbox"/>	<b>Primary SDS VIP:</b> Select “ <b>SDS</b> ” on the “ <b>Function</b> ” pull- down menu.	Function *	- Select Function - NONE SDS	Select one of the Functions supported by the system [A value is required.]

**Procedure 7. Pairing the DR SDS NOAM Servers (DR SDS NOAM Site Only)**

Step	Procedure	Result
11. <input type="checkbox"/>	<p><b>Primary 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>	
12. <input type="checkbox"/>	<p><b>Primary SDS VIP:</b></p> <p>The user should be presented with a banner information message stating <b>“Data committed”</b>.</p>	

Procedure 7. Pairing the DR SDS NOAM Servers (DR SDS NOAM Site Only)

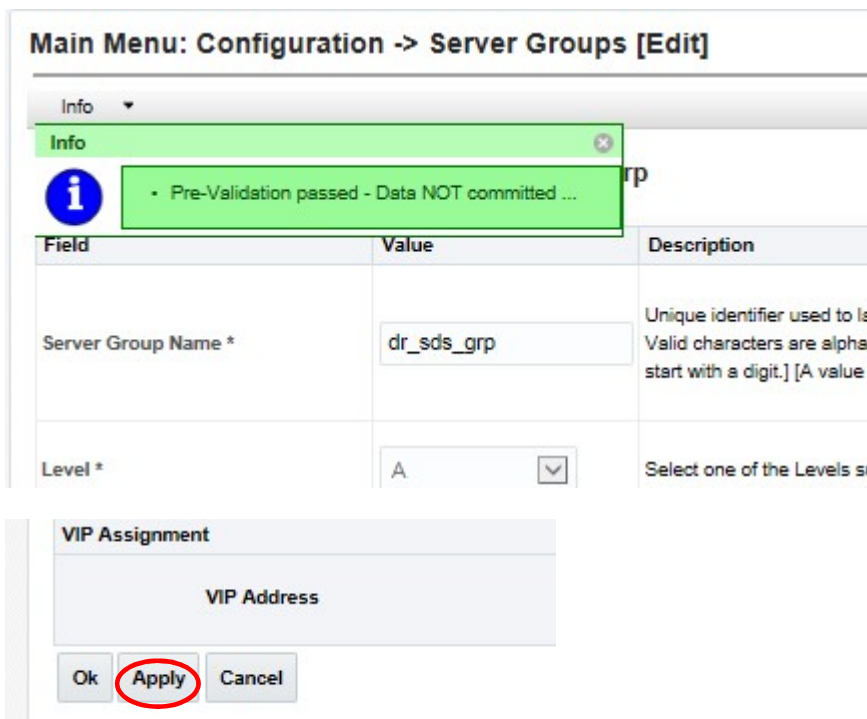
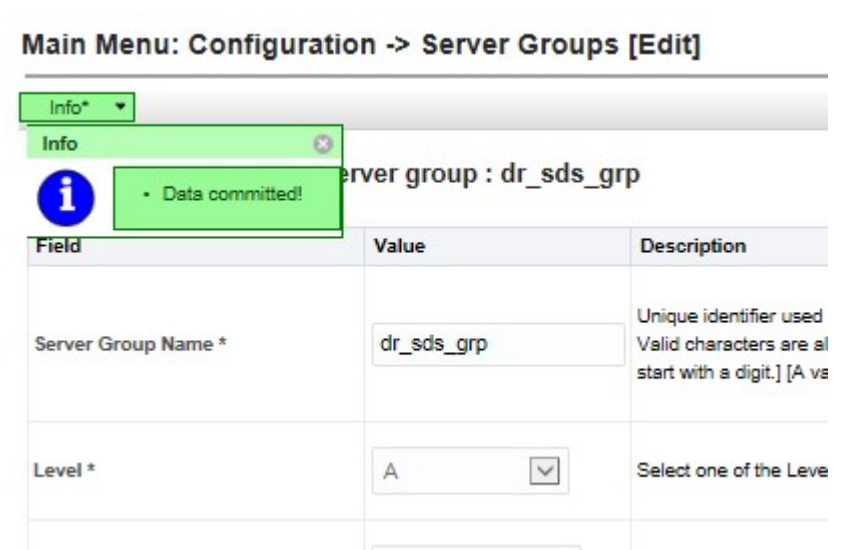
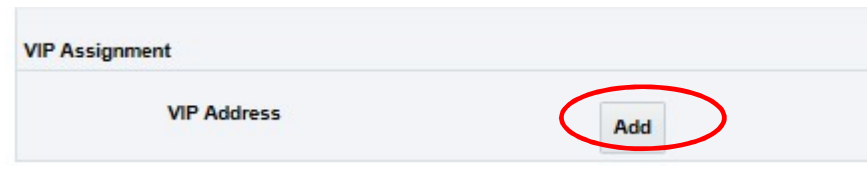
Step	Procedure	Result
13. <div></div>	<p><b>Primary SDS VIP:</b></p> <p>Select...</p> <p><u>Main Menu</u> → <b>Configuration</b> → <b>Server Groups</b></p> <p>...as shown on the right.</p>	<div><div><div><div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div>&lt;</div></div></div></div></div>

**Procedure 7. Pairing the DR SDS NOAM Servers (DR SDS NOAM Site Only)**

Step	Procedure	Result																		
16. <div></div>	<p><b>Primary 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> <hr/> <p><b>Modifying attributes of server group : dr_sds_grp</b></p> <table><tr><td>Level *</td><td>A <div></div></td><td>Select one of the Levels supported</td></tr><tr><td>Parent *</td><td>NONE <div></div></td><td>Select an existing Server Group</td></tr><tr><td>Function *</td><td>SDS <div></div></td><td>Select one of the Functions supported</td></tr><tr><td>WAN Replication Connection Count</td><td>1</td><td>Specify the number of TCP connections associated with this Server Group</td></tr></table> <div><p>SDS_NE <input type="checkbox"/> Prefer Network Element as spare</p><table><tr><th>Server</th><th>SG Inclusion</th><th>Preferred HA Role</th></tr><tr><td>dr-sds-no-a</td><td><input type="checkbox"/> Include in SG</td><td><input type="checkbox"/> Prefer server as spare</td></tr></table></div> <div><p><b>VIP Assignment</b></p><div><p>VIP Address</p><div>Add</div></div><div><div>Ok</div><div>Apply</div><div>Cancel</div></div></div>	Level *	A <div></div>	Select one of the Levels supported	Parent *	NONE <div></div>	Select an existing Server Group	Function *	SDS <div></div>	Select one of the Functions supported	WAN Replication Connection Count	1	Specify the number of TCP connections associated with this Server Group	Server	SG Inclusion	Preferred HA Role	dr-sds-no-a	<input type="checkbox"/> Include in SG	<input type="checkbox"/> Prefer server as spare
Level *	A <div></div>	Select one of the Levels supported																		
Parent *	NONE <div></div>	Select an existing Server Group																		
Function *	SDS <div></div>	Select one of the Functions supported																		
WAN Replication Connection Count	1	Specify the number of TCP connections associated with this Server Group																		
Server	SG Inclusion	Preferred HA Role																		
dr-sds-no-a	<input type="checkbox"/> Include in SG	<input type="checkbox"/> Prefer server as spare																		
17. <div></div>	<p><b>Primary SDS NOAM 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>	<table><tr><th>Server</th><th>SG Inclusion</th><th>Preferred HA Role</th></tr><tr><td>dr-sds-no-a</td><td><input checked="" type="checkbox"/> Include in SG</td><td><input type="checkbox"/> Prefer server as spare</td></tr></table>	Server	SG Inclusion	Preferred HA Role	dr-sds-no-a	<input checked="" type="checkbox"/> Include in SG	<input type="checkbox"/> Prefer server as spare												
Server	SG Inclusion	Preferred HA Role																		
dr-sds-no-a	<input checked="" type="checkbox"/> Include in SG	<input type="checkbox"/> Prefer server as spare																		

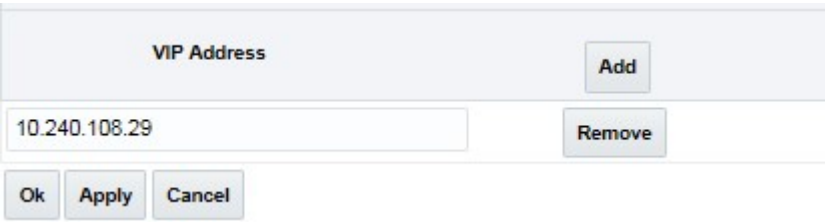
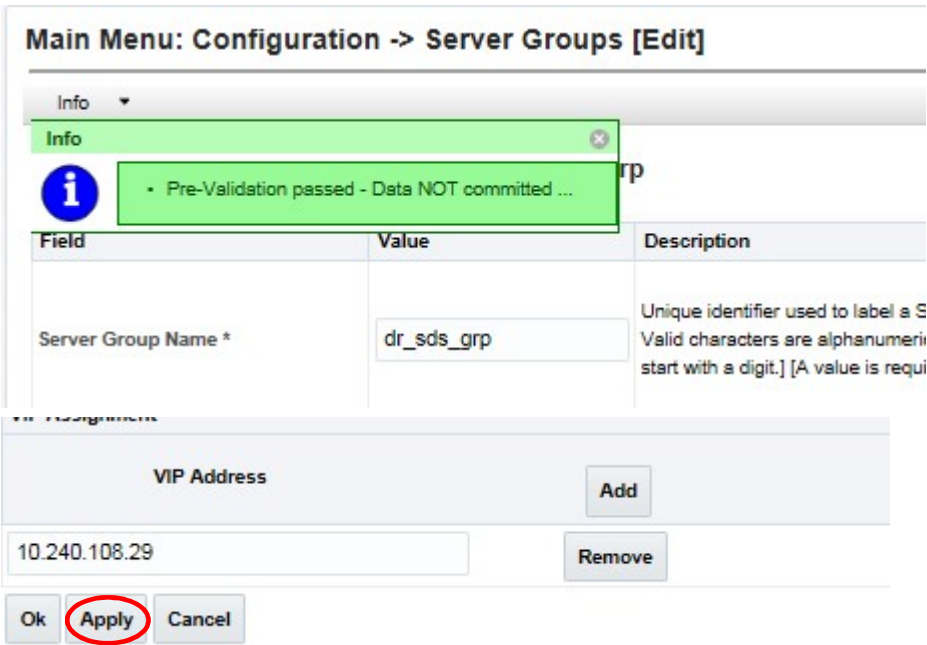
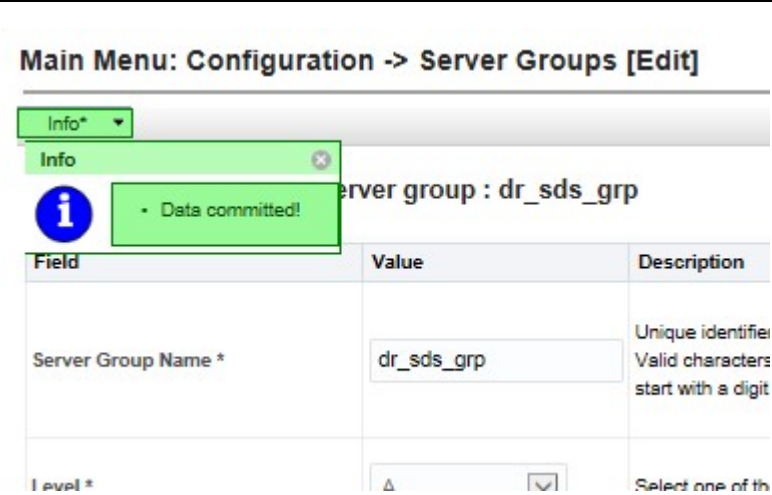


**Procedure 7. Pairing the DR SDS NOAM Servers (DR SDS NOAM Site Only)**

Step	Procedure	Result									
18. <input type="checkbox"/>	<p><b>Primary SDS NOAM 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 [Edit]</b></p> <p>Info ▾</p> <p>Info ⓘ • Pre-Validation passed - Data NOT 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>dr_sds_grp</td><td>Unique identifier used to identify the server group. Valid characters are alphanumeric and start with a digit. [A value of 1 to 32 characters is allowed.]</td></tr> <tr> <td>Level *</td><td>A ▾</td><td>Select one of the Levels supported by the server group.</td></tr> </tbody> </table> <p><b>VIP Assignment</b></p> <p>VIP Address</p> <p>Ok <b>Apply</b> Cancel</p>	Field	Value	Description	Server Group Name *	dr_sds_grp	Unique identifier used to identify the server group. Valid characters are alphanumeric and start with a digit. [A value of 1 to 32 characters is allowed.]	Level *	A ▾	Select one of the Levels supported by the server group.
Field	Value	Description									
Server Group Name *	dr_sds_grp	Unique identifier used to identify the server group. Valid characters are alphanumeric and start with a digit. [A value of 1 to 32 characters is allowed.]									
Level *	A ▾	Select one of the Levels supported by the server group.									
19. <input type="checkbox"/>	<p><b>Primary SDS NOAM 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 [Edit]</b></p> <p>Info* ▾</p> <p>Info ⓘ • Data committed!</p> <p>Server group : dr_sds_grp</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>dr_sds_grp</td><td>Unique identifier used to identify the server group. Valid characters are alphanumeric and start with a digit. [A value of 1 to 32 characters is allowed.]</td></tr> <tr> <td>Level *</td><td>A ▾</td><td>Select one of the Levels supported by the server group.</td></tr> </tbody> </table>	Field	Value	Description	Server Group Name *	dr_sds_grp	Unique identifier used to identify the server group. Valid characters are alphanumeric and start with a digit. [A value of 1 to 32 characters is allowed.]	Level *	A ▾	Select one of the Levels supported by the server group.
Field	Value	Description									
Server Group Name *	dr_sds_grp	Unique identifier used to identify the server group. Valid characters are alphanumeric and start with a digit. [A value of 1 to 32 characters is allowed.]									
Level *	A ▾	Select one of the Levels supported by the server group.									
20. <input type="checkbox"/>	<p><b>Primary SDS NOAM VIP:</b></p> <p>Click the <b>“Add”</b> dialogue button for the <b>VIP Address</b>.</p>	 <p><b>VIP Assignment</b></p> <p>VIP Address</p> <p><b>Add</b></p>									



**Procedure 7. Pairing the DR SDS NOAM Servers (DR SDS NOAM Site Only)**

Step	Procedure	Result
21. <input type="checkbox"/>	<b>Primary SDS NOAM VIP:</b>  Input the <b>VIP Address</b>	
22. <input type="checkbox"/>	<b>Primary SDS NOAM VIP:</b>  1) The user should be presented with a banner information message stating <b>“Pre-Validation passed”</b> .  2) Select the <b>“Apply”</b> dialogue button.	
23. <input type="checkbox"/>	<b>Primary SDS NOAM VIP:</b>  The user should be presented with a banner information message stating <b>“Data committed”</b> .	

Procedure 7. Pairing the DR SDS NOAM Servers (DR SDS NOAM Site Only)

Step	Procedure	Result																																																																			
24.	<p><b>Primary SDS NOAM VIP:</b></p> <p>Select...</p> <p><u><b>Main Menu</b></u> → <b>Alarms &amp; Events</b> → <b>View Active</b></p> <p>...as shown on the right.</p>	<div><div><div><div><div><div></div><div>Main Menu</div></div><div><div><div>Administration</div><div><div>General Options</div><div>Access Control</div><div>Software Management</div><div>Remote Servers</div><div>LDAP Authentication</div><div>SNMP Trapping</div><div>Data Export</div><div>DNS Configuration</div></div><div>Configuration</div><div>Networking</div><div>Networks</div><div>Devices</div><div>Routes</div><div>Services</div><div>Servers</div><div>Server Groups</div><div>Resource Domains</div><div>Places</div><div>Place Associations</div><div>DSCP</div></div><div>Alarms &amp; Events</div><div><div>View Active</div><div>View History</div><div>View Trap Log</div></div><div>Security Log</div></div></div></div></div><div><div><div>Main Menu: Alarms &amp; Events -&gt; View Active</div><div><div>Filter*</div><div>Tasks</div><div>Graph*</div></div><div>sds_no_grp</div><table><thead><tr><th>Seq #</th><th>Event ID</th><th>Timestamp</th><th>Severity</th><th>Product</th><th>Pro</th></tr><tr><th></th><th colspan="2">Alarm Text</th><th colspan="3">Additional Info</th></tr></thead><tbody><tr><td rowspan="2">1820</td><td>31283</td><td>2016-06-05 17:58:32.405 EDT</td><td>MAJOR</td><td>Platform</td><td>cmh</td></tr><tr><td colspan="2">Lost Communication with server</td><td colspan="3">GN_DOWN/WRN HA disc <a href="#">More...</a></td></tr><tr><td rowspan="2">1728</td><td>31283</td><td>2016-06-05 17:58:32.400 EDT</td><td>MAJOR</td><td>Platform</td><td>cmh</td></tr><tr><td colspan="2">Lost Communication with server</td><td colspan="3">GN_DOWN/WRN HA disc <a href="#">More...</a></td></tr><tr><td rowspan="2">1721</td><td>31283</td><td>2016-06-05 17:58:32.168 EDT</td><td>MAJOR</td><td>Platform</td><td>cmh</td></tr><tr><td colspan="2">Lost Communication with server</td><td colspan="3">GN_DOWN/WRN HA disc <a href="#">More...</a></td></tr><tr><td rowspan="2">1719</td><td>31107</td><td>2016-06-05 17:58:22.146 EDT</td><td>MAJOR</td><td>Platform</td><td>ineti</td></tr><tr><td colspan="2">DB Merge From Child Failure</td><td colspan="3">GN_DOWN: Receiver Link <a href="#">More...</a></td></tr><tr><td rowspan="2">1718</td><td>31108</td><td>2016-06-05 17:58:22.144 EDT</td><td>MINOR</td><td>Platform</td><td>ineti</td></tr><tr><td colspan="2"></td><td colspan="3">GN_DOWN: Sender Link</td></tr></tbody></table></div></div></div>	Seq #	Event ID	Timestamp	Severity	Product	Pro		Alarm Text		Additional Info			1820	31283	2016-06-05 17:58:32.405 EDT	MAJOR	Platform	cmh	Lost Communication with server		GN_DOWN/WRN HA disc <a href="#">More...</a>			1728	31283	2016-06-05 17:58:32.400 EDT	MAJOR	Platform	cmh	Lost Communication with server		GN_DOWN/WRN HA disc <a href="#">More...</a>			1721	31283	2016-06-05 17:58:32.168 EDT	MAJOR	Platform	cmh	Lost Communication with server		GN_DOWN/WRN HA disc <a href="#">More...</a>			1719	31107	2016-06-05 17:58:22.146 EDT	MAJOR	Platform	ineti	DB Merge From Child Failure		GN_DOWN: Receiver Link <a href="#">More...</a>			1718	31108	2016-06-05 17:58:22.144 EDT	MINOR	Platform	ineti			GN_DOWN: Sender Link		
Seq #	Event ID	Timestamp	Severity	Product	Pro																																																																
	Alarm Text		Additional Info																																																																		
1820	31283	2016-06-05 17:58:32.405 EDT	MAJOR	Platform	cmh																																																																
	Lost Communication with server		GN_DOWN/WRN HA disc <a href="#">More...</a>																																																																		
1728	31283	2016-06-05 17:58:32.400 EDT	MAJOR	Platform	cmh																																																																
	Lost Communication with server		GN_DOWN/WRN HA disc <a href="#">More...</a>																																																																		
1721	31283	2016-06-05 17:58:32.168 EDT	MAJOR	Platform	cmh																																																																
	Lost Communication with server		GN_DOWN/WRN HA disc <a href="#">More...</a>																																																																		
1719	31107	2016-06-05 17:58:22.146 EDT	MAJOR	Platform	ineti																																																																
	DB Merge From Child Failure		GN_DOWN: Receiver Link <a href="#">More...</a>																																																																		
1718	31108	2016-06-05 17:58:22.144 EDT	MINOR	Platform	ineti																																																																
			GN_DOWN: Sender Link																																																																		
25.	<p><b>Primary SDS NOAM VIP:</b></p> <p>Verify that <b>Event ID 10200</b> (<i>Remote Database re-initialization in progress</i>) alarms are present with the <b>DR SDS NOAM Server hostnames</b> in the “Instance” field..</p>	<div><div><div><div><div><div></div><div>Main Menu</div></div><div><div><div>Administration</div><div><div>General Options</div><div>Access Control</div><div>Software Management</div><div>Remote Servers</div><div>LDAP Authentication</div><div>SNMP Trapping</div><div>Data Export</div><div>DNS Configuration</div></div><div>Configuration</div><div>Networking</div><div>Networks</div><div>Devices</div><div>Routes</div><div>Services</div><div>Servers</div><div>Server Groups</div></div></div></div></div><div><div><div>Main Menu: Alarms &amp; Events -&gt; View Active (Filtered)</div><div><div>Filter*</div><div>Tasks</div><div>Graph*</div></div><div>sds_no_grp sds_so_a</div><table><thead><tr><th>Seq #</th><th>Event ID</th><th>Timestamp</th><th>Severity</th><th>Alarm Text</th><th>Additional Info</th></tr></thead><tbody><tr><td rowspan="2">7320</td><td>10200</td><td>2016-06-06 01:10:03.746 EDT</td><td>MINOR</td><td>Remote Database re-initialization in progress</td><td>Remote D</td></tr></tbody></table></div></div></div></div>	Seq #	Event ID	Timestamp	Severity	Alarm Text	Additional Info	7320	10200	2016-06-06 01:10:03.746 EDT	MINOR	Remote Database re-initialization in progress	Remote D																																																							
Seq #	Event ID	Timestamp	Severity	Alarm Text	Additional Info																																																																
7320	10200	2016-06-06 01:10:03.746 EDT	MINOR	Remote Database re-initialization in progress	Remote D																																																																

MONITOR THE EVENT ID 10200 (*Remote Database re-initialization in progress*) ALARMS.

DO NOT PROCEED TO THE NEXT STEP UNTIL THE ALARM CLEAR IS RECEIVED FOR BOTH DR SDS NOAM SERVERS.



**Procedure 7. Pairing the DR SDS NOAM Servers (DR SDS NOAM Site Only)**

Step	Procedure	Result																																								
28. <div></div>	<p><b>Primary SDS NOAM VIP:</b></p> <p>1) Using the mouse, select <b>DR SDS NOAM 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>DR SDS NOAM Server A</b> stating: “<b>Successfully restarted application</b>”</p>	<div><table><tr><th>Server Hostname</th><th>Network Element</th><th>Appl State</th><th>Alm</th><th>DB</th><th>Reporting Status</th><th>Proc</th></tr><tr><td>dr-sds-no-a</td><td>SDS_NE</td><td>Disabled</td><td>Err</td><td>Norm</td><td>Norm</td><td>Man</td></tr><tr><td>sds-no-a</td><td>SDS_NE</td><td>Enabled</td><td>Err</td><td>Norm</td><td>Norm</td><td>Norm</td></tr><tr><td>sds-no-b</td><td>SDS_NE</td><td>Enabled</td><td>Err</td><td>Norm</td><td>Norm</td><td>Norm</td></tr></table><div><div>Security Log</div><div>Status &amp; Manage</div><div>Network Elements</div><div>Server</div><div>HA</div><div>Database</div><div>KPIs</div><div>Processes</div></div><div>StopRestartRebootNTP SyncReport</div></div> <div><div>Message from webpage</div><div><div>?</div><div>Are you sure you wish to restart application software on the following server(s)? dr-sds-no-a</div></div><div>OKCancel</div></div> <div><div>Main Menu: Status &amp; Manage -&gt; Server</div><div><div>Filter*Info</div><div><div>Info</div><div>• dr-sds-no-a: Successfully restarted application.</div></div><table><tr><th>Server Host</th><th></th><th>Appl State</th></tr><tr><td>dr-sds-no-a</td><td></td><td>Enabled</td></tr><tr><td>sds-no-a</td><td>SDS_NE</td><td>Enabled</td></tr><tr><td>sds-no-b</td><td>SDS_NE</td><td>Enabled</td></tr></table></div></div>	Server Hostname	Network Element	Appl State	Alm	DB	Reporting Status	Proc	dr-sds-no-a	SDS_NE	Disabled	Err	Norm	Norm	Man	sds-no-a	SDS_NE	Enabled	Err	Norm	Norm	Norm	sds-no-b	SDS_NE	Enabled	Err	Norm	Norm	Norm	Server Host		Appl State	dr-sds-no-a		Enabled	sds-no-a	SDS_NE	Enabled	sds-no-b	SDS_NE	Enabled
Server Hostname	Network Element	Appl State	Alm	DB	Reporting Status	Proc																																				
dr-sds-no-a	SDS_NE	Disabled	Err	Norm	Norm	Man																																				
sds-no-a	SDS_NE	Enabled	Err	Norm	Norm	Norm																																				
sds-no-b	SDS_NE	Enabled	Err	Norm	Norm	Norm																																				
Server Host		Appl State																																								
dr-sds-no-a		Enabled																																								
sds-no-a	SDS_NE	Enabled																																								
sds-no-b	SDS_NE	Enabled																																								

**Procedure 7. Pairing the DR SDS NOAM Servers (DR SDS NOAM Site Only)**

Step	Procedure	Result																												
29. <div></div>	<p><b>Primary SDS NOAM 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>	<div><div><div><div><div><div></div><div>Main Menu</div></div><div><div><div></div><div>Administration</div></div><div><div><div></div><div>General Options</div></div><div><div><div></div><div>Access Control</div></div><div><div><div></div><div>Software Management</div></div><div><div><div></div><div>Remote Servers</div></div><div><div><div></div><div>LDAP Authentication</div></div><div><div><div></div><div>SNMP Trapping</div></div><div><div><div></div><div>Data Export</div></div><div><div><div></div><div>DNS Configuration</div></div></div></div><div><div><div></div><div>Configuration</div></div><div><div><div></div><div>Networking</div></div><div><div><div></div><div>Networks</div></div><div><div><div></div><div>Devices</div></div><div><div><div></div><div>Routes</div></div><div><div><div></div><div>Services</div></div><div><div><div></div><div>Servers</div></div><div><div><div></div><div>Server Groups</div></div><div><div><div></div><div>Resource Domains</div></div><div><div><div></div><div>Places</div></div><div><div><div></div><div>Place Associations</div></div><div><div><div></div><div>DSCP</div></div></div></div><div><div><div></div><div>Alarms &amp; Events</div></div><div><div><div></div><div>View Active</div></div><div><div><div></div><div>View History</div></div><div><div><div></div><div>View Trap Log</div></div></div></div><div><div><div></div><div>Security Log</div></div><div><div><div></div><div>Status &amp; Manage</div></div><div><div><div></div><div>Network Elements</div></div><div><div><div></div><div>Server</div></div><div><div><div></div><div>HA</div></div><div><div><div></div><div>Database</div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div>	<div><div><div><div><div></div><div>Main Menu: Status &amp; Manage -&gt; Server</div></div><div><div>Filter*</div></div><div><table><tr><th>Server Hostname</th><th>Network Element</th></tr><tr><td>dr-sds-no-a</td><td>SDS_NE</td></tr><tr><td>sds-no-a</td><td>SDS_NE</td></tr><tr><td>sds-no-b</td><td>SDS_NE</td></tr></table></div></div></div></div>	Server Hostname	Network Element	dr-sds-no-a	SDS_NE	sds-no-a	SDS_NE	sds-no-b	SDS_NE																			
Server Hostname	Network Element																													
dr-sds-no-a	SDS_NE																													
sds-no-a	SDS_NE																													
sds-no-b	SDS_NE																													
30. <div></div>	<p><b>Primary SDS NOAM 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>NOAM Server A</b> before proceeding to the next Step.</p>	<div><div><div><div><div></div><div>Main Menu: Status &amp; Manage -&gt; Server</div></div><div><div>Sun Jun 05 18:03:17 2016 EDT</div></div><div><div>Filter*</div></div><div><table><tr><th>Server Hostname</th><th>Network Element</th><th>Appl State</th><th>Alm</th><th>DB</th><th>Reporting Status</th><th>Proc</th></tr><tr><td>dr-sds-no-a</td><td>SDS_NE</td><td>Enabled</td><td>Err</td><td>Norm</td><td>Norm</td><td>Norm</td></tr><tr><td>sds-no-a</td><td>SDS_NE</td><td>Enabled</td><td>Err</td><td>Norm</td><td>Norm</td><td>Norm</td></tr><tr><td>sds-no-b</td><td>SDS_NE</td><td>Enabled</td><td>Err</td><td>Norm</td><td>Norm</td><td>Norm</td></tr></table></div></div></div></div>	Server Hostname	Network Element	Appl State	Alm	DB	Reporting Status	Proc	dr-sds-no-a	SDS_NE	Enabled	Err	Norm	Norm	Norm	sds-no-a	SDS_NE	Enabled	Err	Norm	Norm	Norm	sds-no-b	SDS_NE	Enabled	Err	Norm	Norm	Norm
Server Hostname	Network Element	Appl State	Alm	DB	Reporting Status	Proc																								
dr-sds-no-a	SDS_NE	Enabled	Err	Norm	Norm	Norm																								
sds-no-a	SDS_NE	Enabled	Err	Norm	Norm	Norm																								
sds-no-b	SDS_NE	Enabled	Err	Norm	Norm	Norm																								



## Procedure 7. Pairing the DR SDS NOAM Servers (DR SDS NOAM Site Only)


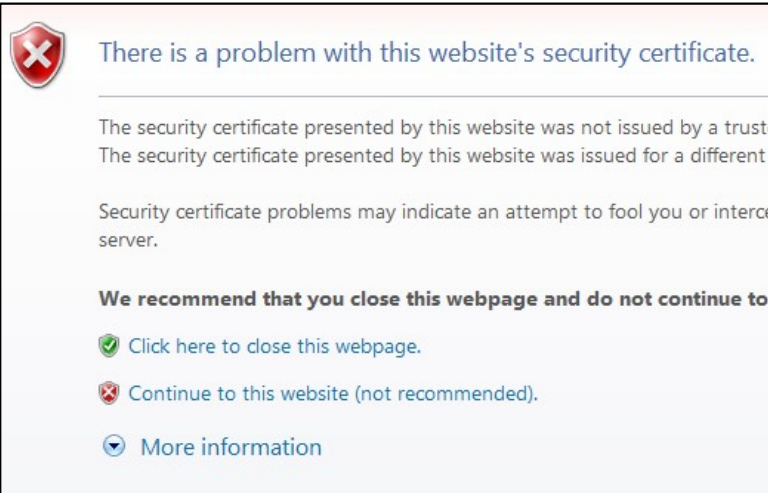
Step	Procedure	Result																												
31. <div></div>	<p><b>Primary SDS NOAM VIP:</b></p> <p>1) Using the mouse, select <b>DR NOAM Server B</b>. The line entry should now be highlighted in <b>GREEN</b>.</p> <p>2) Select the “<b>Restart</b>” dialogue button from the bottom left corner of the 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 SDS <b>DR NOAM Server B</b> stating: “<b>Successfully restarted application</b>”.</p>	<div><table><thead><tr><th>Server Hostname</th><th>Network Element</th><th>Appl State</th><th>Alm</th><th>DB</th><th>Reporting Status</th><th>Proc</th></tr></thead><tbody><tr><td>dr-sds-no-a</td><td>SDS_NE</td><td>Disabled</td><td>Err</td><td>Norm</td><td>Norm</td><td>Man</td></tr><tr><td>sds-no-a</td><td>SDS_NE</td><td>Enabled</td><td>Err</td><td>Norm</td><td>Norm</td><td>Norm</td></tr><tr><td>sds-no-b</td><td>SDS_NE</td><td>Enabled</td><td>Err</td><td>Norm</td><td>Norm</td><td>Norm</td></tr></tbody></table><div><div>Security Log</div><div>Status &amp; Manage</div><div>Network Elements</div><div>Server</div><div>HA</div><div>Database</div><div>KPIs</div><div>Processes</div></div><div>StopRestartRebootNTP SyncReport</div></div> <div><div>Message from webpage</div><div><div>?</div><div>Are you sure you wish to restart application software on the following server(s)? dr-sds-no-a</div></div><div>OKCancel</div></div> <div><div>Main Menu: Status &amp; Manage -&gt; Server</div><div><div>Filter*</div><div>Info</div></div><div><div>Info</div><div>• dr-sds-no-a: Successfully restarted application.</div></div></div>	Server Hostname	Network Element	Appl State	Alm	DB	Reporting Status	Proc	dr-sds-no-a	SDS_NE	Disabled	Err	Norm	Norm	Man	sds-no-a	SDS_NE	Enabled	Err	Norm	Norm	Norm	sds-no-b	SDS_NE	Enabled	Err	Norm	Norm	Norm
Server Hostname	Network Element	Appl State	Alm	DB	Reporting Status	Proc																								
dr-sds-no-a	SDS_NE	Disabled	Err	Norm	Norm	Man																								
sds-no-a	SDS_NE	Enabled	Err	Norm	Norm	Norm																								
sds-no-b	SDS_NE	Enabled	Err	Norm	Norm	Norm																								
32. <div></div>	<p><b>Primary 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>NOAM Server A</b> and <b>NOAM Server B</b> before proceeding to the next Step.</p>	<div><div>Main Menu: Status &amp; Manage -&gt; Server</div><div><div>Filter*</div><div>Info</div></div><div><table><thead><tr><th>Server Hostname</th><th>Network Element</th><th>Appl State</th><th>Alm</th><th>DB</th><th>Reporting Status</th><th>Proc</th></tr></thead><tbody><tr><td>dr-sds-no-a</td><td>SDS_NE</td><td>Enabled</td><td>Norm</td><td>Norm</td><td>Norm</td><td>Norm</td></tr><tr><td>sds-no-a</td><td>SDS_NE</td><td>Enabled</td><td>Norm</td><td>Norm</td><td>Norm</td><td>Norm</td></tr><tr><td>sds-no-b</td><td>SDS_NE</td><td>Enabled</td><td>Norm</td><td>Norm</td><td>Norm</td><td>Norm</td></tr></tbody></table></div></div>	Server Hostname	Network Element	Appl State	Alm	DB	Reporting Status	Proc	dr-sds-no-a	SDS_NE	Enabled	Norm	Norm	Norm	Norm	sds-no-a	SDS_NE	Enabled	Norm	Norm	Norm	Norm	sds-no-b	SDS_NE	Enabled	Norm	Norm	Norm	Norm
Server Hostname	Network Element	Appl State	Alm	DB	Reporting Status	Proc																								
dr-sds-no-a	SDS_NE	Enabled	Norm	Norm	Norm	Norm																								
sds-no-a	SDS_NE	Enabled	Norm	Norm	Norm	Norm																								
sds-no-b	SDS_NE	Enabled	Norm	Norm	Norm	Norm																								
33. <div></div>	<p><b>Primary SDS VIP:</b></p> <p>Add the Query Server for the DR SDS Server</p>	<ul style="list-style-type: none"><li>Repeat all steps listed in Procedure 4 except use the DR SDS NOAM NE and Server Group instead of the Primary SDS NOAM NE (1<sup>st</sup> SDS NOAM site) and Server Group.</li></ul>																												
THIS PROCEDURE HAS BEEN COMPLETED																														

## 5.6 Add SDS Software Images to PMAC Servers (All SOAM Sites)

This procedure must be done once for each DSR signaling site, which is also an SDS SOAM site.

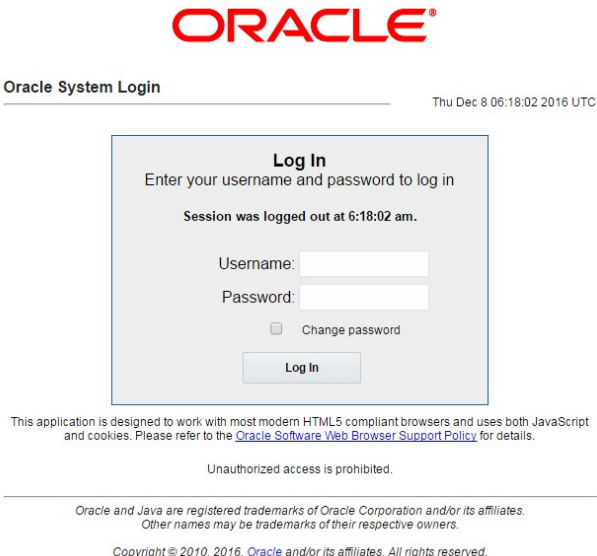
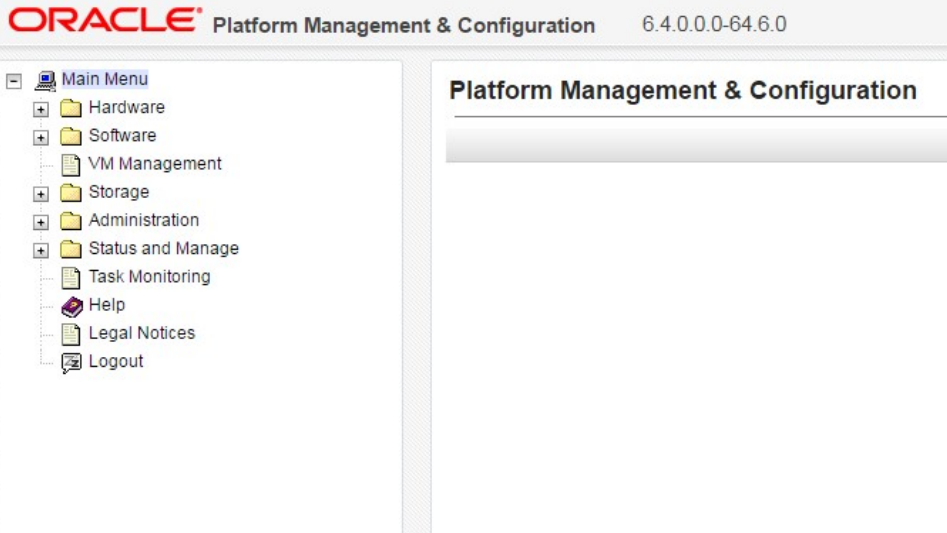
This procedure assumes that the PMAC server has already been installed, as described in [5] HP Solutions Firmware Upgrade Pack Release Notes, 795-000-4xx, latest version (2.2.8 or higher).

### Procedure 8. Add SDS Software Images to PMAC Servers for DSR Signaling Sites


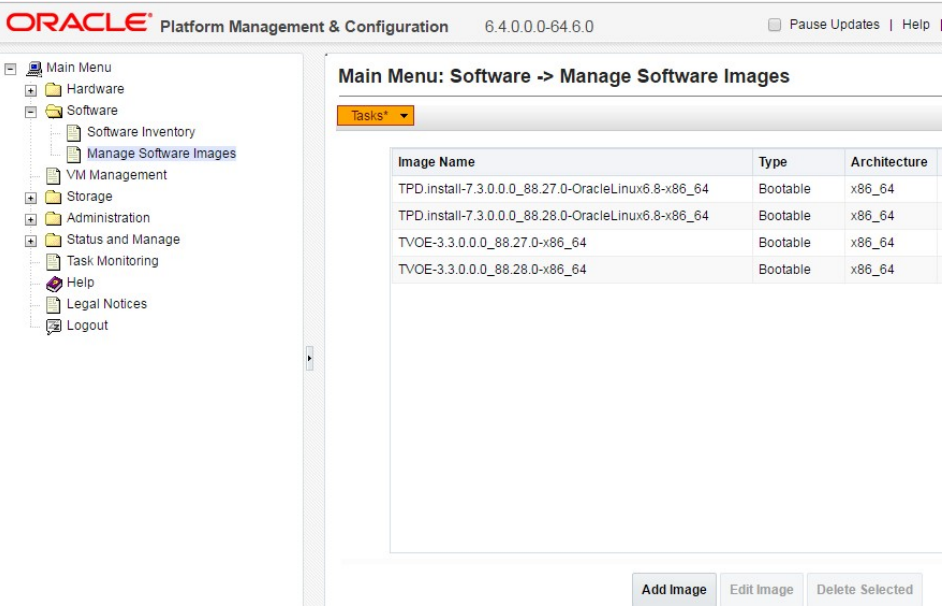

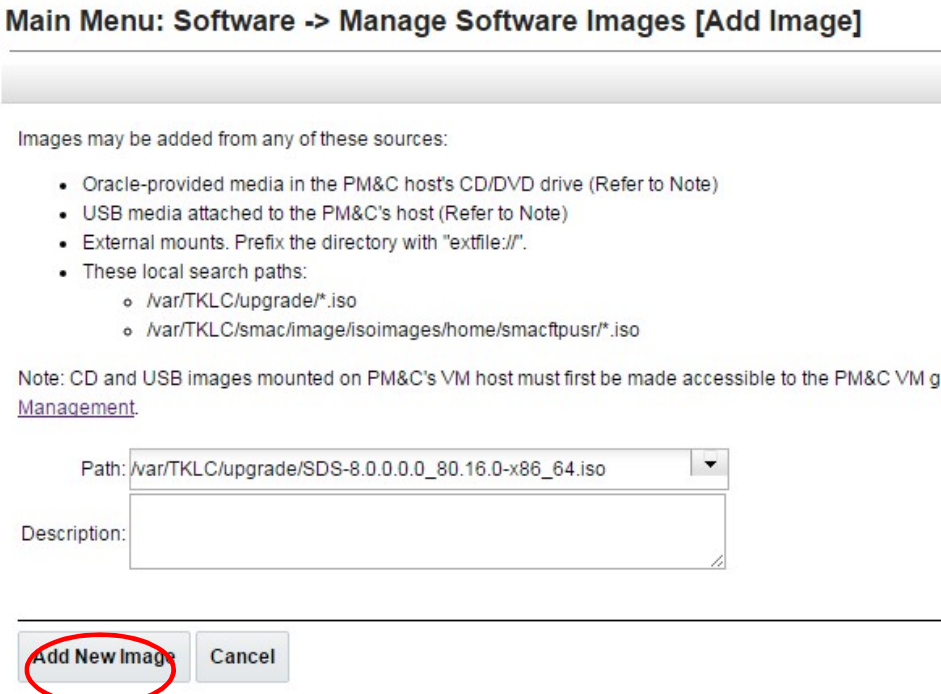
Step	Procedure	Result
1.	<b>Active SDS VIP (CLI):</b>  1) Access the command prompt. 2) Log into the HP server as the “ <b>admusr</b> ” user.	login: <b>admusr</b> Using keyboard-interactive authentication. Password: <b>&lt;admusr_password&gt;</b>  \$
2.	<b>Active SDS VIP (CLI):</b>  “ <b>cd</b> ” into the /var/TKLC/upgrade/ directory.	\$ <b>cd /var/TKLC/upgrade/</b> \$
3.	<b>Active SDS VIP (CLI):</b>  Verify that the <b>SDS ISO</b> file is present.	\$ <b>ls</b> SDS-8.0.0.0.0_80.16.0-x86_64.iso \$
4.	<b>Active SDS VIP (CLI):</b>  “ <b>scp</b> ” the <b>SDS ISO</b> file to the PMAC Server as shown to the right..	\$ <b>scp -p SDS-8.0.0.0.0_80.16.0-x86_64.iso admusr@&lt;PMAC_Mgmt_IP_address&gt;:/var/TKLC/upgrade/</b> Password: <b>&lt;admusr_password&gt;</b> SDS-8.0.0.0.0_80.16.0-x86_64.iso 100% 853MB 53.3MB/s 00:16 \$
5.	<b>PMAC Server GUI:</b>   Launch an approved web browser and connect to the <b>Mgmt IP Address</b> of the PMAC Guest server at the SOAM site.  <b>NOTE:</b> If presented with the “security certificate” warning screen shown to the right, choose the following option: “Continue to this website (not recommended)”.	



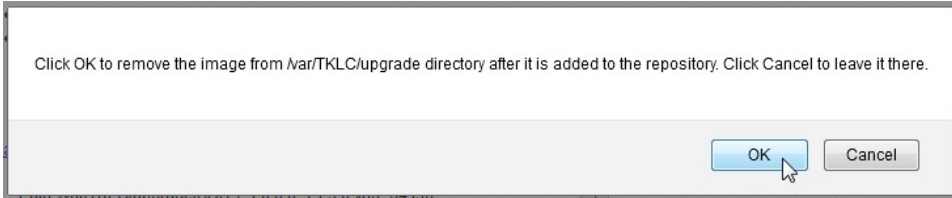





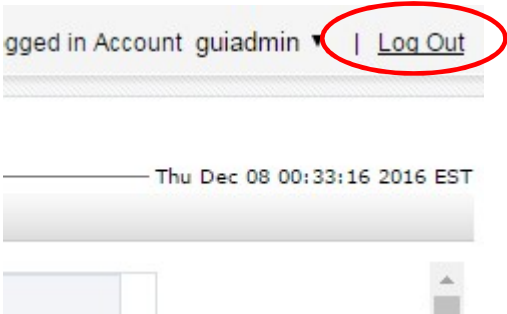
**Procedure 8. Add SDS Software Images to PMAC Servers for DSR Signaling Sites**

Step	Procedure	Result
<p>6.</p> <div></div>	<p><b>PMAC Server GUI:</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>7.</p> <div></div>	<p><b>PMAC Server GUI:</b></p> <p>The user should be presented the PMAC Main Menu as shown on the right.</p>	

**Procedure 8. Add SDS Software Images to PMAC Servers for DSR Signaling Sites**

Step	Procedure	Result															
8. 	<p><b>PMAC Server GUI:</b></p> <p>1) Select...</p> <p><b>Main Menu</b> → <b>Software</b> → <b>Manage Software Images</b></p> <p>...as shown on the right.</p> <p>2) Select the “Add Image” button</p>	 <table border="1"> <thead> <tr> <th>Image Name</th><th>Type</th><th>Architecture</th></tr> </thead> <tbody> <tr> <td>TPD.install-7.3.0.0.0_88.27.0-OracleLinux6.8-x86_64</td><td>Bootable</td><td>x86_64</td></tr> <tr> <td>TPD.install-7.3.0.0.0_88.28.0-OracleLinux6.8-x86_64</td><td>Bootable</td><td>x86_64</td></tr> <tr> <td>TVOE-3.3.0.0.0_88.27.0-x86_64</td><td>Bootable</td><td>x86_64</td></tr> <tr> <td>TVOE-3.3.0.0.0_88.28.0-x86_64</td><td>Bootable</td><td>x86_64</td></tr> </tbody> </table>	Image Name	Type	Architecture	TPD.install-7.3.0.0.0_88.27.0-OracleLinux6.8-x86_64	Bootable	x86_64	TPD.install-7.3.0.0.0_88.28.0-OracleLinux6.8-x86_64	Bootable	x86_64	TVOE-3.3.0.0.0_88.27.0-x86_64	Bootable	x86_64	TVOE-3.3.0.0.0_88.28.0-x86_64	Bootable	x86_64
Image Name	Type	Architecture															
TPD.install-7.3.0.0.0_88.27.0-OracleLinux6.8-x86_64	Bootable	x86_64															
TPD.install-7.3.0.0.0_88.28.0-OracleLinux6.8-x86_64	Bootable	x86_64															
TVOE-3.3.0.0.0_88.27.0-x86_64	Bootable	x86_64															
TVOE-3.3.0.0.0_88.28.0-x86_64	Bootable	x86_64															
9. 	<p><b>PMAC Server GUI:</b></p> <p>1) Click the “Path:” pull-down menu and select the <b>SDS ISO</b> file from the /var/TKLC/upgrade directory.</p> <p>2) Add a comment if desired in the Description field.</p> <p>3) Click the “Add New Image” dialogue button.</p>	 <p>Images may be added from any of these sources:</p> <ul style="list-style-type: none"> <li>• Oracle-provided media in the PM&amp;C host's CD/DVD drive (Refer to Note)</li> <li>• USB media attached to the PM&amp;C's host (Refer to Note)</li> <li>• External mounts. Prefix the directory with "extfile://".</li> <li>• These local search paths:             <ul style="list-style-type: none"> <li>◦ /var/TKLC/upgrade/*.iso</li> <li>◦ /var/TKLC/smac/image/isoimages/home/smacftpusr/*.iso</li> </ul> </li> </ul> <p>Note: CD and USB images mounted on PM&amp;C's VM host must first be made accessible to the PM&amp;C VM g <a href="#">Management</a>.</p> <p>Path: /var/TKLC/upgrade/SDS-8.0.0.0.0_80.16.0-x86_64.iso</p> <p>Description:</p> <p><b>Add New Image</b> Cancel</p>															

**Procedure 8. Add SDS Software Images to PMAC Servers for DSR Signaling Sites**

Step	Procedure	Result																																													
10.	<b>PMAC Server GUI:</b>  Click the “OK” button on the confirmation dialogue box to remove the source image after it has been successfully added to the SW Inventory																																														
11. 	<b>PMAC Server GUI:</b>  An info message will be raised to show a new background task	<b>Main Menu: Software -&gt; Manage Software Images [Add Image]</b> 																																													
12. 	<b>PMAC Server GUI:</b>  Watch the extraction progress in the lower task list on the same page	<table><tr><th>ID</th><th>Task</th><th>Target</th><th>Status</th><th>State</th><th>Task Output</th><th>Running Time</th><th>Start Time</th><th>Progress</th></tr><tr><td>6125</td><td>Add Image</td><td></td><td>Done: mediation-7.3.0.0.0_73.17.0-x86_64</td><td>COMPLETE</td><td>N/A</td><td>0:00:22</td><td>2016-08-06 08:46:45</td><td>100%</td></tr><tr><td>6124</td><td>Delete Image</td><td></td><td>oracle-7.3.0.0.0_73.14.0-x86_64</td><td>COMPLETE</td><td>N/A</td><td>0:00:00</td><td>2016-08-06 08:46:17</td><td>100%</td></tr><tr><td>6123</td><td>Delete Image</td><td></td><td>mediation-7.3.0.0.0_73.14.0-x86_64</td><td>COMPLETE</td><td>N/A</td><td>0:00:00</td><td>2016-08-06 08:46:03</td><td>100%</td></tr><tr><td>6122</td><td>Delete Image</td><td></td><td>apps-7.3.0.0.0_73.14.0-x86_64</td><td>COMPLETE</td><td>N/A</td><td>0:00:00</td><td>2016-08-06 08:45:45</td><td>100%</td></tr></table>	ID	Task	Target	Status	State	Task Output	Running Time	Start Time	Progress	6125	Add Image		Done: mediation-7.3.0.0.0_73.17.0-x86_64	COMPLETE	N/A	0:00:22	2016-08-06 08:46:45	100%	6124	Delete Image		oracle-7.3.0.0.0_73.14.0-x86_64	COMPLETE	N/A	0:00:00	2016-08-06 08:46:17	100%	6123	Delete Image		mediation-7.3.0.0.0_73.14.0-x86_64	COMPLETE	N/A	0:00:00	2016-08-06 08:46:03	100%	6122	Delete Image		apps-7.3.0.0.0_73.14.0-x86_64	COMPLETE	N/A	0:00:00	2016-08-06 08:45:45	100%
ID	Task	Target	Status	State	Task Output	Running Time	Start Time	Progress																																							
6125	Add Image		Done: mediation-7.3.0.0.0_73.17.0-x86_64	COMPLETE	N/A	0:00:22	2016-08-06 08:46:45	100%																																							
6124	Delete Image		oracle-7.3.0.0.0_73.14.0-x86_64	COMPLETE	N/A	0:00:00	2016-08-06 08:46:17	100%																																							
6123	Delete Image		mediation-7.3.0.0.0_73.14.0-x86_64	COMPLETE	N/A	0:00:00	2016-08-06 08:46:03	100%																																							
6122	Delete Image		apps-7.3.0.0.0_73.14.0-x86_64	COMPLETE	N/A	0:00:00	2016-08-06 08:45:45	100%																																							
13. 	<b>PMAC Server GUI:</b>  When the extraction task is complete, a new software image will be displayed	<table><tr><th>Image Name</th><th>Type</th><th>Architecture</th><th>Description</th></tr><tr><td>oracle-7.4.0.0.0_74.3.0-x86_64</td><td>Upgrade</td><td>x86_64</td><td></td></tr><tr><td>oracleGuest-8.0.0.0.0_80.8.0-x86_64</td><td>Upgrade</td><td>x86_64</td><td></td></tr><tr><td>SDS-8.0.0.0_80.16.0-x86_64</td><td>Upgrade</td><td>x86_64</td><td></td></tr><tr><td>TPD.install-7.0.3.0.0_86.46.0-OracleLinux6.7-x86_64</td><td>Bootable</td><td>x86_64</td><td></td></tr><tr><td>TPD.install-7.3.0.0.0_88.28.0-OracleLinux6.8-x86_64</td><td>Bootable</td><td>x86_64</td><td></td></tr><tr><td>TPD.install-7.4.0.0.0_88.30.0-OracleLinux6.8-x86_64</td><td>Bootable</td><td>x86_64</td><td></td></tr></table>	Image Name	Type	Architecture	Description	oracle-7.4.0.0.0_74.3.0-x86_64	Upgrade	x86_64		oracleGuest-8.0.0.0.0_80.8.0-x86_64	Upgrade	x86_64		SDS-8.0.0.0_80.16.0-x86_64	Upgrade	x86_64		TPD.install-7.0.3.0.0_86.46.0-OracleLinux6.7-x86_64	Bootable	x86_64		TPD.install-7.3.0.0.0_88.28.0-OracleLinux6.8-x86_64	Bootable	x86_64		TPD.install-7.4.0.0.0_88.30.0-OracleLinux6.8-x86_64	Bootable	x86_64																		
Image Name	Type	Architecture	Description																																												
oracle-7.4.0.0.0_74.3.0-x86_64	Upgrade	x86_64																																													
oracleGuest-8.0.0.0.0_80.8.0-x86_64	Upgrade	x86_64																																													
SDS-8.0.0.0_80.16.0-x86_64	Upgrade	x86_64																																													
TPD.install-7.0.3.0.0_86.46.0-OracleLinux6.7-x86_64	Bootable	x86_64																																													
TPD.install-7.3.0.0.0_88.28.0-OracleLinux6.8-x86_64	Bootable	x86_64																																													
TPD.install-7.4.0.0.0_88.30.0-OracleLinux6.8-x86_64	Bootable	x86_64																																													
14. 	<b>PMAC Server GUI:</b>  Click the “Logout” link on the PMAC server GUI																																														
15.	<b>PMACServer GUI:</b> Load TPD ISO	If the TPD ISO hasn't been loaded onto the PMAC already, repeat <b>steps 1 through 14</b> to load it using the TPD media or ISO.																																													
THIS PROCEDURE HAS BEEN COMPLETED																																															

5.7 OAM Installation for SOAM Sites (All SOAM Sites)

Assumptions:





- This procedure assumes that the SOAM Network Element XML file for the SOAM site has previously been created, as described in **Appendix E**.
- 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 SOAM software on the OAM server blades located at each DSR Signaling Site. The SOAM and DSR OAM servers run in 2 virtual machines on the same HP C-Class blade.


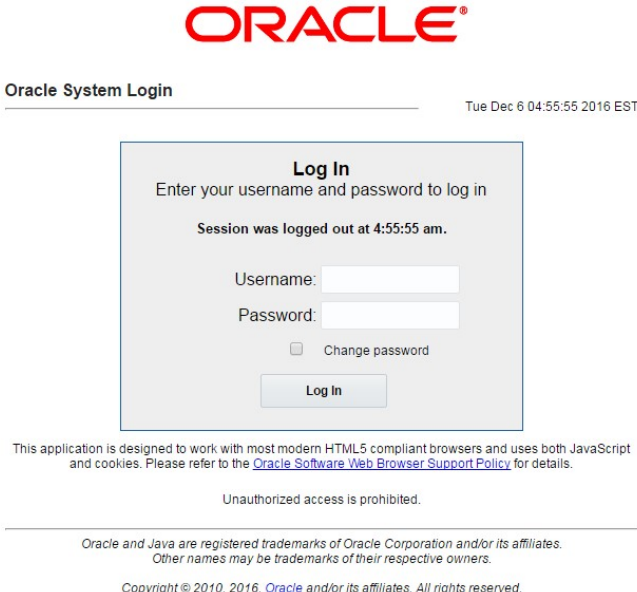

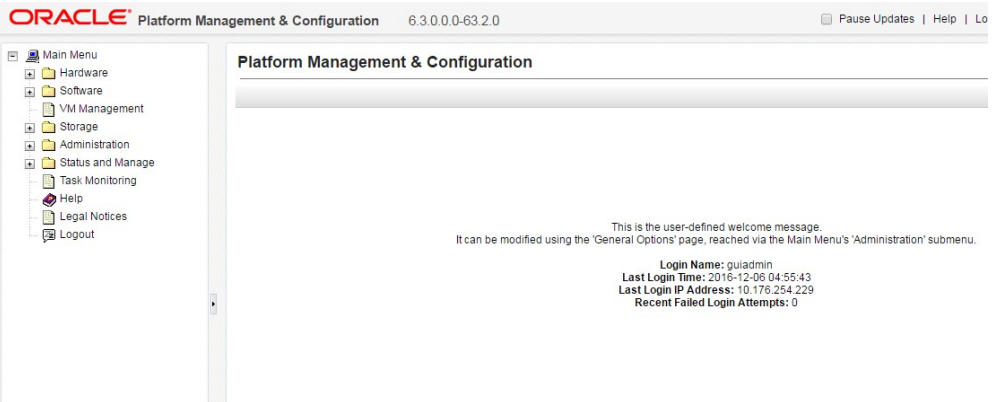
This procedure assumes that the DSR 8.0 or later OAM has already been installed in a virtual environment on the server blade, as described in as described in [5].

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 9. Configuring the SDS SOAM Servers (All SOAM Sites)

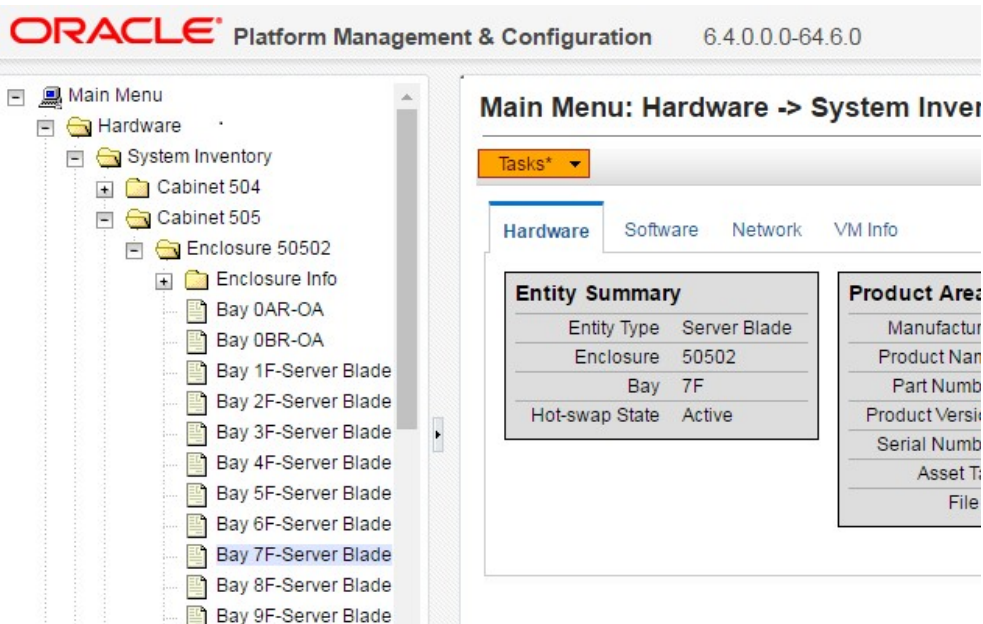
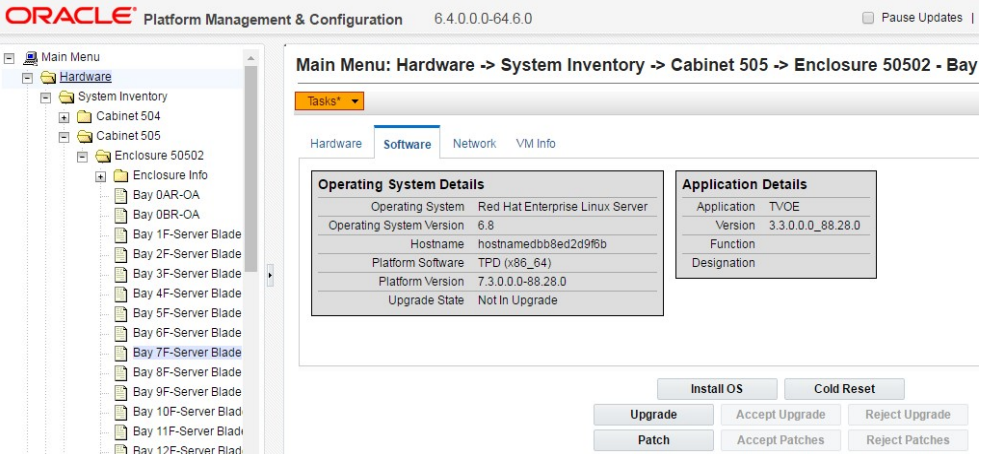

Step	Procedure	Result
1. <div></div>	<p><b>PMAC Server GUI:</b></p> <p>Launch an approved web browser and connect to the <b>Mgmt IP Address</b> of the PMAC server at the SOAM site</p> <p><b>NOTE:</b> <i>If presented with the “security certificate” warning screen shown to the right, choose the following option: “Continue to this website (not recommended)”.</i></p>	<div><div></div><div><p>There is a problem with this website's security certificate.</p><p>The security certificate presented by this website was not issued by a trust</p><p>The security certificate presented by this website was issued for a different</p><p>Security certificate problems may indicate an attempt to fool you or interce</p><p>server.</p><p><b>We recommend that you close this webpage and do not continue to</b></p><p> <a href="#">Click here to close this webpage.</a></p><p> <a href="#">Continue to this website (not recommended).</a></p><p> <a href="#">More information</a></p></div></div>

**Procedure 9. Configuring the SDS SOAM Servers (All SOAM Sites)**

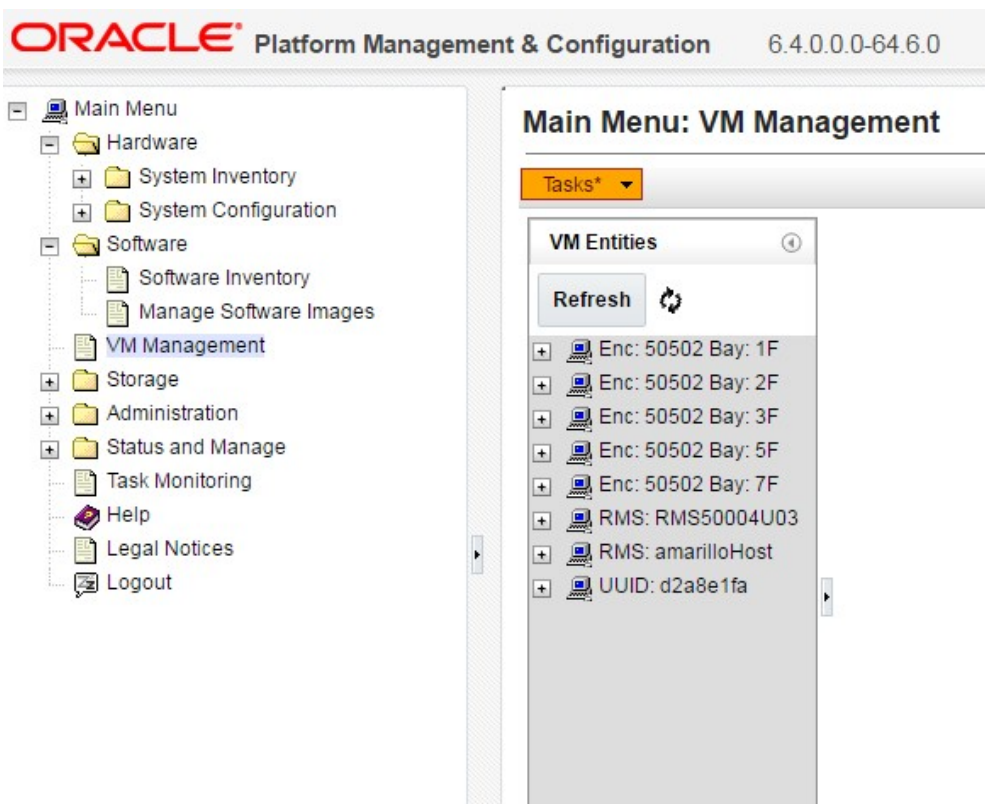
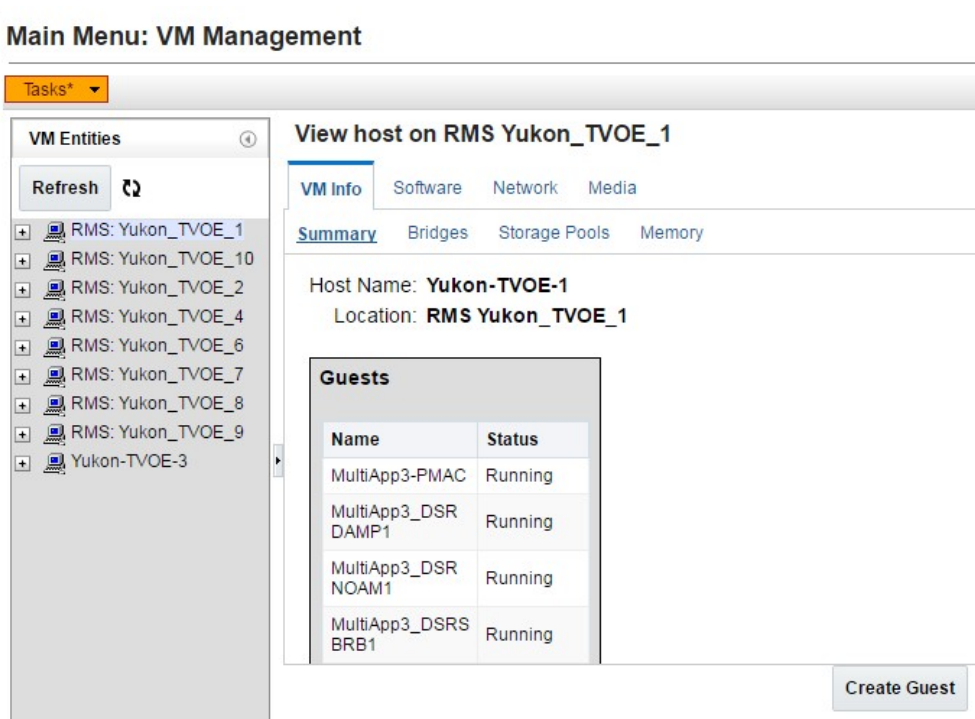
Step	Procedure	Result
<b>2.</b> 	<b>PMAC Server GUI:</b>  The user should be presented the login screen shown on the right.  Login to the GUI using the default user and password.	
<b>3.</b> 	<b>PMAC Server GUI:</b>  The user should be presented the PMAC Main Menu as shown on the right.	



**Procedure 9. Configuring the SDS SOAM Servers (All SOAM Sites)**

Step	Procedure	Result
4. <div></div>	<p><b>PMAC Server GUI:</b></p> <p>Select desired OAM server blade...</p> <p><b>Main Menu</b> → Hardware → System Inventory → &lt;Enclosure&gt; → &lt;Server Blade&gt;</p> <p>...as shown on the right.</p>	
5. <div></div>	<p><b>PMAC Server GUI:</b></p> <p>Select the Software tab.</p> <p>...as shown on the right.</p> <p>Verify that TVOE application has been installed.</p>	
<div><div></div><div><p><b>IF TVOE WAS NOT INSTALLED OR IS THE INCORRECT VERSION ON THE BLADE SERVER, STOP AND EXECUTE THE FOLLOWING STEPS:</b></p><ol style="list-style-type: none"><li>1) Verify that the enclosure and bay number are correct.</li><li>2) Refer [3] for TVOE Installation or Contact DSR Installation Engineer to confirm location of OAM blade and status of TVOE installation.</li><li>3) Restart this procedure.</li></ol><p><b>IF TVOE WAS NOT INSTALLED OR IS THE INCORRECT VERSION ON THE BLADE SERVER, STOP AND EXECUTE THE FOLLOWING STEPS:</b></p><p><b>NOTE:</b> It is assumed that the TVOE version corresponds with the correct DSR and SDS installation guidelines, this can be checked by executing “appRev”.</p></div></div>		

**Procedure 9. Configuring the SDS SOAM Servers (All SOAM Sites)**

Step	Procedure	Result										
6. <div></div>	<p><b>PMAC Server GUI:</b></p> <p>Select ...</p> <p><b>Main Menu</b> → <b>VM Management</b></p> <p>...as shown on the right.</p>	 <p>The screenshot shows the Oracle Platform Management &amp; Configuration interface. The main menu on the left lists various categories: Hardware, System Inventory, System Configuration, Software, Storage, Administration, Status and Manage, Task Monitoring, Help, Legal Notices, and Logout. The 'Software' category is expanded, showing 'Software Inventory', 'Manage Software Images', and 'VM Management' (which is highlighted). The right pane displays the 'Main Menu: VM Management' section, featuring a 'Tasks*' dropdown and a 'VM Entities' list with a 'Refresh' button. The VM Entities list includes items like 'Enc: 50502 Bay: 1F', 'Enc: 50502 Bay: 2F', 'Enc: 50502 Bay: 3F', 'Enc: 50502 Bay: 5F', 'Enc: 50502 Bay: 7F', 'RMS: RMS50004U03', 'RMS: amarilloHost', and 'UUID: d2a8e1fa'.</p>										
7. <div></div>	<p><b>PMAC Server GUI:</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 'Main Menu: VM Management' page. The 'VM Entities' list on the left now includes 'RMS: Yukon_TVOE_1' through 'RMS: Yukon_TVOE_9' and 'Yukon-TVOE-3'. The 'RMS: Yukon_TVOE_1' item is selected. The right pane displays the 'View host on RMS Yukon_TVOE_1' page. It has tabs for 'VM Info', 'Software', 'Network', and 'Media'. The 'VM Info' tab is active, showing a 'Summary' section with 'Host Name: Yukon-TVOE-1' and 'Location: RMS Yukon_TVOE_1'. Below this is a 'Guests' table:</p> <table><thead><tr><th>Name</th><th>Status</th></tr></thead><tbody><tr><td>MultiApp3-PMAC</td><td>Running</td></tr><tr><td>MultiApp3_DSR DAMP1</td><td>Running</td></tr><tr><td>MultiApp3_DSR NOAM1</td><td>Running</td></tr><tr><td>MultiApp3_DSRS BRB1</td><td>Running</td></tr></tbody></table> <p>At the bottom right of the page, there is a 'Create Guest' button.</p>	Name	Status	MultiApp3-PMAC	Running	MultiApp3_DSR DAMP1	Running	MultiApp3_DSR NOAM1	Running	MultiApp3_DSRS BRB1	Running
Name	Status											
MultiApp3-PMAC	Running											
MultiApp3_DSR DAMP1	Running											
MultiApp3_DSR NOAM1	Running											
MultiApp3_DSRS BRB1	Running											



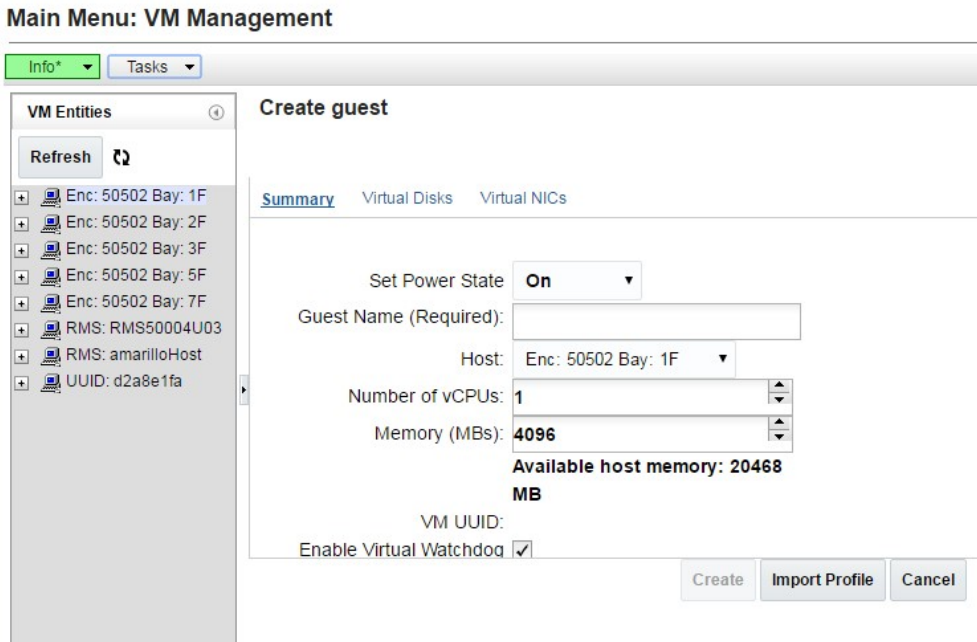
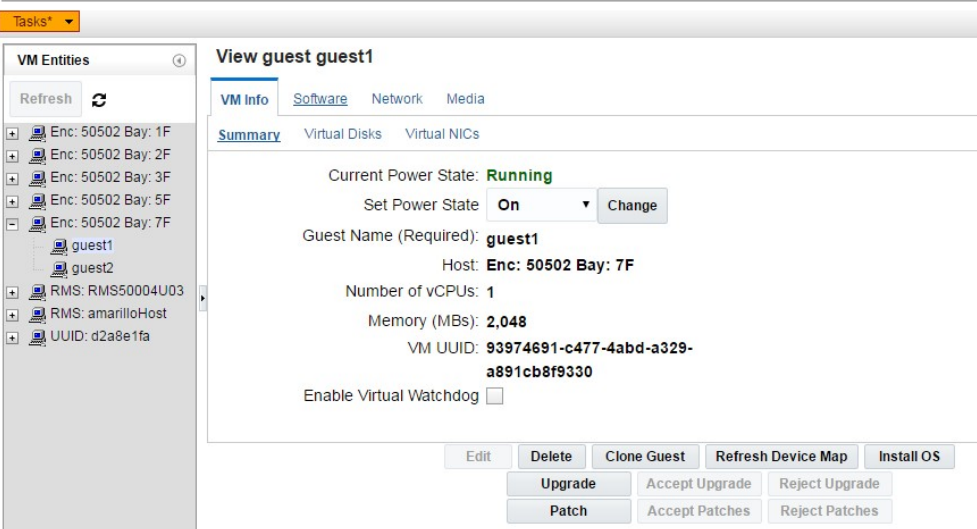
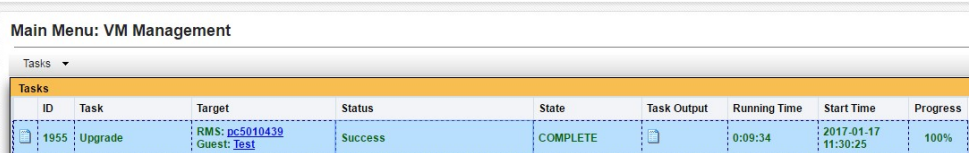
Procedure 9. Configuring the SDS SOAM Servers (All SOAM Sites)

Step	Procedure	Result
8. <div><div></div></div>	<p><b>PMAC Server GUI:</b></p> <p>Click the “<b>Import Profile</b>” dialogue button</p> <p>...as shown on the right.</p>	<div><div><div><div>Main Menu: VM Management</div><div><div>InfoTasks</div><div><div>VM Entities</div><div><div>Refresh</div><div><div><div>RMS: Yukon_TVOE_1</div><div><div>MultiApp3-PMAC</div><div>MultiApp3_DSRDAMF</div><div>MultiApp3_DSRNOAM</div><div>MultiApp3_DSRSBRE</div><div>MultiApp3_DSRSBRS</div><div>MultiApp3_DSRSOAM</div><div>MultiApp3_DSRSOAM</div><div>MultiApp3_DSRS7M</div><div>MultiApp3_SDSSOAM</div></div></div><div><div><div>RMS: Yukon_TVOE_10</div><div>RMS: Yukon_TVOE_2</div><div>RMS: Yukon_TVOE_4</div><div>RMS: Yukon_TVOE_6</div><div>RMS: Yukon_TVOE_7</div><div>RMS: Yukon_TVOE_8</div><div>RMS: Yukon_TVOE_9</div><div>Yukon-TVOE-3</div></div></div></div></div></div><div><div>Create guest</div><div><div>SummaryVirtual DisksVirtual NICs</div><div><div><div>Set Power State</div><div>On</div></div><div><div>Guest Name (Required):</div><div></div></div><div><div>Host:</div><div>RMS: Yukon_TVOE_1</div></div><div><div>Number of vCPUs:</div><div>1</div></div><div><div>Memory (MBs):</div><div>4096</div></div><div><div>Available host memory:</div><div>128890 MB</div></div><div><div>VM UUID:</div><div></div></div><div><div>Enable Virtual Watchdog</div><div><input checked="" type="checkbox"/></div></div></div><div><div>CreateImport ProfileCancel</div></div></div></div></div></div></div></div>


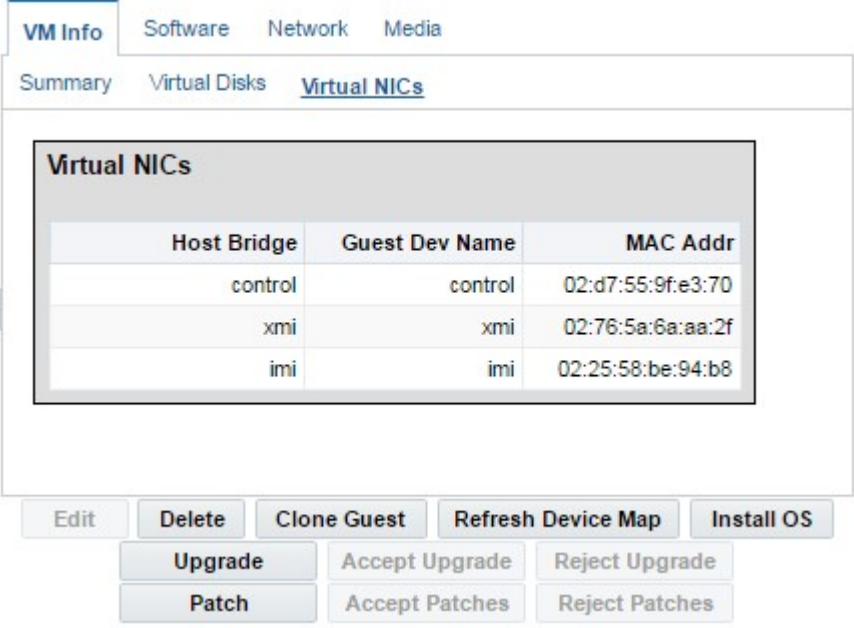


**Procedure 9. Configuring the SDS SOAM Servers (All SOAM Sites)**

Step	Procedure	Result																															
9. <div></div>	<p><b>PMAC Server GUI:</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>From the “<b>ISO/Profile</b>” drop-down box, select the entry that matches depending on the hardware that your SOAM VM TVOE server is running:</p> <table><tr><th>SDS Release</th><th>TVOE HW Type (BL460 Blade Server)</th><th>Role</th><th>Choose Profile (&lt;Application ISO NAME&gt;→)</th></tr><tr><td rowspan="2">8.0</td><td rowspan="2">GEN8 Blade</td><td>SOAM-A</td><td>DP_SOAM_A</td></tr><tr><td>SOAM-B</td><td>DP_SOAM_B</td></tr><tr><td rowspan="2">8.0</td><td rowspan="2">GEN8/ GEN9 Blade</td><td>SOAM-A</td><td rowspan="2">DP_SOAM_1B_RE</td></tr><tr><td>SOAM-B</td></tr></table> <p><b>Note:</b> Application_ISO_NAME is the name of the DSR Application ISO to be installed on this SOAM</p> <div><div>Import Profile</div><div><div>ISO/Profile: SDS-8.0.0.0.0_80.10.0-x86_64 =&gt; DP_SOAM_A</div><div>Num CPUs: 4</div><div>Memory (MBs): 16384</div><div>Virtual Disks:</div><table><tr><th>Prim</th><th>Size (MB)</th><th>Pool</th><th>TPD Dev</th></tr><tr><td>✓</td><td>112640</td><td>vgguests</td><td></td></tr></table><div>NICs:</div><table><tr><th>Bridge</th><th>TPD Dev</th></tr><tr><td>control</td><td>control</td></tr><tr><td>imi</td><td>imi</td></tr><tr><td>xmi</td><td>xmi</td></tr></table><div><div>Select Profile</div><div>Cancel</div></div></div></div>	SDS Release	TVOE HW Type (BL460 Blade Server)	Role	Choose Profile (<Application ISO NAME>→)	8.0	GEN8 Blade	SOAM-A	DP_SOAM_A	SOAM-B	DP_SOAM_B	8.0	GEN8/ GEN9 Blade	SOAM-A	DP_SOAM_1B_RE	SOAM-B	Prim	Size (MB)	Pool	TPD Dev	✓	112640	vgguests		Bridge	TPD Dev	control	control	imi	imi	xmi	xmi
SDS Release	TVOE HW Type (BL460 Blade Server)	Role	Choose Profile (<Application ISO NAME>→)																														
8.0	GEN8 Blade	SOAM-A	DP_SOAM_A																														
		SOAM-B	DP_SOAM_B																														
8.0	GEN8/ GEN9 Blade	SOAM-A	DP_SOAM_1B_RE																														
		SOAM-B																															
Prim	Size (MB)	Pool	TPD Dev																														
✓	112640	vgguests																															
Bridge	TPD Dev																																
control	control																																
imi	imi																																
xmi	xmi																																



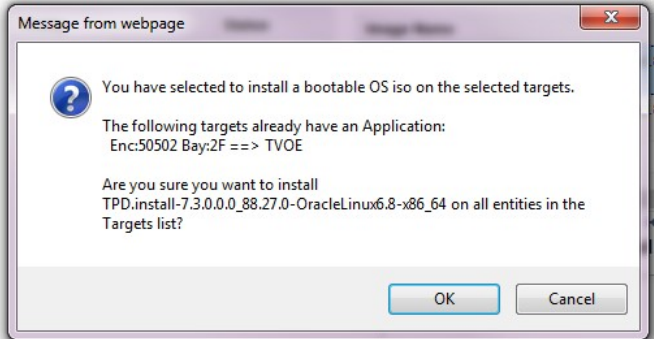
**Procedure 9. Configuring the SDS SOAM Servers (All SOAM Sites)**

Step	Procedure	Result
10.	<p><b>PMAC Server GUI:</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>	
11.	<p><b>PMAC Server GUI:</b></p> <p>Verify that task successfully completes.</p> <p>The user should see a screen similar to the one on below with <b>Progress</b> value of <b>100%</b>.</p> <p><b>"Using the "Tasks" tab, verify that the task completes successfully</b></p>	 

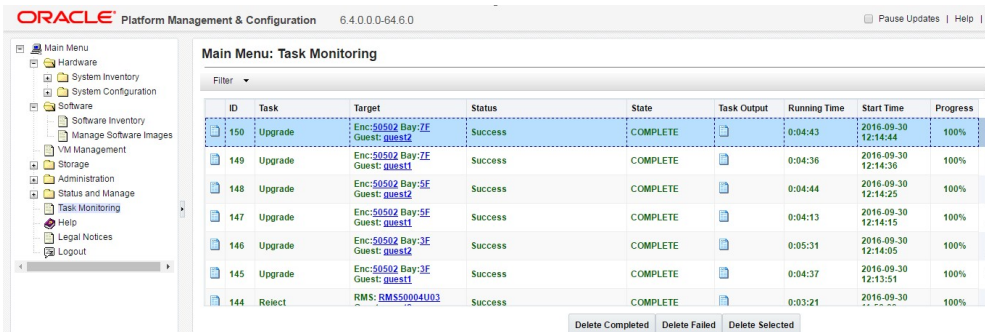
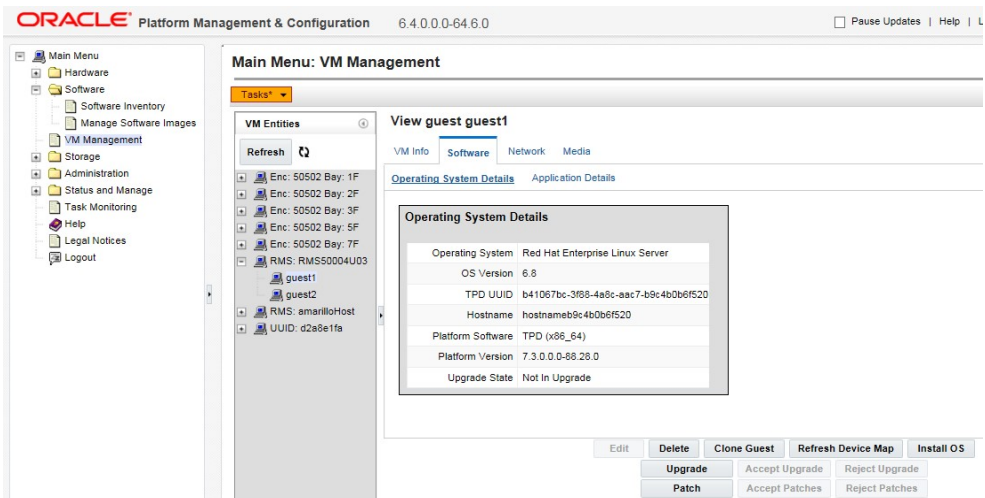
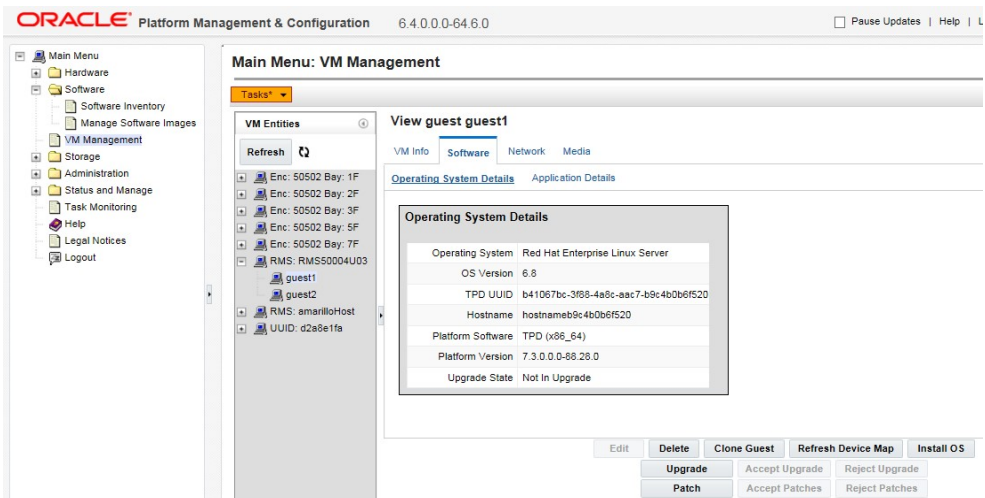
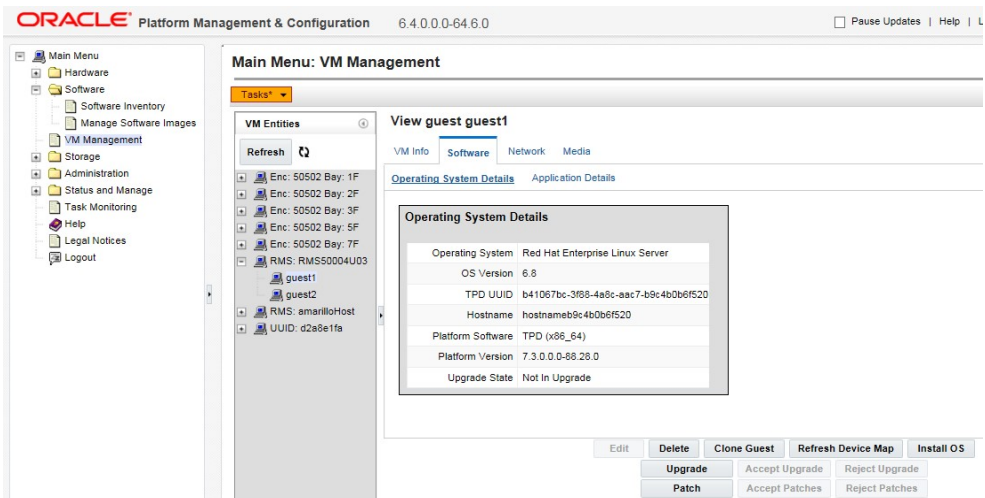
# Procedure 9. Configuring the SDS SOAM Servers (All SOAM Sites)

Step	Procedure	Result
12. 	<b>PMAC Server GUI:</b>  Install the operating system by clicking the “Install OS” dialogue button	
13. 	<b>PMAC Server GUI:</b>  The user should see a screen similar to the one on the right.	

**Procedure 9. Configuring the SDS SOAM Servers (All SOAM Sites)**

Step	Procedure	Result																				
14. 	<b>PMAC Server GUI:</b>  1) Select the desired <b>TPD Image</b>  2) Click the “ <b>Start Install</b> ” dialogue button.	<div><div>Select Image</div><table><thead><tr><th>Image Name</th><th>Type</th><th>Architecture</th><th>Description</th></tr></thead><tbody><tr><td>TPD.install-7.3.0.0.0_88.27.0-OracleLinux6.8-x86_64</td><td>Bootable</td><td>x86_64</td><td>88.27</td></tr><tr><td>TPD.install-7.3.0.0.0_88.28.0-OracleLinux6.8-x86_64</td><td>Bootable</td><td>x86_64</td><td>88.28</td></tr><tr><td>TVOE-3.3.0.0.0_88.27.0-x86_64</td><td>Bootable</td><td>x86_64</td><td>88.27</td></tr><tr><td>TVOE-3.3.0.0.0_88.28.0-x86_64</td><td>Bootable</td><td>x86_64</td><td>88.28</td></tr></tbody></table><div>Supply Software Install Arguments (Optional)</div><div>Start Software InstallBack</div></div>	Image Name	Type	Architecture	Description	TPD.install-7.3.0.0.0_88.27.0-OracleLinux6.8-x86_64	Bootable	x86_64	88.27	TPD.install-7.3.0.0.0_88.28.0-OracleLinux6.8-x86_64	Bootable	x86_64	88.28	TVOE-3.3.0.0.0_88.27.0-x86_64	Bootable	x86_64	88.27	TVOE-3.3.0.0.0_88.28.0-x86_64	Bootable	x86_64	88.28
Image Name	Type	Architecture	Description																			
TPD.install-7.3.0.0.0_88.27.0-OracleLinux6.8-x86_64	Bootable	x86_64	88.27																			
TPD.install-7.3.0.0.0_88.28.0-OracleLinux6.8-x86_64	Bootable	x86_64	88.28																			
TVOE-3.3.0.0.0_88.27.0-x86_64	Bootable	x86_64	88.27																			
TVOE-3.3.0.0.0_88.28.0-x86_64	Bootable	x86_64	88.28																			
15. 	<b>PMAC Server GUI:</b>  The user should be presented with an “ <b>Are you sure you want to install</b> ” message box as shown on the right. Click the “ <b>OK</b> ” dialogue button.																					

Procedure 9. Configuring the SDS SOAM Servers (All SOAM Sites)

Step	Procedure	Result																																																																																									
16. <div></div>	<p><b>PMAC Server GUI:</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><u><b>Main Menu</b></u> → <b>Task Monitoring</b></p> <p><b>Wait till Progress is 100% with a Status of Success and a State of Complete.</b></p>	<div></div> <table><tr><th>ID</th><th>Task</th><th>Target</th><th>Status</th><th>State</th><th>Task Output</th><th>Running Time</th><th>Start Time</th><th>Progress</th></tr><tr><td>150</td><td>Upgrade</td><td>Enc-50502 Bay-1F Guest: guest12</td><td>Success</td><td>COMPLETE</td><td></td><td>0:04:43</td><td>2016-09-30 12:14:44</td><td>100%</td></tr><tr><td>149</td><td>Upgrade</td><td>Enc-50502 Bay-2F Guest: guest12</td><td>Success</td><td>COMPLETE</td><td></td><td>0:04:36</td><td>2016-09-30 12:14:36</td><td>100%</td></tr><tr><td>148</td><td>Upgrade</td><td>Enc-50502 Bay-3F Guest: guest11</td><td>Success</td><td>COMPLETE</td><td></td><td>0:04:44</td><td>2016-09-30 12:14:25</td><td>100%</td></tr><tr><td>147</td><td>Upgrade</td><td>Enc-50502 Bay-4F Guest: guest11</td><td>Success</td><td>COMPLETE</td><td></td><td>0:04:13</td><td>2016-09-30 12:14:15</td><td>100%</td></tr><tr><td>146</td><td>Upgrade</td><td>Enc-50502 Bay-5F Guest: guest12</td><td>Success</td><td>COMPLETE</td><td></td><td>0:05:31</td><td>2016-09-30 12:14:05</td><td>100%</td></tr><tr><td>145</td><td>Upgrade</td><td>Enc-50502 Bay-6F Guest: guest11</td><td>Success</td><td>COMPLETE</td><td></td><td>0:04:37</td><td>2016-09-30 12:13:51</td><td>100%</td></tr><tr><td>144</td><td>Relect</td><td>RMS: RMS50004U03</td><td>Success</td><td>COMPLETE</td><td></td><td>0:03:21</td><td>2016-09-30 12:13:51</td><td>100%</td></tr></table> <tr><td>17.<div></div></td><td><p><b>PMAC Server GUI:</b></p><ol style="list-style-type: none"><li>1. Select [Main Menu: VM Management].</li><li>2. Under VM Entities column, expand (+) plus sign on the Host server containing the newly created VM Guest.</li><li>3. Select the VM Guest.</li><li>4. Select the "Software" tab.</li><li>5. Verify that the OS has been installed.</li><li>6. Click on the "Application Details" tab.</li><li>7. Verify that the "Application Details" table is blank.</li></ol></td><td><div></div><table><tr><th>Operating System</th><th>Red Hat Enterprise Linux Server</th></tr><tr><td>OS Version</td><td>6.8</td></tr><tr><td>TPD UUID</td><td>b41067bc-3f68-4a8c-aac7-b9c4b0b6f520</td></tr><tr><td>Hostname</td><td>hostnameb9c4b0b6f520</td></tr><tr><td>Platform Software</td><td>TPD (x86_64)</td></tr><tr><td>Platform Version</td><td>7.3.0.0.0-88.28.0</td></tr><tr><td>Upgrade State</td><td>Not in Upgrade</td></tr></table></td></tr>	ID	Task	Target	Status	State	Task Output	Running Time	Start Time	Progress	150	Upgrade	Enc-50502 Bay-1F Guest: guest12	Success	COMPLETE		0:04:43	2016-09-30 12:14:44	100%	149	Upgrade	Enc-50502 Bay-2F Guest: guest12	Success	COMPLETE		0:04:36	2016-09-30 12:14:36	100%	148	Upgrade	Enc-50502 Bay-3F Guest: guest11	Success	COMPLETE		0:04:44	2016-09-30 12:14:25	100%	147	Upgrade	Enc-50502 Bay-4F Guest: guest11	Success	COMPLETE		0:04:13	2016-09-30 12:14:15	100%	146	Upgrade	Enc-50502 Bay-5F Guest: guest12	Success	COMPLETE		0:05:31	2016-09-30 12:14:05	100%	145	Upgrade	Enc-50502 Bay-6F Guest: guest11	Success	COMPLETE		0:04:37	2016-09-30 12:13:51	100%	144	Relect	RMS: RMS50004U03	Success	COMPLETE		0:03:21	2016-09-30 12:13:51	100%	17. <div></div>	<p><b>PMAC Server GUI:</b></p> <ol style="list-style-type: none"><li>1. Select [Main Menu: VM Management].</li><li>2. Under VM Entities column, expand (+) plus sign on the Host server containing the newly created VM Guest.</li><li>3. Select the VM Guest.</li><li>4. Select the "Software" tab.</li><li>5. Verify that the OS has been installed.</li><li>6. Click on the "Application Details" tab.</li><li>7. Verify that the "Application Details" table is blank.</li></ol>	<div></div> <table><tr><th>Operating System</th><th>Red Hat Enterprise Linux Server</th></tr><tr><td>OS Version</td><td>6.8</td></tr><tr><td>TPD UUID</td><td>b41067bc-3f68-4a8c-aac7-b9c4b0b6f520</td></tr><tr><td>Hostname</td><td>hostnameb9c4b0b6f520</td></tr><tr><td>Platform Software</td><td>TPD (x86_64)</td></tr><tr><td>Platform Version</td><td>7.3.0.0.0-88.28.0</td></tr><tr><td>Upgrade State</td><td>Not in Upgrade</td></tr></table>	Operating System	Red Hat Enterprise Linux Server	OS Version	6.8	TPD UUID	b41067bc-3f68-4a8c-aac7-b9c4b0b6f520	Hostname	hostnameb9c4b0b6f520	Platform Software	TPD (x86_64)	Platform Version	7.3.0.0.0-88.28.0	Upgrade State	Not in Upgrade
ID	Task	Target	Status	State	Task Output	Running Time	Start Time	Progress																																																																																			
150	Upgrade	Enc-50502 Bay-1F Guest: guest12	Success	COMPLETE		0:04:43	2016-09-30 12:14:44	100%																																																																																			
149	Upgrade	Enc-50502 Bay-2F Guest: guest12	Success	COMPLETE		0:04:36	2016-09-30 12:14:36	100%																																																																																			
148	Upgrade	Enc-50502 Bay-3F Guest: guest11	Success	COMPLETE		0:04:44	2016-09-30 12:14:25	100%																																																																																			
147	Upgrade	Enc-50502 Bay-4F Guest: guest11	Success	COMPLETE		0:04:13	2016-09-30 12:14:15	100%																																																																																			
146	Upgrade	Enc-50502 Bay-5F Guest: guest12	Success	COMPLETE		0:05:31	2016-09-30 12:14:05	100%																																																																																			
145	Upgrade	Enc-50502 Bay-6F Guest: guest11	Success	COMPLETE		0:04:37	2016-09-30 12:13:51	100%																																																																																			
144	Relect	RMS: RMS50004U03	Success	COMPLETE		0:03:21	2016-09-30 12:13:51	100%																																																																																			
17. <div></div>	<p><b>PMAC Server GUI:</b></p> <ol style="list-style-type: none"><li>1. Select [Main Menu: VM Management].</li><li>2. Under VM Entities column, expand (+) plus sign on the Host server containing the newly created VM Guest.</li><li>3. Select the VM Guest.</li><li>4. Select the "Software" tab.</li><li>5. Verify that the OS has been installed.</li><li>6. Click on the "Application Details" tab.</li><li>7. Verify that the "Application Details" table is blank.</li></ol>	<div></div> <table><tr><th>Operating System</th><th>Red Hat Enterprise Linux Server</th></tr><tr><td>OS Version</td><td>6.8</td></tr><tr><td>TPD UUID</td><td>b41067bc-3f68-4a8c-aac7-b9c4b0b6f520</td></tr><tr><td>Hostname</td><td>hostnameb9c4b0b6f520</td></tr><tr><td>Platform Software</td><td>TPD (x86_64)</td></tr><tr><td>Platform Version</td><td>7.3.0.0.0-88.28.0</td></tr><tr><td>Upgrade State</td><td>Not in Upgrade</td></tr></table>	Operating System	Red Hat Enterprise Linux Server	OS Version	6.8	TPD UUID	b41067bc-3f68-4a8c-aac7-b9c4b0b6f520	Hostname	hostnameb9c4b0b6f520	Platform Software	TPD (x86_64)	Platform Version	7.3.0.0.0-88.28.0	Upgrade State	Not in Upgrade																																																																											
Operating System	Red Hat Enterprise Linux Server																																																																																										
OS Version	6.8																																																																																										
TPD UUID	b41067bc-3f68-4a8c-aac7-b9c4b0b6f520																																																																																										
Hostname	hostnameb9c4b0b6f520																																																																																										
Platform Software	TPD (x86_64)																																																																																										
Platform Version	7.3.0.0.0-88.28.0																																																																																										
Upgrade State	Not in Upgrade																																																																																										


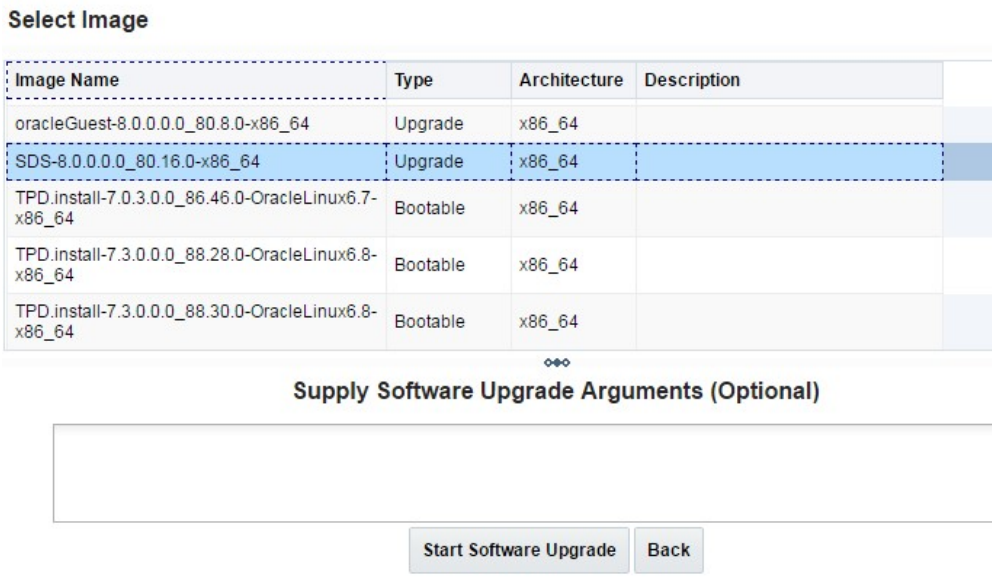

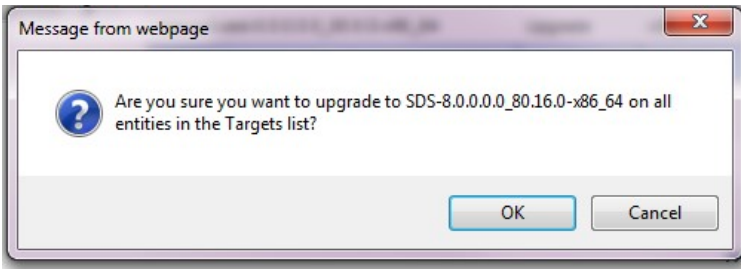


**Procedure 9. Configuring the SDS SOAM Servers (All SOAM Sites)**

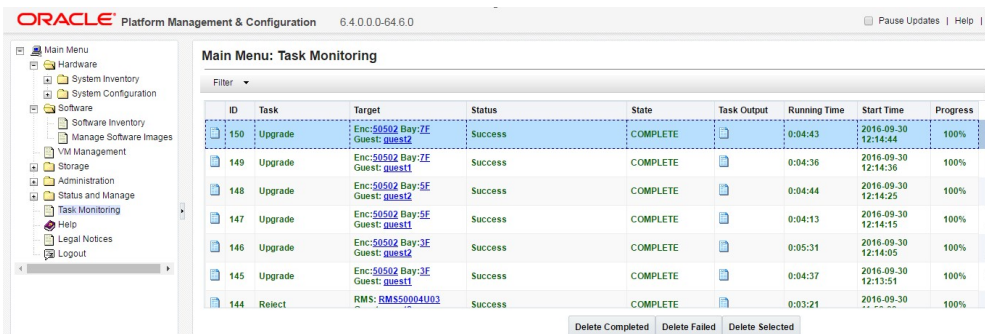
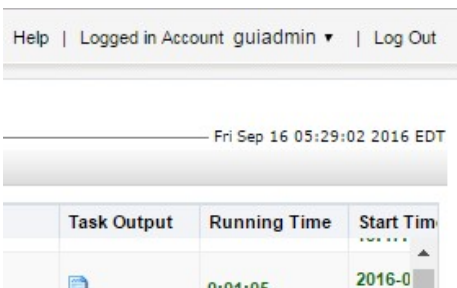
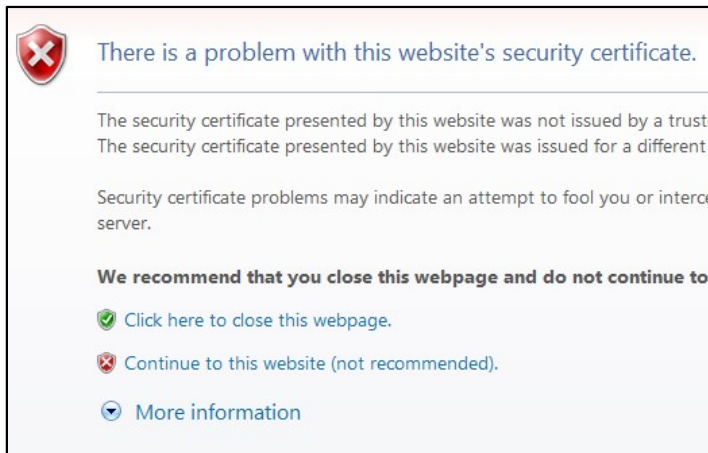
Step	Procedure	Result																				
18. <div></div>	<p><b>PMAC Server GUI:</b></p> <p>1) Select the “<b>Network</b>” tab</p> <p>2) Record the <b>control IP address</b> for this SOAM VM; it will be referenced later.</p> <p>3) Select the “<b>Upgrade</b>” dialogue button</p>	<div><div><div>ORACLE<sup>®</sup> Platform Management &amp; Configuration 6.3.0.0.0-63.1.0<div><div><div><div>Main Menu</div><div><div>Hardware</div><div>Software</div><div>Software Inventory</div><div>Manage Software Images</div><div>VM Management</div><div>Storage</div><div>Administration</div><div>Status and Manage</div><div>Task Monitoring</div><div>Help</div><div>Legal Notices</div><div>Logout</div></div></div></div></div><div><div>Main Menu: VM Management</div><div>Tasks* ▾</div><div><div>VM Entities</div><div><div>Refresh ↺</div><div><div>Enc: 50502 Bay: 1F</div><div>Enc: 50502 Bay: 2F</div><div>Enc: 50502 Bay: 3F</div><div>Enc: 50502 Bay: 5F</div><div>Enc: 50502 Bay: 7F</div><div>RMS: RMS50004U03</div><div>guest1</div><div>guest2</div><div>RMS: amarilloHost</div><div>UUID: d2a8e1fa</div></div></div></div><div><div>View guest guest1</div><div>VM Info Software <b>Network</b> Media</div><div><div>Network Interfaces</div><table><thead><tr><th>Port</th><th>IP Address</th><th>Admin</th><th>Oper</th></tr></thead><tbody><tr><td>control</td><td>fe80::f8:dbff:fe41:d742 169.254.118.194</td><td>Up Up</td><td>Up Up</td></tr></tbody></table></div><div><div>Edit</div><div>Delete</div><div>Clone Guest</div><div>Refresh Device Map</div><div>Install OS</div><div>Upgrade Patch</div><div>Accept Upgrade Accept Patches</div><div>Reject Upgrade Reject Patches</div></div></div></div></div></div></div>	Port	IP Address	Admin	Oper	control	fe80::f8:dbff:fe41:d742 169.254.118.194	Up Up	Up Up												
Port	IP Address	Admin	Oper																			
control	fe80::f8:dbff:fe41:d742 169.254.118.194	Up Up	Up Up																			
19. <div></div>	<p><b>PMAC Server GUI:</b></p> <p>The user should be presented the Select Image screen as shown on the right</p>	<div><div><div>Software Upgrade - Select Image</div><div>Tasks ▾</div><div><div>Targets</div><table><thead><tr><th>Entity</th><th>Status</th></tr></thead><tbody><tr><td>Host IP: ...:e0ff:fe75:d4b8</td><td></td></tr><tr><td>Guest: <a href="#">MultiApp3_SDSSOAM1</a></td><td></td></tr></tbody></table></div><div><div>Select Image</div><table><thead><tr><th>Image Name</th><th>Type</th></tr></thead><tbody><tr><td>apps-7.2.0.0.0_72.20.0-x86_64</td><td>Upgrade</td></tr><tr><td>DSR-7.2.0.0.0_72.18.0-x86_64</td><td>Upgrade</td></tr><tr><td>DSR-8.0.0.0.0_80.10.0-x86_64</td><td>Upgrade</td></tr><tr><td>DSR-8.0.0.0.0_80.8.0-x86_64</td><td>Upgrade</td></tr><tr><td>DSR-8.0.0.0.0_80.9.0-x86_64</td><td>Upgrade</td></tr><tr><td>mediation-7.2.0.0.0_72.20.0-x86_64</td><td>Upgrade</td></tr></tbody></table></div></div></div>	Entity	Status	Host IP: ...:e0ff:fe75:d4b8		Guest: <a href="#">MultiApp3_SDSSOAM1</a>		Image Name	Type	apps-7.2.0.0.0_72.20.0-x86_64	Upgrade	DSR-7.2.0.0.0_72.18.0-x86_64	Upgrade	DSR-8.0.0.0.0_80.10.0-x86_64	Upgrade	DSR-8.0.0.0.0_80.8.0-x86_64	Upgrade	DSR-8.0.0.0.0_80.9.0-x86_64	Upgrade	mediation-7.2.0.0.0_72.20.0-x86_64	Upgrade
Entity	Status																					
Host IP: ...:e0ff:fe75:d4b8																						
Guest: <a href="#">MultiApp3_SDSSOAM1</a>																						
Image Name	Type																					
apps-7.2.0.0.0_72.20.0-x86_64	Upgrade																					
DSR-7.2.0.0.0_72.18.0-x86_64	Upgrade																					
DSR-8.0.0.0.0_80.10.0-x86_64	Upgrade																					
DSR-8.0.0.0.0_80.8.0-x86_64	Upgrade																					
DSR-8.0.0.0.0_80.9.0-x86_64	Upgrade																					
mediation-7.2.0.0.0_72.20.0-x86_64	Upgrade																					




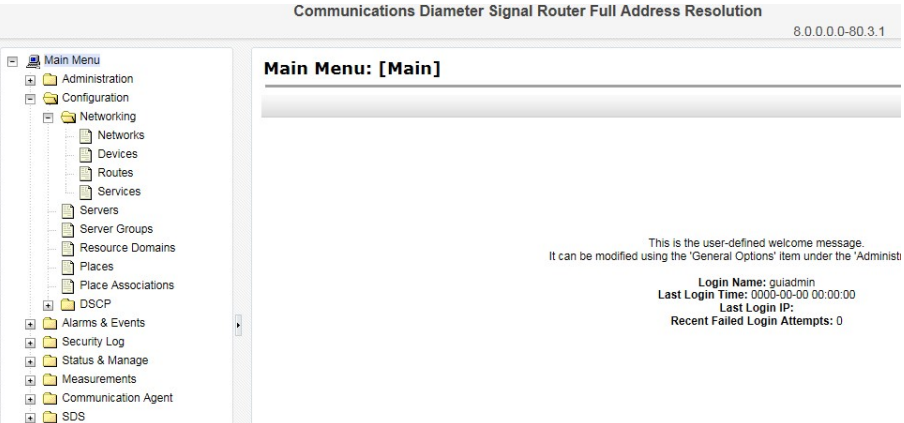
**Procedure 9. Configuring the SDS SOAM Servers (All SOAM Sites)**

Step	Procedure	Result
20. 	<b>PMAC Server GUI:</b>  1) Select the correct <b>SDS</b> version from the “ <b>Image Name</b> ” list. The line entry should now be highlighted in <b>BLUE</b> .  2) Select the “ <b>Start Upgrade</b> ” dialogue button	
21. 	<b>PMAC Server GUI:</b>  The user should be presented with an “ <b>Are you sure you want to upgrade</b> ” message box  ....as shown on the right.  Click the “ <b>OK</b> ” dialogue button.	


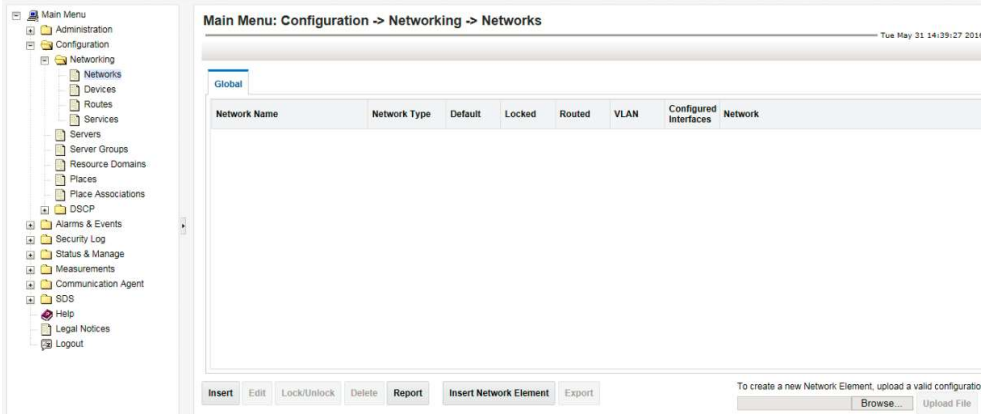

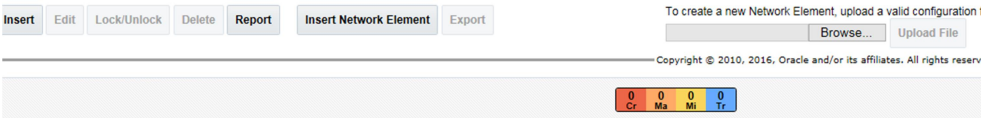



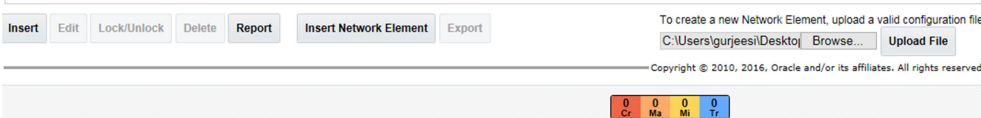
**Procedure 9. Configuring the SDS SOAM Servers (All SOAM Sites)**

Step	Procedure	Result
22. <div></div>	<p><b>PMAC Server GUI:</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><u><b>Main Menu</b></u> → <b>Task Monitoring</b></p> <p>Wait till Progress is 100% with a Status of Success and a State of Complete.</p>	<div></div>
23. <div></div>	Repeat <b>Steps 4 – 22</b> of this procedure for the <b>SOAM B Server</b> .	
24. <div></div>	<p><b>PMAC Server GUI:</b></p> <p>Click the “<b>Logout</b>” link on the PMAC server GUI.</p>	<div></div>
25. <div></div>	<p><b>Primary SDS VIP:</b></p> <p>Launch an approved web browser and connect to the XMI Virtual IP address (VIP) assigned to Active SDS site</p> <p><b>NOTE:</b> <i>If presented with the “security certificate” warning screen shown to the right, choose the following option: “Continue to this website (not recommended)”.</i></p>	<div></div>

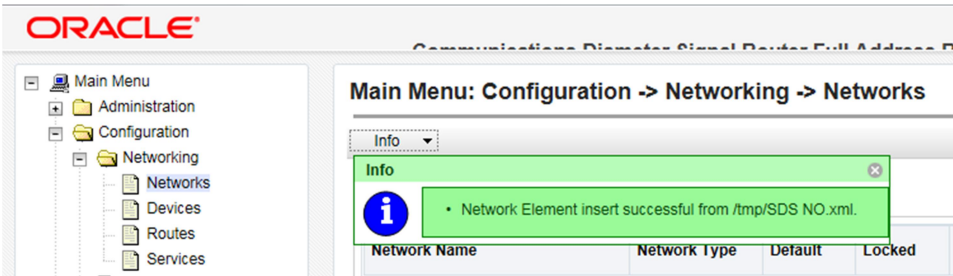
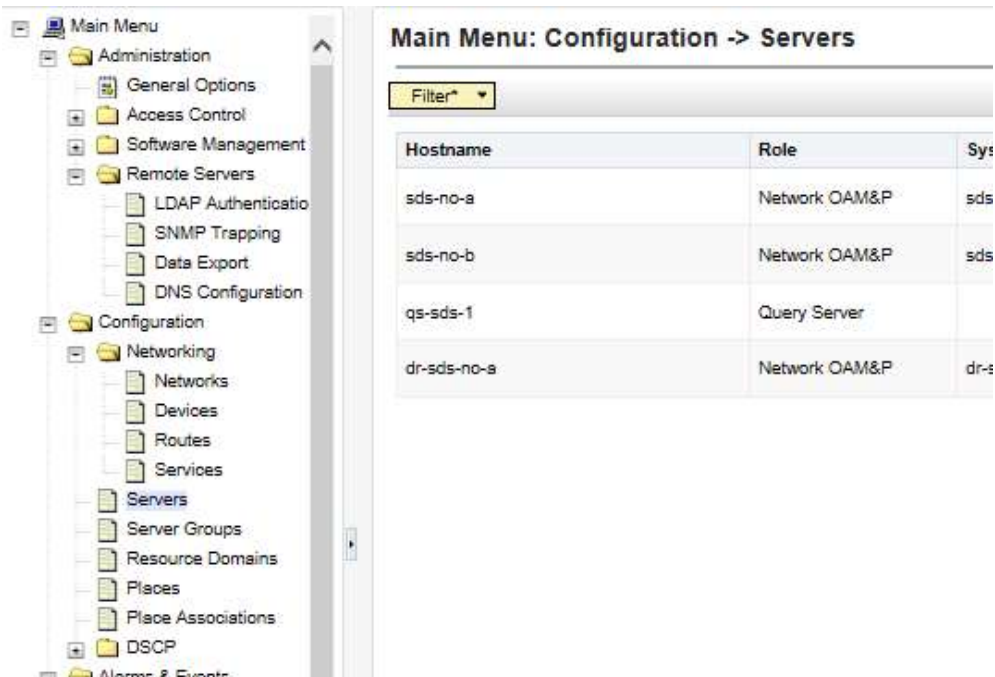
**Procedure 9. Configuring the SDS SOAM Servers (All SOAM Sites)**

Step	Procedure	Result
<p>26.</p> <div></div>	<p><b>Primary 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> <div></div>	<p><b>Primary SDS VIP:</b></p> <p>The user should be presented the SDS Main Menu as shown on the right.</p>	














# Procedure 9. Configuring the SDS SOAM Servers (All SOAM Sites)

Step	Procedure	Result
28. 	<b>Primary SDS VIP:</b> Select...  <b>Main Menu</b> → Configuration → Network Elements  ...as shown on the right.	
29. 	<b>Primary SDS VIP:</b> From the <b>Configuration / Network Elements</b> screen, select the “ <b>Browse</b> ” dialogue button	
30. 	<b>Primary SDS VIP:</b> <b>Note:</b> This step assumes that the <b>.xml</b> files were previously prepared, as described in <b>Appendix E</b> .  1) Select the location containing the site <b>.xml</b> file.  2) Select the <b>.xml</b> file and click the “ <b>Open</b> ” dialogue button	
31. 	<b>Primary SDS VIP:</b> Select the “ <b>Upload File</b> ” dialogue button (bottom left corner of screen)	

**Procedure 9. Configuring the SDS SOAM Servers (All SOAM Sites)**

Step	Procedure	Result															
32. <input type="checkbox"/>	<p><b>Primary SDS VIP:</b></p> <p>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</p>																
33. <input type="checkbox"/>	<p><b>Primary SDS VIP:</b></p> <p>1) Select...</p> <p><b>Main Menu</b> → <b>Configuration</b> → <b>Servers</b></p> <p>...as shown on the right.</p> <p>2) Select the “Insert” dialogue button</p>	 <table border="1"> <thead> <tr> <th>Hostname</th><th>Role</th><th>Sys</th></tr> </thead> <tbody> <tr> <td>sds-no-a</td><td>Network OAM&amp;P</td><td>sds</td></tr> <tr> <td>sds-no-b</td><td>Network OAM&amp;P</td><td>sds</td></tr> <tr> <td>qs-sds-1</td><td>Query Server</td><td></td></tr> <tr> <td>dr-sds-no-s</td><td>Network OAM&amp;P</td><td>dr-s</td></tr> </tbody> </table>	Hostname	Role	Sys	sds-no-a	Network OAM&P	sds	sds-no-b	Network OAM&P	sds	qs-sds-1	Query Server		dr-sds-no-s	Network OAM&P	dr-s
Hostname	Role	Sys															
sds-no-a	Network OAM&P	sds															
sds-no-b	Network OAM&P	sds															
qs-sds-1	Query Server																
dr-sds-no-s	Network OAM&P	dr-s															

**Procedure 9. Configuring the SDS SOAM Servers (All SOAM Sites)**


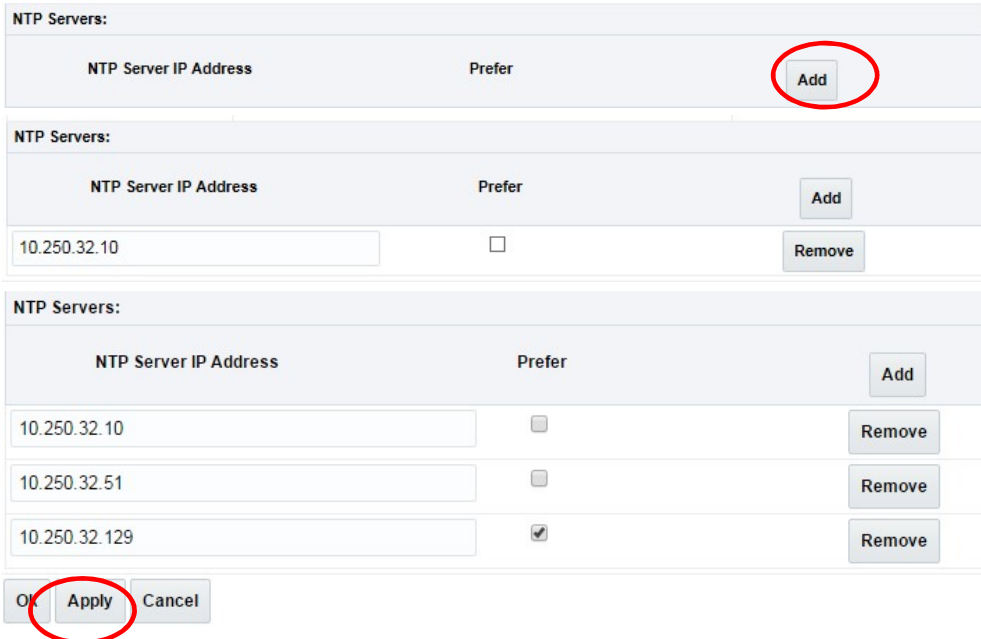

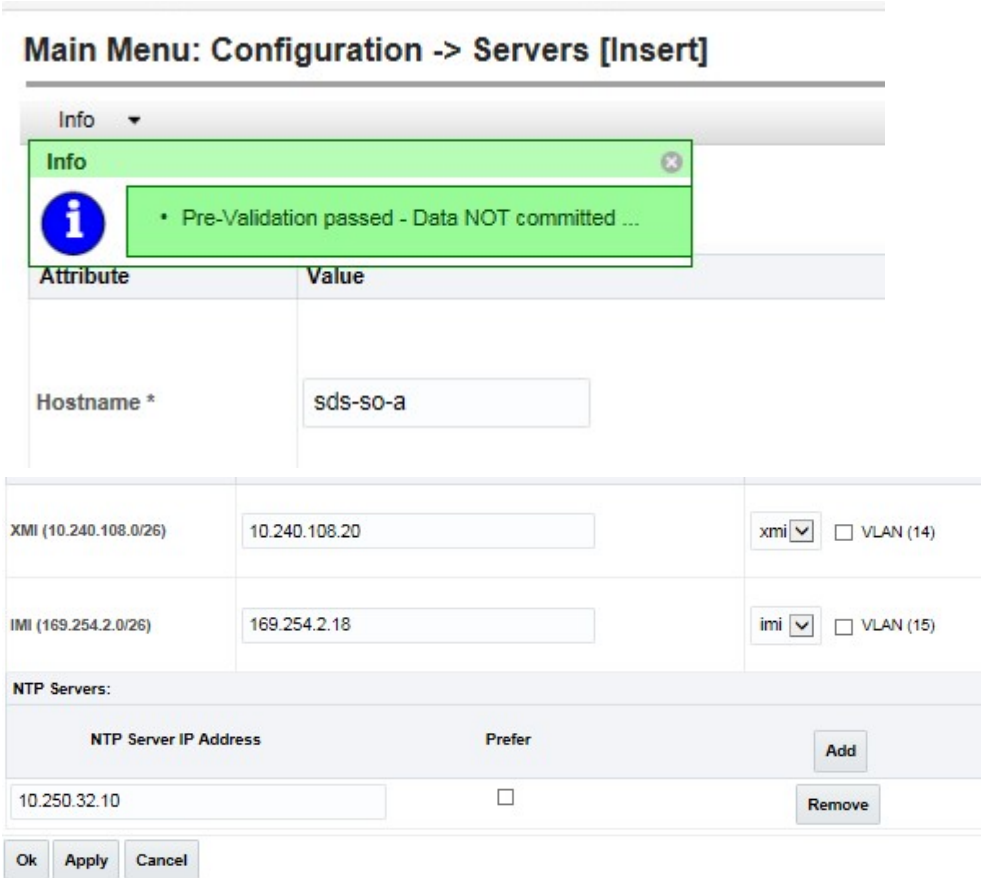
Step	Procedure	Result																					
34. 	<b>Primary SDS VIP:</b> The user is now presented with the “Adding a new server” configuration screen.	<p><b>Adding a new server</b></p> <table border="1"> <thead> <tr> <th>Attribute</th><th>Value</th><th>Description</th></tr> </thead> <tbody> <tr> <td>Hostname *</td><td><input type="text"/></td><td>Unique name for the server. [A value is required.]</td></tr> <tr> <td>Role *</td><td>- Select Role - </td><td>Select the function of the server [A value is required.]</td></tr> <tr> <td>System ID</td><td><input type="text"/></td><td>System ID for the NOAMP or Range = A 64-character string</td></tr> <tr> <td>Hardware Profile</td><td>SDS HP Rack Mount </td><td>Hardware profile for the server</td></tr> <tr> <td>Network Element Name *</td><td>- Unassigned - </td><td>Select the network element for the server</td></tr> <tr> <td>Location</td><td><input type="text"/></td><td>Location of the server</td></tr> </tbody> </table> <p>Ok Apply Cancel</p>	Attribute	Value	Description	Hostname *	<input type="text"/>	Unique name for the server. [A value is required.]	Role *	- Select Role - 	Select the function of the server [A value is required.]	System ID	<input type="text"/>	System ID for the NOAMP or Range = A 64-character string	Hardware Profile	SDS HP Rack Mount 	Hardware profile for the server	Network Element Name *	- Unassigned - 	Select the network element for the server	Location	<input type="text"/>	Location of the server
Attribute	Value	Description																					
Hostname *	<input type="text"/>	Unique name for the server. [A value is required.]																					
Role *	- Select Role - 	Select the function of the server [A value is required.]																					
System ID	<input type="text"/>	System ID for the NOAMP or Range = A 64-character string																					
Hardware Profile	SDS HP Rack Mount 	Hardware profile for the server																					
Network Element Name *	- Unassigned - 	Select the network element for the server																					
Location	<input type="text"/>	Location of the server																					
35. 	<b>Primary SDS VIP:</b> Input the assigned “hostname” for SOAM Server.	<table border="1"> <thead> <tr> <th>Attribute</th><th>Value</th><th>Description</th></tr> </thead> <tbody> <tr> <td>Hostname *</td><td>sds-so-a</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.] [A value is required.]</td></tr> </tbody> </table>	Attribute	Value	Description	Hostname *	sds-so-a	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.] [A value is required.]															
Attribute	Value	Description																					
Hostname *	sds-so-a	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.] [A value is required.]																					
36. 	<b>Primary SDS VIP:</b> Select “ <b>SYSTEM OAM</b> ” for the <b>Role</b> from the pull-down menu.	<table border="1"> <tbody> <tr> <td>Role *</td> <td> <div>           - Select Role -            NETWORK OAM&amp;P  <b>SYSTEM OAM</b>            MP            QUERY SERVER         </div> </td> <td>Select the function of the server [A value is required.]</td></tr> </tbody> </table>	Role *	<div>           - Select Role -            NETWORK OAM&amp;P  <b>SYSTEM OAM</b>            MP            QUERY SERVER         </div>	Select the function of the server [A value is required.]																		
Role *	<div>           - Select Role -            NETWORK OAM&amp;P  <b>SYSTEM OAM</b>            MP            QUERY SERVER         </div>	Select the function of the server [A value is required.]																					
37. 	<b>Primary SDS VIP:</b> Input the assigned hostname again as the “ <b>System ID</b> ” for the SO Server (A or B).	<table border="1"> <tbody> <tr> <td>System ID</td> <td>sds-so-a</td> <td>System ID for the NOAMP or Range = A 64-character string</td></tr> </tbody> </table>	System ID	sds-so-a	System ID for the NOAMP or Range = A 64-character string																		
System ID	sds-so-a	System ID for the NOAMP or Range = A 64-character string																					

### Procedure 9. Configuring the SDS SOAM Servers (All SOAM Sites)

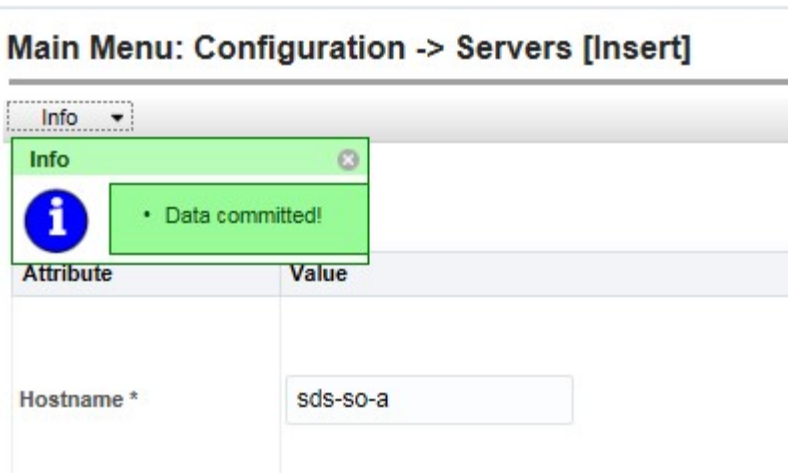
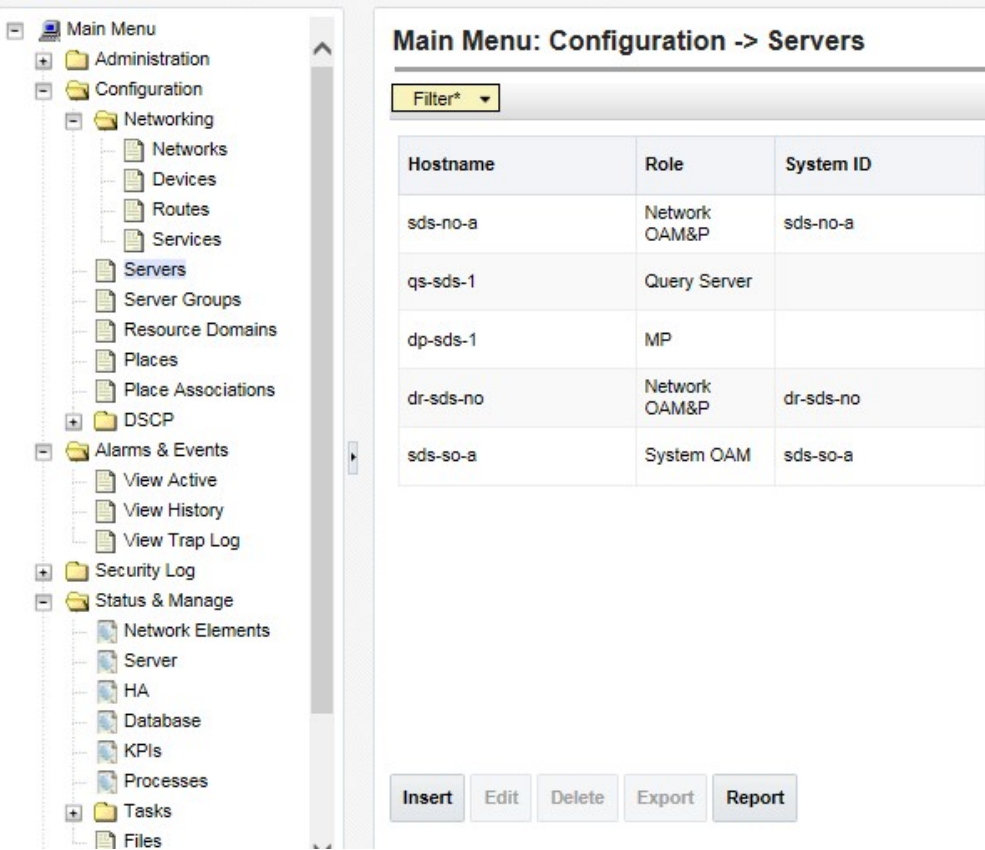
Step	Procedure	Result									
38. <input type="checkbox"/>	<b>Primary SDS VIP:</b> Select “ <b>SDS TVOE Guest</b> ” for the <b>Hardware Profile</b> for the SOAM from the pull-down menu.	<div> <div>System ID</div> <div>Hardware Profile</div> </div> <div> <div> <div>SDS HP Rack Mount</div> <div>SDS Cloud Guest</div> <div>SDS HP c-Class Blade V1</div> <div>SDS HP c-Class Blade V2</div> <div>SDS TVOE Guest</div> <div>SDS HP c-Class Blade V0</div> </div> <div>System ID for the NOAMP or SOAM Range = A 64-character string. Valid</div> <div>Hardware profile of the server</div> </div>									
39. <input type="checkbox"/>	<b>Primary SDS VIP:</b> Select the <b>Network Element Name</b> for the SDS from the pull-down menu.  <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 41</b> .	<div> <div>Network Element Name *</div> <div>SDS_NE</div> <div>Select the network element [A value is required.]</div> </div>									
40. <input type="checkbox"/>	<b>Primary SDS VIP:</b> Enter the site location.	<div> <div>Location</div> <div>Bangalore</div> <div>Location description [Default = "". Range = A 15-character string. Valid value is any text string.]</div> </div> <p><b>NOTE:</b> Location is an optional field.</p>									
41. <input type="checkbox"/>	<b>Primary SDS VIP:</b> <b>1) Enter the XMI IP address and IMI IP address for the SDS SOAM Server.</b>  <b>2) Set the XMI Interface to “xmi” and DO NOT check the VLAN checkbox.</b>  <b>3) Set the IMI Interface to “imi” and DO NOT check the VLAN checkbox.</b>	<table> <thead> <tr> <th>Network</th><th>IP Address</th><th>Interface</th></tr> </thead> <tbody> <tr> <td>XMI (10.240.108.0/26)</td><td>10.240.108.21</td><td>xmi <input type="checkbox"/> VLAN (14)</td></tr> <tr> <td>IMI (169.254.2.0/26)</td><td>169.254.2.11</td><td>imi <input type="checkbox"/> VLAN (15)</td></tr> </tbody> </table>	Network	IP Address	Interface	XMI (10.240.108.0/26)	10.240.108.21	xmi <input type="checkbox"/> VLAN (14)	IMI (169.254.2.0/26)	169.254.2.11	imi <input type="checkbox"/> VLAN (15)
Network	IP Address	Interface									
XMI (10.240.108.0/26)	10.240.108.21	xmi <input type="checkbox"/> VLAN (14)									
IMI (169.254.2.0/26)	169.254.2.11	imi <input type="checkbox"/> VLAN (15)									



**Procedure 9. Configuring the SDS SOAM Servers (All SOAM Sites)**

Step	Procedure	Result
42. 	<b>Primary SDS VIP:</b> 1) Click the “NTP Servers:” “Add” dialogue button.  2) Enter the <b>NTP Server IP Address</b> for an NTP Server.  3) Enter 3 NTP Server <b>IP address</b> , repeat (1) and (2) to enter it.  4) Optionally, click the “Prefer” checkbox to prefer one NTP Server over the other.	
43. 	<b>Primary SDS VIP:</b> 1) The user should be presented with a banner information message stating “Pre-Validation passed”.  2) Click the “Apply” dialogue button.	

**Procedure 9. Configuring the SDS SOAM Servers (All SOAM Sites)**

Step	Procedure	Result																		
44. <input type="checkbox"/>	<p><b>Primary 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</p>	 <p>The screenshot shows the 'Main Menu: Configuration -&gt; Servers [Insert]' interface. A green information box with an 'i' icon and a close button 'x' displays the message 'Data committed!'. Below this, there is a table with two columns: 'Attribute' and 'Value'. The 'Attribute' column contains 'Hostname *' and the 'Value' column contains 'sds-so-a'.</p>																		
45. <input type="checkbox"/>	<p><b>Primary SDS VIP:</b></p> <p>Select...</p> <p><b>Main Menu</b> → <b>Configuration</b> → <b>Servers</b></p> <p>...as shown on the right.</p>	 <p>The screenshot shows the 'Main Menu: Configuration -&gt; Servers' interface. On the left is a tree view of the system menu. On the right is a table of servers. At the bottom are buttons for 'Insert', 'Edit', 'Delete', 'Export', and 'Report'.</p> <p><b>Main Menu:</b></p> <ul style="list-style-type: none"> <li>Administration</li> <li>Configuration <ul style="list-style-type: none"> <li>Networking <ul style="list-style-type: none"> <li>Networks</li> <li>Devices</li> <li>Routes</li> <li>Services</li> <li><b>Servers</b></li> <li>Server Groups</li> <li>Resource Domains</li> <li>Places</li> <li>Place Associations</li> </ul> </li> <li>DSCP</li> </ul> </li> <li>Alarms &amp; Events <ul style="list-style-type: none"> <li>View Active</li> <li>View History</li> <li>View Trap Log</li> </ul> </li> <li>Security Log</li> <li>Status &amp; Manage <ul style="list-style-type: none"> <li>Network Elements</li> <li>Server</li> <li>HA</li> <li>Database</li> <li>KPIs</li> <li>Processes</li> </ul> </li> <li>Tasks</li> <li>Files</li> </ul> <p><b>Main Menu: Configuration -&gt; Servers</b></p> <table border="1"> <thead> <tr> <th>Hostname</th><th>Role</th><th>System ID</th></tr> </thead> <tbody> <tr> <td>sds-no-a</td><td>Network OAM&amp;P</td><td>sds-no-a</td></tr> <tr> <td>qs-sds-1</td><td>Query Server</td><td></td></tr> <tr> <td>dp-sds-1</td><td>MP</td><td></td></tr> <tr> <td>dr-sds-no</td><td>Network OAM&amp;P</td><td>dr-sds-no</td></tr> <tr> <td>sds-so-a</td><td>System OAM</td><td>sds-so-a</td></tr> </tbody> </table> <p>Buttons: Insert, Edit, Delete, Export, Report</p>	Hostname	Role	System ID	sds-no-a	Network OAM&P	sds-no-a	qs-sds-1	Query Server		dp-sds-1	MP		dr-sds-no	Network OAM&P	dr-sds-no	sds-so-a	System OAM	sds-so-a
Hostname	Role	System ID																		
sds-no-a	Network OAM&P	sds-no-a																		
qs-sds-1	Query Server																			
dp-sds-1	MP																			
dr-sds-no	Network OAM&P	dr-sds-no																		
sds-so-a	System OAM	sds-so-a																		

**Procedure 9. Configuring the SDS SOAM Servers (All SOAM Sites)**

Step	Procedure	Result																																																
46. <div></div>	<b>Primary SDS VIP:</b>  On the “ <b>Configuration →Servers</b> ” screen, find the newly added System SOAM server in the list.	<div><div>Main Menu: Configuration -&gt; Servers</div><div>Thu Jun 02 08:52:38 2016 ED</div><div><div>Filter*</div><table><thead><tr><th>Hostname</th><th>Role</th><th>System ID</th><th>Server Group</th><th>Network Element</th><th>Location</th><th>Place</th><th>Details</th></tr></thead><tbody><tr><td>sds-no-a</td><td>Network OAM&amp;P</td><td>sds-no-a</td><td>sds_bllorcnc_g rp</td><td>SDS_NE</td><td>Bangalore</td><td></td><td>XMI: 10.240.108.18 IMI: 169.254.2.8</td></tr><tr><td>qs-sds-1</td><td>Query Server</td><td></td><td>sds_bllorcnc_g rp</td><td>SDS_NE</td><td>bangalore</td><td></td><td>XMI: 10.240.108.11 IMI: 169.254.2.2</td></tr><tr><td>dp-sds-1</td><td>MP</td><td></td><td></td><td>SDS_NE</td><td>bangalore</td><td></td><td>XMI: 10.240.108.23 IMI: 169.254.2.12</td></tr><tr><td>dr-sds-no</td><td>Network OAM&amp;P</td><td>dr-sds-no</td><td></td><td>SDS_NE</td><td>bangalore</td><td></td><td>XMI: 10.240.108.14 IMI: 169.254.2.4</td></tr><tr><td>sds-so-a</td><td>System OAM</td><td>sds-so-a</td><td></td><td>SDS_NE</td><td>Bangalore</td><td></td><td>XMI: 10.240.108.21 IMI: 169.254.2.11</td></tr></tbody></table></div></div>	Hostname	Role	System ID	Server Group	Network Element	Location	Place	Details	sds-no-a	Network OAM&P	sds-no-a	sds_bllorcnc_g rp	SDS_NE	Bangalore		XMI: 10.240.108.18 IMI: 169.254.2.8	qs-sds-1	Query Server		sds_bllorcnc_g rp	SDS_NE	bangalore		XMI: 10.240.108.11 IMI: 169.254.2.2	dp-sds-1	MP			SDS_NE	bangalore		XMI: 10.240.108.23 IMI: 169.254.2.12	dr-sds-no	Network OAM&P	dr-sds-no		SDS_NE	bangalore		XMI: 10.240.108.14 IMI: 169.254.2.4	sds-so-a	System OAM	sds-so-a		SDS_NE	Bangalore		XMI: 10.240.108.21 IMI: 169.254.2.11
Hostname	Role	System ID	Server Group	Network Element	Location	Place	Details																																											
sds-no-a	Network OAM&P	sds-no-a	sds_bllorcnc_g rp	SDS_NE	Bangalore		XMI: 10.240.108.18 IMI: 169.254.2.8																																											
qs-sds-1	Query Server		sds_bllorcnc_g rp	SDS_NE	bangalore		XMI: 10.240.108.11 IMI: 169.254.2.2																																											
dp-sds-1	MP			SDS_NE	bangalore		XMI: 10.240.108.23 IMI: 169.254.2.12																																											
dr-sds-no	Network OAM&P	dr-sds-no		SDS_NE	bangalore		XMI: 10.240.108.14 IMI: 169.254.2.4																																											
sds-so-a	System OAM	sds-so-a		SDS_NE	Bangalore		XMI: 10.240.108.21 IMI: 169.254.2.11																																											
47. <div></div>	<b>Primary SDS VIP:</b>  Use the cursor to select the new SOAM server entry added in the <b>Step 35</b> .  The row containing the server should now be highlighted.	<div><table><thead><tr><th>Hostname</th><th>Role</th><th>System ID</th><th>Server Group</th><th>Network Element</th><th>Location</th><th>Place</th><th>Details</th></tr></thead><tbody><tr><td>sds-no-a</td><td>Network OAM&amp;P</td><td>sds-no-a</td><td>sds_bllorcnc_g rp</td><td>SDS_NE</td><td>Bangalore</td><td></td><td>XMI: 10.240.108.18 IMI: 169.254.2.8</td></tr><tr><td>qs-sds-1</td><td>Query Server</td><td></td><td>sds_bllorcnc_g rp</td><td>SDS_NE</td><td>bangalore</td><td></td><td>XMI: 10.240.108.11 IMI: 169.254.2.2</td></tr><tr><td>dp-sds-1</td><td>MP</td><td></td><td></td><td>SDS_NE</td><td>bangalore</td><td></td><td>XMI: 10.240.108.23 IMI: 169.254.2.12</td></tr><tr><td>dr-sds-no</td><td>Network OAM&amp;P</td><td>dr-sds-no</td><td></td><td>SDS_NE</td><td>bangalore</td><td></td><td>XMI: 10.240.108.14 IMI: 169.254.2.4</td></tr><tr><td>sds-so-a</td><td>System OAM</td><td>sds-so-a</td><td></td><td>SDS_NE</td><td>Bangalore</td><td></td><td>XMI: 10.240.108.21 IMI: 169.254.2.11</td></tr></tbody></table></div>	Hostname	Role	System ID	Server Group	Network Element	Location	Place	Details	sds-no-a	Network OAM&P	sds-no-a	sds_bllorcnc_g rp	SDS_NE	Bangalore		XMI: 10.240.108.18 IMI: 169.254.2.8	qs-sds-1	Query Server		sds_bllorcnc_g rp	SDS_NE	bangalore		XMI: 10.240.108.11 IMI: 169.254.2.2	dp-sds-1	MP			SDS_NE	bangalore		XMI: 10.240.108.23 IMI: 169.254.2.12	dr-sds-no	Network OAM&P	dr-sds-no		SDS_NE	bangalore		XMI: 10.240.108.14 IMI: 169.254.2.4	sds-so-a	System OAM	sds-so-a		SDS_NE	Bangalore		XMI: 10.240.108.21 IMI: 169.254.2.11
Hostname	Role	System ID	Server Group	Network Element	Location	Place	Details																																											
sds-no-a	Network OAM&P	sds-no-a	sds_bllorcnc_g rp	SDS_NE	Bangalore		XMI: 10.240.108.18 IMI: 169.254.2.8																																											
qs-sds-1	Query Server		sds_bllorcnc_g rp	SDS_NE	bangalore		XMI: 10.240.108.11 IMI: 169.254.2.2																																											
dp-sds-1	MP			SDS_NE	bangalore		XMI: 10.240.108.23 IMI: 169.254.2.12																																											
dr-sds-no	Network OAM&P	dr-sds-no		SDS_NE	bangalore		XMI: 10.240.108.14 IMI: 169.254.2.4																																											
sds-so-a	System OAM	sds-so-a		SDS_NE	Bangalore		XMI: 10.240.108.21 IMI: 169.254.2.11																																											
48. <div></div>	<b>Primary SDS VIP:</b>  Select the “ <b>Export</b> ” dialogue button (bottom left corner of screen).	<div><div>sds-so-aSystem OAMSds-so-aSDS_NEBangaloreXMI: 10.240.108.21 IMI: 169.254.2.11</div><div>InsertEditDeleteExportReport</div></div>																																																
49. <div></div>	Configure the <b>SDS SOAM B</b> server.	<div><div>Repeat Steps 33- 48 of this procedure for the SDS SOAM B Server.</div></div>																																																
50. <div></div>	<b>Primary SDS VIP:</b>  Click the “ <b>Logout</b> ” link on the SDS server GUI.	<div><div>account guiadmin   Log Out</div><div>Wed Nov 16 11:23:30 2016 UT</div></div>																																																
51. <div></div>	<b>Primary SDS VIP:</b>  Access the server console.	<div>Connect to the <b>Active SDS VIP</b> console using one of the access methods described in <b>Section 2.3</b>.</div>																																																

### Procedure 9. Configuring the SDS SOAM Servers (All SOAM Sites)

Step	Procedure	Result
52. <input type="checkbox"/>	<b>Primary SDS VIP:</b> Log into the server as the <b>admusr</b>	login: <b>admusr</b> Password: <b>&lt;admusr_password&gt;</b>
53. <input type="checkbox"/>	<b>Primary SDS VIP:</b> Change directory into the file management space.	\$ sudo <b>cd /var/TKLC/db/filemgmt</b>
54. <input type="checkbox"/>	<b>Primary SDS VIP:</b> Get a directory listing and find the configuration files with the SOAM server A and B name as shown in <b>red</b> .  Note: These should appear toward the bottom of the listing.	\$ <b>ls -ltr TKLCConfigData*.sh</b>  *** TRUNCATED OUTPUT ***  -rw-rw-rw- 1 admusr admusr 2208 Dec 19 16:37 TKLCConfigData. <b>so-carync-a.sh</b> -rw-rw-rw- 1 admusr admusr 2208 Dec 19 16:50 TKLCConfigData. <b>so-carync-b.sh</b>
55. <input type="checkbox"/>	<b>Primary SDS VIP:</b> Copy the configuration files found in the previous step to the PMAC.	\$ sudo <b>scp -p &lt;configuration_file-a&gt; &lt;configuration_file-b&gt;</b> <b>admusr@&lt;PMAC_Mgmt_IP&gt;:/tmp/</b> <b>admusr@10.240.39.4's password:</b> <b>TKLCConfigData.so-carync-a.sh</b> 100% 1741 1.7KB/s 00:00 <b>TKLCConfigData.so-carync-b.sh</b> 100% 1741 1.7KB/s 00:00 <b>[admusr@sds-mrsvnc-a filemgmt]#</b>
56.	<b>Primary SDS VIP:</b> Logout of the Primary SDS CLI.	\$ <b>exit</b>
57.	<b>PMAC Server CLI:</b> Use <b>SSH</b> to login to the <b>PMAC Guest</b> VM server as the <b>admusr</b> .	login: <b>admusr</b> Password: <b>&lt;admusr_password&gt;</b>

## Procedure 9. Configuring the SDS SOAM Servers (All SOAM Sites)

Step	Procedure	Result
58.	<b>PMAC Guest VM:</b>  <b>Keyexchange with DP control IP</b>	<pre>\$ keyexchange admusr@&lt;DP_Control_IP&gt;</pre> <p><b>Example:</b></p> <pre>[admusr@nassau-enc-pmac-1 ~]\$ keyexchange admusr@192.168.1.22 The server does not know of 192.168.1.22. Will just exchange host keys for the name given! Password of admusr: Could not get authorized keys file from remote (192.168.1.22). Maybe it does not exist. Continuing... The server does not know of 192.168.1.22. Will just exchange host keys for the name given! ssh is working correctly. [admusr@nassau-enc-pmac-1 ~]\$</pre>
59. <input type="checkbox"/>	<b>PMAC Guest VM:</b>  Copy the server configuration file to the Control IP for the SOAM.  <b>Note:</b> The Control IP for each OAM is obtained in <b>Step 18</b> of this procedure.	<pre>\$ sudo scp -p /tmp/&lt;configuration_file&gt; admusr@&lt;SOAM_Control_IP&gt;:/var/TKLC/db/filemgmt admusr@192.168.1.199's password: TKLCConfigData.so-carync-a.sh          100% 1741      1.7KB/s   00:00</pre>
60. <input type="checkbox"/>	<b>PMAC Guest VM:</b>  Connect to the SOAM server console from the PMAC Server Console	<pre>\$ sudo ssh &lt; SOAM_Guest_Control_IP&gt; admusr@192.168.1.199's password: &lt;admusr_password&gt;</pre>
61. <input type="checkbox"/>	<b>SOAM Guest VM:</b>  Copy the server configuration file to the “/var/tmp” 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><b>Example:</b></p> <p>TKLCConfigData&lt;.server_hostname&gt;.sh → will translate to →TKLCConfigData.sh</p> <pre>\$ sudo cp -p /var/TKLC/db/filemgmt/TKLCConfigData.so-carync-a.sh /var/tmp/TKLCConfigData.sh</pre> <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>

**Procedure 9. Configuring the SDS SOAM Servers (All SOAM Sites)**

Step	Procedure	Result
<b>62.</b> <input type="checkbox"/>	<b>SOAM Guest VM:</b> <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 admusr (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>
<b>63.</b>	<b>SOAM Guest VM:</b> <p>Verify that the desired Time Zone is currently in use.</p>	<p>\$ <b>date</b></p> <p>Mon Aug 10 19:34:51 UTC 2015</p>
<b>64.</b> <input type="checkbox"/>	<b>SOAM Guest VM:</b> <p>If the desired Time Zone was not presented in the previous step...</p> <p><b>Configure the Time Zone.</b></p> <p>Otherwise, skip to the next step.</p>	<p><b>Example:</b> \$ <b>sudo set_ini_tz.pl &lt;time_zone&gt;</b></p> <p><b>NOTE:</b> <i>The following command example sets the time to the "UTC" (aka GMT) time zone which is recommended for all sites.</i></p> <p><i>The user may replace, as appropriate, with the customer requested time zone for this site installation. See <b>Appendix G</b> for a list of valid time zones.</i></p> <p>\$ <b>sudo set_ini_tz.pl "Etc/UTC"</b></p>
<b>65.</b> <input type="checkbox"/>	<b>SOAM Guest VM:</b> <p>Initiate a reboot of the SOAM server.</p>	<p>\$ <b>sudo init 6</b></p>
<b>66.</b> <input type="checkbox"/>	<b>SOAM Guest VM:</b> <p>Output similar to that shown on the right may be observed as the server initiates a reboot.</p>	<p>Connection to 192.168.1.199 closed by remote host.</p> <p>Connection to 192.168.1.199 closed.</p>

**Procedure 9. Configuring the SDS SOAM Servers (All SOAM Sites)**

Step	Procedure	Result
67. <input type="checkbox"/>	<b>PMAC Guest VM:</b>  After the SOAM server has completed reboot, re-connect to the SOAM server console from the PMAC Server Console	\$ sudo <b>ssh</b> <SOAM_Control_IP> admusr@192.168.1.199's password: <admusr_password>
68. <input type="checkbox"/>	<b>SOAM Guest VM:</b>  <b>1) Verify that the IMI IP address</b> input in <b>Step 41</b> has been applied as specified.  <b>2) Verify that the XMI IP address</b> input in <b>Step 41</b> has been applied as specified.	\$ <b>ifconfig  grep in</b> 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
69.	<b>SOAM Guest VM:</b>  Execute a <b>"syscheck"</b> to verify the current health of the server.	\$ <b>sudo 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




**Procedure 9. Configuring the SDS SOAM Servers (All SOAM Sites)**

Step	Procedure	Result
70.	<p><b>SOAM Guest VM:</b></p> <p>Accept upgrade to the Application Software.</p> <p>- Running the "accept" script from the command line now launches a screen session on blades &amp; VM Guest.</p> <p>- Use the "q" key to exit the screen session</p>	<p>-</p> <pre>[admusr@nassau-sds-so-b ~]\$ sudo /var/TKLC/backout/accept</pre> <p>Called with options: --accept  Loading Backout::BackoutType::RPM  Accepting Upgrade  Executing common accept tasks  Setting POST_UPGRADE_ACTION to ACCEPT in upgrade info.  Cleaning backout directory.  Clearing Upgrade Accept/Reject alarm.  Cleaning message from MOTD.  No patch pending alarm on server so no MOTD update.  Cleaning up RPM config backup files...  Checking /  Checking /boot  Checking /tmp  Checking /usr  Checking /var  Checking /var/TKLC  Checking /tmp/appworks_temp  Checking /usr/openv  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 '/etc/my.cnf' from RCS repository  INFO: Removing '/etc/pam.d/password-auth' from RCS repository  INFO: Removing '/etc/pam.d/system-auth' from RCS repository  INFO: Removing '/etc/sysconfig/network-scripts/ifcfg-eth0' from RCS repository  INFO: Removing '/etc/php.d/zip.ini' from RCS repository  INFO: Removing '/var/lib/prelink/force' from RCS repository  === Window terminated (Thu Feb 2 20:07:21 2017) ===  screen session: use 'screen -x upgrade' to reconnect <p>Type the letter "q" on the keyboard to exit the screen session.</p> <pre>[screen is terminating] [admusr@nassau-sds-so-b ~]\$</pre> </p>
71.	<p>Apply the <b>SDS SOAM B</b> server configuration file.</p>	<ul style="list-style-type: none"> <li>Repeat Steps 57 – 69 this procedure for <b>SOAM Server B</b>.</li> </ul>

**Procedure 9. Configuring the SDS SOAM Servers (All SOAM Sites)**

Step	Procedure	Result
72. <input type="checkbox"/>	<b>SOAM Guest B:</b>  From the <b>SOAM-B</b> Guest, “ping” the <b>IMI IP address</b> of the <b>SOAM-A</b> Guest	<pre>\$ ping -c 5 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  --- 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</pre>
73.	<b>SOAM Guest B:</b>  From the <b>SOAM-B</b> Guest, “ping” the <b>XMI IP address</b> of the <b>SOAM-A</b> Guest	<pre>\$ ping -c 5 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  --- 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</pre>
74. <input type="checkbox"/>	<b>SOAM Guest B:</b>  From the <b>SOAM-B</b> Guest, “ping” the <b>local XMI Gateway address</b> associated with the <b>SOAM NE</b> .	<pre>\$ ping -c 5 10.240.39.1 PING 10.240.39.1 (10.240.39.1) 56(84) bytes of data. 64 bytes from 10.240.39.1: icmp_seq=1 ttl=64 time=0.024 ms 64 bytes from 10.240.39.1: icmp_seq=2 ttl=64 time=0.033 ms 64 bytes from 10.240.39.1: icmp_seq=3 ttl=64 time=0.032 ms 64 bytes from 10.240.39.1: icmp_seq=4 ttl=64 time=0.026 ms 64 bytes from 10.240.39.1: icmp_seq=5 ttl=64 time=0.027 ms 64 bytes from 10.240.39.1: icmp_seq=6 ttl=64 time=0.026 ms  --- 10.240.39.1 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</pre>
75. <input type="checkbox"/>	<b>SOAM Guest VM:</b>  Use the “ <b>ntpq</b> ” command to verify that the server has connectivity to the assigned <b>Primary</b> and <b>Secondary NTP</b> server(s).	<pre>\$ 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</pre>

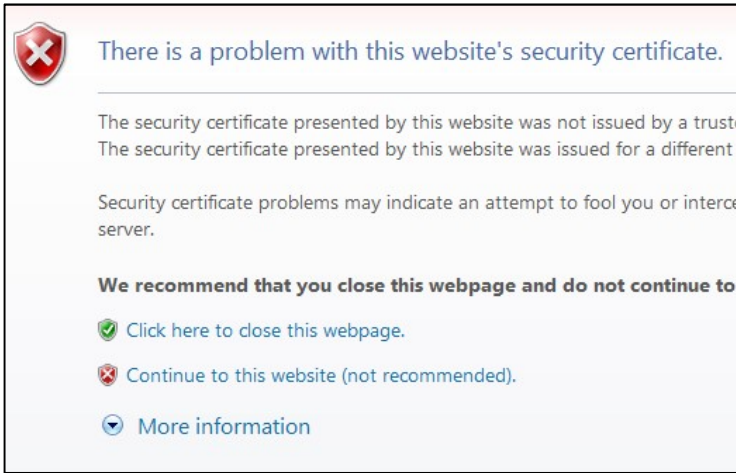
**Procedure 9. Configuring the SDS SOAM Servers (All SOAM Sites)**

Step	Procedure	Result
<div>  <p><b>IF CONNECTIVITY TO THE NTP SERVER(S) CANNOT BE ESTABLISHED, STOP AND EXECUTE THE FOLLOWING STEPS:</b></p> <ol style="list-style-type: none"> <li>1) Contact the customer to verify that the IP addresses for the NTP server(s) are correct.</li> <li>2) Have the customer IT group provide a network path from the OAM server IP to the assigned NTP IP addresses.</li> </ol> <p><b>ONCE NETWORK CONNECTIVITY IS ESTABLISHED TO THE ASSIGNED NTP IP ADDRESSES, THEN RESTART THIS PROCEDURE BEGINNING WITH STEP 75.</b></p> </div>		
76. <input type="checkbox"/>	<b>SOAM Guest VM:</b>  Exit from the SOAM command line to return the PMAC server console prompt.	\$ <code>exit</code>
77. <input type="checkbox"/>	<b>PMAC Guest VM:</b>  Exit from the PMAC server	\$ <code>exit</code>
<b>THIS PROCEDURE HAS BEEN COMPLETED</b>		




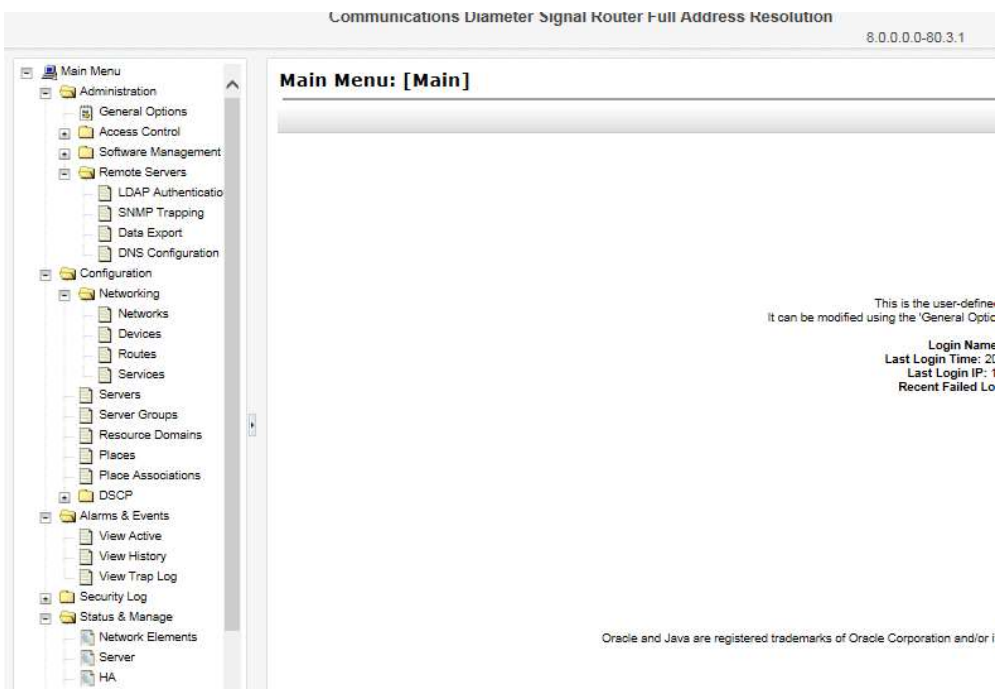
**5.8 OAM Pairing for SDS SOAM Sites (All SOAM Sites)**

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 10. Pairing the SDS SOAM Servers (All SOAM Sites)**

Step	Procedure	Result
1. <input type="checkbox"/>	<b>Primary SDS VIP:</b>  Launch an approved web browser and connect to the SDS VIP address  <b>NOTE:</b> <i>If presented with the “security certificate” warning screen shown to the right, choose the following option: “Continue to this website (not recommended)”.</i>	

Procedure 10. Pairing the SDS SOAM Servers (All SOAM Sites)

Step	Procedure	Result
2. 	<p><b>Primary 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>	
3. 	<p><b>Primary SDS VIP:</b></p> <p>The user should be presented the SDS Main Menu as shown on the right.</p>	

Procedure 10. Pairing the SDS SOAM Servers (All SOAM Sites)


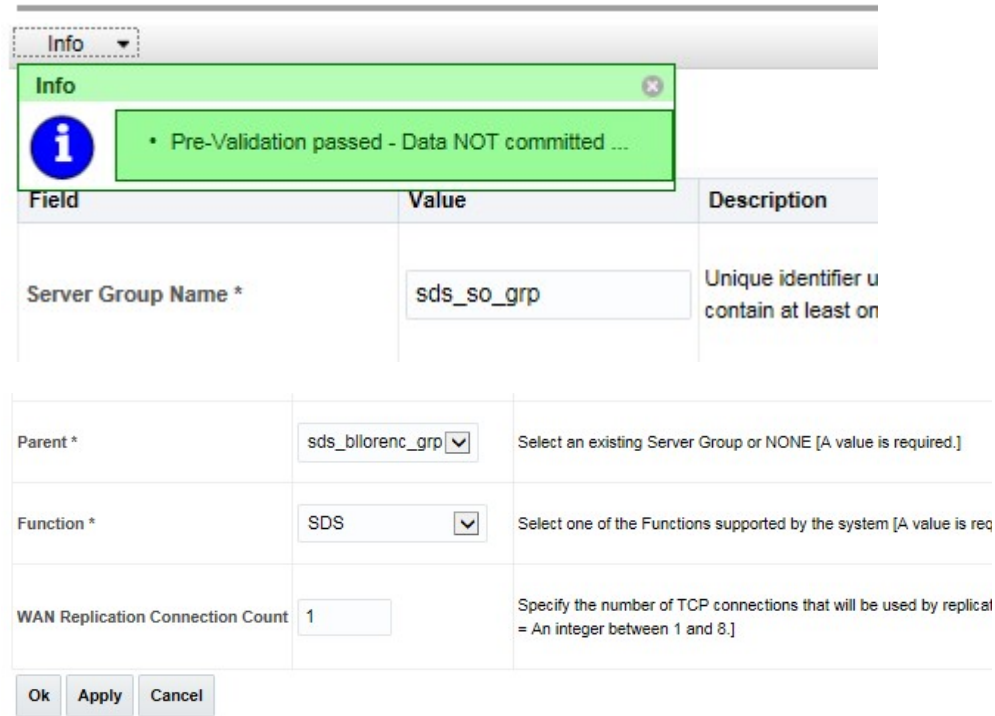
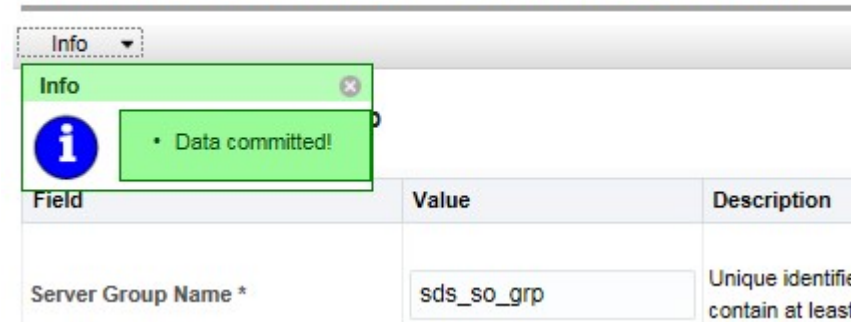
Step	Procedure	Result																																				
4. <div></div>	<p><b>Primary SDS VIP:</b></p> <p>Select...</p> <p><u>Main Menu</u> → Configuration → <b>Server Groups</b></p> <p>...as shown on the right.</p>	<div><div><div><div><div><div></div><div>Main Menu</div></div><div><div><div>Administration</div><div><div>General Options</div><div>Access Control</div><div>Software Management</div><div>Remote Servers</div><div>LDAP Authentication</div><div>SNMP Trapping</div><div>Data Export</div><div>DNS Configuration</div></div></div><div><div>Configuration</div><div><div>Networking</div><div><div>Networks</div><div>Devices</div><div>Routes</div><div>Services</div><div>Servers</div><div>Server Groups</div><div>Resource Domains</div><div>Places</div><div>Place Associations</div></div></div><div>DSCP</div><div>Admin &amp; Profile</div></div></div></div></div></div><div><div><div>Main Menu: Configuration -&gt; Server Groups</div><div><div>Filter*</div></div><table><tr><th>Server Group Name</th><th>Level</th><th>Parent</th></tr><tr><td>dr_sds_grp</td><td>A</td><td>NONE</td></tr><tr><td>sds_no_grp</td><td>A</td><td>NONE</td></tr></table></div></div></div>	Server Group Name	Level	Parent	dr_sds_grp	A	NONE	sds_no_grp	A	NONE																											
Server Group Name	Level	Parent																																				
dr_sds_grp	A	NONE																																				
sds_no_grp	A	NONE																																				
5. <div></div>	<p><b>Primary 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><div><div><div><div><div></div><div>Main Menu: Configuration -&gt; Server Groups</div></div><div><div>Filter*</div></div><table><tr><th>Server Group Name</th><th>Level</th><th>Parent</th><th>Function</th><th>Connection Count</th><th>Servers</th></tr><tr><td>dr_sds_grp</td><td>A</td><td>NONE</td><td>SDS</td><td>1</td><td><div>Network Element: SDS_NE NE HA Pref: DEFAULT</div><table><tr><th>Server</th><th>Node HA Pref</th><th>VIPs</th></tr><tr><td>dr-sds-no-a</td><td></td><td>10.240.108.20</td></tr></table></td></tr><tr><td>sds_no_grp</td><td>A</td><td>NONE</td><td>SDS</td><td>1</td><td><div>Network Element: SDS_NE NE HA Pref: DEFAULT</div><table><tr><th>Server</th><th>Node HA Pref</th><th>VIPs</th></tr><tr><td>qs-sds-1</td><td></td><td>10.240.108.24</td></tr><tr><td>sds-no-a</td><td></td><td>10.240.108.24</td></tr><tr><td>sds-no-b</td><td></td><td>10.240.108.24</td></tr></table></td></tr></table></div></div><div><div><div><div><div>Security Log</div><div>Status &amp; Manage</div><div>Network Elements</div><div>Server</div><div>HA</div><div>Database</div><div>KPIs</div><div>Processes</div><div>Tools</div></div></div></div></div><div><div><div>Insert</div><div>Edit</div><div>Delete</div><div>Report</div></div></div></div></div>	Server Group Name	Level	Parent	Function	Connection Count	Servers	dr_sds_grp	A	NONE	SDS	1	<div>Network Element: SDS_NE NE HA Pref: DEFAULT</div> <table><tr><th>Server</th><th>Node HA Pref</th><th>VIPs</th></tr><tr><td>dr-sds-no-a</td><td></td><td>10.240.108.20</td></tr></table>	Server	Node HA Pref	VIPs	dr-sds-no-a		10.240.108.20	sds_no_grp	A	NONE	SDS	1	<div>Network Element: SDS_NE NE HA Pref: DEFAULT</div> <table><tr><th>Server</th><th>Node HA Pref</th><th>VIPs</th></tr><tr><td>qs-sds-1</td><td></td><td>10.240.108.24</td></tr><tr><td>sds-no-a</td><td></td><td>10.240.108.24</td></tr><tr><td>sds-no-b</td><td></td><td>10.240.108.24</td></tr></table>	Server	Node HA Pref	VIPs	qs-sds-1		10.240.108.24	sds-no-a		10.240.108.24	sds-no-b		10.240.108.24
Server Group Name	Level	Parent	Function	Connection Count	Servers																																	
dr_sds_grp	A	NONE	SDS	1	<div>Network Element: SDS_NE NE HA Pref: DEFAULT</div> <table><tr><th>Server</th><th>Node HA Pref</th><th>VIPs</th></tr><tr><td>dr-sds-no-a</td><td></td><td>10.240.108.20</td></tr></table>	Server	Node HA Pref	VIPs	dr-sds-no-a		10.240.108.20																											
Server	Node HA Pref	VIPs																																				
dr-sds-no-a		10.240.108.20																																				
sds_no_grp	A	NONE	SDS	1	<div>Network Element: SDS_NE NE HA Pref: DEFAULT</div> <table><tr><th>Server</th><th>Node HA Pref</th><th>VIPs</th></tr><tr><td>qs-sds-1</td><td></td><td>10.240.108.24</td></tr><tr><td>sds-no-a</td><td></td><td>10.240.108.24</td></tr><tr><td>sds-no-b</td><td></td><td>10.240.108.24</td></tr></table>	Server	Node HA Pref	VIPs	qs-sds-1		10.240.108.24	sds-no-a		10.240.108.24	sds-no-b		10.240.108.24																					
Server	Node HA Pref	VIPs																																				
qs-sds-1		10.240.108.24																																				
sds-no-a		10.240.108.24																																				
sds-no-b		10.240.108.24																																				

Procedure 10. Pairing the SDS SOAM Servers (All SOAM Sites)

Step	Procedure	Result																		
6. <input type="checkbox"/>	<p><b>Primary 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><b>Main Menu: Configuration -&gt; Server Groups [Insert]</b></p> <p>Info ▾</p> <p><b>Adding new server group</b></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_so_grp</td><td>Unique identifier used to label a Server Group. [De contain at least one alpha and must not start with a</td></tr> <tr> <td>Level *</td><td>A ▾</td><td>Select one of the Levels supported by the system.   servers. Level C groups contain MP servers.] [A va</td></tr> <tr> <td>Parent *</td><td>NONE ▾</td><td>Select an existing Server Group or NONE [A value</td></tr> <tr> <td>Function *</td><td>SDS ▾</td><td>Select one of the Functions supported by the syste</td></tr> <tr> <td>WAN Replication Connection Count</td><td>1</td><td>Specify the number of TCP connections that will be = An integer between 1 and 8.]</td></tr> </tbody> </table> <p>Ok Apply Cancel</p>	Field	Value	Description	Server Group Name *	sds_so_grp	Unique identifier used to label a Server Group. [De contain at least one alpha and must not start with a	Level *	A ▾	Select one of the Levels supported by the system.   servers. Level C groups contain MP servers.] [A va	Parent *	NONE ▾	Select an existing Server Group or NONE [A value	Function *	SDS ▾	Select one of the Functions supported by the syste	WAN Replication Connection Count	1	Specify the number of TCP connections that will be = An integer between 1 and 8.]
Field	Value	Description																		
Server Group Name *	sds_so_grp	Unique identifier used to label a Server Group. [De contain at least one alpha and must not start with a																		
Level *	A ▾	Select one of the Levels supported by the system.   servers. Level C groups contain MP servers.] [A va																		
Parent *	NONE ▾	Select an existing Server Group or NONE [A value																		
Function *	SDS ▾	Select one of the Functions supported by the syste																		
WAN Replication Connection Count	1	Specify the number of TCP connections that will be = An integer between 1 and 8.]																		
7. <input type="checkbox"/>	<p><b>Primary SDS VIP:</b></p> <p>Input the <b>Server Group Name</b>.</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_so_grp</td><td>Unique identifier used to label a Server Group. [De contain at least one alpha and must not start with a</td></tr> </tbody> </table>	Field	Value	Description	Server Group Name *	sds_so_grp	Unique identifier used to label a Server Group. [De contain at least one alpha and must not start with a												
Field	Value	Description																		
Server Group Name *	sds_so_grp	Unique identifier used to label a Server Group. [De contain at least one alpha and must not start with a																		
8. <input type="checkbox"/>	<p><b>Primary SDS VIP:</b></p> <p>Select “<b>B</b>” on the “<b>Level</b>” pull-down menu...</p>	<table border="1"> <thead> <tr> <th>Field</th><th>Value</th><th>Description</th></tr> </thead> <tbody> <tr> <td>Level *</td><td> <div>- Select Level - A <b>B</b> C</div> </td><td>Select one of the Levels supported by the sy: servers. Level C groups contain MP servers.]</td></tr> </tbody> </table>	Field	Value	Description	Level *	<div>- Select Level - A <b>B</b> C</div>	Select one of the Levels supported by the sy: servers. Level C groups contain MP servers.]												
Field	Value	Description																		
Level *	<div>- Select Level - A <b>B</b> C</div>	Select one of the Levels supported by the sy: servers. Level C groups contain MP servers.]																		
9. <input type="checkbox"/>	<p><b>Primary 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"> <thead> <tr> <th>Field</th><th>Value</th><th>Description</th></tr> </thead> <tbody> <tr> <td>Parent *</td><td> <div>- Select Parent- NONE <b>sds_bilorenc_grp</b></div> </td><td>Select an existing Server Group or NONE [A value is required.]</td></tr> </tbody> </table>	Field	Value	Description	Parent *	<div>- Select Parent- NONE <b>sds_bilorenc_grp</b></div>	Select an existing Server Group or NONE [A value is required.]												
Field	Value	Description																		
Parent *	<div>- Select Parent- NONE <b>sds_bilorenc_grp</b></div>	Select an existing Server Group or NONE [A value is required.]																		


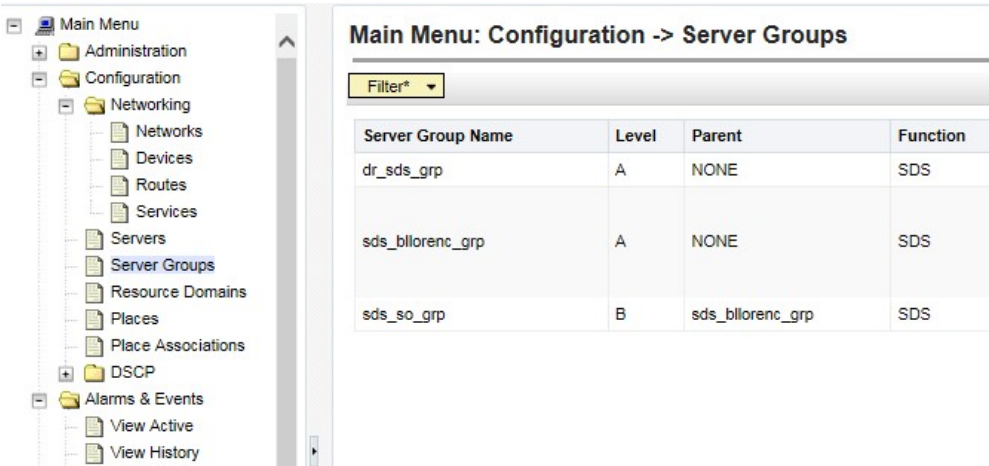

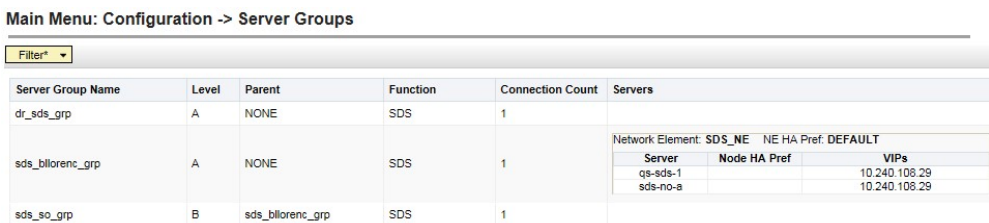

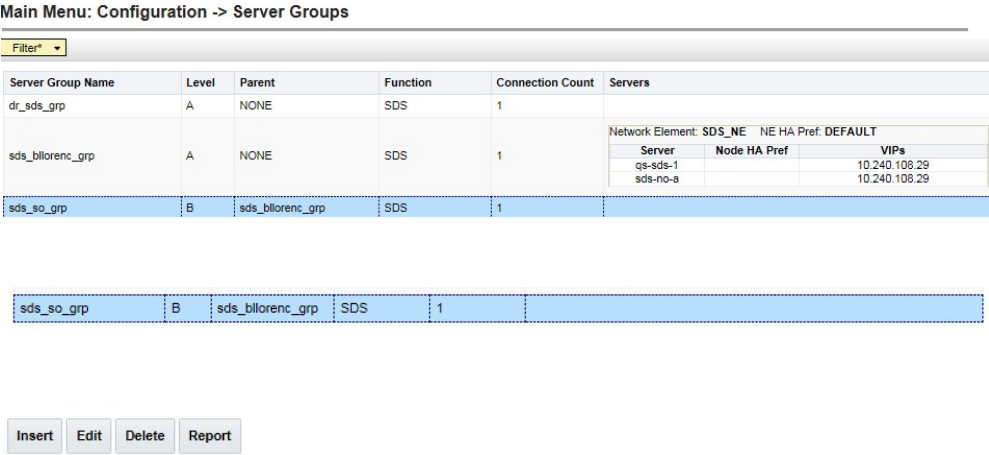


Procedure 10. Pairing the SDS SOAM Servers (All SOAM Sites)

Step	Procedure	Result															
10. <input type="checkbox"/>	<b>Primary SDS VIP:</b> Select “SDS” on the “Function” pull-down menu.	 <p>Function *</p> <p>- Select Function - NONE SDS</p> <p>Select one of the Functions supported by the system [A value is required.]</p>															
11. <input type="checkbox"/>	<b>Primary SDS VIP:</b>  1) The user should be presented with a banner information message stating “Pre-Validation passed”.  2) Select the “Apply” dialogue button.	<b>Main Menu: Configuration -&gt; Server Groups [Insert]</b>  <p>Info</p> <p>Info</p> <p>• Pre-Validation passed - Data NOT 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_so_grp</td><td>Unique identifier u contain at least on</td></tr> <tr> <td>Parent *</td><td>sds_bllorenc_grp</td><td>Select an existing Server Group or NONE [A value is required.]</td></tr> <tr> <td>Function *</td><td>SDS</td><td>Select one of the Functions supported by the system [A value is req</td></tr> <tr> <td>WAN Replication Connection Count</td><td>1</td><td>Specify the number of TCP connections that will be used by replicat = An integer between 1 and 8.]</td></tr> </tbody> </table> <p>Ok Apply Cancel</p>	Field	Value	Description	Server Group Name *	sds_so_grp	Unique identifier u contain at least on	Parent *	sds_bllorenc_grp	Select an existing Server Group or NONE [A value is required.]	Function *	SDS	Select one of the Functions supported by the system [A value is req	WAN Replication Connection Count	1	Specify the number of TCP connections that will be used by replicat = An integer between 1 and 8.]
Field	Value	Description															
Server Group Name *	sds_so_grp	Unique identifier u contain at least on															
Parent *	sds_bllorenc_grp	Select an existing Server Group or NONE [A value is required.]															
Function *	SDS	Select one of the Functions supported by the system [A value is req															
WAN Replication Connection Count	1	Specify the number of TCP connections that will be used by replicat = An integer between 1 and 8.]															
12. <input type="checkbox"/>	<b>Primary SDS VIP:</b>  The user should be presented with a banner information message stating “Data committed”.	<b>Main Menu: Configuration -&gt; Server Groups [Insert]</b>  <p>Info</p> <p>Info</p> <p>• 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_so_grp</td><td>Unique identifi contain at least</td></tr> </tbody> </table>	Field	Value	Description	Server Group Name *	sds_so_grp	Unique identifi contain at least									
Field	Value	Description															
Server Group Name *	sds_so_grp	Unique identifi contain at least															



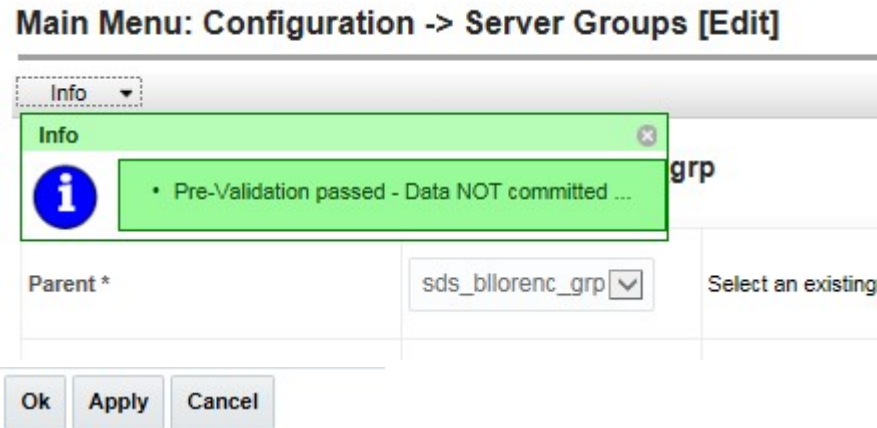

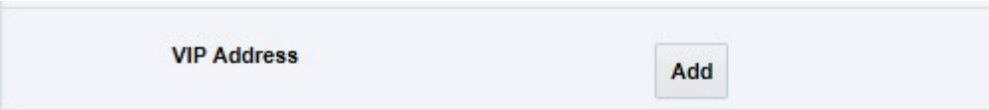
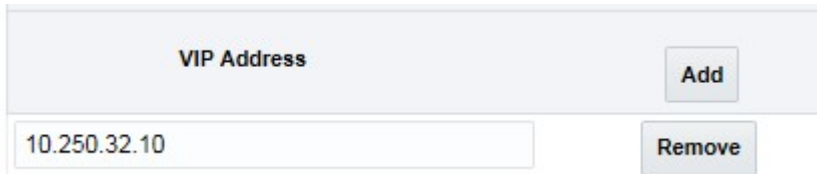
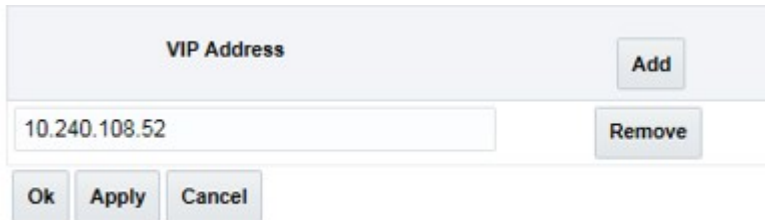
Procedure 10. Pairing the SDS SOAM Servers (All SOAM Sites)

Step	Procedure	Result
14. 	<p><b>Primary SDS VIP:</b></p> <p>Select...</p> <p><b>Main Menu</b> → Configuration → <b>Server Groups</b></p> <p>...as shown on the right.</p>	
15. 	<p><b>Primary 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>	
16. 	<p><b>Primary SDS VIP:</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>	

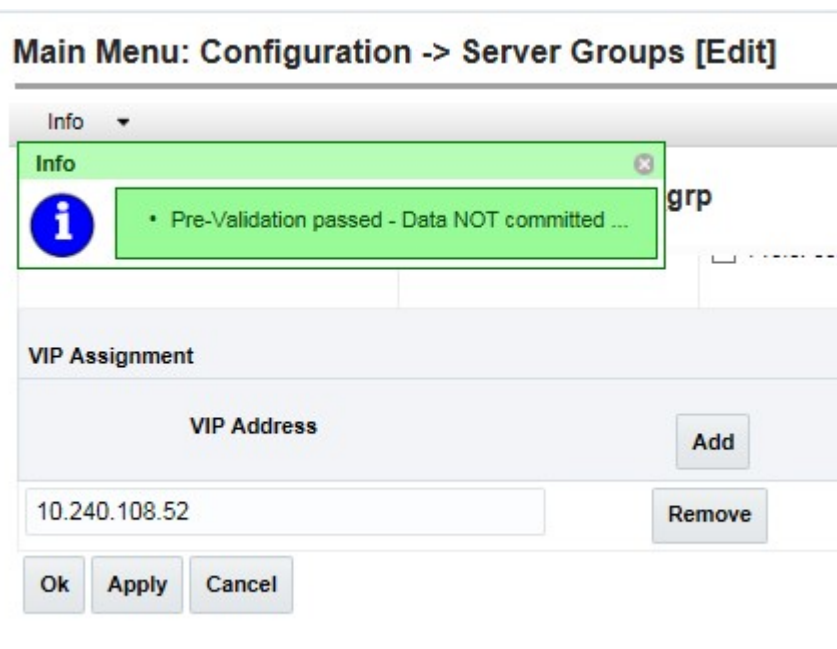
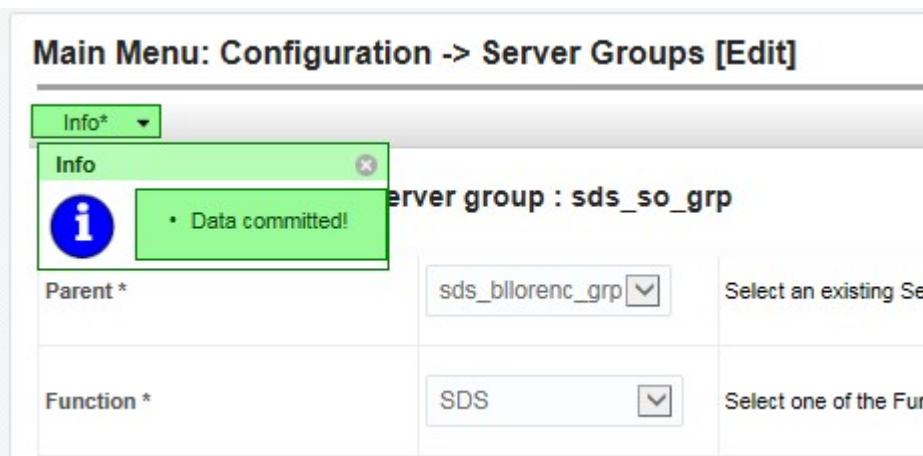
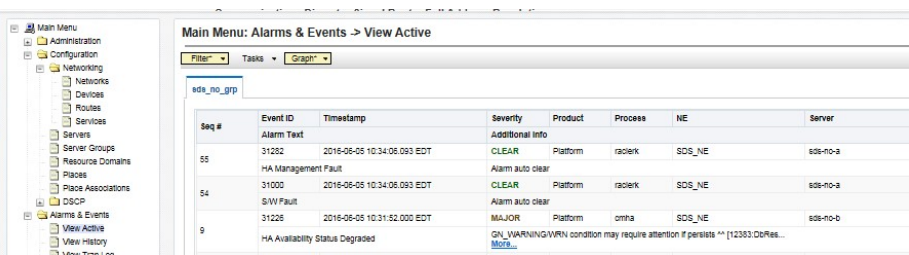
Procedure 10. Pairing the SDS SOAM Servers (All SOAM Sites)

Step	Procedure	Result																								
<p>17.</p> <input type="checkbox"/>	<p><b>Primary 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> <hr/> <p>Modifying attributes of server group : sds_so_grp</p> <table> <tr> <th>Field</th><th>Value</th><th>Description</th></tr> <tr> <td>Server Group Name *</td><td>sds_so_grp</td><td>Unique Identifier used to label a Server Group and must not start with a digit.]</td></tr> <tr> <td>Level *</td><td>B <input type="button" value="v"/></td><td>Select one of the Levels supported by</td></tr> <tr> <td>Parent *</td><td>sds_billorenc_grp <input type="button" value="v"/></td><td>Select an existing Server Group [A va</td></tr> <tr> <td>Function *</td><td>SDS <input type="button" value="v"/></td><td>Select one of the Functions supported</td></tr> <tr> <td>WAN Replication Connection Count</td><td>1</td><td>Specify the number of TCP connections [1 and 8.]</td></tr> </table> <p>SDS_NE <input type="checkbox"/> Prefer Network Element as spare</p> <table> <tr> <th>Server</th><th>SG Inclusion</th><th>Preferred HA Role</th></tr> <tr> <td>sds-so-a</td><td><input type="checkbox"/> Include in SG</td><td><input type="checkbox"/> Prefer server as spare</td></tr> </table> <p>VIP Assignment</p> <p>VIP Address <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 *	sds_so_grp	Unique Identifier used to label a Server Group and must not start with a digit.]	Level *	B <input type="button" value="v"/>	Select one of the Levels supported by	Parent *	sds_billorenc_grp <input type="button" value="v"/>	Select an existing Server Group [A va	Function *	SDS <input type="button" value="v"/>	Select one of the Functions supported	WAN Replication Connection Count	1	Specify the number of TCP connections [1 and 8.]	Server	SG Inclusion	Preferred HA Role	sds-so-a	<input type="checkbox"/> Include in SG	<input type="checkbox"/> Prefer server as spare
Field	Value	Description																								
Server Group Name *	sds_so_grp	Unique Identifier used to label a Server Group and must not start with a digit.]																								
Level *	B <input type="button" value="v"/>	Select one of the Levels supported by																								
Parent *	sds_billorenc_grp <input type="button" value="v"/>	Select an existing Server Group [A va																								
Function *	SDS <input type="button" value="v"/>	Select one of the Functions supported																								
WAN Replication Connection Count	1	Specify the number of TCP connections [1 and 8.]																								
Server	SG Inclusion	Preferred HA Role																								
sds-so-a	<input type="checkbox"/> Include in SG	<input type="checkbox"/> Prefer server as spare																								
<p>18.</p> <input type="checkbox"/>	<p><b>Primary 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>	<table> <tr> <th>Server</th><th>SG Inclusion</th><th>Preferred HA Role</th></tr> <tr> <td>sds-so-a</td><td><input checked="" type="checkbox"/> Include in SG</td><td><input type="checkbox"/> Prefer server as spare</td></tr> </table>	Server	SG Inclusion	Preferred HA Role	sds-so-a	<input checked="" type="checkbox"/> Include in SG	<input type="checkbox"/> Prefer server as spare																		
Server	SG Inclusion	Preferred HA Role																								
sds-so-a	<input checked="" type="checkbox"/> Include in SG	<input type="checkbox"/> Prefer server as spare																								

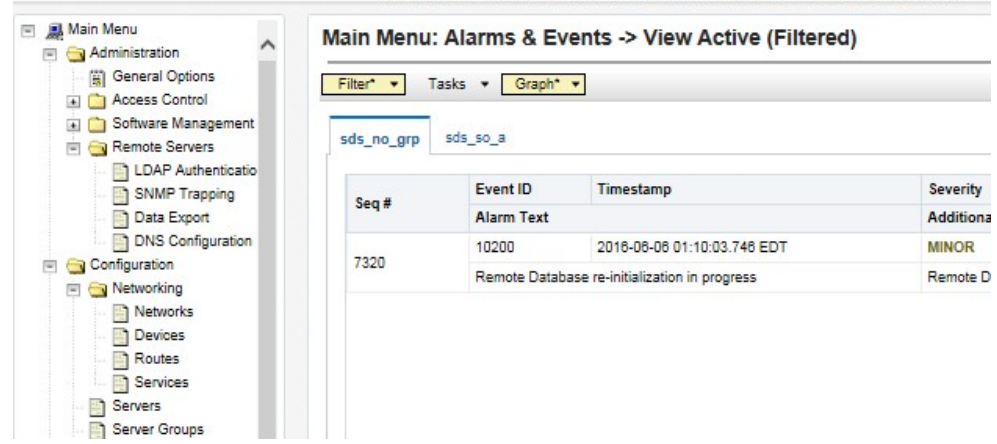

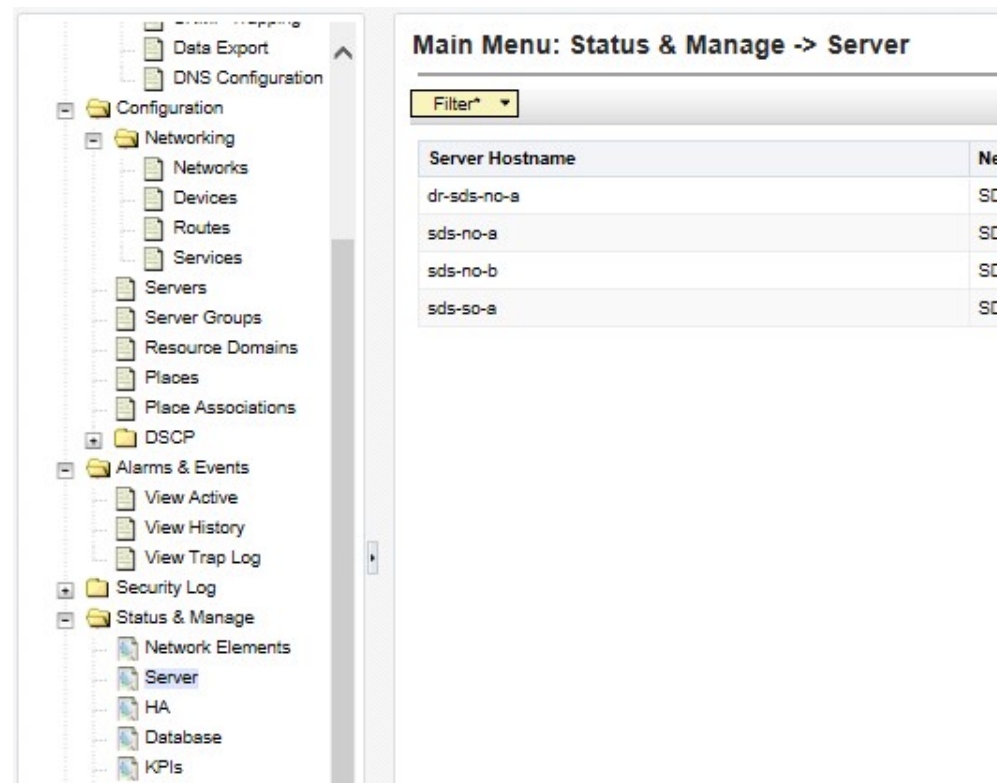
**Procedure 10. Pairing the SDS SOAM Servers (All SOAM Sites)**

Step	Procedure	Result
19. <input type="checkbox"/>	<p><b>Primary 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 [Edit]</b></p> <p>Info</p> <p>Info</p> <p>• Pre-Validation passed - Data NOT committed ...</p> <p>Parent * sds_bllorenc_grp Select an existing</p> <p>Ok Apply Cancel</p>
20. <input type="checkbox"/>	<p><b>Primary 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 [Edit]</b></p> <p>Info</p> <p>Info</p> <p>• Data committed!</p> <p>Parent * sds_bllorenc_grp Select an existing Server Group [A value is required.]</p>
21. <input type="checkbox"/>	<p><b>Primary SDS VIP:</b></p> <p>Click the “<b>Add</b>” dialogue button for the <b>VIP Address</b>.</p>	 <p>VIP Address Add</p>
22. <input type="checkbox"/>	<p><b>Primary SDS VIP:</b></p> <p>Input the <b>VIP Address</b></p>	 <p>VIP Address Add</p> <p>10.250.32.10 Remove</p>
23. <input type="checkbox"/>	<p><b>Primary SDS VIP:</b></p> <p>Click the “<b>Apply</b>” dialogue button.</p>	 <p>VIP Address Add</p> <p>10.240.108.52 Remove</p> <p>Ok Apply Cancel</p>

Procedure 10. Pairing the SDS SOAM Servers (All SOAM Sites)

Step	Procedure	Result																																																																
24. <div></div>	<p><b>Primary 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>																																																																	
25. <div></div>	<p><b>Primary SDS VIP:</b></p> <p>The user should be presented with a banner information message stating “<b>Data committed</b>”.</p>																																																																	
26. <div></div>	<p><b>Primary SDS VIP:</b></p> <p>Select...</p> <p><b>Main Menu</b> → <b>Alarms &amp; Events</b> → <b>View Active</b></p> <p>...as shown on the right.</p>	 <table><tr><th>Seq #</th><th>Event ID</th><th>Timestamp</th><th>Severity</th><th>Product</th><th>Process</th><th>NE</th><th>Server</th></tr><tr><td></td><td>Alarm Text</td><td></td><td>Additional Info</td><td></td><td></td><td></td><td></td></tr><tr><td>55</td><td>31262</td><td>2016-05-05 10:34:08.093 EDT</td><td>CLEAR</td><td>Platform</td><td>racierk</td><td>SDS_NE</td><td>sds-no-a</td></tr><tr><td></td><td>HA Management Fault</td><td></td><td>Alarm auto clear</td><td></td><td></td><td></td><td></td></tr><tr><td>54</td><td>31000</td><td>2016-05-05 10:34:08.093 EDT</td><td>CLEAR</td><td>Platform</td><td>racierk</td><td>SDS_NE</td><td>sds-no-a</td></tr><tr><td></td><td>S/W Fault</td><td></td><td>Alarm auto clear</td><td></td><td></td><td></td><td></td></tr><tr><td>9</td><td>31226</td><td>2016-05-05 10:31:52.000 EDT</td><td>MAJOR</td><td>Platform</td><td>omha</td><td>SDS_NE</td><td>sds-no-b</td></tr><tr><td></td><td>HA Availability Status Degraded</td><td></td><td>CHL_WARNING-VRN condition may require attention if persists ** (12393.06Res...</td><td></td><td></td><td></td><td></td></tr></table>	Seq #	Event ID	Timestamp	Severity	Product	Process	NE	Server		Alarm Text		Additional Info					55	31262	2016-05-05 10:34:08.093 EDT	CLEAR	Platform	racierk	SDS_NE	sds-no-a		HA Management Fault		Alarm auto clear					54	31000	2016-05-05 10:34:08.093 EDT	CLEAR	Platform	racierk	SDS_NE	sds-no-a		S/W Fault		Alarm auto clear					9	31226	2016-05-05 10:31:52.000 EDT	MAJOR	Platform	omha	SDS_NE	sds-no-b		HA Availability Status Degraded		CHL_WARNING-VRN condition may require attention if persists ** (12393.06Res...				
Seq #	Event ID	Timestamp	Severity	Product	Process	NE	Server																																																											
	Alarm Text		Additional Info																																																															
55	31262	2016-05-05 10:34:08.093 EDT	CLEAR	Platform	racierk	SDS_NE	sds-no-a																																																											
	HA Management Fault		Alarm auto clear																																																															
54	31000	2016-05-05 10:34:08.093 EDT	CLEAR	Platform	racierk	SDS_NE	sds-no-a																																																											
	S/W Fault		Alarm auto clear																																																															
9	31226	2016-05-05 10:31:52.000 EDT	MAJOR	Platform	omha	SDS_NE	sds-no-b																																																											
	HA Availability Status Degraded		CHL_WARNING-VRN condition may require attention if persists ** (12393.06Res...																																																															

Procedure 10. Pairing the SDS SOAM Servers (All SOAM Sites)

Step	Procedure	Result
27.	<p><b>Primary SDS VIP:</b></p> <p>Verify that <b>Event ID 10200</b> (<i>Remote Database re-initialization in progress</i>) alarms are present with the <b>SDS SOAM Server hostnames</b> in the “Instance” field..</p>	
<div>  <p><b>MONITOR THE EVENT ID 10200 (<i>Remote Database re-initialization in progress</i>) ALARMS.</b></p> <p><b>DO NOT PROCEED TO THE NEXT STEP UNTIL THE ALARM CLEAR IS RECEIVED FOR BOTH SDS SOAM SERVERS.</b></p> </div>		
28.	<p><b>Primary SDS VIP:</b></p> <p>Select...</p> <p><b>Main Menu</b>  → Status &amp; Manage  → Server</p> <p>...as shown on the right.</p>	



Procedure 10. Pairing the SDS SOAM Servers (All SOAM Sites)

Step	Procedure	Result																																															
29. <div></div>	<p><b>Primary SDS VIP:</b></p> <p>1) The “A” and “B” 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>	<div><div>Main Menu: Status &amp; Manage -&gt; Server</div><div><div>Filter*</div><table><thead><tr><th>Server Hostname</th><th>Network Element</th><th>Appl State</th><th>Alm</th><th>DB</th><th>Reporting Status</th><th>Proc</th></tr></thead><tbody><tr><td>dr-sds-no-a</td><td>SDS_NE</td><td>Enabled</td><td>Warn</td><td>Norm</td><td>Norm</td><td>Norm</td></tr><tr><td>sds-no-a</td><td>SDS_NE</td><td>Enabled</td><td>Err</td><td>Norm</td><td>Norm</td><td>Norm</td></tr><tr><td>sds-no-b</td><td>SDS_NE</td><td>Enabled</td><td>Warn</td><td>Norm</td><td>Norm</td><td>Norm</td></tr><tr><td>sds-so-a</td><td>SDS_NE</td><td>Disabled</td><td>Err</td><td>Norm</td><td>Norm</td><td>Man</td></tr></tbody></table></div></div>	Server Hostname	Network Element	Appl State	Alm	DB	Reporting Status	Proc	dr-sds-no-a	SDS_NE	Enabled	Warn	Norm	Norm	Norm	sds-no-a	SDS_NE	Enabled	Err	Norm	Norm	Norm	sds-no-b	SDS_NE	Enabled	Warn	Norm	Norm	Norm	sds-so-a	SDS_NE	Disabled	Err	Norm	Norm	Man												
Server Hostname	Network Element	Appl State	Alm	DB	Reporting Status	Proc																																											
dr-sds-no-a	SDS_NE	Enabled	Warn	Norm	Norm	Norm																																											
sds-no-a	SDS_NE	Enabled	Err	Norm	Norm	Norm																																											
sds-no-b	SDS_NE	Enabled	Warn	Norm	Norm	Norm																																											
sds-so-a	SDS_NE	Disabled	Err	Norm	Norm	Man																																											
30. <div></div>	<p><b>Primary SDS VIP:</b></p> <p>1) Using the mouse, select <b>SOAM Server A</b>. The line entry should now be highlighted in <b>GREEN</b>.</p> <p>2) Select the “Restart” dialogue button from the bottom left corner of the screen.</p> <p>3) Click the “OK” button on the confirmation dialogue box.</p> <p>4) The user should be presented with a confirmation message (in the banner area) for <b>SOAM Server A</b> stating: “<b>Successfully restarted application</b>”.</p>	<div><div>Main Menu: Status &amp; Manage -&gt; Server</div><div><div>Filter*</div><table><thead><tr><th>Server Hostname</th><th>Network Element</th><th>Appl State</th><th>Alm</th><th>DB</th><th>Reporting Status</th><th>Proc</th></tr></thead><tbody><tr><td>dr-sds-no-a</td><td>SDS_NE</td><td>Enabled</td><td>Warn</td><td>Norm</td><td>Norm</td><td>Norm</td></tr><tr><td>sds-no-a</td><td>SDS_NE</td><td>Enabled</td><td>Err</td><td>Norm</td><td>Norm</td><td>Norm</td></tr><tr><td>sds-no-b</td><td>SDS_NE</td><td>Enabled</td><td>Warn</td><td>Norm</td><td>Norm</td><td>Norm</td></tr><tr><td>sds-so-a</td><td>SDS_NE</td><td>Disabled</td><td>Err</td><td>Norm</td><td>Norm</td><td>Man</td></tr></tbody></table></div><div><div><div>View History</div><div>View Trap Log</div><div>Security Log</div><div>Status &amp; Manage</div><div>Network Elements</div><div>Server</div></div><div><div>Stop</div><div>Restart</div><div>Reboot</div><div>NTP Sync</div><div>Report</div></div></div><div><div>Message from webpage</div><div><div>?</div><div>Are you sure you wish to restart application software on the following server(s)? sds-so-a</div><div><div>OK</div><div>Cancel</div></div></div></div><div><div>Main Menu: Status &amp; Manage -&gt; Server</div><div><div>Filter*</div><div>Info</div><div><div>Info</div><div><div>i</div><div>sds-so-a: Successfully restarted application.</div></div></div><table><thead><tr><th>Server Host</th><th></th><th>App</th></tr></thead><tbody><tr><td>dr-sds-no-a</td><td></td><td>Enal</td></tr><tr><td>sds-no-a</td><td>SDS_NE</td><td>Enal</td></tr><tr><td>sds-no-b</td><td>SDS_NE</td><td>Enal</td></tr></tbody></table></div></div></div>	Server Hostname	Network Element	Appl State	Alm	DB	Reporting Status	Proc	dr-sds-no-a	SDS_NE	Enabled	Warn	Norm	Norm	Norm	sds-no-a	SDS_NE	Enabled	Err	Norm	Norm	Norm	sds-no-b	SDS_NE	Enabled	Warn	Norm	Norm	Norm	sds-so-a	SDS_NE	Disabled	Err	Norm	Norm	Man	Server Host		App	dr-sds-no-a		Enal	sds-no-a	SDS_NE	Enal	sds-no-b	SDS_NE	Enal
Server Hostname	Network Element	Appl State	Alm	DB	Reporting Status	Proc																																											
dr-sds-no-a	SDS_NE	Enabled	Warn	Norm	Norm	Norm																																											
sds-no-a	SDS_NE	Enabled	Err	Norm	Norm	Norm																																											
sds-no-b	SDS_NE	Enabled	Warn	Norm	Norm	Norm																																											
sds-so-a	SDS_NE	Disabled	Err	Norm	Norm	Man																																											
Server Host		App																																															
dr-sds-no-a		Enal																																															
sds-no-a	SDS_NE	Enal																																															
sds-no-b	SDS_NE	Enal																																															

Procedure 10. Pairing the SDS SOAM Servers (All SOAM Sites)

Step	Procedure	Result
31. <div></div>	<p><b>Primary 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>	<div><div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div></div></div>



Procedure 10. Pairing the SDS SOAM Servers (All SOAM Sites)

Step	Procedure	Result																																											
33. <div></div>	<p><b>Primary SDS VIP:</b></p> <p>1) Using the mouse, select <b>SOAM Server B</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>SOAM Server B</b> stating: “<b>Successfully restarted application</b>”.</p>	<div><p>Main Menu: Status &amp; Manage -&gt; Server</p><table><thead><tr><th>Filter*</th><th>Server Hostname</th><th>Network Element</th><th>Appl State</th><th>Alm</th><th>DB</th><th>Report</th></tr></thead><tbody><tr><td></td><td>dr-sds-no-a</td><td>SDS_NE</td><td>Enabled</td><td>Warn</td><td>Norm</td><td>Norm</td></tr><tr><td></td><td>sds-no-a</td><td>SDS_NE</td><td>Enabled</td><td>Err</td><td>Norm</td><td>Norm</td></tr><tr><td></td><td>sds-no-b</td><td>SDS_NE</td><td>Enabled</td><td>Warn</td><td>Norm</td><td>Norm</td></tr><tr><td></td><td>sds-so-a</td><td>SDS_NE</td><td>Disabled</td><td>Err</td><td>Norm</td><td>Norm</td></tr></tbody></table><div><div><div>View History</div><div>View Trap Log</div><div>Security Log</div><div>Status &amp; Manage</div><div>Network Elements</div><div>Server</div></div><div><div>Stop</div><div>Restart</div><div>Reboot</div><div>NTP Sync</div><div>Report</div></div></div><div><div>Message from webpage</div><div><div>Are you sure you wish to restart application software on the following server(s)? sds-so-b</div><div><div>OK</div><div>Cancel</div></div></div></div><p>Main Menu: Status &amp; Manage -&gt; Server</p><div><div>Filter* Info</div><div><div>Info</div><div><div>• sds-so-b: Successfully restarted application.</div></div></div><table><thead><tr><th>Server Host</th><th>App</th></tr></thead><tbody><tr><td>dr-sds-no-a</td><td>Enal</td></tr><tr><td>sds-no-a</td><td>Enal</td></tr><tr><td>sds-no-b</td><td>Enal</td></tr></tbody></table></div></div>	Filter*	Server Hostname	Network Element	Appl State	Alm	DB	Report		dr-sds-no-a	SDS_NE	Enabled	Warn	Norm	Norm		sds-no-a	SDS_NE	Enabled	Err	Norm	Norm		sds-no-b	SDS_NE	Enabled	Warn	Norm	Norm		sds-so-a	SDS_NE	Disabled	Err	Norm	Norm	Server Host	App	dr-sds-no-a	Enal	sds-no-a	Enal	sds-no-b	Enal
Filter*	Server Hostname	Network Element	Appl State	Alm	DB	Report																																							
	dr-sds-no-a	SDS_NE	Enabled	Warn	Norm	Norm																																							
	sds-no-a	SDS_NE	Enabled	Err	Norm	Norm																																							
	sds-no-b	SDS_NE	Enabled	Warn	Norm	Norm																																							
	sds-so-a	SDS_NE	Disabled	Err	Norm	Norm																																							
Server Host	App																																												
dr-sds-no-a	Enal																																												
sds-no-a	Enal																																												
sds-no-b	Enal																																												


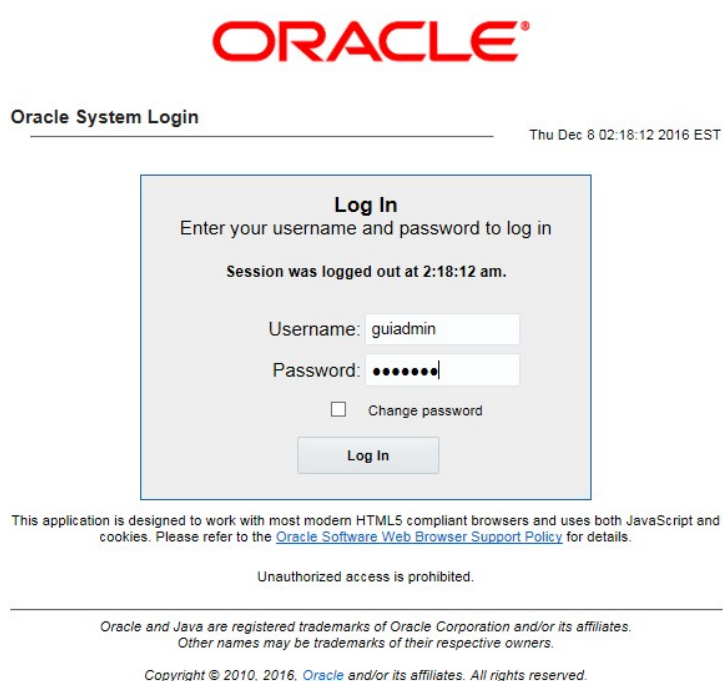
Procedure 10. Pairing the SDS SOAM Servers (All SOAM Sites)

Step	Procedure	Result																																			
34. <div></div>	<p><b>Primary 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>	<div><div><div>Configuration</div><div>Networking</div><div>Networks</div><div>Devices</div><div>Routes</div><div>Services</div><div>Servers</div><div>Server Groups</div><div>Resource Domains</div><div>Places</div><div>Place Associations</div><div>DSCP</div><div>Alarms &amp; Events</div><div>View Active</div><div>View History</div><div>View Trap Log</div><div>Security Log</div><div>Status &amp; Manage</div><div>Network Elements</div><div>Server</div><div>HA</div><div>Networks</div></div><div><h3>Main Menu: Status &amp; Manage -&gt; Server</h3><div>Filter*</div><table><thead><tr><th>Server Hostname</th><th>Net</th></tr></thead><tbody><tr><td>dr-sds-no-a</td><td>SD:</td></tr><tr><td>sds-no-a</td><td>SD:</td></tr><tr><td>sds-no-b</td><td>SD:</td></tr><tr><td>sds-so-a</td><td>SD:</td></tr></tbody></table></div></div>	Server Hostname	Net	dr-sds-no-a	SD:	sds-no-a	SD:	sds-no-b	SD:	sds-so-a	SD:																									
Server Hostname	Net																																				
dr-sds-no-a	SD:																																				
sds-no-a	SD:																																				
sds-no-b	SD:																																				
sds-so-a	SD:																																				
35. <div></div>	<p><b>Primary 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>SOAM Server A</b> and <b>Server B</b> before proceeding to the next Step.</p>	<div><div><div>Main Menu: Status &amp; Manage -&gt; Server</div><div>Filter*</div><table><thead><tr><th>Server Hostname</th><th>Network Element</th><th>Appl State</th><th>Alm</th><th>DB</th><th>Reporting Status</th><th>Proc</th></tr></thead><tbody><tr><td>dr-sds-no-a</td><td>SDS_NE</td><td>Enabled</td><td>Warn</td><td>Norm</td><td>Norm</td><td>Norm</td></tr><tr><td>sds-no-a</td><td>SDS_NE</td><td>Enabled</td><td>Err</td><td>Norm</td><td>Norm</td><td>Norm</td></tr><tr><td>sds-no-b</td><td>SDS_NE</td><td>Enabled</td><td>Warn</td><td>Norm</td><td>Norm</td><td>Norm</td></tr><tr><td>sds-so-a</td><td>SDS_NE</td><td>Enabled</td><td>Warn</td><td>Norm</td><td>Norm</td><td>Norm</td></tr></tbody></table></div><div><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 → Server</b>” option from the Main menu on the left.</p></div></div>	Server Hostname	Network Element	Appl State	Alm	DB	Reporting Status	Proc	dr-sds-no-a	SDS_NE	Enabled	Warn	Norm	Norm	Norm	sds-no-a	SDS_NE	Enabled	Err	Norm	Norm	Norm	sds-no-b	SDS_NE	Enabled	Warn	Norm	Norm	Norm	sds-so-a	SDS_NE	Enabled	Warn	Norm	Norm	Norm
Server Hostname	Network Element	Appl State	Alm	DB	Reporting Status	Proc																															
dr-sds-no-a	SDS_NE	Enabled	Warn	Norm	Norm	Norm																															
sds-no-a	SDS_NE	Enabled	Err	Norm	Norm	Norm																															
sds-no-b	SDS_NE	Enabled	Warn	Norm	Norm	Norm																															
sds-so-a	SDS_NE	Enabled	Warn	Norm	Norm	Norm																															
36. <div></div>	<p><b>Primary SDS VIP:</b></p> <p>Click the “<b>Logout</b>” link on the SDS server GUI.</p>	<div><div>account guidadmin   Log Out</div><div>Wed Nov 16 11:23:30 2016 UT</div></div>																																			
THIS PROCEDURE HAS BEEN COMPLETED																																					


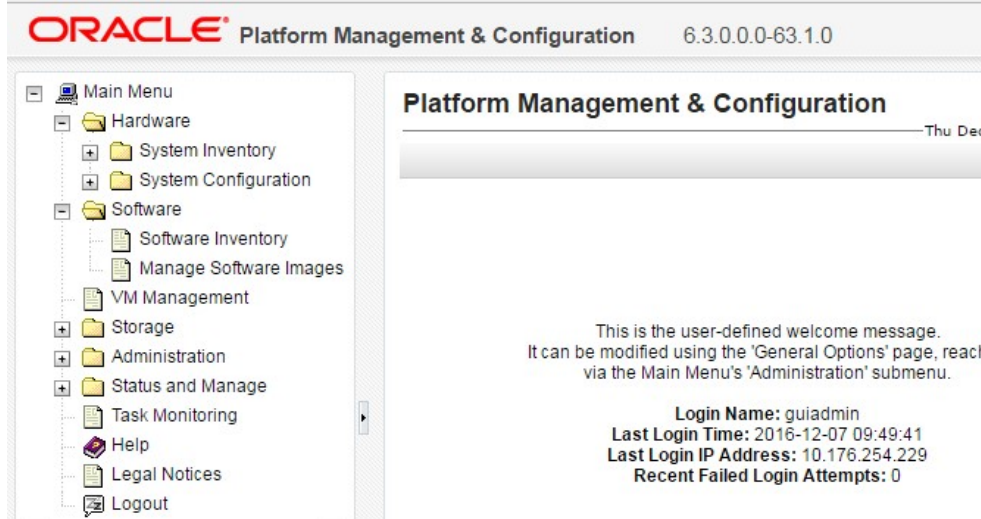

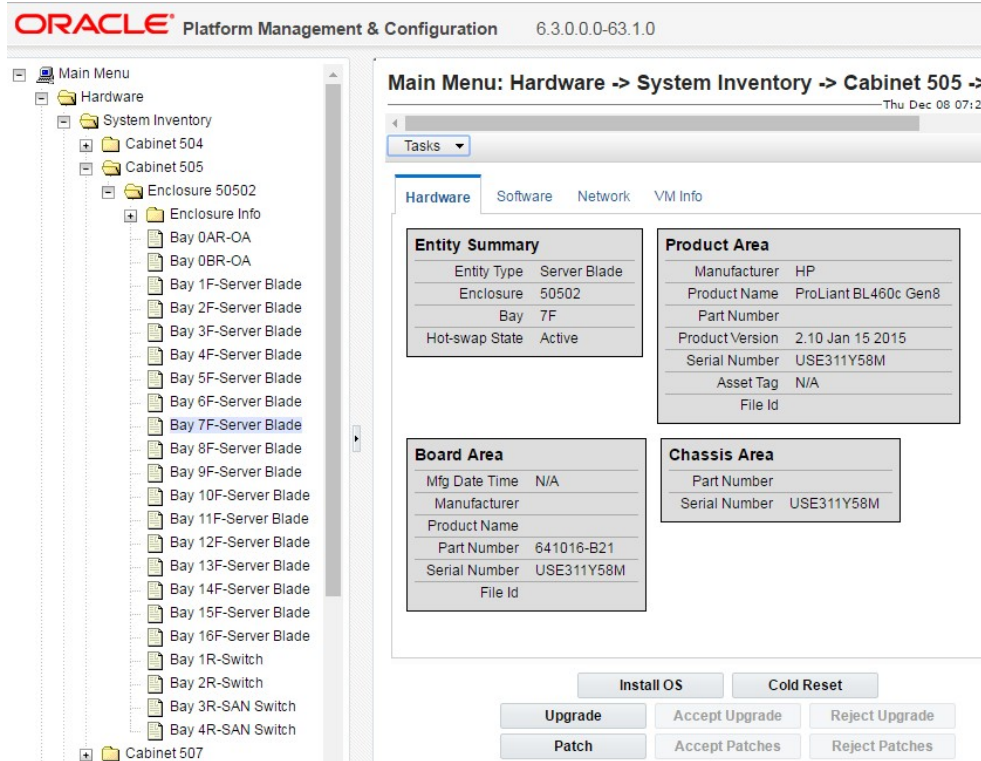
## 5.9 DP Installation (All SOAM Sites)

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.

### Procedure 11. Installing the Data Processor Blade (All SOAM Sites)

Step	Procedure	Result
 <b>EXECUTE Appendix I: ( Disable Hyperthreading for GEN8 and GEN9 (DP Only) ON EACH DP BLADE AFTER THIS PROCEDURE.</b>		
1. <input type="checkbox"/>	<b>PMAC Guest VM:</b> Launch an approved web browser and connect to the <b>XMI IP Address</b> of the PMAC server at the SOAM site  <b>NOTE:</b> <i>If presented with the “security certificate” warning screen shown to the right, choose the following option: “Continue to this website (not recommended)”.</i>	
2. <input type="checkbox"/>	<b>PMAC Guest VM:</b> The user should be presented the login screen shown on the right.  Login to the GUI using the default user and password.	

## Procedure 11. Installing the Data Processor Blade (All SOAM Sites)

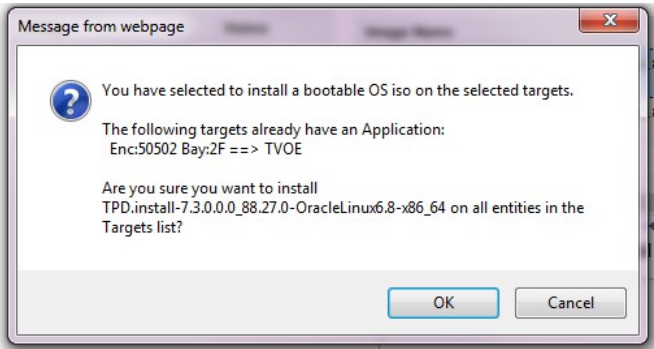
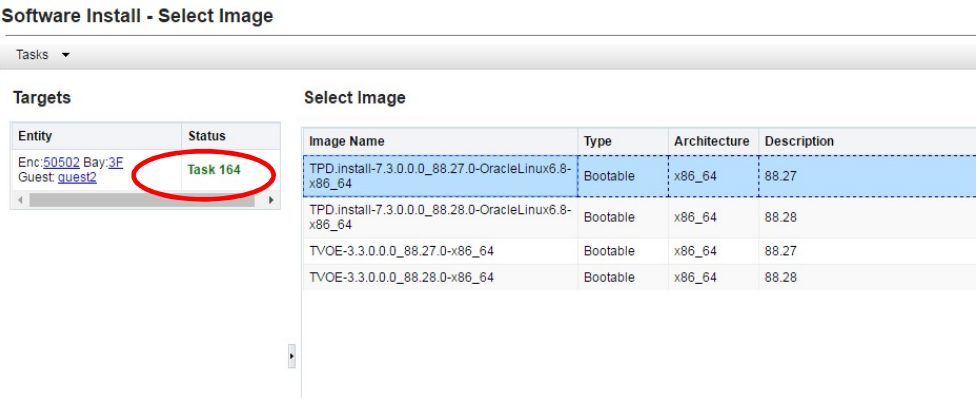
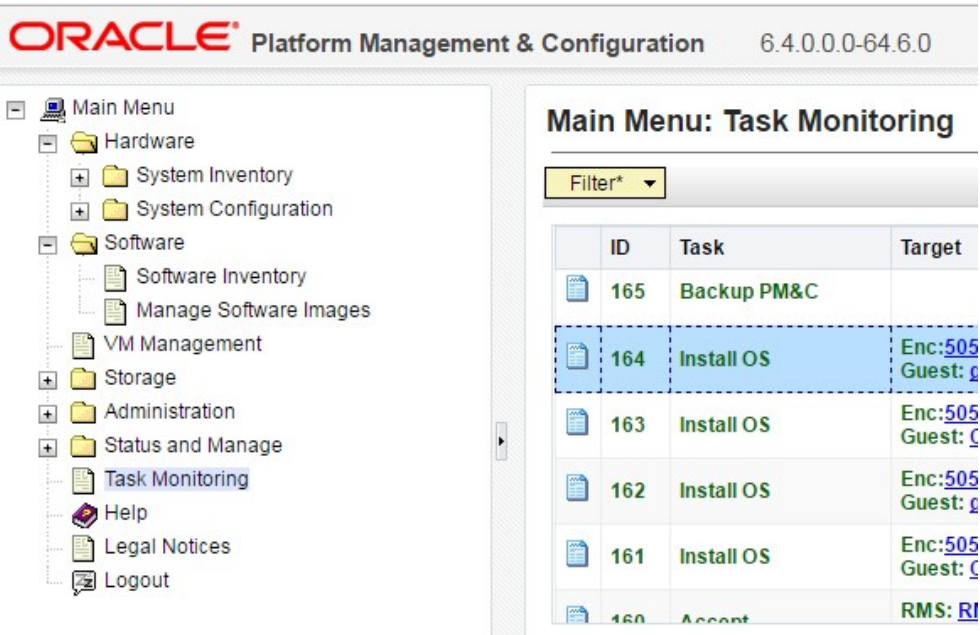
Step	Procedure	Result
3. 	<b>PMAC Guest VM:</b>  The user should be presented the PMAC Main Menu as shown on the right...	
4. 	<b>PMAC Guest VM:</b>  Select the designated DP server blade from the Menu...  <b>Main Menu</b> → Hardware → System Inventory → <Cabinet> → <Enclosure> → <Server Blade>  ...as shown on the right.	

## Procedure 11. Installing the Data Processor Blade (All SOAM Sites)

Step	Procedure	Result																																						
5. <div></div>	<p><b>PMAC Guest VM:</b></p> <p>Install the operating system by clicking the “Install OS” dialogue button</p>	<p>Main Menu: Hardware -&gt; System Inventory -&gt; Cabinet 505 -&gt; Encl</p> <p>Thu Dec 08 07:20:23 201</p> <p>Tasks</p> <p>Hardware Software Network VM Info</p> <div><div><p><b>Entity Summary</b></p><table><tr><td>Entity Type</td><td>Server Blade</td></tr><tr><td>Enclosure</td><td>50502</td></tr><tr><td>Bay</td><td>7F</td></tr><tr><td>Hot-swap State</td><td>Active</td></tr></table></div><div><p><b>Product Area</b></p><table><tr><td>Manufacturer</td><td>HP</td></tr><tr><td>Product Name</td><td>ProLiant BL460c Gen8</td></tr><tr><td>Part Number</td><td></td></tr><tr><td>Product Version</td><td>2.10 Jan 15 2015</td></tr><tr><td>Serial Number</td><td>USE311Y58M</td></tr><tr><td>Asset Tag</td><td>N/A</td></tr><tr><td>File Id</td><td></td></tr></table></div><div><p><b>Board Area</b></p><table><tr><td>Mfg Date Time</td><td>N/A</td></tr><tr><td>Manufacturer</td><td></td></tr><tr><td>Product Name</td><td></td></tr><tr><td>Part Number</td><td>641016-B21</td></tr><tr><td>Serial Number</td><td>USE311Y58M</td></tr><tr><td>File Id</td><td></td></tr></table></div><div><p><b>Chassis Area</b></p><table><tr><td>Part Number</td><td></td></tr><tr><td>Serial Number</td><td>USE311Y58M</td></tr></table></div></div> <p>Install OS Cold Reset</p> <p>Upgrade Accept Upgrade Reject Upgrade</p> <p>Patch Accept Patches Reject Patches</p>	Entity Type	Server Blade	Enclosure	50502	Bay	7F	Hot-swap State	Active	Manufacturer	HP	Product Name	ProLiant BL460c Gen8	Part Number		Product Version	2.10 Jan 15 2015	Serial Number	USE311Y58M	Asset Tag	N/A	File Id		Mfg Date Time	N/A	Manufacturer		Product Name		Part Number	641016-B21	Serial Number	USE311Y58M	File Id		Part Number		Serial Number	USE311Y58M
Entity Type	Server Blade																																							
Enclosure	50502																																							
Bay	7F																																							
Hot-swap State	Active																																							
Manufacturer	HP																																							
Product Name	ProLiant BL460c Gen8																																							
Part Number																																								
Product Version	2.10 Jan 15 2015																																							
Serial Number	USE311Y58M																																							
Asset Tag	N/A																																							
File Id																																								
Mfg Date Time	N/A																																							
Manufacturer																																								
Product Name																																								
Part Number	641016-B21																																							
Serial Number	USE311Y58M																																							
File Id																																								
Part Number																																								
Serial Number	USE311Y58M																																							
6. <div></div>	<p><b>PMAC Guest VM:</b></p> <p>1) Select the desired TPD Image</p> <p>2) Click the “Start Software Install” dialogue button</p>	<p>Select Image</p> <table><thead><tr><th>Image Name</th><th>Type</th><th>Architecture</th><th>Description</th></tr></thead><tbody><tr><td>TPD.install-7.3.0.0.0_88.27.0-OracleLinux6.8-x86_64</td><td>Bootable</td><td>x86_64</td><td>88.27</td></tr><tr><td>TPD.install-7.3.0.0.0_88.28.0-OracleLinux6.8-x86_64</td><td>Bootable</td><td>x86_64</td><td>88.28</td></tr><tr><td>TVOE-3.3.0.0.0_88.27.0-x86_64</td><td>Bootable</td><td>x86_64</td><td>88.27</td></tr><tr><td>TVOE-3.3.0.0.0_88.28.0-x86_64</td><td>Bootable</td><td>x86_64</td><td>88.28</td></tr></tbody></table> <p>Supply Software Install Arguments (Optional)</p> <p>Start Software Install Back</p>	Image Name	Type	Architecture	Description	TPD.install-7.3.0.0.0_88.27.0-OracleLinux6.8-x86_64	Bootable	x86_64	88.27	TPD.install-7.3.0.0.0_88.28.0-OracleLinux6.8-x86_64	Bootable	x86_64	88.28	TVOE-3.3.0.0.0_88.27.0-x86_64	Bootable	x86_64	88.27	TVOE-3.3.0.0.0_88.28.0-x86_64	Bootable	x86_64	88.28																		
Image Name	Type	Architecture	Description																																					
TPD.install-7.3.0.0.0_88.27.0-OracleLinux6.8-x86_64	Bootable	x86_64	88.27																																					
TPD.install-7.3.0.0.0_88.28.0-OracleLinux6.8-x86_64	Bootable	x86_64	88.28																																					
TVOE-3.3.0.0.0_88.27.0-x86_64	Bootable	x86_64	88.27																																					
TVOE-3.3.0.0.0_88.28.0-x86_64	Bootable	x86_64	88.28																																					



Procedure 11. Installing the Data Processor Blade (All SOAM Sites)

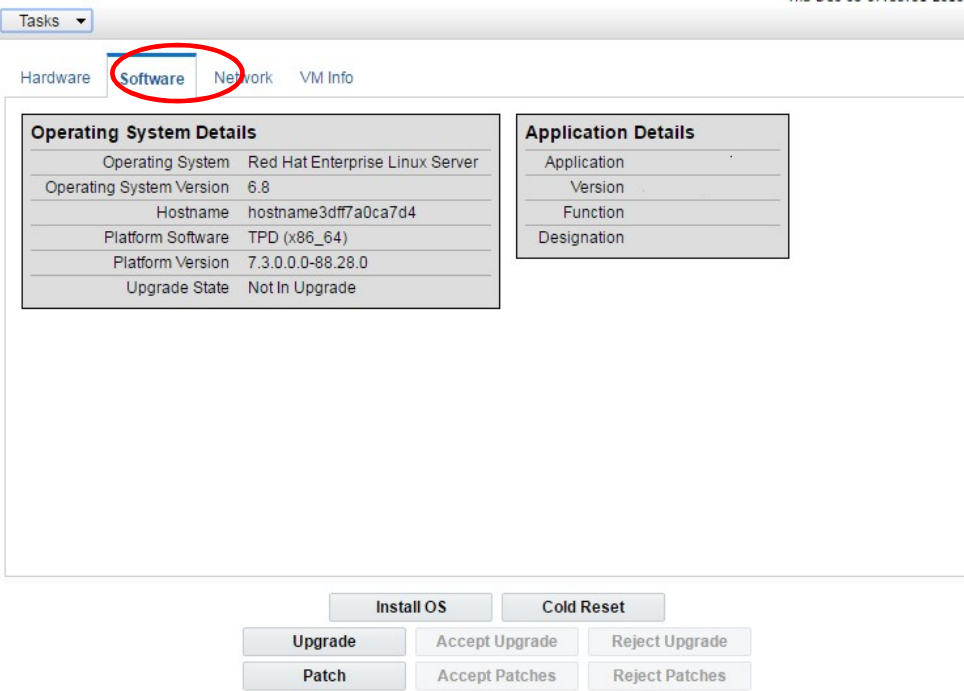
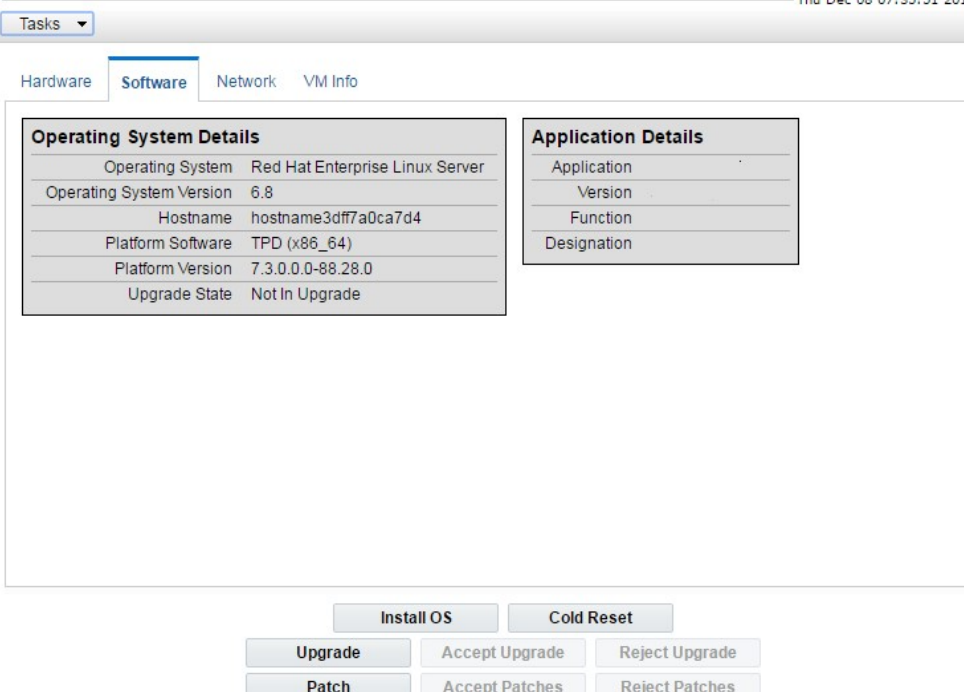
Step	Procedure	Result
7. <input type="checkbox"/>	<p><b>PMAC Guest VM:</b></p> <p>The user should be presented with an <b>“Are you sure you want to install”</b> message box as shown on the right.</p> <p>Click the <b>“OK”</b> dialogue button</p>	
8. <input type="checkbox"/>	<p><b>PMAC Guest VM:</b></p> <p>Note the task number assigned to SDS Application upgrade. This number will be used to track its progress.</p> <p>This task takes up to ~25 minutes.</p>	
9. <input type="checkbox"/>	<p>Execute <b>“Install OS”</b> for for each additional <b>DP Server</b>.</p>	<ul style="list-style-type: none"> <li>Repeat <b>Steps 3 – 9</b> of this procedure for each additional <b>DP server blade</b> in the <b>SOAM</b> enclosure.</li> </ul>
10. <input type="checkbox"/>	<p><b>PMAC Guest VM:</b></p> <p>1) Select... <b>Main Menu</b> → <b>Task Monitoring</b> ...as shown on the right.</p>	

## Procedure 11. Installing the Data Processor Blade (All SOAM Sites)

Step	Procedure	Result																																																						
11. <div></div>	<p><b>PMAC Guest VM:</b></p> <p>Wait till Progress is 100% with a Status of Success and a State of Complete.</p> <p>.... then proceed to the next step.</p>	<table><thead><tr><th>ID</th><th>Task</th><th>Target</th><th>Status</th><th>State</th><th>Task Output</th><th>Running Time</th><th>Start Time</th><th>Progress</th></tr></thead><tbody><tr><td>165</td><td>Backup PM&amp;C</td><td></td><td>PM&amp;C Backup successful</td><td>COMPLETE</td><td>N/A</td><td>0:00:16</td><td>2016-10-01 05:00:01</td><td>100%</td></tr><tr><td>164</td><td>Install OS</td><td>Enc:50502 Bay:3F Guest: guesi12</td><td>Done: TPD.install-7.3.0.0.0_88.27.0-OracleLinux6.8-x86_64</td><td>COMPLETE</td><td>N/A</td><td>0:15:24</td><td>2016-09-30 14:36:16</td><td>100%</td></tr><tr><td>163</td><td>Install OS</td><td>Enc:50502 Bay:1F Guest: CPUHOG</td><td>Done: TPD.install-7.3.0.0.0_88.27.0-OracleLinux6.8-x86_64</td><td>COMPLETE</td><td>N/A</td><td>0:17:58</td><td>2016-09-30 14:36:14</td><td>100%</td></tr><tr><td>162</td><td>Install OS</td><td>Enc:50502 Bay:2F Guest: guquest</td><td>Done: TPD.install-7.3.0.0.0_88.27.0-OracleLinux6.8-x86_64</td><td>COMPLETE</td><td>N/A</td><td>0:15:22</td><td>2016-09-30 13:53:36</td><td>100%</td></tr><tr><td>161</td><td>Install OS</td><td>Enc:50502 Bay:1F Guest: CPUHOG</td><td>Done: TPD.install-7.3.0.0.0_88.27.0-OracleLinux6.8-x86_64</td><td>COMPLETE</td><td>N/A</td><td>0:18:05</td><td>2016-09-30 13:53:04</td><td>100%</td></tr></tbody></table>	ID	Task	Target	Status	State	Task Output	Running Time	Start Time	Progress	165	Backup PM&C		PM&C Backup successful	COMPLETE	N/A	0:00:16	2016-10-01 05:00:01	100%	164	Install OS	Enc:50502 Bay:3F Guest: guesi12	Done: TPD.install-7.3.0.0.0_88.27.0-OracleLinux6.8-x86_64	COMPLETE	N/A	0:15:24	2016-09-30 14:36:16	100%	163	Install OS	Enc:50502 Bay:1F Guest: CPUHOG	Done: TPD.install-7.3.0.0.0_88.27.0-OracleLinux6.8-x86_64	COMPLETE	N/A	0:17:58	2016-09-30 14:36:14	100%	162	Install OS	Enc:50502 Bay:2F Guest: guquest	Done: TPD.install-7.3.0.0.0_88.27.0-OracleLinux6.8-x86_64	COMPLETE	N/A	0:15:22	2016-09-30 13:53:36	100%	161	Install OS	Enc:50502 Bay:1F Guest: CPUHOG	Done: TPD.install-7.3.0.0.0_88.27.0-OracleLinux6.8-x86_64	COMPLETE	N/A	0:18:05	2016-09-30 13:53:04	100%
ID	Task	Target	Status	State	Task Output	Running Time	Start Time	Progress																																																
165	Backup PM&C		PM&C Backup successful	COMPLETE	N/A	0:00:16	2016-10-01 05:00:01	100%																																																
164	Install OS	Enc:50502 Bay:3F Guest: guesi12	Done: TPD.install-7.3.0.0.0_88.27.0-OracleLinux6.8-x86_64	COMPLETE	N/A	0:15:24	2016-09-30 14:36:16	100%																																																
163	Install OS	Enc:50502 Bay:1F Guest: CPUHOG	Done: TPD.install-7.3.0.0.0_88.27.0-OracleLinux6.8-x86_64	COMPLETE	N/A	0:17:58	2016-09-30 14:36:14	100%																																																
162	Install OS	Enc:50502 Bay:2F Guest: guquest	Done: TPD.install-7.3.0.0.0_88.27.0-OracleLinux6.8-x86_64	COMPLETE	N/A	0:15:22	2016-09-30 13:53:36	100%																																																
161	Install OS	Enc:50502 Bay:1F Guest: CPUHOG	Done: TPD.install-7.3.0.0.0_88.27.0-OracleLinux6.8-x86_64	COMPLETE	N/A	0:18:05	2016-09-30 13:53:04	100%																																																
12. <div></div>	<p><b>PMAC Guest VM:</b></p> <p>Re-select the designated DP server blade from the Menu...</p> <p><u>Main Menu</u></p> <p>→ Hardware</p> <p>→ System Inventory</p> <p>→ &lt;Cabinet&gt;</p> <p>→ &lt;Enclosure&gt;</p> <p>→ &lt;Server Blade&gt;</p> <p>...as shown on the right.</p>	<div><div><div>ORACLE® Platform Management &amp; Configuration 6.4.0.0.0-64.6.0</div><div><div><div>Main Menu</div><div><div>Hardware</div><div><div>System Inventory</div><div>System Configuration</div></div><div>Software</div><div><div>Software Inventory</div><div>Manage Software Images</div><div>VM Management</div></div><div>Storage</div><div>Administration</div><div>Status and Manage</div><div>Task Monitoring</div><div>Help</div><div>Legal Notices</div><div>Logout</div></div></div><div><div>Platform Management &amp; Configuration</div><div>Thu Dec</div><div>This is the user-defined welcome message. It can be modified using the 'General Options' page, reach via the Main Menu's 'Administration' submenu.</div><div>Login Name: guiadmin Last Login Time: 2016-12-07 09:49:41 Last Login IP Address: 10.176.254.229 Recent Failed Login Attempts: 0</div></div></div></div></div>																																																						



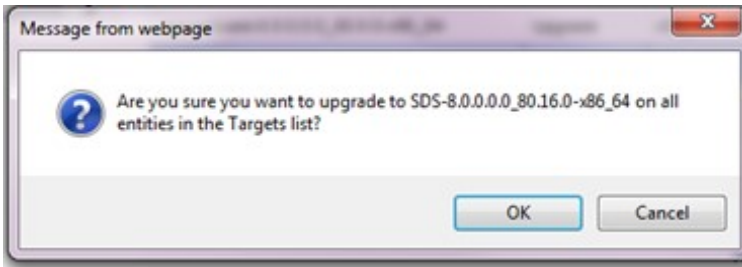
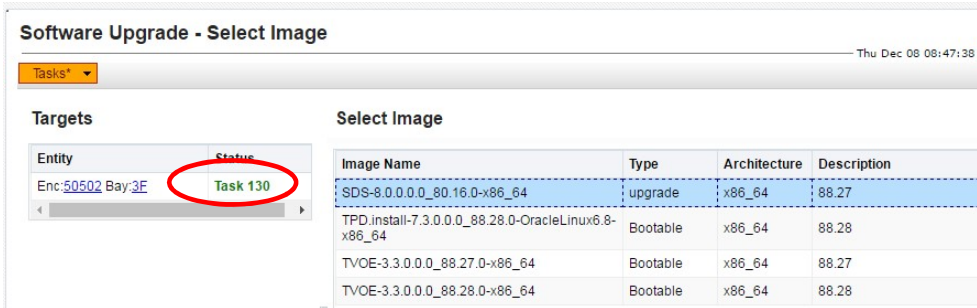
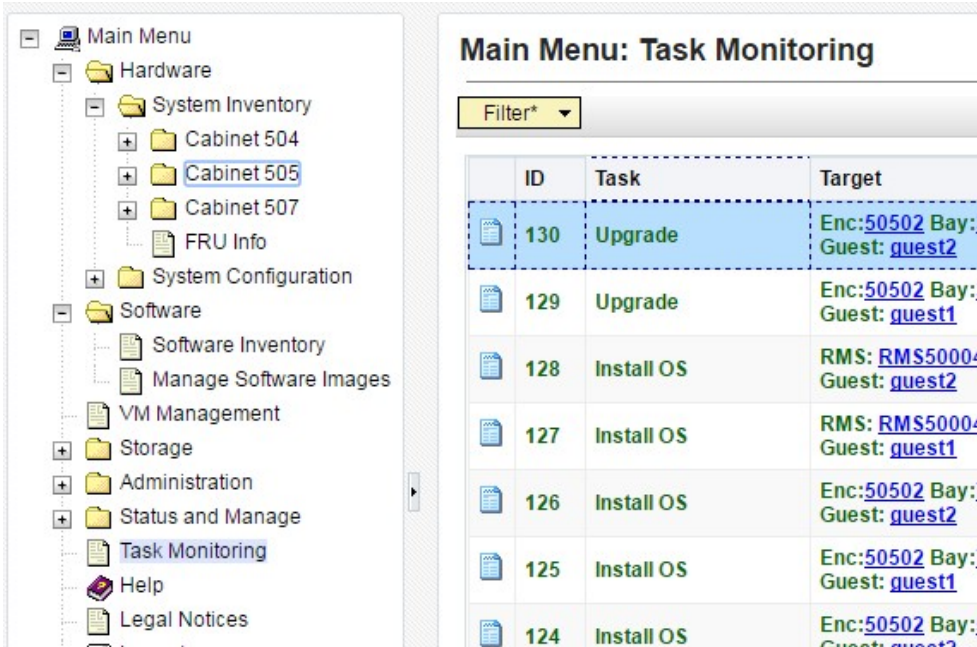
## Procedure 11. Installing the Data Processor Blade (All SOAM Sites)

Step	Procedure	Result
13. <input type="checkbox"/>	<b>PMAC Guest VM:</b>  Select the "Software" tab.	<p><b>Main Menu: Hardware -&gt; System Inventory -&gt; Cabinet 505 -&gt; Enclosure 50502 - Bay 3F</b>  <small>Thu Dec 08 07:35:51 2016</small></p> 
14. <input type="checkbox"/>	<b>PMAC Guest VM:</b>  1) Verify the correct TPD is shown.  2) Verify "Application Details" are blank.	<p><b>Main Menu: Hardware -&gt; System Inventory -&gt; Cabinet 505 -&gt; Enclosure 50502 - Bay 3F</b>  <small>Thu Dec 08 07:35:51 2016</small></p> 

Procedure 11. Installing the Data Processor Blade (All SOAM Sites)

Step	Procedure	Result																								
15. <div></div>	<p><b>PMAC Guest VM:</b></p> <p>1) Select the "Network" tab.</p> <p>2) Make note of the control IP address for this DP, called "bond0"; it will be referenced later</p> <p>3) Select the "Upgrade" button.</p>	<div><div>Main Menu: Hardware -&gt; System Inventory -&gt; Cabinet 505 -&gt; Enclosure 50502 - Bay</div><div>Tasks*</div><div><div>HardwareSoftwareNetwork</div><div><div>Networking Details:</div><table><tr><th>Interface</th><th>IP Address</th><th>Admin Status</th><th>Operational Status</th></tr><tr><td>bond0</td><td>169.254.118.158</td><td>Up</td><td>Up</td></tr><tr><td>bond0</td><td>fe80::dad3:85ff:feda:2580</td><td>Up</td><td>Up</td></tr></table></div><div><div>Install OSCold Reset</div><div>UpgradeAccept UpgradeReject UpgradePatchAccept PatchesReject Patches</div></div></div></div>	Interface	IP Address	Admin Status	Operational Status	bond0	169.254.118.158	Up	Up	bond0	fe80::dad3:85ff:feda:2580	Up	Up												
Interface	IP Address	Admin Status	Operational Status																							
bond0	169.254.118.158	Up	Up																							
bond0	fe80::dad3:85ff:feda:2580	Up	Up																							
16. <div></div>	<p><b>PMAC Guest VM:</b></p> <p>1) Select the correct SDS version from the "Image Name" list. The line entry should now be highlighted in BLUE.</p> <p>2) Select the "Start Software Upgrade" dialogue button</p>	<div><div>Select Image</div><table><tr><th>Image Name</th><th>Type</th><th>Architecture</th><th>Description</th></tr><tr><td>oracleGuest-8.0.0.0.0_80.8.0-x86_64</td><td>Upgrade</td><td>x86_64</td><td></td></tr><tr><td>SDS-8.0.0.0.0_80.16.0-x86_64</td><td>Upgrade</td><td>x86_64</td><td></td></tr><tr><td>TPD.install-7.0.3.0.0_86.46.0-OracleLinux6.7-x86_64</td><td>Bootable</td><td>x86_64</td><td></td></tr><tr><td>TPD.install-7.3.0.0.0_88.28.0-OracleLinux6.8-x86_64</td><td>Bootable</td><td>x86_64</td><td></td></tr><tr><td>TPD.install-7.3.0.0.0_88.30.0-OracleLinux6.8-x86_64</td><td>Bootable</td><td>x86_64</td><td></td></tr></table><div>Supply Software Upgrade Arguments (Optional)</div><div><div>Start Software UpgradeBack</div></div></div>	Image Name	Type	Architecture	Description	oracleGuest-8.0.0.0.0_80.8.0-x86_64	Upgrade	x86_64		SDS-8.0.0.0.0_80.16.0-x86_64	Upgrade	x86_64		TPD.install-7.0.3.0.0_86.46.0-OracleLinux6.7-x86_64	Bootable	x86_64		TPD.install-7.3.0.0.0_88.28.0-OracleLinux6.8-x86_64	Bootable	x86_64		TPD.install-7.3.0.0.0_88.30.0-OracleLinux6.8-x86_64	Bootable	x86_64	
Image Name	Type	Architecture	Description																							
oracleGuest-8.0.0.0.0_80.8.0-x86_64	Upgrade	x86_64																								
SDS-8.0.0.0.0_80.16.0-x86_64	Upgrade	x86_64																								
TPD.install-7.0.3.0.0_86.46.0-OracleLinux6.7-x86_64	Bootable	x86_64																								
TPD.install-7.3.0.0.0_88.28.0-OracleLinux6.8-x86_64	Bootable	x86_64																								
TPD.install-7.3.0.0.0_88.30.0-OracleLinux6.8-x86_64	Bootable	x86_64																								

Procedure 11. Installing the Data Processor Blade (All SOAM Sites)

Step	Procedure	Result
17. <input type="checkbox"/>	<b>PMAC Guest VM:</b> The user should be presented with an <b>“Are you sure you want to upgrade”</b> message box ....as shown on the right. Click the <b>“OK”</b> dialogue button.	
18. <input type="checkbox"/>	<b>PMAC Guest VM:</b> Note the task number assigned to upgrade SDS application . This number will be used to track its progress. This task takes up to ~20 minutes.	
19. <input type="checkbox"/>	Install SDS SW on each remaining DP server blade.	<ul style="list-style-type: none"> <li>Repeat <b>Steps 10 – 18</b> of this procedure for each additional <b>DP server blade</b> installed in the <b>SOAM enclosure</b>.</li> </ul>
20. <input type="checkbox"/>	<b>PMAC Guest VM:</b> Select... <b>Main Menu</b> <b>→ Task Monitoring</b> ...as shown on the right.	

Procedure 11. Installing the Data Processor Blade (All SOAM Sites)

Step	Procedure	Result																																													
21. <div></div>	<p><b>PMAC Guest VM:</b></p> <p>Wait till Progress is 100% with a Status of Success and a State of Complete.</p> <p>.... then proceed to the next step.</p>	<table><tr><th>ID</th><th>Task</th><th>Target</th><th>Status</th><th>State</th><th>Task Output</th><th>Running Time</th><th>Start Time</th><th>Progress</th></tr><tr><td>130</td><td>Upgrade</td><td>Enc: 50502 Bay: 3F Guest: guest12</td><td>Success</td><td>COMPLETE</td><td></td><td>0:05:41</td><td>2016-09-30 11:32:36</td><td>100%</td></tr><tr><td>129</td><td>Upgrade</td><td>Enc: 50502 Bay: 3F Guest: guest11</td><td>Success</td><td>COMPLETE</td><td></td><td>0:05:27</td><td>2016-09-30 11:32:26</td><td>100%</td></tr><tr><td>128</td><td>Install OS</td><td>RMS: RMS50004U03 Guest: guest12</td><td>Done: TPD.install-7.3.0.0.0_88.27.0-OracleLinux6.8-x86_64</td><td>COMPLETE</td><td>N/A</td><td>0:14:43</td><td>2016-09-30 11:01:30</td><td>100%</td></tr><tr><td>127</td><td>Install OS</td><td>RMS: RMS50004U03 Guest: guest11</td><td>Done: TPD.install-7.3.0.0.0_88.27.0-OracleLinux6.8-x86_64</td><td>COMPLETE</td><td>N/A</td><td>0:13:05</td><td>2016-09-30 11:01:21</td><td>100%</td></tr></table>	ID	Task	Target	Status	State	Task Output	Running Time	Start Time	Progress	130	Upgrade	Enc: 50502 Bay: 3F Guest: guest12	Success	COMPLETE		0:05:41	2016-09-30 11:32:36	100%	129	Upgrade	Enc: 50502 Bay: 3F Guest: guest11	Success	COMPLETE		0:05:27	2016-09-30 11:32:26	100%	128	Install OS	RMS: RMS50004U03 Guest: guest12	Done: TPD.install-7.3.0.0.0_88.27.0-OracleLinux6.8-x86_64	COMPLETE	N/A	0:14:43	2016-09-30 11:01:30	100%	127	Install OS	RMS: RMS50004U03 Guest: guest11	Done: TPD.install-7.3.0.0.0_88.27.0-OracleLinux6.8-x86_64	COMPLETE	N/A	0:13:05	2016-09-30 11:01:21	100%
ID	Task	Target	Status	State	Task Output	Running Time	Start Time	Progress																																							
130	Upgrade	Enc: 50502 Bay: 3F Guest: guest12	Success	COMPLETE		0:05:41	2016-09-30 11:32:36	100%																																							
129	Upgrade	Enc: 50502 Bay: 3F Guest: guest11	Success	COMPLETE		0:05:27	2016-09-30 11:32:26	100%																																							
128	Install OS	RMS: RMS50004U03 Guest: guest12	Done: TPD.install-7.3.0.0.0_88.27.0-OracleLinux6.8-x86_64	COMPLETE	N/A	0:14:43	2016-09-30 11:01:30	100%																																							
127	Install OS	RMS: RMS50004U03 Guest: guest11	Done: TPD.install-7.3.0.0.0_88.27.0-OracleLinux6.8-x86_64	COMPLETE	N/A	0:13:05	2016-09-30 11:01:21	100%																																							
22. <div></div>	<p><b>PMAC Guest VM::</b></p> <p>Click the “Logout” link on the PMAC server GUI.</p>	<div><div>in Account guidadmin ▾   Log Out</div><div>Thu Dec 08 08:47:38 2016 UTC</div></div>																																													
23. <div></div>	<p><b>Primary SDS VIP:</b></p> <p>Launch an approved web browser and connect to the XMI Virtual IP address (VIP) assigned to Active SDS site</p> <p><b>NOTE:</b> <i>If presented with the “security certificate” warning screen shown to the right, choose the following option: “Continue to this website (not recommended)”.</i></p>	<div><div><div><div></div></div><div>There is a problem with this website's security certificate.</div></div><div><div>The security certificate presented by this website was not issued by a trust</div><div>The security certificate presented by this website was issued for a different</div></div><div>Security certificate problems may indicate an attempt to fool you or interce server.</div><div>We recommend that you close this webpage and do not continue to</div><div><div><div></div></div>Click here to close this webpage.</div><div><div><div></div></div>Continue to this website (not recommended).</div><div><div><div></div></div>More information</div></div>																																													

**Procedure 11. Installing the Data Processor Blade (All SOAM Sites)**

Step	Procedure	Result
<p>24.</p> <div></div>	<p><b>Primary 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>25.</p> <div></div>	<p><b>Primary SDS VIP:</b></p> <p>The user should be presented the SDS Main Menu as shown on the right.</p>	



Procedure 11. Installing the Data Processor Blade (All SOAM Sites)

Step	Procedure	Result																		
26. <div></div>	<p><b>Primary SDS VIP:</b></p> <p>1) Select... <b>Main Menu</b> → <b>Configuration</b> → <b>Servers</b> ...as shown on the right</p> <p>2) Select the “<b>Insert</b>” dialogue button.</p>	<div><div><div><div><div></div><div>Main Menu</div></div><div><div></div><div>Administration</div><div><div>General Options</div><div>Access Control</div><div>Software Management</div><div>Remote Servers</div><div>LDAP Authentication</div><div>SNMP Trapping</div><div>Data Export</div><div>DNS Configuration</div></div><div><div>Configuration</div><div>Networking</div><div><div>Networks</div><div>Devices</div><div>Routes</div><div>Services</div></div><div>Servers</div><div>Server Groups</div><div>Resource Domains</div><div>Places</div><div>Place Associations</div><div>DSCP</div></div><div><div></div><div>Alarms &amp; Events</div></div></div></div></div><div><div><div>Main Menu: Configuration -&gt; Servers</div><div>Filter*</div><table><tr><th>Hostname</th><th>Role</th><th>System</th></tr><tr><td>sds-no-a</td><td>Network OAM&amp;P</td><td>sds-no-s</td></tr><tr><td>sds-no-b</td><td>Network OAM&amp;P</td><td>sds-no-t</td></tr><tr><td>qs-sds-1</td><td>Query Server</td><td></td></tr><tr><td>dr-sds-no-a</td><td>Network OAM&amp;P</td><td>dr-sds-n</td></tr><tr><td>sds-so-a</td><td>System OAM</td><td>sds-so-s</td></tr></table></div></div></div>	Hostname	Role	System	sds-no-a	Network OAM&P	sds-no-s	sds-no-b	Network OAM&P	sds-no-t	qs-sds-1	Query Server		dr-sds-no-a	Network OAM&P	dr-sds-n	sds-so-a	System OAM	sds-so-s
Hostname	Role	System																		
sds-no-a	Network OAM&P	sds-no-s																		
sds-no-b	Network OAM&P	sds-no-t																		
qs-sds-1	Query Server																			
dr-sds-no-a	Network OAM&P	dr-sds-n																		
sds-so-a	System OAM	sds-so-s																		

Procedure 11. Installing the Data Processor Blade (All SOAM Sites)

Step	Procedure	Result														
27. <div></div>	<b>Primary SDS VIP:</b>  The user is now presented with the “ <b>Adding a new server</b> ” configuration screen.	<div><b>Main Menu: Configuration -&gt; Servers [Insert]</b></div> <div><b>Adding a new server</b></div> <table><thead><tr><th>Attribute</th><th>Value</th></tr></thead><tbody><tr><td>Hostname *</td><td><div></div></td></tr><tr><td>Role *</td><td><div>- Select Role - <div></div></div></td></tr><tr><td>System ID</td><td><div></div></td></tr><tr><td>Hardware Profile</td><td><div>SDS HP c-Class Blade V1 <div></div></div></td></tr><tr><td>Network Element Name *</td><td><div>- Unassigned - <div></div></div></td></tr><tr><td>Location</td><td><div></div></td></tr></tbody></table> <div><div>Ok</div><div>Apply</div><div>Cancel</div></div>	Attribute	Value	Hostname *	<div></div>	Role *	<div>- Select Role - <div></div></div>	System ID	<div></div>	Hardware Profile	<div>SDS HP c-Class Blade V1 <div></div></div>	Network Element Name *	<div>- Unassigned - <div></div></div>	Location	<div></div>
Attribute	Value															
Hostname *	<div></div>															
Role *	<div>- Select Role - <div></div></div>															
System ID	<div></div>															
Hardware Profile	<div>SDS HP c-Class Blade V1 <div></div></div>															
Network Element Name *	<div>- Unassigned - <div></div></div>															
Location	<div></div>															
28. <div></div>	<b>Primary SDS VIP:</b>  Input the assigned “ <b>hostname</b> ” for the Database Processor (DP).	<div>Adding a new server</div> <table><thead><tr><th>Attribute</th><th>Value</th><th>Description</th></tr></thead><tbody><tr><td>Hostname *</td><td><div>dp-sds-1</div></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.] [A value is required.]</td></tr></tbody></table>	Attribute	Value	Description	Hostname *	<div>dp-sds-1</div>	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.] [A value is required.]								
Attribute	Value	Description														
Hostname *	<div>dp-sds-1</div>	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.] [A value is required.]														
29. <div></div>	<b>Primary SDS VIP:</b>  Select “ <b>MP</b> ” for the server <b>Role</b> from the pull-down menu.	<table><tbody><tr><td></td><td><div>- Select Role - NETWORK OAM&amp;P SYSTEM OAM <b>MP</b> QUERY SERVER</div></td><td>end with an alphanumeric.] [A value is required.]</td></tr><tr><td>Role *</td><td></td><td>Select the function of the server [A value is required.]</td></tr></tbody></table>		<div>- Select Role - NETWORK OAM&amp;P SYSTEM OAM <b>MP</b> QUERY SERVER</div>	end with an alphanumeric.] [A value is required.]	Role *		Select the function of the server [A value is required.]								
	<div>- Select Role - NETWORK OAM&amp;P SYSTEM OAM <b>MP</b> QUERY SERVER</div>	end with an alphanumeric.] [A value is required.]														
Role *		Select the function of the server [A value is required.]														




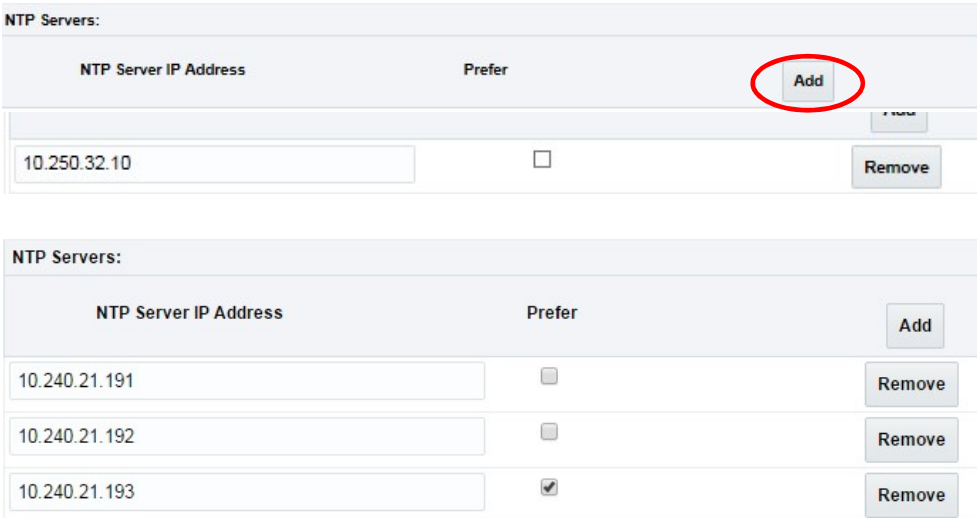

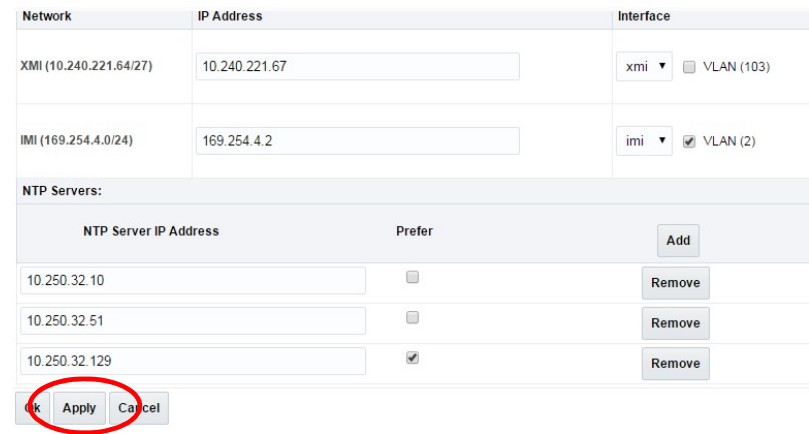

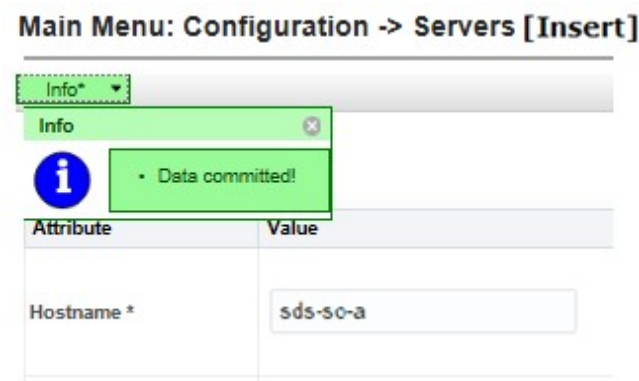
Procedure 11. Installing the Data Processor Blade (All SOAM Sites)

Step	Procedure	Result																					
30. <div></div>	<p><b>Primary SDS VIP:</b></p> <p>Using the chart provided, select the <b>DP Hardware Profile</b> which is appropriate to your installation from the pull-down menu.</p> <p><b>NOTE:</b> <i>The choice of DP HW Profile is dictated by the placement of the XMI switch pair in the c-Class enclosure.</i></p>	<div><div>Hardware Profile</div><div><div>SDS HP Rack Mount</div><div>SDS Cloud Guest</div><div>SDS HP c-Class Blade V1</div><div>SDS HP c-Class Blade V2</div><div>SDS TVOE Guest</div><div>SDS HP c-Class Blade V0</div></div><div>Hardware profile of the server</div></div> <table><thead><tr><th>DP HW Profile</th><th>Network</th><th>Bonded Interfaces</th><th>Comments</th></tr></thead><tbody><tr><td rowspan="2">SDS HP c-Class Blade V0</td><td>IMI</td><td rowspan="2">Bond0 (eth01, eth02)</td><td rowspan="2">Use when both XMI and IMI are to be VLAN tagged.</td></tr><tr><td>XMI</td></tr><tr><td rowspan="2">SDS HP c-Class Blade V1</td><td>IMI</td><td>Bond0 (eth01, eth02)</td><td rowspan="2">Use when XMI enclosure switches are connected to DP blade mezzanine card ports eth23 / eth24.</td></tr><tr><td>XMI</td><td>bond1 (eth23, eth24)</td></tr><tr><td rowspan="2">SDS HP c-Class Blade V2</td><td>IMI</td><td>Bond0 (eth01, eth02)</td><td rowspan="2">Use when XMI enclosure switches are connected to DP blade mezzanine card ports eth21 / eth22.</td></tr><tr><td>XMI</td><td>bond1 (eth21, eth22)</td></tr></tbody></table>	DP HW Profile	Network	Bonded Interfaces	Comments	SDS HP c-Class Blade V0	IMI	Bond0 (eth01, eth02)	Use when both XMI and IMI are to be VLAN tagged.	XMI	SDS HP c-Class Blade V1	IMI	Bond0 (eth01, eth02)	Use when XMI enclosure switches are connected to DP blade mezzanine card ports eth23 / eth24.	XMI	bond1 (eth23, eth24)	SDS HP c-Class Blade V2	IMI	Bond0 (eth01, eth02)	Use when XMI enclosure switches are connected to DP blade mezzanine card ports eth21 / eth22.	XMI	bond1 (eth21, eth22)
DP HW Profile	Network	Bonded Interfaces	Comments																				
SDS HP c-Class Blade V0	IMI	Bond0 (eth01, eth02)	Use when both XMI and IMI are to be VLAN tagged.																				
	XMI																						
SDS HP c-Class Blade V1	IMI	Bond0 (eth01, eth02)	Use when XMI enclosure switches are connected to DP blade mezzanine card ports eth23 / eth24.																				
	XMI	bond1 (eth23, eth24)																					
SDS HP c-Class Blade V2	IMI	Bond0 (eth01, eth02)	Use when XMI enclosure switches are connected to DP blade mezzanine card ports eth21 / eth22.																				
	XMI	bond1 (eth21, eth22)																					
31. <div></div>	<p><b>Primary SDS VIP:</b></p> <p>Select the <b>Network Element Name</b> of the <b>SOAM site</b> where the <b>DP</b> is physically located from the list of available NEs in the pull-down menu</p>	<div><div>Network Element Name *</div><div><div>- Unassigned -</div><div>SDS_NE</div></div><div>Select the network element [A value is required.]</div></div> <p><b>NOTE:</b> <i>After the Network Element Name is selected, the Interfaces fields will be displayed, as seen in Step 33</i></p>																					
32. <div></div>	<p><b>Primary SDS VIP:</b></p> <p>Enter the site location.</p> <p><b>NOTE:</b> <i>Location is an optional field.</i></p>	<div><div>Location</div><div><div>bangalore</div><div>x</div></div><div>Location description [Default = "", Rar string.]</div></div>																					

## Procedure 11. Installing the Data Processor Blade (All SOAM Sites)

Step	Procedure	Result																				
33. <div></div>	<p><b>Primary SDS VIP:</b></p> <p>1) Enter the <b>IMI IP address</b> for the <b>DP Server</b>.</p> <p>2) Set the <b>IMI Interface</b> to “<b>bond0</b>” and “<b>check</b>” the <b>VLAN</b> checkbox.</p>	<div><div>NTP Servers:</div><table><thead><tr><th>NTP Server IP Address</th><th>Prefer</th><th></th></tr></thead><tbody><tr><td>10.240.21.191</td><td><input type="checkbox"/></td><td><div>Add</div><div>Remove</div></td></tr><tr><td>10.240.21.192</td><td><input type="checkbox"/></td><td><div>Remove</div></td></tr><tr><td>10.240.21.193</td><td><input checked="" type="checkbox"/></td><td><div>Remove</div></td></tr></tbody></table><table><thead><tr><th>DP Server</th><th>Network</th><th>Interface</th><th>VLAN Checkbox</th></tr></thead><tbody><tr><td>DP</td><td>IMI</td><td>bond0</td><td><div></div></td></tr></tbody></table></div>	NTP Server IP Address	Prefer		10.240.21.191	<input type="checkbox"/>	<div>Add</div> <div>Remove</div>	10.240.21.192	<input type="checkbox"/>	<div>Remove</div>	10.240.21.193	<input checked="" type="checkbox"/>	<div>Remove</div>	DP Server	Network	Interface	VLAN Checkbox	DP	IMI	bond0	<div></div>
NTP Server IP Address	Prefer																					
10.240.21.191	<input type="checkbox"/>	<div>Add</div> <div>Remove</div>																				
10.240.21.192	<input type="checkbox"/>	<div>Remove</div>																				
10.240.21.193	<input checked="" type="checkbox"/>	<div>Remove</div>																				
DP Server	Network	Interface	VLAN Checkbox																			
DP	IMI	bond0	<div></div>																			
34.	<p>1) Enter the customer assigned <b>XMI IP</b> address for the <b>DP Server</b>.</p> <p><b>Layer 3</b> (No VLAN tagging used for XMI)</p> <p>2) Set the <b>XMI Interface</b> to “<b>bond1</b>” and “<b>DO NOT check</b>” the <b>VLAN</b> checkbox.</p> <p>- OR -</p> <p><b>Layer 2</b> (VLAN tagging used for XMI)</p> <p>2) Set the <b>XMI Interface</b> to “<b>bond0</b>” and “<b>check</b>” the <b>VLAN</b> checkbox.</p>	<table><thead><tr><th>DP Server</th><th>Network</th><th>VLAN tagging (on XMI network)</th><th>Interface</th><th>VLAN Checkbox</th></tr></thead><tbody><tr><td rowspan="2">DP</td><td rowspan="2">XMI</td><td>No</td><td>bond1</td><td><div></div></td></tr><tr><td>Yes</td><td>bond0</td><td><div></div></td></tr></tbody></table> <div><div>!!! CAUTION !!!</div><div>It is crucial that the correct network configuration be selected in <b>Steps 33 – 34</b> of this procedure. Choosing an incorrect configuration will result in the need to re-install the OS and restart the DP Server instalation procedure over from the beginning.</div></div>	DP Server	Network	VLAN tagging (on XMI network)	Interface	VLAN Checkbox	DP	XMI	No	bond1	<div></div>	Yes	bond0	<div></div>							
DP Server	Network	VLAN tagging (on XMI network)	Interface	VLAN Checkbox																		
DP	XMI	No	bond1	<div></div>																		
		Yes	bond0	<div></div>																		

Procedure 11. Installing the Data Processor Blade (All SOAM Sites)

Step	Procedure	Result
35. 	<b>Primary SDS VIP:</b> 1) Click the “NTP Servers:” “Add” dialogue button. 2) Enter the NTP Server IP Address for an NTP Server. 3) Enter 3 NTP Server IP address, repeat (1) and (2) to enter it. 4) Optionally, click the “Prefer” checkbox to prefer one NTP Server over the other.	
36. 	<b>Primary SDS VIP:</b> 1) The user should be presented with a banner information message stating “Pre-Validation passed”. 2) Click the “Apply” dialogue button...	
37. 	<b>Primary SDS VIP:</b> 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 committed to the DB.	



Procedure 11. Installing the Data Processor Blade (All SOAM Sites)

Step	Procedure	Result																																																	
40. <div></div>	<p><b>Primary SDS VIP:</b></p> <p>1) Using the mouse, select the newly added <b>DP server</b> entry. The line entry containing the server with a “<b>MP</b>” role should now be highlighted in <b>BLUE</b>.</p> <p>2) Click the “<b>Export</b>” dialogue button from the bottom left corner of the screen.</p>	<table><thead><tr><th>Hostname</th><th>Role</th><th>System ID</th><th>Server Group</th><th>Network Element</th><th>Location</th><th>Place</th></tr></thead><tbody><tr><td>sds-no-a</td><td>Network OAM&amp;P</td><td>sds-no-a</td><td>sds_no_grp</td><td>SDS_NE</td><td>Bangalore</td><td></td></tr><tr><td>sds-no-b</td><td>Network OAM&amp;P</td><td>sds-no-b</td><td>sds_no_grp</td><td>SDS_NE</td><td>Bangalore</td><td></td></tr><tr><td>qs-sds-1</td><td>Query Server</td><td></td><td>sds_no_grp</td><td>SDS_NE</td><td>Bangalore</td><td></td></tr><tr><td>dr-sds-no-a</td><td>Network OAM&amp;P</td><td>dr-sds-no-a</td><td>dr_sds_grp</td><td>SDS_NE</td><td>Bangalore</td><td></td></tr><tr><td>sds-so-a</td><td>System OAM</td><td>sds-so-1</td><td>sds_so_a</td><td>SDS_NE</td><td>Bangalore</td><td></td></tr><tr><td>dp-sds-1</td><td>MP</td><td></td><td></td><td>SDS_NE</td><td>Bangalore</td><td></td></tr></tbody></table> <div><div>Insert</div><div>Edit</div><div>Delete</div><div>Export</div><div>Report</div></div>	Hostname	Role	System ID	Server Group	Network Element	Location	Place	sds-no-a	Network OAM&P	sds-no-a	sds_no_grp	SDS_NE	Bangalore		sds-no-b	Network OAM&P	sds-no-b	sds_no_grp	SDS_NE	Bangalore		qs-sds-1	Query Server		sds_no_grp	SDS_NE	Bangalore		dr-sds-no-a	Network OAM&P	dr-sds-no-a	dr_sds_grp	SDS_NE	Bangalore		sds-so-a	System OAM	sds-so-1	sds_so_a	SDS_NE	Bangalore		dp-sds-1	MP			SDS_NE	Bangalore	
Hostname	Role	System ID	Server Group	Network Element	Location	Place																																													
sds-no-a	Network OAM&P	sds-no-a	sds_no_grp	SDS_NE	Bangalore																																														
sds-no-b	Network OAM&P	sds-no-b	sds_no_grp	SDS_NE	Bangalore																																														
qs-sds-1	Query Server		sds_no_grp	SDS_NE	Bangalore																																														
dr-sds-no-a	Network OAM&P	dr-sds-no-a	dr_sds_grp	SDS_NE	Bangalore																																														
sds-so-a	System OAM	sds-so-1	sds_so_a	SDS_NE	Bangalore																																														
dp-sds-1	MP			SDS_NE	Bangalore																																														
41. <div></div>	<p><b>Primary SDS VIP:</b></p> <p>The user will receive a banner information message showing a download link for the “<b>MP</b>” configuration data.</p>	<p><b>Main Menu: Configuration -&gt; Servers</b></p> <div><div>Filter*</div><div>Info</div></div> <div><div>Info</div><div>• Exported server data in TKLCConfigData.dp-sds-1.sh may be <a href="#">downloaded</a></div></div> <table><thead><tr><th>Hostname</th><th>Role</th><th>System ID</th><th>Server Group</th><th>Network Element</th><th>Location</th></tr></thead><tbody><tr><td>sds-no-a</td><td>OAM&amp;P</td><td>sds-no-a</td><td>sds_no_grp</td><td>SDS_NE</td><td>Bangalore</td></tr><tr><td>sds-no-b</td><td>Network OAM&amp;P</td><td>sds-no-b</td><td>sds_no_grp</td><td>SDS_NE</td><td>Bangalore</td></tr></tbody></table>	Hostname	Role	System ID	Server Group	Network Element	Location	sds-no-a	OAM&P	sds-no-a	sds_no_grp	SDS_NE	Bangalore	sds-no-b	Network OAM&P	sds-no-b	sds_no_grp	SDS_NE	Bangalore																															
Hostname	Role	System ID	Server Group	Network Element	Location																																														
sds-no-a	OAM&P	sds-no-a	sds_no_grp	SDS_NE	Bangalore																																														
sds-no-b	Network OAM&P	sds-no-b	sds_no_grp	SDS_NE	Bangalore																																														
42. <div></div>	<p>Configure/Export the each additional DP server to be installed for this SOAM site.</p>	<ul style="list-style-type: none"><li>Repeat <b>Steps 26 – 41</b> of this procedure for each additional <b>DP</b> server installed in the <b>SOAM cabinet</b>.</li></ul>																																																	
43. <div></div>	<p><b>Primary SDS VIP:</b></p> <p>Click the “<b>Logout</b>” link on the SDS server GUI.</p>	<div>Updates   Help   Logged in Account <a href="#">guiadmin</a>   <a href="#">Log Out</a></div> <div>8.0.0.0-80.3.1</div>																																																	
44. <div></div>	<p><b>Primary SDS VIP:</b></p> <p>1) <b>SSH</b> to the <b>Primary SDS NOAM VIP</b> and access the command prompt.</p> <p>2) Log into the server as the “<b>admusr</b>” user.</p>	<p>login: <b>admusr</b></p> <p>Using keyboard-interactive authentication.</p> <p>Password: <b>&lt;admusr_password&gt;</b></p>																																																	
45. <div></div>	<p><b>Primary SDS VIP:</b></p> <p>Change directory to filemgmt</p>	<pre>\$ cd /var/TKLC/db/filemgmt</pre>																																																	

### Procedure 11. Installing the Data Processor Blade (All SOAM Sites)

Step	Procedure	Result
46. <input type="checkbox"/>	<b>Primary SDS VIP:</b>  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.	<pre>\$ ls -ltr TKLCConfigData*.sh  *** TRUNCATED OUTPUT ***  -rw-rw-rw- 1 admusr admusr 2042 Dec 20 10:54 TKLCConfigData.dp-carync-1.sh -rw-rw-rw- 1 admusr admusr 2042 Dec 20 10:57 TKLCConfigData.dp-carync-2.sh</pre>
47. <input type="checkbox"/>	<b>Primary SDS VIP:</b>  Use <b>scp</b> to copy the file(s) to the PMAC server.	<pre>\$sudo scp -p &lt;configuration_file-1&gt; &lt;configuration_file-2&gt; admusr@&lt;PMAC_Mgmt_IP&gt;:/tmp/ Password: &lt;admusr_password&gt; TKLCConfigData.dp-carync-1.sh      100% 1757      1.7KB/s   00:00 TKLCConfigData.dp-carync-2.sh      100% 1757      1.7KB/s   00:00 \$</pre>
48.	<b>Primary SDS VIP:</b>  Logout of the Primary SDS CLI.	<pre>\$ exit</pre>
49. <input type="checkbox"/>	<b>PMAC Server CLI:</b>  Use <b>SSH</b> to login to the <b>PMAC Guest VM</b> server as the <b>admusr</b> .	<pre>login: admusr Password: &lt;admusr_password&gt;</pre>
50.	<b>PMAC Guest VM:</b> <b>Key exchange with DP control IP</b>	<pre>\$ keyexchange admusr@&lt;DP_Control_IP&gt;  Example: [admusr@nassau-enc-pmac-1 ~]\$ keyexchange admusr@192.168.1.22 The server does not know of 192.168.1.22. Will just exchange host keys for the name given! Password of admusr: Could not get authorized keys file from remote (192.168.1.22). Maybe it does not exist. Continuing... The server does not know of 192.168.1.22. Will just exchange host keys for the name given! ssh is working correctly. [admusr@nassau-enc-pmac-1 ~]\$</pre>

## Procedure 11. Installing the Data Processor Blade (All SOAM Sites)

Step	Procedure	Result
51. <input type="checkbox"/>	<b>PMAC Guest VM:</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 15</b> of this procedure.	<pre>\$ sudo scp -p /tmp/&lt;configuration_file&gt; admusr@&lt;DP_Control_IP&gt;:/var/TKLC/db/filemgmt/ Password: &lt;admusr_password&gt; TKLCConfigData.dp-carync-1.sh      100% 1757      1.7KB/s   00:00</pre>
52. <input type="checkbox"/>	<b>PMAC Guest VM:</b>  Connect to the DP server console from the PMAC Server Console.	<pre>\$ ssh &lt;DP_Control_IP&gt; Password: &lt;admusr_password&gt;</pre>
53. <input type="checkbox"/>	<b>DP Server:</b>  Copy the <b>SDS DP</b> configuration file to the “/var/tmp” directory on the server, making sure to rename the file by omitting the server hostname (shown in red) from the file name.	<p><b>Example:</b> TKLCConfigData&lt;server_hostname&gt;.sh → will translate to →TKLCConfigData.sh</p> <pre>\$ sudo cp -p /var/TKLC/db/filemgmt/TKLCConfigData.dp-carync-1.sh /var/tmp/TKLCConfigData.sh</pre> <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>
54. <input type="checkbox"/>	<b>DP Server:</b>  After the script completes, a broadcast message will be sent to the terminal.	<p><b>*** NO OUTPUT FOR ≈ 3-20 MINUTES ***</b></p> <pre>Broadcast message from admusr (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>
55.	<b>DP Server:</b>  Verify that the desired Time Zone is currently in use.	<pre>\$ date Mon Aug 10 19:34:51 UTC 2015</pre>




Procedure 11. Installing the Data Processor Blade (All SOAM Sites)

Step	Procedure	Result
56.	<p><b>DP Server:</b></p> <p>If the desired Time Zone was not presented in the previous step...</p> <p><b>Configure the Time Zone.</b></p> <p>Otherwise, skip to the next step.</p>	<p><b>Example:</b> <code>\$ sudo set_ini_tz.pl &lt;time_zone&gt;</code></p> <p><b>NOTE:</b> The following command example sets the time to the “UTC” (aka GMT) time zone which is recommended for all sites.</p> <p>The user may replace, as appropriate, with the customer requested time zone for this site installation. See <b>Appendix G</b> for a list of valid time zones.</p> <p><code>\$ sudo set_ini_tz.pl "Etc/UTC"</code></p>
57. <input type="checkbox"/>	<p><b>DP Server:</b></p> <p>Initiate a reboot of the DP.</p>	<p><code>\$ sudo init 6</code></p>
58. <input type="checkbox"/>	<p><b>DP Server:</b></p> <p>Output similar to that shown on the right may be observed as the server initiates a reboot.</p>	<p><code>\$ Connection to 192.168.1.226 closed by remote host.</code></p> <p><code>Connection to 192.168.1.226 closed.</code></p>
59. <input type="checkbox"/>	<p><b>PMAC Guest VM:</b></p> <p>After the DP server has completed reboot...</p> <p>Re-connect to the DP server console from the PMAC Server Console</p>	<p><code>\$ sudo ssh &lt;DP_Control_IP&gt;</code></p> <p>Password: <code>&lt;admusr_password&gt;</code></p>
60. <input type="checkbox"/>	<p><b>DP Server:</b></p> <p>1) Verify that the <b>XMI IP address</b> input in <b>Step 33</b> has been applied to “<b>bond1</b>”.</p> <p>2) Verify that the <b>IMI IP address</b> input in <b>Step 33</b> has been applied to “<b>bond0.4</b>”.</p> <p><b>NOTE:</b> Exact bond configuration may vary for custom network implementations.</p>	<p><code>\$ ifconfig  grep in</code></p> <pre> 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 </pre>























## Procedure 11. Installing the Data Processor Blade (All SOAM Sites)

Step	Procedure	Result
61. <input type="checkbox"/>	<b>DP Server:</b>  From the <b>DP Server</b> , “ping” the <b>IMI IP address</b> of the <b>SOAM-A Guest</b> .	<pre>\$ ping -c 5 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  --- 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</pre>
62. <input type="checkbox"/>	<b>DP Server:</b>  From the <b>DP Server</b> , “ping” the local <b>XMI Gateway address</b> associated with the <b>SOAM NE</b> .	<pre>\$ ping -c 5 10.240.39.1 PING 10.240.39.1 (10.240.39.1) 56(84) bytes of data. 64 bytes from 10.240.39.1: icmp_seq=1 ttl=64 time=0.024 ms 64 bytes from 10.240.39.1: icmp_seq=2 ttl=64 time=0.033 ms 64 bytes from 10.240.39.1: icmp_seq=3 ttl=64 time=0.032 ms 64 bytes from 10.240.39.1: icmp_seq=4 ttl=64 time=0.026 ms 64 bytes from 10.240.39.1: icmp_seq=5 ttl=64 time=0.027 ms 64 bytes from 10.240.39.1: icmp_seq=6 ttl=64 time=0.026 ms  --- 10.240.39.1 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</pre>
63. <input type="checkbox"/>	<b>DP Server:</b>  Use the “ <b>ntpq</b> ” command to verify connectivity to the assigned Primary and Secondary NTP server(s).	<pre>\$ 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</pre>
64. <input type="checkbox"/>	<b>DP Server:</b>  Execute a “ <b>syscheck</b> ” to verify the current health of the server.	<pre>\$ sudo 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</pre>

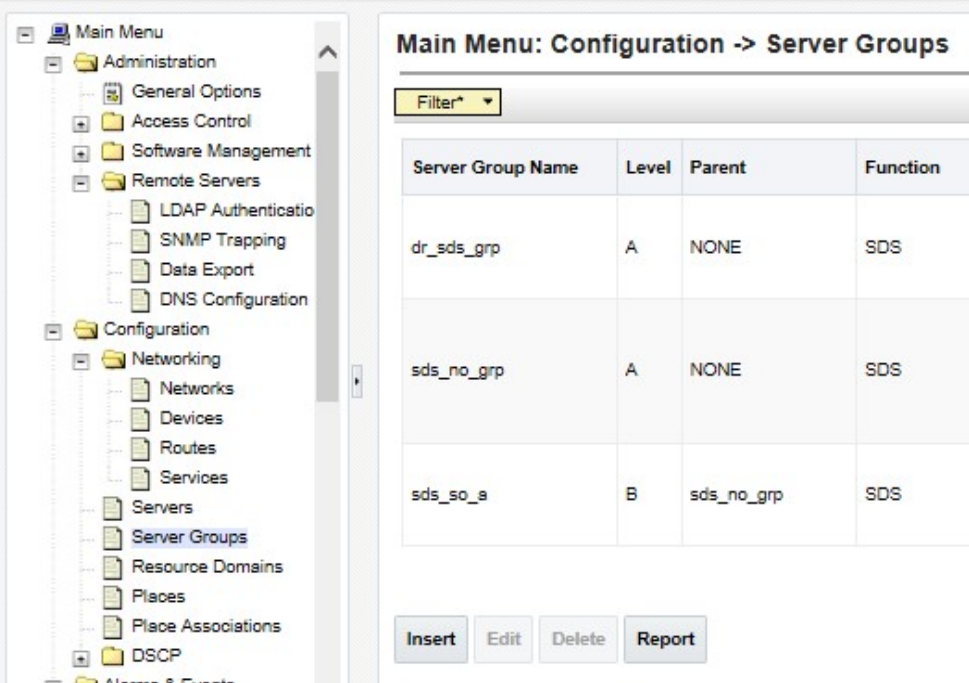
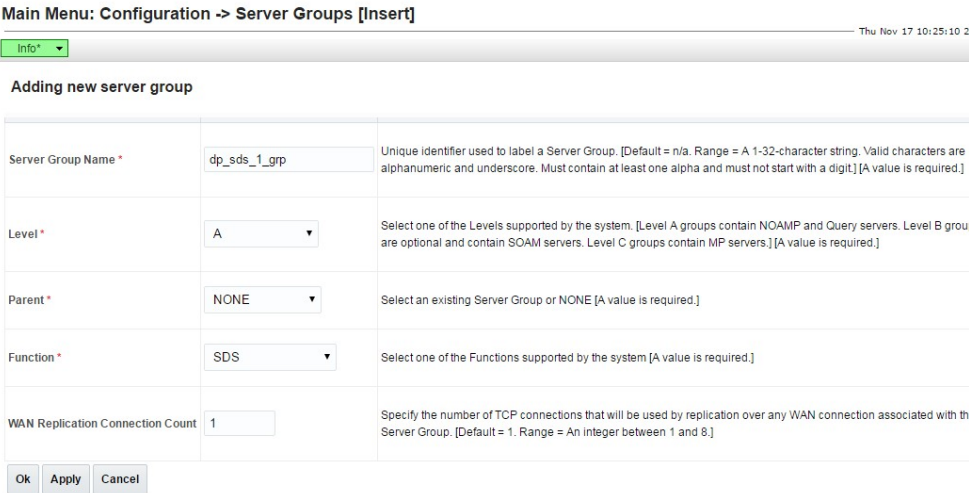
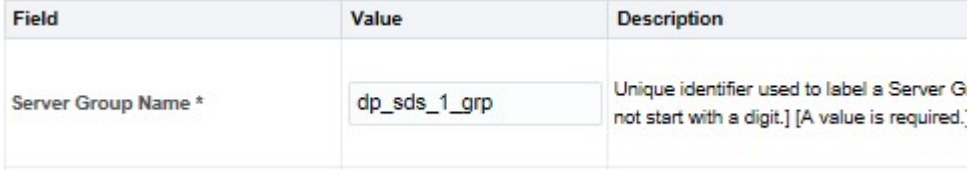
## Procedure 11. Installing the Data Processor Blade (All SOAM Sites)

Step	Procedure	Result
65.	<p><b>DP Server:</b></p> <p>Accept upgrade to the Application Software.</p> <p>Use "q" key to exit the screen session.</p>	<pre>[admusr@nassau-dp-2 ~]\$ sudo /var/TKLC/backout/accept</pre> <p>Called with options: --accept  Loading Backout::BackoutType::RPM  Accepting Upgrade  Executing common accept tasks  Setting POST_UPGRADE_ACTION to ACCEPT in upgrade info.  Cleaning backout directory.  Clearing Upgrade Accept/Reject alarm.  Cleaning message from MOTD.  No patch pending alarm on server so no MOTD update.  Cleaning up RPM config backup files...  Checking /  Checking /boot  Checking /tmp  Checking /usr  Checking /var  Checking /var/TKLC  Checking /tmp/appworks_temp  Checking /usr/openv  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 '/etc/my.cnf' from RCS repository  INFO: Removing '/etc/pam.d/password-auth' from RCS repository  INFO: Removing '/etc/pam.d/system-auth' from RCS repository  INFO: Removing '/etc/sysconfig/network-scripts/ifcfg-eth0' from RCS repository  INFO: Removing '/etc/php.d/zip.ini' from RCS repository  INFO: Removing '/var/lib/prelink/force' from RCS repository  === Window terminated (Thu Feb 2 20:07:21 2017) ===  screen session: use 'screen -x upgrade' to reconnect <p>Type the letter "q" on the keyboard to exit the screen session.</p> <pre>[screen is terminating] [admusr@nassau-dp-2 ~]\$</pre> <p><b>NOTE:</b>  <b>EXECUTE Appendix I: Disable Hyperthreading (DP Only) on server before exiting.</b></p> </p>
66. 	<p><b>DP Server:</b></p> <p>Exit from the command line to return the server console to the login prompt.</p>	<pre>\$ exit</pre> <p>Connection to 192.168.1.199 closed.</p>

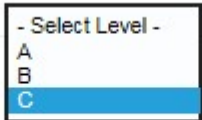
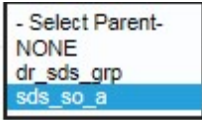
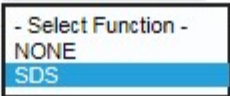
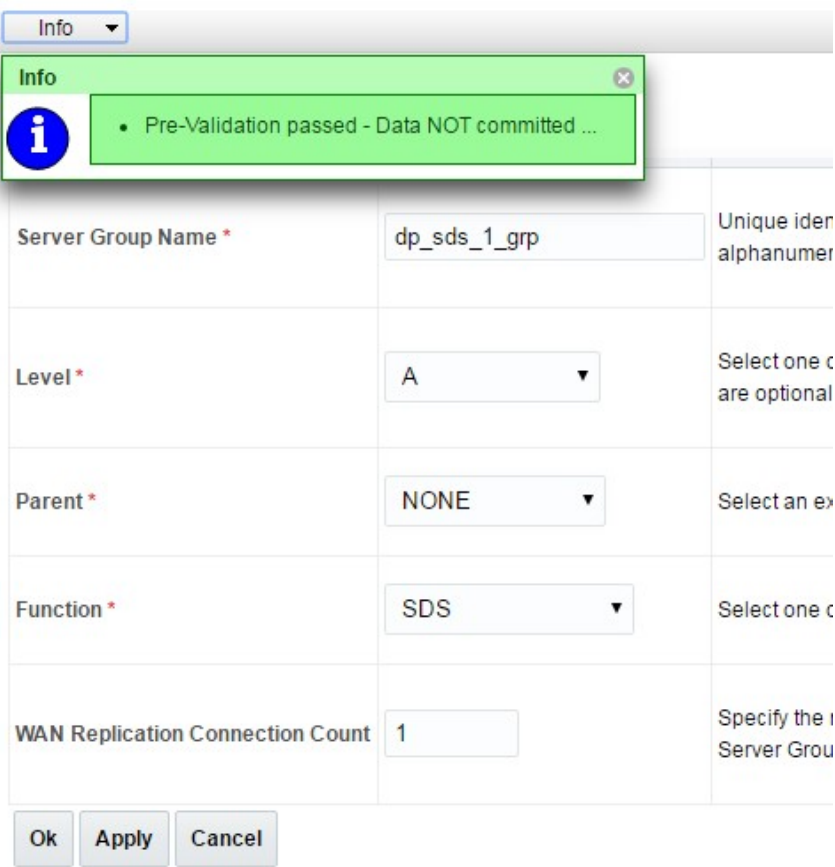
# Procedure 11. Installing the Data Processor Blade (All SOAM Sites)

Step	Procedure	Result																
67. <input type="checkbox"/>	Apply the configuration file for each additional DP server installed at the SOAM site.	<ul style="list-style-type: none"><li>Repeat <b>Steps 51 – 66</b> of this procedure for each subtending <b>DP</b> server installed in the same SOAM enclosure.</li></ul>																
68. <input type="checkbox"/>	<b>PMAC Guest VM:</b>  Exit from the PMAC server.	\$ <b>exit</b>																
69. <input type="checkbox"/>	<b>Primary SDS VIP:</b>  Select...  <b>Main Menu</b> → <b>Configuration</b> → <b>Server Groups</b>  ...as shown on the right.	<div><div><div><div><div></div><div>Main Menu</div></div><div><div></div><div>Administration</div></div><div><div></div><div>General Options</div></div><div><div></div><div>Access Control</div></div><div><div></div><div>Software Management</div></div><div><div></div><div>Remote Servers</div></div><div><div></div><div>LDAP Authentication</div></div><div><div></div><div>SNMP Trapping</div></div><div><div></div><div>Data Export</div></div><div><div></div><div>DNS Configuration</div></div><div><div></div><div>Configuration</div></div><div><div></div><div>Networking</div></div><div><div></div><div>Networks</div></div><div><div></div><div>Devices</div></div><div><div></div><div>Routes</div></div><div><div></div><div>Services</div></div><div><div></div><div>Servers</div></div><div><div></div><div>Server Groups</div></div><div><div></div><div>Resource Domains</div></div><div><div></div><div>Places</div></div><div><div></div><div>Place Associations</div></div><div><div></div><div>DSCP</div></div><div><div></div><div>Alarms &amp; Events</div></div></div></div></div> <div><div><div><div><b>Main Menu: Configuration -&gt; Server Groups</b></div><div>Filter*</div></div><table><tr><th>Server Group Name</th><th>Level</th><th>Parent</th><th>Function</th></tr><tr><td>dr_sds_grp</td><td>A</td><td>NONE</td><td>SDS</td></tr><tr><td>sds_no_grp</td><td>A</td><td>NONE</td><td>SDS</td></tr><tr><td>sds_so_a</td><td>B</td><td>sds_no_grp</td><td>SDS</td></tr></table><div><div>Insert</div><div>Edit</div><div>Delete</div><div>Report</div></div></div></div>	Server Group Name	Level	Parent	Function	dr_sds_grp	A	NONE	SDS	sds_no_grp	A	NONE	SDS	sds_so_a	B	sds_no_grp	SDS
Server Group Name	Level	Parent	Function															
dr_sds_grp	A	NONE	SDS															
sds_no_grp	A	NONE	SDS															
sds_so_a	B	sds_no_grp	SDS															

Procedure 11. Installing the Data Processor Blade (All SOAM Sites)

Step	Procedure	Result
70. <input type="checkbox"/>	<p><b>Primary 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>	
71. <input type="checkbox"/>	<p><b>Primary 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>	
72. <input type="checkbox"/>	<p><b>Primary SDS VIP:</b></p> <p>Input the <b>Server Group Name</b>.</p>	 <p><b>NOTE:</b> Each DP will have its own server group. Group names may be differentiated by assigning each a unique name.</p>

**Procedure 11. Installing the Data Processor Blade (All SOAM Sites)**

Step	Procedure	Result	
73. <input type="checkbox"/>	<b>Primary SDS VIP:</b> Select “C” on the “Level” pull-down menu.	Level *	 <p>not start with a digit.) [A value is required.]</p> <p>Select one of the Levels supported by servers. [A value is required.]</p>
74. <input type="checkbox"/>	<b>Primary SDS VIP:</b> Select <b>System OAM group</b> on the “Parent” pull-down menu.	Parent *	 <p>Select an existing Server Group or NONE [A</p>
75. <input type="checkbox"/>	<b>Primary SDS VIP:</b> Select “SDS” on the “Function” pull-down menu.	Function *	 <p>Select one of the Functions supported</p>
76. <input type="checkbox"/>	<b>Primary SDS VIP:</b> 1) The user should be presented with a banner information message stating “Pre-Validation passed”.  2) Select the “Apply” dialogue button.	<b>Main Menu: Configuration -&gt; Server Groups [Insert]</b> 	

Procedure 11. Installing the Data Processor Blade (All SOAM Sites)



Step	Procedure	Result																				
77. <div></div>	<p><b>Primary SDS VIP:</b></p> <p>The user should be presented with a banner information message stating “Data committed”.</p>	<div><div>Main Menu: Configuration -&gt; Server Groups [Insert]</div><div><div><div>Info</div><div>Info</div><div><div><div>i</div><div>Data committed!</div></div></div></div><table><tr><th>Field</th><th>Value</th><th>Description</th></tr><tr><td>Server Group Name *</td><td>dp_sds_1_grp</td><td>Unique identifier used to label a not start with a digit.] [A value is</td></tr></table></div></div>	Field	Value	Description	Server Group Name *	dp_sds_1_grp	Unique identifier used to label a not start with a digit.] [A value is														
Field	Value	Description																				
Server Group Name *	dp_sds_1_grp	Unique identifier used to label a not start with a digit.] [A value is																				
78. <div></div>	<p><b>Primary SDS VIP:</b></p> <p>1) Select... <b>Main Menu</b> → <b>Configuration</b> → <b>Server Groups</b> ...as shown on the right</p> <p>2) The user will be presented with the “<b>Configuration → Server Groups</b>” screen as shown on the right.</p>	<div><div><div><div>Main Menu</div><div>Administration</div><div>Configuration</div><div>Networking</div><div>Networks</div><div>Devices</div><div>Routes</div><div>Services</div><div>Servers</div><div>Server Groups</div><div>Resource Domains</div><div>Places</div><div>Place Associations</div><div>DSCP</div><div>Alarms &amp; Events</div><div>Security Log</div><div>Status &amp; Manage</div><div>Measurements</div><div>Communication Agent</div><div>SDS</div><div>Help</div><div>Legal Notices</div><div>Logout</div></div></div><div><div>Main Menu: Configuration -&gt; Server Groups</div><div><div>Filter*</div><table><tr><th>Server Group Name</th><th>Level</th><th>Parent</th><th>Func</th></tr><tr><td>SDS_DP_01_GRP</td><td>C</td><td>SDS_SO_GRP</td><td>SDS</td></tr><tr><td>SDS_DP_02_GRP</td><td>C</td><td>SDS_SO_GRP</td><td>SDS</td></tr><tr><td>SDS_NO_GRP</td><td>A</td><td>NONE</td><td>SDS</td></tr><tr><td>SDS_SO_GRP</td><td>B</td><td>SDS_NO_GRP</td><td>SDS</td></tr></table></div></div></div>	Server Group Name	Level	Parent	Func	SDS_DP_01_GRP	C	SDS_SO_GRP	SDS	SDS_DP_02_GRP	C	SDS_SO_GRP	SDS	SDS_NO_GRP	A	NONE	SDS	SDS_SO_GRP	B	SDS_NO_GRP	SDS
Server Group Name	Level	Parent	Func																			
SDS_DP_01_GRP	C	SDS_SO_GRP	SDS																			
SDS_DP_02_GRP	C	SDS_SO_GRP	SDS																			
SDS_NO_GRP	A	NONE	SDS																			
SDS_SO_GRP	B	SDS_NO_GRP	SDS																			



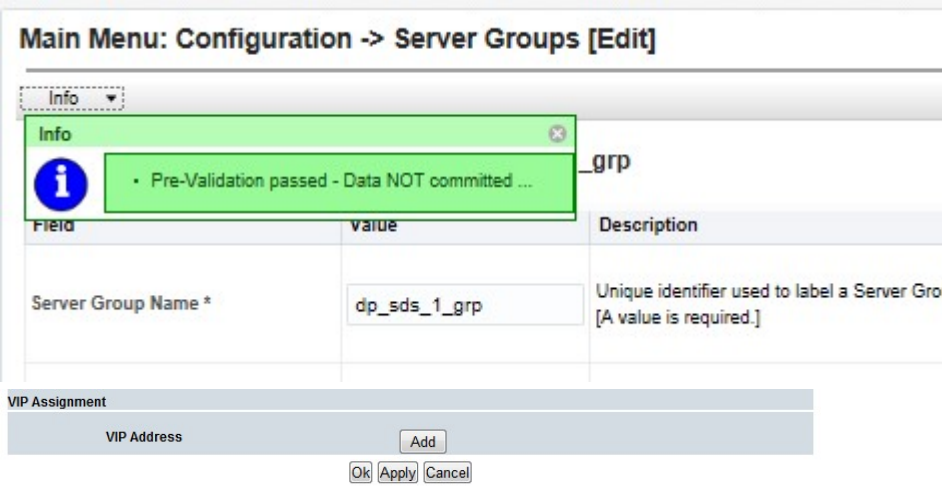
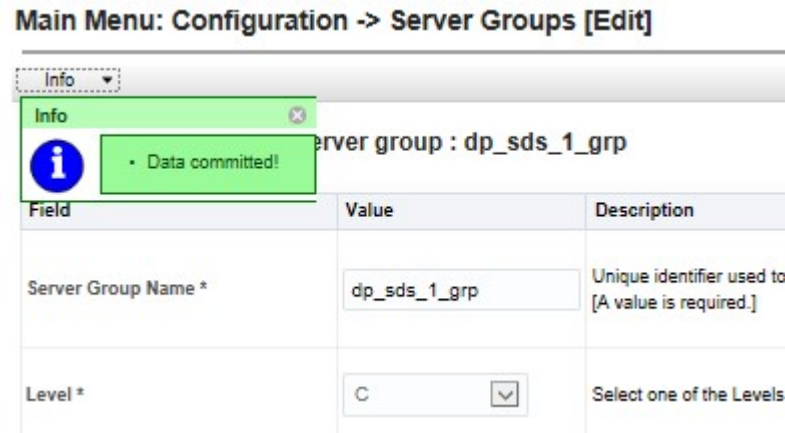
# Procedure 11. Installing the Data Processor Blade (All SOAM Sites)

Step	Procedure	Result																														
79. <div></div>	<p><b>Primary SDS VIP:</b></p> <p>1) Using the mouse, select the MP Server Group associated with the <b>DP</b> being installed.</p> <p>2) Select the <b>“Edit”</b> dialogue button from the bottom left corner of the screen.</p>	<div><div>Main Menu: Configuration -&gt; Server Groups</div><div><div>Filter* ▼</div><table><tr><th>Server Group Name</th><th>Level</th><th>Parent</th><th>Function</th><th>Connection Count</th><th>Servers</th></tr><tr><td>dp_sds_1_grp</td><td>C</td><td>sds_so_a</td><td>SDS</td><td>1</td><td></td></tr><tr><td>dr_sds_grp</td><td>A</td><td>NONE</td><td>SDS</td><td>1</td><td>Network Element Server dr-sds-no-a</td></tr><tr><td>sds_no_grp</td><td>A</td><td>NONE</td><td>SDS</td><td>1</td><td>Network Element Server qs-sds-1 sds-no-a sds-no-b</td></tr><tr><td>sds_so_a</td><td>B</td><td>sds_no_grp</td><td>SDS</td><td>1</td><td>Network Element Server sds-so-a</td></tr></table><div><div>Insert</div><div>Edit</div><div>Delete</div><div>Report</div></div></div></div>	Server Group Name	Level	Parent	Function	Connection Count	Servers	dp_sds_1_grp	C	sds_so_a	SDS	1		dr_sds_grp	A	NONE	SDS	1	Network Element Server dr-sds-no-a	sds_no_grp	A	NONE	SDS	1	Network Element Server qs-sds-1 sds-no-a sds-no-b	sds_so_a	B	sds_no_grp	SDS	1	Network Element Server sds-so-a
Server Group Name	Level	Parent	Function	Connection Count	Servers																											
dp_sds_1_grp	C	sds_so_a	SDS	1																												
dr_sds_grp	A	NONE	SDS	1	Network Element Server dr-sds-no-a																											
sds_no_grp	A	NONE	SDS	1	Network Element Server qs-sds-1 sds-no-a sds-no-b																											
sds_so_a	B	sds_no_grp	SDS	1	Network Element Server sds-so-a																											

Procedure 11. Installing the Data Processor Blade (All SOAM Sites)

Step	Procedure	Result																								
80. <input type="checkbox"/>	<b>Primary SDS VIP:</b> The user will be presented with the “ <b>Configuration → Server Groups [Edit]</b> ” screen as shown on the right	 <p><b>Main Menu: Configuration -&gt; Server Groups [Edit]</b></p> <p>Modifying attributes of server group : dp_sds_1_grp</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_sds_1_grp</td><td>Unique identifier used to label : [A value is required.]</td></tr> <tr> <td>Level *</td><td>C</td><td>Select one of the Levels suppo</td></tr> <tr> <td>Parent *</td><td>sds_so_a</td><td>Select an existing Server Grou</td></tr> <tr> <td>Function *</td><td>SDS</td><td>Select one of the Functions su</td></tr> <tr> <td>WAN Replication Connection Count</td><td>1</td><td>Specify the number of TCP cor</td></tr> </tbody> </table> <p>SDS_NE <input type="checkbox"/> Prefer Network Element as spare</p> <table border="1"> <thead> <tr> <th>Server</th><th>SG Inclusion</th><th>Preferred HA Role</th></tr> </thead> <tbody> <tr> <td>dp-sds-1</td><td><input type="checkbox"/> Include in SG</td><td><input type="checkbox"/> Prefer server as 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 *	dp_sds_1_grp	Unique identifier used to label : [A value is required.]	Level *	C	Select one of the Levels suppo	Parent *	sds_so_a	Select an existing Server Grou	Function *	SDS	Select one of the Functions su	WAN Replication Connection Count	1	Specify the number of TCP cor	Server	SG Inclusion	Preferred HA Role	dp-sds-1	<input type="checkbox"/> Include in SG	<input type="checkbox"/> Prefer server as spare
Field	Value	Description																								
Server Group Name *	dp_sds_1_grp	Unique identifier used to label : [A value is required.]																								
Level *	C	Select one of the Levels suppo																								
Parent *	sds_so_a	Select an existing Server Grou																								
Function *	SDS	Select one of the Functions su																								
WAN Replication Connection Count	1	Specify the number of TCP cor																								
Server	SG Inclusion	Preferred HA Role																								
dp-sds-1	<input type="checkbox"/> Include in SG	<input type="checkbox"/> Prefer server as spare																								
81. <input type="checkbox"/>	<b>Primary SDS VIP:</b> Select the “ <b>DP</b> ” server from the list of “ <b>Servers</b> ” by clicking the check box next its name.	 <table border="1"> <thead> <tr> <th>Server</th><th>SG Inclusion</th><th>Preferred HA Role</th></tr> </thead> <tbody> <tr> <td>dp-sds-1</td><td><input checked="" type="checkbox"/> Include in SG</td><td><input type="checkbox"/> Prefer server as spare</td></tr> </tbody> </table>	Server	SG Inclusion	Preferred HA Role	dp-sds-1	<input checked="" type="checkbox"/> Include in SG	<input type="checkbox"/> Prefer server as spare																		
Server	SG Inclusion	Preferred HA Role																								
dp-sds-1	<input checked="" type="checkbox"/> Include in SG	<input type="checkbox"/> Prefer server as spare																								

Procedure 11. Installing the Data Processor Blade (All SOAM Sites)

Step	Procedure	Result
82. <input type="checkbox"/>	<p><b>Primary 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>	
83. <input type="checkbox"/>	<p><b>Primary SDS VIP:</b></p> <p>The user should be presented with a banner information message stating “<b>Data committed</b>”.</p>	
84. <input type="checkbox"/>	<p>Place each additional DP Server into its respective DP Server Group.</p>	<ul style="list-style-type: none"> <li>Repeat <b>Steps 69 – 83</b> of this procedure for each subrending <b>DP</b> server installed in the same SOAM enclosure, <i>using a unique group for each DP</i>.</li> </ul>


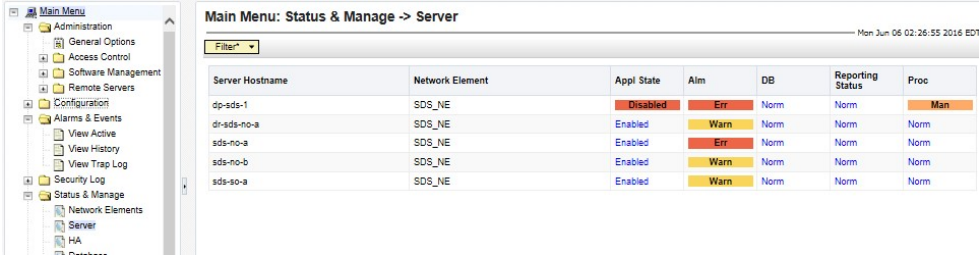

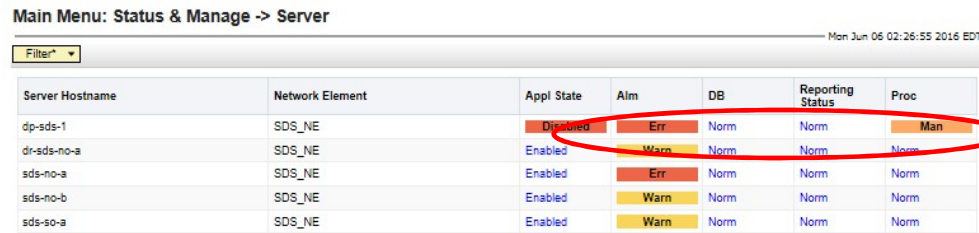

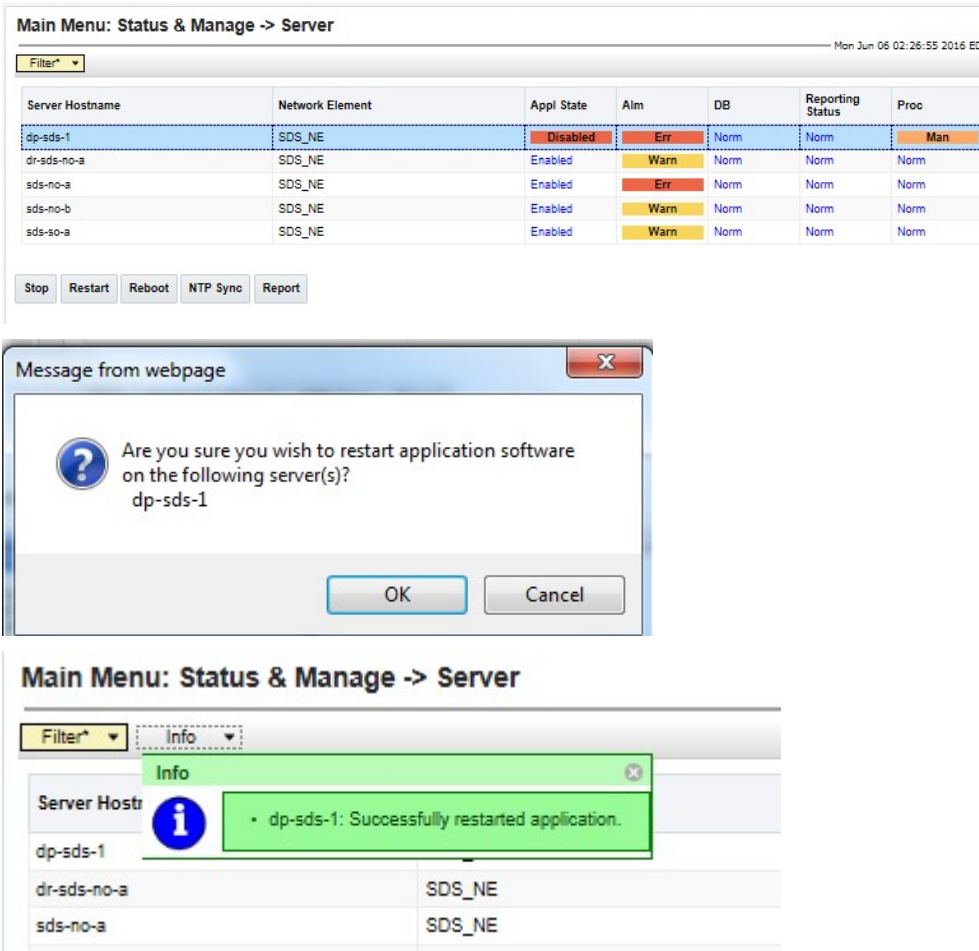
Procedure 11. Installing the Data Processor Blade (All SOAM Sites)

Step	Procedure	Result																												
85.	<p><b>Primary SDS VIP:</b></p> <p>Select...</p> <p><b>Main Menu</b> → <b>Alarms &amp; Events</b> → <b>View Active</b></p> <p>...as shown on the right.</p>	<div><div><div><div><div><div></div><div>Main Menu</div></div><div><div>Administration</div><div><div>General Options</div><div>Access Control</div><div>Software Management</div><div>Remote Servers</div><div>LDAP Authentication</div><div>SNMP Trapping</div><div>Data Export</div><div>DNS Configuration</div></div></div><div><div>Configuration</div><div><div>Networking</div><div><div>Networks</div><div>Devices</div><div>Routes</div><div>Services</div></div><div>Servers</div><div>Server Groups</div><div>Resource Domains</div><div>Places</div><div>Place Associations</div></div></div><div><div>DSCP</div><div>Alarms &amp; Events</div><div><div>View Active</div><div>View History</div><div>View Trap Log</div></div></div><div>Security Log</div></div></div></div><div><div><div>Main Menu: Alarms &amp; Events -&gt; View Active</div><div><div>Filter*</div><div>Tasks</div><div>Graph*</div></div><div><div>sds_no_grp</div><div>sds_so_a</div></div><table><thead><tr><th>Seq #</th><th>Event ID</th><th>Timestamp</th><th>Alarm Text</th></tr></thead><tbody><tr><td>10</td><td>31228</td><td>2016-06-06 02:21:57.072 EDT</td><td>HA Availability Status Degraded</td></tr><tr><td>9</td><td>10075</td><td>2016-06-06 02:21:56.952 EDT</td><td>Application processes have been manually stopped</td></tr><tr><td>4</td><td>32532</td><td>2016-06-06 02:21:47.700 EDT</td><td>Server Upgrade Pending Accept/Reject</td></tr><tr><td>24</td><td>10300</td><td>2016-06-06 01:20:10.363 EDT</td><td>SNMP Trapping Not Configured</td></tr><tr><td>2</td><td>32532</td><td>2016-06-06 01:19:12.089 EDT</td><td>Server Upgrade Pending Accept/Reject</td></tr><tr><td>7320</td><td>10200</td><td>2016-06-06 01:10:03.746 EDT</td><td>Remote Database re-initialization in progress</td></tr></tbody></table></div></div></div>	Seq #	Event ID	Timestamp	Alarm Text	10	31228	2016-06-06 02:21:57.072 EDT	HA Availability Status Degraded	9	10075	2016-06-06 02:21:56.952 EDT	Application processes have been manually stopped	4	32532	2016-06-06 02:21:47.700 EDT	Server Upgrade Pending Accept/Reject	24	10300	2016-06-06 01:20:10.363 EDT	SNMP Trapping Not Configured	2	32532	2016-06-06 01:19:12.089 EDT	Server Upgrade Pending Accept/Reject	7320	10200	2016-06-06 01:10:03.746 EDT	Remote Database re-initialization in progress
Seq #	Event ID	Timestamp	Alarm Text																											
10	31228	2016-06-06 02:21:57.072 EDT	HA Availability Status Degraded																											
9	10075	2016-06-06 02:21:56.952 EDT	Application processes have been manually stopped																											
4	32532	2016-06-06 02:21:47.700 EDT	Server Upgrade Pending Accept/Reject																											
24	10300	2016-06-06 01:20:10.363 EDT	SNMP Trapping Not Configured																											
2	32532	2016-06-06 01:19:12.089 EDT	Server Upgrade Pending Accept/Reject																											
7320	10200	2016-06-06 01:10:03.746 EDT	Remote Database re-initialization in progress																											
86.	<p><b>Primary SDS VIP:</b></p> <p>Verify that <b>Event ID 10200</b> (<i>Remote Database re-initialization in progress</i>) alarms are present with the <b>DP Server hostnames</b> in the “Instance” field..</p>	<div><div><div><div><div><div></div><div>Main Menu</div></div><div><div>Administration</div><div><div>General Options</div><div>Access Control</div><div>Software Management</div><div>Remote Servers</div><div>LDAP Authentication</div><div>SNMP Trapping</div><div>Data Export</div><div>DNS Configuration</div></div></div><div><div>Configuration</div><div><div>Networking</div><div><div>Networks</div><div>Devices</div><div>Routes</div><div>Services</div></div><div>Servers</div><div>Server Groups</div></div></div></div></div></div><div><div><div>Main Menu: Alarms &amp; Events -&gt; View Active (Filtered)</div><div><div>Filter*</div><div>Tasks</div><div>Graph*</div></div><div><div>sds_no_grp</div><div>sds_so_a</div></div><table><thead><tr><th>Seq #</th><th>Event ID</th><th>Timestamp</th><th>Severity</th><th>Additio</th></tr></thead><tbody><tr><td>7320</td><td>10200</td><td>2016-06-06 01:10:03.746 EDT</td><td>MINOR</td><td>Remoti</td></tr></tbody></table></div></div></div>	Seq #	Event ID	Timestamp	Severity	Additio	7320	10200	2016-06-06 01:10:03.746 EDT	MINOR	Remoti																		
Seq #	Event ID	Timestamp	Severity	Additio																										
7320	10200	2016-06-06 01:10:03.746 EDT	MINOR	Remoti																										

MONITOR THE EVENT ID 10200 (*Remote Database re-initialization in progress*) ALARMS.

DO NOT PROCEED TO THE NEXT STEP UNTIL THE ALARM CLEAR IS RECEIVED FOR ALL DP SERVERS.

Procedure 11. Installing the Data Processor Blade (All SOAM Sites)

Step	Procedure	Result
87. 	<p><b>Primary SDS VIP:</b> Select...</p> <p><b>Main Menu</b> → <b>Status &amp; Manage</b> → <b>Server</b> ...as shown on the right.</p>	
88. 	<p><b>Primary SDS VIP:</b> Verify that the “DB &amp; Reporting” status columns all show “Norm” for the DP at this point. The “Proc” column should show “Man”.</p>	
89. 	<p><b>Primary SDS VIP:</b></p> <ol style="list-style-type: none"> <li>1) Using the mouse, select the “DP” hostname. The line entry should now be highlighted in <b>GREEN</b>.</li> <li>2) Select the “Restart” dialogue button from the bottom left corner of the screen.</li> <li>3) Click the “OK” button on the confirmation dialogue box.</li> <li>4) The user should be presented with a confirmation message (in the banner area) for the “DP” stating: “<b>Successfully restarted application</b>”.</li> </ol> <p><b>NOTE:</b> The user may need to use the vertical scroll-bar in order to make the “Restart” dialogue button visible.</p>	

Procedure 11. Installing the Data Processor Blade (All SOAM Sites)

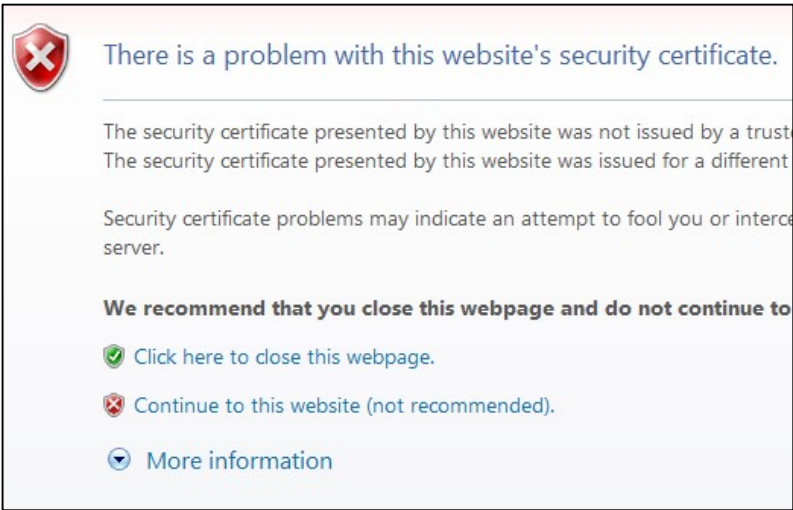
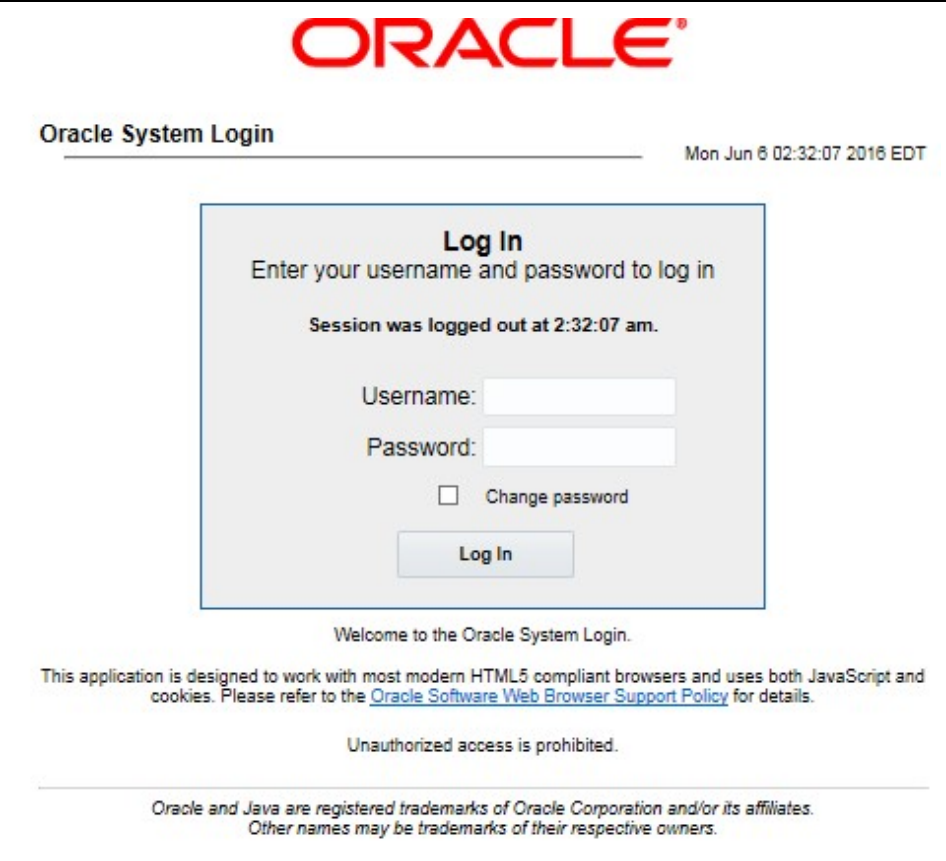
Step	Procedure	Result																																										
90. <div></div>	<p><b>Primary SDS VIP:</b></p> <p>Select...</p> <p><b>Main Menu</b> → <b>Status &amp; Manage</b> → <b>Server</b></p> <p>...as shown on the right.</p>	<div><div><div><div><div></div><div>Main Menu</div></div><div><div>Administration</div><div>Configuration</div><div>Alarms &amp; Events</div><div>View Active</div><div>View History</div><div>View Trap Log</div><div>Security Log</div><div>Status &amp; Manage</div><div>Network Elements</div><div>Server</div><div>HA</div><div>Database</div><div>I/OI</div></div></div></div><div><div><div>Main Menu: Status &amp; Manage -&gt; Server</div><div>Filter*</div><table><tr><th>Server Hostname</th><th>Network Element</th><th>Appl State</th></tr><tr><td>dp-sds-1</td><td>SDS_NE</td><td>Enabled</td></tr><tr><td>dr-sds-no-a</td><td>SDS_NE</td><td>Enabled</td></tr><tr><td>sds-no-a</td><td>SDS_NE</td><td>Enabled</td></tr><tr><td>sds-no-b</td><td>SDS_NE</td><td>Enabled</td></tr><tr><td>sds-so-a</td><td>SDS_NE</td><td>Enabled</td></tr></table></div></div></div>	Server Hostname	Network Element	Appl State	dp-sds-1	SDS_NE	Enabled	dr-sds-no-a	SDS_NE	Enabled	sds-no-a	SDS_NE	Enabled	sds-no-b	SDS_NE	Enabled	sds-so-a	SDS_NE	Enabled																								
Server Hostname	Network Element	Appl State																																										
dp-sds-1	SDS_NE	Enabled																																										
dr-sds-no-a	SDS_NE	Enabled																																										
sds-no-a	SDS_NE	Enabled																																										
sds-no-b	SDS_NE	Enabled																																										
sds-so-a	SDS_NE	Enabled																																										
91. <div></div>	<p><b>Primary 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 the “<b>DP</b>”.</p>	<div><div><div>Main Menu: Status &amp; Manage -&gt; Server</div><div>Filter*</div><div>Mon Jun 06 02:30:25 2016 ET</div><table><tr><th>Server Hostname</th><th>Network Element</th><th>Appl State</th><th>Alm</th><th>DB</th><th>Reporting Status</th><th>Proc</th></tr><tr><td>dp-sds-1</td><td>SDS_NE</td><td>Enabled</td><td>Warn</td><td>Norm</td><td>Norm</td><td>Norm</td></tr><tr><td>dr-sds-no-a</td><td>SDS_NE</td><td>Enabled</td><td>Warn</td><td>Norm</td><td>Norm</td><td>Norm</td></tr><tr><td>sds-no-a</td><td>SDS_NE</td><td>Enabled</td><td>Err</td><td>Norm</td><td>Norm</td><td>Norm</td></tr><tr><td>sds-no-b</td><td>SDS_NE</td><td>Enabled</td><td>Warn</td><td>Norm</td><td>Norm</td><td>Norm</td></tr><tr><td>sds-so-a</td><td>SDS_NE</td><td>Enabled</td><td>Warn</td><td>Norm</td><td>Norm</td><td>Norm</td></tr></table></div></div>	Server Hostname	Network Element	Appl State	Alm	DB	Reporting Status	Proc	dp-sds-1	SDS_NE	Enabled	Warn	Norm	Norm	Norm	dr-sds-no-a	SDS_NE	Enabled	Warn	Norm	Norm	Norm	sds-no-a	SDS_NE	Enabled	Err	Norm	Norm	Norm	sds-no-b	SDS_NE	Enabled	Warn	Norm	Norm	Norm	sds-so-a	SDS_NE	Enabled	Warn	Norm	Norm	Norm
Server Hostname	Network Element	Appl State	Alm	DB	Reporting Status	Proc																																						
dp-sds-1	SDS_NE	Enabled	Warn	Norm	Norm	Norm																																						
dr-sds-no-a	SDS_NE	Enabled	Warn	Norm	Norm	Norm																																						
sds-no-a	SDS_NE	Enabled	Err	Norm	Norm	Norm																																						
sds-no-b	SDS_NE	Enabled	Warn	Norm	Norm	Norm																																						
sds-so-a	SDS_NE	Enabled	Warn	Norm	Norm	Norm																																						
92. <div></div>	<p>Repeat this procedure for each additional <b>DP</b> Server.</p>	<ul style="list-style-type: none"><li>Repeat <b>Steps 87 – 91</b> of this procedure for each additional <b>DP</b> server installed in the SOAM cabinet.</li></ul>																																										
THIS PROCEDURE HAS BEEN COMPLETED																																												



## 5.10 Configuring ComAgent

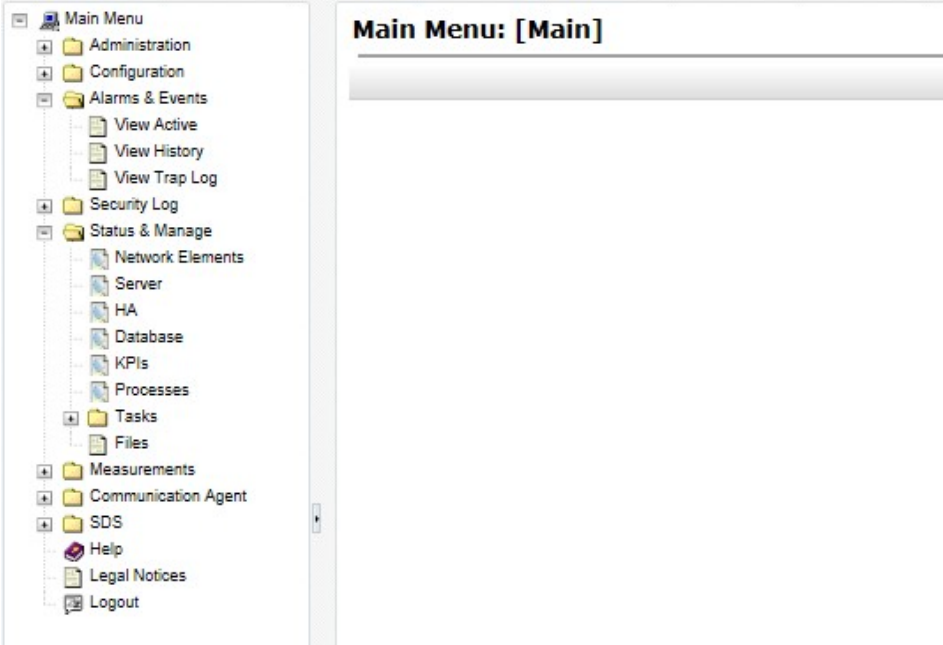
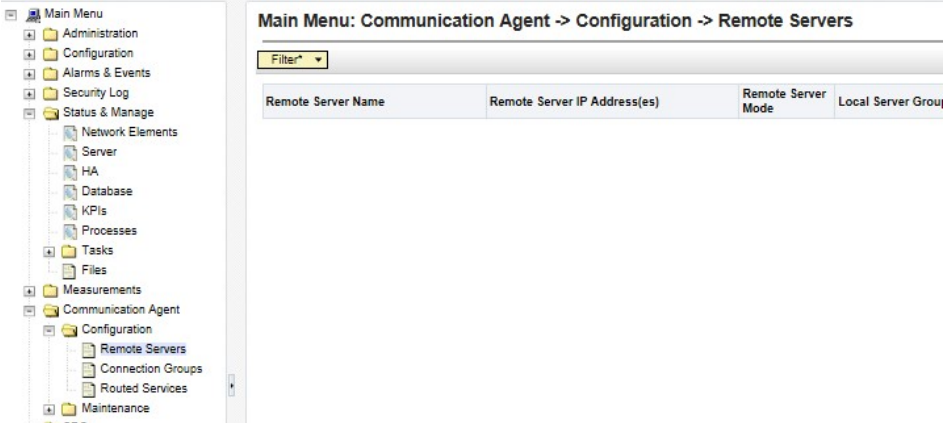

This procedure configures the ComAgent that allows the SDS Data Processor servers and the DSR Message Processor servers to communicate with each other. These steps cannot be executed until all SDS DP servers are configured.

### Procedure 12. Configuring ComAgent (All SOAM Sites)

Step	Procedure	Result
1. <input type="checkbox"/>	<p><b>Primary SDS VIP:</b> Launch an approved web browser and connect to the XML Virtual IP Address (VIP) of the SDS</p> <p><b>NOTE:</b> <i>If presented with the "security certificate" warning screen shown to the right, choose the following option: "Continue to this website (not recommended)".</i></p>	
2. <input type="checkbox"/>	<p><b>Primary SDS VIP:</b> 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 12. Configuring ComAgent (All SOAM Sites)

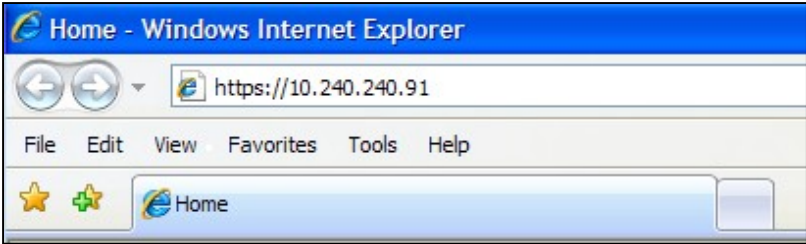
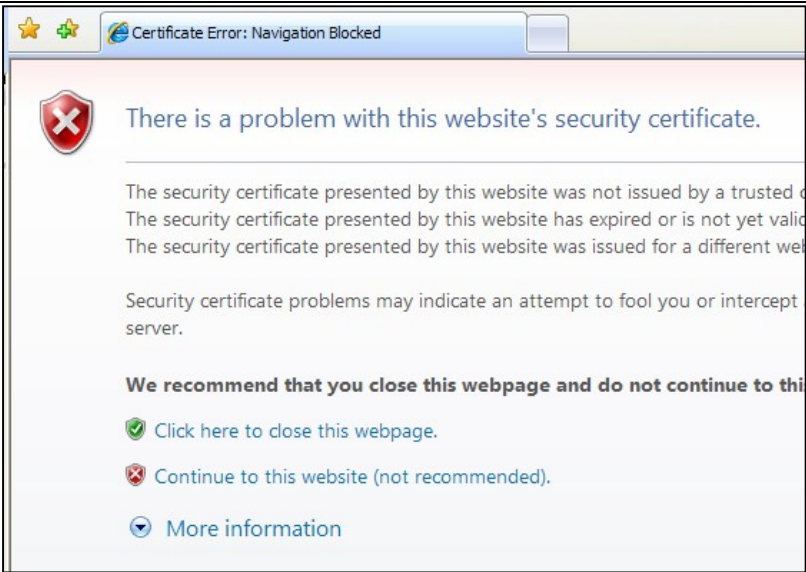
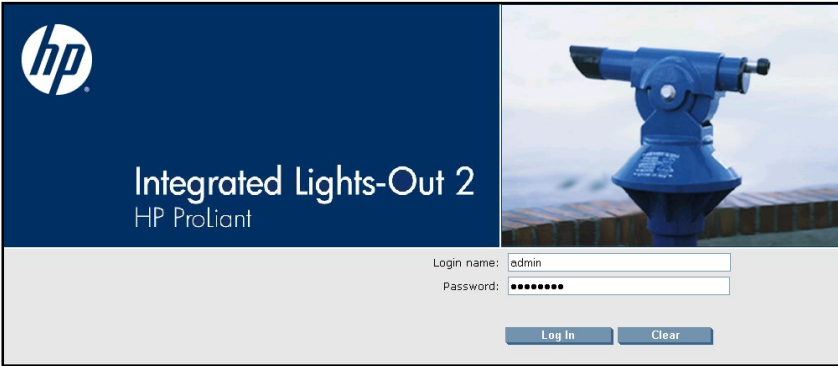
<p>3.</p> <div></div>	<p><b>Primary SDS VIP:</b></p> <p>The user should be presented the SDS Main Menu as shown on the right.</p>							
<p>4.</p> <div></div>	<p><b>Primary SDS VIP:</b></p> <p>Select...</p> <p><b>Main Menu</b>  →Communication Agent  →Configuration  →Remote Servers</p> <p>...as shown on the right.</p>							
<p>5.</p> <div></div>	<p><b>Primary SDS VIP:</b></p> <p>Select the “Insert” dialogue button</p>							
<p>6.</p> <div></div>	<p><b>Primary 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>RSSDSMP1</td><td>Unique identifier used to label a Remote Server. [Default: n/a; Range: A 32-character string. Valid characters are alphanumeric.] [A value is required.]</td></tr> </tbody> </table>	Field	Value	Description	Remote Server Name *	RSSDSMP1	Unique identifier used to label a Remote Server. [Default: n/a; Range: A 32-character string. Valid characters are alphanumeric.] [A value is required.]
Field	Value	Description						
Remote Server Name *	RSSDSMP1	Unique identifier used to label a Remote Server. [Default: n/a; Range: A 32-character string. Valid characters are alphanumeric.] [A value is required.]						

Procedure 12. Configuring ComAgent (All SOAM Sites)


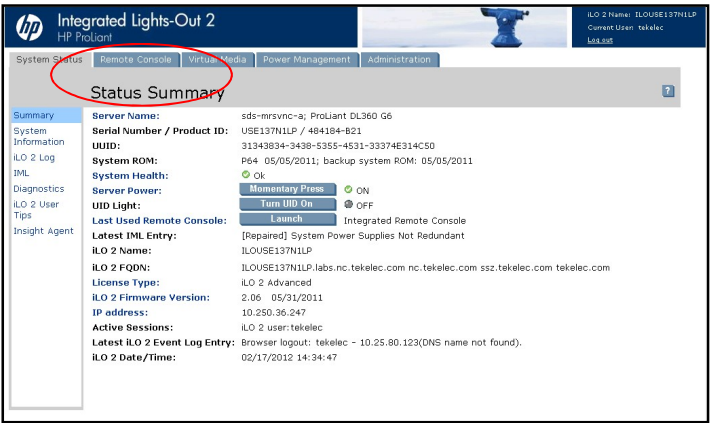

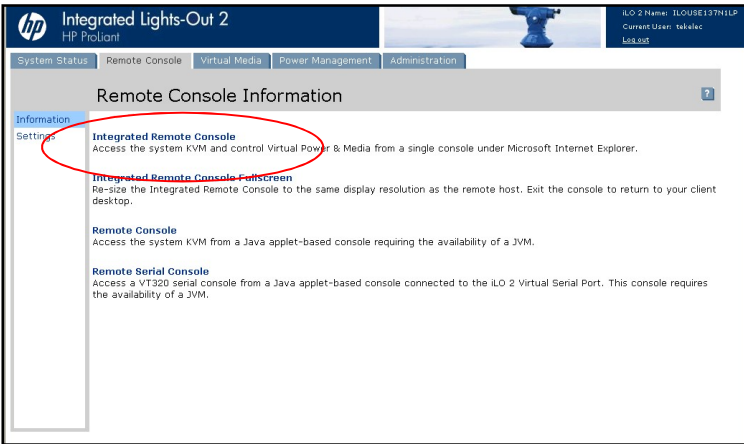

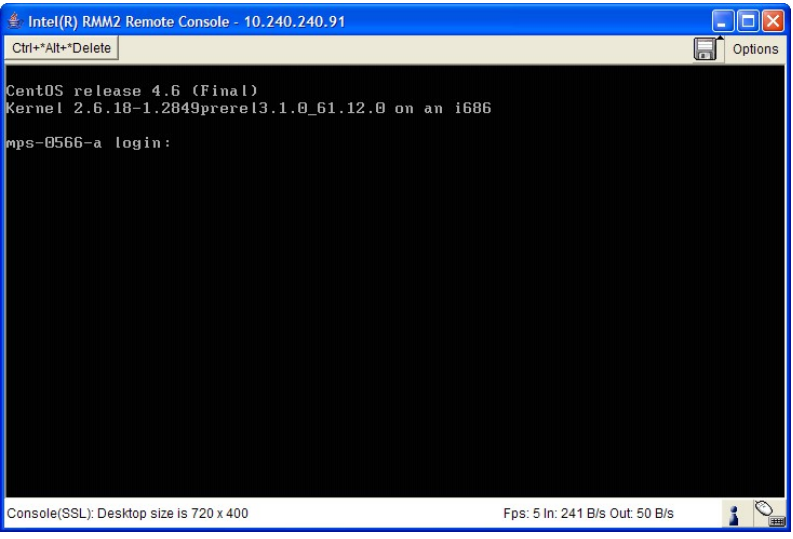
7. <div></div>	<p><b>Primary SDS VIP:</b></p> <p>Enter the “<b>Remote Server IMI IP Address</b>”.</p>	<div><div>Remote Server IPv4 IP Address</div><div>169.254.5.157</div></div> <div>This is the IPv4 IP address of the Remote Server. Default: n/a; Range: A valid IPv4 IP address.</div>
<p><b>NOTE:</b> This should be the IMI IP address of the MP blade.</p>		
8. <div></div>	<p><b>Primary SDS VIP:</b></p> <p>Select “<b>Client</b>” for the <b>Remote Server Mode</b> from the pull-down menu.</p>	<div><div>Remote Server Mode *</div><div><div>-- Select --</div><div>Client</div><div>Server</div></div></div> <div>Identifies the mode in which the Remote Server [A value is required.]</div>
9. <div></div>	<p><b>Primary SDS VIP:</b></p> <p>Select the <b>Local Server Group</b> for the SDS Data Processor server group</p>	<div><div><div>Available Local Server Groups</div><div>dp_sds_1_grp</div></div><div><div>Add selected Local Server Group(s).</div><div>&gt;&gt;</div><div>&lt;&lt;</div><div>Assigned Local Server Groups</div><div></div></div></div>
10. <div></div>	<p><b>Primary SDS VIP:</b></p> <p>Click the “<b>Apply</b>” dialogue button</p>	<div><div><div>Available Local Server Groups</div><div></div></div><div><div>&gt;&gt;</div><div>&lt;&lt;</div></div><div><div>Assigned Local Server Groups</div><div>dp_sds_1_grp</div></div><div><div>Ok</div><div>Apply</div><div>Cancel</div></div></div>
11. <div></div>	<p><b>Primary SDS VIP:</b></p> <p>Under the “Info” banner option, the user should be presented with a message stating “<b>Data committed</b>”</p>	<div><div>Main Menu: Communication Agent -&gt; Configuration -&gt; Remote Servers [Insert]</div><div><div>Info</div><div><div>Info</div><div>Data committed!</div></div></div><div><div>Remote Server Name *</div><div>RSSDSMP1</div></div><div><div>Remote Server IPv4 IP Address</div><div>169.254.5.157</div></div><div><div>Description</div><div>Unique identifier used to label a Remote Server. [Default: n/a; Range: A 32-character string. Valid characters are alphanumeric.] [A value is required.]</div><div>This is the IPv4 IP address of the Remote Server. If Default: n/a; Range: A valid IPv4 IP address.</div></div></div>
12. <div></div>	<ul style="list-style-type: none"><li>Repeat steps 5 – 11 of this procedure for each additional remote DA-MP in the associated DSR SOAM NE.</li></ul>	
THIS PROCEDURE HAS BEEN COMPLETED		

## Appendix A. Accessing the iLO VGA Redirection Window

### Procedure 13. Accessing the iLO VGA Redirection Window

Step	Procedure	Result
1. <input type="checkbox"/>	Launch an approved web browser and connect to the iLO interface  <b>NOTE:</b> Always use <i>https://</i> for iLO GUI access.	
2. <input type="checkbox"/>	The web browser will display a warning message regarding the Security Certificate.  <b>NOTE:</b> If presented with the “security certificate” warning screen shown to the right, choose the following option: <b>“Continue to this website (not recommended)”</b> .	
3. <input type="checkbox"/>	Login to the iLO console as “Administrator”	

**Procedure 13. Accessing the iLO VGA Redirection Window**

<p>4.</p> <p></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>5.</p> <p></p>	<p>The Remote Console Information GUI is displayed</p> <p>Click on the <b>“Integrated Remote Console”</b> option</p>	
<p>6.</p> <p></p>	<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><b>THIS PROCEDURE HAS BEEN COMPLETED</b></p>		

## Appendix B. 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.

### Procedure 14. 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.	
1. <input type="checkbox"/>	Log onto the SDS NOAM Server A ILO  <b>NOTE:</b> <i>Output similar to that shown on the right will appear.</i>	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>admusr</b> Password: <b>&lt;admusr_password&gt;</b>
2. <input type="checkbox"/>	For GEN8: Delete bond0  For GEN9: Delete bond0	\$ sudo <b>netAdm delete --device=bond0</b> eth01 was successfully removed from bond0 eth11 was successfully removed from bond0 Interface bond0 removed  For GEN9: \$ sudo <b>netAdm delete --device=bond0</b> eth01 was successfully removed from bond0 eth02 was successfully removed from bond0 Interface bond0 removed
3. <input type="checkbox"/>	Add XMI IP address to the first SDS server  (SDS NOAM-A) and have it use interface eth02 for GEN8 and eth03 for GEN9	For GEN8: \$ sudo <b>netAdm set --device=eth02 --onboot=yes --netmask=255.255.255.0 --address=&lt;XMI_IP_Address_for_SDS_A&gt;</b> Interface eth02 updated  For GEN9: \$ sudo <b>netAdm set --device=eth03 --onboot=yes --netmask=255.255.255.0 --address=&lt;XMI_IP_Address_for_SDS_A&gt;</b> Interface eth03 updated
4. <input type="checkbox"/>	Add route to the default gateway for the first SDS site	For GEN8: \$ sudo <b>netAdm add --device=eth02 --route=default --gateway=&lt;XMI_IP_Address_for_default_gateway&gt;</b> Route to eth02 added  For GEN9: \$ sudo <b>netAdm add --device=eth03 --route=default --gateway=&lt;XMI_IP_Address_for_default_gateway&gt;</b> Route to eth03 added
5. <input type="checkbox"/>	Wait a few minutes and then ping the default gateway to ensure connectivity.	\$ <b>ping &lt;XMI_IP_Address_for_default_gateway&gt;</b>

#### Procedure 14. Creating Temporary External IP Address for Accessing SDS GUI

6. <input type="checkbox"/>	Log off the ILO	\$ <b>exit</b>
THIS PROCEDURE HAS BEEN COMPLETED		

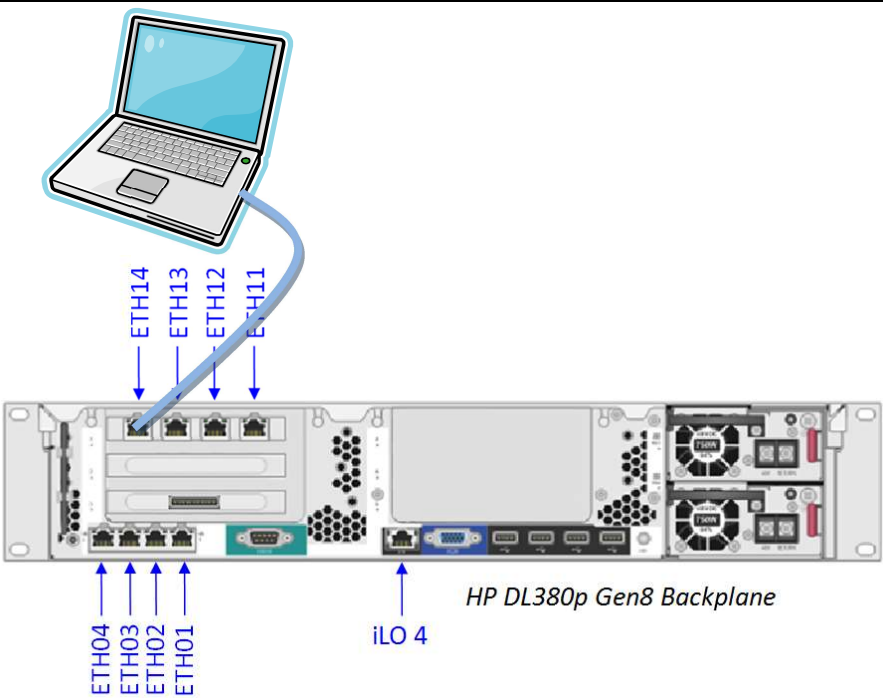
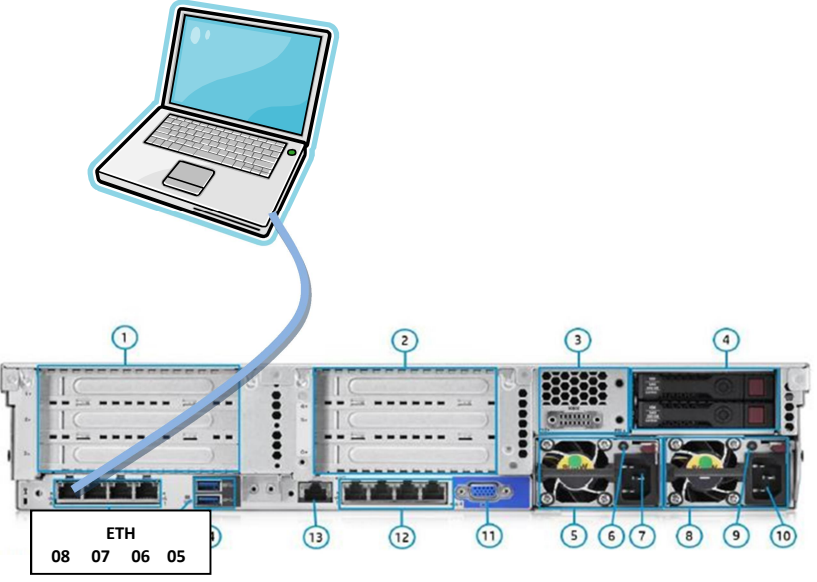
### Appendix C. Establish a Local Connection for Accessing the SDS GUI

This procedure contains steps to connect a laptop to the SDS NOAM-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.

#### Procedure 15. Establish a Local Connection for Accessing SDS GUI

Step	In this procedure you will configure a temporary external IP Address for SDS Server NOAM 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 NOAM-A server's console.	Connect to the SDS NOAM-A server's console using one of the access methods described in <b>Section 2.3</b> .
2. <input type="checkbox"/>	<b>1) Access the command prompt.</b> <b>2) Log into the SDS NOAM-A server as the "admusr" user.</b>	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>admusr</b> Password: <b>&lt;admusr_password&gt;</b>
3. <input type="checkbox"/>	<b>This step, DL380 GEN8 only!</b>  Configure static IP 192.168.100.11 on the eth14 port of the SDS NOAM-A server.	<pre>\$ sudo netAdm set --device=eth14 --address=192.168.100.11 --netmask=255.255.255.0 --onboot=yes</pre>
4. <input type="checkbox"/>	<b>This step, DL380 GEN9 only!</b>  Configure static IP 192.168.100.11 on the eth08 port of the SDS NOAM-A server.	<pre>\$ sudo netAdm set --device=eth08 --address=192.168.100.11 --netmask=255.255.255.0 --onboot=yes</pre>

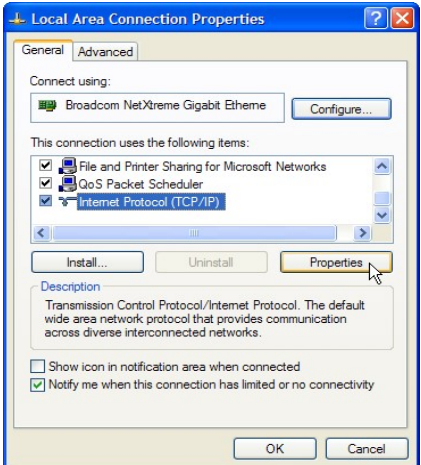
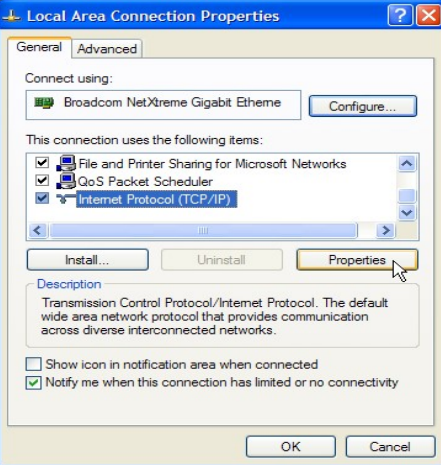
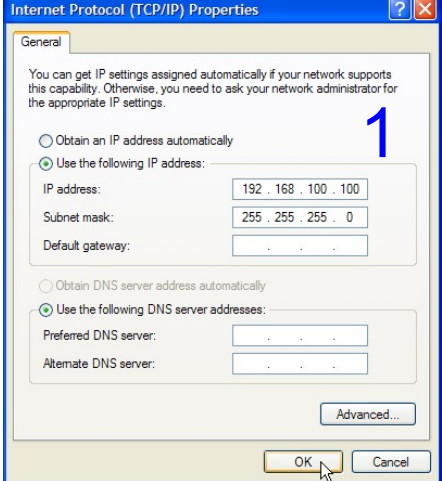
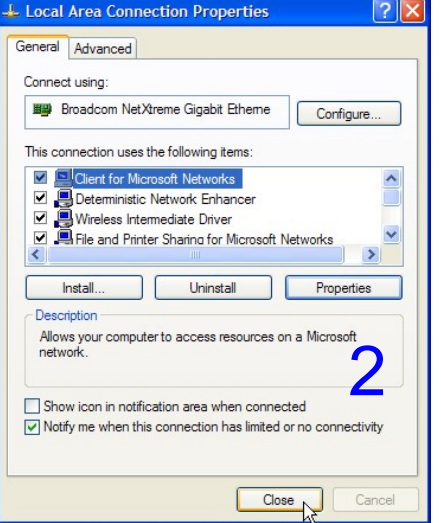
**Procedure 15. Establish a Local Connection for Accessing SDS GUI**

<p>5.</p> <p><input type="checkbox"/></p>	<p><b>Execute this step for HP DL380 GEN8:</b></p> <p>1) Plug in one end of the Ethernet cable (straight-thru) into the back of SDS NOAM-A server ETH14 (top left port).</p> <p>2) Plug the other end of the Ethernet cable into the laptop's Ethernet jack.</p>	 <p>HP DL380p Gen8 Backplane</p>
<p><input type="checkbox"/></p>	<p><b>Execute this step For HP DL380 GEN9:</b></p> <p>1) Plug in one end of the Ethernet cable (straight-thru) into the back of SDS NOAM-A server <b>ETH08</b> (bottom left port).</p> <p>2) Plug the other end of the Ethernet cable into the laptop's Ethernet jack.</p>	

**Figure 16 – HP DL380 GEN9: DC (Rear Panel)**



**Procedure 15. Establish a Local Connection for Accessing SDS GUI**

<p>6.</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>	<p><b>Windows XP</b></p> <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> 	<p><b>Windows Vista / Win 7</b></p> <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>7.</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 is suggested</b>) and click "OK".</p> <p>2) Click "Close" from the network interface card's main "Properties" screen.</p>	<p><b>Internet Protocol (TCP/IP) Properties</b></p> 	<p><b>Local Area Connection Properties</b></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 D. Configure Cisco 4948E-F Aggregation Switches

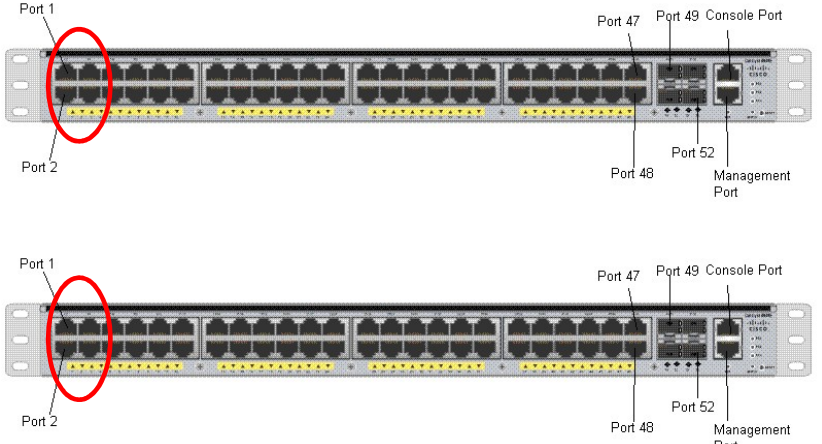
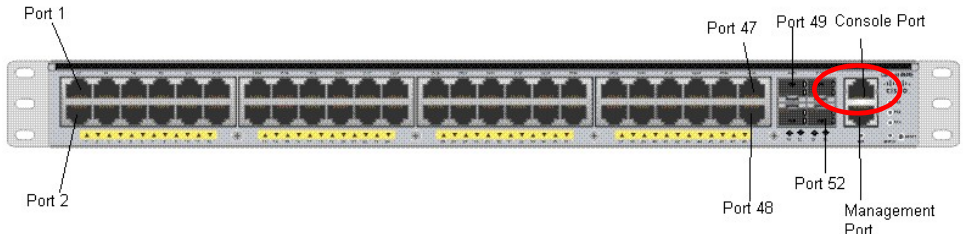
These switch configuration procedures require that the SDS hardware (servers and switches) are installed in a frame as indicated in the below picture:

DL380 Gen8/Gen9		
U	SDS - DC - Seismic	
44	PDP-A	PWR
43		
42		
41		
	OPEN	
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	SERVER C - QUERY (HP DL380 Gen8/Gen9)	Servers
8		
7	SERVER B - SDS NOAM (HP DL380 Gen8/Gen9)	
6		
5	SERVER A - SDS NOAM (HP DL380 Gen8/Gen9)	
4		
3	FILLER PANEL	
2	FILLER PANEL	
1	FILLER PANEL	

Figure 17 – SDS Frame Layout

## D-1. Verifying Cisco Switch Wiring (All SDS NOAM Sites)

## Procedure 16. Verifying Cisco Switch Wiring (SDS Sites)

Step	Procedure	Result	
<p>1.</p> <div><input type="checkbox"/></div> <div><input type="checkbox"/></div> <div><input type="checkbox"/></div> <div><input type="checkbox"/></div>	<p>Set/Verify the following cable configuration at the <b>Cisco 4948E-F switches</b>:</p> <p>1) Verify that the ISL <b>switch1A, Port 1</b> to <b>switch1B, Port 1</b> is <b>CONNECTED</b>.</p> <p>2) Verify that the ISL <b>switch1A, Port 2</b> to <b>switch1B, Port 2</b> is <b>CONNECTED</b>.</p> <p>3) Verify that the ISL <b>switch1A, Port 3</b> to <b>switch1B, Port 3</b> is <b>CONNECTED</b>.</p> <p>4) Verify that the ISL <b>switch1A, Port 4</b> to <b>switch1B, Port 4</b> is <b>CONNECTED</b>.</p>	<p><b>1B</b> switch1B (Top)</p> <p><b>1A</b> switch1A (Bottom)</p>	
<p>2.</p>	<p><b>DL380 GEN8 only</b> :</p> <p>Verify that <b>SERVER A</b> has the Quad-Serial card interface ports connected to the <b>Console Port</b> each switch port.</p>	 <p><b>Figure 19 – Cisco 4948E-F Switch (Console Port)</b></p>	

## Procedure 16. Verifying Cisco Switch Wiring (SDS Sites)

Step	Procedure	Result
<input type="checkbox"/>  <input type="checkbox"/>	<p>1) Verify that the switch1A, Console Port is <b>CONNECTED</b> to SERVER A, Quad-Serial Port S1 using Cable 830-1229-xx.</p> <p>2) Verify that the switch1B, Console Port is <b>CONNECTED</b> to SERVER A, Quad-Serial Port S2 using Cable 830-1229-xx.</p>	<p>The diagram shows the rear panel of an HP DL380 GEN8 server. On the left, four serial ports are labeled S1, S2, S3, and S4. S1 and S2 are circled in red. Blue arrows point from S1 and S2 to a single port on the server's rear panel labeled "Quad-Serial cable". To the right of this cable are four RJ45 ports labeled ETH01, ETH02, ETH03, and ETH04 from bottom to top. Further up the panel are four more RJ45 ports labeled ETH11, ETH12, ETH13, and ETH14 from bottom to top. An iLO 4 port is located on the far right. The caption below reads: "Figure 20 – HP DL380 GEN8: Rear Panel (Quad-Serial Ports)"</p>
3.  <input type="checkbox"/>	<p><b>This step, DL380 GEN8 only!</b></p> <p>1) Verify that switch1A, Port 5 is <b>CONNECTED</b> to SERVER A, ETH01.</p>	

Procedure 16. Verifying Cisco Switch Wiring (SDS Sites)

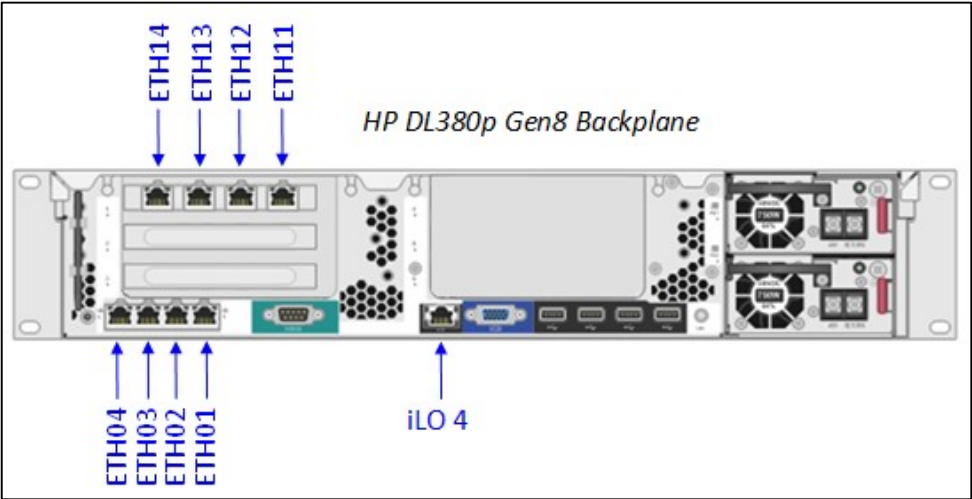
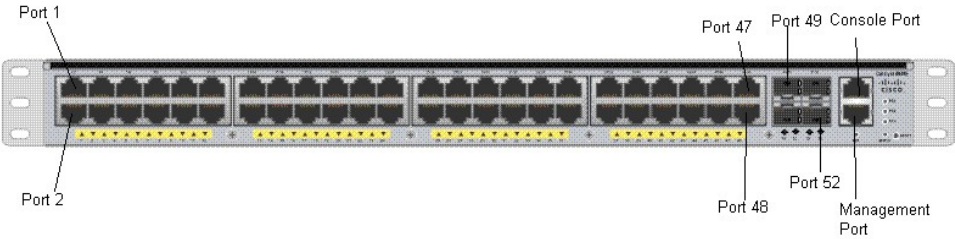
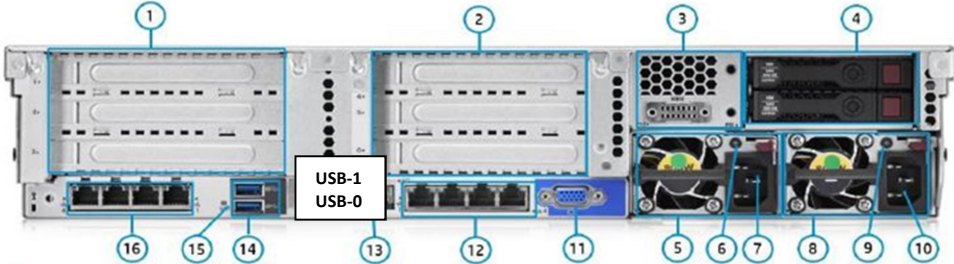
Step	Procedure	Result
<input type="checkbox"/>	2) Verify that switch1B, Port 5 is <b>CONNECTED to SERVER A, ETH11</b> .	 <p>The diagram shows the rear panel of an HP DL380p Gen8 server. It features a central backplane with two rows of ports. The top row has four ports labeled ETH14, ETH13, ETH12, and ETH11 from left to right. The bottom row has four ports labeled ETH04, ETH03, ETH02, and ETH01 from left to right. To the right of the bottom row is a port labeled iLO 4. The text 'HP DL380p Gen8 Backplane' is centered above the ports. Blue arrows point from the labels to their respective ports.</p>
<input type="checkbox"/>	3) Verify that switch1A, Port 6 is <b>CONNECTED to SERVER B, ETH01</b> .	
<input type="checkbox"/>	4) Verify that switch1B, Port 6 is <b>CONNECTED to SERVER B, ETH11</b> .	
<input type="checkbox"/>	5) Verify that switch1A, Port 7 is <b>CONNECTED to SERVER C, ETH01</b> .	
<input type="checkbox"/>	6) Verify that switch1B, Port 7 is <b>CONNECTED to SERVER C, ETH11</b> .	

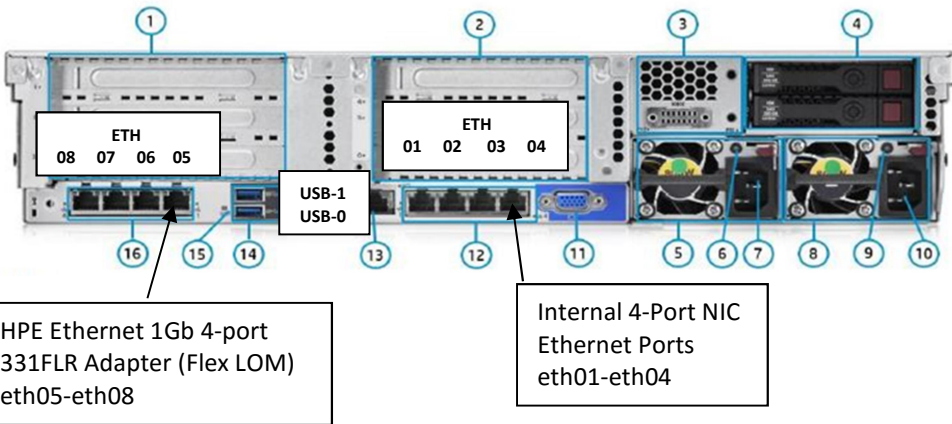
Figure 21 – HP DL380 GEN8: Rear Panel (Ethernet)

Procedure 16. Verifying Cisco Switch Wiring (SDS Sites)

Step	Procedure	Result
4. <div></div>	<p><b><i>This step, DL380 GEN9 only!</i></b></p> <p>1) Verify that the switch1A, Console Port is <b>CONNECTED</b> to SERVER A, USB Port USB0</p> <p>2) Verify that the switch1B, Console Port is <b>CONNECTED</b> to SERVER A, USB Port USB1</p>	<div><p>Figure 22 – Cisco 4948E-F Switch (Console Port)</p><p>Figure 23 – HP DL380 GEN9: DC (Rear Panel)</p></div>



Procedure 16. Verifying Cisco Switch Wiring (SDS Sites)

Step	Procedure	Result
5.	<p><b><i>This step, DL380 GEN9 only!</i></b></p> <p>1) Verify that <b>switch1A, Port 5</b> is <b>CONNECTED</b> to <b>SERVER A, ETH01</b></p> <p>2) Verify that <b>switch1B, Port 5</b> is <b>CONNECTED</b> to <b>SERVER A, ETH02</b></p> <p>3) Verify that <b>switch1A, Port 6</b> is <b>CONNECTED</b> to <b>SERVER B, ETH01</b></p> <p>4) Verify that <b>switch1B, Port 6</b> is <b>CONNECTED</b> to <b>SERVER B, ETH02</b></p> <p>5) Verify that <b>switch1A, Port 7</b> is <b>CONNECTED</b> to <b>SERVER C, ETH01</b></p> <p>6) Verify that <b>switch1B, Port 7</b> is <b>CONNECTED</b> to <b>SERVER C, ETH02</b></p>	 <p>HPE Ethernet 1Gb 4-port 331FLR Adapter (Flex LOM) eth05-eth08</p> <p>Internal 4-Port NIC Ethernet Ports eth01-eth04</p> <p><b>Figure 24 – HP DL380 GEN9: DC (Rear Panel)</b></p>
THIS PROCEDURE HAS BEEN COMPLETED		



## D-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.

Variable	Management Server	Serial Port (DL380 GEN8)	Serial Port (DL380 GEN9)
<switch1A_serial_port>	SERVER A	ttyS4	ttyUSB0
<switch1B_serial_port>	SERVER A	ttyS5	ttyUSB1
Variable			

<IOS_image_file>	Fill in the appropriate value from [6]: _____		
Variable	Value		
<switch_platform_username>	Contact Oracle's Customer Support Accessing My Oracle Support (MOS).		
<switch_platform_password>	Contact Oracle's Customer Support Accessing My Oracle Support (MOS).		
<switch_console_password>	Contact Oracle's Customer Support Accessing My Oracle Support (MOS).		
<switch_enable_password>	Contact Oracle's Customer Support Accessing My Oracle Support (MOS).		
<SERVER A_mgmtVLAN_ip_address >	Primary SDS: 169.254.1.11    DR SDS: 169.254.1.14		
< SERVER B_mgmtVLAN_ip_address>	Primary SDS: 169.254.1.12    DR SDS: 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		
<SERVER A_iLO_ip> ( See NAPD documentation for IP Address ) [2][10]	_____		
< SERVER B_iLO_ip > ( See NAPD documentation for IP Address ) [2][10]	_____		

Ethernet Interface	DL380 GEN8 /	DL380 GEN9
--------------------	--------------	------------

<ethernet_interface_1>	bond0.2 (eth01, eth11)	bond0.2 (eth01, eth02)
<ethernet_interface_2>	bond0.4 (eth01, eth11)	bond0.4 (eth01, eth02)

Variable	Value
<platcfg_password>	Contact Oracle's Customer Support Accessing My Oracle Support (MOS).
<management_server_mgmtInterface>	bond0.2
<switch_backup_user>	Contact Oracle's Customer Support Accessing My Oracle Support (MOS)..
<switch_backup_user_password>	Contact Oracle's Customer Support Accessing My Oracle Support (MOS).

**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. Determining which cables are used for customer uplink.

## Needed Material:

- HP Misc. Firmware DVD
- HP Solutions Firmware Upgrade Pack Release Notes [5]
- Application specific documentation (documentation that referred to this procedure)
- Switch A and B initialization xml files and SDS switch configuration xml file located on the NOAM server in the /usr/TKLC/plat/etc/switch/xml/ directory ISO.
- 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.

## Procedure 17. Configuring Cisco 4948E-F Switches (All SDS NOAM Sites)

Step	Procedure	Result
1. <input type="checkbox"/>	<b>SERVER A:</b> Access the <b>SERVER A</b> console.	Connect to the <b>SERVER A</b> console using one of the access methods described in <b>Section 2.3</b> .
2. <input type="checkbox"/>	<b>SERVER A:</b> Log into the HP DL380 server as the "admusr" user.	login: <b>admusr</b> Using keyboard-interactive authentication. Password: <b>&lt;admusr_password&gt;</b>

## Procedure 17. Configuring Cisco 4948E-F Switches (All SDS NOAM Sites)

Step	Procedure	Result
3. <input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>	<b>SERVER A:</b>  Verify the switch1A initialization file exists  Verify the switch1B initialization file exists  Verify the switch configuration files exist	<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/Primary_switch1A_SDS_4948E_E- F_configure.xml \$ ls -l /usr/TKLC/plat/etc/switch/xml/Primary_switch1B_SDS_4948E_E- F_configure.xml \$ ls -l /usr/TKLC/plat/etc/switch/xml/DR_switch1A_SDS_4948E_E- F_configure.xml \$ ls -l /usr/TKLC/plat/etc/switch/xml/DR_switch1B_SDS_4948E_E- F_configure.xml </pre> <p>If any file does not exist, contact Customer Care Center for assistance.</p>
4. <input type="checkbox"/>	<b>SERVER A:</b> <u>DL 380 GEN 8:</u>  Verify quad-serial port mappings <i>(quad-dongle S1 = ttyS4, quad-dongle S2 = ttyS5)</i>	<pre> \$ sudo 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>
5.	<b>SERVER A:</b> <u>For GEN 9:</u>  Verify serial port mapping from USB0 and USB1.	<pre> \$ sudo setserial -g /dev/ttyUSB* /dev/ttyUSB0, UART: unknown, Port: 0x0000, IRQ: 0, Flags: low_latency /dev/ttyUSB1, UART: unknown, Port: 0x0000, IRQ: 0, Flags: low_latency </pre>

Procedure 17. Configuring Cisco 4948E-F Switches (All SDS NOAM Sites)

Step	Procedure	Result
6. <input type="checkbox"/>	<b>SERVER A:</b>  For GEN8:  Setup conserver serial console access for switch1A	<pre> \$ sudo conserverSetup -i -s &lt;SERVER_A_mgmtVLAN_ip_address&gt;  Example: \$ sudo conserverSetup -i -s 169.254.1.11 Enter your platcfg username, followed by [ENTER]:platcfg Enter your platcfg password, followed by [ENTER]: Target address is local to this host.  Running conserverSetup in local mode. Checking Platform Revision for local TPD installation... The local machine is running:     Product Name: SDS     Base Distro Release: 7.0.0.0.0_86.14.0 Checking Platform Revision for remote TPD installation... The remote machine is running:     Product Name: SDS     Base Distro Release: 7.0.0.0.0_86.14.0 Enter the switch name for this console connection (default: "switch1A_console"), followed by [ENTER]: switch1A_console Enter the serial device designation for switch1A_console (default: "ttyUSB0"), followed by [ENTER]:ttyS4 Configure additional serial consoles [Y/n]? [press ENTER for default &lt;Y&gt;]:n Configuring switch 'switch1A_console' console server...Configured. Configuring console repository service.....Configured. Remote host has the following available interfaces:     bond0     bond0.4     bond1     eth01     eth02     eth11     eth12 Enter the name of the bond on the remote server(default: "bond0"), followed by [ENTER]: ...No entry provided for bond. Resorting to default. Slave interfaces for bond0:     bond0 interface:  eth01     bond0 interface:  eth11           </pre>

Procedure 17. Configuring Cisco 4948E-F Switches (All SDS NOAM Sites)

Step	Procedure	Result
7.	<b>SERVER A:</b> Note: For DL380 GEN9 only: Setup consver serial console access for switch1A	<pre> \$ sudo consverSetup -i -u &lt;SERVER_A_mgmtVLAN_ip_address&gt;  Example: \$ sudo consverSetup -i -u 169.254.1.11 Enter your platcfg username, followed by [ENTER]:platcfg Enter your platcfg password, followed by [ENTER]: Target address is local to this host.  Running consverSetup in local mode. Checking Platform Revision for local TPD installation... The local machine is running:     Product Name: SDS Base Distro Release: 7.0.0.0.0_86.14.0 Checking Platform Revision for remote TPD installation... The remote machine is running:     Product Name: SDS Base Distro Release: 7.0.0.0.0_86.14.0 Enter the switch name for this console connection (default: "switch1A_console"), followed by [ENTER]: switch1A_console Enter the serial device designation for switch1A_console (default: "ttyUSB0"), followed by [ENTER]:ttyUSB0 Configure additional serial consoles [Y/n]? [press ENTER for default &lt;Y&gt;]:n Configuring switch 'switch1A_console' console server...Configured. Configuring console repository service.....Configured. Remote host has the following available interfaces:     bond0     bond0.4     bond1     eth01     eth02     eth11     eth12 Enter the name of the bond on the remote server(default: "bond0"), followed by [ENTER]: ...No entry provided for bond. Resorting to default. Slave interfaces for bond0:     bond0 interface:  eth01     bond0 interface:  eth02           </pre>

Procedure 17. Configuring Cisco 4948E-F Switches (All SDS NOAM Sites)

Step	Procedure	Result
8.	<p><b>SERVER A:</b></p> <p>Note: For DL380 GEN8:</p> <p>Setup conserver serial console access for switch1B</p>	<pre>\$ sudo conserverSetup -i -s &lt;SERVER_A_mgmtVLAN_ip_address&gt;</pre> <p>Example:</p> <pre>\$ sudo conserverSetup -i -s 169.254.1.11</pre> <p>Enter your platcfg username, followed by [ENTER]:platcfg</p> <p>Enter your platcfg password, followed by [ENTER]:</p> <p>Checking Platform Revision for local TPD installation...</p> <p>The local machine is running:</p> <p>Product Name: SDS</p> <p>Base Distro Release: 7.0.0.0.0_86.14.0</p> <p>Checking Platform Revision for remote TPD installation...</p> <p>The remote machine is running:</p> <p>Product Name: SDS</p> <p>Base Distro Release: 7.0.0.0.0_86.14.0</p> <p>Enter the switch name for this console connection (default: "switch1A_console"), followed by [ENTER]:switch1B_console</p> <p>Enter the serial device designation for switch1B_console (default: "ttyUSB0"), followed by [ENTER]:ttyS5</p> <p>Configure additional serial consoles [Y/n]? [press ENTER for default &lt;Y&gt;]:n</p> <p>Configuring switch 'switch1B_console' console server...Configured.</p> <p>Configuring console repository service...</p> <p>Repo entry for "console_service" already exists; deleting entry for:</p> <pre>Service Name: console_service Type: conserver Host: 169.254.1.11</pre> <p>...Configured.</p> <p>Remote host has the following available interfaces:</p> <pre>bond0 bond0.2 bond0.4 bond1 eth01 eth02 eth11 eth12 eth13 eth14</pre> <p>Enter the name of the bond on the remote server(default: "bond0"), followed by [ENTER]:</p> <p>...No entry provided for bond. Resorting to default.</p> <p>Slave interfaces for bond0:</p> <pre>bond0 interface: eth01 bond0 interface: eth11</pre>

## Procedure 17. Configuring Cisco 4948E-F Switches (All SDS NOAM Sites)

Step	Procedure	Result
9. <input type="checkbox"/>	<p><b>SERVER A:</b></p> <p><b>Note : For DL380 GEN9</b></p> <p>Setup conserver serial console access for switch1B</p>	<pre>\$ sudo conserverSetup -i -u &lt;SERVER_A_mgmtVLAN_ip_address&gt;</pre> <p>Example:</p> <pre>\$ sudo conserverSetup -i -u 169.254.1.11</pre> <p>Enter your platcfg username, followed by [ENTER]:platcfg  Enter your platcfg password, followed by [ENTER]:  Checking Platform Revision for local TPD installation...  The local machine is running:      Product Name: SDS      Base Distro Release: 7.0.0.0.0_86.14.0  Checking Platform Revision for remote TPD installation...  The remote machine is running:      Product Name: SDS      Base Distro Release: 7.0.0.0.0_86.14.0  Enter the switch name for this console connection (default: "switch1A_console"), followed by [ENTER]:<b>switch1B_console</b>  Enter the serial device designation for switch1B_console (default: "ttyUSB0"), followed by [ENTER]:<b>ttyUSB1</b>  Configure additional serial consoles [Y/n]? [press ENTER for default &lt;Y&gt;]:<b>n</b>  Configuring switch 'switch1B_console' console server...Configured.  Configuring iptables for port(s) 782...Configured.  Configuring iptables for port(s) 1024:65535...Configured.  Configuring console repository service...  Repo entry for "console_service" already exists; deleting entry for:      Service Name: console_service      Type: conserver      Host: 169.254.1.11  ...Configured.  Remote host has the following available interfaces:      bond0      bond0.2      bond0.4      bond1      eth01      eth02      eth11      eth12      eth13      eth14  Enter the name of the bond on the remote server(default: "bond0"), followed by [ENTER]:  ...No entry provided for bond. Resorting to default.  Slave interfaces for bond0:      bond0 interface: eth01      bond0 interface: eth02 </p>



Procedure 17. Configuring Cisco 4948E-F Switches (All SDS NOAM Sites)

Step	Procedure	Result
10. <input type="checkbox"/>	<b>SERVER A:</b> Add a repository for SSH service	<pre>\$ sudo netConfig --repo addService name=ssh_service Service type? (tftp, ssh, conserver, oa) ssh SSH host IP? 169.254.1.11 SSH username: admusr SSH password? &lt;user_password&gt; Verify password: &lt;user_password&gt; Add service for ssh_service successful</pre>
11. <input type="checkbox"/>	<b>SERVER A:</b> Verify you have entered the information correctly for SSH service	<pre>\$ sudo netConfig --repo showService name=ssh_service Service Name: ssh_service Type: ssh Host: 169.254.1.11 Options:   password: 615EBD88232A2EFD0080AC990393083D   user: admusr</pre>
12. <input type="checkbox"/>	<b>SERVER A:</b> Add a repository for TFTP service	<pre>\$ sudo netConfig --repo addService name=tftp_service Service type? (tftp, ssh, conserver, oa) tftp Service host? 169.254.1.11 Directory on host? /var/lib/tftpboot/ Add service for tftp_service successful</pre>
13. <input type="checkbox"/>	<b>SERVER A:</b> Verify that you have entered the information correctly for TFTP service	<pre>\$ sudo netConfig --repo showService name=tftp_service Service Name: tftp_service Type: tftp Host: 169.254.1.11 Options:   dir: /var/lib/tftpboot/</pre>
14. <input type="checkbox"/>	<b>SERVER A:</b> Create console service for switch1A	<pre>\$ sudo netConfig --repo addService name=switch1A_consvc Service type? (tftp, ssh, conserver, oa) conserver Conserver host IP? 169.254.1.11 Conserver username? platcfg Service password? &lt;platcfg_password&gt; Verify password: &lt;platcfg_password&gt; Add service for switch1A_consvc successful</pre>
15. <input type="checkbox"/>	<b>SERVER A:</b> Verify you have entered the information correctly for switch1A console service	<pre>\$ sudo netConfig --repo showService name=switch1A_consvc Service Name: switch1A_consvc Type: conserver Host: 169.254.1.11 Options:   password: 0B902ECD13D5BD2F1B57B5BFC6E95FE9   user: platcfg</pre>

# Procedure 17. Configuring Cisco 4948E-F Switches (All SDS NOAM Sites)

Step	Procedure	Result
16. <input type="checkbox"/>	<b>SERVER A:</b> Add repository for switch1B console service	<pre>\$ sudo netConfig --repo addService name=switch1B_consvc</pre> <p>Service type? (tftp, ssh, conserver, oa) <b>conserver</b></p> <p>Conserver host IP? <b>169.254.1.11</b></p> <p>Conserver username? <b>platcfg</b></p> <p>Service password?: <b>&lt;platcfg_password&gt;</b></p> <p>Verify password: <b>&lt;platcfg_password&gt;</b></p> <p>Add service for console_service successful</p>
17. <input type="checkbox"/>	<b>SERVER A:</b> Verify you have entered the information correctly for switch1B console service	<pre>\$ sudo netConfig --repo showService name=switch1B_consvc</pre> <pre> Service Name:  switch1B_consvc Type:         conserver Host:         169.254.1.11 Options:     password:  0B902ECD13D5BD2F1B57B5BFC6E95FE9     user:       platcfg </pre>
18. <input type="checkbox"/>	<b>SERVER A:</b> Verify and remove the service named "console_service" if present	<pre>\$ sudo netConfig --repo showService name=console_service</pre> <pre> Services:   Service Name:  console_service   Type:         conserver   Host:         169.254.1.11   Options:     password:  0B902ECD13D5BD2F1B57B5BFC6E95FE9     user:       platcfg </pre> <p>If service named "console_service" is present, then remove it. Otherwise skip to the next step.</p> <pre>\$ sudo netConfig --repo deleteService name=console_service</pre> <pre> Are you sure you want to delete console_service (y/n)? <b>y</b> Deleting service console_service... </pre>

Procedure 17. Configuring Cisco 4948E-F Switches (All SDS NOAM Sites)

Step	Procedure	Result
19. <input type="checkbox"/>	<b>SERVER A:</b>  Add repository for switch1A	<pre> \$ sudo netConfig --repo addDevice name=switch1A --reuseCredentials Device Vendor? Cisco Device Model? 4948E-F What is the IPv4 (CIDR notation) or IPv6 (address/prefix notation) address for management?: 169.254.1.1/24 Is the management interface a port or a vlan? [vlan]:vlan What is the VLAN ID of the management VLAN? [2]: 2 What is the name of the management VLAN? [management]: management What switchport connects to the management server? [GE40]: GE5 What is the switchport mode (access trunk) for the management server port? [trunk]: trunk What are the allowed vlans for the management server port? [1,2]: 1-4 Enter the name of the firmware file [cat4500e-entservicesk9-mz.122- 54.WO.bin]: Enter the name of the upgrade file transfer service: tftp_service File transfer service to be used in upgrade: tftp_service WARNING: Could not find firmware file on local host. If using a local service, please update the device entry using the editDevice command or copy the file to the correct location.  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 platform access username? platcfg What is the device console password? Verify password:  What is the platform user password? Verify password:  What is the device privileged mode password? Verify password:  Should the live network adapter be added (y/n)? y  Adding cli protocol for switch1A using network... Network device access already set: 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: switch1A_consvc Device named switch1A successfully added. </pre>

Procedure 17. Configuring Cisco 4948E-F Switches (All SDS NOAM Sites)

Step	Procedure	Result
20. <input type="checkbox"/>	<b>SERVER A:</b>  Add repository for switch1B	<pre> \$ sudo netConfig --repo addDevice name=switch1B --reuseCredentials Device Vendor? Cisco Device Model? 4948E-F What is the IPv4 (CIDR notation) or IPv6 (address/prefix notation) address for management?: 169.254.1.2/24 Is the management interface a port or a vlan? [vlan]:vlan What is the VLAN ID of the management VLAN? [2]: 2 What is the name of the management VLAN? [management]: management What switchport connects to the management server? [GE40]: GE5 What is the switchport mode (access trunk) for the management server port? [trunk]: trunk What are the allowed vlans for the management server port? [1,2]: 1-4 Enter the name of the firmware file [cat4500e-entservicesk9-mz.122- 54.WO.bin]: Enter the name of the upgrade file transfer service: tftp_service File transfer service to be used in upgrade: tftp_service WARNING: Could not find firmware file on local host. If using a local service, please update the device entry using the editDevice command or copy the file to the correct location.  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? switch1B_consvc What is the name of the console for OOB access? switch1B_console What is the platform access username? platcfg What is the device console password? Verify password:  What is the platform user password? Verify password:  What is the device privileged mode password? Verify password:  Should the live network adapter be added (y/n)? y  Adding cli protocol for switch1A using network... Network device access already set: 169.254.1.2  Should the live oob adapter be added (y/n)? y  Adding cli protocol for switch1A using oob... OOB device access already set: switch1B_consvc Device named switch1B successfully added. </pre>

Procedure 17. Configuring Cisco 4948E-F Switches (All SDS NOAM Sites)

Step	Procedure	Result
<b>21.</b> <input type="checkbox"/>	<b>SERVER A:</b>  Verify you have entered the information correctly	<pre> \$ sudo 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>
<b>22.</b> <input type="checkbox"/>	<b>SERVER A:</b>  Log in to switch1A	<p><b>Example:</b></p> <pre> console -M &lt;SERVER A_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>23.</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:cat4500e-entservicesk9-mz.122-54.XO.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 D-3** Cisco 4948E-F IOS Upgrade (All SDS NOAM Sites)
- 2) Return to this Procedure and continue with the following Step. **Beginning with Step 43.**

**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.

### Procedure 18. Configure Cisco 4948E-F Aggregation Switches (All SDS NOAM Sites)

Step	Procedure	Result
24. <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
25. <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#
26. <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
27. <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>
28. <input type="checkbox"/>	<b>Switch1A:</b>  Enter "enable" mode.	Switch# <b>enable</b> Switch#
29. <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#
30. <input type="checkbox"/>	<b>Switch1A:</b>  Close connection to switch.	Switch# <b>quit</b>  Switch con0 is now available  Press RETURN to get started.
31. <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.
32. <input type="checkbox"/>	<b>SERVER A:</b>  Log in to switch1B	<b>Example:</b> <b>console -M &lt;SERVER A_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>



Step	Procedure	Result
33. <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 D-3 Cisco 4948E-F IOS Upgrade (All SDS NOAM Sites); Beginning with Step 26.**
- 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
34. <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
35. <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#

Step	Procedure	Result
36. <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>
37. <input type="checkbox"/>	<b>Switch1B:</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>
38. <input type="checkbox"/>	<b>Switch1B:</b>  Enter "enable" mode.	Switch# <b>enable</b> Switch#
39. <input type="checkbox"/>	<b>Switch1B:</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#
40. <input type="checkbox"/>	<b>Switch1B:</b>  Close connection to switch.	Switch# <b>quit</b>  Switch con0 is now available  Press RETURN to get started.
41. <input type="checkbox"/>	<b>Switch1B:</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.

Step	Procedure	Result
42.		<p><b>Open firewall with command:</b></p> <pre>sudo iptablesAdm insert --type=rule --protocol=ipv4 --domain=10platnet --table=filter --chain=INPUT --persist=yes --match="-s 169.254.1.0/24 -p udp --dport 69 -j ACCEPT" --location=1</pre> <p><b>Turn on tftp:</b></p> <pre>\$ tpdProvd --client --noxml --ns=Xinetd startXinetdService service tftp Login on Remote: platcfg Password of platcfg: &lt;platcfg_password&gt; 1 \$</pre>
43. <input type="checkbox"/>	<p><b>SERVER A:</b></p> <p>Initialize switch 1A</p>	<pre>\$ sudo netConfig --file=/usr/TKLC/plat/etc/switch/xml/switch1A_SDS_4948E_E-F_init.xml</pre> <p>Processing file: /usr/TKLC/plat/etc/switch/xml/switch1A_SDS_4948E-F_init.xml</p> <p>\$</p> <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>
44. <input type="checkbox"/>	<p><b>SERVER A:</b></p> <p>Initialize switch 1B</p>	<pre>\$ sudo 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> <p>\$</p> <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
45. <input type="checkbox"/>	<b>SERVER A:</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  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=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  --- 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>
46. <input type="checkbox"/>	<b>SERVER A:</b>  Ping switch 1B's SVI (router interface) addresses to verify switch initialization.  <b>Note:</b> VIP addresses are not yet available.	<pre> \$ ping -c 15 169.254.1.2  PING 169.254.1.2 (169.254.1.2) 56(84) bytes of data.  64 bytes from 169.254.1.2: icmp_seq=9 ttl=255 time=2.76 ms 64 bytes from 169.254.1.2: icmp_seq=10 ttl=255 time=0.397 ms 64 bytes from 169.254.1.2: icmp_seq=11 ttl=255 time=0.448 ms 64 bytes from 169.254.1.2: icmp_seq=12 ttl=255 time=0.382 ms 64 bytes from 169.254.1.2: icmp_seq=13 ttl=255 time=0.426 ms 64 bytes from 169.254.1.2: icmp_seq=14 ttl=255 time=0.378 ms 64 bytes from 169.254.1.2: icmp_seq=15 ttl=255 time=0.431 ms  --- 169.254.1.2 ping statistics ---  15 packets transmitted, 7 received, +6 errors, 53% packet loss, time 14003ms  rtt min/avg/max/mdev = 0.378/0.747/2.769/0.825 ms, pipe 3  <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 MOS My Oracle Support.</b> </pre>

Step	Procedure	Result
47. <input type="checkbox"/>	<b>SERVER A:</b> Configure switch 1A	<pre>\$ sudo netConfig -- file=/usr/TKLC/plat/etc/switch/xml/Primary_switch1A_SDS_4948E_E- F_configure.xml</pre> <p>Processing file: /usr/TKLC/plat/etc/switch/xml/Primary_switch1A_SDS_4948E-F_configure.xml</p> <p>\$</p> <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>
48.	<b>SERVER A:</b> Configure switch 1B	<pre>\$ sudo netConfig -- file=/usr/TKLC/plat/etc/switch/xml/Primary_switch1B_SDS_4948E_E- F_configure.xml</pre> <p>Processing file: /usr/TKLC/plat/etc/switch/xml/Primary_switch1B_SDS_4948E-F_configure.xml</p> <p>\$</p> <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>
49. <input type="checkbox"/>	<b>SERVER A:</b> Undo the temporary changes.	<pre>\$ tpdProvd --client --noxml --ns=Xinetd stopXinetdService service tftp</pre> <p>Login on Remote: <b>platcfg</b></p> <p>Password of platcfg: <b>&lt;platcfg_password&gt;</b></p> <p><b>1</b></p>
50.	Close firewall.	<p>Close firewall with command:</p> <pre>sudo iptablesAdm delete --type=rule --protocol=ipv4 --domain=10platnet --table=filter -- chain=INPUT --persist=yes --match="-s 169.254.1.0/24 -p udp --dport 69 -j ACCEPT" -- location=1</pre>

Step	Procedure	Result
51. <input type="checkbox"/>	<b>SERVER A:</b>  Verify the switch is using the correct IOS image per platform version.	<pre>\$ sudo netConfig --device=switch1A listFirmware</pre> <p>Image: cat4500e-entservicesk9-mz.122-54.XO.bin</p> <pre>\$ sudo netConfig --device=switch1B listFirmware</pre> <p>Image: cat4500e-entservicesk9-mz.122-54.XO.bin</p>
52. <input type="checkbox"/>	<b>SERVER A:</b>  Execute the “ <b>service network restart</b> ” to restore SERVER A networking to original state.  Output similar to that shown on the right may be observed.	<pre>\$ sudo service network restart</pre> <p>[admusr@mrvsvc-sds-NO-a xml]\$ sudo service network restart</p> <pre>Shutting down interface bond0.2: [ OK ]</pre> <pre>Shutting down interface bond0.4: [ OK ]</pre> <pre>Shutting down interface bond0: [ OK ]</pre> <pre>Shutting down interface bond1: [ OK ]</pre> <pre>Shutting down loopback interface: [ OK ]</pre> <pre>Bringing up loopback interface: [ OK ]</pre> <pre>Bringing up interface bond0: [ OK ]</pre> <pre>Bringing up interface bond1: Determining if ip address 10.75.160.146 is already in use for device bond1...</pre> <p>[ OK ]</p> <pre>Bringing up interface bond0.2: Determining if ip address 169.254.1.11 is already in use for device bond0.2...</pre> <p>[ OK ]</p> <pre>Bringing up interface bond0.4: Determining if ip address 169.254.100.11 is already in use for device bond0.4...</pre> <p>[ OK ]</p> <pre>\$</pre>

Step	Procedure	Result
53. <input type="checkbox"/>	<b>SERVER A:</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>
54. <input type="checkbox"/>	<b>SERVER A:</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>
55. <input type="checkbox"/>	<b>SERVER A:</b>  Verify SSH capability from server A to switch 1A.	<pre> \$ ssh platcfg@169.254.1.1  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>
56. <input type="checkbox"/>	<b>SERVER A:</b>  Close SSH connection to switch 1A.	<pre> \$ quit  Connection to 169.254.1.1 closed. </pre>



Step	Procedure	Result
57. <input type="checkbox"/>	<b>SERVER A:</b>  Verify SSH capability from server A to switch 1B	<pre>\$ ssh platcfg@169.254.1.2</pre> <p>The authenticity of host '169.254.1.2 (169.254.1.2)' can't be established.</p> <p>RSA key fingerprint is 3a:1b:e0:92:99:73:9d:04:92:3f:72:37:c0:1c:a6:95.</p> <p>Are you sure you want to continue connecting (yes/no)? yes</p> <p>Warning: Permanently added '169.254.1.2' (RSA) to the list of known hosts.</p> <p>Password: &lt;switch_platform_password&gt;</p>
58. <input type="checkbox"/>	<b>SERVER A:</b>  Close SSH connection to switch 1A.	<pre>\$ quit</pre> <p>Connection to 169.254.1.2 closed.</p>
59. <input type="checkbox"/>	<b>SERVER B:</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</pre> <p>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</p>
60. <input type="checkbox"/>	<b>SERVER B:</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</pre> <p>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</p>



Step	Procedure	Result
61. <input type="checkbox"/>	<b>SERVER B:</b> Verify SSH capability from server B to switch 1A.	\$ <b>ssh platcfg@169.254.1.1</b> 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: <b>&lt;switch_platform_password&gt;</b>
62. <input type="checkbox"/>	<b>SERVER B:</b> Close SSH connection to switch 1A.	<b>switch1A&gt; quit</b> Connection to 169.254.1.1 closed.
63. <input type="checkbox"/>	<b>SERVER B:</b> Verify SSH capability from server B to switch 1B	\$ <b>ssh platcfg@169.254.1.2</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: <b>&lt;switch_platform_password&gt;</b>
64. <input type="checkbox"/>	<b>SERVER B:</b> Close SSH connection to switch 1B.	<b>switch1B&gt; quit</b> Connection to 169.254.1.2 closed.
65. <input type="checkbox"/>	<b>SERVER A:</b> <b>Run Appendix D-4 to backup switch configuration.</b>	
66. <input type="checkbox"/>	<b>SERVER A:</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
<b>THIS PROCEDURE HAS BEEN COMPLETED</b>		

## D-3. Cisco 4948E-F IOS Upgrade (All SDS NOAM Sites)

### Procedure 19. Cisco 4948E-F IOS Upgrade (SDS Sites)

Step	Procedure	Result
1. <input type="checkbox"/>	<b>SERVER A:</b> Access the <b>SERVER A</b> console.	Connect to the <b>SERVER A</b> console using one of the access methods described in <b>Section 2.3</b> .
2. <input type="checkbox"/>	<b>SERVER A:</b> 1) Access the command prompt.  2) Log into the HP DL380 server as the "admusr" user.	CentOS release 5.6 (Final) Kernel 2.6.18-238.19.1.el5prere15.0.0_72.20.0 on an x86_64  hostname1260476221 login: <b>admusr</b> Password: <b>&lt;admusr_password&gt;</b>
3. <input type="checkbox"/>	<b>SERVER A:</b> Output similar to that shown on the right will appear as the server access the command prompt.	<b>*** TRUNCATED OUTPUT ***</b>  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 [admusr@hostname1260476221 ~]\$
4. <input type="checkbox"/>	<b>SERVER A:</b> Verify IOS images on the system	\$ <b>ls /var/lib/tftpboot/</b> <b>&lt;IOS_image_file&gt;</b>  If the correct IOS version is displayed, skip forward to <b>Step 8</b> .

Procedure 19. Cisco 4948E-F IOS Upgrade (SDS Sites)

Step	Procedure	Result
<b>5.</b> <input type="checkbox"/>	<b>SERVER A:</b> Place <b>USB drive</b> containing the the <b>HP Misc Firmware</b> image with the correct 4948E-F IOS version into the <b>SERVER A</b> front panel USB port.	 <p>Figure 25 – HP DL380 GEN8: Front Panel (USB Port)</p>  <p>Figure 26 – HP DL380 GEN9: Front Panel (USB Port)</p>
<b>6.</b> <input type="checkbox"/>	<b>SERVER A:</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>
<b>7.</b>	Open firewall	Open firewall with command:  <pre>sudo iptablesAdm insert --type=rule --protocol=ipv4 -- domain=10platnet --table=filter --chain=INPUT --persist=yes -- match="-s 169.254.1.0/24 -p udp --dport 69 -j ACCEPT" --location=1</pre>
<b>8.</b> <input type="checkbox"/>	<b>SERVER A:</b> Prepare the system for IOS transfer.	<pre>\$ tpdProvdl --client --noxml --ns=Xinetd startXinetdService service tftp Login on Remote: platcfg Password of platcfg: &lt;platcfg_password&gt; 1 \$</pre>
<b>9.</b> <input type="checkbox"/>	<b>SERVER A:</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>Execute one of the following options:</p> <ul style="list-style-type: none"> <li>• If <b>bond0</b> &amp; <b>bond0.2</b> are both present, skip to <b>Step 11</b>.</li> <li>• If only <b>bond0</b> is present, continue with the following step.</li> </ul>

Procedure 19. Cisco 4948E-F IOS Upgrade (SDS Sites)

Step	Procedure	Result
10. <input type="checkbox"/>	<p><b>SERVER A:</b></p> <p><b>For GEN8:</b></p> <p>Create the bond0.2 and add interfaces eth01 &amp; eth11 to it.</p> <p><b>For GEN9:</b></p> <p>Create the bond0.2 and add interfaces eth01 &amp; eth02 to it.</p>	<p><u>For GEN8:</u></p> <pre>\$ sudo netAdm delete --device=bond0</pre> <pre>\$ sudo netAdm add --device=bond0 --onboot=yes --type=Bonding --mode=active-backup --miimon=100 --bootproto=none</pre> <pre>\$ sudo netAdm set --device=eth01 --bootproto=none --type=Ethernet --master=bond0 --slave=yes --onboot=yes</pre> <pre>\$ sudo netAdm set --device=eth11 --bootproto=none --type=Ethernet --master=bond0 --slave=yes --onboot=yes</pre> <p>Add the &lt;SERVER A_mgmtVLAN_IP_address&gt; to bond0.2</p> <pre>\$ sudo netAdm add --device=bond0.2 --address=169.254.1.11 --netmask=255.255.255.0 --onboot=yes</pre> <p><u>For GEN9:</u></p> <pre>\$ sudo netAdm delete --device=bond0</pre> <pre>\$ sudo netAdm add --device=bond0 --onboot=yes --type=Bonding --mode=active-backup --miimon=100 --bootproto=none</pre> <pre>\$ sudo netAdm set --device=eth01 --bootproto=none --type=Ethernet --master=bond0 --slave=yes --onboot=yes</pre> <pre>\$ sudo netAdm set --device=eth02 --bootproto=none --type=Ethernet --master=bond0 --slave=yes --onboot=yes</pre> <p>Add the &lt;SERVER A_mgmtVLAN_IP_address&gt; to bond0.2</p> <pre>\$ sudo netAdm add --device=bond0.2 --address=169.254.1.11 --netmask=255.255.255.0 --onboot=yes</pre>

## Procedure 19. Cisco 4948E-F IOS Upgrade (SDS Sites)

Step	Procedure	Result
<b>11.</b> <input type="checkbox"/>	<b>SERVER A:</b>  Disable the bond0.2 interface to switch1B and verify the bond0.2 IP address.	<p>On SERVER A ensure that the interface connected to switch1A is the only interface available and obtain the IP address of &lt;SERVER A_mgmtVLAN_Interface&gt; by performing the following commands:</p> <p>For GEN8:</p> <pre>\$ sudo ifdown eth11 \$ sudo ifup eth01 \$ sudo 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;SERVER A_mgmtVLAN_ip_address&gt;.</p> <p>For GEN9:</p> <pre>\$ sudo ifdown eth02 \$ sudo ifup eth01 \$ sudo 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;SERVER A_mgmtVLAN_ip_address&gt;.</p>
<b>12.</b> <input type="checkbox"/>	<b>SERVER A:</b>  Connect to switch1A console	<pre>console -M &lt;SERVER A_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>

Procedure 19. Cisco 4948E-F IOS Upgrade (SDS Sites)

Step	Procedure	Result
13. <input type="checkbox"/>	<b>switch1A:</b> Enter enable mode	Switch> <b>enable</b> Switch#
14. <input type="checkbox"/>	<b>switch1A:</b> Configure switch port with this sequence of commands	Switch# <b>conf t</b> Switch(config)# <b>vlan 2</b> Switch(config)# <b>int vlan 2</b> Switch(config-if)# <b>ip address 169.254.1.1 255.255.255.0</b> Switch(config-if)# <b>no shut</b> Switch(config-if)# <b>int gi1/5</b> Switch(config-if)# <b>switchport mode trunk</b> Switch(config-if)# <b>spanning-tree portfast trunk</b> Switch(config-if)# <b>end</b>
15. <input type="checkbox"/>	<b>switch1A:</b> Test connectivity	<b>ping &lt;SERVER A_mgmtVLAN_ip_address&gt;</b>  Switch# <b>ping 169.254.1.11</b> Type escape sequence to abort. Sending 5, 100-byte ICMP Echos to <SERVER A_mgmtVLAN_ip_address>, timeout is 2 seconds: !!!!!! Success rate is 100 percent (5/5), round trip min/avg/max = 1/1/4 ms  <i>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.</i>
16. <input type="checkbox"/>	<b>switch1A:</b> Upload IOS image to switch	Switch# <b>copy tftp: bootflash:</b> Address or name of remote host []? <b>&lt;SERVER A_mgmtVLAN_ip_address&gt;</b>  Source filename []? <b>&lt;New_IOS_image_file&gt;</b>  Destination filename [ <b>&lt;New_IOS_image_file&gt;</b> ]? <b>&lt;ENTER&gt;</b>  <b>Press &lt;Enter&gt; here, you do NOT want to change the filename</b>  Accessing tftp://<SERVER A_mgmtVLAN_ip address>/<IOS_image_file>... Loading <IOS_image_file> from <SERVER A_mgmtVLAN_ip_address> (via Vlan2): !!! !! [OK - 45606 bytes]  45606 bytes copied in 3.240 secs (140759 bytes/sec)
17. <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 2 -rwx 17779888 May 11 2011 02:25:23 -05:00 cat4500-ipbasek9-mz.122-54.WO.bin 60817408 bytes total (43037392 bytes free)  <b>NOTE:</b> 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 <b>&lt;OLD_IOS_image&gt;</b>



Procedure 19. Cisco 4948E-F IOS Upgrade (SDS Sites)

Step	Procedure	Result
18. <input type="checkbox"/>	<b>switch1A:</b> Remove old IOS image	Switch# <b>delete /force /recursive bootflash:&lt;OLD_IOS_image&gt;</b> Switch#
19. <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)  <b>NOTE:</b> Here, you should see only the IOS version you uploaded.
20. <input type="checkbox"/>	<b>Switch1A:</b> Reset switch back to factory defaults by deleting the VLANs.	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 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#
21. <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>  <b>! WARNING!: It is extremely important to answer "no" to the above "Save?" option.</b>
22. <input type="checkbox"/>	<b>switch1A:</b> After the reload, enter <i>enable</i> mode.	Switch> <b>enable</b> Switch#
23. <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>  <b>NOTE:</b> 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.

## Procedure 19. Cisco 4948E-F IOS Upgrade (SDS Sites)

Step	Procedure	Result
24. <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)  <b>NOTE:</b> Here, you should see only the IOS version you uploaded.
25. <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
26. <input type="checkbox"/>	<b>SERVER A:</b> Disable the bond0.2 interface to switch1A.	On SERVER A ensure that the interface of the server connected to switch1B is the only interface up and obtain the IP address of <b>&lt;SERVER A_mgmtInterface&gt;</b> by performing the following commands:  For GEN8: \$ <b>sudo ifup eth11</b> \$ <b>sudo ifdown eth01</b>  For GEN9: \$ <b>ifup eth02</b> \$ <b>ifdown eth01</b>  <b>NOTE:</b> The command output should contain the IP address of the variable <b>&lt;SERVER A_mgmtVLAN_ip_address&gt;</b> .
27. <input type="checkbox"/>	<b>SERVER A:</b> Connect to switch1B console	<b>console -M &lt;SERVER A_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>
28. <input type="checkbox"/>	<b>switch1B:</b> Enter enable mode	Switch> <b>enable</b> Switch#
29. <input type="checkbox"/>	<b>switch1B:</b> Configure switch port with this sequence of commands	Switch# <b>conf t</b> Switch(config)# <b>vlan 2</b> Switch(config)# <b>int vlan 2</b> Switch(config-if)# <b>ip address 169.254.1.2 255.255.255.0</b> Switch(config-if)# <b>no shut</b> Switch(config-if)# <b>int gil/5</b> Switch(config-if)# <b>switchport mode trunk</b> Switch(config-if)# <b>spanning-tree portfast trunk</b> Switch(config-if)# <b>end</b>

## Procedure 19. Cisco 4948E-F IOS Upgrade (SDS Sites)

Step	Procedure	Result
30. <input type="checkbox"/>	switch1B: Test connectivity	<p><b>ping &lt;management_SERVER A_mgmtVLAN_ip_address&gt;</b></p> <pre>Switch# ping 169.254.1.11 Type escape sequence to abort. Sending 5, 100-byte ICMP Echos to &lt;SERVER A_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><b>NOTE:</b> 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>
31. <input type="checkbox"/>	switch1B: Upload IOS image to switch	<pre>Switch# copy tftp: bootflash: Address or name of remote host []? &lt;management_SERVER A_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;management_SERVER B_mgmtVLAN_ip address&gt;/&lt;IOS_image_file&gt;... Loading &lt;IOS_image_file&gt; from &lt;SERVER A_mgmtVLAN_ip_address&gt; (via Vlan2): !!! !! [OK - 45606 bytes]  45606 bytes copied in 3.240 secs (140759 bytes/sec)</pre>
32. <input type="checkbox"/>	switch1B: Locate old IOS image to be removed	<pre>Switch# dir bootflash: Directory of bootflash:/  1  -rw-    17779888  May 11 2011 02:25:23 -05:00  cat4500- ent servicesk9-mz.122-54.WO.bin  2  -rw-    17779888  May 11 2011 02:25:23 -05:00  cat4500-ipbasek9- mz.122-54.WO.bin 60817408 bytes total (43037392 bytes free)</pre> <p><b>NOTE:</b> 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>
33. <input type="checkbox"/>	switch1B: Remove old IOS image	<pre>Switch# delete /force /recursive bootflash:&lt;OLD_IOS_image&gt; Switch#</pre>
34. <input type="checkbox"/>	switch1B: Locate old IOS image to be removed	<pre>Switch# dir bootflash: Directory of bootflash:/  1  -rw-    17779888  May 11 2011 02:25:23 -05:00  cat4500- ent servicesk9-mz.122-54.WO.bin 60817408 bytes total (43037392 bytes free)</pre> <p>Here, you should see only the IOS version you uploaded.</p>

Procedure 19. Cisco 4948E-F IOS Upgrade (SDS Sites)

Step	Procedure	Result
35. <input type="checkbox"/>	<b>Switch1B:</b>  Reset switch back to factory defaults by deleting the VLANs.	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 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#
36. <input type="checkbox"/>	<b>switch1B:</b>  Reload the switch	Switch# <b>reload</b> Proceed with reload? [confirm] <b>&lt;ENTER&gt;</b> System config modified. save? [ <b>yes/no</b> ]: <b>no</b>  ! WARNING !: It is extremely important to answer "no" to the above "Save?" option.  Proceed with reload? [confirm] <b>&lt;ENTER&gt;</b>
37. <input type="checkbox"/>	<b>switch1B:</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>
38. <input type="checkbox"/>	<b>switch1B:</b>  Enter enable mode	Switch> <b>enable</b> Switch#
39. <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.
40. <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: Ctrl-E, C, period</b>

**Procedure 19. Cisco 4948E-F IOS Upgrade (SDS Sites)**

Step	Procedure	Result
41. <div><input type="checkbox"/></div>	<b>SERVER A:</b>  Re-enable the bond0.2 interface to switch1A.	On SERVER A ensure that the both bond0.2 interfaces are up:  For GEN8:  \$ <b>sudo ifup eth11</b> \$ <b>sudo ifup eth01</b>  For GEN9:  \$ <b>sudo ifup eth02</b> \$ <b>sudo ifup eth01</b>
42.	Close firewall	<b>\$ sudo iptablesAdm delete --type=rule --protocol=ipv4 --domain=10platnet --table=filter --chain=INPUT --persist=yes --match="-s 169.254.1.0/24 -p udp --dport 69 -j ACCEPT" --location=1</b>
43. <div><input type="checkbox"/></div>	<b>SERVER A:</b>  Stop the “tftp” service.	<b>\$ tpdProvd --client --noxml --ns=Xinetd stopXinetdService service tftp</b>  Login on Remote: <b>platcfg</b>  Password of platcfg: <b>&lt;platcfg_password&gt;</b>  <b>1</b>
44.	Return to Appendix D-2	
THIS PROCEDURE HAS BEEN COMPLETED		

**D-4. Cisco 4948E-F Configuration Backup (All SDS NOAM 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

Procedure 20. Cisco 4948E-F Backup (SDS Sites)

Step	Procedure	Result
1. <input type="checkbox"/>	<b>SERVER A:</b> Access the <b>SERVER A</b> console.	Connect to the <b>SERVER A</b> console using one of the access methods described in <b>Section 2.3</b> .
2. <input type="checkbox"/>	<b>SERVER A:</b> Log into server as the "admusr" user.	login: <b>admusr</b> Using keyboard-interactive authentication. Password: <b>&lt;admusr_password&gt;</b>
3. <input type="checkbox"/>	<b>SERVER A:</b> Verify hostname of the switch1A	<pre>\$ sudo netConfig --device=&lt;switch_name&gt; getHostname</pre> Hostname: switch1A  <b>Note:</b> The value beside "Hostname:" should be the same as the <switch_name> variable
4. <input type="checkbox"/>	<b>SERVER A:</b> Verify SSH service	<pre>\$ sudo netConfig --repo showService name=ssh_service</pre> Service Name: ssh_service Type: ssh Host: 169.254.1.11 Options: password: 615EBD88232A2EFD0080AC990393083D user: admusr
5. <input type="checkbox"/>	<b>SERVER A:</b> Run backup command	<pre>\$ sudo netConfig --device=&lt;switch_name&gt; backupConfiguration service=ssh_service filename=&lt;switch_name&gt;-backup</pre>
6. <input type="checkbox"/>	<b>SERVER A:</b> Verify backup and inspect its contents to ensure they reflect the configured values	<pre>\$ ls /home/admusr/&lt;switch_name&gt;-backup*</pre> Example Output: /home/admusr/switch1A-backup /home/admusr/switch1A-backup.info  \$ \$ <b>cat /home/admusr/&lt;switch_name&gt;-backup</b>  Verify that the backup information looks correct.
7. <input type="checkbox"/>	<b>Repeat steps 3-6 for switch1B.</b>	
8. <input type="checkbox"/>	<b>SERVER A:</b> Copy the switch1A and switch1B backup files to the permanent backup storage directory	<pre>\$ sudo cp -p /home/admusr/switch*-backup* /usr/TKLC/plat/etc/switch/backup/  ls -al /usr/TKLC/plat/etc/switch/backup/ [admusr@hostnameecf48ffa1d812 xml]\$ ls -al</pre> -rw----- 1 admusr admgrp 7368 Mar 1 10:37 switch1A-backup -rw----- 1 admusr admgrp 88 Mar 1 10:37 switch1A-backup.info -rw----- 1 admusr admgrp 7368 Mar 1 10:37 switch1B-backup -rw----- 1 admusr admgrp 88 Mar 1 10:37 switch1B-backup.info

Procedure 20. Cisco 4948E-F Backup (SDS Sites)


Step	Procedure	Result
9. <input type="checkbox"/>	<b>SERVER A:</b>  Delete switch1A and switch1B backup files from the admusr directory	\$ <code>sudo rm /home/admusr/*backup*</code>
THIS PROCEDURE HAS BEEN COMPLETED		

## Appendix E. Creating an XML File for Installing 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 (NOAM & SOAM). The format for each of these XML files is identical. Below is an example of the **SDS\_NO\_NE.xml** file.

	<ul style="list-style-type: none"> <li>THE HIGHLIGHTED VALUES IN EACH TABLE MUST BE UPDATED BY THE USER FOR EACH NETWORK ELEMENT (SITE).</li> </ul>
--	---

**NOTE\_1:** 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.

**NOTE\_2:** The **MGMT\_VLAN** network should only be implemented when (2) dedicated **Aggregation Switches** (typically Cisco 4948E-F) are used exclusively for the **SDS NOAM** and **Query Server (RMS) IMI network**. The **MGMT\_VLAN** network should be **removed** from the Network Element XML file when SDS Aggregation Switches are not part of the implementation.

**NOTE\_3:** When installing **IPv6** for the **XMI** or **IMI** networks, please note that the **MGMT\_VLAN** (if implemented ) should remain in the **IPv4** format only.

**NOTE\_4:** When creating the SDS **SOAM NE XML** file, the user should be aware that the **XMI** and **IMI** networks subnets chosen **MUST EXACTLY MATCH** those used by the associated **DSR NE** within the same SOAM enclosure.



Table 4 – SDS Network Element Configuration File (IPv4)

XML File Text	Description
<?xml version="1.0"?>	
<networkelement>	
<name> <b>NO_RLGHNC</b> </name>	[Range = 1-32 character string] – Must be alphanumeric or underscore.
<networks>	
<network>	
<name> <b>MGMNT_VLAN</b> </name>	Name of customer management network. <b>Note:</b> Do NOT change this name.
<vlanId> <b>2</b> </vlanId>	[Range = 2-4094.] – The VLAN ID to use for this VLAN.
<ip> <b>169.254.1.0</b> </ip>	[Range = A valid IP address] – The network address of this VLAN
<mask> <b>255.255.255.0</b> </mask>	Subnetting to apply to servers within this VLAN
</network>	
<network>	
<name> <b>XMI</b> </name>	Name of customer external network. <b>Note:</b> Do NOT change this name.
<vlanId> <b>3</b> </vlanId>	[Range = 2-4094.] – The VLAN ID to use for this VLAN.
<ip> <b>10.250.55.0</b> </ip>	[Range = A valid IP address] – This network must be the same as the associated DSR NE XMI network subnet within the same SOAM enclosure.
<mask> <b>255.255.255.0</b> </mask>	Must be the same as the associated DSR NE XMI netmask within the same SOAM enclosure.
<gateway> <b>10.250.55.1</b> </gateway>	[Range = A valid IP address] – This gateway address must be the same as the associated DSR NE XMI network gateway within the same SOAM enclosure.
<isDefault>true</isDefault>	[Range = true/false] – true if this is the network with the default gateway.
</network>	
<network>	
<name> <b>IMI</b> </name>	Name of customer internal network. <b>Note:</b> Do NOT change this name.
<vlanId> <b>4</b> </vlanId>	[Range = 2-4094.] – The VLAN ID to use for this VLAN.
<ip> <b>169.254.100.0</b> </ip>	[Range = A valid IP address] – This network must be the same as the DSR IMI network subnet within the SOAM enclosure.
<mask> <b>255.255.255.0</b> </mask>	Must be the same as the DSR IMI netmask within the SOAM enclosure.
<nonRoutable> <b>true</b> </nonRoutable>	[Range = true / false] – Determines whether or not the IMI network subnet is treated as a routable network.
</network>	
</networks>	
</networkelement>	

Table 5 – SDS Network Element Configuration File (IPv6)

XML File Text	Description
<?xml version="1.0"?>	
<networkelement>	
<name> <b>NO_RLGHNC</b> </name>	[Range = 1-32 character string] – Must be alphanumeric or underscore.
<networks>	
<network>	
<name> <b>MGMNT_VLAN</b> </name>	Name of customer management network. <b>Note:</b> Do NOT change this name.
<vlanId> <b>2</b> </vlanId>	[Range = 2-4094.] – The VLAN ID to use for this VLAN.
<ip> <b>169.254.1.0</b> </ip>	[Range = A valid IP address] – The network address of this VLAN
<mask> <b>255.255.255.0</b> </mask>	Subnetting to apply to servers within this VLAN
</network>	
<network>	
<name> <b>XMI</b> </name>	Name of customer external network. <b>Note:</b> Do NOT change this name.
<vlanId> <b>3</b> </vlanId>	[Range = 2-4094.] – The VLAN ID to use for this VLAN.
<ip> <b>2001:db8:0:241::0</b> </ip>	[Range = A valid IP address] – This network must be the same as the associated DSR NE XMI network subnet within the same SOAM enclosure.
<mask> <b>/64</b> </mask>	Must be the same as the associated DSR NE XMI netmask within the same SOAM enclosure.
<gateway> <b>2001:db8:0:241::1</b> </gateway>	[Range = A valid IP address] – This gateway address must be the same as the associated DSR NE XMI network gateway within the same SOAM enclosure.
<isDefault>true</isDefault>	[Range = true/false] – true if this is the network with the default gateway.
</network>	
<network>	
<name> <b>IMI</b> </name>	Name of customer internal network. <b>Note:</b> Do NOT change this name.
<vlanId> <b>4</b> </vlanId>	[Range = 2-4094.] – The VLAN ID to use for this VLAN.
<ip> <b>fd01::0</b> </ip>	[Range = A valid IP address] – This network must be the same as the associated DSR NE XMI network subnet within the same SOAM enclosure.
<mask> <b>/64</b> </mask>	Must be the same as the associated DSR NE XMI netmask within the same SOAM enclosure.
<nonRoutable> <b>true</b> </nonRoutable>	[Range = true / false] – Determines whether or not the IMI network subnet is treated as a routable network.
</network>	
</networks>	
</networkelement>	

## Appendix F. NetBackup Client Installation

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

### Procedure 21. NetBackup Client Installation

<b>Step</b>	<p>This procedure will download and install NetBackup Client software on the server.</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 ACCESSING MY ORACLE SUPPORT (MOS). AND ASK FOR ASSISTANCE.</p>	
<b>1.</b> <input type="checkbox"/>	<b>Install Netbackup Client Software</b>	<p>Execute Section 3.10.5 <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 (Primary SDS and DR SDS servers only).</p> <p><b>NOTE:</b> Location of the bpstart_notify and bpend_notify scripts is required for the execution of this step. These scripts are located as follows:</p> <p><a href="#">/usr/TKLC/appworks/sbin/bpstart_notify</a>  <a href="#">/usr/TKLC/appworks/sbin/bpend_notify</a></p>
<b>2.</b> <input type="checkbox"/>	<b>Link notify scripts to well-known path stated in the above step</b>	<p>Link the notify scripts to well-known path stated in the above step</p> <pre>ln -s &lt;path&gt;/bpstart_notify /usr/opencv/netbackup/bin/bpstart_notify</pre> <pre>ln -s &lt;path&gt;/bpend_notify /usr/opencv/netbackup/bin/bpend_notify</pre>
<b>3.</b> <input type="checkbox"/>	<b>Verify if the Netbackup port 1556 is opened for IPv4 protocol</b>	<p>Verify if the NetBackup port 1556 is opened on IPv4 protocol:</p> <pre>iptables -L 60sds-INPUT -n   grep 1556</pre> <p>If there is no output, then enable the port 1556 for NetBackup on IPv4:</p> <pre>iptablesAdm append --type=rule --protocol=ipv4 --domain=60sds --table=filter --chain=INPUT --match='-m state --state NEW -m tcp -p tcp --dport 1556 -j ACCEPT' --persist=yes</pre>
<b>4.</b> <input type="checkbox"/>	<b>Verify if the Netbackup port 1556 is opened for IPv6 protocol</b>	<p>Verify if the NetBackup port 1556 is opened on IPv6 protocol:</p> <pre>ip6tables -L 60sds-INPUT -n   grep 1556</pre> <p>If there is no output, then enable the port 1556 for NetBackup on IPv6 protocol:</p> <pre>iptablesAdm append --type=rule --protocol=ipv6 --domain=60sds --table=filter --chain=INPUT --match='-m state --state NEW -m tcp -p tcp --dport 1556 -j ACCEPT' --persist=yes</pre>

## Appendix G. 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 6 – List of Selected Time Zone Values**

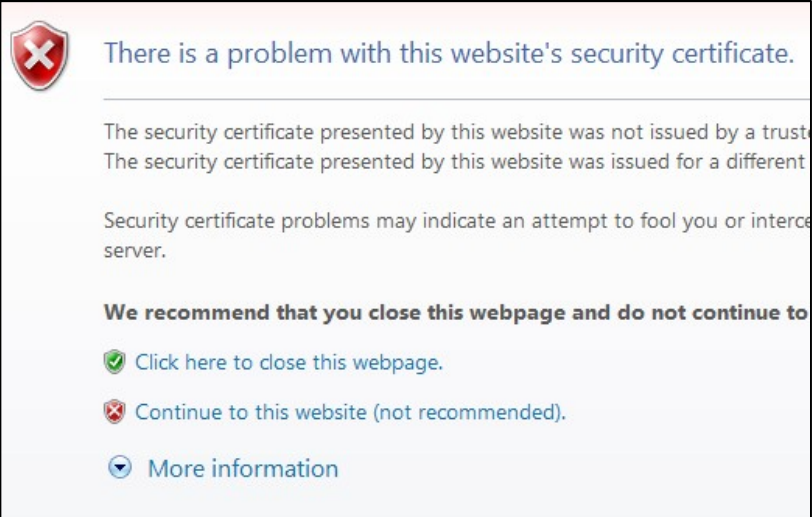
Time Zone Value	Description	Universal Time Code (UTC) Offset
America/New_York	Eastern Time	UTC-05
America/Chicago	Central Time	UTC-06
America/Denver	Mountain Time	UTC-07
America/Phoenix	Mountain Standard Time — Arizona	UTC-07
America/Los Angeles	Pacific Time	UTC-08
America/Anchorage	Alaska Time	UTC-09
Pacific/Honolulu	Hawaii	UTC-10
Africa/Johannesburg		UTC+02
America/Mexico City	Central Time — most locations	UTC-06
Africa/Monrovia		UTC+00
Asia/Tokyo		UTC+09
America/Jamaica		UTC-05
Europe/Rome		UTC+01
Asia/Hong Kong		UTC+08
Pacific/Guam		UTC+10
Europe/Athens		UTC+02
Europe/London		UTC+00
Europe/Paris		UTC+01
Europe/Madrid	mainland	UTC+01
Africa/Cairo		UTC+02
Europe/Copenhagen		UTC+01
Europe/Berlin		UTC+01
Europe/Prague		UTC+01
America/Vancouver	Pacific Time — west British Columbia	UTC-08
America/Edmonton	Mountain Time — Alberta, east British Columbia & west Saskatchewan	UTC-07
America/Toronto	Eastern Time — Ontario — most locations	UTC-05
America/Montreal	Eastern Time — Quebec — most locations	UTC-05
America/Sao Paulo	South & Southeast Brazil	UTC-03
Europe/Brussels		UTC+01
Australia/Perth	Western Australia — most locations	UTC+08
Australia/Sydney	New South Wales — most locations	UTC+10
Asia/Seoul		UTC+09

Time Zone Value	Description	Universal Time Code (UTC) Offset
Africa/Lagos		UTC+01
Europe/Warsaw		UTC+01
America/Puerto Rico		UTC-04
Europe/Moscow	Moscow+00 — west Russia	UTC+04
Asia/Manila		UTC+08
Atlantic/Reykjavik		UTC+00
Asia/Jerusalem		UTC+02

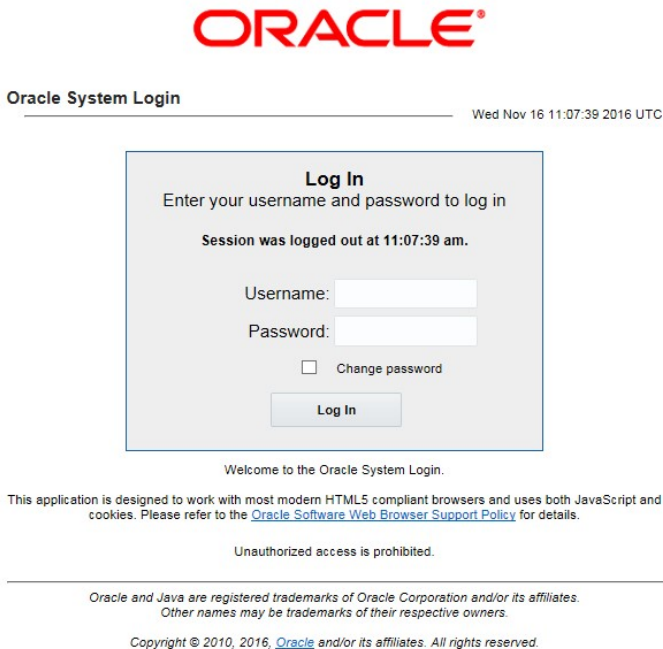
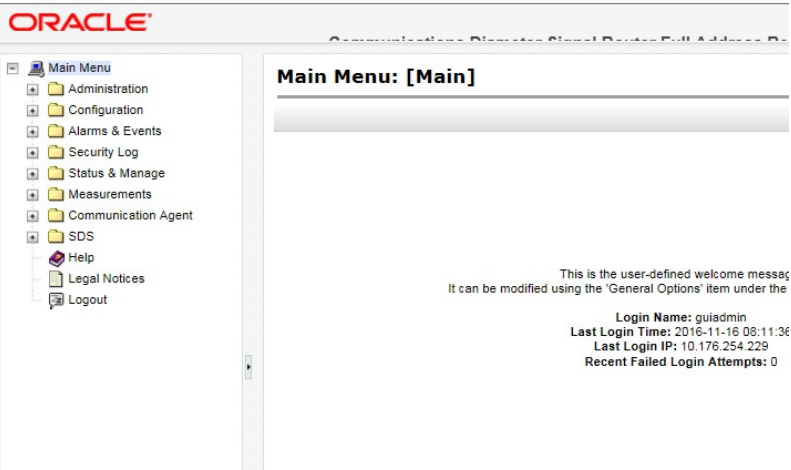
## Appendix H. Accepting Installation Through SDS NOAM GUI

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


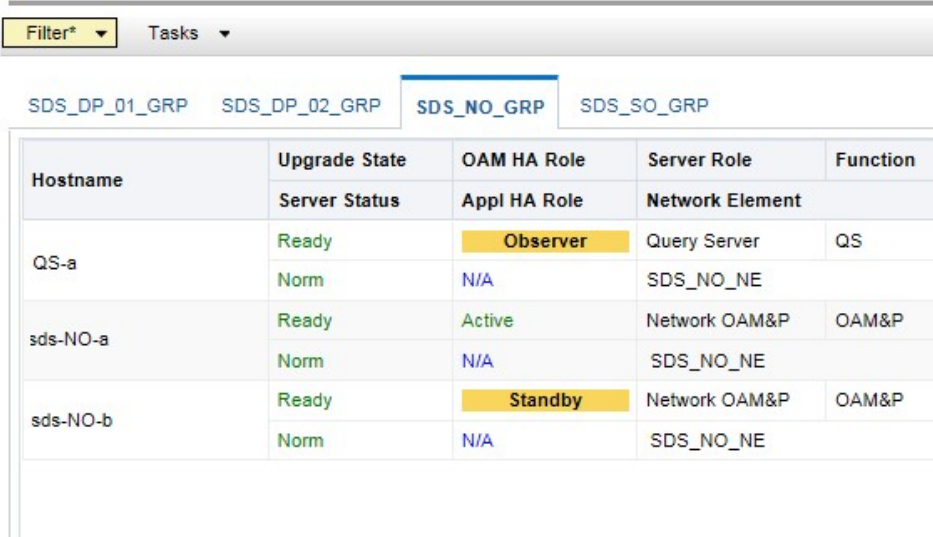



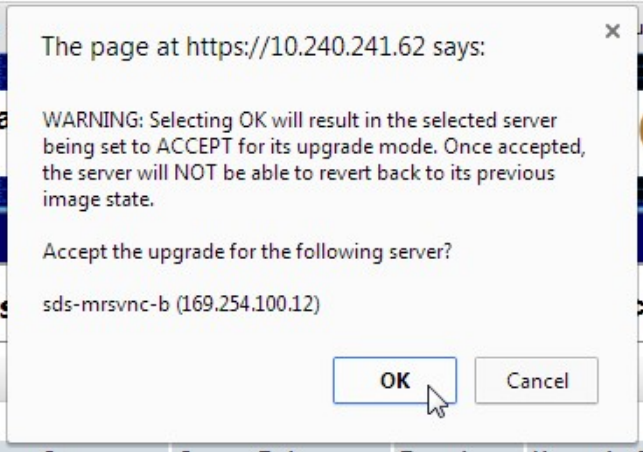
### Procedure 22. Accepting Installation Through SDS NOAM GUI

Step	Procedure	Result
1. <input type="checkbox"/>	<p><b>Primary 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></p> <p><b>NOTE:</b> <i>If presented with the “security certificate” warning screen shown to the right, choose the following option: “Continue to this website (not recommended)”.</i></p>	

**Procedure 22. Accepting Installation Through SDS NOAM GUI**

Step	Procedure	Result
<p>2.</p> <div></div>	<p><b>Primary 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> <div></div>	<p><b>Primary SDS VIP:</b></p> <p>The user should be presented the SDS Main Menu as shown on the right.</p>	



**Procedure 22. Accepting Installation Through SDS NOAM GUI**

Step	Procedure	Result
4. 	<p><b>Primary 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 left-click multiple rows.</p>	<p><b>Main Menu: Administration -&gt; Software Management -&gt; Upgrade</b></p> 
5. 	<p><b>Primary SDS VIP:</b></p> <p>Using the cursor <b>left-click</b>, select the “Accept” dialogue button.</p>	
6. 	<p><b>Primary SDS VIP:</b></p> <p>The user is presented with a dialogue box stating that the “Accept Upgrade” action is <b>irreversible</b> and locks the Server on the current software release (i.e. Backout to the previous release is no longer allowed).</p> <p>If the user wishes to continue, use the cursor <b>left-click</b> to select the “OK” dialogue button.</p>	
<b>THIS PROCEDURE HAS BEEN COMPLETED</b>		

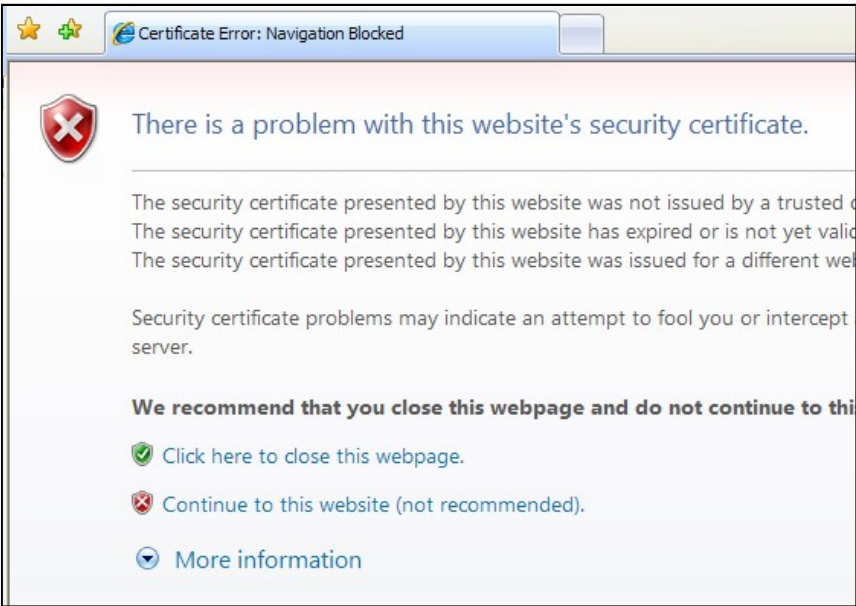
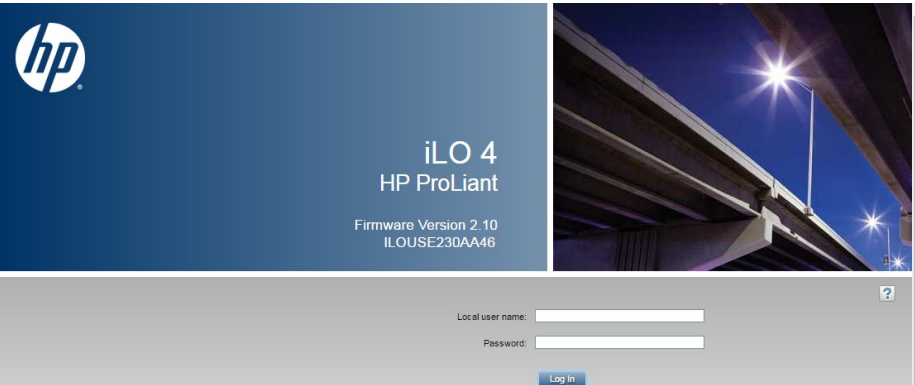


## Appendix I. Disable Hyperthreading for GEN8 and GEN9 (DP Only)


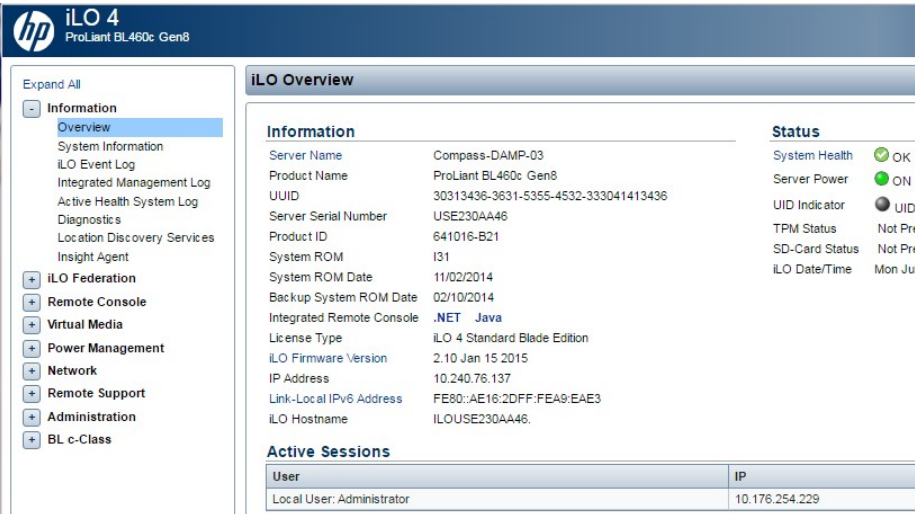

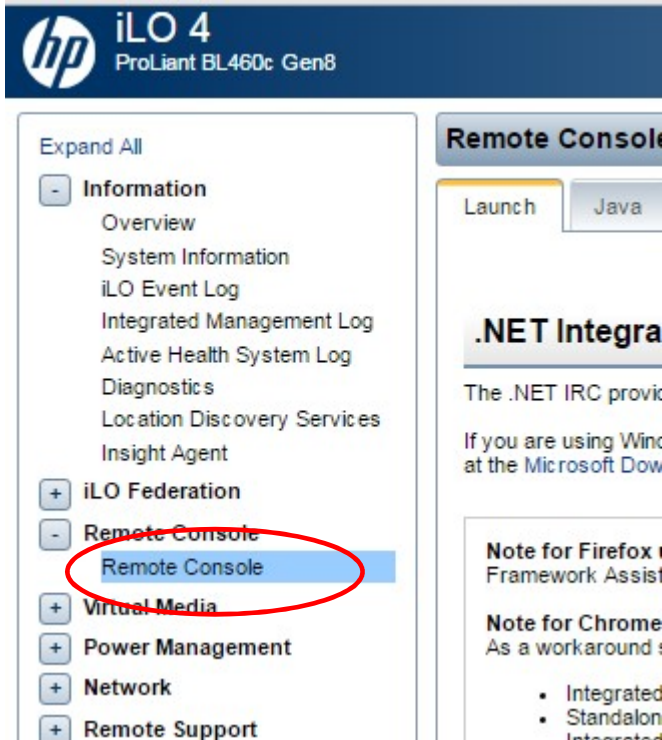
### Procedure 23. GEN8: Disable Hyperthreading (DP Only)

Step	Procedure	Result
1. <input type="checkbox"/>	<b>DP Server XMI IP (SSH):</b>  Access the command prompt via DP blade's <b>XMI IP</b> address and log into the server as the "admusr" user.	login: <b>admusr</b> Password: <b>&lt;admusr_password&gt;</b>
2. <input type="checkbox"/>	<b>DP Server XMI IP (SSH):</b>  Execute "hpsasmcli" command to determine status of hyperthreading for the DP blade.	<pre>\$ sudo hpsasmcli -s "show ht"</pre> Processor hyper-threading is currently enabled.  <b>NOTE:</b> Output returned may state "enabled" or "disabled".
3. <input type="checkbox"/>	 <ul style="list-style-type: none"> <li>If output from <b>Step 2</b> shows that hyperthreading is currently "enabled", then continue with <b>Step 4</b> of this procedure.</li> <li>If output from <b>Step 2</b> shows that hyperthreading is currently "disabled", then <b>STOP</b> and restart <b>Appendix Procedure 23</b> for the next installed <b>DP</b> blade.</li> </ul>	
4. <input type="checkbox"/>	Launch the Internet Explorer web browser and connect to the <b>DP-iLO</b> GUI interface.  <b>NOTE:</b> Always use <b>https://</b> for iLO GUI access.	  <b>!!! WARNING !!!</b> <b>Verify the DP-iLO IP address before proceeding. The user must login using the DP-iLO IP address only.</b>


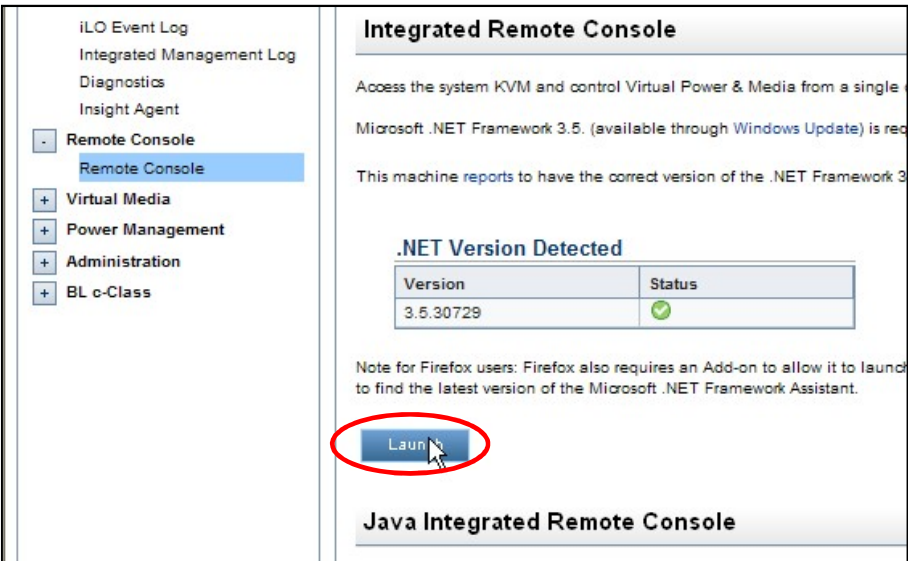

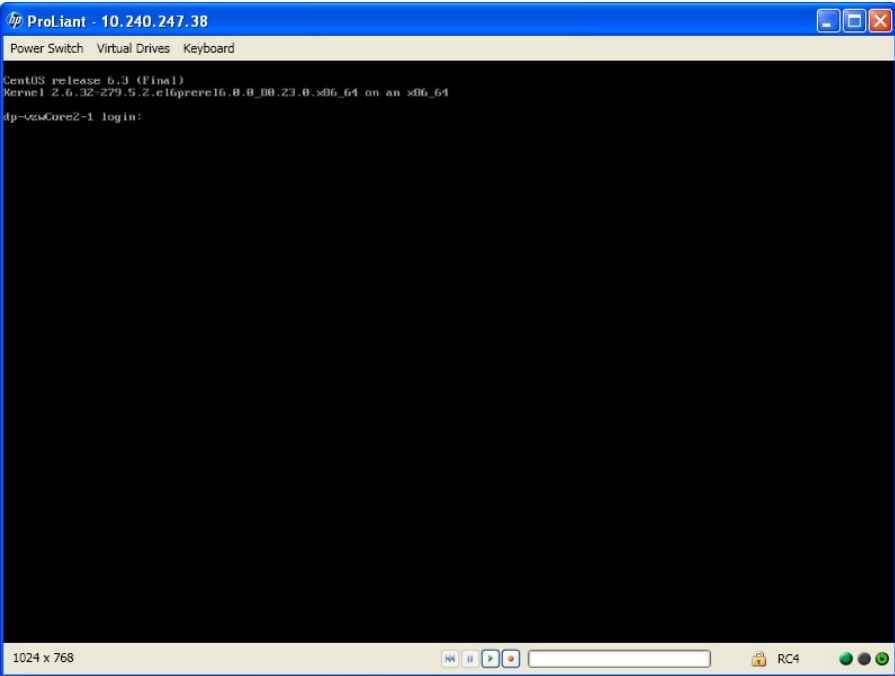
**Procedure 23. GEN8: Disable Hyerthreading (DP Only)**

Step	Procedure	Result
<b>5.</b> <input type="checkbox"/>	<p>The web browser will display a warning message regarding the Security Certificate.</p> <p><b>NOTE:</b> <i>If presented with the “security certificate” warning screen shown to the right, choose the following option: “Continue to this website (not recommended)”.</i></p>	
<b>6.</b> <input type="checkbox"/>	<p>Login to the iLO console as “Administrator” and enter the configured password.</p>	

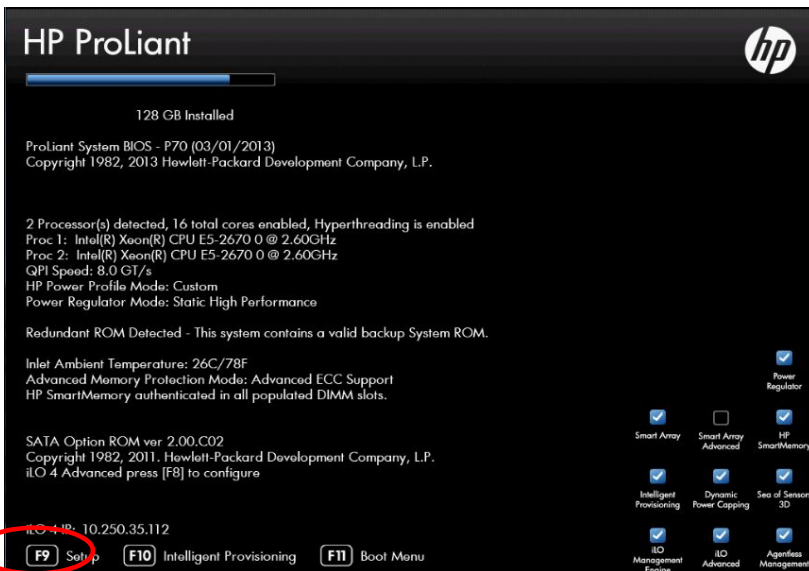
Procedure 23. GEN8: Disable Hyerthreading (DP Only)

Step	Procedure	Result
7. 	<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>The screenshot shows the iLO 4 ProLiant BL460c Gen8 admin GUI. On the left, the 'Expand All' menu is visible, with 'Remote Console' selected. The main content area displays the 'iLO Overview' page, which includes a table of system information (Server Name, Product Name, UUID, etc.) and a 'Status' section showing various system health indicators like System Health (OK), Server Power (ON), and TPM Status (Not Pre).</p>
8. 	<p>The Remote Console Information GUI is displayed</p> <p>Click on the “<b>Remote Console</b>” menu option</p>	 <p>The screenshot shows the iLO 4 ProLiant BL460c Gen8 admin GUI. The 'Remote Console' menu option in the left-hand navigation menu is highlighted with a red circle. The main content area shows the 'Remote Console' page, which includes a 'Launch' button and a 'Java' button. Below these buttons, there is a section for '.NET Integra' and a 'Note for Firefox'.</p>

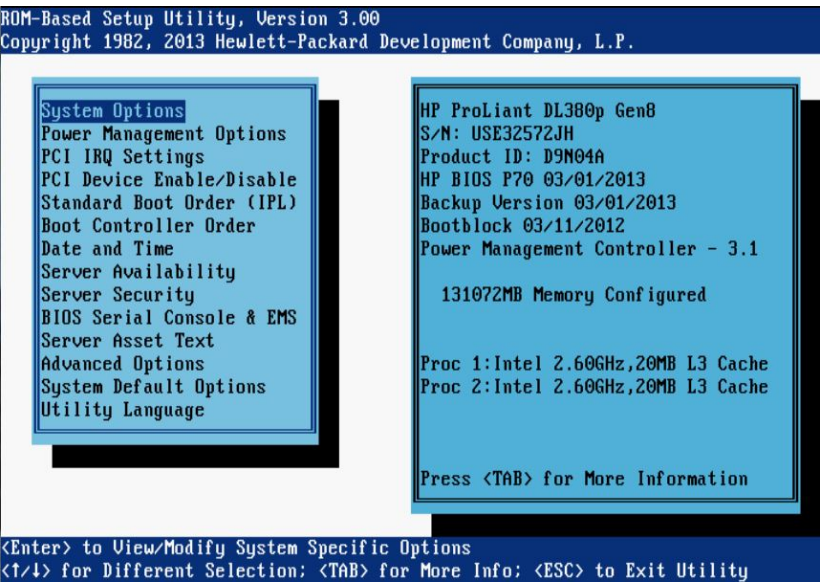
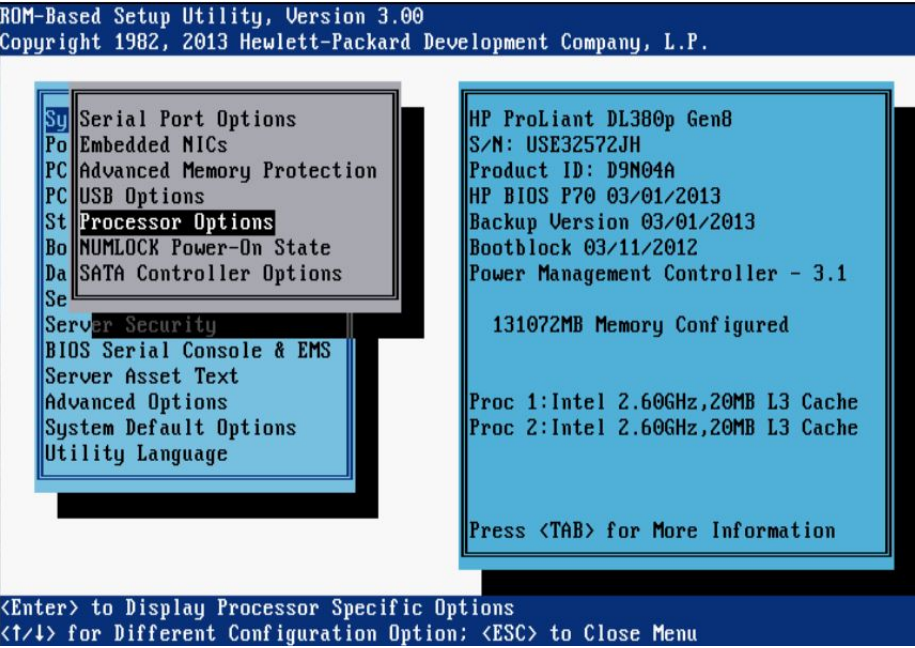
**Procedure 23. GEN8: Disable Hyerthreading (DP Only)**

Step	Procedure	Result
9. 	<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>	
10. 	<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>	
11.	<p><b>DP Server XMI IP (SSH):</b></p> <p>Access the command prompt via DP blade's <b>XMI IP</b> address and log into the server as the “<b>admusr</b>” user.</p>	<p>login: <b>admusr</b></p> <p>Password: <b>&lt;admusr_password&gt;</b></p>

**Procedure 23. GEN8: Disable Hyerthreading (DP Only)**

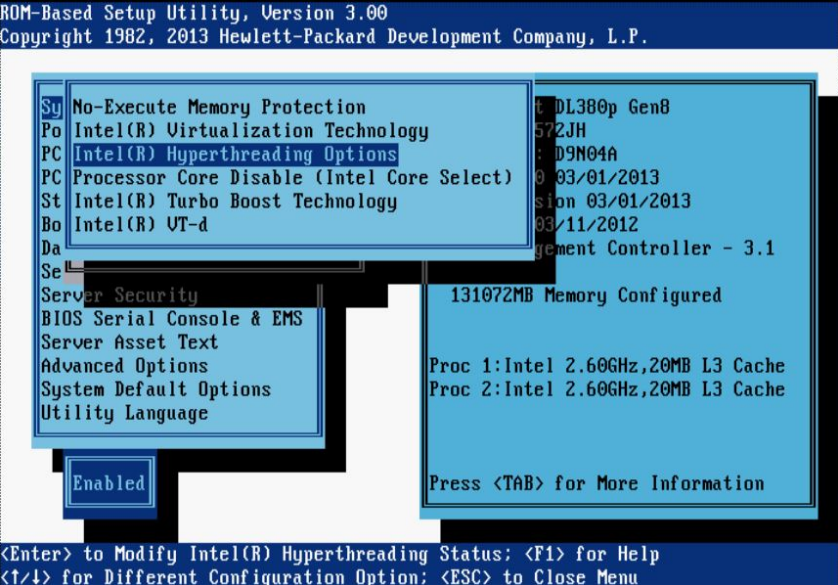
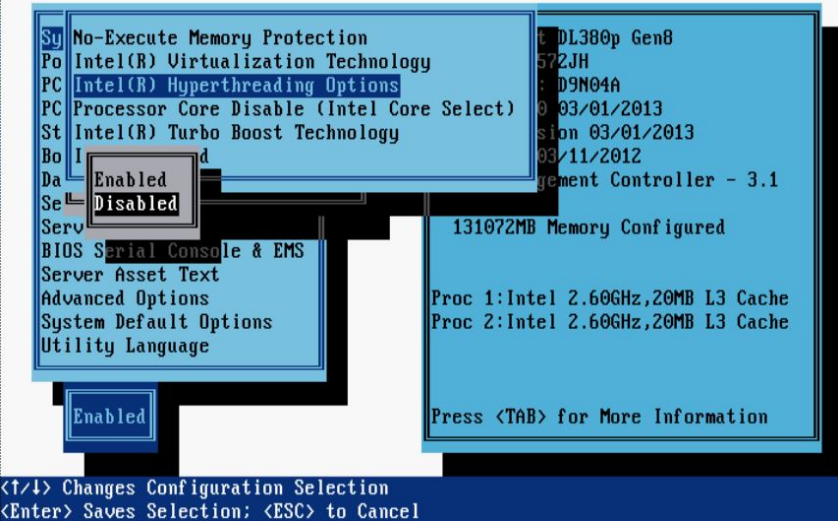
Step	Procedure	Result
12. <input type="checkbox"/>	<p>Reboot the server.</p> <p>This can be achieved by logging in as the “ ” user and executing <b>init 6</b> command at the command prompt.</p>	<p>\$ <b>sudo init 6</b></p> <p><b>NOTE:</b> <i>It is normal for the Remote Console window to stay blank for up to 3 minutes before initial output appears.</i></p>
13. <input type="checkbox"/>	<p>Access the Server BIOS by pressing <b>F9</b> key</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 <b>[F9]</b> 2-3 times. The <b>F9=Setup</b> will change to <b>F9 Pressed</b> once it is accepted. See example below.</p>  <p><b>Expected Result:</b> <i>ROM-Based Setup Utility is accessed and the ROM-Based Setup Utility menu will be displayed.</i></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>

## Procedure 23. GEN8: Disable Hyerthreading (DP Only)

Step	Procedure	Result
14. <input type="checkbox"/>	Select System Options	<p>Scroll to <b>System Options</b> and press [ENTER]</p>  <p>ROM-Based Setup Utility, Version 3.00 Copyright 1982, 2013 Hewlett-Packard Development Company, L.P.</p> <p><b>System Options</b> 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 Utility Language</p> <p>HP ProLiant DL380p Gen8 S/N: USE32572JH Product ID: D9N04A HP BIOS P70 03/01/2013 Backup Version 03/01/2013 Bootblock 03/11/2012 Power Management Controller - 3.1</p> <p>131072MB Memory Configured</p> <p>Proc 1: Intel 2.60GHz, 20MB L3 Cache Proc 2: Intel 2.60GHz, 20MB L3 Cache</p> <p>Press &lt;TAB&gt; for More Information</p> <p>&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>
15. <input type="checkbox"/>	Select Processor Options	<p>Select <b>Processor Options</b> option and press [ENTER]</p>  <p>ROM-Based Setup Utility, Version 3.00 Copyright 1982, 2013 Hewlett-Packard Development Company, L.P.</p> <p><b>Processor Options</b> Serial Port Options Embedded NICs Advanced Memory Protection USB Options NUMLOCK Power-On State SATA Controller Options Server Security BIOS Serial Console &amp; EMS Server Asset Text Advanced Options System Default Options Utility Language</p> <p>HP ProLiant DL380p Gen8 S/N: USE32572JH Product ID: D9N04A HP BIOS P70 03/01/2013 Backup Version 03/01/2013 Bootblock 03/11/2012 Power Management Controller - 3.1</p> <p>131072MB Memory Configured</p> <p>Proc 1: Intel 2.60GHz, 20MB L3 Cache Proc 2: Intel 2.60GHz, 20MB L3 Cache</p> <p>Press &lt;TAB&gt; for More Information</p> <p>&lt;Enter&gt; to Display Processor Specific Options &lt;↑/↓&gt; for Different Configuration Option; &lt;ESC&gt; to Close Menu</p>

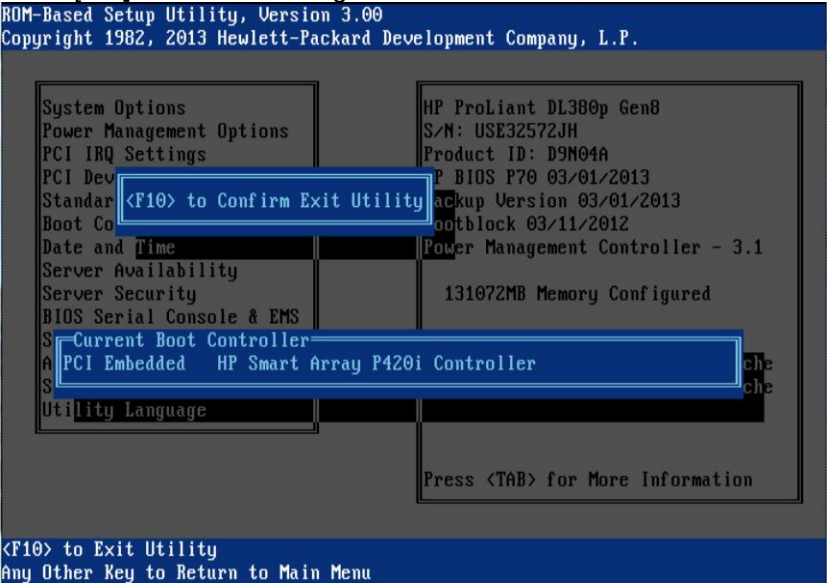
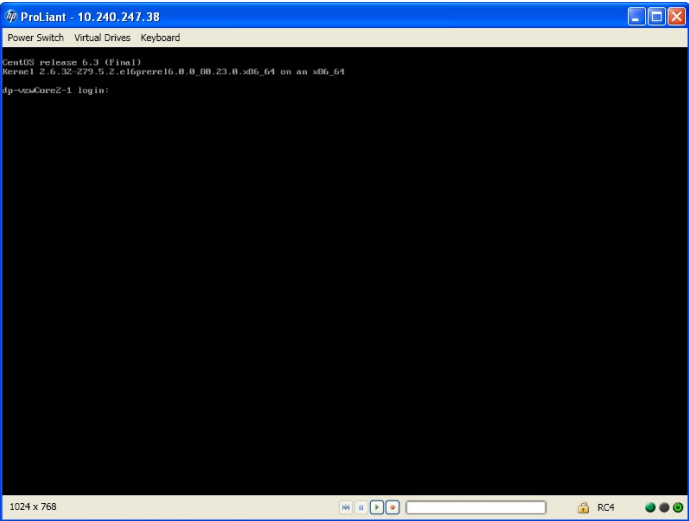
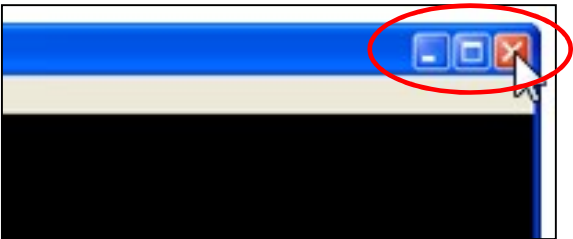


Procedure 23. GEN8: Disable Hyperthreading (DP Only)



Step	Procedure	Result
<p>16.</p> <div style="border: 1px solid black; width: 28px; height: 20px; margin-left: 10px;"></div>	<p>Select Hyperthreading Options</p>	<p><b>Select <i>Intel® Hyperthreading Options</i> and press [ENTER].</b></p>  <p>ROM-Based Setup Utility, Version 3.00 Copyright 1982, 2013 Hewlett-Packard Development Company, L.P.</p> <p>DL380p Gen8 572JH D9N04A 03/01/2013 131072MB Memory Configured Proc 1: Intel 2.60GHz, 20MB L3 Cache Proc 2: Intel 2.60GHz, 20MB L3 Cache Press &lt;TAB&gt; for More Information</p> <p>Enabled</p> <p>&lt;Enter&gt; to Modify Intel(R) Hyperthreading Status; &lt;F1&gt; for Help &lt;↑/↓&gt; for Different Configuration Option; &lt;ESC&gt; to Close Menu</p>
<p>17.</p> <div style="border: 1px solid black; width: 28px; height: 20px; margin-left: 10px;"></div>	<p>Set hyperthreading to <b>Disabled</b>.</p>	<p><b>Select <i>Disabled</i> option and press [ENTER].</b></p>  <p>ROM-Based Setup Utility, Version 3.00 Copyright 1982, 2013 Hewlett-Packard Development Company, L.P.</p> <p>DL380p Gen8 572JH D9N04A 03/01/2013 131072MB Memory Configured Proc 1: Intel 2.60GHz, 20MB L3 Cache Proc 2: Intel 2.60GHz, 20MB L3 Cache Press &lt;TAB&gt; for More Information</p> <p>Disabled</p> <p>&lt;↑/↓&gt; Changes Configuration Selection &lt;Enter&gt; Saves Selection; &lt;ESC&gt; to Cancel</p>



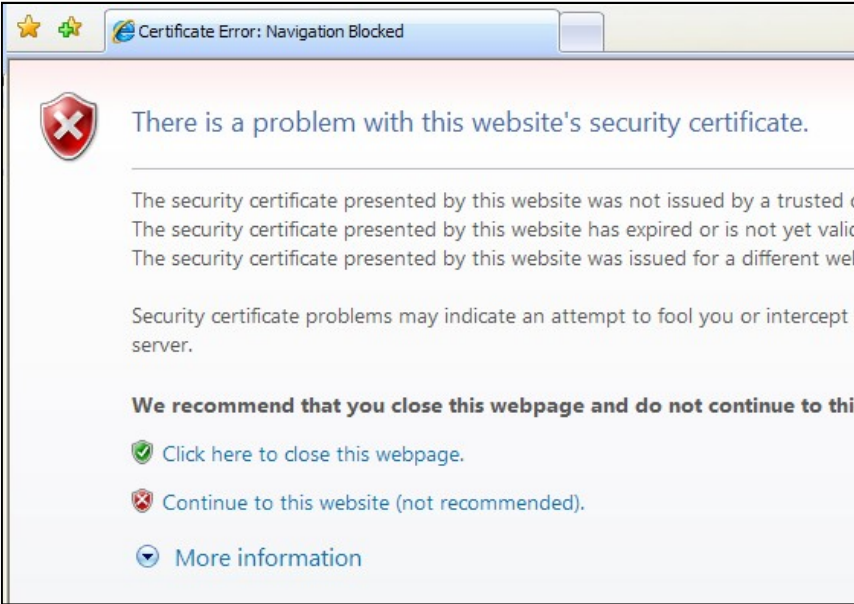

Procedure 23. GEN8: Disable Hyerthreading (DP Only)

Step	Procedure	Result
18. <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 <b>[F10]</b> to save the configuration and exit. The server will reboot</p>  <p><b>Expected Result:</b> <i>Settings are saved and server reboots.</i></p>
19. <input type="checkbox"/>	<p>Continue to monitor the server boot process until the screen returns to the login prompt.</p>	
20. <input type="checkbox"/>	<p>Close the Remote Console window.</p>	
THIS PROCEDURE HAS BEEN COMPLETED		


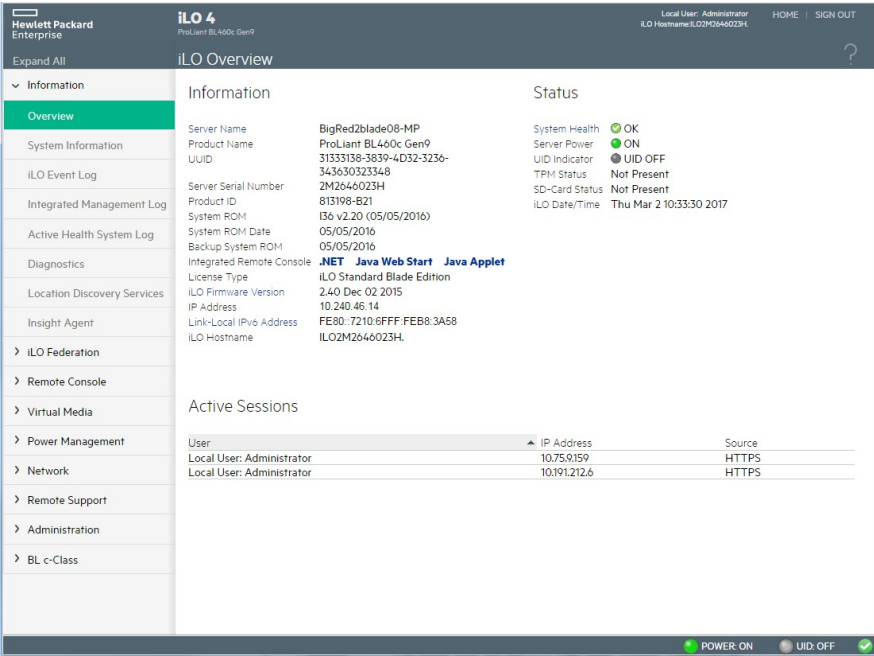
**Procedure 24. GEN9: Disable Hyperthreading (DP Only)**

Step	Procedure	Result
1. <input type="checkbox"/>	<b>DP Server XMI IP (SSH):</b> Access the command prompt via DP blade's <b>XMI IP</b> address and log into the server as the " <b>admusr</b> " user.	login: <b>admusr</b> Password: <b>&lt;admusr_password&gt;</b>
2. <input type="checkbox"/>	<b>DP Server XMI IP (SSH):</b> Execute " <b>hpasmcli</b> " command to determine status of hyperthreading for the DP blade.	\$ sudo <b>hpasmcli -s "show ht"</b>  Processor hyper-threading is currently enabled.  <b>NOTE:</b> Output returned may state " <b>enabled</b> " or " <b>disabled</b> ".
3. <input type="checkbox"/>	 <ul style="list-style-type: none"> <li>If output from <b>Step 2</b> shows that hyperthreading is currently "<b>enabled</b>", then continue with <b>Step 4</b> of this procedure.</li> <li>If output from <b>Step 2</b> shows that hyperthreading is currently "<b>disabled</b>", then <b>STOP</b> and restart <b>Appendix Procedure 24</b> for the next installed <b>DP</b> blade.</li> </ul>	
4. <input type="checkbox"/>	Launch the Internet Explorer web browser and connect to the <b>DP-iLO</b> GUI interface.  <b>NOTE:</b> Always use <b>https://</b> for iLO GUI access.	 <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>

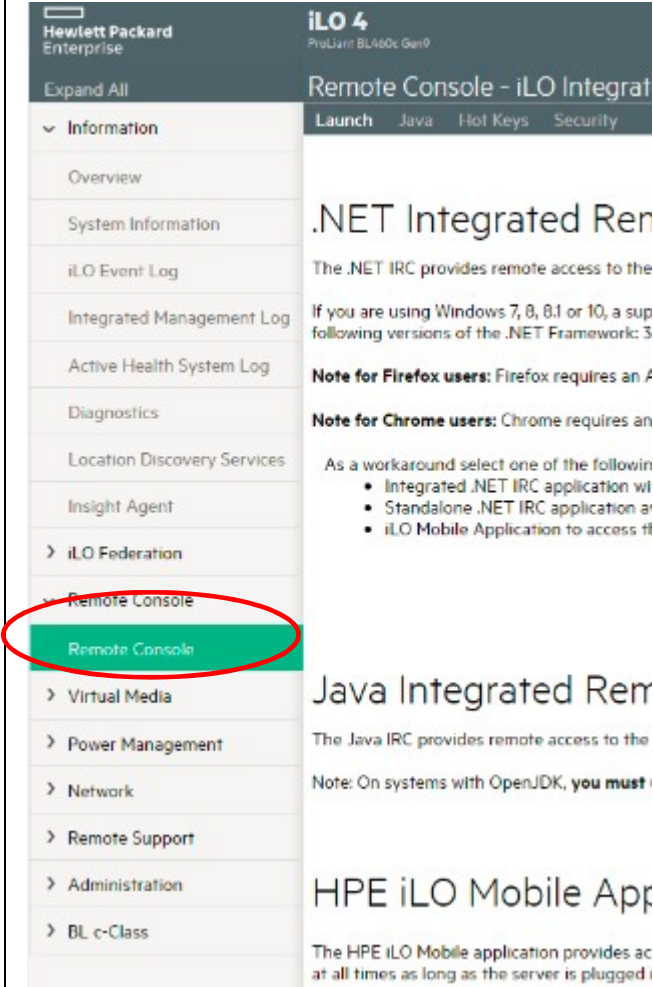
## Procedure 24. GEN9: Disable Hyperthreading (DP Only)

Step	Procedure	Result
5. <input type="checkbox"/>	<p>The web browser will display a warning message regarding the Security Certificate.</p> <p><b>NOTE:</b> <i>If presented with the “security certificate” warning screen shown to the right, choose the following option: “Continue to this website (not recommended)”.</i></p>	
6. <input type="checkbox"/>	<p>Login to the iLO console as “Administrator” and enter the configured password.</p>	


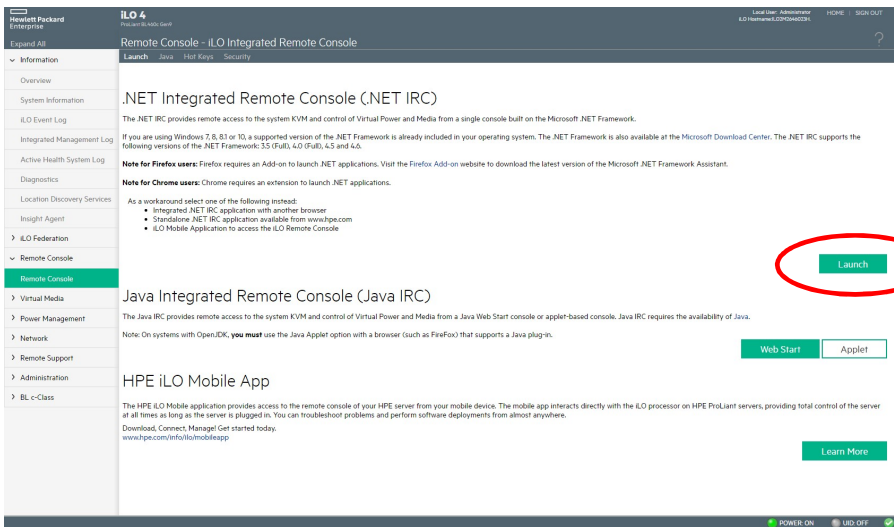

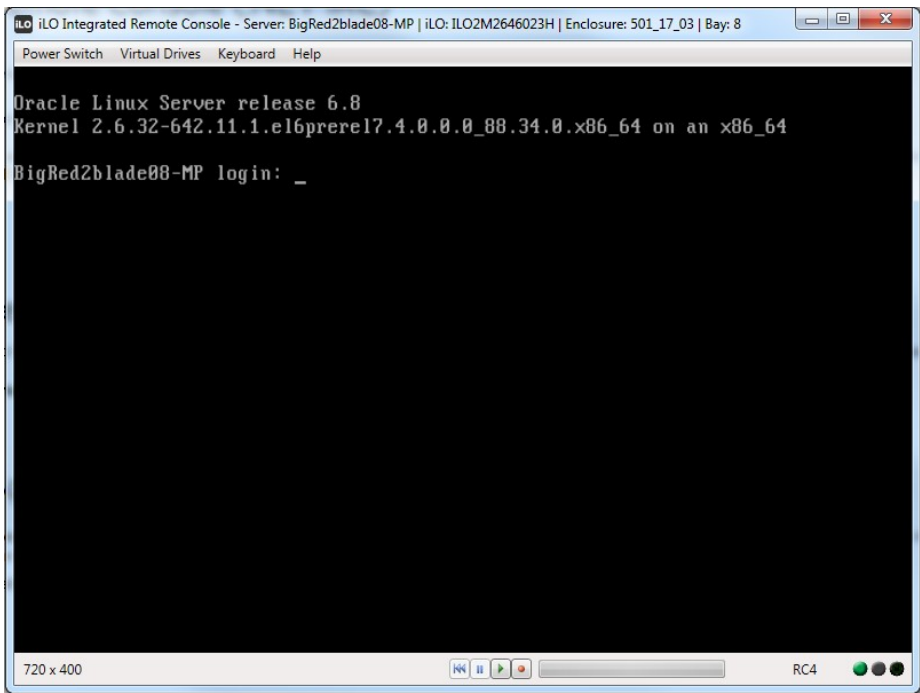
Procedure 24. GEN9: Disable Hyperthreading (DP Only)

Step	Procedure	Result									
7. 	<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>The screenshot shows the iLO 4 Overview page for a ProLiant BL460c Gen9 server. The page is divided into three main sections: Information, Status, and Active Sessions. The Information section lists various system details including Server Name, Product Name, UUID, and IP Address. The Status section shows System Health, Server Power, and UID Indicator status. The Active Sessions section displays a table of active users and their IP addresses.</p> <table border="1"> <thead> <tr> <th>User</th> <th>IP Address</th> <th>Source</th> </tr> </thead> <tbody> <tr> <td>Local User: Administrator</td> <td>10.75.9.159</td> <td>HTTPS</td> </tr> <tr> <td>Local User: Administrator</td> <td>10.191.212.6</td> <td>HTTPS</td> </tr> </tbody> </table>	User	IP Address	Source	Local User: Administrator	10.75.9.159	HTTPS	Local User: Administrator	10.191.212.6	HTTPS
User	IP Address	Source									
Local User: Administrator	10.75.9.159	HTTPS									
Local User: Administrator	10.191.212.6	HTTPS									

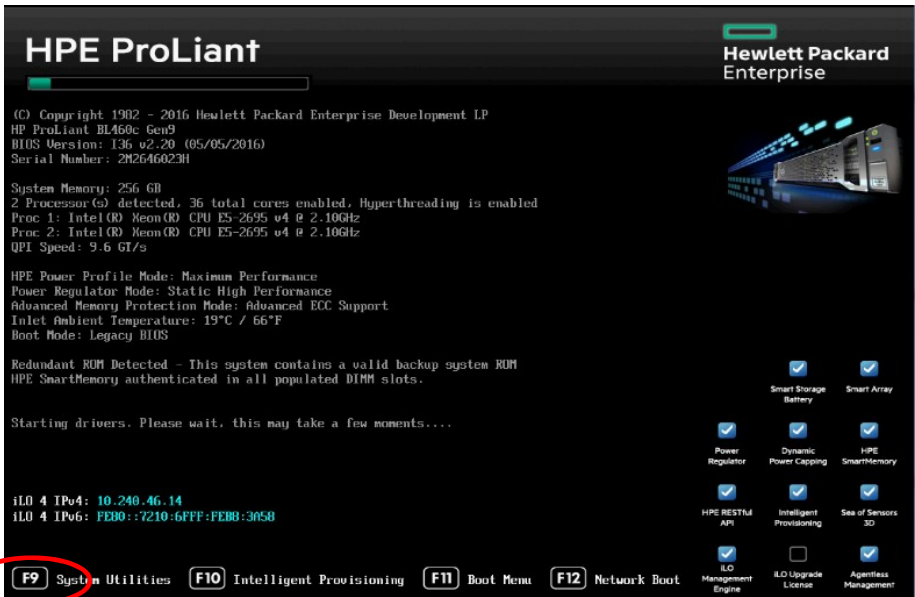
Procedure 24. GEN9: Disable Hyperthreading (DP Only)

Step	Procedure	Result
8. <div></div>	<p>The Remote Console Information GUI is displayed</p> <p>Click on the “<b>Remote Console</b>” menu option</p>	

## Procedure 24. GEN9: Disable Hyperthreading (DP Only)


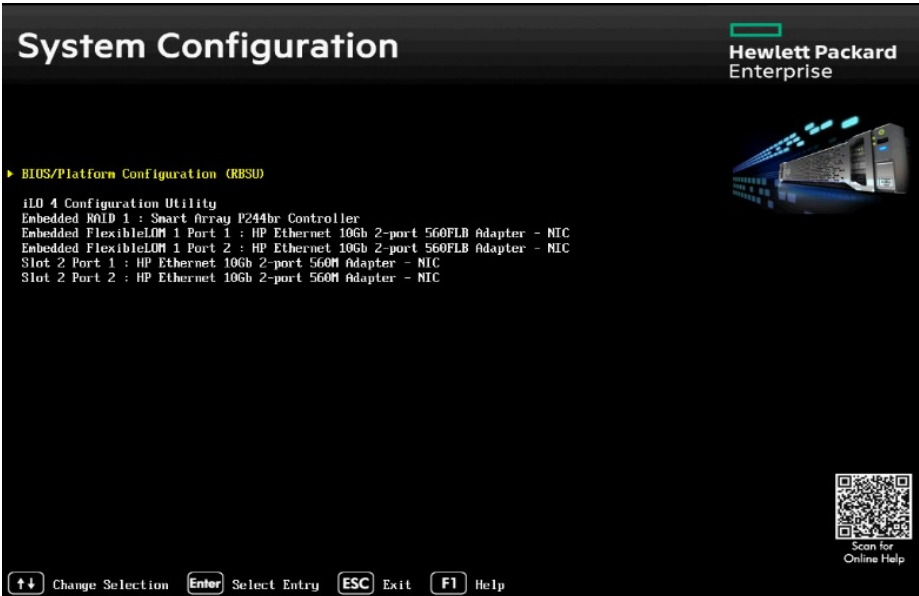
Step	Procedure	Result
9. 	<p>Under the “Integrated Remote Console” section in the top of the right panel, click on the “Launch” dialogue button.</p> <p><b>NOTE:</b> Answer “Yes/OK” to any pop-up windows that might appear.</p>	
10. 	<p>The iLO Console window is displayed.</p> <p><b>NOTE:</b> The console window resembles an MS-DOS window but DOES NOT have a scroll-back buffer.</p>	
11.	<p><b>DP Server XMI IP (SSH):</b></p> <p>Access the command prompt via DP blade's XMI IP address and log into the server as the “admusr” user.</p>	<pre>login: admusr Password: &lt;admusr_password&gt;</pre>

Procedure 24. GEN9: Disable Hyperthreading (DP Only)

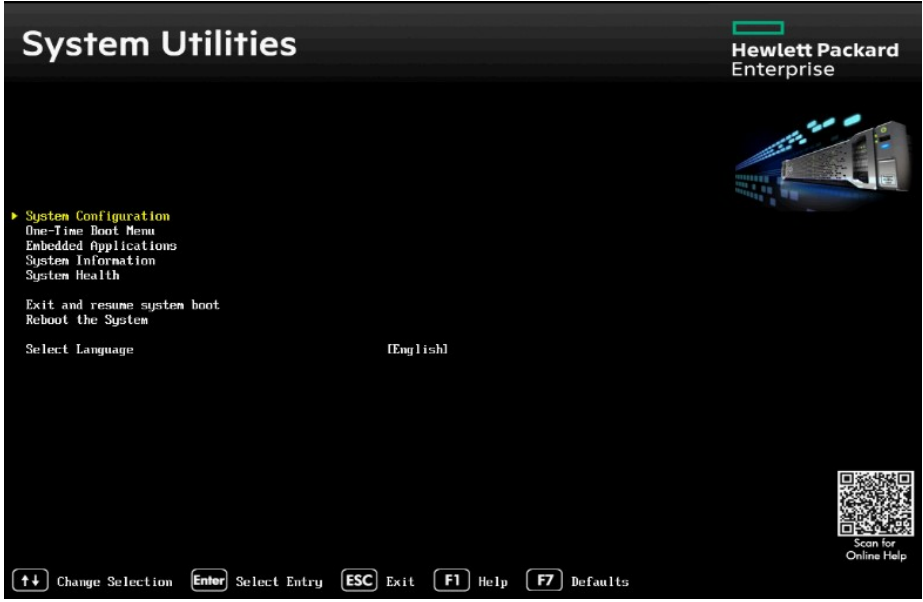
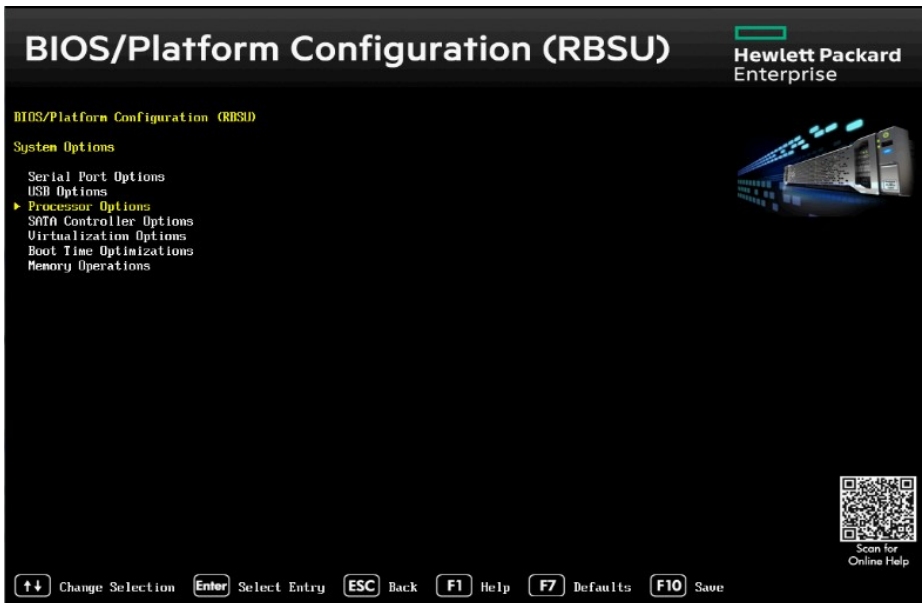
Step	Procedure	Result
12. <input type="checkbox"/>	<p>Reboot the server.</p> <p>This can be achieved by logging in as the “ ” user and executing <b>init 6</b> command at the command prompt.</p>	<p>\$ <b>sudo init 6</b></p> <p><b>NOTE:</b> It is normal for the Remote Console window to stay blank for up to <b>3 minutes</b> before initial output appears.</p>
13. <input type="checkbox"/>	<p>Access the Server BIOS by pressing <b>F9</b> key</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 <b>[F9]</b> 2-3 times. The <b>F9=Setup</b> will change to <b>F9 Pressed</b> 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> <p><b>NOTE:</b> It is normal for a period of <b>2 minutes</b> or more to occur between pressing the <b>F9</b> key and entering the Blade BIOS screen</p>



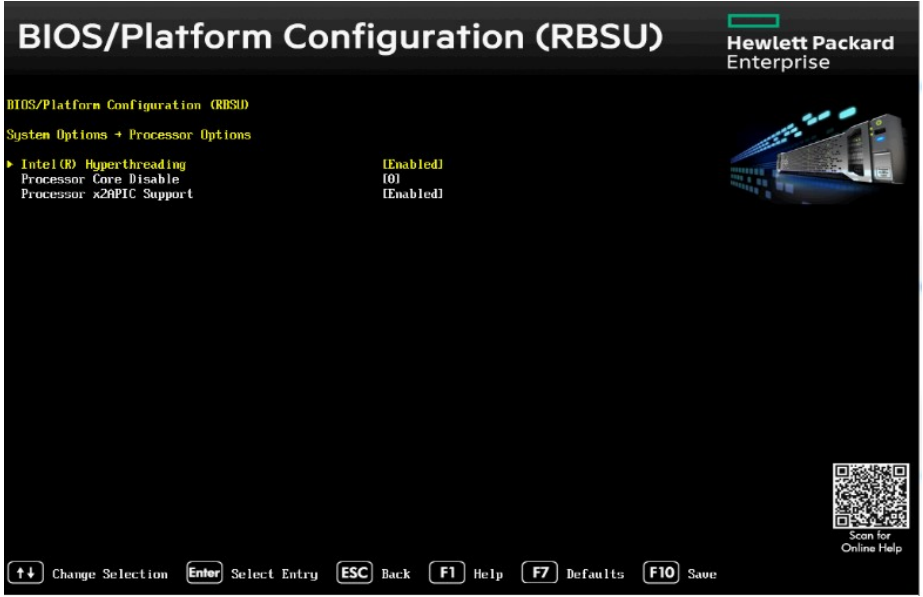
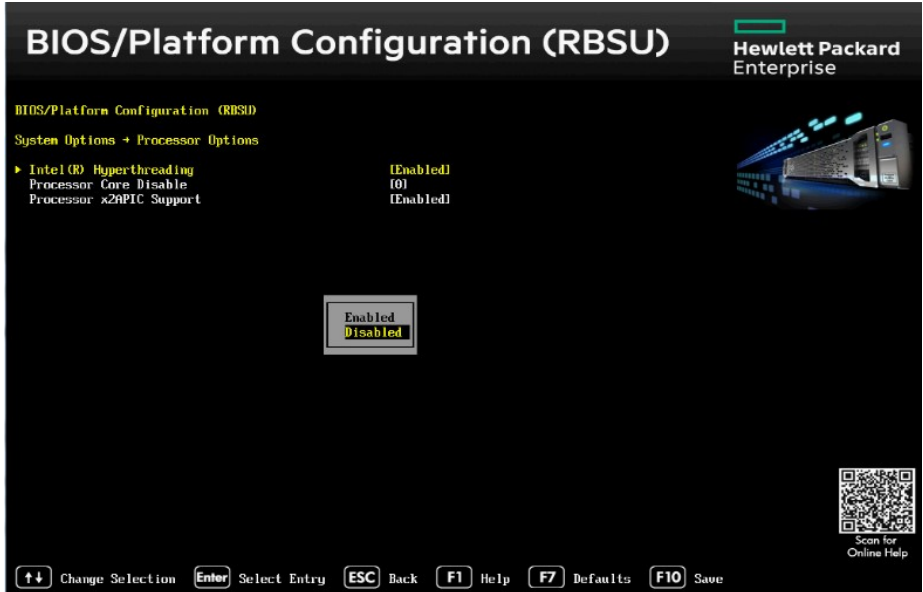
Procedure 24. GEN9: Disable Hyperthreading (DP Only)

Step	Procedure	Result
14.	Scroll to <b>System Configuration</b>	<p>Scroll to <b>System Configuration</b> and press [ENTER]</p> 
15.	Scroll to <b>BIOS/Platform Configuration</b>	<p>Scroll to <b>BIOS/Platform Configuration</b> and press [ENTER]</p> 

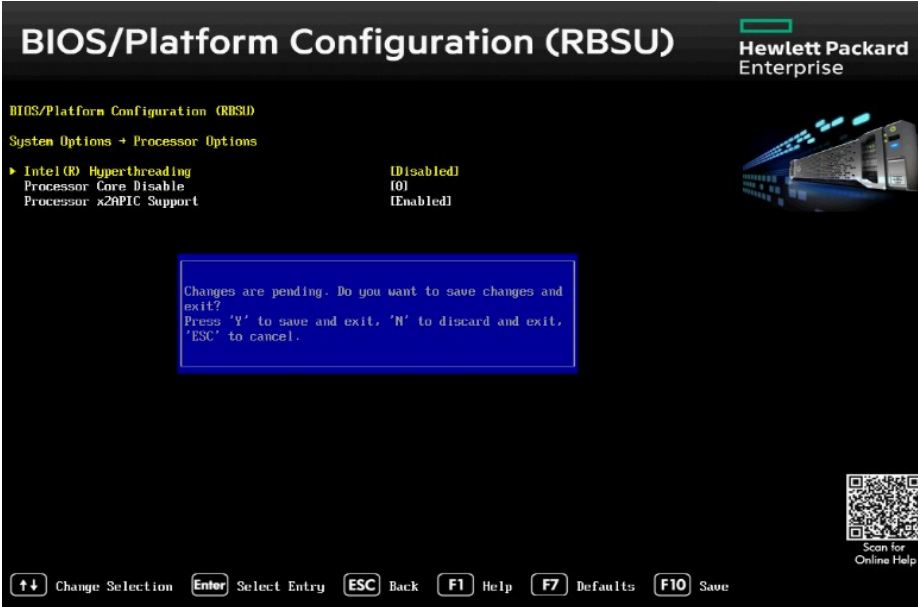
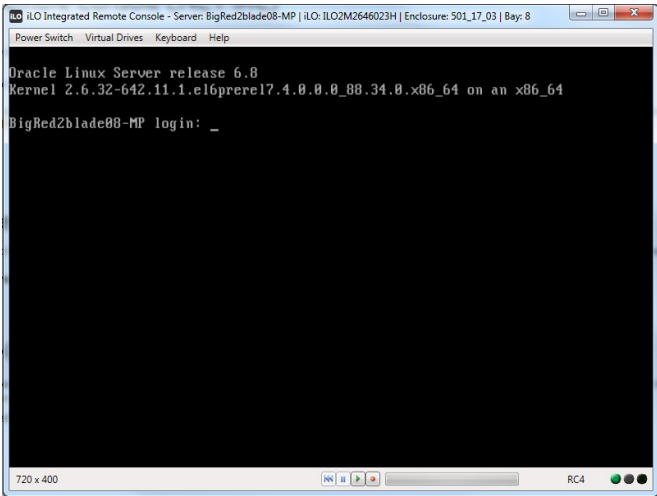
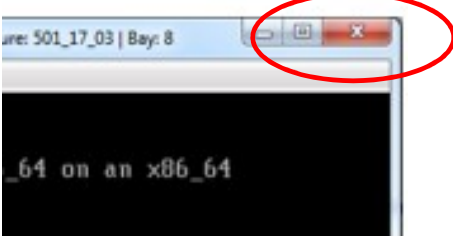
**Procedure 24. GEN9: Disable Hyperthreading (DP Only)**

Step	Procedure	Result
16. <input type="checkbox"/>	Select System Configuration	<p>Scroll to <b>System Configuration</b> and press [ENTER]</p> 
17. <input type="checkbox"/>	Select Processor Options	<p>Select <b>Processor Options</b> option and press [ENTER]</p> 

# Procedure 24. GEN9: Disable Hyperthreading (DP Only)

Step	Procedure	Result
18. <input type="checkbox"/>	Select Hyperthreading Options	<p>Select <b>Intel® Hyperthreading Options</b> and press [ENTER].</p> 
19. <input type="checkbox"/>	Set hyperthreading to Disabled	<p>Select <b>Disabled</b> option and press [ENTER].</p> 

Procedure 24. GEN9: Disable Hyperthreading (DP Only)

Step	Procedure	Result
<p>20.</p> <div></div>	<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> <i>Settings are saved and server reboots.</i></p>
<p>21.</p> <div></div>	<p>Continue to monitor the server boot process until the screen returns to the login prompt.</p>	
<p>22.</p> <div></div>	<p>Close the Remote Console window.</p>	

## Appendix J. Configure the HP DL380 (GEN8 & GEN9) Server CMOS Clock/BIOS Settings

### J-1. GEN8: Configure the iLO for Rack Mount Server



#### J.1.1. RMS: Configure iLO

In this procedure you will be configuring Integrated Lights Out (iLO) for RMS. You will configure the NIC and TCP/IP, DNS/DHCP parameters as well as adding a new iLO user.

##### Prerequisites & Requirements:

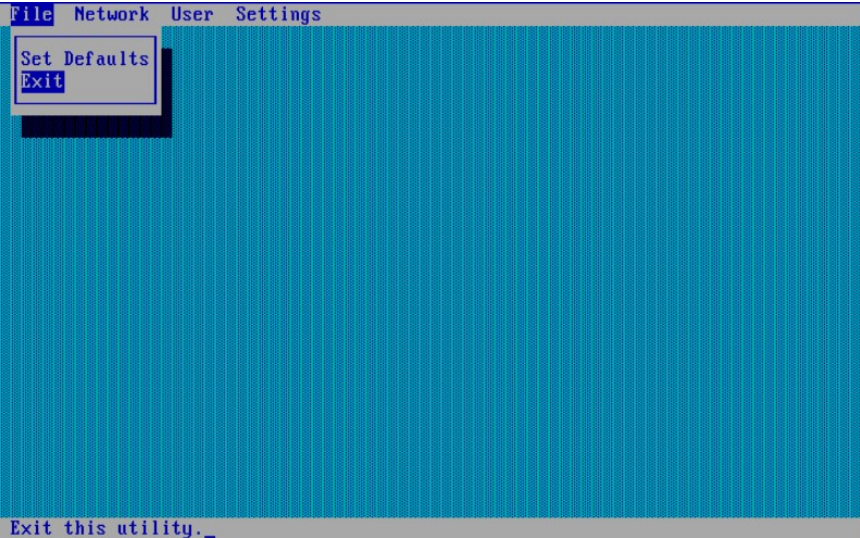
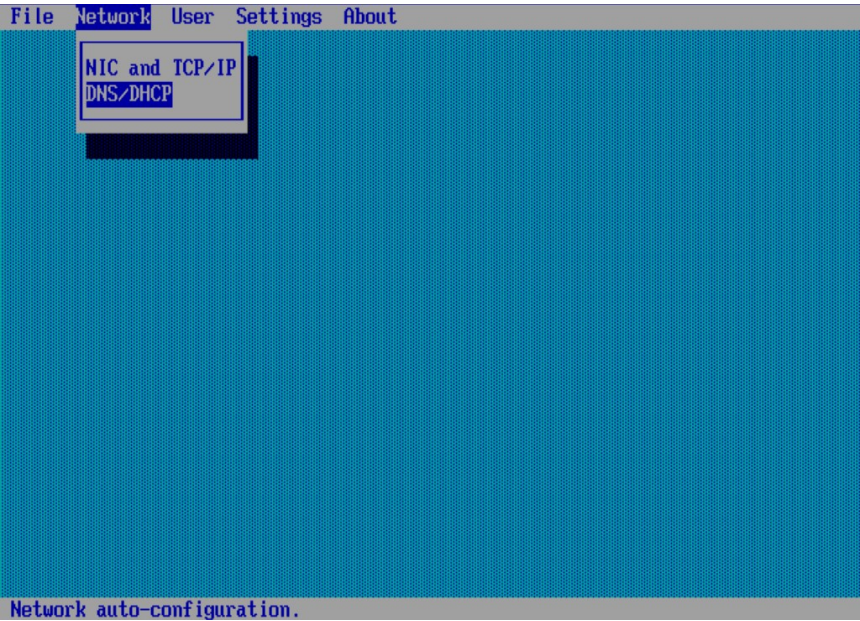
- ✓ Server powered on
- ✓ Server booting up or rebooted

#### Procedure 25. GEN8: Configure the iLO for Rack Mount Server

Step	Procedure	Result
1. 	<p><b>Configure Integrated Lights Out (iLO) for Rack Mount Servers (RMS):</b></p> <p><b>For HP GEN8 DL380 servers perform the following</b></p> <ol style="list-style-type: none"> <li><b>1. Reboot the server.</b></li> <li><b>2. When “iLO 4 Standard press [F8] to configure” is displayed, press [F8]</b></li> <li><b>3. Once [F8] is pressed wait for the iLO Configuration screen to appear.</b></li> </ol>	 <p><b>Figure 27 – iLO Configuration – GEN8: Press [F8] to configure</b></p>

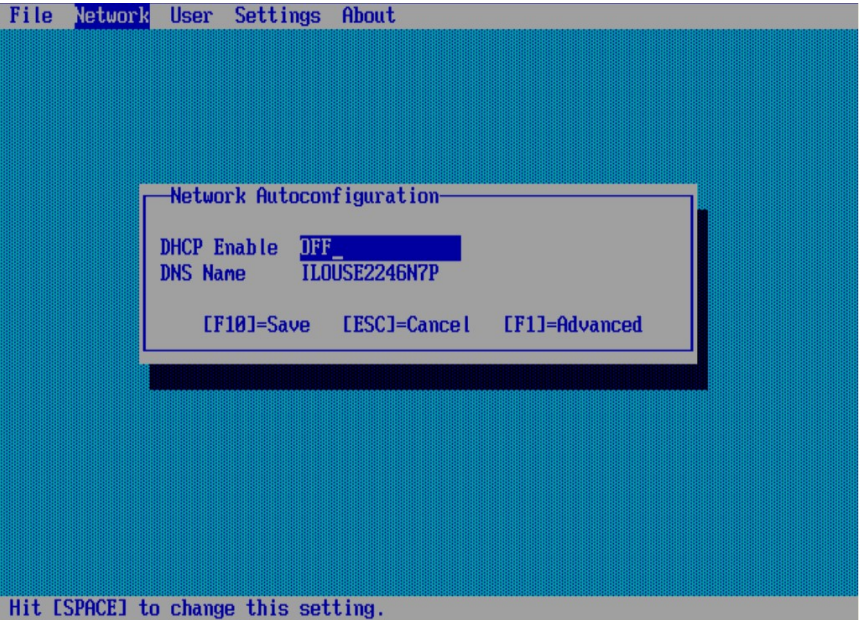
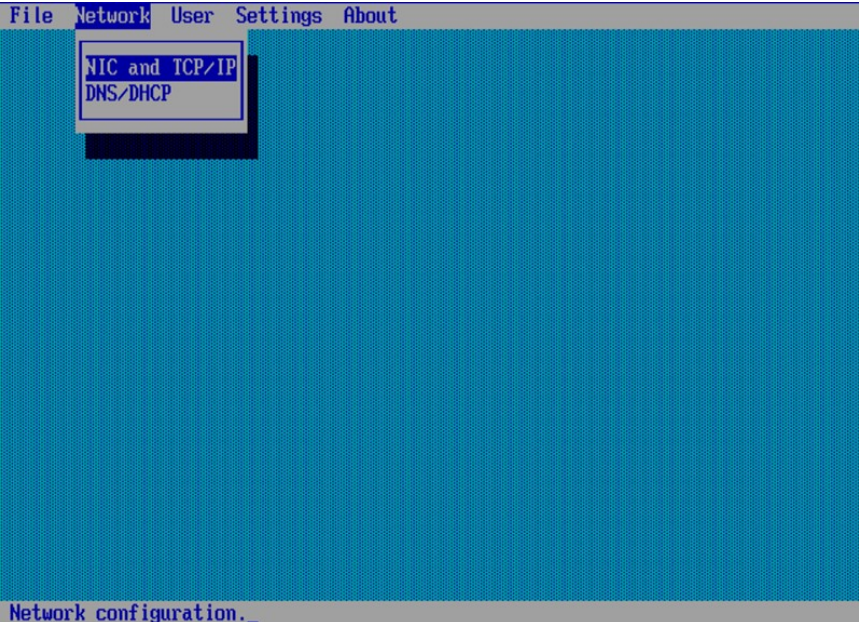


Procedure 25. GEN8: Configure the iLO for Rack Mount Server

Step	Procedure	Result
2.	After the initial iLO configuration utility screen appears, use the arrow keys to select the Network menu	 <p>Figure 28 – iLO Configuration – Initial iLO Configuration Screen</p>
3.	Within the Network menu, select DNS/DHCP	 <p>Figure 29 – iLO Configuration – Select Network-&gt;DNS/DHCP</p>

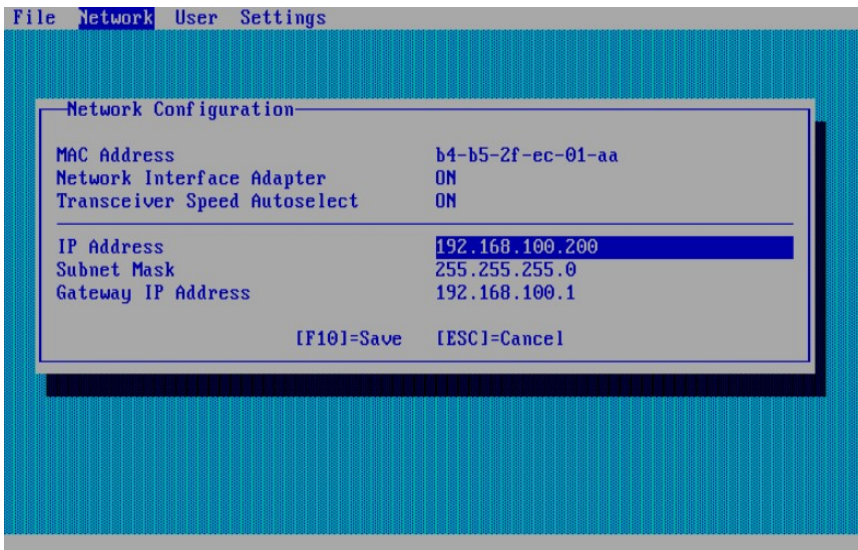
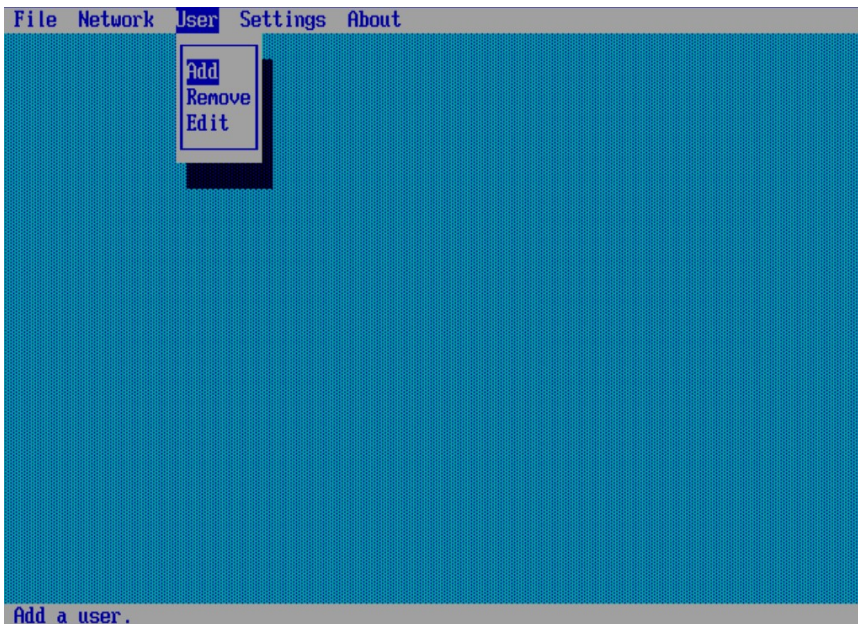


Procedure 25. GEN8: Configure the iLO for Rack Mount Server

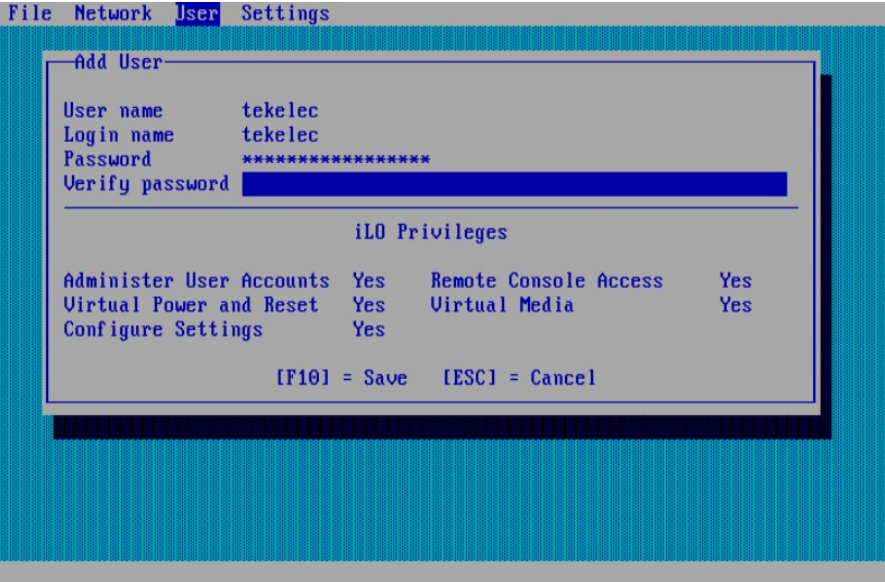
Step	Procedure	Result
4.	Verify that DNS/DHCP is set to OFF. If it is not set to OFF, use the [SPACE BAR] to toggle the setting to 'OFF'	 <p>The screenshot shows the iLO Network configuration interface. At the top is a menu bar with 'File', 'Network', 'User', 'Settings', and 'About'. The 'Network' menu is highlighted. A sub-menu titled 'Network Autoconfiguration' is displayed in the center. It contains two settings: 'DHCP Enable' set to 'OFF' and 'DNS Name' set to 'ILOUSE2246N7P'. Below these settings are instructions: '[F10]=Save', '[ESC]=Cancel', and '[F1]=Advanced'. At the bottom of the screen, a prompt reads 'Hit [SPACE] to change this setting.'</p> <p>Figure 30 – iLO Configuration – press [SPACE BAR] to turn DHCP OFF</p>
5.	Press [F10] to save if changes were made or [ESC] to Cancel if no changes were made. You should be returned to the Network main menu.	 <p>The screenshot shows the iLO Network configuration interface. At the top is a menu bar with 'File', 'Network', 'User', 'Settings', and 'About'. The 'Network' menu is highlighted. A sub-menu titled 'NIC and TCP/IP' is displayed in the center. Below this sub-menu is the text 'DNS/DHCP'. At the bottom of the screen, a prompt reads 'Network configuration._'</p> <p>Figure 31 – iLO Configuration – Select NIC and TCP/IP</p>



Procedure 25. GEN8: Configure the iLO for Rack Mount Server

Step	Procedure	Result
6.	Press [ENTER] if required and select 'NIC and TCP/IP'	 <p>Figure 32 – iLO Configuration – Select NIC and TCP/IP and configure Network</p>
7.	Enter the Network Configuration information for the server. Use the arrow keys to select the field to change	IP Address should be set based on the information in the NAPD.
8.	<p>Once the <b>Network Configuration</b> information has been entered, press [F10] to save the settings.</p> <p>Using the arrow keys, select the <b>User</b> menu, then select <b>Add</b> and press [ENTER]</p>	 <p>Figure 33 – iLO Configuration – Select User – Add</p>

Procedure 25. GEN8: Configure the iLO for Rack Mount Server



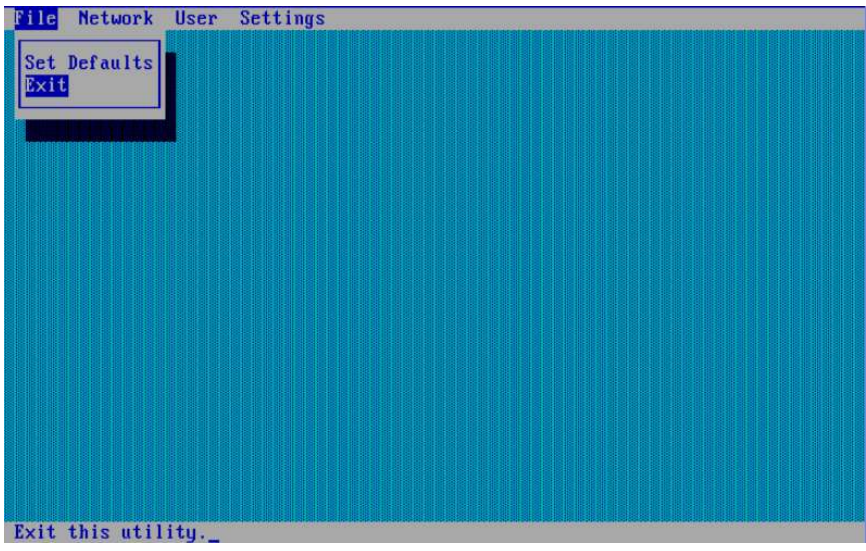
Step	Procedure	Result
9.	Add the tekelec user. Username: tekelec Login name: tekelec Password: tekelec1	
10.	Once the tekelec User has been added, press <b>[F10]</b> to Save the user.	
11. <input type="checkbox"/>	Repeat this procedure for other ship loose servers for the work order.	

### J.1.2. GEN8: RMS BIOS Configuration, Verify Processor and Memory

#### Prerequisites & Requirements:

- ✓ Server powered on
- ✓ KVM connectivity to the server to get console

#### Procedure 26. Enter the ROM-Based Setup Utility (RBSU)

Step	Procedure	Result
1. 	Reboot the server. You will see an HP ProLiant screen as shown below. When prompted with the option to Press F9 for setup, do so. Once F9 is pressed, you should see “F9” selected on the screen as shown below:	 <p>The HP ProLiant splash screen displays the following information:</p> <ul style="list-style-type: none"> <li>2 Processor(s) detected, 16 total cores enabled, Hyperthreading is enabled</li> <li>Proc 1: Intel(R) Xeon(R) CPU E5-2670 0 @ 2.60GHz</li> <li>Proc 2: Intel(R) Xeon(R) CPU E5-2670 0 @ 2.60GHz</li> <li>QPI Speed: 8.0 GT/s</li> <li>HP Power Profile Mode: Balanced Power and Performance</li> <li>Power Regulator Mode: Dynamic Power Savings</li> <li>Redundant ROM Detected - This system contains a valid backup System ROM.</li> <li>Inlet Ambient Temperature: 23C/73F</li> <li>Advanced Memory Protection Mode: Advanced ECC Support</li> <li>HP SmartMemory authenticated in all populated DIMM slots.</li> <li>SATA Option ROM ver 2.00.C02</li> <li>Copyright 1982, 2011. Hewlett-Packard Development Company, L.P.</li> <li>iLO 4 Advanced</li> <li>iLO 4 v1.05 Apr 19 2012 192.168.100.101</li> <li>Slot 0 HP Smart Array P420i Controller (1 GiB, v2.14) 1 Logical Drive</li> <li>iLO 4 IP: 192.168.100.101</li> <li>Navigation keys: F9 Setup, F10 Intelligent Provisioning, F11 Boot Menu</li> <li>Checkmarks for: Power Regulator, Smart Array, Smart Array Advanced, HP SmartMemory, Intelligent Provisioning, Dynamic Power Capping, Sea of Sensors 3D, iLO Management Engine, iLO Advanced, Agentless Management.</li> </ul>
2.	After the initial iLO configuration utility screen appears, use the arrow keys to select the Network menu	 <p>The initial iLO Configuration screen shows a menu with the following options:</p> <ul style="list-style-type: none"> <li>File</li> <li>Network</li> <li>User</li> <li>Settings</li> </ul> <p>Below the menu, there are options to Set Defaults or Exit. The Network menu is highlighted.</p>

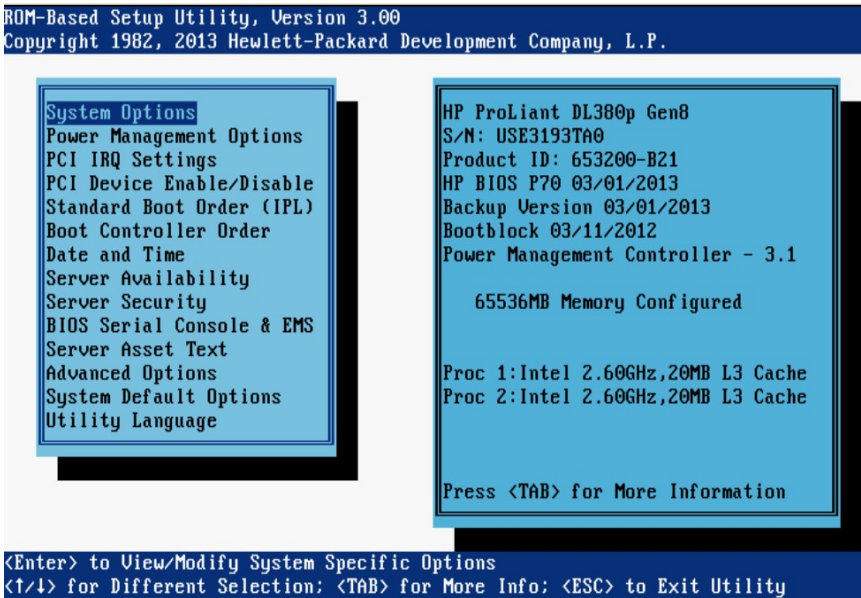
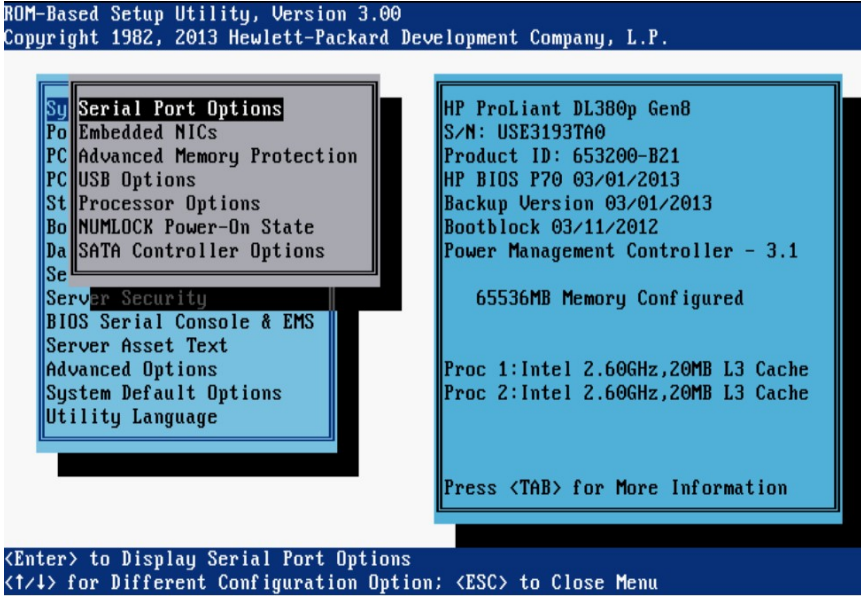
In this procedure you will be verifying and/or configuring the Serial Port Options for the Embedded and Virtual Serial Ports.



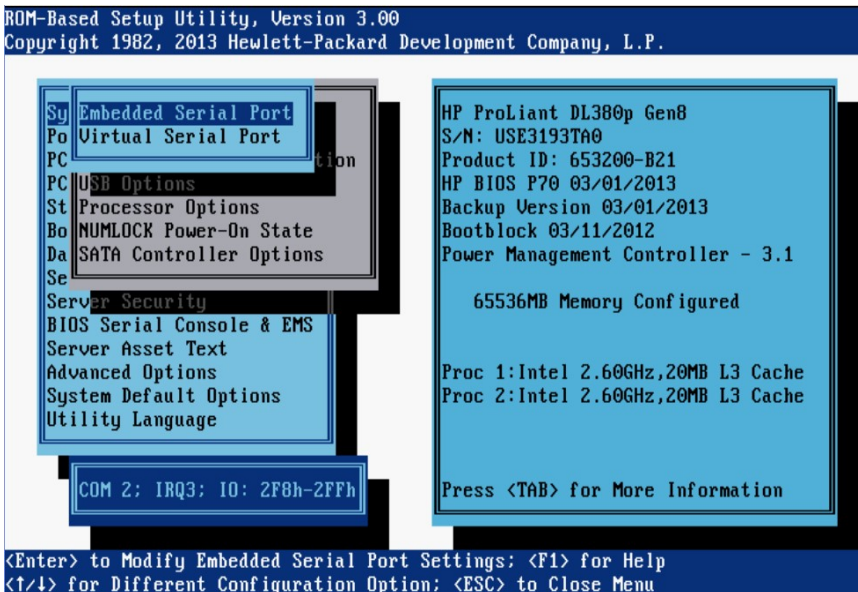
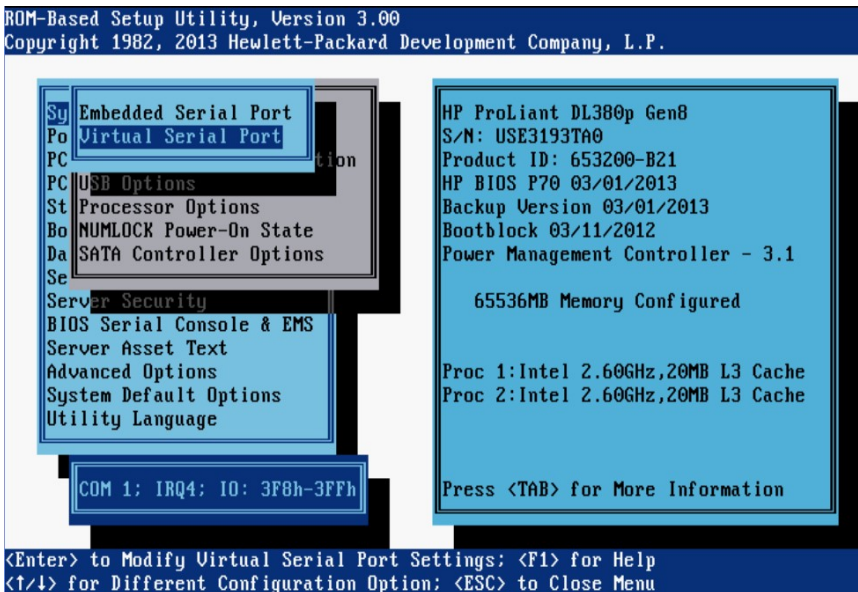
**Prerequisites & Requirements:**

- ✓ Server rebooted and in RBSU mode

**Procedure 27. Verify/Configure Serial Port Options**

Step	Procedure	Result
1. <input type="checkbox"/>	Select <b>System Options</b> , then <b>Serial Port Options</b> :	 <p>ROM-Based Setup Utility, Version 3.00 Copyright 1982, 2013 Hewlett-Packard Development Company, L.P.</p> <p><b>System Options</b> 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 Utility Language</p> <p>HP ProLiant DL380p Gen8 S/N: USE3193TA0 Product ID: 653200-B21 HP BIOS P70 03/01/2013 Backup Version 03/01/2013 Bootblock 03/11/2012 Power Management Controller - 3.1</p> <p>65536MB Memory Configured</p> <p>Proc 1: Intel 2.60GHz, 20MB L3 Cache Proc 2: Intel 2.60GHz, 20MB L3 Cache</p> <p>Press &lt;TAB&gt; for More Information</p> <p>&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> <p><b>Figure 36 – ROM-Based Setup Utility – Initial Screen</b></p>  <p>ROM-Based Setup Utility, Version 3.00 Copyright 1982, 2013 Hewlett-Packard Development Company, L.P.</p> <p><b>Serial Port Options</b> Embedded NICs Advanced Memory Protection USB Options Processor Options NUMLOCK Power-On State SATA Controller Options Server Security BIOS Serial Console &amp; EMS Server Asset Text Advanced Options System Default Options Utility Language</p> <p>HP ProLiant DL380p Gen8 S/N: USE3193TA0 Product ID: 653200-B21 HP BIOS P70 03/01/2013 Backup Version 03/01/2013 Bootblock 03/11/2012 Power Management Controller - 3.1</p> <p>65536MB Memory Configured</p> <p>Proc 1: Intel 2.60GHz, 20MB L3 Cache Proc 2: Intel 2.60GHz, 20MB L3 Cache</p> <p>Press &lt;TAB&gt; for More Information</p> <p>&lt;Enter&gt; to Display Serial Port Options &lt;↑/↓&gt; for Different Configuration Option; &lt;ESC&gt; to Close Menu</p> <p><b>Figure 37 – ROM-Based Setup Utility – Serial Port Options</b></p>

## Procedure 27. Verify/Configure Serial Port Options

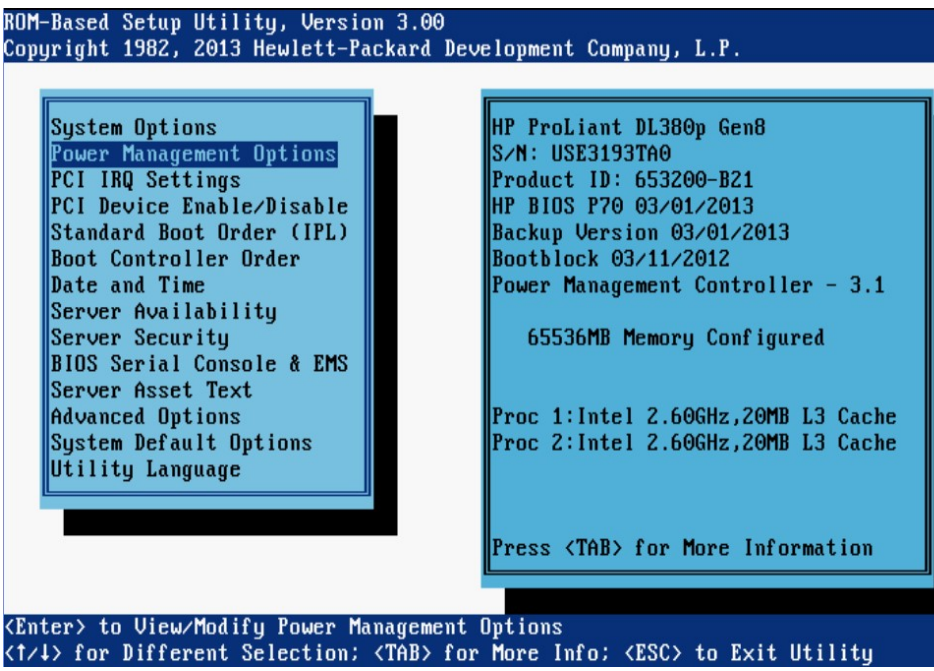
Step	Procedure	Result
2.	Verify the settings for Embedded Serial Port:	<p>Select <b>“Embedded Serial Port”</b> and verify it is set for <b>“COM 2”</b>. If it is not set to <b>COM 2</b>, press [ENTER], select <b>COM 2</b>, then [ENTER].</p>  <p>ROM-Based Setup Utility, Version 3.00 Copyright 1982, 2013 Hewlett-Packard Development Company, L.P.</p> <p>Embedded Serial Port Virtual Serial Port USB Options Processor Options NUMLOCK Power-On State SATA Controller Options Server Security BIOS Serial Console &amp; EMS Server Asset Text Advanced Options System Default Options Utility Language</p> <p>COM 2: IRQ3; IO: 2F8h-2FFh</p> <p>HP ProLiant DL380p Gen8 S/N: USE3193TA0 Product ID: 653200-B21 HP BIOS P70 03/01/2013 Backup Version 03/01/2013 Bootblock 03/11/2012 Power Management Controller - 3.1 65536MB Memory Configured Proc 1: Intel 2.60GHz, 20MB L3 Cache Proc 2: Intel 2.60GHz, 20MB L3 Cache Press &lt;TAB&gt; for More Information</p> <p>&lt;Enter&gt; to Modify Embedded Serial Port Settings; &lt;F1&gt; for Help &lt;↑/↓&gt; for Different Configuration Option; &lt;ESC&gt; to Close Menu</p> <p><b>Figure 38 – Verify Embedded Serial Port Setting</b></p>
3.	Verify the settings for Virtual Serial Port:	<p>Select <b>“Virtual Serial Port”</b> and verify it is set for <b>COM 1</b>. If it is not set to <b>COM 1</b>, press [ENTER], select <b>COM 1</b>, then [ENTER].</p>  <p>ROM-Based Setup Utility, Version 3.00 Copyright 1982, 2013 Hewlett-Packard Development Company, L.P.</p> <p>Embedded Serial Port Virtual Serial Port USB Options Processor Options NUMLOCK Power-On State SATA Controller Options Server Security BIOS Serial Console &amp; EMS Server Asset Text Advanced Options System Default Options Utility Language</p> <p>COM 1: IRQ4; IO: 3F8h-3FFh</p> <p>HP ProLiant DL380p Gen8 S/N: USE3193TA0 Product ID: 653200-B21 HP BIOS P70 03/01/2013 Backup Version 03/01/2013 Bootblock 03/11/2012 Power Management Controller - 3.1 65536MB Memory Configured Proc 1: Intel 2.60GHz, 20MB L3 Cache Proc 2: Intel 2.60GHz, 20MB L3 Cache Press &lt;TAB&gt; for More Information</p> <p>&lt;Enter&gt; to Modify Virtual Serial Port Settings; &lt;F1&gt; for Help &lt;↑/↓&gt; for Different Configuration Option; &lt;ESC&gt; to Close Menu</p>

In this procedure you will be configuring **Power Management Options**. The server **HP Power Profile** will be verified or set to **Maximum Performance**.

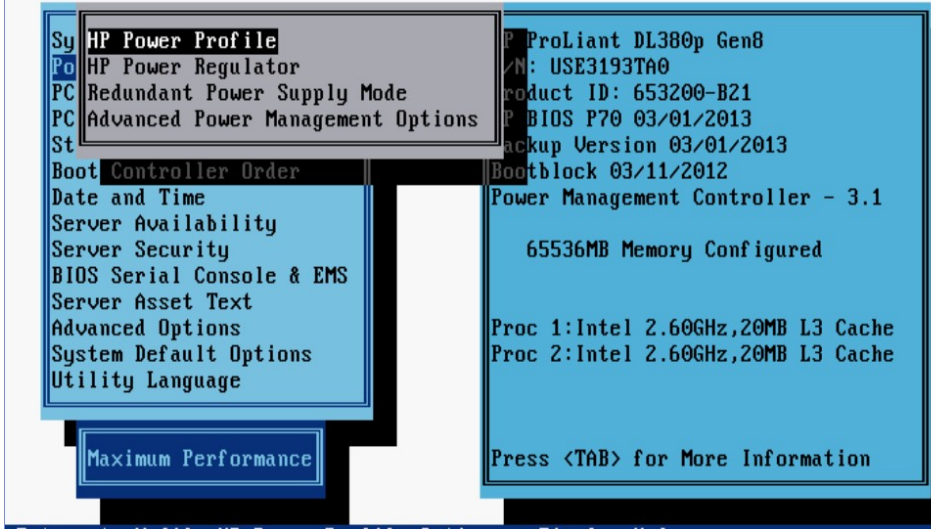
**Prerequisites & Requirements:**

- ✓ Server rebooted and in RBSU

**Procedure 28. Verify/Set Power Management**

Step	Procedure	Result
1. <input type="checkbox"/>	While in <b>RBSU</b> , verify or set the <b>HP Power Profile</b>	<p>Select <b>"Power Management Options"</b>, then press <b>[ENTER]</b>.</p>  <p>The screenshot shows the RBSU interface. At the top, it says 'ROM-Based Setup Utility, Version 3.00' and 'Copyright 1982, 2013 Hewlett-Packard Development Company, L.P.'. The main menu lists the following options: System Options, Power Management Options (highlighted), 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 of the menu, system information is displayed: HP ProLiant DL380p Gen8, S/N: USE3193TA0, Product ID: 653200-B21, HP BIOS P70 03/01/2013, Backup Version 03/01/2013, Bootblock 03/11/2012, Power Management Controller - 3.1, 65536MB Memory Configured, Proc 1: Intel 2.60GHz, 20MB L3 Cache, and Proc 2: Intel 2.60GHz, 20MB L3 Cache. At the bottom, it says 'Press &lt;TAB&gt; for More Information'. Below the screenshot, a blue bar contains the following text: '&lt;Enter&gt; to View/Modify Power Management Options', '&lt;↑/↓&gt; for Different Selection; &lt;TAB&gt; for More Info; &lt;ESC&gt; to Exit Utility'.</p> <p><b>Figure 39 – RBSU – Select Power Management Options</b></p>

## Procedure 28. Verify/Set Power Management

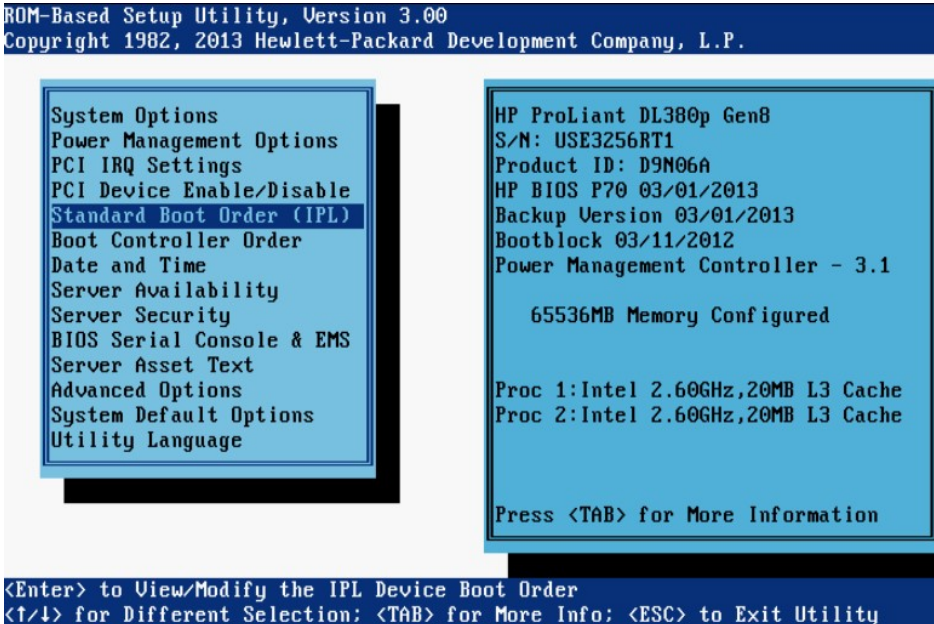
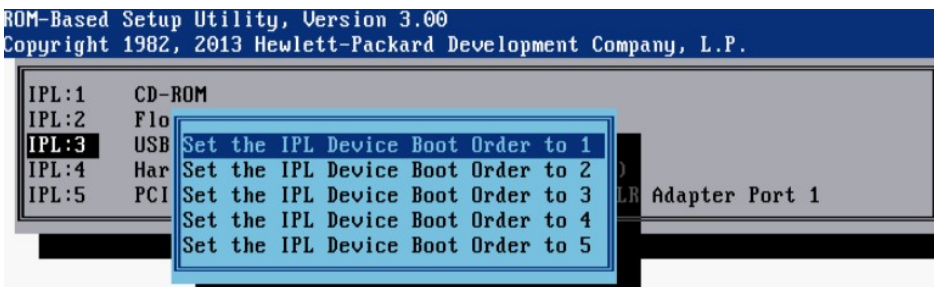
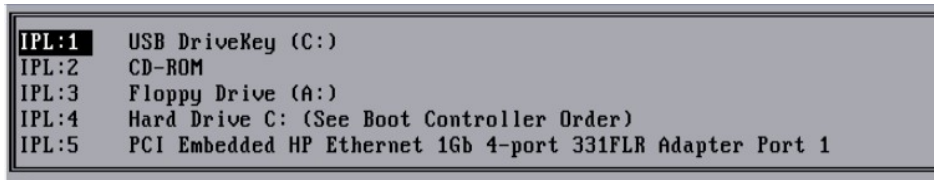
Step	Procedure	Result
2.	After pressing [ENTER] you will see several options to choose from such as:	<p>HP Power Profile, HP Power Regulator, Redundant Power Supply Mode, Advanced Power Management.</p> <p>ROM-Based Setup Utility, Version 3.00 Copyright 1982, 2013 Hewlett-Packard Development Company, L.P.</p>  <p>&lt;Enter&gt; to Modify HP Power Profile Options; &lt;F1&gt; for Help &lt;↑/↓&gt; for Different Configuration Option; &lt;ESC&gt; to Close Menu</p> <p>Figure 40 – RBSU – Select HP Power Profile and Maximum</p>
3.	<ul style="list-style-type: none"> <li>Select <b>HP Power Profile</b></li> <li>Verify it is set to <b>Maximum Performance</b></li> </ul>	
4.	If not set to <b>Maximum Performance</b> , press [ENTER] and select “ <b>Maximum Performance</b> ”, then press [ENTER]	



**Prerequisites & Requirements:**

- ✓ Server rebooted and in RBSU

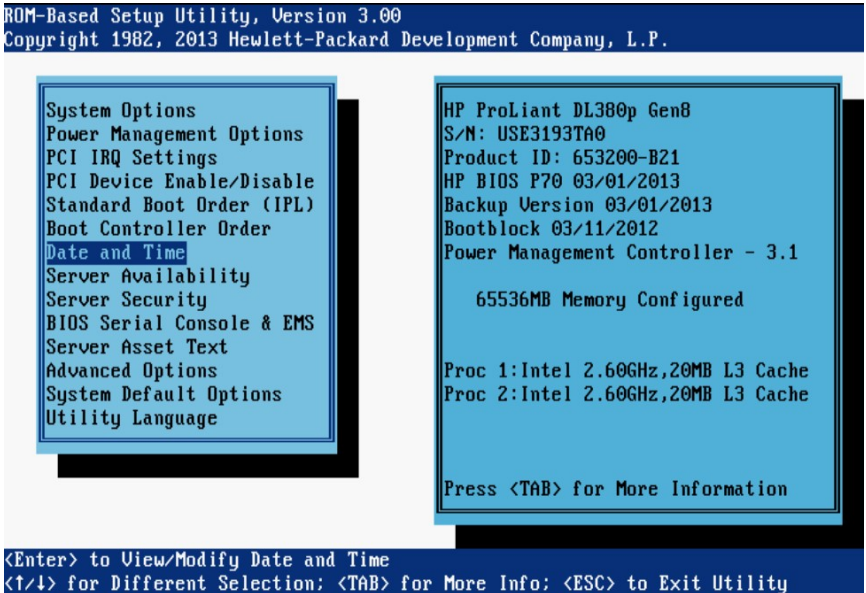
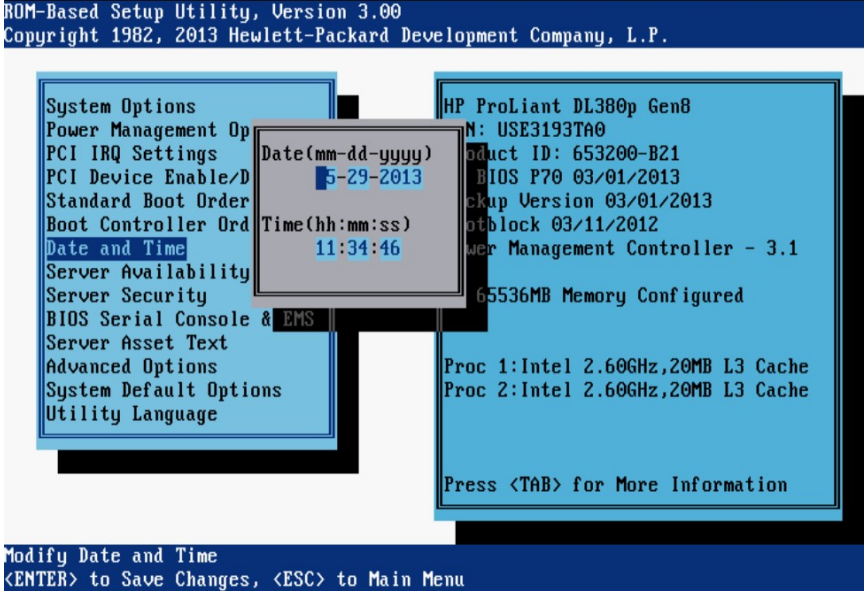
**Procedure 29. Verify/Set Standard Boot Order (IPL)**

Step	Procedure	Result
1. <input type="checkbox"/>	While in <b>RBSU</b> , verify or set the <b>Standard Boot Order</b> . Select <b>Standard Boot Order</b> , then press <b>[ENTER]</b>	<p>Select <b>"Power Management Options"</b>, then press <b>[ENTER]</b>.</p>  <p><b>Figure 41 – Select Standard Boot Order</b></p>
2.	Verify that <b>IPL:1</b> is <b>USB DriveKey (C:)</b> . If <b>IPL:1</b> is not <b>USB DriveKey</b> , then select <b>USB DriveKey</b> and press <b>[ENTER]</b> , then select <b>"Set the IPL Device Boot Order to 1"</b> and press <b>[ENTER]</b>	 <p><b>Figure 42 – Select Set the IP Device Boot Order to 1</b></p>
3.	Verify that <b>IPL:1</b> is now <b>USB DriveKey (C:)</b>	 <p><b>Figure 43 – IPL:1 is Now USB DriveKey (C:)</b></p>

**Prerequisites & Requirements:**

- ✓ Server rebooted and in RBSU

**Procedure 30. Verify/Set System Date and Time**

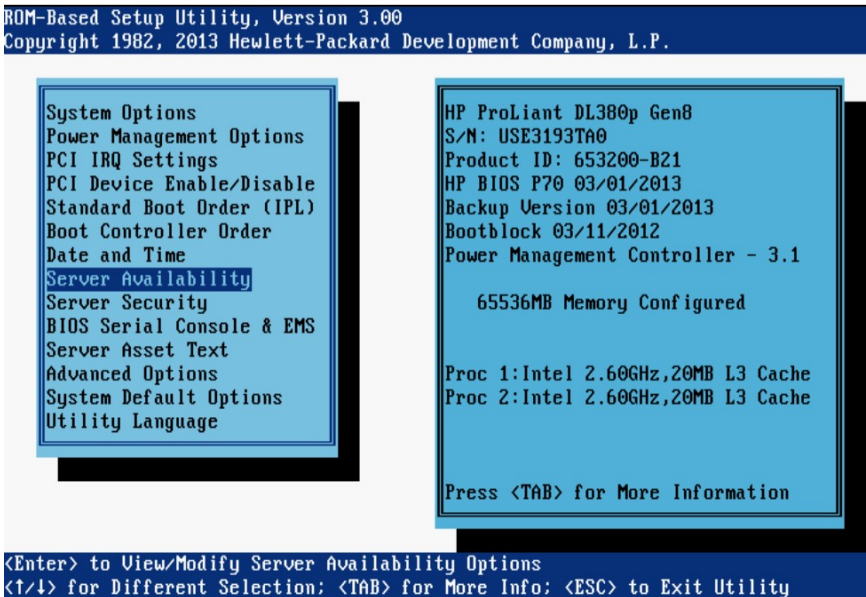
Step	Procedure	Result
1. <input type="checkbox"/>	While in RBSU, set the system Date and Time: Select “ <b>Date and Time</b> ”, then press [ENTER]	 <p style="text-align: center;"><b>Figure 44 – Select Date and Time</b></p>
2.	Set the current <b>Date and Time</b> . Use <b>UTC</b> for the time settings. Once the correct Date and Time has been set, press [ENTER] to confirm the settings.	 <p style="text-align: center;"><b>Figure 45 – Set Date and Time (UTC)</b></p>

In this procedure you will be configuring **Server Availability** which determines how the server will behave following a power loss and recovery. The server will be set to **Restore Last Power State** following a power outage and recovery. In addition it will be set to power on with **No Delay**.

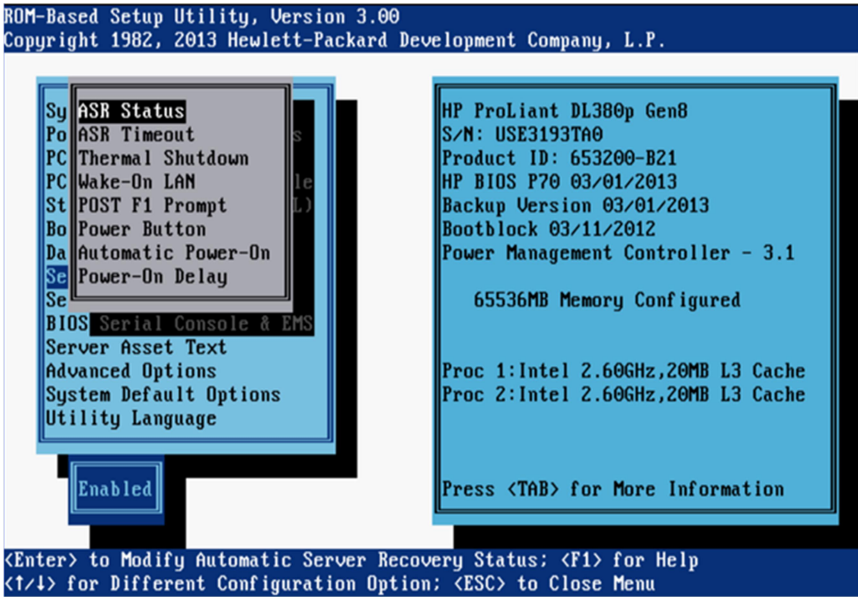
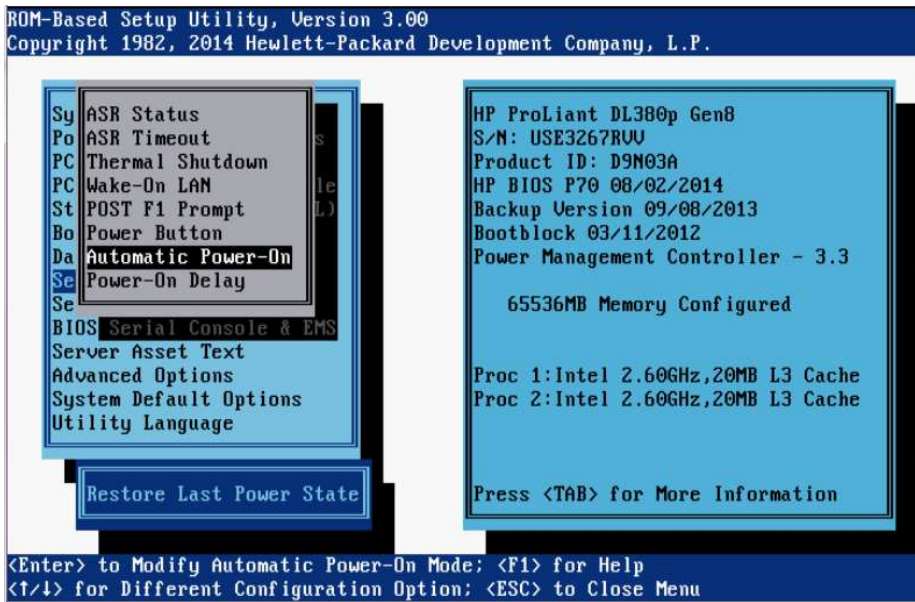
## Prerequisites & Requirements:

- ✓ Server rebooted and in RBSU

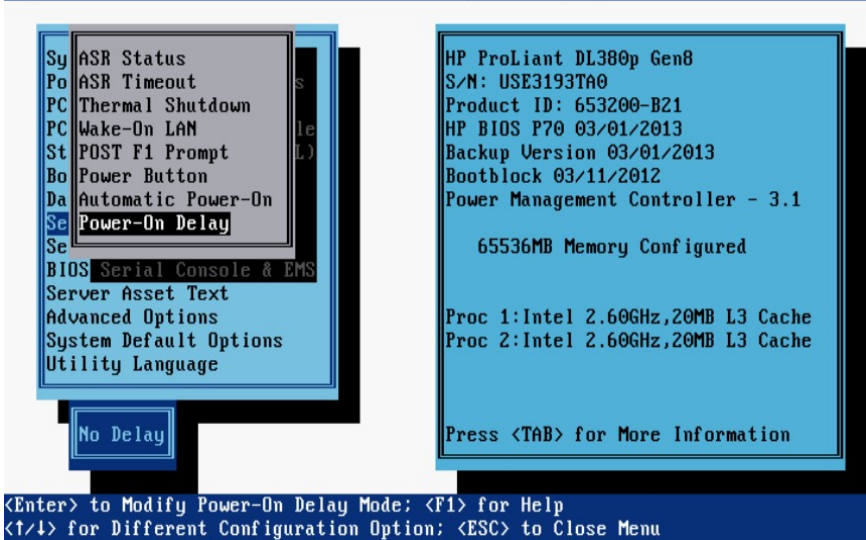
## Procedure 31. Verify/Set Server Availability

Step	Procedure	Result
1. <input type="checkbox"/>	While in <b>RBSU</b> , set the <b>Server Availability</b> :  Select " <b>Server Availability</b> ", then press <b>[ENTER]</b>	 <p>ROM-Based Setup Utility, Version 3.00 Copyright 1982, 2013 Hewlett-Packard Development Company, L.P.</p> <p>System Options Power Management Options PCI IRQ Settings PCI Device Enable/Disable Standard Boot Order (IPL) Boot Controller Order Date and Time <b>Server Availability</b> Server Security BIOS Serial Console &amp; EMS Server Asset Text Advanced Options System Default Options Utility Language</p> <p>HP ProLiant DL380p Gen8 S/N: USE3193TA0 Product ID: 653200-B21 HP BIOS P70 03/01/2013 Backup Version 03/01/2013 Bootblock 03/11/2012 Power Management Controller - 3.1  65536MB Memory Configured  Proc 1: Intel 2.60GHz, 20MB L3 Cache Proc 2: Intel 2.60GHz, 20MB L3 Cache  Press &lt;TAB&gt; for More Information</p> <p>&lt;Enter&gt; to View/Modify Server Availability Options &lt;↑/↓&gt; for Different Selection; &lt;TAB&gt; for More Info; &lt;ESC&gt; to Exit Utility</p> <p><b>Figure 46 – RBSU – Select Server Availability</b></p>
2.	After pressing <b>[ENTER]</b> you will see several options to choose from including  <i>ASR Status, ASR Timeout, Thermal Shutdown, Wake-On LAN, POST F1 Prompt, Power Button, Automatic Power-On and Power-On Delay.</i>	
3.	<ul style="list-style-type: none"> <li>✓ Select <b>ASR Status</b>.</li> <li>✓ Verify it is set to <b>Enabled</b>.</li> </ul>	

Procedure 31. Verify/Set Server Availability

Step	Procedure	Result
4.	If not set to <b>Enabled</b> , press [ENTER] and select “Enabled”, then press [ENTER]	 <p>ROM-Based Setup Utility, Version 3.00 Copyright 1982, 2013 Hewlett-Packard Development Company, L.P.</p> <p>ASR Status ASR Timeout Thermal Shutdown Wake-On LAN POST F1 Prompt Power Button Automatic Power-On Power-On Delay</p> <p>Enabled</p> <p>HP ProLiant DL380p Gen8 S/N: USE3193TA0 Product ID: 653200-B21 HP BIOS P70 03/01/2013 Backup Version 03/01/2013 Bootblock 03/11/2012 Power Management Controller - 3.1</p> <p>65536MB Memory Configured</p> <p>Proc 1: Intel 2.60GHz, 20MB L3 Cache Proc 2: Intel 2.60GHz, 20MB L3 Cache</p> <p>Press &lt;TAB&gt; for More Information</p> <p>&lt;Enter&gt; to Modify Automatic Server Recovery Status; &lt;F1&gt; for Help &lt;↑/↓&gt; for Different Configuration Option; &lt;ESC&gt; to Close Menu</p>
Figure 47 – RBSU – Verify ASR Status is Set to Enabled		
5.	Select <b>Automatic Power-On</b>	 <p>ROM-Based Setup Utility, Version 3.00 Copyright 1982, 2014 Hewlett-Packard Development Company, L.P.</p> <p>ASR Status ASR Timeout Thermal Shutdown Wake-On LAN POST F1 Prompt Power Button Automatic Power-On Power-On Delay</p> <p>Restore Last Power State</p> <p>HP ProLiant DL380p Gen8 S/N: USE3267RUU Product ID: D9N03A HP BIOS P70 08/02/2014 Backup Version 09/08/2013 Bootblock 03/11/2012 Power Management Controller - 3.3</p> <p>65536MB Memory Configured</p> <p>Proc 1: Intel 2.60GHz, 20MB L3 Cache Proc 2: Intel 2.60GHz, 20MB L3 Cache</p> <p>Press &lt;TAB&gt; for More Information</p> <p>&lt;Enter&gt; to Modify Automatic Power-On Mode; &lt;F1&gt; for Help &lt;↑/↓&gt; for Different Configuration Option; &lt;ESC&gt; to Close Menu</p>
Figure 48 – RBSU – Verify Automatic Power-On is Set to Enabled		
6.	Verify <b>Automatic Power-On</b> is set to <b>Restore Last Power State</b>	
7.	If not set to <b>Enabled</b> , press [ENTER] and select “Enabled”, then press [ENTER]	

## Procedure 31. Verify/Set Server Availability

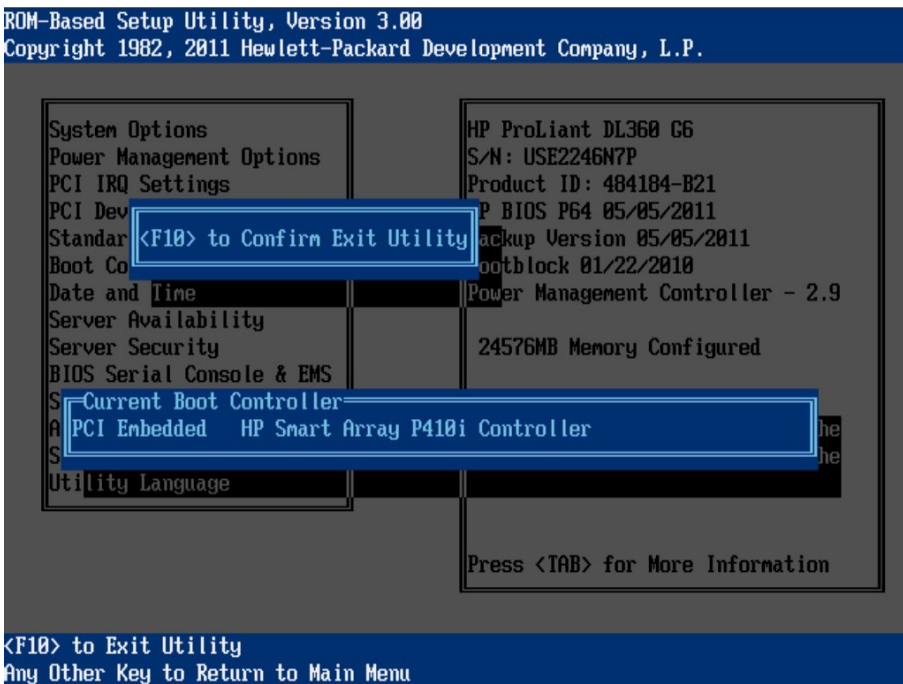
Step	Procedure	Result
8.	Select <b>Power-On Delay</b>	 <p>Figure 49 – RBSU – Verify Power-On Delay is Set to No Delay</p>
9.	Verify <b>Power-On Delay</b> is set to <b>No Delay</b>	
10.	If not set to <b>Enabled</b> , press <b>[ENTER]</b> and select “ <b>No Delay</b> ”, then press <b>[ENTER]</b>	



**Prerequisites & Requirements:**

- ✓ Tasks within the RBSU have been completed.
- ✓ To **Exit** the **RBSU**, press **<ESC>** and then press **<F10>** to Confirm Exit Utility

**Procedure 32. Exit the RBSU**

Step	Procedure	Result
11. <input type="checkbox"/>	<p>While in <b>RBSU</b>, set the <b>Server Availability</b>:</p> <p>Select "<b>Server Availability</b>", then press <b>[ENTER]</b></p>	 <p style="text-align: center;"><b>Figure 50 – RBSU – Exit ROM-Based Setup Utility</b></p>
12.	<p><b>Expected Results:</b></p> <p>The BIOS for the server is successfully configured, memory and processors are verified.</p>	

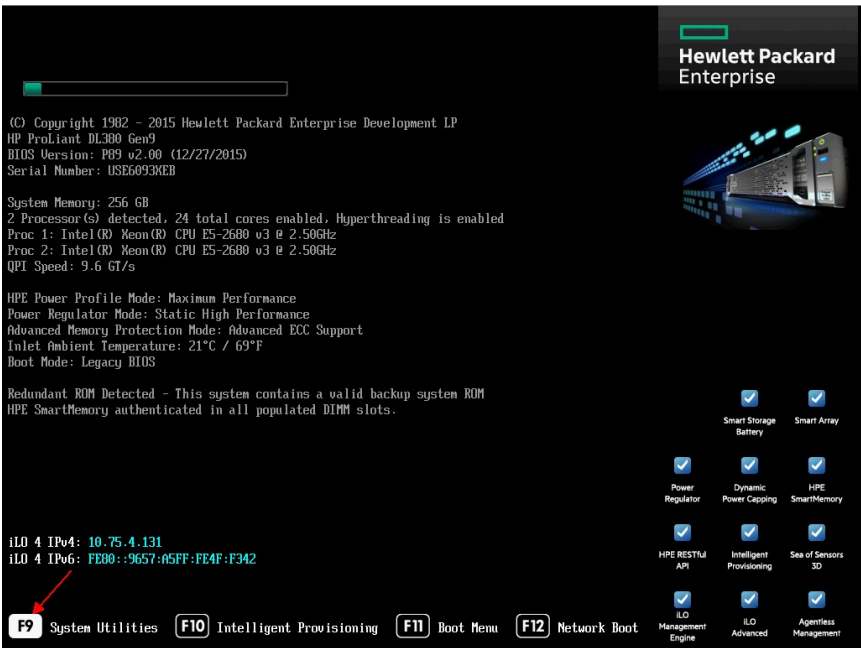
## J-2. GEN9: RMS Configure iLO

### J.2.1. RMS: Configure iLO

#### Prerequisites & Requirements:

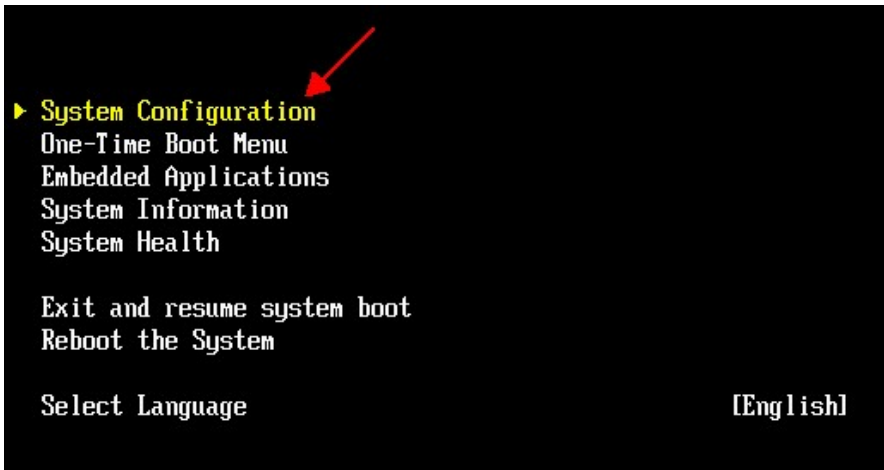
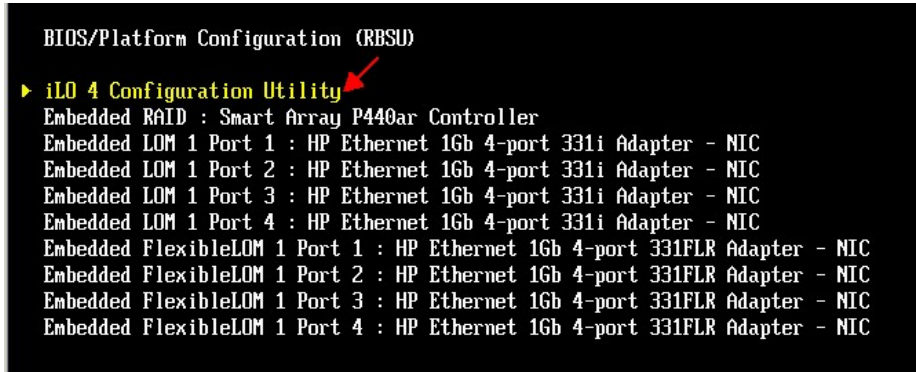
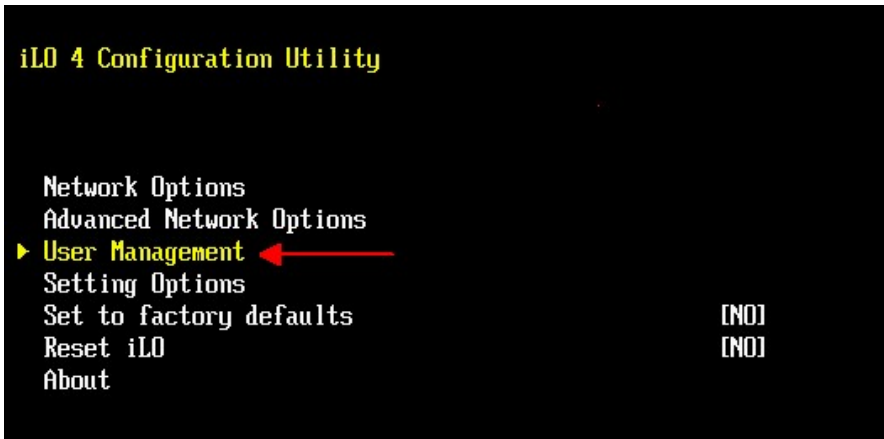
- ✓ Server powered on
- ✓ Server booting up or rebooted

#### Procedure 33. GEN8: Configure the iLO for Rack Mount Server


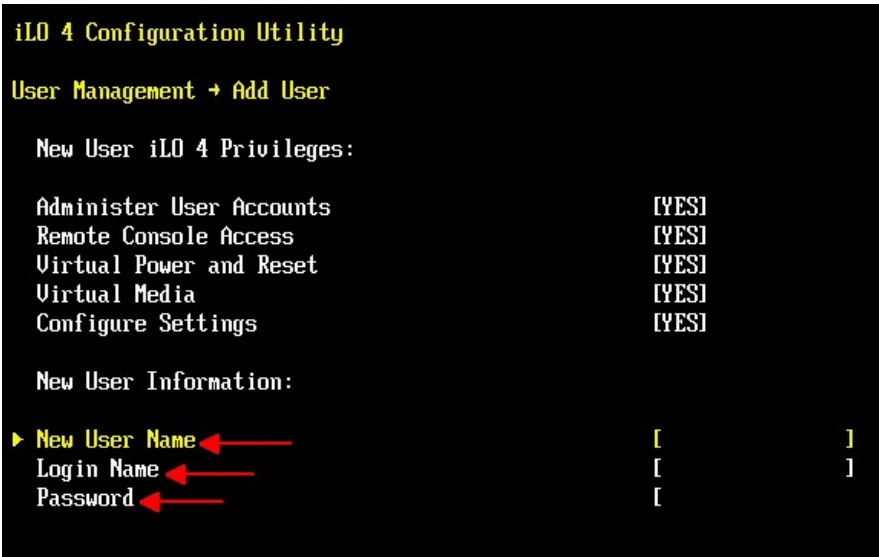
Step	Procedure	Result
1. <div></div>	<p><b>Reboot the server.</b> You will see an HP screen as shown below. When prompted with the option to <b>Press F9</b> for System Utilities, do so. Once <b>F9</b> is pressed, you should see “<b>F9</b>” selected on the screen as shown below</p>	 <p><b>Figure 51 – GEN9: iLO Configuration – GEN9: Press [F9] to configure</b></p>



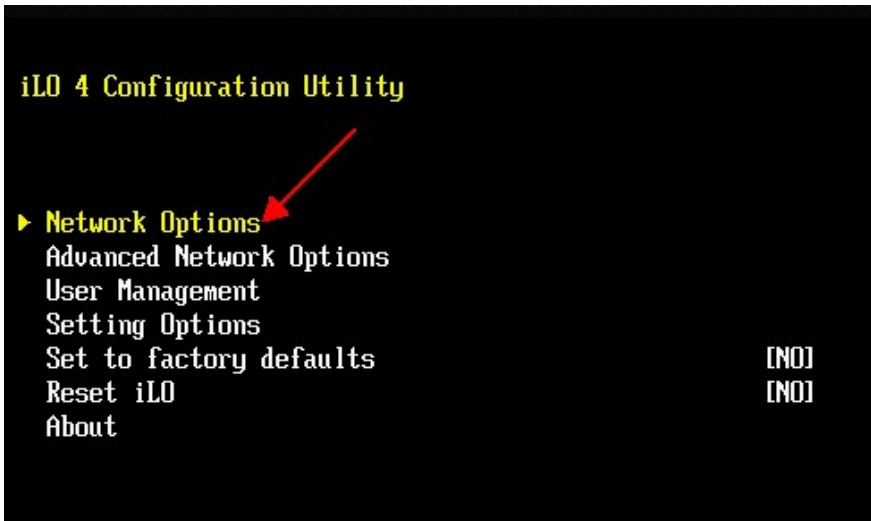
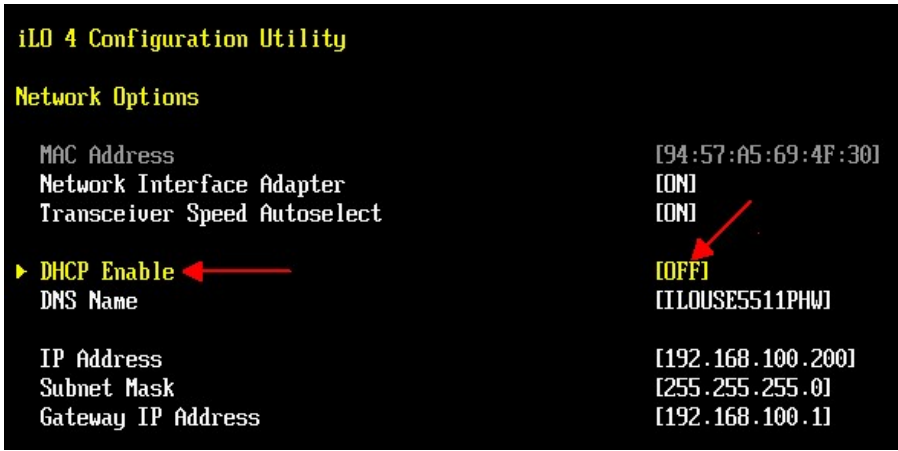
**Procedure 33. GEN8: Configure the iLO for Rack Mount Server**

Step	Procedure	Result
2.	After F9 is pressed select <b>System Configuration</b> then select <b>iLO 4 Configuration Utility</b>	 <p>► <b>System Configuration</b>  One-Time Boot Menu  Embedded Applications  System Information  System Health    Exit and resume system boot  Reboot the System    Select Language [English]</p> <p><b>Figure 52 – GEN9: iLO4 Select System Configuration</b></p>  <p>BIOS/Platform Configuration (RBSU)  ► <b>iLO 4 Configuration Utility</b>  Embedded RAID : Smart Array P440ar Controller  Embedded LOM 1 Port 1 : HP Ethernet 1Gb 4-port 331i Adapter - NIC  Embedded LOM 1 Port 2 : HP Ethernet 1Gb 4-port 331i Adapter - NIC  Embedded LOM 1 Port 3 : HP Ethernet 1Gb 4-port 331i Adapter - NIC  Embedded LOM 1 Port 4 : HP Ethernet 1Gb 4-port 331i Adapter - NIC  Embedded FlexibleLOM 1 Port 1 : HP Ethernet 1Gb 4-port 331FLR Adapter - NIC  Embedded FlexibleLOM 1 Port 2 : HP Ethernet 1Gb 4-port 331FLR Adapter - NIC  Embedded FlexibleLOM 1 Port 3 : HP Ethernet 1Gb 4-port 331FLR Adapter - NIC  Embedded FlexibleLOM 1 Port 4 : HP Ethernet 1Gb 4-port 331FLR Adapter - NIC</p> <p><b>Figure 53 – GEN9: iLO: Select iLO4 Configuration Utility</b></p>
3.	After the initial <b>iLO Configuration Utility</b> screen appears, select <b>User Management</b>	 <p><b>iLO 4 Configuration Utility</b>    Network Options  Advanced Network Options  ► <b>User Management</b>  Setting Options  Set to factory defaults [NO]  Reset iLO [NO]  About</p> <p><b>Figure 54 – GEN9: iLO Configuration – User Management</b></p>

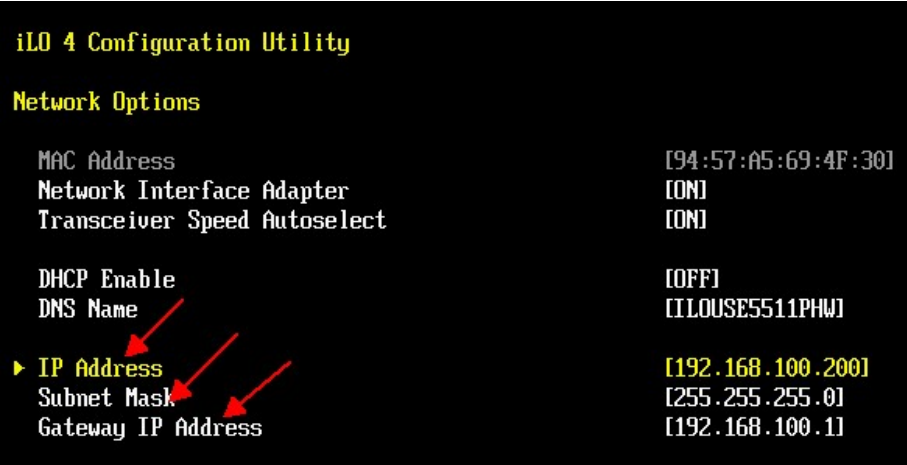
Procedure 33. GEN8: Configure the iLO for Rack Mount Server

Step	Procedure	Result										
4.	Select <b>Add User</b> press <b>[ENTER]</b> to add the <b>admusr</b> user.	 <p>System Configuration</p> <p>iLO 4 Configuration Utility</p> <p>User Management</p> <p>► Add User ← Edit/Remove User</p> <p>Figure 55 – GEN9: iLO Configuration – Add User</p>										
5.	Enter the New User Name, Login Name and Password information for <b>tekelec</b> :  New User Name: <b>tekelec</b> Login Name: <b>tekelec</b> Password: <b>tekelec1</b>	 <p>iLO 4 Configuration Utility</p> <p>User Management → Add User</p> <p>New User iLO 4 Privileges:</p> <table><tr><td>Administer User Accounts</td><td>[YES]</td></tr><tr><td>Remote Console Access</td><td>[YES]</td></tr><tr><td>Virtual Power and Reset</td><td>[YES]</td></tr><tr><td>Virtual Media</td><td>[YES]</td></tr><tr><td>Configure Settings</td><td>[YES]</td></tr></table> <p>New User Information:</p> <p>► New User Name ← [ ] Login Name ← [ ] Password ← [ ]</p> <p>Figure 56 – GEN9: iLO Configuration – Add New User Name: tekelec</p>	Administer User Accounts	[YES]	Remote Console Access	[YES]	Virtual Power and Reset	[YES]	Virtual Media	[YES]	Configure Settings	[YES]
Administer User Accounts	[YES]											
Remote Console Access	[YES]											
Virtual Power and Reset	[YES]											
Virtual Media	[YES]											
Configure Settings	[YES]											


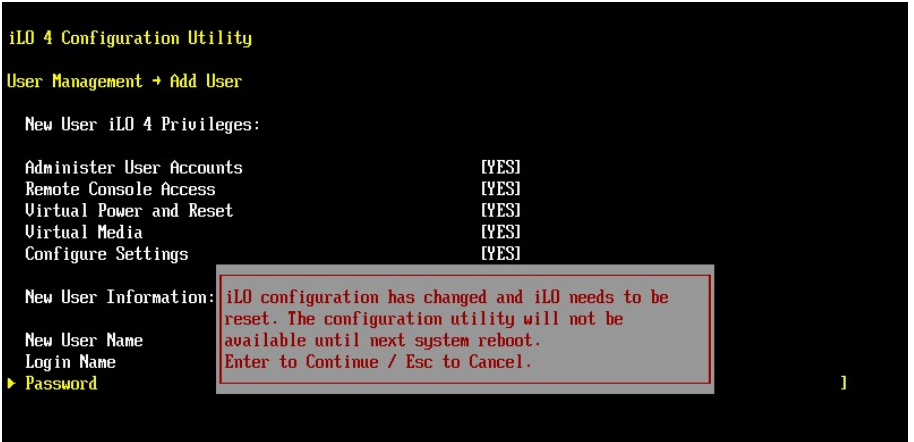
**Procedure 33. GEN8: Configure the iLO for Rack Mount Server**

Step	Procedure	Result
6.	Press [ESC] to go back to the iLO 4 Configuration Utility menu, then select <b>Network Options</b> .	 <p><b>iLO 4 Configuration Utility</b></p> <ul style="list-style-type: none"> <li>▶ <b>Network Options</b></li> <li>Advanced Network Options</li> <li>User Management</li> <li>Setting Options</li> <li>Set to factory defaults [NO]</li> <li>Reset iLO [NO]</li> <li>About</li> </ul> <p><b>Figure 57 – GEN9: iLO Configuration – Select Network Options</b></p>
7.	Within the <b>Network</b> menu verify that <b>DHCP Enable</b> is set to [OFF]. IF not set to [OFF], press [ENTER] and arrow down to select [OFF] then press [ENTER].	 <p><b>iLO 4 Configuration Utility</b></p> <p><b>Network Options</b></p> <ul style="list-style-type: none"> <li>MAC Address [94:57:A5:69:4F:30]</li> <li>Network Interface Adapter [ON]</li> <li>Transceiver Speed Autoselect [ON]</li> <li>▶ <b>DHCP Enable</b> [OFF]</li> <li>DNS Name [ILOUSE5511PHW]</li> <li>IP Address [192.168.100.200]</li> <li>Subnet Mask [255.255.255.0]</li> <li>Gateway IP Address [192.168.100.1]</li> </ul> <p><b>Figure 58 – GEN9: iLO Configuration – DHCP Enable to OFF</b></p>

Procedure 33. GEN8: Configure the iLO for Rack Mount Server

Step	Procedure	Result
8.	Use the arrow keys to move up/down to set the IP Address, Subnet Mask and Gateway IP Address for the server.	<p>IP Address should be set based on the information in the NAPD.</p> <p>Subnet Mask: 255.255.255.0</p> <p>Gateway IP Address: 192.168.100.1</p> <div><pre>iLO 4 Configuration Utility  Network Options  MAC Address                      [94:57:A5:69:4F:30] Network Interface Adapter        [ON] Transceiver Speed Autoselect     [ON]  DHCP Enable                      [OFF] DNS Name                        [ILOUSE5511PHW] ▶ IP Address                     [192.168.100.200] Subnet Mask                      [255.255.255.0] Gateway IP Address               [192.168.100.1]</pre></div> <p>Figure 59 – GEN9: iLO Configuration – Network Configuration IP, Subnet, Gateway</p>

**Procedure 33. GEN8: Configure the iLO for Rack Mount Server**

Step	Procedure	Result
9.	Press [F10] to save all changes, ENTER “Y” to confirm then exit out and reboot the server	 <p><b>Figure 60 – GEN9: iLO Configuration – F10 Save Changes</b></p>  <p><b>Figure 61 – GEN9: iLO Configuration – Change Reboot Message</b></p>
10.	Repeat this procedure for other ship loose servers for the work order.	

## J.2.2. GEN9: RMS BIOS Configuration, verify processor & memory


In this section you will be configuring the BIOS on the Rack Mount Server and verifying the processor and memory configuration.

### Verify/Configure BIOS Settings and Verify Configured Memory

#### Prerequisites & Requirements:

- ✓ Server powered on
- ✓ KVM connectivity to the server to get console

#### Procedure 34. GEN9: Enter the ROM-Based Setup Utility (RBSU)

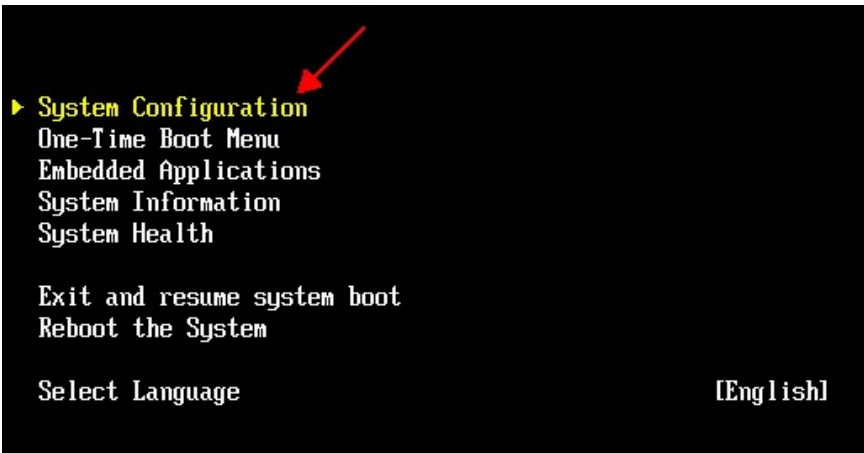
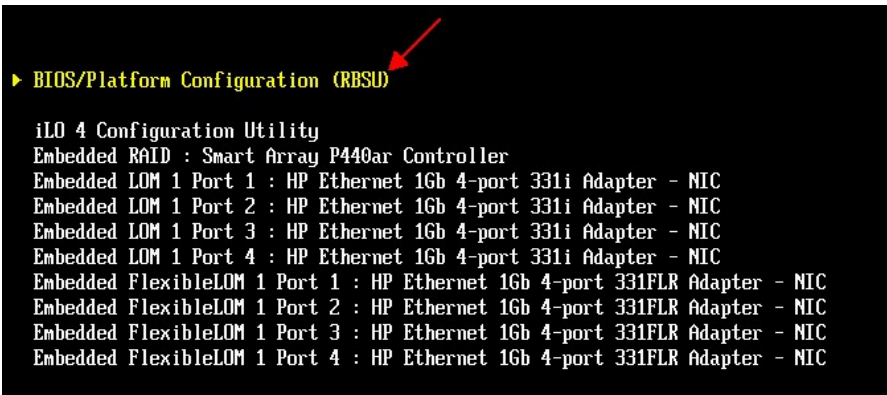
Step	Procedure	Result
1. <input type="checkbox"/>	<b>Reboot the server.</b> You will see an HP screen as shown below. When prompted with the option to <b>Press F9</b> for System Utilities, do so. Once <b>F9</b> is pressed, you should see <b>"F9" selected</b> on the screen as shown below:	 <p>The image shows the HP RBSU splash screen. At the top right is the 'Hewlett Packard Enterprise' logo. The main area displays system information: Copyright 1982 - 2015 Hewlett Packard Enterprise Development LP, HP ProLiant DL380 Gen9, BIOS Version: P89 v2.00 (12/27/2015), Serial Number: USE6093KEB. Below this, it lists System Memory: 256 GB, 2 Processor(s) detected, 24 total cores enabled, Hyperthreading is enabled, and details for two Intel Xeon E5-2680 v3 processors. It also shows HPE Power Profile Mode: Maximum Performance, Power Regulator Mode: Static High Performance, Advanced Memory Protection Mode: Advanced ECC Support, Inlet Ambient Temperature: 21°C / 69°F, and Boot Mode: Legacy BIOS. A message states 'Redundant ROM Detected - This system contains a valid backup system ROM' and 'HPE SmartMemory authenticated in all populated DIMM slots.' At the bottom, there are network addresses: iLO 4 IPv4: 10.75.4.131 and iLO 4 IPv6: FE80::9657:A5FF:FE4F:F342. A grid of icons on the right includes Smart Storage Battery, Smart Array, Power Regulator, Dynamic Power Capping, HPE SmartMemory, HPE RESTful API, Intelligent Provisioning, Sea of Sensors 3D, ILO Management Engine, ILO Advanced, and Agentless Management. At the bottom left, a row of buttons shows 'F9 System Utilities' (highlighted with a red arrow), 'F10 Intelligent Provisioning', 'F11 Boot Menu', and 'F12 Network Boot'.</p> <p><b>Figure 62 – GEN9 RBSU – Enter RBSU – F9 Pressed indicated in HP Splash Screen</b></p>

In this procedure you will be verifying and/or configuring the Serial Port Options for the Embedded and Virtual Serial Ports.

**Prerequisites & Requirements:**

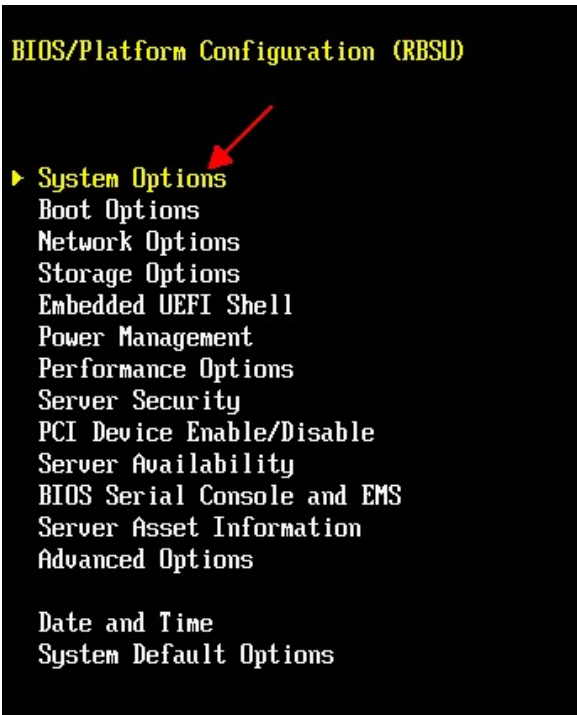
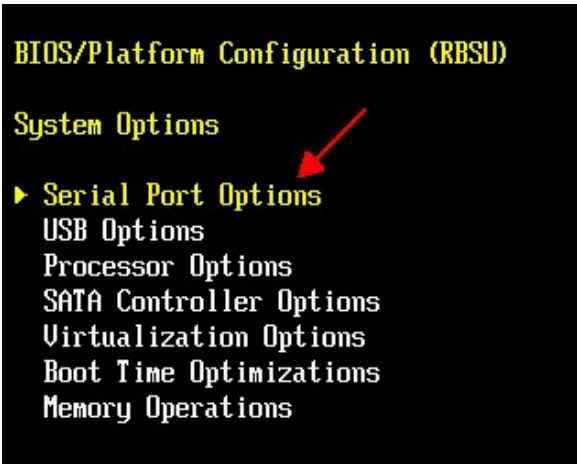
- ✓ Server rebooted and in RBSU mode

**Procedure 35. GEN9: Verify/Configure Serial Port Options**

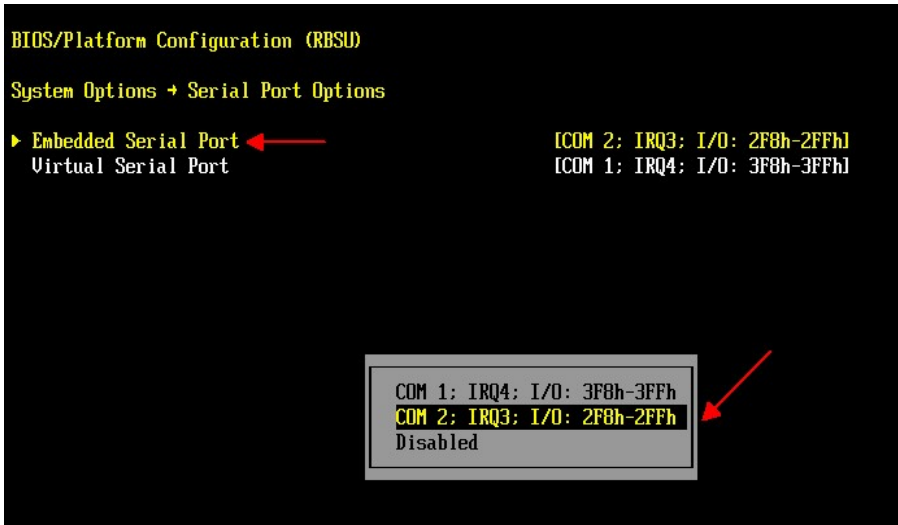
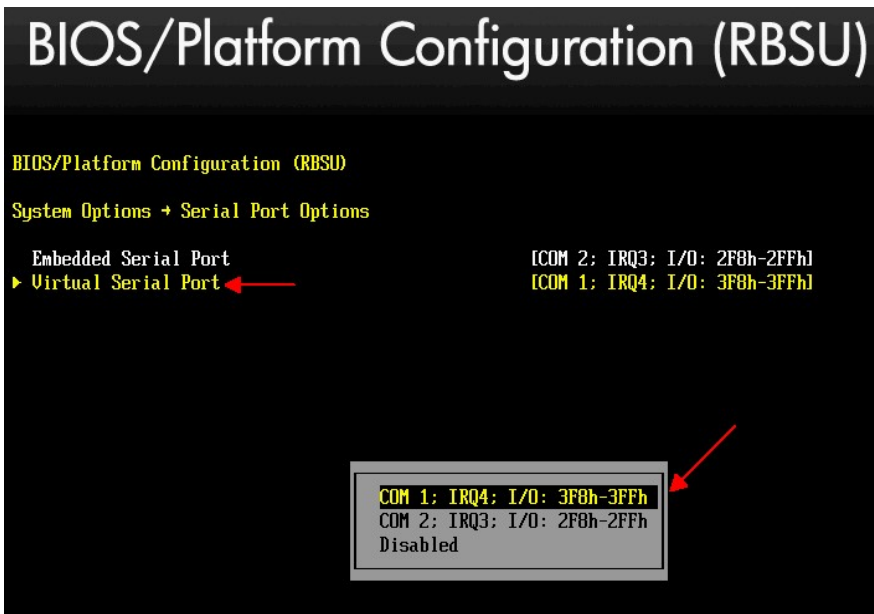
Step	Procedure	Result
1. <input type="checkbox"/>	Press Enter to go into the <b>System Configuration</b> menu then select <b>BIOS/Platform Configuration (RBSU)</b> .	 <p>Figure 63 – GEN9: Select System Configuration</p>  <p>Figure 64 – GEN9: Select BIOS/Platform Configuration (RBSU)</p>



Procedure 35. GEN9: Verify/Configure Serial Port Options

Step	Procedure	Result
2.	Select <b>System Options</b> then select <b>Serial Port Options</b>	 <p>Figure 65 – GEN9: ROM-Based Setup Utility – System Options</p>  <p>Figure 66 – GEN9: ROM-Based Setup Utility – Serial Port Options</p>

## Procedure 35. GEN9: Verify/Configure Serial Port Options


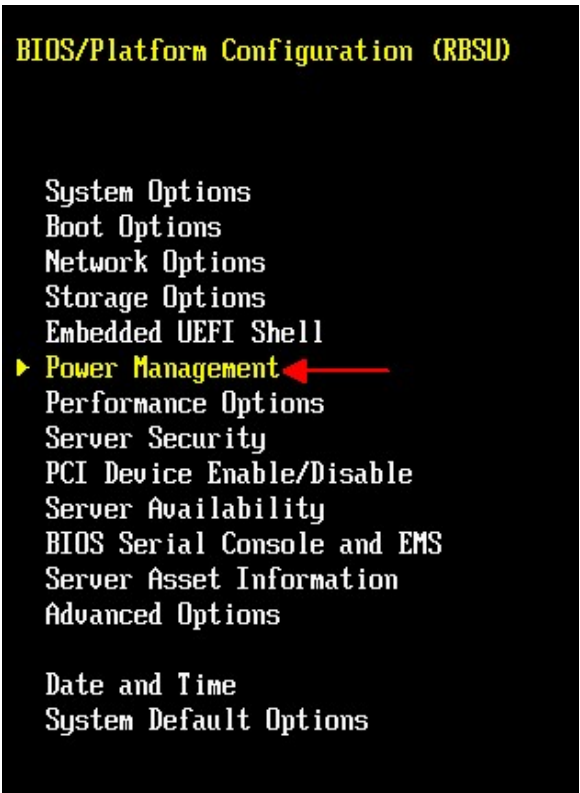
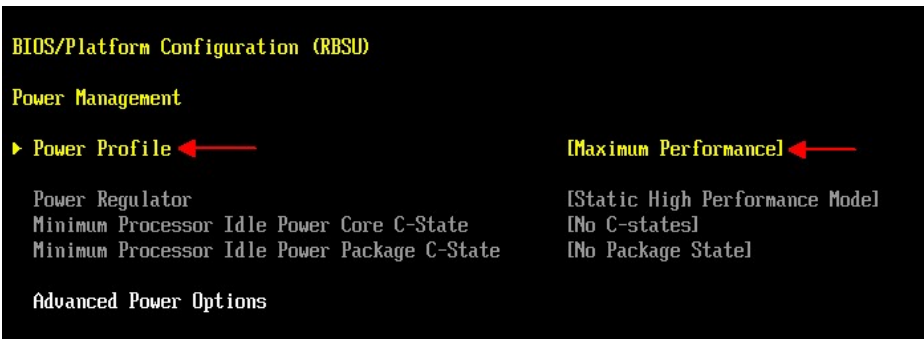
Step	Procedure	Result
3.	<p><b>Verify the settings for Embedded Serial Port:</b></p> <p>Select “<b>Embedded Serial Port</b>” and verify it is set for “<b>COM 2</b>”. If it is not set to <b>COM 2</b>, press [ENTER], select <b>COM 2</b>, then [ENTER]</p>	 <p>Figure 67 – GEN9: Verify Embedded Serial Port Setting</p>
4.	<p><b>Verify the settings for Virtual Serial Port:</b></p> <p>Select “<b>Virtual Serial Port</b>” and verify it is set for <b>COM 1</b>. If it is not set to <b>COM 1</b>, press [ENTER], select <b>COM 1</b>, then [ENTER]</p>	 <p>Figure 68 – GEN9: Verify Virtual Serial Port Setting</p>

In this procedure you will be configuring **Power Management Options**. The server **HP Power Profile** will be verified/set to **Maximum Performance**.

**Prerequisites & Requirements:**

- ✓ Server rebooted and in RBSU

**Procedure 36. GEN9: Verify/Set Power Management**

Step	Procedure	Result
1. 	While in RBSU, verify/set the <b>HP Power Profile</b> :  Select “ <b>Power Management</b> ”, then press [ENTER]	 <p>Figure 69 – GEN9: RBSU – Select Power Management</p>
2.	After pressing [ENTER] you will see several options to choose from such as:  <i>Power Profile, Power Regulator, Minimum Processor Idle Power Core C-State, Minimum Processor Idle Power Package C-State and Advanced Power Options</i>	 <p>Figure 70 – GEN9: RBSU – Select HP Power Profile and Maximum Performance</p>

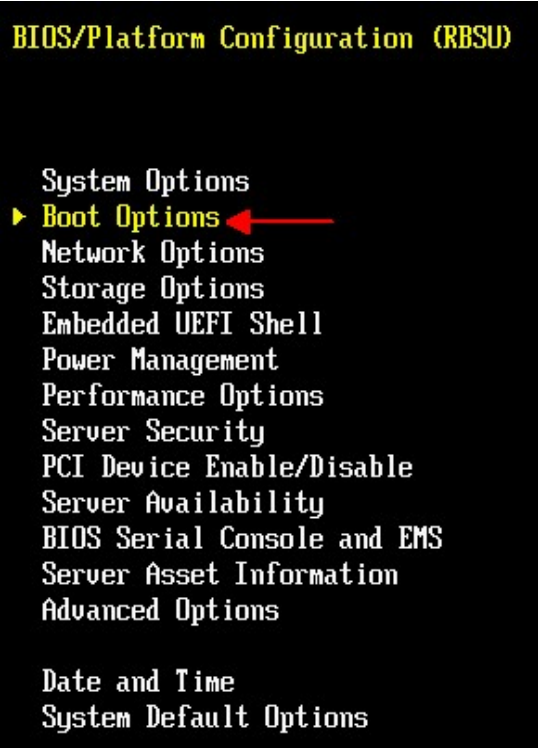
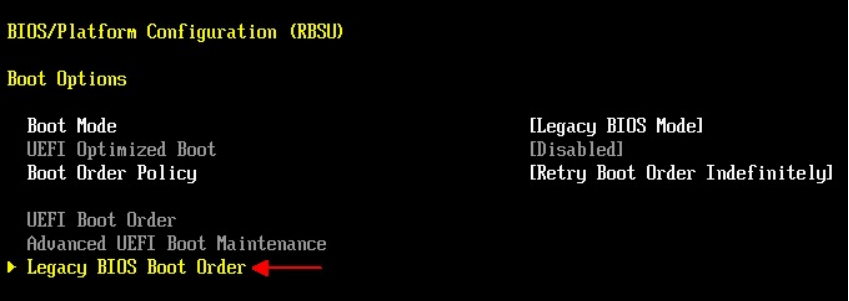
**Procedure 36. GEN9: Verify/Set Power Management**

Step	Procedure	Result
3.	<ul style="list-style-type: none"> <li>• Select <b>Power Profile</b>.</li> <li>• Verify it is set to <b>Maximum Performance</b></li> </ul>	
4.	If not set to <b>Maximum Performance</b> , press [ENTER] and select “ <b>Maximum Performance</b> ”, then press [ENTER]	

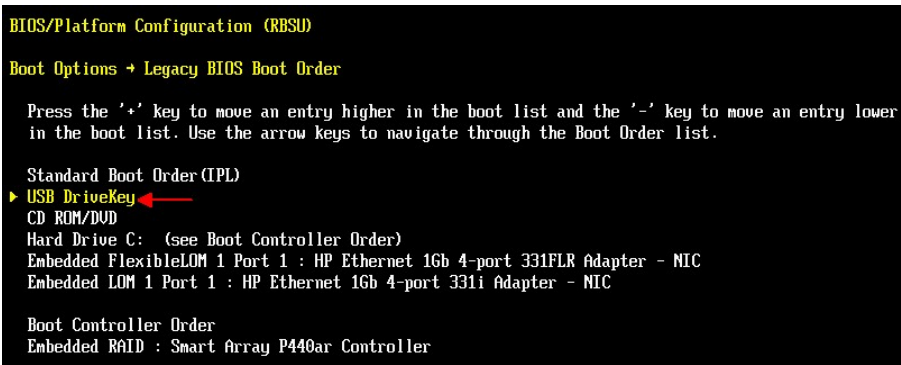
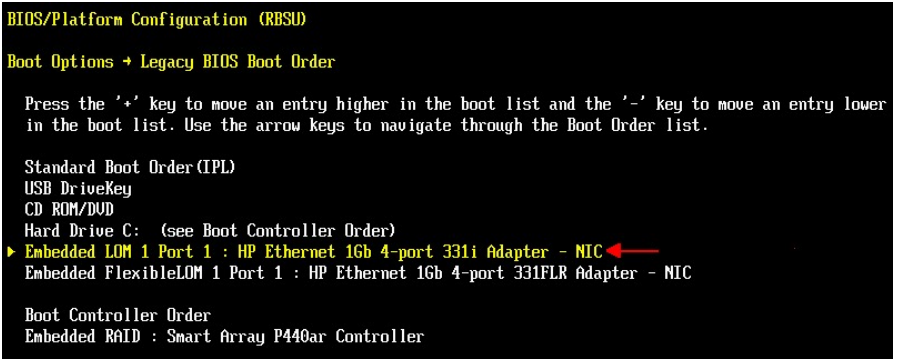
Prerequisites & Requirements:

- ✓ Server rebooted and in RBSU

Procedure 37. GEN9: Verify/Set Standard Boot Order (IPL)

Step	Procedure	Result
1. <div></div>	While in RBSU, verify or set the Legacy BIOS Boot Order, Select Boot Options, then press [ENTER], then select Legacy BIOS Boot Order then press [ENTER]	<div><p>BIOS/Platform Configuration (RBSU)</p><p>System Options ▶ <b>Boot Options</b> ← Network Options Storage Options Embedded UEFI Shell Power Management Performance Options Server Security PCI Device Enable/Disable Server Availability BIOS Serial Console and EMS Server Asset Information Advanced Options</p><p>Date and Time System Default Options</p></div> <p>Figure 71 – GEN9: Select Boot Options</p> <div><p>BIOS/Platform Configuration (RBSU)</p><p>Boot Options</p><p>Boot Mode [Legacy BIOS Mode] UEFI Optimized Boot [Disabled] Boot Order Policy [Retry Boot Order Indefinitely]</p><p>UEFI Boot Order Advanced UEFI Boot Maintenance ▶ <b>Legacy BIOS Boot Order</b> ←</p></div> <p>Figure 72 – GEN9: Select Legacy BIOS Boot Order</p>

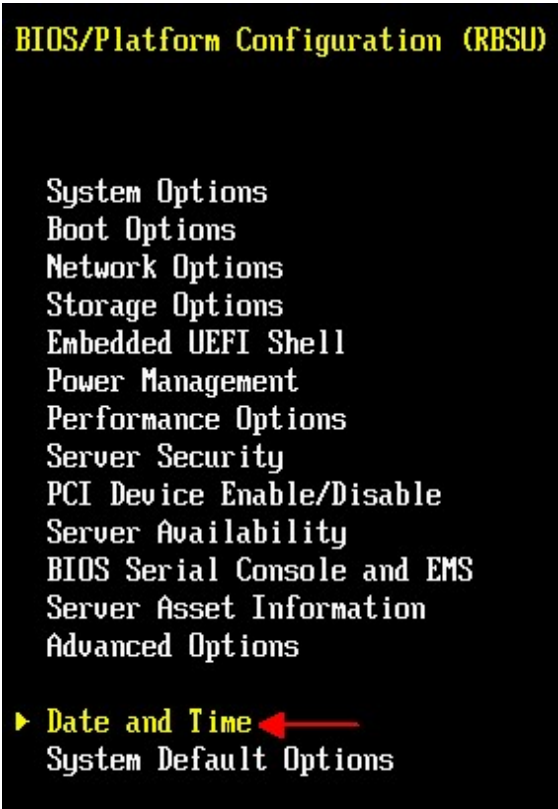
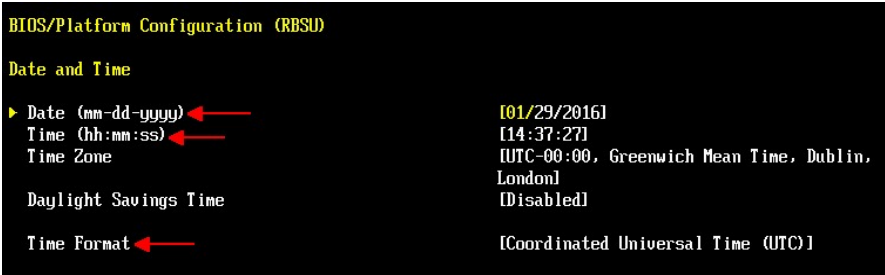
**Procedure 37. GEN9: Verify/Set Standard Boot Order (IPL)**

Step	Procedure	Result
2.	Verify under <b>Standard Boot Order (IPL)</b> that <b>USB DriveKey</b> is in the first position and <b>Embedded LOM</b> is in the fourth position. Press “+” or “-” to maneuver to the correct position.	<p><b>Legacy BIOS Boot Order:</b></p> <p>USB DriveKey</p> <p>CD ROM/DVD</p> <p>Hard Drive C</p> <p>Embedded LOM 1 Port 1</p> <p>Embedded FlexibleLOM 1 Port 1</p>  <p><b>Figure 73 – Select Set the IP Device Boot Order USB DriveKey</b></p>  <p><b>Figure 74 – Select Set the IP Device Boot Order Embedded LOM 1 Port 1</b></p>

**Prerequisites & Requirements:**

- ✓ Server rebooted and in RBSU

**Procedure 38. GEN9: Verify/Set System Date and Time**

Step	Procedure	Result
1. <input type="checkbox"/>	While in RBSU, set the system Date and Time: Select “Date and Time”, then press [ENTER]	 <p style="text-align: center;"><b>Figure 75 – GEN9: Select Date and Time</b></p>
2.	Set the current <b>Date and Time</b> . Use <b>UTC</b> for the time settings. Once the correct Date and Time has been set, press [ENTER] to confirm the settings.	 <p style="text-align: center;"><b>Figure 76 – GEN9: Set Date and Time (UTC)</b></p>




In this procedure you will be configuring **Server Availability** which determines how the server will behave following a power loss and recovery. The server will be set to **Restore Last Power State** following a power outage and recovery. In addition it will be set to power on with **No Delay**.

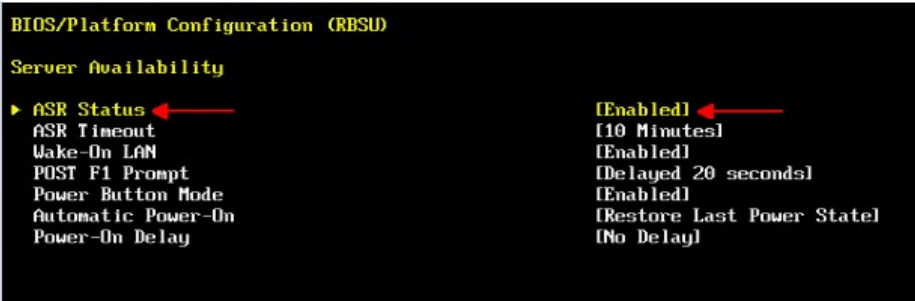

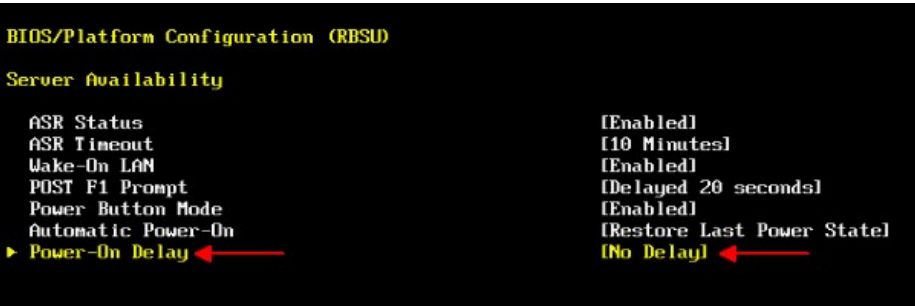
## Prerequisites & Requirements:

- ✓ Server rebooted and in RBSU


## Procedure 39. GEN9: Verify/Set Server Availability

Step	Procedure	Result
1. <input type="checkbox"/>	While in <b>RBSU</b> , set the <b>Server Availability</b> : Select " <b>Server Availability</b> ", then press <b>[ENTER]</b>	 <p>Figure 77 – GEN9: RBSU – Select Server Availability</p>
2.	After pressing <b>[ENTER]</b> you will see several options to choose from including: <b>ASR Status, ASR Timeout, Wake-On LAN, POST F1 Prompt, Power Button Mode, Automatic Power-On and Power-On Delay.</b>	
3.	<ul style="list-style-type: none"> <li>• Select <b>ASR Status</b></li> <li>• Verify it is set to <b>Enabled</b></li> </ul>	

Procedure 39. GEN9: Verify/Set Server Availability

Step	Procedure	Result
4.	If not set to <b>Enabled</b> , press [ENTER] and select " <b>Enabled</b> ", then press [ENTER]	 <p>Figure 78 – GEN9: RBSU – Verify ASR Status is Set to Enabled</p>
5.	Select <b>Automatic Power-On</b>	 <p>Figure 79 – GEN9: RBSU – Verify Automatic Power-On is Set to Restore Last Power State</p>
6.	Verify <b>Automatic Power-On</b> is set to <b>Restore Last Power State</b>	
7.	If not set to <b>Enabled</b> , press [ENTER] and select " <b>Enabled</b> ", then press [ENTER]	
8.	Select <b>Power-On Delay</b>	 <p>Figure 80 – GEN9: RBSU – Verify Power-On Delay is Set to No Delay</p>
9.	Verify <b>Power-On Delay</b> is set to <b>No Delay</b>	

**Procedure 39. GEN9: Verify/Set Server Availability**

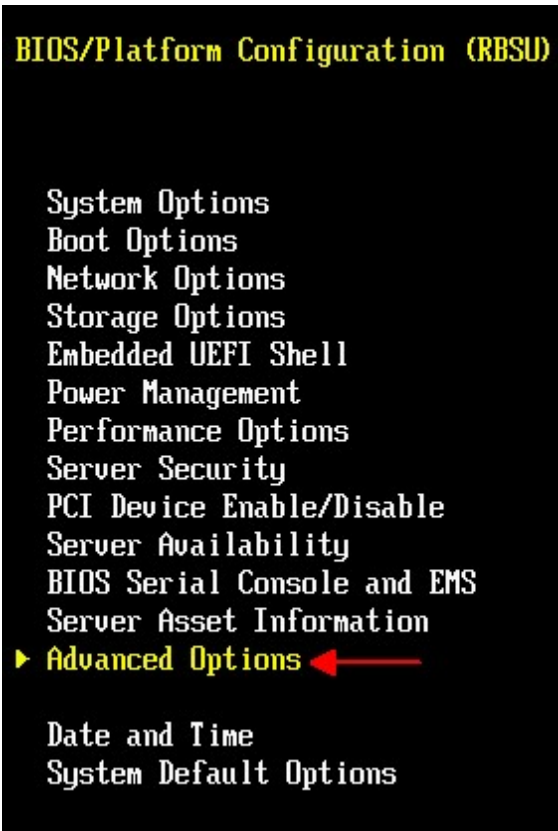
Step	Procedure	Result
10.	If not set to <b>Enabled</b> , press [ENTER] and select “No Delay”, then press [ENTER]	
11.	Select <b>POST F1 Prompt</b>	 <p>Figure 81 – GEN9: RBSU – Verify Post F1 Prompt is Set to Delayed 20 Seconds</p>
12.	Verify <b>Delayed 20 seconds</b> is set	
13.	If not set to <b>Delayed 20 seconds</b> , press [ENTER] and select “Delayed 20 seconds”, then press [ENTER]	

In this procedure you will be configuring **Advanced Options**. The **Fan and Thermal Options** will be verified/set to **Optimal Cooling**.

**Prerequisites & Requirements:**

- ✓ Server rebooted and in RBSU

**Procedure 40. GEN9: Verify Advanced Options**

Step	Procedure	Result
1. <input type="checkbox"/>	While in <b>RBSU</b> , set the <b>Advanced Options</b> . Select " <b>Advanced Options</b> ", then press <b>[ENTER]</b>	 <p style="text-align: center;">Figure 82 – GEN9: RBSU – Verify Advanced Options</p>
2.	After pressing <b>[ENTER]</b> you will see several options to choose from including: <i><b>ROM Selection, Embedded Video Connection, Fan and Thermal Options, Advanced System ROM options.</b></i>	
3.	Select <b>Fan and Thermal Options</b>	

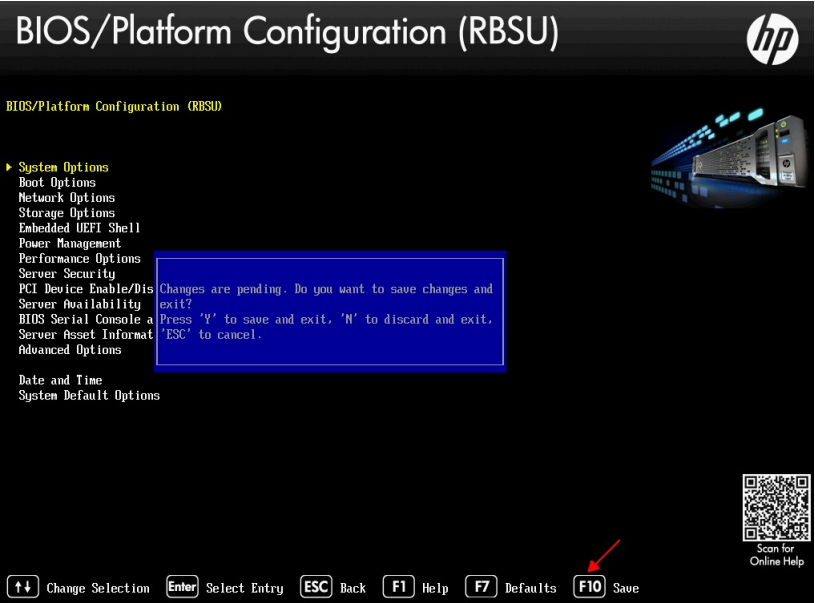
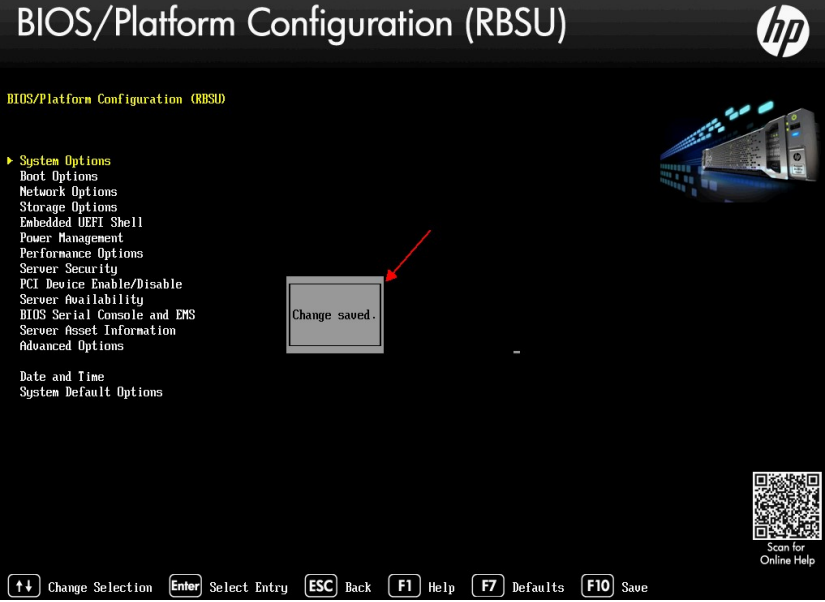
Procedure 40. GEN9: Verify Advanced Options

Step	Procedure	Result
4.	Verify <b>Thermal Configuration</b> is set for <b>Optimal Cooling</b>	<div></div> <p><b>Figure 83 – GEN9: RBSU – Verify Fan and Thermal Options</b></p>
5.	If not set to <b>Optimal Cooling</b> , press <b>[ENTER]</b> and select “ <b>Optimal Cooling</b> ”, then press <b>[ENTER]</b>	


Prerequisites & Requirements:

Tasks within the RBSU have been completed.

Procedure 41. GEN9: Save and Exit the RBSU

Step	Procedure	Result
1. <div></div>	Press <b>F10</b> to save changes then Enter “ <b>Y</b> ” to confirm changes. the <b>RBSU</b> , press <b>&lt;ESC&gt;</b> and then press <b>&lt;F10&gt;</b> to Confirm Exit Utility	<div></div> <p><b>Figure 84 – GEN9: RBSU – Save Changes and Confirm</b></p> <div></div> <p><b>Figure 85 – GEN9: RBSU – Changes Saved</b></p>

Procedure 41. GEN9: Save and Exit the RBSU

Step	Procedure	Result
2.	To Exit the RBSU and System Utilities, press <ESC> and then press [ENTER] to confirm exit	 <p>Figure 86 – GEN9: Exit System Utilities</p>
THIS PROCEDURE HAS BEEN COMPLETED		



## Appendix K. Accessing My Oracle Support (MOS)

MOS (<https://support.oracle.com>) is your initial point of contact for all product support and training needs. A representative at Customer Access Support (CAS) can assist you with MOS registration.

Call the CAS main number at **1-800-223-1711** (toll-free in the US), or call the Oracle Support hotline for your local country from the list at <http://www.oracle.com/us/support/contact/index.html>. When calling, make the selections in the sequence shown below on the Support telephone menu:

1. Select 2 for New Service Request.
2. Select 3 for Hardware, Networking and Solaris Operating System Support.
3. Select one of the following options:

For technical issues such as creating a new Service Request (SR), select 1.

For non-technical issues such as registration or assistance with MOS, select 2.

You are connected to a live agent who can assist you with MOS registration and opening a support ticket. MOS is available 24 hours a day, 7 days a week, 365 days a year.

### **Emergency Response**

In the event of a critical service situation, emergency response is offered by the Customer Access Support (CAS) main number at 1-800-223-1711 (toll-free in the US), or by calling the Oracle Support hotline for your local country from the list at <http://www.oracle.com/us/support/contact/index.html>. The emergency response provides immediate coverage, automatic escalation, and other features to ensure that critical situation is resolved as rapidly as possible. A critical situation is defined as a problem with the installed equipment that severely affects service, traffic, or maintenance capabilities, and requires immediate corrective action.

Critical Situations affect service and/or system operation resulting in one or several of these situations:

- A total system failure that results in loss of all transaction processing capability.
- Significant reduction in system capacity or traffic handling capability
- Loss of the system's ability to perform automatic system reconfiguration
- Inability to restart a processor or the system.
- Corruption of system databases that requires service affecting corrective actions
- Loss of access for maintenance or recovery operations.
- Loss of system ability to provide any required critical or major trouble notification

Other problems severely affecting service, capacity/ traffic, billing, and maintenance capabilities may also be defined as critical by prior discussion and agreement with Oracle.