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Installation and Configuration Guide
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OCUDR 10.0.1 Installation and Configuration Guide

Oracle Communications UDR Initial Installation and Configuration Guide, Release 10.0.1

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

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

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See more information on MOS in the Appendix section.

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1.0 INTRODUCTION

1.1 Purpose and Scope

This document describes how to install OCUDR (on HP Proliant hardware) product within a customer network. It makes use of AppWorks 5.7 network installation and is intended to cover the initial network configuration steps for NOAMP, SOAM, and MP servers which includes validation of initial configuration.

This document only describes the OCUDR product SW installation on the HP Proliant Blade or Server. 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 OCUDR cabinet.

1.2 References

- [1] *TEKELEC Acronym Guide*, MS005077, latest revision
- [2] *Site Survey (Domestic US)*, SS005977, latest revision
- [3] *Hardware Verification Plan*, VP005629, latest revision
- [4] *Platform 6.x Configuration Procedure Reference*, 909-2209-001, latest revision
- [5] *HP Solutions Firmware Upgrade Pack Release Notes*, 795-000-2xx, v2.1.5 (or latest 2.1 version)
- [6] *Network Interconnect: UDR 10.0, TR007403*, latest revision
- [7] *OC UDR 10.0 Base Hardware and Software Installation Procedure*, E48809-01, latest revision
- [8] *OC UDR 10.0.1 Disaster Recovery Guide*, E58585-01, latest revision

1.3 Acronyms

An alphabetized list of acronyms used in the document:

Acronym	Meaning
HA	High Availability
IMI	Internal Management Interface
IPM	Initial Product Manufacture – the process of installing TPD on hardware platform
NOAMP	Network Operations, Administration, Maintenance & Provisioning
SOAM	System Operations, Administration and Maintenance
MP	Message Processor
SPR	Subscriber Profile Repository
TPD	Tekelec Platform Distribution (Linux OS)
UDR	User Data Repository
VIP	Virtual IP
VM	Virtual Machine
XMI	External Management Interface
XSI	External Signalling Interface

Table 1 – Acronyms and Terminology

1.4 Terminology

Multiple server types may be involved with the procedures in this manual. Therefore, most steps in the written procedures begin with the name or type of server to which the step applies. For example:

Each step has a checkbox for every command within the step that the technician should check to keep track of the progress of the procedure.

The title box describes the operations to be performed during that step.

Each command that the technician is to enter is in 10 point bold Courier font.

5 <input type="checkbox"/>	ServerX: Connect to the console of the server	Establish a connection to the server using cu on the terminal server/console. \$ cu -l /dev/ttyS7
-------------------------------	--	---

Figure 1. Example of an instruction that indicates the server to which it applies

1.5 Assumptions

This procedure assumes the following:

- The user has taken assigned values from the Customer network and used them to compile XML files (see Appendix N for each NOAMP and SOAM site's NE prior to attempting to execute this procedure).
- The user conceptually understands OCUDR topology and network configuration as described in the OCUDR Network Implementation Guide [6].
- The user has at least an intermediate skill set with command prompt activities on an Open Systems computing environment such as Linux or TPD.

1.6 XML Files (for installing NE)

The XML files compiled for installation of the each of the NOAMP and SOAM site's NE must be maintained and accessible for use in Disaster Recovery procedures. The Professional Services Engineer (PSE) will provide a copy of the XML files used for installation to the designated Customer Operations POC. The customer is ultimately responsible for maintaining and providing the XML files to My Oracle Support (MOS) if needed for use in Disaster Recovery operations. For more details on Disaster Recovery refer to [8].

1.7 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 My Oracle Support MOS for assistance before attempting to continue.

2.0 GENERAL DESCRIPTION

This document defines the steps to execute the initial installation of the Next Generation Subscriber Data Management 10.0.1(UDR 10.0.1) application on new HP Proliant Hardware.

UDR 10.0.1 installation paths are shown in the figures below. The general timeline for all processes to perform a software installation and configuration is also included below.

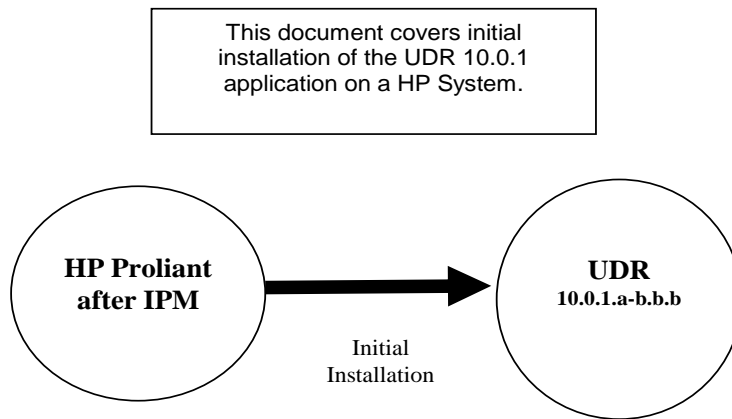


Figure 2. Initial Application Installation Path – Example shown

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2.1 PRE-INSTALLATION SETUP

2.1.1 Installation Requirements

The following items/settings are required in order to perform installation for HP DL380 and HP BL460 based OCUDR:

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

2.1.2 Physical Connections

A connection to the VGA/Keyboard ports on the HP DL380 rear panel or a connection to the iLO is required to initiate and monitor the progress of OCUDR installation procedures. Blade installations require no physical connections as installation is carried out through a management server.

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Access Alternatives for Application Install

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




Figure 3. DL 380 Layout

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

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

Method 1) VGA Monitor and PS2 Keyboard.

Method 2) Laptop +  KVM2USB Switch.
<http://www.epiphan.com/products/frame-grabbers/kvm2usb/>

Method 3) iLO VGA Redirection Window, IE8, Ethernet cable.
(See **Appendix A**)

Method 4) iLO access via SSH, terminal program, Ethernet cable.

2.1.3 Network Topologies

Various Topologies will be supported for this release. C-Class (Normal or Low Capacity) and Normal Capacity RMS Configurations utilize Topologies (1,4) and Low Capacity RMS Configurations utilize Topology 7.. Please refer to [6] for Topology details.

2.1.4 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 for archiving post installation.

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

3.0 INSTALLATION MATRIX

3.1 Installing OCUDR on the Customer Network

Installing the OCUDR product is a task which requires multiple installations of varying types. The matrix below provides a guide to the user as to which procedures are to be performed on which site types. The user should be aware that this document only covers the necessary configuration required to complete product install. Refer to the online help or contact the MY ORACLE SUPPORT MOS FOR ASSISTANCE Appendix Q with post installation configuration options.

NOTE: Although the NOAMP 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 “NOAMP” site refers to the 1st installation of a NOAMP pair on the customer network while references to the “DR NOAMP” site refers to the 2nd NOAMP pair to be installed.

Normal Capacity C-Class Configuration (Topologies 1 and 4 supported, refer to [6] for more details on the configurations):

Server Type		Procedure Number												
		1	2	3	11	12	13	14	15	16	17	18	19	21
<input type="checkbox"/>	NOAMP-A	✓	✗	✗	✓	✗	✗	✓	✗	✗	✗	✗	✓	✓
<input type="checkbox"/>	NOAMP-B	✓	✗	✗	✗	✓	✗	✓	✗	✗	✗	✗	✓	✗
<input type="checkbox"/>	DR NOAMP	✓	✗	✗	✗	✓	✗	✗	✓	✗	✗	✗	✓	✗
<input type="checkbox"/>	SOAM	✗	✓	✓	✗	✓	✓	✗	✓	✗	✗	✗	✗	✗
<input type="checkbox"/>	MP	✗	✓	✓	✗	✓	✓	✗	✓	✓	✓	✓	✗	✗

Table 2 - OCUDR Installation Matrix for Normal Capacity C-Class Configuration

Low Capacity C-Class Configuration (Topologies 1 and 4 supported , refer to [6] for more details on the configurations :

Server Type		Procedure Number											
		4	5	11	12	13	14	15	16	17	18	20	21
<input type="checkbox"/>	NOAMP-A	✓	✓	✓	✗	✗	✓	✗	✗	✗	✗	✓	✓
<input type="checkbox"/>	NOAMP-B	✓	✓	✗	✓	✗	✓	✗	✗	✗	✗	✓	✗
<input type="checkbox"/>	DR NOAMP	✓	✓	✗	✓	✗	✗	✓	✗	✗	✗	✓	✗
<input type="checkbox"/>	SOAM	✓	✓	✗	✓	✓	✗	✓	✗	✗	✗	✗	✗
<input type="checkbox"/>	MP	✓	✓	✗	✓	✓	✗	✓	✓	✓	✓	✗	✗

Table 3 - OCUDR Installation Matrix for Low Capacity C-Class Configuration

Normal Capacity RMS Configuration (Topologies 1 and 4 supported , refer to [6] for more details on the configurations):

Server Type		Procedure Number												
		6	7	8	11	12	13	14	15	16	17	18	19	21
<input type="checkbox"/>	NOAMP-A	✓	✗	✗	✓	✗	✗	✓	✗	✗	✗	✗	✓	✓
<input type="checkbox"/>	NOAMP-B	✓	✗	✗	✗	✓	✗	✓	✗	✗	✗	✗	✓	✗
<input type="checkbox"/>	DR NOAMP	✓	✗	✗	✗	✓	✗	✗	✓	✗	✗	✗	✓	✗
<input type="checkbox"/>	SOAM	✗	✓	✓	✗	✓	✓	✗	✓	✗	✗	✗	✗	✗
<input type="checkbox"/>	MP	✗	✓	✓	✗	✓	✓	✗	✓	✓	✓	✓	✗	✗

Table 4 - OCUDR Installation Matrix for Normal Capacity RMS Configuration

Low Capacity RMS Configuration (Topology 7 supported , refer to [6] for more details on the configurations) :

Server Type		Procedure Number											
		9	10	11	12	13	14	15	16	17	18	20	21
<input type="checkbox"/>	NOAMP-A	✓	✓	✓	✗	✗	✓	✗	✗	✗	✗	✓	✓
<input type="checkbox"/>	NOAMP-B	✓	✓	✗	✓	✗	✓	✗	✗	✗	✗	✓	✗
<input type="checkbox"/>	DR NOAMP	✓	✓	✗	✓	✗	✗	✓	✗	✗	✗	✓	✗
<input type="checkbox"/>	SOAM	✓	✓	✗	✓	✓	✗	✓	✗	✗	✗	✗	✗
<input type="checkbox"/>	MP	✓	✓	✗	✓	✓	✗	✓	✓	✓	✓	✗	✗

Table 5 - OCUDR Installation Matrix for Low Capacity RMS Configuration

3.2 UDR Installation List of Procedures

Normal Capacity C-Class Configuration

Procedure No :	Title :	
1	Install NOAMP Servers (NO and DR Network Elements)	16
2	Install SOAM / MP Host Servers (SO Network Elements)	21
3	Create, IPM and Install Application on all Virtual Machines (SO Network Elements)	23
11	Configuring NOAMP-A Server (1st NOAMP site only)	83
12	Create Configuration for Remaining Servers (All Sites)	98
13	Configure XSI Networks (All SOAM Sites)	113
14	OAM Pairing for the Primary NOAMP Servers (1st NOAMP site only)	116
15		131
16	Configuring MP Server Groups (All SOAM sites)	147
17	Configure MP Signaling Interfaces (All SOAM Sites)	158
18	Configure SPR Application on MP (All SOAM Sites)	165
19	Configure NOAMP Signaling Interfaces (All NOAM Sites) <i>NOTE: Optional and should only be executed if ComAgent over XSI is desired</i>	170
21	Configure ComAgent Service on Signaling Network <i>NOTE: Optional and should only be executed if ComAgent over XSI is desired</i>	187

Table 6 - OCUDR Installation: List of Procedures for Normal Capacity C-Class Configuration

Low Capacity C-Class Configuration

Procedure No :	Title :	Page No :
4	Install NOAMP / SOAM / MP Servers	35
5	Create, IPM and Install Application on all Virtual Machines	37
11	Configuring NOAMP-A Server (1st NOAMP site only)	83
12	Create Configuration for Remaining Servers (All Sites)	98
13	Configure XSI Networks (All SOAM Sites)	113
14	OAM Pairing for the Primary NOAMP Servers (1st NOAMP site only)	116
15		131
16	Configuring MP Server Groups (All SOAM sites)	147
17	Configure MP Signaling Interfaces (All SOAM Sites)	158
18	Configure SPR Application on MP (All SOAM Sites)	165
20	Configure NOAMP Signaling Interfaces (virtual NOAMP servers on Low Capacity RMS or Low Capacity C-Class)	180
21	Configure ComAgent Service on Signaling Network <i>NOTE: Optional and should only be executed if ComAgent over XSI is desired</i>	187

Table 7 - OCUDR Installation: List of Procedures for Low Capacity C-Class Configuration

Normal Capacity RMS Configuration

Procedure No :	Title :	Page No :
6	Install NOAMP Servers (NO and DR Network Elements)	49
7	Install SOAM / MP Host Servers (SO Network Elements)	54
8	Create, IPM and Install Application on all Virtual Machines (SO Network Elements)	56
11	Configuring NOAMP-A Server (1st NOAMP site only)	83
12	Create Configuration for Remaining Servers (All Sites)	98
13	Configure XSI Networks (All SOAM Sites)	113
14	OAM Pairing for the Primary NOAMP Servers (1st NOAMP site only)	116
15		131
16	Configuring MP Server Groups (All SOAM sites)	147
17	Configure MP Signaling Interfaces (All SOAM Sites)	158
18	Configure SPR Application on MP (All SOAM Sites)	165
19	Configure NOAMP Signaling Interfaces (All NOAM Sites) <i>NOTE: Optional and should only be executed if ComAgent over XSI is desired</i>	170
21	Configure ComAgent Service on Signaling Network <i>NOTE: Optional and should only be executed if ComAgent over XSI is desired</i>	187

Table 8 - OCUDR Installation: List of Procedures for Normal Capacity RMS Configuration

Low Capacity RMS Configuration

Procedure No :	Title :	Page No :
9	Install NOAMP / SOAM / MP Servers	35
10	Create, IPM and Install Application on all Virtual Machines	37
11	Configuring NOAMP-A Server (1st NOAMP site only)	83
12	Create Configuration for Remaining Servers (All Sites)	98
13	Configure XSI Networks (All SOAM Sites)	113
14	OAM Pairing for the Primary NOAMP Servers (1st NOAMP site only)	116
15		131
16	Configuring MP Server Groups (All SOAM sites)	147
17	Configure MP Signaling Interfaces (All SOAM Sites)	158
18	Configure SPR Application on MP (All SOAM Sites)	165
20	Configure NOAMP Signaling Interfaces (virtual NOAMP servers on Low Capacity RMS or Low Capacity C-Class)	180
21	Configure ComAgent Service on Signaling Network <i>NOTE: Optional and should only be executed if ComAgent over XSI is desired</i>	187

Table 9 - OCUDR Installation: List of Procedures for Low Capacity RMS Configuration

4.0 NORMAL CAPACITY C-CLASS CONFIGURATION SOFTWARE INSTALLATION PROCEDURE

The user should confirm that the server has been verified through the Hardware Verification Plan [3] before beginning this procedure. ProLiantBL460Gen8 and ProLiantBL460Gen8+ are supported for this procedure.

4.1 Install NOAMP Servers (NO and DR Network Elements)

This procedure will install Tekelec Platform Distribution (TPD) on the NO network elements.

Needed material:

- TPD Media

Check off (✓) each step as it is completed. Boxes have been provided for this purpose under each step number.

IF THIS PROCEDURE FAILS, CONTACT MY ORACLE SUPPORT (MOS) FOR ASSISTANCE.

Procedure 1: Install NOAMP Servers (NO and DR Network Elements)

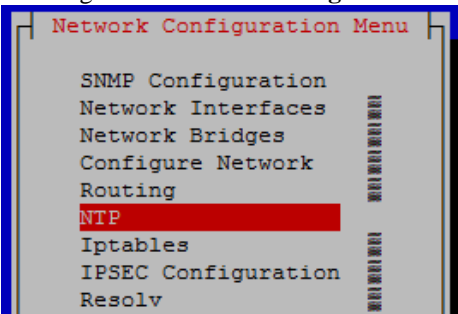
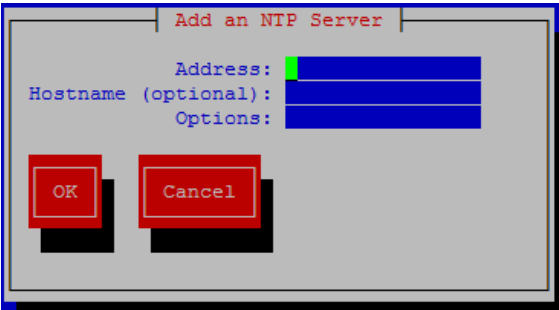
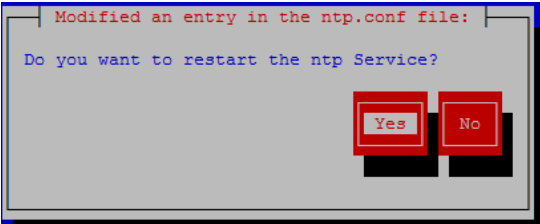
Step	Procedure	Result
1. <input type="checkbox"/>	Access the HP server's console.	Connect to the server's console using one of the access methods described in Section 2.1.2.
2. <input type="checkbox"/>	Verify the type of server hardware	# <code>hardwareInfo grep Hardware</code> Hardware ID: ProLiantBL460Gen8 or ProLiantBL460Gen8+
3. <input type="checkbox"/>	Update firmware	Follow steps defined in ... Appendix D.1 HP Blade Firmware Upgrade (BL460 hardware) ... to update firmware.
4. <input type="checkbox"/>	Update BIOS settings	Follow steps defined in Appendix D.2 BIOS Settings to update BIOS settings.
5. <input type="checkbox"/>	Add images to management server.	Follow Appendix J Adding Software Images to PM&C Server to add TPD, TVOE and OCUDR software images.
6. <input type="checkbox"/>	Clean the Disk Array	Note: Execute only if previous install on the Blade. Follow steps defined in .. Appendix M.2 Removing Blade Disk Array Configuration (Sidecar) ... to clean the Disk Array

OCUDR 10.0.1 Installation and Configuration Guide

Procedure 1: Install NOAMP Servers (NO and DR Network Elements)

Step	Procedure	Result
7. <input type="checkbox"/>	<i>Install Operating System (TPD)</i>	Follow steps defined in ... Appendix F.2 Installing Operating Systems with PM&C (<i>BL460 hardware</i>) ... to install TPD software.
<p>Note: The next five steps are only for the NOAMP-A and DR NOAMP-A servers. Once these steps are completed for both servers, Section 0 Install SOAM / MP Host Servers (SO Network Elements) may be run in parallel with this procedure.</p>		
8. <input type="checkbox"/>	<i>Access the HP server's console.</i>	Connect to the server's console using one of the access methods described in Section 2.1.2 .
9. <input type="checkbox"/>	<i>Log into the server console as the "root" user.</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: root Password: <root_password>
10. <input type="checkbox"/>	<i>Configure a temporary XMI IP so NTP can access the routed network.</i>	Follow steps defined in ... Appendix B.1 Creating Temporary External XMI IP Address ... to define a temporary network. Note: The permanent IP assignment for this server will be made when its TKLCCfgData.sh script is applied later in this installation.
11. <input type="checkbox"/>	<i>Enter Platform configuration menu</i>	Enter platform configuration by running the following: # su - platcfg

Procedure 1: Install NOAMP Servers (NO and DR Network Elements)

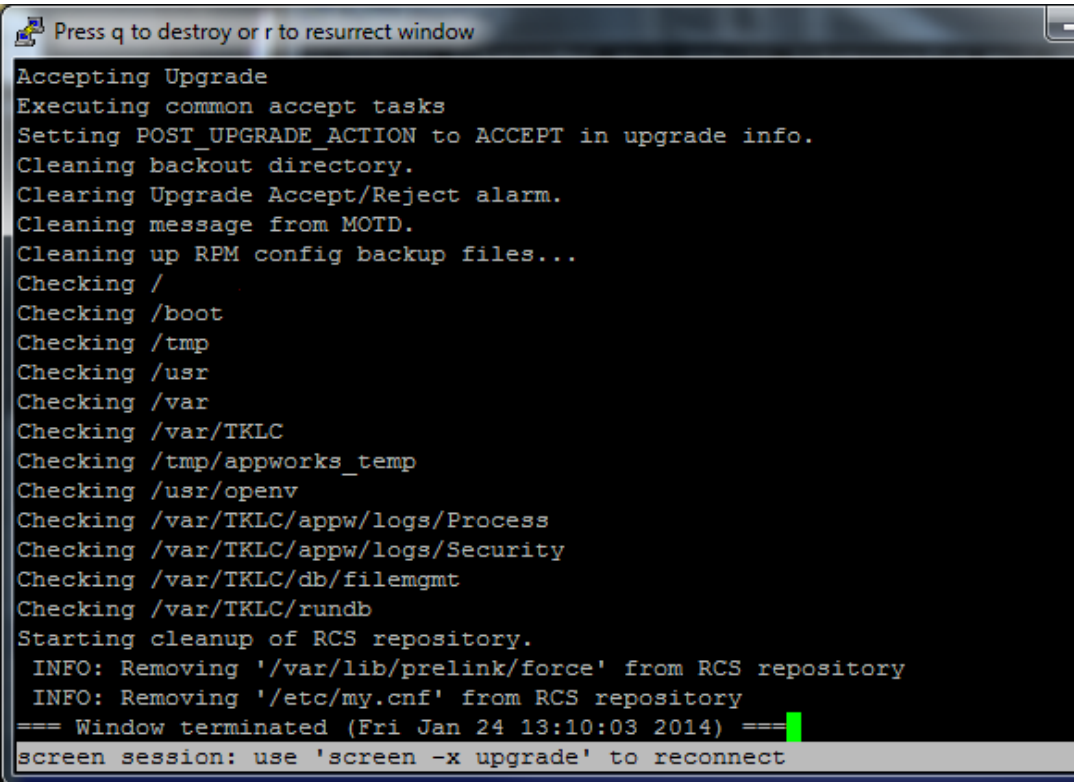
Step	Procedure	Result
<p>12.</p> <p><input type="checkbox"/></p>	<p>For NOAMP-A only:</p> <p>Enter Platform configuration menu</p>	<ol style="list-style-type: none"> Navigate to Network Configuration > NTP.  Select Edit, then “Add a New NTP Server.” Enter the IP Address of the customer provided NTP server.  Select OK, then “Exit.” Select Yes to restart ntp Service.  Exit platcfg.
<p>Note: The remainder of this procedure is for all NOAMP servers.</p>		
<p>13.</p> <p><input type="checkbox"/></p>	<p><i>Configure Disk Array</i></p>	<p>Follow steps defined in ...</p> <p>Appendix E.2 Configuring Blade Disk Array (NO Network Element Servers with Sidecar)</p> <p>... to configure the disk array.</p>

Procedure 1: Install NOAMP Servers (NO and DR Network Elements)

Step	Procedure	Result
<p>14.</p> <input type="checkbox"/>	<p>(Optional)</p> <p>Configure NetBackup Dedicated Interface</p> <p>(Only deployments with Net Backup)</p> <p>Dual Pass-Thru Modules</p>	<p>For C-Class Blade, Netbackup enabled systems equipped with <i>two</i> Pass Thru Modules:</p> <pre># netAdm add --device=bond2 --type=Bonding --mode=active-backup \ --onboot=yes --bootproto=none --bondInterfaces="eth21,eth22" \ --address=<NetBackup_IP> --netmask=<NetBackup_NetMask></pre> <pre># netAdm add --route=net --device=bond2 \ --address=<NetBackup_Network_Address> \ --netmask=<NetBackup_Network_NetMask> \ --gateway=<NetBackup_Network_Gateway_IP></pre> <p>[OPTIONAL] If this installation is using jumbo frames, set the ethernet interface MTU to the desired jumbo frame size:</p> <pre># netAdm set --device=bond2 --MTU=<NetBackup_MTU_size></pre>
<p>15.</p> <input type="checkbox"/>	<p>(Optional)</p> <p>Configure Second NetBackup Interface</p> <p>(Only deployments with Net Backup)</p> <p>Single Pass-Thru Modules and RMS</p>	<p>For c-Class Blade, Netbackup enabled systems equipped with <i>a single</i> Pass Thru Module :</p> <p>For Blade systems with a single Pass Thru Module, <backup_device> will be : eth21</p> <pre># netAdm set --device=<backup_device> --slave=no --onboot=yes \ --address=<NetBackup_IP> --netmask=<NetBackup_NetMask></pre> <pre># netAdm add --route=net --device=<backup_device> \ --address=<NetBackup_Network_Address> \ --netmask=<NetBackup_Network_NetMask> \ --gateway=<NetBackup_Network_Gateway_IP></pre> <p>[OPTIONAL] If this installation is using jumbo frames, set the ethernet interface MTU to the desired jumbo frame size:</p> <pre># netAdm set --device=<backup_device> --MTU=<NetBackup_MTU_size></pre>
<p>16.</p> <input type="checkbox"/>	<p>Install OCUDR application software.</p>	<p>Follow steps defined in ...</p> <p>Appendix G.2 Installing OCUDR Application with PM&C (<i>BL460 hardware</i>)</p> <p>... to install OCUDR software.</p>
<p>17.</p> <input type="checkbox"/>	<p>Access the HP server's console.</p>	<p>Connect to the server's console using one of the access methods described in <i>Section 2.1.2</i>.</p>

OCUDR 10.0.1 Installation and Configuration Guide

Procedure 1: Install NOAMP Servers (NO and DR Network Elements)

Step	Procedure	Result
18. <input type="checkbox"/>	Verify successful upgrade. Command will generate no output if no issues are found.	# <code>verifyUpgrade</code> <i>NOTE: This command should return no output on a healthy system. If any errors are reported, please contact My Oracle Support MOS for assistance.</i>
19. <input type="checkbox"/>	Change directory	# <code>cd /var/TKLC/backout</code>
20. <input type="checkbox"/>	Perform upgrade acceptance.	# <code>./accept</code>
21. <input type="checkbox"/>	Press the 'q' key to quit screen session wrapper from upgrade acceptance.	 <pre> Press q to destroy or r to resurrect window Accepting Upgrade Executing common accept tasks Setting POST_UPGRADE_ACTION to ACCEPT in upgrade info. Cleaning backout directory. Cleaning Upgrade Accept/Reject alarm. Cleaning message from MOTD. Cleaning up RPM config backup files... Checking / Checking /boot Checking /tmp Checking /usr Checking /var Checking /var/TKLC Checking /tmp/appworks_temp Checking /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 '/var/lib/prelink/force' from RCS repository INFO: Removing '/etc/my.cnf' from RCS repository === Window terminated (Fri Jan 24 13:10:03 2014) === screen session: use 'screen -x upgrade' to reconnect </pre>
THIS PROCEDURE HAS BEEN COMPLETED		

OCUDR 10.0.1 Installation and Configuration Guide

4.2 Install SOAM / MP Host Servers (SO Network Elements)

This procedure will install and configure the operating system on hardware that will host SOAM and MP VM Guests. A Normal Capacity C-Class system has two blades at a site that utilize the following procedure. ProLiantBL460Gen8 and ProLiantBL460Gen8+ are supported for this procedure.

Requirements:

- **Procedure 1: Install NOAMP Servers (NO and DR Network Elements)** must be complete

Needed material:

- TVOE Media

Check off (✓) each step as it is completed. Boxes have been provided for this purpose under each step number.

IF THIS PROCEDURE FAILS, CONTACT MY ORACLE SUPPORT (MOS) FOR ASSISTANCE.

Procedure 2: Install SOAM / MP Servers (SO Network Elements)

Step	Procedure	Result
1. <input type="checkbox"/>	Access the HP server's console.	Connect to the HP server's console using one of the access methods described in Section 2.1.2 .
2. <input type="checkbox"/>	Check the type of server hardware	# <code>hardwareInfo grep Hardware</code> Hardware ID: ProLiantDL380Gen8 or ProLiantBL460Gen8+
3. <input type="checkbox"/>	Update firmware	Follow steps defined in ... Appendix D.1 HP Blade Firmware Upgrade (BL460 hardware) ... to update firmware.
4. <input type="checkbox"/>	Update BIOS settings	Follow steps defined in Appendix D.2 BIOS Settings to update BIOS settings.
5. <input type="checkbox"/>	Add image to management server.	Follow Appendix J Adding Software Images to PM&C Server to add TVOE image.
6. <input type="checkbox"/>	Install Operating System (TVOE)	Follow steps defined in ... Appendix F.2 Installing Operating Systems with PM&C (BL460 hardware) ... to install TVOE software.

OCUDR 10.0.1 Installation and Configuration Guide

Procedure 2: Install SOAM / MP Servers (SO Network Elements)

Step	Procedure	Result
7. <input type="checkbox"/>	<i>Configure TVOE network</i>	Follow steps defined in ... Appendix L.1 Configure TVOE Network for Normal or Low Capacity C-Class Configurations ... to configure TVOE network.
THIS PROCEDURE HAS BEEN COMPLETED		

4.3 Create, IPM and Install Application on all Virtual Machines (SO Network Elements)

This procedure will create Virtual Machines (VMs) for SO and MP servers, install the TPD Operating System on each VM, and install the OCUDR application on each VM. It details the create/IPM/install for a single VM and should be repeated for every VM. A normal capacity C-Class system has two blades at a site that utilize the following procedure.

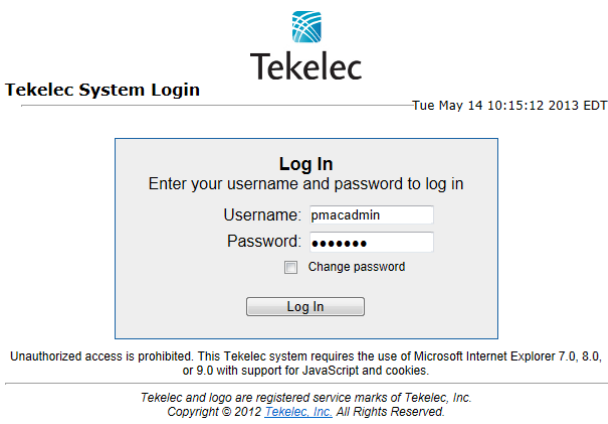
Requirements:

- **Procedure 2: Install SOAM / MP Host Servers (SO Network Elements)** has been completed.

Check off (✓) each step as it is completed. Boxes have been provided for this purpose under each step number.

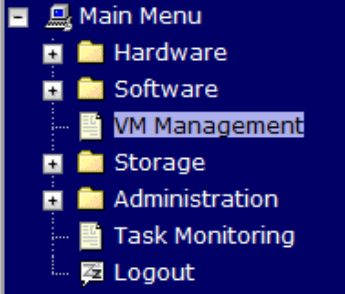
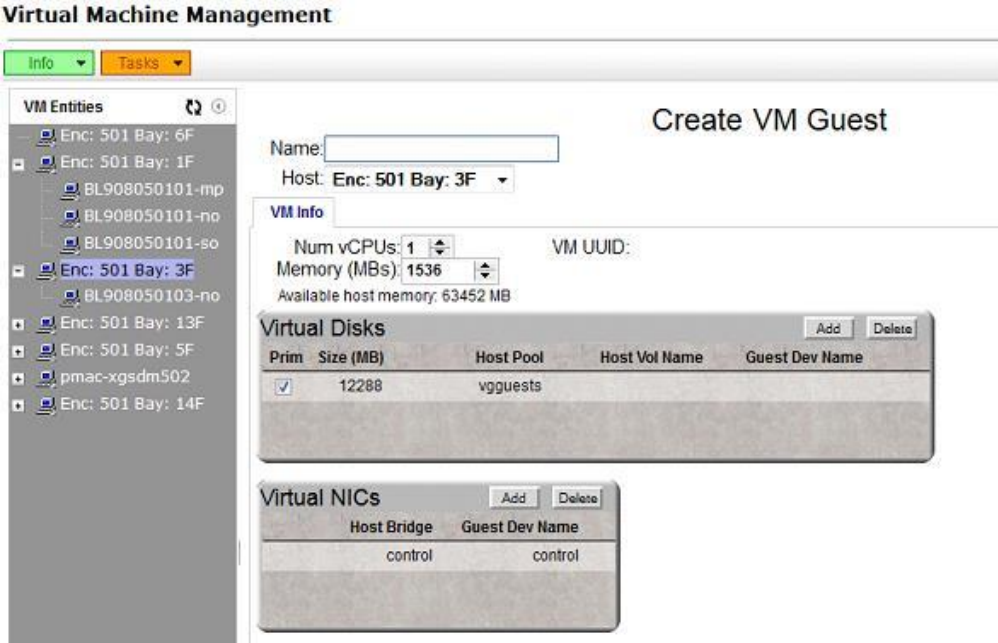
IF THIS PROCEDURE FAILS, CONTACT MY ORACLE SUPPORT (MOS) FOR ASSISTANCE.

Procedure 3: Create, IPM and Install Application on all Virtual Machines

Step	Procedure	Result
	Blade deployments (ex: ProLiantBL460cGen8) will use only one IP to access the PM&C that manages the entire enclosure for this OCUDR site.	
1. <input type="checkbox"/>	Add image to management server.	Follow Appendix J Adding Software Images to PM&C Server to add TPD and OCUDR software images to this PM&C repository. <i>Note: Images may already exist if this is a blade deployment, with SOAM/MP blades controlled by the same PM&C as the NOAMP.</i>
2. <input type="checkbox"/>	PM&C GUI: Login to PM&C GUI	Open web browser and enter: <a href="http://<pmac_management_network_ip>">http://<pmac_management_network_ip> Login as pmacadmin user. 

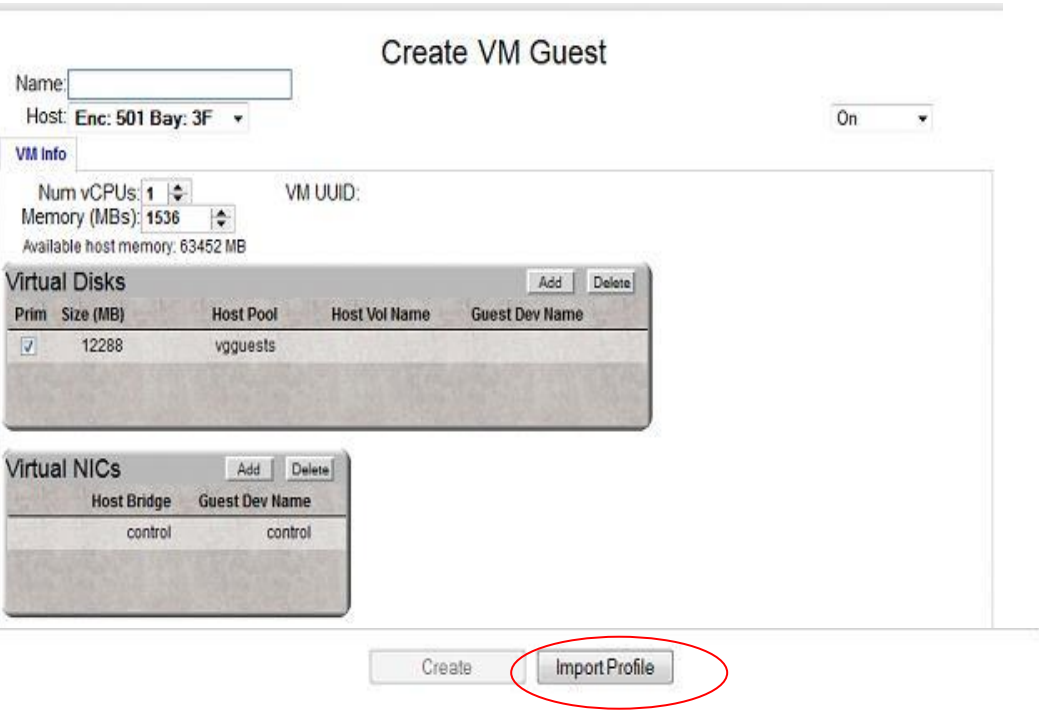
OCUDR 10.0.1 Installation and Configuration Guide

Procedure 3: Create, IPM and Install Application on all Virtual Machines

Step	Procedure	Result
<p>3.</p> <input type="checkbox"/>	<p>PM&C GUI:</p> <p>Navigate to VM Management menu</p>	 <p>The screenshot shows a dark blue menu with the following items: Main Menu, Hardware, Software, VM Management (highlighted), Storage, Administration, Task Monitoring, and Logout.</p>
<p>4.</p> <input type="checkbox"/>	<p>PM&C GUI:</p> <p>Select the desired Server and create the VM Guest</p>	<p>Select the TVOE blade or rack mounted server from the “VM Entities” listing on the left side of the screen. The selected server’s guest machine configuration will then be displayed in the remaining area of the window.</p>  <p>The screenshot shows the 'Virtual Machine Management' interface. On the left, under 'VM Entities', a server 'Enc: 501 Bay: 3F' is selected. The main area shows the 'Create VM Guest' configuration form with fields for Name, Host (Enc: 501 Bay: 3F), Num vCPUs (1), Memory (1536 MB), and VM UUID. Below this are tables for 'Virtual Disks' and 'Virtual NICs'.</p> <p>Click Create Guest.</p> <ul style="list-style-type: none"> • Check-off the associated Check Box as addition is completed for the VM. <p> <input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B <input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2 <input type="checkbox"/> MP-3 <input type="checkbox"/> MP-4 </p>

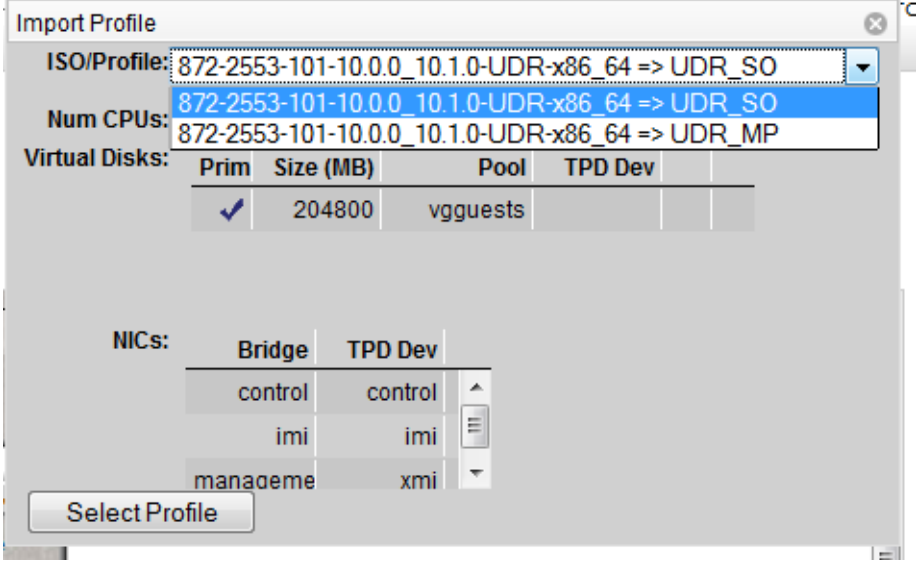
OCUDR 10.0.1 Installation and Configuration Guide

Procedure 3: Create, IPM and Install Application on all Virtual Machines

Step	Procedure	Result
<p>5.</p> <input type="checkbox"/>	<p>PM&C GUI:</p> <p>Click on the Import Profile dialogue buttont</p>	<p>A “Create VM Guest” window is displayed that is similar to the below.:</p>  <p>Click “Import Profile” button .</p> <ul style="list-style-type: none"> • Check-off the associated Check Box as addition is completed for the VM. <p><input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B</p> <p><input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2 <input type="checkbox"/> MP-3 <input type="checkbox"/> MP-4</p>

OCUDR 10.0.1 Installation and Configuration Guide

Procedure 3: Create, IPM and Install Application on all Virtual Machines

Step	Procedure	Result
<p>6.</p> <input type="checkbox"/>	<p>PM&C GUI:</p> <p>Select the desired ISO/Profile value</p>	<p>Select the desired ISO/Profile.</p> <ul style="list-style-type: none"> - If creating a VM for a SOAM server, use the “UDR_SO” profile. - If creating a VM for an MP, use the “UDR_MP” profile.  <p>Click “Select Profile” button.</p> <ul style="list-style-type: none"> • Check-off the associated Check Box as addition is completed for the VM. <p><input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B</p> <p><input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2 <input type="checkbox"/> MP-3 <input type="checkbox"/> MP-4</p>

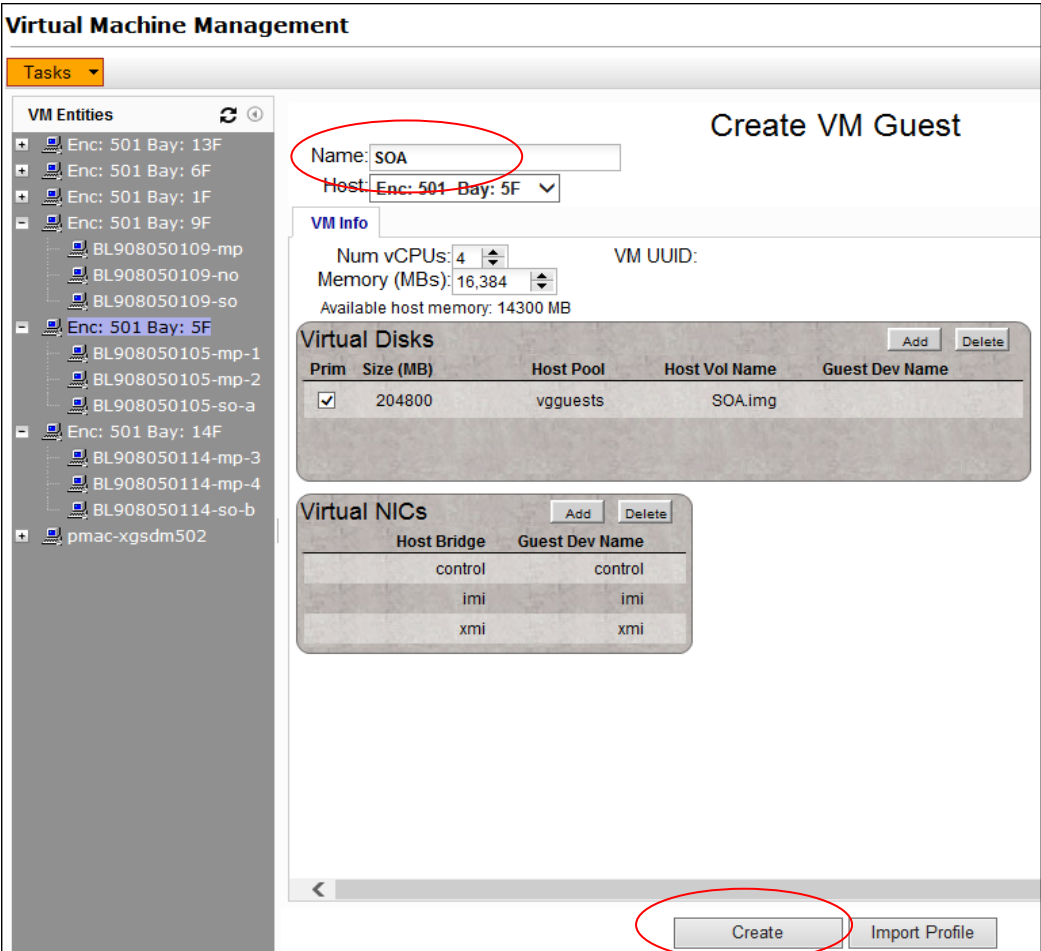
OCUDR 10.0.1 Installation and Configuration Guide

Procedure 3: Create, IPM and Install Application on all Virtual Machines

Step	Procedure	Result								
<p>7.</p> <input type="checkbox"/>	<p>PM&C GUI:</p> <p><i>Customize the NICs list to suit your deployment</i></p>	<p>The default Virtual NICs are configured for a deployment with two XSI networks.</p> <ul style="list-style-type: none"> - If your deployment has only a single XSI network, select the row for “xsi2” by clicking on it then click the Delete button: <div style="border: 1px solid gray; padding: 5px; margin: 10px 0;"> <p>Virtual NICs Add Delete</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;">Host Bridge</th> <th style="width: 50%;">Guest Dev Name</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">xmi</td> <td style="text-align: center;">xmi</td> </tr> <tr> <td style="text-align: center;">xsi1</td> <td style="text-align: center;">xsi1</td> </tr> <tr> <td style="text-align: center;">xsi2</td> <td style="text-align: center;">xsi2</td> </tr> </tbody> </table> </div> <ul style="list-style-type: none"> - If your deployment has more than two XSI networks, click the Add button, select them from the Host Bridge drop box and type in the same name into Guest Dev Name. • Check-off the associated Check Box as addition is completed for the VM. <p> <input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B </p> <p> <input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2 <input type="checkbox"/> MP-3 <input type="checkbox"/> MP-4 </p>	Host Bridge	Guest Dev Name	xmi	xmi	xsi1	xsi1	xsi2	xsi2
Host Bridge	Guest Dev Name									
xmi	xmi									
xsi1	xsi1									
xsi2	xsi2									

OCUDR 10.0.1 Installation and Configuration Guide

Procedure 3: Create, IPM and Install Application on all Virtual Machines

Step	Procedure	Result
<p>8.</p> <p><input type="checkbox"/></p>	<p>PM&C GUI:</p> <p>Override the VM Guest Name to make it unique for the site</p>	<p>A “Create VM Guest” window is displayed that is similar to the below..</p>  <p>Override the Name field to something like: SOA, SOB, MP1 or MP2, etc. (Don’t use hyphens in the name). You could also include a location within the Name value such as SOMRSVNCA. (This will not become the ultimate hostname. It is just an internal tag for the VM host manager.)</p> <p>Click Create button</p> <ul style="list-style-type: none"> Record the Site VM Guest Name of each VM that is added in the space provided below: Check-off the associated Check Box as addition is completed for the VM. <p><input type="checkbox"/> SOAM-A: _____ <input type="checkbox"/> SOAM-B: _____</p> <p><input type="checkbox"/> MP-1: _____ <input type="checkbox"/> MP-2: _____</p> <p><input type="checkbox"/> MP-3: _____ <input type="checkbox"/> MP-4: _____</p>

OCUDR 10.0.1 Installation and Configuration Guide

Procedure 3: Create, IPM and Install Application on all Virtual Machines

Step	Procedure	Result																																																															
<p>9.</p> <input type="checkbox"/>	<p>PM&C GUI:</p> <p>Select...</p> <p>Main Menu → Task Monitoring</p> <p>...as shown on the right.</p>	<p>Background Task Monitoring</p> <table border="1"> <thead> <tr> <th>ID</th> <th>Task</th> <th>Target</th> <th>Status</th> <th>Running Time</th> <th>Start Time</th> <th>Progress</th> </tr> </thead> <tbody> <tr> <td>103</td> <td>VirtAction: Create</td> <td>Host IP: ...9ffffe64:ee0d Guest: pc9000716-no</td> <td>Create initiated</td> <td>0:00:00</td> <td>2015-01-16 05:42:49</td> <td>8%</td> </tr> <tr> <td>102</td> <td>Add image</td> <td></td> <td>Done: UDR-10.2.0_12.3.0-x86_64</td> <td>0:00:15</td> <td>2015-01-16 05:35:49</td> <td>100%</td> </tr> </tbody> </table> <p>Background Task Monitoring</p> <table border="1"> <thead> <tr> <th>ID</th> <th>Task</th> <th>Target</th> <th>Status</th> <th>Running Time</th> <th>Start Time</th> <th>Progress</th> </tr> </thead> <tbody> <tr> <td>103</td> <td>VirtAction: Create</td> <td>Host IP: ...9ffffe64:ee0d Guest: pc9000716-no</td> <td>Handling guest power</td> <td>0:00:04</td> <td>2015-01-16 05:42:49</td> <td>42%</td> </tr> <tr> <td>102</td> <td>Add image</td> <td></td> <td>Done: UDR-10.2.0_12.3.0-x86_64</td> <td>0:00:15</td> <td>2015-01-16 05:35:49</td> <td>100%</td> </tr> </tbody> </table> <p>Background Task Monitoring</p> <table border="1"> <thead> <tr> <th>ID</th> <th>Task</th> <th>Target</th> <th>Status</th> <th>Running Time</th> <th>Start Time</th> <th>Progress</th> </tr> </thead> <tbody> <tr> <td>103</td> <td>VirtAction: Create</td> <td>Host IP: ...9ffffe64:ee0d Guest: pc9000716-no</td> <td>Guest creation completed (pc9000716-no)</td> <td>0:01:00</td> <td>2015-01-16 05:42:49</td> <td>100%</td> </tr> <tr> <td>102</td> <td>Add image</td> <td></td> <td>Done: UDR-10.2.0_12.3.0-x86_64</td> <td>0:00:15</td> <td>2015-01-16 05:35:49</td> <td>100%</td> </tr> </tbody> </table> <ul style="list-style-type: none"> Check-off the associated Check Box as addition is completed for the VM. <p> <input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B <input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2 <input type="checkbox"/> MP-3 <input type="checkbox"/> MP-4 </p>	ID	Task	Target	Status	Running Time	Start Time	Progress	103	VirtAction: Create	Host IP: ...9ffffe64:ee0d Guest: pc9000716-no	Create initiated	0:00:00	2015-01-16 05:42:49	8%	102	Add image		Done: UDR-10.2.0_12.3.0-x86_64	0:00:15	2015-01-16 05:35:49	100%	ID	Task	Target	Status	Running Time	Start Time	Progress	103	VirtAction: Create	Host IP: ...9ffffe64:ee0d Guest: pc9000716-no	Handling guest power	0:00:04	2015-01-16 05:42:49	42%	102	Add image		Done: UDR-10.2.0_12.3.0-x86_64	0:00:15	2015-01-16 05:35:49	100%	ID	Task	Target	Status	Running Time	Start Time	Progress	103	VirtAction: Create	Host IP: ...9ffffe64:ee0d Guest: pc9000716-no	Guest creation completed (pc9000716-no)	0:01:00	2015-01-16 05:42:49	100%	102	Add image		Done: UDR-10.2.0_12.3.0-x86_64	0:00:15	2015-01-16 05:35:49	100%
ID	Task	Target	Status	Running Time	Start Time	Progress																																																											
103	VirtAction: Create	Host IP: ...9ffffe64:ee0d Guest: pc9000716-no	Create initiated	0:00:00	2015-01-16 05:42:49	8%																																																											
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103	VirtAction: Create	Host IP: ...9ffffe64:ee0d Guest: pc9000716-no	Handling guest power	0:00:04	2015-01-16 05:42:49	42%																																																											
102	Add image		Done: UDR-10.2.0_12.3.0-x86_64	0:00:15	2015-01-16 05:35:49	100%																																																											
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103	VirtAction: Create	Host IP: ...9ffffe64:ee0d Guest: pc9000716-no	Guest creation completed (pc9000716-no)	0:01:00	2015-01-16 05:42:49	100%																																																											
102	Add image		Done: UDR-10.2.0_12.3.0-x86_64	0:00:15	2015-01-16 05:35:49	100%																																																											
<p>10.</p> <input type="checkbox"/>	<p>PM&C GUI:</p> <p>Verify that <i>Create VM task successfully completes</i>.</p> <p>The user should see a screen similar to the one on the right with Progress value of 100%.</p>	<p>Verify that the Virtual Machine successfully created.</p> <p>Tasks</p> <table border="1"> <thead> <tr> <th>ID</th> <th>Task</th> <th>Target</th> <th>Status</th> <th>Start Time</th> <th>Progress</th> </tr> </thead> <tbody> <tr> <td>13</td> <td>VirtAction: Create</td> <td>RMS: pc9040833-no-a Guest: NO-A</td> <td>Guest creation completed (NO-A)</td> <td>2012-07-06 19:05:02</td> <td>100%</td> </tr> </tbody> </table> <ul style="list-style-type: none"> Check-off the associated Check Box as addition is completed for the VM. <p> <input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B <input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2 <input type="checkbox"/> MP-3 <input type="checkbox"/> MP-4 </p>	ID	Task	Target	Status	Start Time	Progress	13	VirtAction: Create	RMS: pc9040833-no-a Guest: NO-A	Guest creation completed (NO-A)	2012-07-06 19:05:02	100%																																																			
ID	Task	Target	Status	Start Time	Progress																																																												
13	VirtAction: Create	RMS: pc9040833-no-a Guest: NO-A	Guest creation completed (NO-A)	2012-07-06 19:05:02	100%																																																												
<p>Note: The steps above may be completed for each VM Guest that this PM&C administers before proceeding on to the next step. This way you may install and upgrade multiple VM Guests in parallel.</p>																																																																	

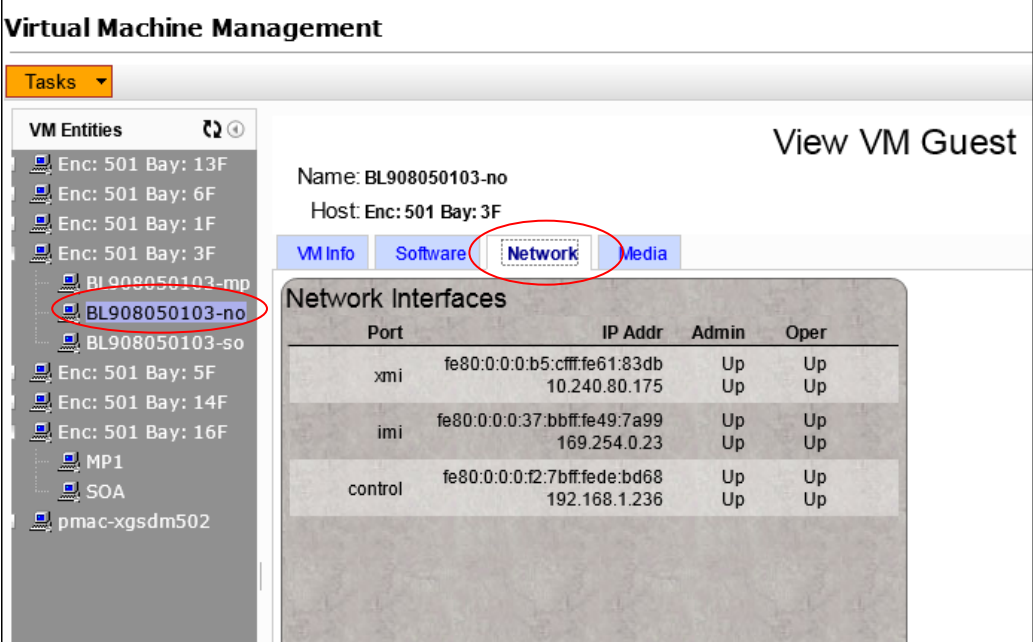
OCUDR 10.0.1 Installation and Configuration Guide

Procedure 3: Create, IPM and Install Application on all Virtual Machines

Step	Procedure	Result
11. <input type="checkbox"/>	<i>Install Operating System (TPD)</i>	Follow steps defined in ... Appendix F.2 Installing Operating Systems with PM&C ... to install TPD software on VM Guests. <ul style="list-style-type: none">• Check-off the associated Check Box as addition is completed for the VM. <input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B <input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2 <input type="checkbox"/> MP-3 <input type="checkbox"/> MP-4

OCUDR 10.0.1 Installation and Configuration Guide

Procedure 3: Create, IPM and Install Application on all Virtual Machines

Step	Procedure	Result																									
<p>12.</p> <p><input type="checkbox"/></p>	<p>PM&C GUI:</p> <p><i>Get and record control IP address of VM Guest</i></p>	<p>Navigate to the VM Management menu</p> <p>Select the VM Guest Name from the VM Entities list, and click “Network” tab</p>  <p>The screenshot shows the 'Virtual Machine Management' interface. On the left, a 'VM Entities' list includes 'BL908050103-no' which is circled in red. On the right, the 'View VM Guest' page for 'BL908050103-no' is shown, with the 'Network' tab selected. Below the tabs is a 'Network Interfaces' table:</p> <table border="1"> <thead> <tr> <th>Port</th> <th>IP Addr</th> <th>Admin</th> <th>Oper</th> </tr> </thead> <tbody> <tr> <td rowspan="2">xmi</td> <td>fe80:0:0:0:b5:cfff:fe61:83db</td> <td>Up</td> <td>Up</td> </tr> <tr> <td>10.240.80.175</td> <td>Up</td> <td>Up</td> </tr> <tr> <td rowspan="2">imi</td> <td>fe80:0:0:0:37:bbff:fe49:7a99</td> <td>Up</td> <td>Up</td> </tr> <tr> <td>169.254.0.23</td> <td>Up</td> <td>Up</td> </tr> <tr> <td rowspan="2">control</td> <td>fe80:0:0:0:f2:7bff:fede:bd68</td> <td>Up</td> <td>Up</td> </tr> <tr> <td>192.168.1.236</td> <td>Up</td> <td>Up</td> </tr> </tbody> </table> <p>Determine control IP address of VM Guest and record it.</p> <ul style="list-style-type: none"> Record the Site control IP Address of each VM that is added in the space provided below: Check-off the associated Check Box as addition is completed for the VM. <p><input type="checkbox"/> SOAM-A: _____ <input type="checkbox"/> SOAM-B: _____</p> <p><input type="checkbox"/> MP-1: _____ <input type="checkbox"/> MP-2: _____</p> <p><input type="checkbox"/> MP-3: _____ <input type="checkbox"/> MP-4: _____</p>	Port	IP Addr	Admin	Oper	xmi	fe80:0:0:0:b5:cfff:fe61:83db	Up	Up	10.240.80.175	Up	Up	imi	fe80:0:0:0:37:bbff:fe49:7a99	Up	Up	169.254.0.23	Up	Up	control	fe80:0:0:0:f2:7bff:fede:bd68	Up	Up	192.168.1.236	Up	Up
Port	IP Addr	Admin	Oper																								
xmi	fe80:0:0:0:b5:cfff:fe61:83db	Up	Up																								
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	169.254.0.23	Up	Up																								
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	192.168.1.236	Up	Up																								

OCUDR 10.0.1 Installation and Configuration Guide

Procedure 3: Create, IPM and Install Application on all Virtual Machines

Step	Procedure	Result
13. <input type="checkbox"/>	Install OCUDR application software.	<p>Follow steps defined in ...</p> <p>Appendix G.2 Installing OCUDR Application with PM&C</p> <p>... to install OCUDR software.</p> <ul style="list-style-type: none"> Check-off the associated Check Box as addition is completed for the VM. <p><input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B</p> <p><input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2 <input type="checkbox"/> MP-3 <input type="checkbox"/> MP-4</p>
14. <input type="checkbox"/>	Repeat Steps 4 - 13 for each Virtual Machine to install its operating system and application software.	
15. <input type="checkbox"/>	Perform upgrade acceptance.	<p>Follow steps defined in ...</p> <p>Appendix H Accept Application Installation on PM&C Managed Servers</p> <p>... to accept upgrade.</p>
16. <input type="checkbox"/>	Access the NOAMP server's console.	Connect to the server's console using one of the access methods described in <i>Section 2.1.2</i> .
17. <input type="checkbox"/>	Log into the tvoe server console as the "root" user.	<pre>CentOS release 5.6 (Final) Kernel 2.6.18-238.19.1.el5prere15.0.0_72.22.0 on an x86_64 hostname1260476221 login: root Password: <root_password></pre>
18. <input type="checkbox"/>	NOAMP: Transfer file to TVOE Host	<pre># scp /var/TKLC/db/filemgmt/udrInitConfig.sh \ admusr@<tvoe_host_name>:/var/tmp admusr@<tvoe_host_name>'s password: <admusr_password></pre> <ul style="list-style-type: none"> Check-off the associated Check Box as addition is completed for the TVOE host. <p><input type="checkbox"/> TVOE Host (SOAM-A / MP-1 / MP-2)</p> <p><input type="checkbox"/> TVOE Host (SOAM-B / MP-3 / MP-4)</p>

OCUDR 10.0.1 Installation and Configuration Guide

Procedure 3: Create, IPM and Install Application on all Virtual Machines

Step	Procedure	Result
19. <input type="checkbox"/>	<p>Login to TVOE Host:</p> <p>1) SSH to server.</p> <p>2) Log into the server as the "admusr" user..</p>	<pre># ssh admusr@<tvoe_host_name></pre> <pre>admusr@<tvoe_host_name>'s password: <admusr_password></pre> <ul style="list-style-type: none"> • Check-off the associated Check Box as addition is completed for the TVOE host. <p><input type="checkbox"/> TVOE Host (SOAM-A / MP-1 / MP-2)</p> <p><input type="checkbox"/> TVOE Host (SOAM-B / MP-3 / MP-4)</p>
20. <input type="checkbox"/>	<p>TVOE host:</p> <p>Switch to root user.</p>	<pre>[admusr@hostname1326744539 ~]\$ su -</pre> <pre>password: <root_password></pre> <ul style="list-style-type: none"> • Check-off the associated Check Box as addition is completed for the TVOE host. <p><input type="checkbox"/> TVOE Host (SOAM-A / MP-1 / MP-2)</p> <p><input type="checkbox"/> TVOE Host (SOAM-B / MP-3 / MP-4)</p>
21. <input type="checkbox"/>	<p>TVOE host:</p> <p>Change directory.</p>	<pre># cd /var/tmp</pre> <ul style="list-style-type: none"> • Check-off the associated Check Box as addition is completed for the TVOE host. <p><input type="checkbox"/> TVOE Host (SOAM-A / MP-1 / MP-2)</p> <p><input type="checkbox"/> TVOE Host (SOAM-B / MP-3 / MP-4)</p>
22. <input type="checkbox"/>	<p>TVOE host:</p> <p>Update script permissions.</p>	<pre># chmod 555 udrInitConfig.sh</pre> <ul style="list-style-type: none"> • Check-off the associated Check Box as addition is completed for the TVOE host. <p><input type="checkbox"/> TVOE Host (SOAM-A / MP-1 / MP-2)</p> <p><input type="checkbox"/> TVOE Host (SOAM-B / MP-3 / MP-4)</p>

OCUDR 10.0.1 Installation and Configuration Guide

Procedure 3: Create, IPM and Install Application on all Virtual Machines

Step	Procedure	Result
<p>23.</p> <input type="checkbox"/>	<p>TVOE host:</p> <p>Run configuration script as root.</p>	<pre># ./udrInitConfig.sh</pre> <p>Verify no failures are reported. A trace to display the settings for all VM Guests on this server should be shown in output.</p> <p>In case of failures, save the log file /var/TKLC/log/udrVMCfg/udrInitConfig.log and contact My Oracle Support (MOS) for assistance.</p> <ul style="list-style-type: none"> • Check-off the associated Check Box as addition is completed for the TVOE host. <p><input type="checkbox"/> TVOE Host (SOAM-A / MP-1 / MP-2)</p> <p><input type="checkbox"/> TVOE Host (SOAM-B / MP-3 / MP-4)</p>
<p>24.</p> <input type="checkbox"/>	<p>TVOE host:</p> <p>Reboot the server.</p>	<pre># init 6</pre> <ul style="list-style-type: none"> • Check-off the associated Check Box as addition is completed for the TVOE host. <p><input type="checkbox"/> TVOE Host (SOAM-A / MP-1 / MP-2)</p> <p><input type="checkbox"/> TVOE Host (SOAM-B / MP-3 / MP-4)</p>
<p>THIS PROCEDURE HAS BEEN COMPLETED</p>		

5.0 LOW CAPACITY C-CLASS SOFTWARE INSTALLATION PROCEDURE

The user should confirm that the server has been verified through the Hardware Verification Plan [3] before beginning this procedure. ProLiantBL460Gen8 or ProLiantBL460Gen8+ are supported for this procedure.

The following Low Capacity C-Class configuration will be supported and can utilize the procedures in this section:

- 2 server per site system**
 This includes all OCUDR software running on a TVOE virtualization environment in each server, resulting in a fully-virtualized, fully-redundant HA configuration. This can be deployed either as a single site or as a geo-redundant deployment, with 2 servers at each site.

5.1 Install NOAMP / SOAM / MP Servers

This procedure will install and configure the operating system on hardware that will host NOAMP, SOAM and MP VM Guests. ProLiantBL460Gen8 and ProLiantBL460Gen8+ are supported for this procedure.

Needed material:

- TVOE Media

Check off (✓) each step as it is completed. Boxes have been provided for this purpose under each step number.

IF THIS PROCEDURE FAILS, CONTACT MY ORACLE SUPPORT (MOS) FOR ASSISTANCE.

Procedure 4: Install NOAMP / SOAM / MP Servers

Step	Procedure	Result
1. <input type="checkbox"/>	Access the HP server's console.	Connect to the HP server's console using one of the access methods described in <i>Section 2.1.2</i> .
2. <input type="checkbox"/>	Verify the type of server hardware	# <code>hardwareInfo grep Hardware</code> Hardware ID: ProLiantBL460Gen8 or ProLiantBL460Gen8+
3. <input type="checkbox"/>	Update firmware	Follow steps defined in ... Appendix D.1 HP Blade Firmware Upgrade (<i>BL460 hardware</i>) ... to update firmware.
4. <input type="checkbox"/>	Update BIOS settings	Follow steps defined in Appendix D.2 BIOS Settings to update BIOS settings.
5. <input type="checkbox"/>	Add image to management server.	Follow Appendix J Adding Software Images to PM&C Server to add TVOE image.

OCUDR 10.0.1 Installation and Configuration Guide

Procedure 4: Install NOAMP / SOAM / MP Servers

Step	Procedure	Result									
6. <input type="checkbox"/>	<i>Clean the Disk Array</i>	<p>Note: Execute only if previous install on the Blade.</p> <p>Follow steps defined in ..</p> <p>Appendix M.2 Removing Blade Disk Array Configuration (Sidecar)</p> <p>... to clean the Disk Array</p>									
7. <input type="checkbox"/>	<i>Install Operating System (TVOE)</i>	<p>Follow steps defined in ...</p> <p>Appendix F.2 Installing Operating Systems with PM&C (BL460 hardware)</p> <p>... to install TVOE software.</p>									
8. <input type="checkbox"/>	<i>Configure TVOE network</i>	<p>Follow steps defined in ...</p> <p>Appendix L.1 Configure TVOE Network for Normal or Low Capacity C-Class Configurations</p> <p>... to configure TVOE network.</p>									
9. <input type="checkbox"/>	<i>Configure Disk Array</i>	<p>Follow steps defined in ...</p> <p>Appendix E.2 Configuring Blade Disk Array (NO Network Element Servers with Sidecar)</p> <p>... to configure the disk array.</p>									
10. <input type="checkbox"/>	<i>Configure a logical storage pool</i>	<p>a. Create a file names as “configStorageBlade” through vi command.</p> <pre>[root@BL908050101-tvoe ~]# vi configStorageBlade</pre> <p>Add the line below in the file</p> <pre>vg --name="stripePool_vg" --members="sdb" --virtstoragepool</pre> <p>b. Create storage pool</p> <pre>[root@BL908050101-tvoe ~]# /usr/TKLC/plat/sbin/storageMgr configStorageBlade</pre> <p>c. Verify pool is listed below</p> <pre>[root@BL908050101-tvoe ~]# virsh pool-list</pre> <table border="1"> <thead> <tr> <th>Name</th> <th>State</th> <th>Autostart</th> </tr> </thead> <tbody> <tr> <td>stripePool_vg</td> <td>active</td> <td>yes</td> </tr> <tr> <td>vgguests</td> <td>active</td> <td>yes</td> </tr> </tbody> </table>	Name	State	Autostart	stripePool_vg	active	yes	vgguests	active	yes
Name	State	Autostart									
stripePool_vg	active	yes									
vgguests	active	yes									
THIS PROCEDURE HAS BEEN COMPLETED											

5.2 Create, IPM and Install Application on all Virtual Machines

This procedure will create Virtual Machines (VMs) for NOAMP, SOAM and MP servers, install the TPD Operating System on each VM and install the OCUDR application on each VM. It details the create/IPM/install for a single VM and should be repeated for every VM. A Low capacity C-Class blade is configured with 1 NOAMP, 1 SOAM and 1 MP.

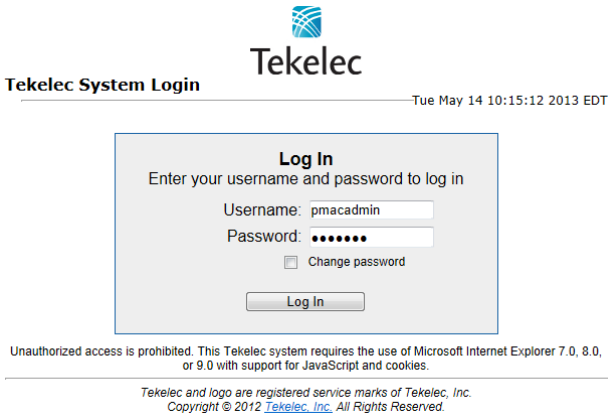
Requirements:

- **Procedure 4: Install NOAMP / SOAM / MP Servers** has been completed.

Check off (✓) each step as it is completed. Boxes have been provided for this purpose under each step number.

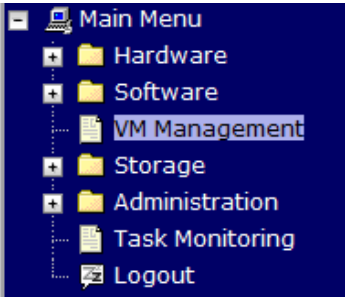
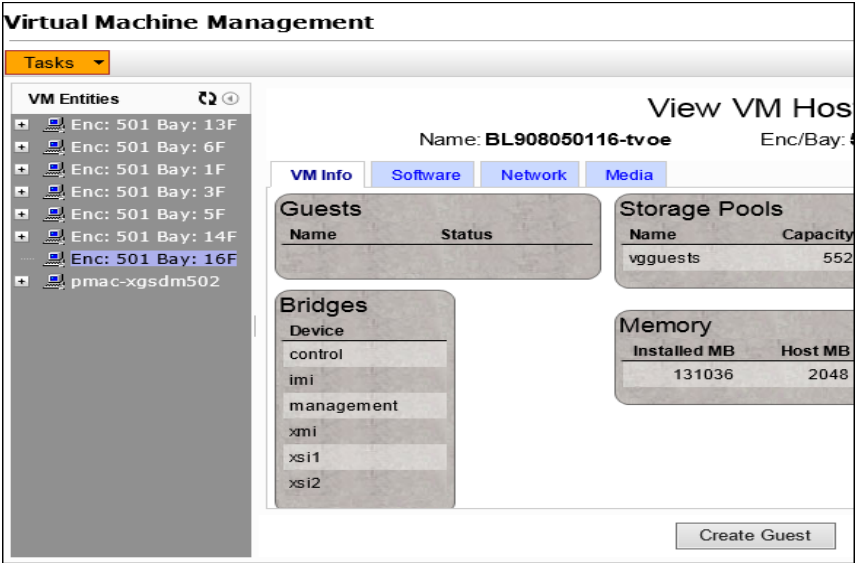
IF THIS PROCEDURE FAILS, CONTACT MY ORACLE SUPPORT (MOS) FOR ASSISTANCE.

Procedure 5: Create, IPM and Install Application on all Virtual Machines

Step	Procedure	Result
		<ul style="list-style-type: none"> • Blade deployments (ex: ProLiantBL460cGen8) will use only one IP to access the PM&C that manages the entire enclosure for this OCUDR site.
<p>1.</p> <input type="checkbox"/>	<p>Add image to management server.</p>	<p>Follow Appendix J Adding Software Images to PM&C Server to add TPD and OCUDR software images to this PM&C repository.</p> <p><i>Note: Images may already exist if this is a blade deployment, with SOAM/MP blades controlled by the same PM&C as the NOAMP.</i></p>
<p>2.</p> <input type="checkbox"/>	<p>PM&C GUI: Login to PM&C GUI</p>	<p>Open web browser and enter: <a href="http://<pmac_management_network_ip>">http://<pmac_management_network_ip> Login as pmacadmin user.</p> 

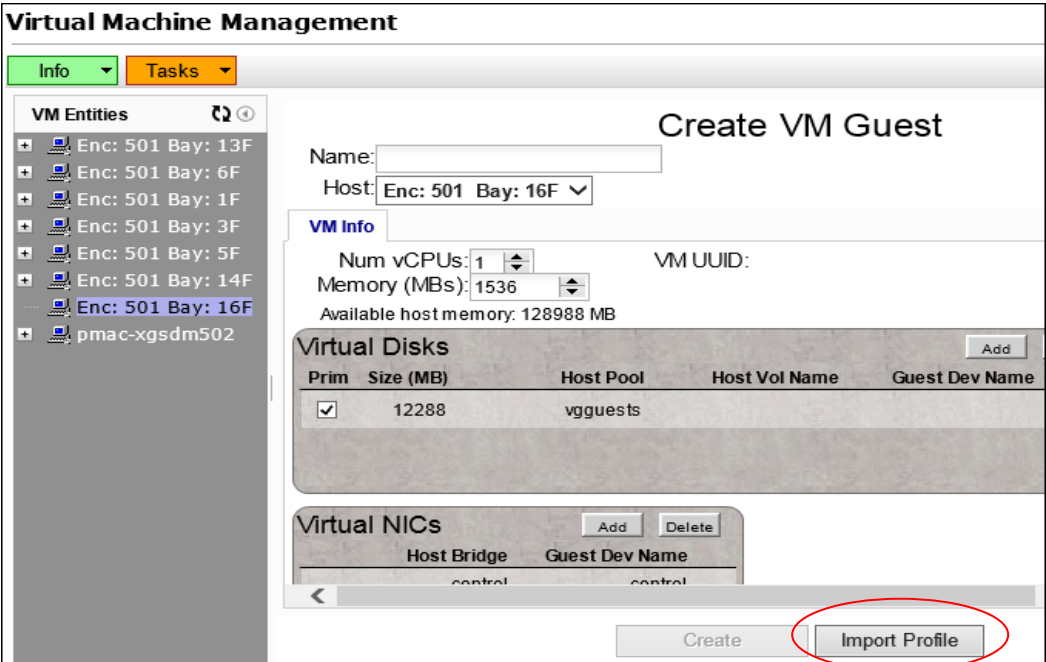
OCUDR 10.0.1 Installation and Configuration Guide

Procedure 5: Create, IPM and Install Application on all Virtual Machines

Step	Procedure	Result
<p>3.</p> <input type="checkbox"/>	<p>PM&C GUI:</p> <p>Navigate to VM Management menu</p>	 <p>The screenshot shows a dark blue menu with the following items: Main Menu, Hardware, Software, VM Management (highlighted with a blue bar), Storage, Administration, Task Monitoring, and Logout.</p>
<p>4.</p> <input type="checkbox"/>	<p>PM&C GUI:</p> <p>Select the desired Server and create the VM Guest</p>	<p>Select the TVOE blade from the “VM Entities” listing on the left side of the screen. The selected server’s guest machine configuration will then be displayed in the remaining area of the window.</p>  <p>The screenshot shows the 'Virtual Machine Management' interface. On the left, there is a 'VM Entities' list with several entries like 'Enc: 501 Bay: 13F' through '16F' and 'pmac-xgsdm502'. The main area is titled 'View VM Host' and shows configuration for 'Name: BL908050116-tvoe'. It includes sections for 'Guests', 'Storage Pools', and 'Bridges'. A 'Create Guest' button is visible at the bottom right.</p> <p>Click Create Guest.</p> <ul style="list-style-type: none"> • Check-off the associated Check Box as addition is completed for the VM. <p><input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP-B <input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B</p> <p><input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2</p>

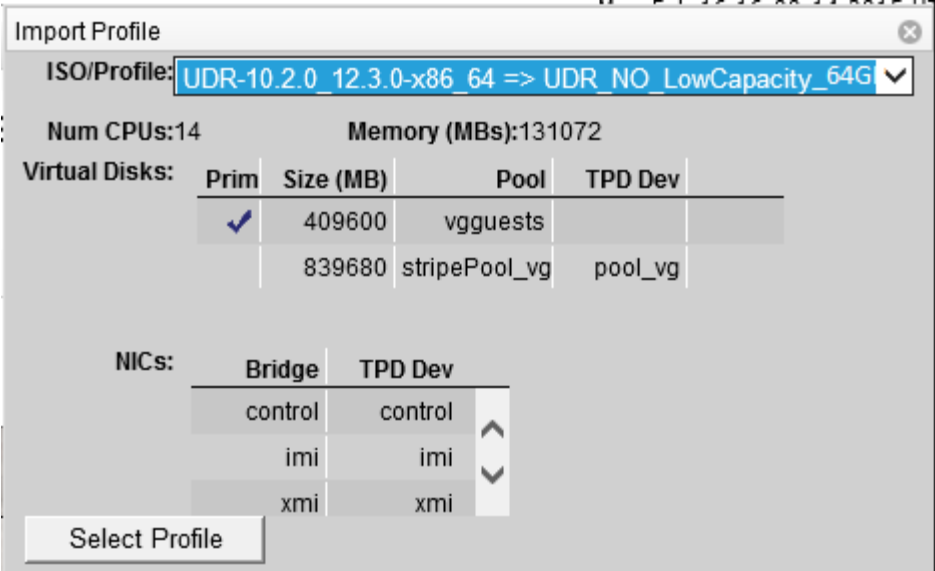
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Procedure 5: Create, IPM and Install Application on all Virtual Machines

Step	Procedure	Result
<p>5.</p> <p><input type="checkbox"/></p>	<p>PM&C GUI:</p> <p>Click on the Import Profile dialogue button</p>	<p>A “Create VM Guest” window is displayed that is similar to the below:</p>  <p>Click “Import Profile” button.</p> <ul style="list-style-type: none"> • Check-off the associated Check Box as addition is completed for the VM. <p><input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP-B <input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B</p> <p><input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2</p>

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Procedure 5: Create, IPM and Install Application on all Virtual Machines

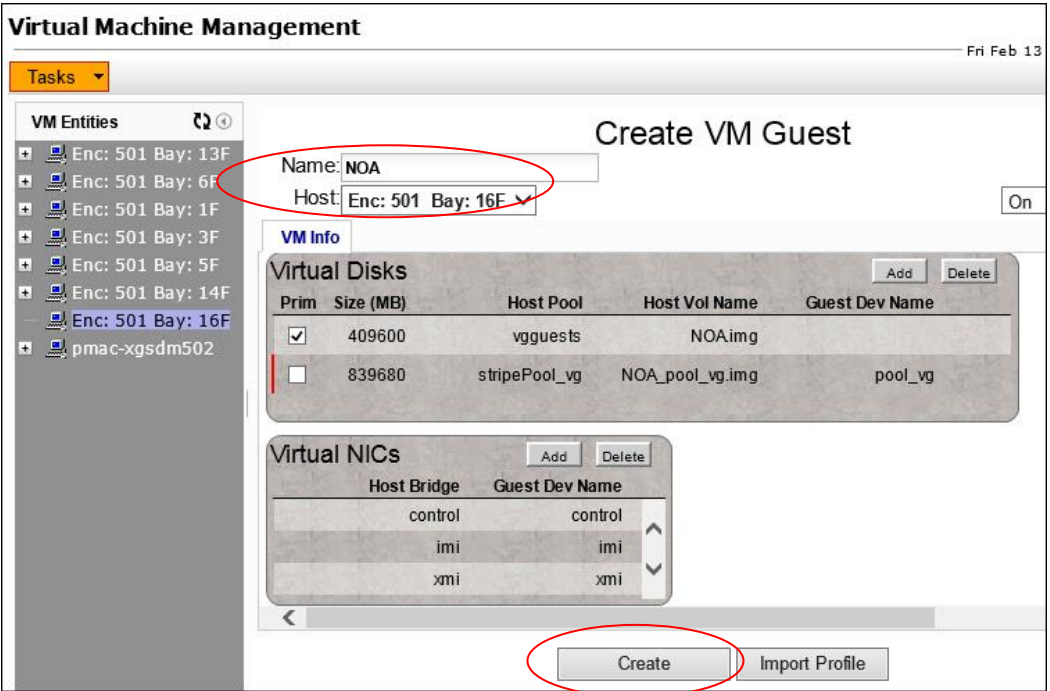
Step	Procedure	Result
<p>6.</p> <input type="checkbox"/>	<p>PM&C GUI:</p> <p>Select the desired ISO/Profile value</p>	<p>Select the desired ISO/Profile.</p> <ul style="list-style-type: none"> - If creating a VM for a NOAMP server, use the “UDR_NO_LowCapacity_64GB” profile. - If creating a VM for a SOAM server, use the “UDR_SO_LowCapacity_64GB” profile. - If creating a VM for an MP, use the “UDR_MP_LowCapacity_64GB” profile.  <p>Click “Select Profile” button.</p> <ul style="list-style-type: none"> • Check-off the associated Check Box as addition is completed for the VM. <p><input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP-B <input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B</p> <p><input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2</p>

OCUDR 10.0.1 Installation and Configuration Guide

Procedure 5: Create, IPM and Install Application on all Virtual Machines

Step	Procedure	Result
<p>7.</p> <input type="checkbox"/>	<p>PM&C GUI:</p> <p><i>Customize the NICs list to suit your deployment</i></p>	<p>The default Virtual NICs are configured for a deployment with one XSI network (for NOAMPs) or two XSI networks (for MPs).</p> <ul style="list-style-type: none"> - If your deployment has only a single XSI network, select the row for “xsi2” (if it’s present) by clicking on it then click the Delete button: <div> </div> <ul style="list-style-type: none"> - If your deployment has more than two XSI networks, click the Add button, select them from the Host Bridge drop box and type in the same name into Guest Dev Name. - Check-off the associated Check Box as addition is completed for the VM. <p> <input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP-B <input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B </p> <p> <input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2 </p>

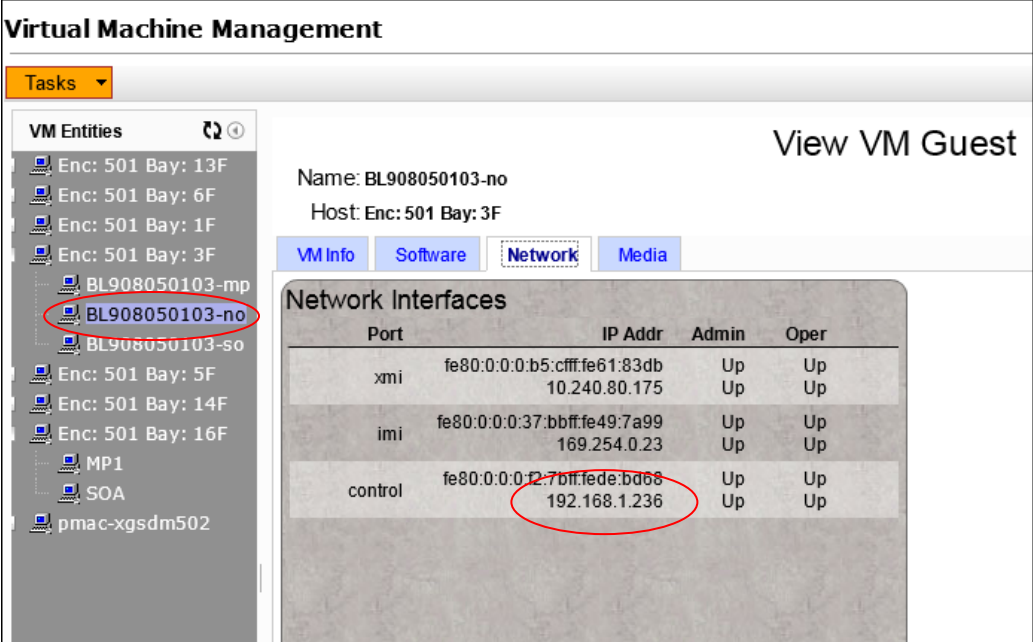
Procedure 5: Create, IPM and Install Application on all Virtual Machines

Step	Procedure	Result
<p>8.</p> <p><input type="checkbox"/></p>	<p>PM&C GUI:</p> <p>Override the VM Guest Name to make it unique for the site</p>	<p>A “Create VM Guest” window is displayed that is similar to the below..</p>  <p>Override the Name field to something like: NOA, NOB, SOA, SOB, MP1 or MP2, etc. (Don't use hyphens in the name). You could also include a location within the Name value such as SOMRSVNCA. (This will not become the ultimate hostname. It is just an internal tag for the VM host manager.)</p> <p>Click Create button</p> <ul style="list-style-type: none"> Record the Site VM Guest Name of each VM that is added in the space provided below: Check-off the associated Check Box as addition is completed for the VM. <p> <input type="checkbox"/> NOAMP-A ----- <input type="checkbox"/> NOAMP-B ----- <input type="checkbox"/> SOAM-A: _____ <input type="checkbox"/> SOAM-B: _____ <input type="checkbox"/> MP-1: _____ <input type="checkbox"/> MP-2: _____ </p>

Procedure 5: Create, IPM and Install Application on all Virtual Machines

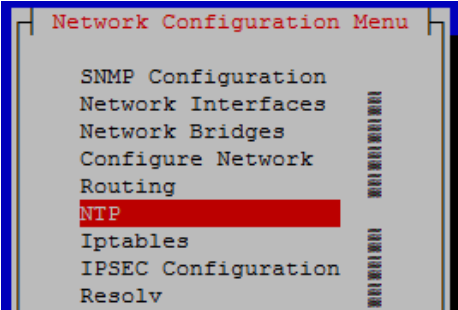
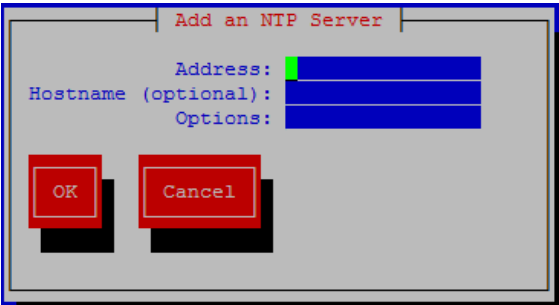
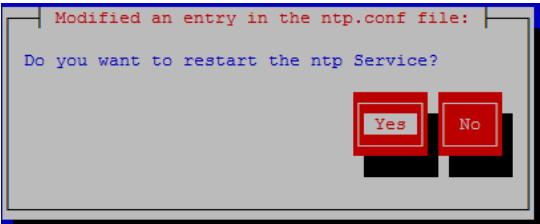
Step	Procedure	Result																					
<p>9.</p> <input type="checkbox"/>	<p>PM&C GUI:</p> <p>Select...</p> <p>Main Menu</p> <p>→ Task Monitoring</p> <p>...as shown on the right.</p>	<p>Background Task Monitoring</p> <p>Filter ▾</p> <table border="1"> <thead> <tr> <th>ID</th> <th>Task</th> <th>Target</th> <th>Status</th> <th>Running Time</th> <th>Start Time</th> <th>Progress</th> </tr> </thead> <tbody> <tr> <td>1190</td> <td>VirtAction: Create</td> <td>Enc:501 Bay:16F Guest: MP1</td> <td>Guest creation completed (MP1)</td> <td>0:00:06</td> <td>2015-02-16 10:55:59</td> <td>100%</td> </tr> <tr> <td>1187</td> <td>VirtAction: Create</td> <td>Enc:501 Bay:16F Guest: SOA</td> <td>Guest creation completed (SOA)</td> <td>0:00:06</td> <td>2015-02-16 10:37:23</td> <td>100%</td> </tr> </tbody> </table> <ul style="list-style-type: none"> Check-off the associated Check Box as addition is completed for the VM. <p><input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP-B <input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B</p> <p><input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2</p>	ID	Task	Target	Status	Running Time	Start Time	Progress	1190	VirtAction: Create	Enc:501 Bay:16F Guest: MP1	Guest creation completed (MP1)	0:00:06	2015-02-16 10:55:59	100%	1187	VirtAction: Create	Enc:501 Bay:16F Guest: SOA	Guest creation completed (SOA)	0:00:06	2015-02-16 10:37:23	100%
ID	Task	Target	Status	Running Time	Start Time	Progress																	
1190	VirtAction: Create	Enc:501 Bay:16F Guest: MP1	Guest creation completed (MP1)	0:00:06	2015-02-16 10:55:59	100%																	
1187	VirtAction: Create	Enc:501 Bay:16F Guest: SOA	Guest creation completed (SOA)	0:00:06	2015-02-16 10:37:23	100%																	
<p>10.</p> <input type="checkbox"/>	<p>PM&C GUI:</p> <p>Verify that Create VM task successfully completes.</p> <p>The user should see a screen similar to the one on the right with Progress value of 100%.</p>	<p>Verify that the Virtual Machine successfully created.</p> <table border="1"> <thead> <tr> <th>ID</th> <th>Task</th> <th>Target</th> <th>Status</th> <th>Start Time</th> <th>Progress</th> </tr> </thead> <tbody> <tr> <td>13</td> <td>VirtAction: Create</td> <td>RMS: pc9040833-no-a Guest: NO-A</td> <td>Guest creation completed (NO-A)</td> <td>2012-07-06 19:05:02</td> <td>100%</td> </tr> </tbody> </table> <ul style="list-style-type: none"> Check-off the associated Check Box as addition is completed for the VM. <p><input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP-B <input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B</p> <p><input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2</p>	ID	Task	Target	Status	Start Time	Progress	13	VirtAction: Create	RMS: pc9040833-no-a Guest: NO-A	Guest creation completed (NO-A)	2012-07-06 19:05:02	100%									
ID	Task	Target	Status	Start Time	Progress																		
13	VirtAction: Create	RMS: pc9040833-no-a Guest: NO-A	Guest creation completed (NO-A)	2012-07-06 19:05:02	100%																		
<p>Note: The steps above may be completed for each VM Guest that this PM&C administers before proceeding on to the next step. This way you may install and upgrade multiple VM Guests in parallel. A low capacity C-Class system has two blades at a site.</p>																							
<p>11.</p> <input type="checkbox"/>	<p><i>Install Operating System (TPD)</i></p>	<p>Follow steps defined in ...</p> <p>Appendix F.2 Installing Operating Systems with PM&C</p> <p>... to install TPD software on VM Guests.</p> <ul style="list-style-type: none"> Check-off the associated Check Box as addition is completed for the VM. <p><input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP-B <input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B</p> <p><input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2</p>																					

Procedure 5: Create, IPM and Install Application on all Virtual Machines

Step	Procedure	Result
<p>12.</p> <p><input type="checkbox"/></p>	<p>PM&C GUI:</p> <p>Get and record control IP address of VM Guest</p>	<p>Navigate to the VM Management menu</p> <p>Select the VM Guest Name from the VM Entities list, and click “Network” tab</p>  <p>Derermine control IP address of VM Guest and record it.</p> <ul style="list-style-type: none"> Record the Site control IP Address of each VM that is added in the space provided below: Check-off the associated Check Box as addition is completed for the VM. <p><input type="checkbox"/> NOAMP-A ----- <input type="checkbox"/> NOAMP-B -----</p> <p><input type="checkbox"/> SOAM-A: _____ <input type="checkbox"/> SOAM-B: _____</p> <p><input type="checkbox"/> MP-1: _____ <input type="checkbox"/> MP-2: _____</p>
<p>13.</p>	<p>For NOAMPs only:</p> <p>Prepare NOAMP for installation of OCUDR application software</p> <p>Connect to the NOAMP server Control IPaddress</p>	<p>Manually configure XMI network on the NOAMPs only; the below steps must be executed before installing OCUDR:</p> <pre>[root@hostname1260476221 ~] # netAdm set --device=xmi --onboot=yes --netmask=<XMI_NETMASK> --address=<XMI_IP_Address_for_NOAMP_A></pre> <p>Interface xmi updated</p> <pre>[root@hostname1260476221 ~] # netAdm add --device=xmi --route=default --gateway=<XMI_IP_Address_for_default_gateway></pre> <p>Route to xmi added</p> <p>Restart the network by running the following:</p> <pre>root@hostname1260476221 ~] # service network restart</pre>

OCUDR 10.0.1 Installation and Configuration Guide

Procedure 5: Create, IPM and Install Application on all Virtual Machines

Step	Procedure	Result
14.	<p>For NOAMP-A only:</p> <p><i>Enter Platform configuration menu</i></p>	<p>Enter platform configuration by running the following:</p> <pre># su - platcfg</pre>
15.	<p>For NOAMP-A only:</p> <p>Configure NTP for NOAMP-A</p>	<ol style="list-style-type: none"> Navigate to Network Configuration > NTP.  Select Edit, then “Add a New NTP Server.” Enter the IP Address of the TVOE Host.  Select OK, then “Exit.” Select Yes to restart ntp Service.  Exit platcfg.

OCUDR 10.0.1 Installation and Configuration Guide

Procedure 5: Create, IPM and Install Application on all Virtual Machines

Step	Procedure	Result
16.	<p><i>Prepare NOAMP for installation of OCUDR application software</i></p> <p><i>Connect to the NOAMP server Control IPaddress</i></p>	<p>Create a logical volume from NOAMP VM Guest:</p> <pre>root@hostname1260476221 ~] # vgcreate stripe_vg /dev/pool_vg Volume group "stripe_vg" successfully created</pre> <p>Create a logical volume rundb:</p> <pre>root@hostname1260476221 ~] # lvcreate -L 385G --alloc anywhere --name rundb stripe_vg Logical volume "rundb" created</pre> <p>Make filesystem on rundb:</p> <pre>root@hostname1260476221 ~] # mkfs -t ext4 /dev/stripe_vg/rundb mke2fs 1.41.12 (17-May-2010) Filesystem label= OS type: Linux Block size=4096 (log=2) Fragment size=4096 (log=2) Stride=64 blocks, Stripe width=192 blocks 45883392 inodes, 183502848 blocks 9175142 blocks (5.00%) reserved for the super user First data block=0 Maximum filesystem blocks=4294967296 5601 block groups 32768 blocks per group, 32768 fragments per group 8192 inodes per group Superblock backups stored on blocks: 32768, 98304, 163840, 229376, 294912, 819200, 884736, 1605632, 2654208, 4096000, 7962624, 11239424, 20480000, 23887872, 71663616, 78675968 Allocating group tables: done Writing inode tables: done Creating journal (32768 blocks): done Writing superblocks and filesystem accounting information: done</pre>
17. <input type="checkbox"/>	<p><i>Install OCUDR application software.</i></p>	<p>Follow steps defined in ...</p> <p>Appendix G.2 Installing OCUDR Application with PM&C</p> <p>... to install OCUDR software.</p> <ul style="list-style-type: none"> • Check-off the associated Check Box as addition is completed for the VM. <p><input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP-B <input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B</p> <p><input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2</p>

OCUDR 10.0.1 Installation and Configuration Guide

Procedure 5: Create, IPM and Install Application on all Virtual Machines

Step	Procedure	Result
18. <input type="checkbox"/>	Repeat Steps 4 - 17 for each Virtual Machine to install its operating system and application software. Note: Steps 13-16 MUST be executed for NOAMPs only.	
19. <input type="checkbox"/>	Perform upgrade acceptance.	Follow steps defined in ... Appendix H Accept Application Installation on PM&C Managed Servers ... to accept upgrade.
20. <input type="checkbox"/>	Access the NOAMP server's console.	Connect to the server's console using one of the access methods described in <i>Section 2.1.2</i> .
21. <input type="checkbox"/>	Log into the server console as the "root" user.	CentOS release 5.6 (Final) Kernel 2.6.18-238.19.1.el5prere15.0.0_72.22.0 on an x86_64 hostname1260476221 login: root Password: <root_password>
22. <input type="checkbox"/>	NOAMP: Transfer file to TVOE Host	# scp /var/TKLC/db/filemgmt/udrInitConfig.sh \admusr@<tvoe_host_name>:/var/tmp admusr@<tvoe_host_name>'s password: <admusr_password> <ul style="list-style-type: none"> • Check-off the associated Check Box as addition is completed for the TVOE host. <input type="checkbox"/> TVOE Host (NOAMP-A / SOAM-A / MP-1) <input type="checkbox"/> TVOE Host (NOAMP-B / SOAM-B / MP-2)
23. <input type="checkbox"/>	Login to TVOE Host: 1) SSH to server. 2) Log into the server as the "admusr" user..	# ssh admusr@<tvoe_host_name> admusr@<tvoe_host_name>'s password: <admusr_password> <ul style="list-style-type: none"> • Check-off the associated Check Box as addition is completed for the TVOE host. <input type="checkbox"/> TVOE Host (NOAMP-A / SOAM-A / MP-1) <input type="checkbox"/> TVOE Host (NOAMP-B / SOAM-B / MP-2)
24. <input type="checkbox"/>	TVOE host: Switch to root user.	[admusr@hostname1326744539 ~]\$ su - password: <root_password> <ul style="list-style-type: none"> • Check-off the associated Check Box as addition is completed for the TVOE host. <input type="checkbox"/> TVOE Host (NOAMP-A / SOAM-A / MP-1) <input type="checkbox"/> TVOE Host (NOAMP-B / SOAM-B / MP-2)

OCUDR 10.0.1 Installation and Configuration Guide

Procedure 5: Create, IPM and Install Application on all Virtual Machines

Step	Procedure	Result
25. <input type="checkbox"/>	TVOE host: <i>Change directory.</i>	# <code>cd /var/tmp</code> <ul style="list-style-type: none"> • Check-off the associated Check Box as addition is completed for the TVOE host. <input type="checkbox"/> TVOE Host (NOAMP-A / SOAM-A / MP-1) <input type="checkbox"/> TVOE Host (NOAMP-B / SOAM-B / MP-2)
26. <input type="checkbox"/>	TVOE host: <i>Update script permissions.</i>	# <code>chmod 555 udrInitConfig.sh</code> <ul style="list-style-type: none"> • Check-off the associated Check Box as addition is completed for the TVOE host. <input type="checkbox"/> TVOE Host (NOAMP-A / SOAM-A / MP-1) <input type="checkbox"/> TVOE Host (NOAMP-B / SOAM-B / MP-2)
27. <input type="checkbox"/>	TVOE host: <i>Run configuration script as root.</i>	# <code>./udrInitConfig.sh</code> Verify no failures are reported. A trace to display the settings for all VM Guests on this server should be shown in output. In case of failures, save the log file /var/TKLC/log/udrVMCfg/udrInitConfig.log and contact My Oracle Support (MOS) for assistance. <ul style="list-style-type: none"> • Check-off the associated Check Box as addition is completed for the TVOE host. <input type="checkbox"/> TVOE Host (NOAMP-A / SOAM-A / MP-1) <input type="checkbox"/> TVOE Host (NOAMP-B / SOAM-B / MP-2)
28. <input type="checkbox"/>	TVOE host: <i>Reboot the server.</i>	# <code>init 6</code> <ul style="list-style-type: none"> • Check-off the associated Check Box as addition is completed for the TVOE host. <input type="checkbox"/> TVOE Host (NOAMP-A / SOAM-A / MP-1) <input type="checkbox"/> TVOE Host (NOAMP-B / SOAM-B / MP-2)
THIS PROCEDURE HAS BEEN COMPLETED		

6.0 NORMAL CAPACITY RMS CONFIGURATION SOFTWARE INSTALLATION PROCEDURE

The user should confirm that the server has been verified through the Hardware Verification Plan [3] before beginning this procedure. RMS Configurations are for lab use only.

6.1 Install NOAMP Servers (NO and DR Network Elements)

This procedure will install Tekelec Platform Distribution (TPD) on the NO network elements. ProLiantDL380Gen8 and ProLiantDL380Gen8+ are supported for this procedure.

Needed material:

- TPD Media

Check off (✓) each step as it is completed. Boxes have been provided for this purpose under each step number.

IF THIS PROCEDURE FAILS, CONTACT MY ORACLE SUPPORT (MOS) FOR ASSISTANCE.

Procedure 6: Install NOAMP Servers (NO and DR Network Elements)

Step	Procedure	Result
1. <input type="checkbox"/>	Access the HP server's console.	Connect to the server's console using one of the access methods described in Section 2.1.2 .
2. <input type="checkbox"/>	Verify the type of server hardware	# hardwareInfo grep Hardware Hardware ID: ProLiantDL380Gen8 or ProLiantDL380Gen8+
3. <input type="checkbox"/>	Update firmware	Follow steps defined in ... Appendix D.3 HP Rack Mount Firmware Upgrade (<i>DL380 hardware</i>) ... to update firmware.
4. <input type="checkbox"/>	Update BIOS settings	Follow steps defined in Appendix D.2 BIOS Settings to update BIOS settings.
5. <input type="checkbox"/>	Install Operating System (TPD)	Follow steps defined in ... Appendix F.1 Installing Operating Systems with ILO (<i>DL380 hardware</i>) ... to install TPD software.

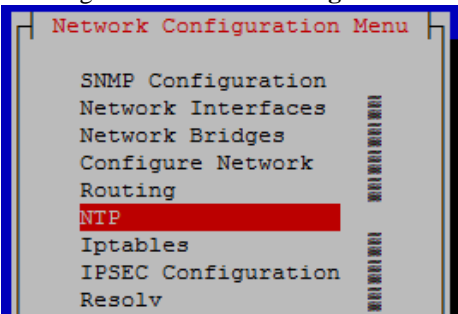
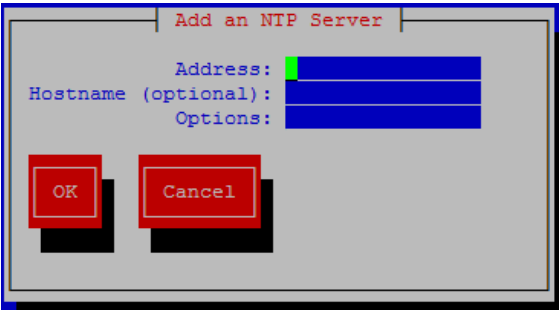
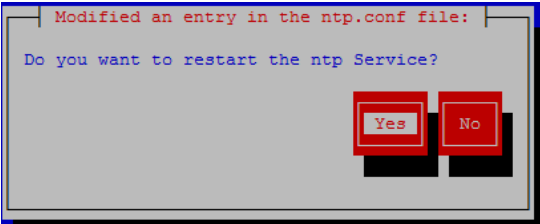
Note: The next five steps are only for the **NOAMP-A** and **DR NOAMP-A** servers. Once these steps are completed for both servers, Section 6.2: Install SOAM / MP Host Servers (SO Network Elements) may be run in parallel with this procedure.

OCUDR 10.0.1 Installation and Configuration Guide

Procedure 6: Install NOAMP Servers (NO and DR Network Elements)

Step	Procedure	Result
6. <input type="checkbox"/>	Access the HP server's console.	Connect to the server's console using one of the access methods described in <i>Section 2.1.2</i> .
7. <input type="checkbox"/>	Log into the server console as the "root" user.	CentOS release 5.6 (Final) Kernel 2.6.18-238.19.1.el5prere15.0.0_72.22.0 on an x86_64 hostname1260476221 login: root Password: <root_password>
8. <input type="checkbox"/>	Configure a temporary XMI IP so NTP can access the routed network.	Follow steps defined in ... Appendix B.2 Creating Temporary External XMI IP Address without Interface Bonding (<i>RMS without Cabinet Switch</i>) ... to define a temporary network. Note: The permanent IP assignment for this server will be made when its TKLCConfigData.sh script is applied later in this installation.
9. <input type="checkbox"/>	Enter Platform configuration menu	Enter platform configuration by running the following: # su - platcfg

Procedure 6: Install NOAMP Servers (NO and DR Network Elements)

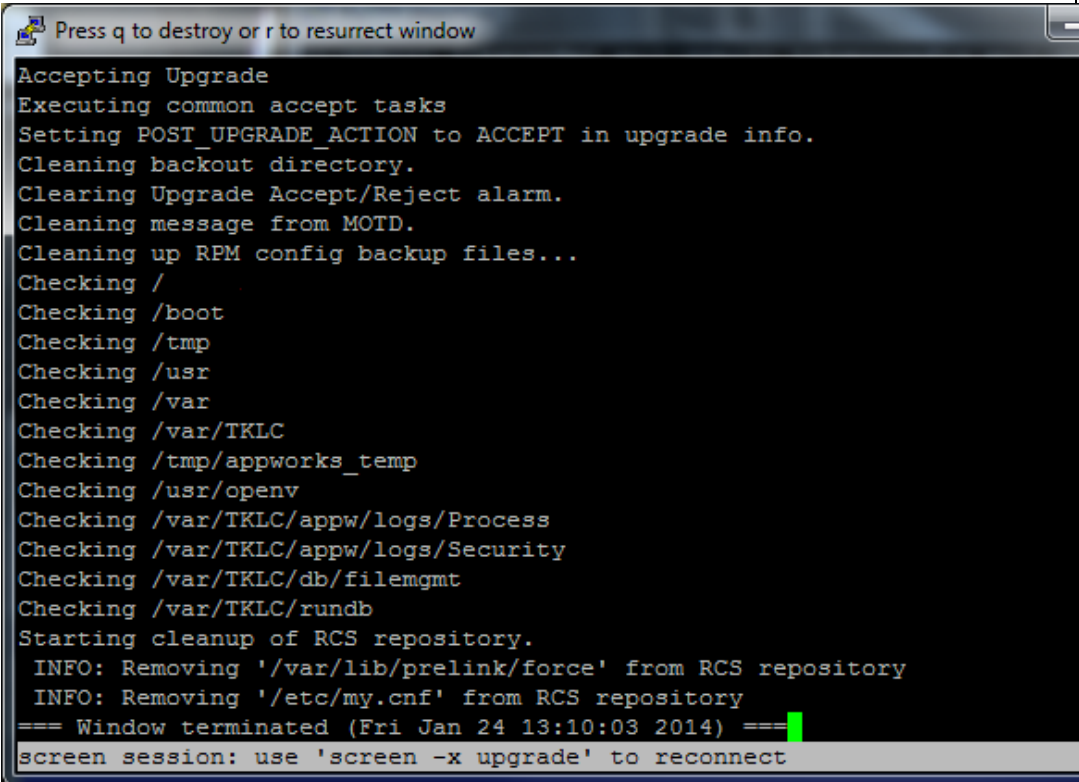
Step	Procedure	Result
<p>10.</p> <p><input type="checkbox"/></p>	<p>For NOAMP-A only:</p> <p>Enter Platform configuration menu</p>	<ol style="list-style-type: none"> Navigate to Network Configuration > NTP.  Select Edit, then “Add a New NTP Server.” Enter the IP Address of the customer provided NTP server.  Select OK, then “Exit.” Select Yes to restart ntp Service.  Exit platcfg.
<p>Note: The remainder of this procedure is for all NOAMP servers.</p>		
<p>11.</p> <p><input type="checkbox"/></p>	<p><i>Configure Disk Array</i></p>	<p>Follow steps defined in ...</p> <p>Appendix E.1 Configuring Disk Array (NO Network Element Servers) (<i>DL380 hardware</i>)</p> <p>... to configure the disk array.</p>

Procedure 6: Install NOAMP Servers (NO and DR Network Elements)

Step	Procedure	Result
<p>12.</p> <input type="checkbox"/>	<p>(Optional)</p> <p>Configure NetBackup Dedicated Interface</p> <p>(Only deployments with Net Backup)</p> <p>Dual Pass-Thru Modules</p>	<pre># netAdm add --device=bond2 --type=Bonding --mode=active-backup \ --onboot=yes --bootproto=none --bondInterfaces="eth21,eth22" \ --address=<NetBackup_IP> --netmask=<NetBackup_NetMask> # netAdm add --route=net --device=bond2 \ --address=<NetBackup_Network_Address> \ --netmask=<NetBackup_Network_NetMask> \ --gateway=<NetBackup_Network_Gateway_IP></pre> <p>[OPTIONAL] If this installation is using jumbo frames, set the ethernet interface MTU to the desired jumbo frame size:</p> <pre># netAdm set --device=bond2 --MTU=<NetBackup_MTU_size></pre>
<p>13.</p> <input type="checkbox"/>	<p>(Optional)</p> <p>Configure Second NetBackup Interface</p> <p>(Only deployments with Net Backup)</p> <p>Single Pass-Thru Modules and RMS</p>	<p>For all RMS systems, <backup_device> will be : eth14</p> <pre># netAdm set --device=<backup_device> --slave=no --onboot=yes \ --address=<NetBackup_IP> --netmask=<NetBackup_NetMask> # netAdm add --route=net --device=<backup_device> \ --address=<NetBackup_Network_Address> \ --netmask=<NetBackup_Network_NetMask> \ --gateway=<NetBackup_Network_Gateway_IP></pre> <p>[OPTIONAL] If this installation is using jumbo frames, set the ethernet interface MTU to the desired jumbo frame size:</p> <pre># netAdm set --device=<backup_device> --MTU=<NetBackup_MTU_size></pre>
<p>14.</p> <input type="checkbox"/>	<p>Install OCUDR application software.</p>	<p>Follow steps defined in ...</p> <p>Appendix G.1 Installing OCUDR Application with ILO (DL380 hardware)</p> <p>... to install OCUDR software.</p>
<p>15.</p> <input type="checkbox"/>	<p>Access the HP server's console.</p>	<p>Connect to the server's console using one of the access methods described in <i>Section 2.1.2</i>.</p>
<p>16.</p> <input type="checkbox"/>	<p>Verify successful upgrade.</p> <p>Command will generate no output if no issues are found.</p>	<pre># verifyUpgrade</pre> <p>NOTE: This command should return no output on a healthy system. If any errors are reported, please contact My Oracle Support MOS for assistance.</p>

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Procedure 6: Install NOAMP Servers (NO and DR Network Elements)

Step	Procedure	Result
17. <input type="checkbox"/>	Change directory	# <code>cd /var/TKLC/backout</code>
18. <input type="checkbox"/>	Perform upgrade acceptance.	# <code>./accept</code>
19. <input type="checkbox"/>	Press the 'q' key to quit screen session wrapper from upgrade acceptance.	

THIS PROCEDURE HAS BEEN COMPLETED

6.2 Install SOAM / MP Host Servers (SO Network Elements)

This procedure will install and configure the operating system on hardware that will host SOAM and MP VM Guests. ProLiantDL380Gen8 and ProLiantDL380Gen8+ are supported for this procedure.

Requirements:

- **Procedure 6: Install NOAMP Servers (NO and DR Network Elements)** must be complete

Needed material:

- TVOE Media

Check off (✓) each step as it is completed. Boxes have been provided for this purpose under each step number.

IF THIS PROCEDURE FAILS, CONTACT MY ORACLE SUPPORT (MOS) FOR ASSISTANCE.

Procedure 7: Install SOAM / MP Servers (SO Network Elements)

Step	Procedure	Result
1. <input type="checkbox"/>	Access the HP server's console.	Connect to the HP server's console using one of the access methods described in Section 2.1.2 .
2. <input type="checkbox"/>	Check the type of server hardware	# <code>hardwareInfo grep Hardware</code> Hardware ID: ProLiantDL380Gen8 or ProLiantDL380Gen8+
3. <input type="checkbox"/>	Update firmware	Follow steps defined in ... Appendix D.3 HP Rack Mount Firmware Upgrade (DL380 hardware) ... to update firmware.
4. <input type="checkbox"/>	Update BIOS settings	Follow steps defined in Appendix D.2 BIOS Settings to update BIOS settings.
5. <input type="checkbox"/>	Add image to management server.	Follow Appendix J Adding Software Images to PM&C Server to add TVOE image.
6. <input type="checkbox"/>	Install Operating System (TVOE)	Follow steps defined in ... Appendix F.1 Installing Operating Systems with ILO (DL380 hardware) ... to install TVOE software.

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Procedure 7: Install SOAM / MP Servers (SO Network Elements)

Step	Procedure	Result
7. <input type="checkbox"/>	<i>Configure TVOE network</i>	Follow steps defined in ... Appendix L.2 Configure TVOE Network without Interface Bonding (<i>RMS without cabinet switch</i>) ... to configure TVOE network.
8. <input type="checkbox"/>	<i>Deploy PM&C</i>	Follow steps defined in Appendix I.1 Deploying PM&C on TVOE Server.
9. <input type="checkbox"/>	<i>Configure PM&C application</i>	Follow steps defined in Appendix I.2 Configure PM&C Application.
10. <input type="checkbox"/>	<i>Configure Cabinet</i>	Follow steps defined in Appendix I.3 Add Cabinet to PM&C System Inventory.
11. <input type="checkbox"/>	<i>Configure RMS</i>	Follow steps defined in Appendix I.4 Add Rack Mount Server to PM&C System Inventory.
THIS PROCEDURE HAS BEEN COMPLETED		

6.3 Create, IPM and Install Application on all Virtual Machines (SO Network Elements)

This procedure will create Virtual Machines (VMs) for SO and MP servers, install the TPD Operating System on each VM, and install the OCUDR application on each VM. It details the create/IPM/install for a single VM and should be repeated for every VM.

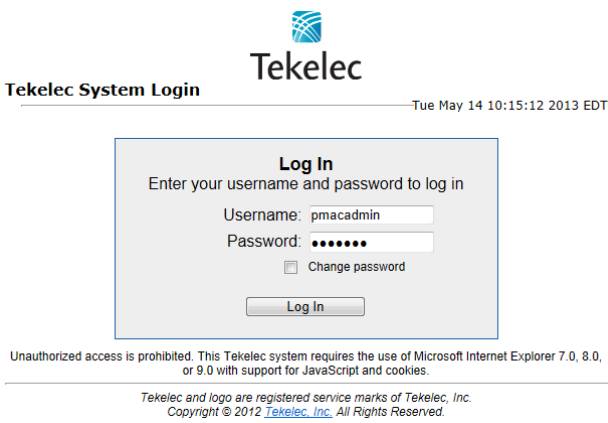
Requirements:

- **Procedure 7: Install SOAM / MP Host Servers (SO Network Elements)** has been completed.

Check off (✓) each step as it is completed. Boxes have been provided for this purpose under each step number.

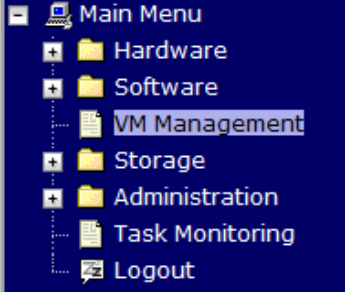
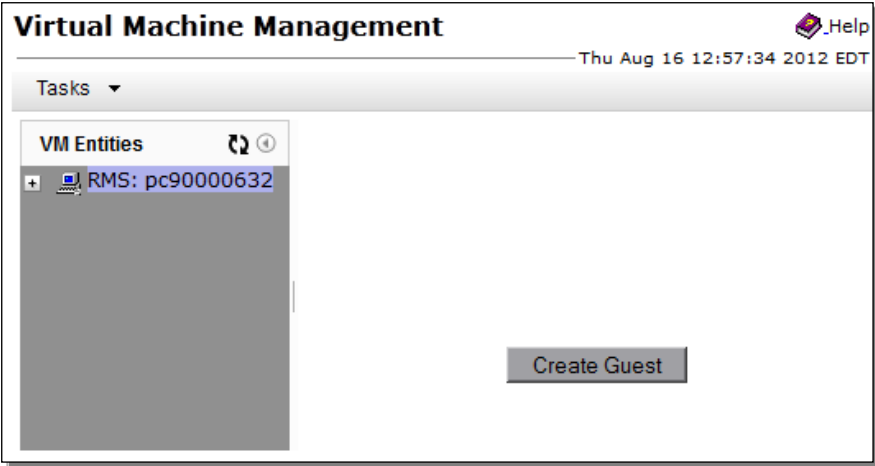
IF THIS PROCEDURE FAILS, CONTACT MY ORACLE SUPPORT (MOS) FOR ASSISTANCE.

Procedure 8: Create, IPM and Install Application on all Virtual Machines

Step	Procedure	Result
	<p>Important Note: The IP address used in this procedure for <code><pmac_management_network_ip></code> will vary according to hardware type:</p> <ul style="list-style-type: none"> • Rack Mount Server deployments (ex: ProLiantDL380pGen8) will use two IP addresses per SO Network Element to access the PM&C deployed on each member RMS. 	
<p>1.</p> <input type="checkbox"/>	<p>Add image to management server.</p>	<p>Follow Appendix J Adding Software Images to PM&C Server to add TPD and OCUDR software images to this PM&C repository.</p>
<p>2.</p> <input type="checkbox"/>	<p>PM&C GUI: Login to PM&C GUI</p>	<p>Open web browser and enter: <code>http://<pmac_management_network_ip></code> Login as pmacadmin user.</p> 

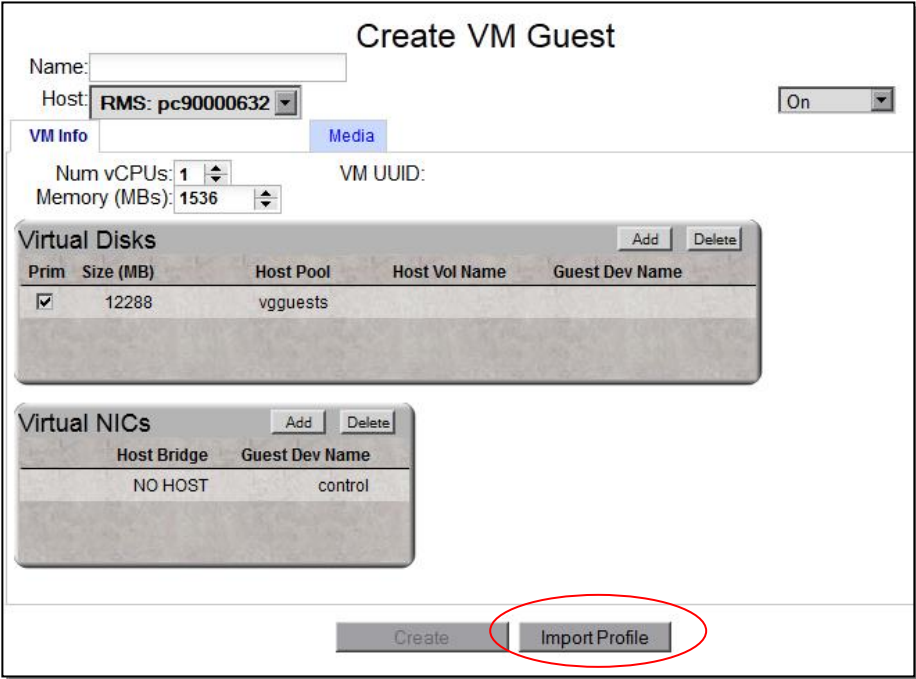
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Procedure 8: Create, IPM and Install Application on all Virtual Machines

Step	Procedure	Result
<p>3.</p> <input type="checkbox"/>	<p>PM&C GUI:</p> <p><i>Navigate to VM Management menu</i></p>	<p>Navigate to the VM Management menu</p>  <p>The screenshot shows a dark blue menu with the following items: Main Menu, Hardware, Software, VM Management (highlighted), Storage, Administration, Task Monitoring, and Logout.</p>
<p>4.</p> <input type="checkbox"/>	<p>PM&C GUI:</p> <p><i>Select the desired Server and create the VM Guest</i></p>	<p>Select the TVOE blade or rack mounted server from the “VM Entities” listing on the left side of the screen. The selected server’s guest machine configuration will then be displayed in the remaining area of the window.</p>  <p>The screenshot shows the 'Virtual Machine Management' window. On the left, under 'VM Entities', the server 'RMS: pc90000632' is selected. A 'Create Guest' button is visible in the lower right area of the window.</p> <p>Click Create Guest.</p> <ul style="list-style-type: none"> • Check-off the associated Check Box as addition is completed for the VM. <p> <input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B <input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2 <input type="checkbox"/> MP-3 <input type="checkbox"/> MP-4 </p>

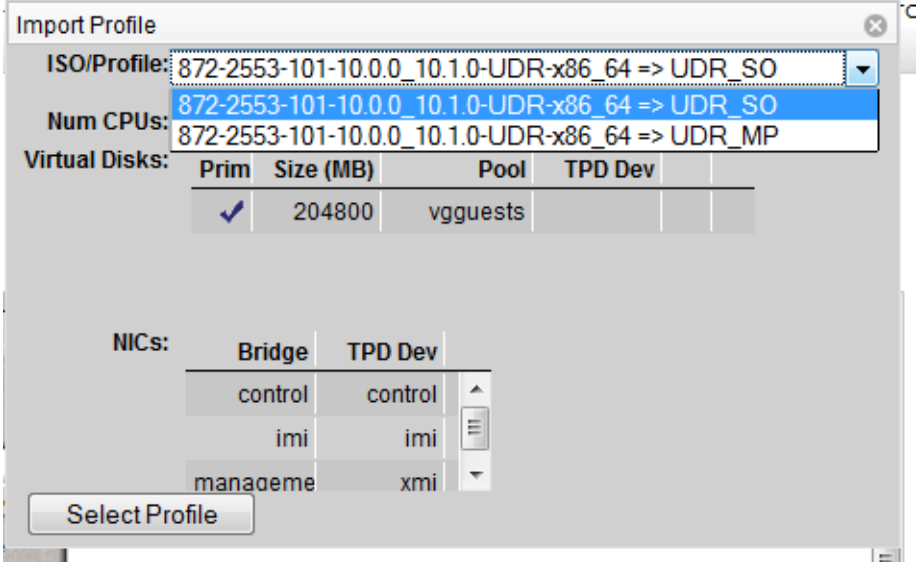
OCUDR 10.0.1 Installation and Configuration Guide

Procedure 8: Create, IPM and Install Application on all Virtual Machines

Step	Procedure	Result
<p>5.</p> <input type="checkbox"/>	<p>PM&C GUI:</p> <p>Click on the Import Profile dialogue button</p>	<p>A “Create VM Guest” window is displayed that is similar to the below..</p>  <p>Click “Import Profile” button .</p> <ul style="list-style-type: none"> • Check-off the associated Check Box as addition is completed for the VM. <p><input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B</p> <p><input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2 <input type="checkbox"/> MP-3 <input type="checkbox"/> MP-4</p>

OCUDR 10.0.1 Installation and Configuration Guide

Procedure 8: Create, IPM and Install Application on all Virtual Machines

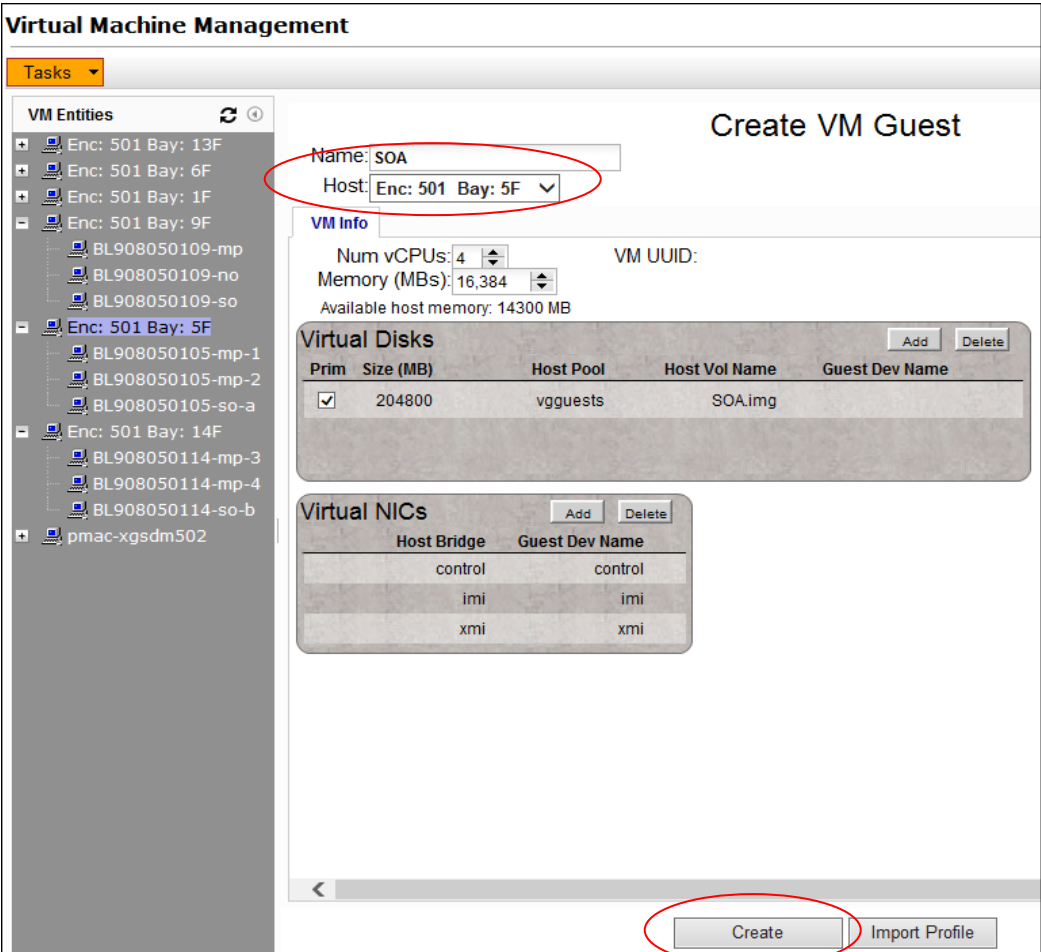
Step	Procedure	Result
<p>6.</p> <input type="checkbox"/>	<p>PM&C GUI:</p> <p>Select the desired ISO/Profile value</p>	<p>Select the desired ISO/Profile.</p> <ul style="list-style-type: none"> - If creating a VM for a SOAM server, use the “UDR_SO” profile. - If creating a VM for an MP, use the “UDR_MP” profile.  <p>Click “Select Profile” button.</p> <ul style="list-style-type: none"> • Check-off the associated Check Box as addition is completed for the VM. <p><input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B</p> <p><input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2 <input type="checkbox"/> MP-3 <input type="checkbox"/> MP-4</p>

OCUDR 10.0.1 Installation and Configuration Guide

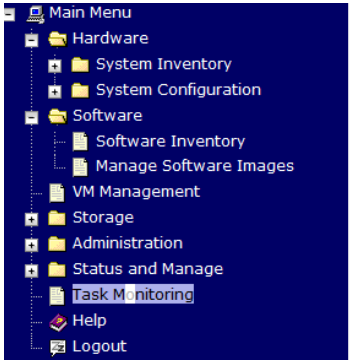
Procedure 8: Create, IPM and Install Application on all Virtual Machines

Step	Procedure	Result								
<p>7.</p> <input type="checkbox"/>	<p>PM&C GUI:</p> <p><i>Customize the NICs list to suit your deployment</i></p>	<p>The default Virtual NICs are configured for a deployment with two XSI networks.</p> <ul style="list-style-type: none"> - If your deployment has only a single XSI network, select the row for “xsi2” by clicking on it then click the Delete button: <div style="border: 1px solid gray; padding: 5px; margin: 10px 0;"> <p>Virtual NICs Add Delete</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;">Host Bridge</th> <th style="width: 50%;">Guest Dev Name</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">xmi</td> <td style="text-align: center;">xmi</td> </tr> <tr> <td style="text-align: center;">xsi1</td> <td style="text-align: center;">xsi1</td> </tr> <tr> <td style="text-align: center;">xsi2</td> <td style="text-align: center;">xsi2</td> </tr> </tbody> </table> </div> <ul style="list-style-type: none"> - If your deployment has more than two XSI networks, click the Add button, select them from the Host Bridge drop box and type in the same name into Guest Dev Name. • Check-off the associated Check Box as addition is completed for the VM. <p> <input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B <input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2 <input type="checkbox"/> MP-3 <input type="checkbox"/> MP-4 </p>	Host Bridge	Guest Dev Name	xmi	xmi	xsi1	xsi1	xsi2	xsi2
Host Bridge	Guest Dev Name									
xmi	xmi									
xsi1	xsi1									
xsi2	xsi2									

Procedure 8: Create, IPM and Install Application on all Virtual Machines

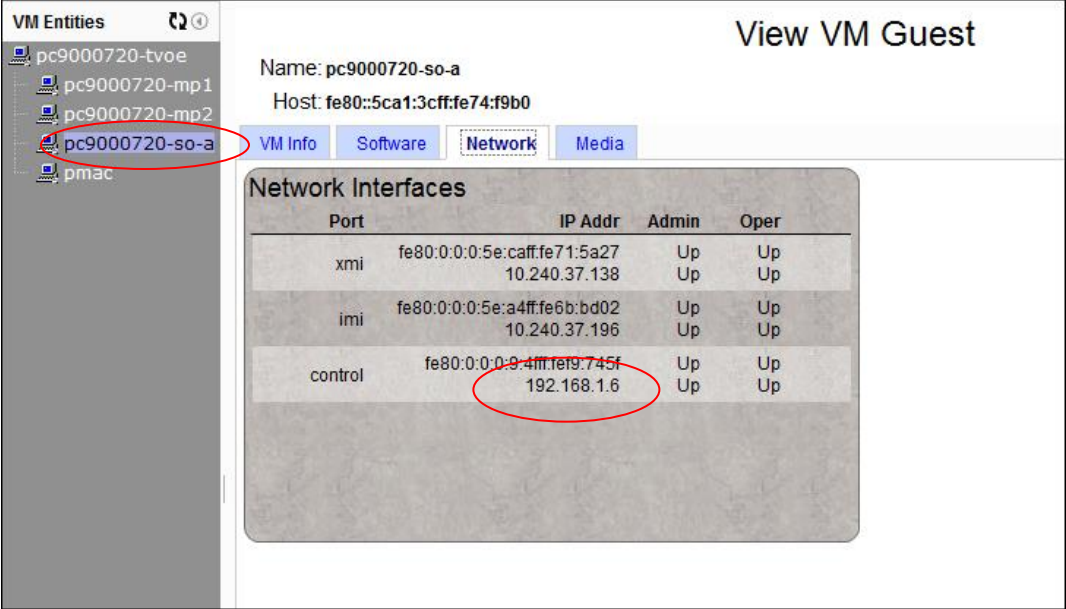
Step	Procedure	Result																		
<p>8.</p> <p><input type="checkbox"/></p>	<p>PM&C GUI:</p> <p>Override the VM Guest Name to make it unique for the site</p>	<p>A “Create VM Guest” window is displayed that is similar to the below..</p>  <p>Virtual Machine Management</p> <p>Tasks</p> <p>VM Entities</p> <ul style="list-style-type: none"> Enc: 501 Bay: 13F Enc: 501 Bay: 6F Enc: 501 Bay: 1F Enc: 501 Bay: 9F Enc: 501 Bay: 5F <ul style="list-style-type: none"> BL908050109-mp BL908050109-no BL908050109-so BL908050105-mp-1 BL908050105-mp-2 BL908050105-so-a BL908050114-mp-3 BL908050114-mp-4 BL908050114-so-b pmac-xgsdm502 <p>Create VM Guest</p> <p>Name: SOA</p> <p>Host: Enc: 501 Bay: 5F</p> <p>VM Info</p> <p>Num vCPUs: 4</p> <p>Memory (MBs): 16,384</p> <p>Available host memory: 14300 MB</p> <p>Virtual Disks</p> <table border="1"> <thead> <tr> <th>Prim</th> <th>Size (MB)</th> <th>Host Pool</th> <th>Host Vol Name</th> <th>Guest Dev Name</th> </tr> </thead> <tbody> <tr> <td><input checked="" type="checkbox"/></td> <td>204800</td> <td>vgguests</td> <td>SOA.img</td> <td></td> </tr> </tbody> </table> <p>Virtual NICs</p> <table border="1"> <thead> <tr> <th>Host Bridge</th> <th>Guest Dev Name</th> </tr> </thead> <tbody> <tr> <td>control</td> <td>control</td> </tr> <tr> <td>imi</td> <td>imi</td> </tr> <tr> <td>xmi</td> <td>xmi</td> </tr> </tbody> </table> <p>Create Import Profile</p> <p>Override the Name field to something like: SOA, SOB, MP1 or MP2, etc. (Don't use hyphens in the name) .You could also include a location within the Name value such as SOMRSVNCA. (This will not become the ultimate hostname. It is just an internal tag for the VM host manager.)</p> <p>Click Create button</p> <ul style="list-style-type: none"> Record the Site VM Guest Name of each VM that is added in the space provided below: Check-off the associated Check Box as addition is completed for the VM. <p><input type="checkbox"/> SOAM-A: _____ <input type="checkbox"/> SOAM-B: _____</p> <p><input type="checkbox"/> MP-1: _____ <input type="checkbox"/> MP-2: _____</p> <p><input type="checkbox"/> MP-3: _____ <input type="checkbox"/> MP-4: _____</p>	Prim	Size (MB)	Host Pool	Host Vol Name	Guest Dev Name	<input checked="" type="checkbox"/>	204800	vgguests	SOA.img		Host Bridge	Guest Dev Name	control	control	imi	imi	xmi	xmi
Prim	Size (MB)	Host Pool	Host Vol Name	Guest Dev Name																
<input checked="" type="checkbox"/>	204800	vgguests	SOA.img																	
Host Bridge	Guest Dev Name																			
control	control																			
imi	imi																			
xmi	xmi																			

Procedure 8: Create, IPM and Install Application on all Virtual Machines

Step	Procedure	Result																								
9. <input type="checkbox"/>	<p>PM&C GUI:</p> <p>Select...</p> <p>Main Menu → Task Monitoring</p> <p>...as shown on the right.</p>	 <p>Background Task Monitoring</p> <table border="1"> <thead> <tr> <th>ID</th> <th>Task</th> <th>Target</th> <th>Status</th> </tr> </thead> <tbody> <tr> <td>125</td> <td>Install OS</td> <td>Enc:701 Bay:4E Guest: SO-B</td> <td>Waiting for target server to boot</td> </tr> <tr> <td>124</td> <td>Install OS</td> <td>Enc:701 Bay:4E Guest: MP-3</td> <td>Waiting for target server to boot</td> </tr> <tr> <td>123</td> <td>Install OS</td> <td>Enc:701 Bay:3E Guest: SO-A</td> <td>Waiting for target server to boot</td> </tr> <tr> <td>122</td> <td>Install OS</td> <td>Enc:701 Bay:3E Guest: MP-1</td> <td>Waiting for target server to boot</td> </tr> <tr> <td>121</td> <td>Upgrade</td> <td>Enc:701 Bay:2E</td> <td>Success</td> </tr> </tbody> </table> <ul style="list-style-type: none"> • Check-off the associated Check Box as addition is completed for the VM. <p><input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B</p> <p><input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2 <input type="checkbox"/> MP-3 <input type="checkbox"/> MP-4</p>	ID	Task	Target	Status	125	Install OS	Enc:701 Bay:4E Guest: SO-B	Waiting for target server to boot	124	Install OS	Enc:701 Bay:4E Guest: MP-3	Waiting for target server to boot	123	Install OS	Enc:701 Bay:3E Guest: SO-A	Waiting for target server to boot	122	Install OS	Enc:701 Bay:3E Guest: MP-1	Waiting for target server to boot	121	Upgrade	Enc:701 Bay:2E	Success
ID	Task	Target	Status																							
125	Install OS	Enc:701 Bay:4E Guest: SO-B	Waiting for target server to boot																							
124	Install OS	Enc:701 Bay:4E Guest: MP-3	Waiting for target server to boot																							
123	Install OS	Enc:701 Bay:3E Guest: SO-A	Waiting for target server to boot																							
122	Install OS	Enc:701 Bay:3E Guest: MP-1	Waiting for target server to boot																							
121	Upgrade	Enc:701 Bay:2E	Success																							
10. <input type="checkbox"/>	<p>PM&C GUI:</p> <p>Verify that Create VM task successfully completes.</p> <p>The user should see a screen similar to the one on the right with Progress value of 100%.</p>	<p>Verify that the Virtual Machine successfully created.</p> <table border="1"> <tbody> <tr> <td>5</td> <td>VirtAction: Create</td> <td>Host IP: ...:1dfff77:7fb2 Guest: pc9000720-mp1</td> <td>Guest creation completed (pc9000720-mp1)</td> <td>0:00:05</td> <td>2014-10-13 17:05:56</td> <td>100%</td> </tr> </tbody> </table> <ul style="list-style-type: none"> • Check-off the associated Check Box as addition is completed for the VM. <p><input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B</p> <p><input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2 <input type="checkbox"/> MP-3 <input type="checkbox"/> MP-4</p>	5	VirtAction: Create	Host IP: ...:1dfff77:7fb2 Guest: pc9000720-mp1	Guest creation completed (pc9000720-mp1)	0:00:05	2014-10-13 17:05:56	100%																	
5	VirtAction: Create	Host IP: ...:1dfff77:7fb2 Guest: pc9000720-mp1	Guest creation completed (pc9000720-mp1)	0:00:05	2014-10-13 17:05:56	100%																				
<p>Note: The steps above may be completed for each VM Guest that this PM&C administers before proceeding on to the next step. This way you may install and upgrade multiple VM Guests in parallel.</p>																										
11. <input type="checkbox"/>	<p><i>Install Operating System (TPD)</i></p>	<p>Follow steps defined in</p> <p>Appendix F.2 Installing Operating Systems with PM&C</p> <p>... to install TPD software on VM Guests.</p> <ul style="list-style-type: none"> • Check-off the associated Check Box as addition is completed for the VM. <p><input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B</p> <p><input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2 <input type="checkbox"/> MP-3 <input type="checkbox"/> MP-4</p>																								

OCUDR 10.0.1 Installation and Configuration Guide

Procedure 8: Create, IPM and Install Application on all Virtual Machines

Step	Procedure	Result
<p>12.</p> <input type="checkbox"/>	<p>PM&C GUI:</p> <p><i>Get and record control IP address of VM Guest</i></p>	<p>Navigate to the VM Management menu</p> <p>Select the VM Guest Name from the VM Entities list, and click “Network” tab</p>  <p>Derermine control IP address of VM Guest and record it.</p> <ul style="list-style-type: none"> Record the Site control IP Address of each VM that is added in the space provided below: Check-off the associated Check Box as addition is completed for the VM. <p> <input type="checkbox"/> SOAM-A: _____ <input type="checkbox"/> SOAM-B: _____ <input type="checkbox"/> MP-1: _____ <input type="checkbox"/> MP-2: _____ <input type="checkbox"/> MP-3: _____ <input type="checkbox"/> MP-4: _____ </p>

OCUDR 10.0.1 Installation and Configuration Guide

Procedure 8: Create, IPM and Install Application on all Virtual Machines

Step	Procedure	Result
13. <input type="checkbox"/>	Install OCUDR application software.	<p>Follow steps defined in ...</p> <p>Appendix G.2 Installing OCUDR Application with PM&C</p> <p>... to install OCUDR software.</p> <ul style="list-style-type: none"> Check-off the associated Check Box as addition is completed for the VM. <p><input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B</p> <p><input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2 <input type="checkbox"/> MP-3 <input type="checkbox"/> MP-4</p>
14. <input type="checkbox"/>	Repeat Steps 4 - 13 for each Virtual Machine to install its operating system and application software.	
15. <input type="checkbox"/>	Perform upgrade acceptance.	<p>Follow steps defined in ...</p> <p>Appendix H Accept Application Installation on PM&C Managed Servers</p> <p>... to accept upgrade.</p>
16. <input type="checkbox"/>	Access the NOAMP server's console.	Connect to the server's console using one of the access methods described in Section 2.1.2 .
17. <input type="checkbox"/>	Log into the server console as the "root" user.	<pre>CentOS release 5.6 (Final) Kernel 2.6.18-238.19.1.el5prere15.0.0_72.22.0 on an x86_64 hostname1260476221 login: root Password: <root_password></pre>
18. <input type="checkbox"/>	NOAMP: Transfer file to TVOE Host	<pre># scp /var/TKLC/db/filemgmt/udrInitConfig.sh \ admusr@<tvoe_host_name>:/var/tmp admusr@<tvoe_host_name>'s password: <admusr_password></pre> <ul style="list-style-type: none"> Check-off the associated Check Box as addition is completed for the TVOE host. <p><input type="checkbox"/> TVOE Host (SOAM-A / MP-1 / MP-2)</p> <p><input type="checkbox"/> TVOE Host (SOAM-B / MP-3 / MP-4)</p>

OCUDR 10.0.1 Installation and Configuration Guide

Procedure 8: Create, IPM and Install Application on all Virtual Machines

Step	Procedure	Result
19. <input type="checkbox"/>	<p>Login to TVOE Host:</p> <p>1) SSH to server.</p> <p>2) Log into the server as the "admusr" user..</p>	<pre># ssh admusr@<tvoe_host_name></pre> <pre>admusr@<tvoe_host_name>'s password: <admusr_password></pre> <ul style="list-style-type: none"> • Check-off the associated Check Box as addition is completed for the TVOE host. <p><input type="checkbox"/> TVOE Host (SOAM-A / MP-1 / MP-2)</p> <p><input type="checkbox"/> TVOE Host (SOAM-B / MP-3 / MP-4)</p>
20. <input type="checkbox"/>	<p>TVOE host:</p> <p>Switch to root user.</p>	<pre>[admusr@hostname1326744539 ~]\$ su -</pre> <pre>password: <root_password></pre> <ul style="list-style-type: none"> • Check-off the associated Check Box as addition is completed for the TVOE host. <p><input type="checkbox"/> TVOE Host (SOAM-A / MP-1 / MP-2)</p> <p><input type="checkbox"/> TVOE Host (SOAM-B / MP-3 / MP-4)</p>
21. <input type="checkbox"/>	<p>TVOE host:</p> <p>Change directory.</p>	<pre># cd /var/tmp</pre> <ul style="list-style-type: none"> • Check-off the associated Check Box as addition is completed for the TVOE host. <p><input type="checkbox"/> TVOE Host (SOAM-A / MP-1 / MP-2)</p> <p><input type="checkbox"/> TVOE Host (SOAM-B / MP-3 / MP-4)</p>
22. <input type="checkbox"/>	<p>TVOE host:</p> <p>Update script permissions.</p>	<pre># chmod 555 udrInitConfig.sh</pre> <ul style="list-style-type: none"> • Check-off the associated Check Box as addition is completed for the TVOE host. <p><input type="checkbox"/> TVOE Host (SOAM-A / MP-1 / MP-2)</p> <p><input type="checkbox"/> TVOE Host (SOAM-B / MP-3 / MP-4)</p>

OCUDR 10.0.1 Installation and Configuration Guide

Procedure 8: Create, IPM and Install Application on all Virtual Machines

Step	Procedure	Result
23. <input type="checkbox"/>	TVOE host: Run configuration script as root.	<pre># ./udrInitConfig.sh</pre> <p>Verify no failures are reported. A trace to display the settings for all VM Guests on this server should be shown in output.</p> <p>In case of failures, save the log file /var/TKLC/log/udrVMCf/udrInitConfig.log and contact My Oracle Support (MOS) for assistance.</p> <ul style="list-style-type: none"> • Check-off the associated Check Box as addition is completed for the TVOE host. <input type="checkbox"/> TVOE Host (SOAM-A / MP-1 / MP-2) <input type="checkbox"/> TVOE Host (SOAM-B / MP-3 / MP-4)
24. <input type="checkbox"/>	TVOE host: Reboot the server.	<pre># init 6</pre> <ul style="list-style-type: none"> • Check-off the associated Check Box as addition is completed for the TVOE host. <input type="checkbox"/> TVOE Host (SOAM-A / MP-1 / MP-2) <input type="checkbox"/> TVOE Host (SOAM-B / MP-3 / MP-4)
THIS PROCEDURE HAS BEEN COMPLETED		

7.0 LOW CAPACITY RMS CONFIGURATION SOFTWARE INSTALLATION PROCEDURE

The user should confirm that the server has been verified through the Hardware Verification Plan [3] before beginning this procedure.

The following HP RMS configurations will be supported and can utilize the procedures in this section:

- 1-RMS sever per site system**
 This includes all OCUDR software running on a TVOE virtualization environment. This configuration will be supported only for lab testing systems.
- 2-RMS server per site system**
 This includes all OCUDR software running on a TVOE virtualization environment in each server, resulting in a fully-virtualized, fully-redundant HA configuration. This can be deployed either as a single site or as a geo-redundant deployment, with 2 RMS servers at each site.

7.1 Install NOAMP /SOAM / MP Servers

This procedure will install and configure the operating system on hardware that will host NOAMP, SOAM and MP VM Guests. ProLiantDL380Gen8 and ProLiantDL380Gen8+ are supported for this procedure.

Needed material:

- TVOE Media

Check off (✓) each step as it is completed. Boxes have been provided for this purpose under each step number.

IF THIS PROCEDURE FAILS, CONTACT MY ORACLE SUPPORT (MOS) FOR ASSISTANCE.

Procedure 9: Install NOAMP/ SOAM / MP Servers

Step	Procedure	Result
1. <input type="checkbox"/>	Access the HP server's console.	Connect to the HP server's console using one of the access methods described in <i>Section 2.1.2</i> .
2. <input type="checkbox"/>	Verify the type of server hardware	# <code>hardwareInfo grep Hardware</code> Hardware ID: ProLiantDL380Gen8 or ProLiantDL380Gen8+
3. <input type="checkbox"/>	Update firmware	Follow steps defined in ... Appendix D.3 HP Rack Mount Firmware Upgrade (DL380 hardware) ... to update firmware.
4. <input type="checkbox"/>	Update BIOS settings	Follow steps defined in Appendix D.2 BIOS Settings to update BIOS settings.

OCUDR 10.0.1 Installation and Configuration Guide

Procedure 9: Install NOAMP/ SOAM / MP Servers

Step	Procedure	Result
5.	<i>Clean the Disk Array</i>	<p>Note: Execute only if previous install on the RMS server.</p> <p>Follow steps defined in ..</p> <p>Appendix M.1 Removing RMS Disk Array Configuration</p> <p>... to clean the Disk Array</p>
6. <input type="checkbox"/>	<i>Install Operating System (TVOE)</i>	<p>Follow steps defined in ...</p> <p>Appendix F.1 Installing Operating Systems with ILO (<i>DL380 hardware</i>)</p> <p>... to install TVOE software.</p>
7.	<i>Configure TVOE network</i>	<p>Follow steps defined in ...</p> <p>Appendix L.3 Configure TVOE Network for Topology 7</p> <p>... to configure TVOE network.</p>
8. <input type="checkbox"/>	<i>Configure Disk Array</i>	<p>Follow steps defined in ...</p> <p>Appendix E.1 Configuring Disk Array (NO Network Element Servers) (<i>DL380 hardware</i>)</p> <p>... to configure the disk array.</p>

OCUDR 10.0.1 Installation and Configuration Guide

Procedure 9: Install NOAMP/ SOAM / MP Servers

Step	Procedure	Result									
9.	Configure a logical storage pool	<p>a. Create the file name “configStorageBlade” through vi command.</p> <pre>[root@pc9000714-tvoe ~]# vi configStorageBlade</pre> <p>Add the line below in the file</p> <pre>vg --name="stripePool_vg" --members="sdb, sdc, sdd" --virtstoragepool</pre> <p>b. Create storage pool</p> <pre>[root@pc9000714-tvoe ~]# /usr/TKLC/plat/sbin/storageMgr configStorageBlade</pre> <p>c. Verify pool is listed below</p> <pre>[root@pc9000714-tvoe ~]# virsh pool-list</pre> <table border="1"> <thead> <tr> <th>Name</th> <th>State</th> <th>Autostart</th> </tr> </thead> <tbody> <tr> <td>stripePool_vg</td> <td>active</td> <td>yes</td> </tr> <tr> <td>vgguests</td> <td>active</td> <td>yes</td> </tr> </tbody> </table>	Name	State	Autostart	stripePool_vg	active	yes	vgguests	active	yes
Name	State	Autostart									
stripePool_vg	active	yes									
vgguests	active	yes									
10.	The following steps should be performed on all four TVOE servers.										
11. <input type="checkbox"/>	Deploy PM&C	Follow steps defined in Appendix I.1 Deploying PM&C on TVOE Server.									
12. <input type="checkbox"/>	Configure PM&C application	Follow steps defined in Appendix I.2 Configure PM&C Application.									
13. <input type="checkbox"/>	Configure Cabinet	Follow steps defined in Appendix I.3 Add Cabinet to PM&C System Inventory.									
14. <input type="checkbox"/>	Configure RMS	Follow steps defined in Appendix I.4 Add Rack Mount Server to PM&C System Inventory.									
THIS PROCEDURE HAS BEEN COMPLETED											

7.2 Create, IPM and Install Application on all Virtual Machines

This procedure will create Virtual Machines (VMs) for NOAMP, SOAM and MP servers, install the TPD Operating System on each VM, and install the OCUDR application on each VM. It details the create/IPM/install for a single VM and should be repeated for every VM.

OCUDR 10.0.1 Installation and Configuration Guide

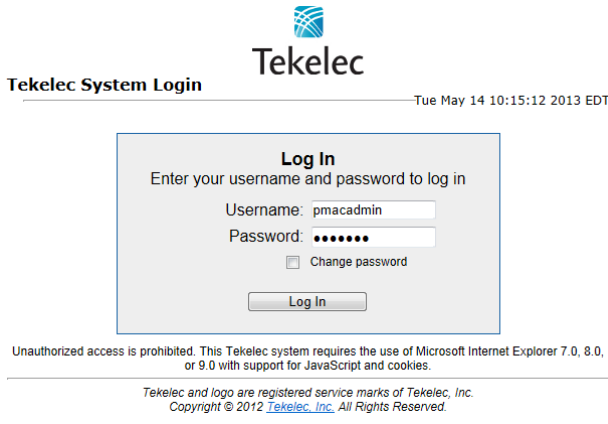
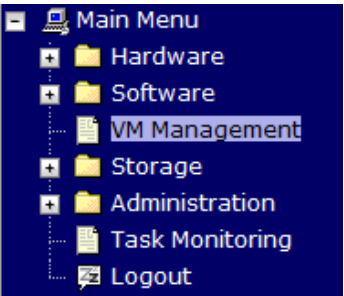
Requirements:

- **Procedure 9:** Install NOAMP /SOAM / MP Servers has been completed.

Check off (✓) each step as it is completed. Boxes have been provided for this purpose under each step number.

IF THIS PROCEDURE FAILS, CONTACT MY ORACLE SUPPORT (MOS) FOR ASSISTANCE.

Procedure 10: Create, IPM and Install Application on all Virtual Machines

Step	Procedure	Result
	<ul style="list-style-type: none"> • Rack Mount Server deployments (ex: ProLiantDL380pGen8) will use two IP addresses per SO Network Element to access the PM&C deployed on each member RMS. 	
1. <input type="checkbox"/>	<i>Add image to management server.</i>	Follow Appendix J Adding Software Images to PM&C Server to add TPD and OCUDR software images to this PM&C repository.
2. <input type="checkbox"/>	PM&C GUI: <i>Login to PM&C GUI</i>	<p>Open web browser and enter: <a href="http://<pmac_management_network_ip>">http://<pmac_management_network_ip> Login as pmacadmin user.</p> 
3. <input type="checkbox"/>	PM&C GUI: <i>Navigate to VM Management menu</i>	<p>Navigate to the VM Management menu</p> 


OCUDR 10.0.1 Installation and Configuration Guide

Procedure 10: Create, IPM and Install Application on all Virtual Machines

Step	Procedure	Result
<p>4.</p> <p><input type="checkbox"/></p>	<p>PM&C GUI:</p> <p><i>Select the desired Server and create the VM Guest</i></p>	<p>Select the rack mounted server from the “VM Entities” listing on the left side of the screen. The selected server’s guest machine configuration will then be displayed in the remaining area of the window.</p> <div style="border: 1px solid black; padding: 5px;"> </div> <p>Click Create Guest.</p> <ul style="list-style-type: none"> • Check-off the associated Check Box as addition is completed for the VM. <p> <input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP-B <input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B <input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2 </p>

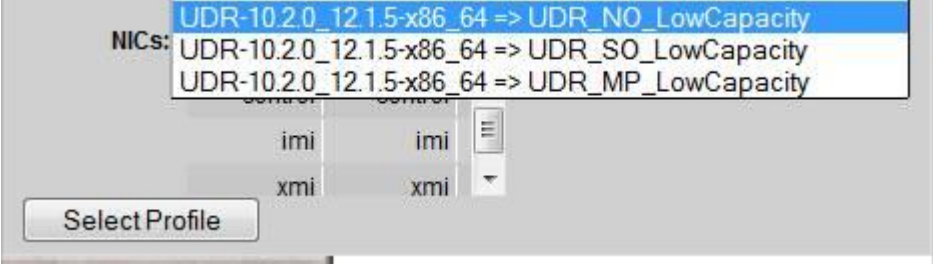

OCUDR 10.0.1 Installation and Configuration Guide

Procedure 10: Create, IPM and Install Application on all Virtual Machines

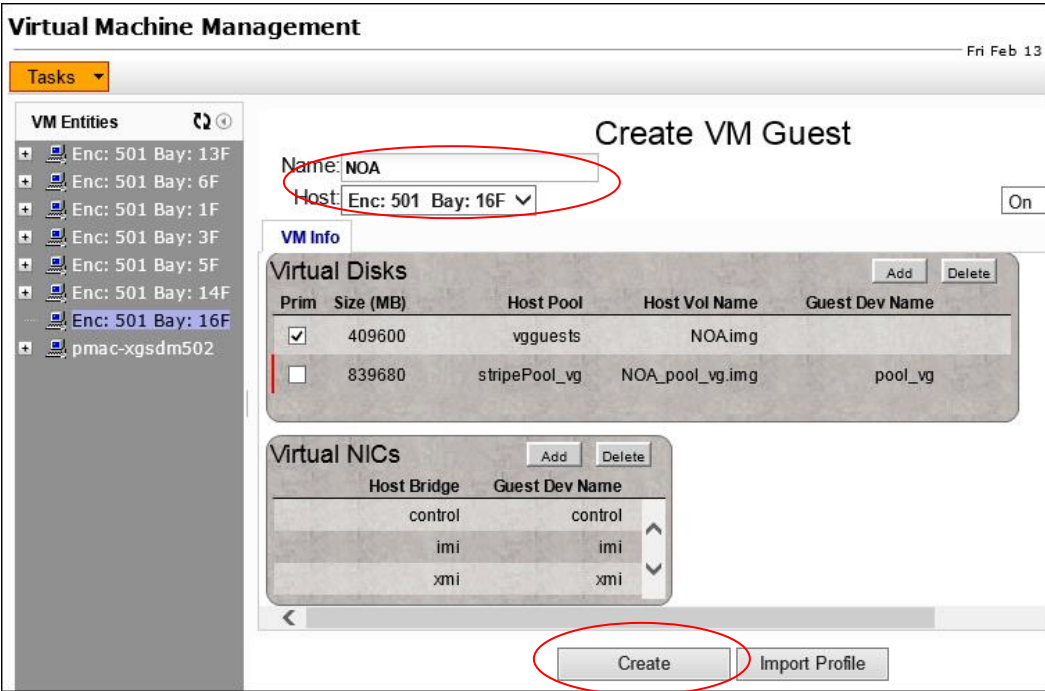
Step	Procedure	Result
<p>5.</p> <p><input type="checkbox"/></p>	<p>PM&C GUI:</p> <p>Click on the Import Profile dialogue buttont</p>	<p>A “Create VM Guest” window is displayed that is similar to the below.:</p>  <p>Click “Import Profile” button .</p> <ul style="list-style-type: none"> • Check-off the associated Check Box as addition is completed for the VM. <p><input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP-B <input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B</p> <p><input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2</p>

OCUDR 10.0.1 Installation and Configuration Guide

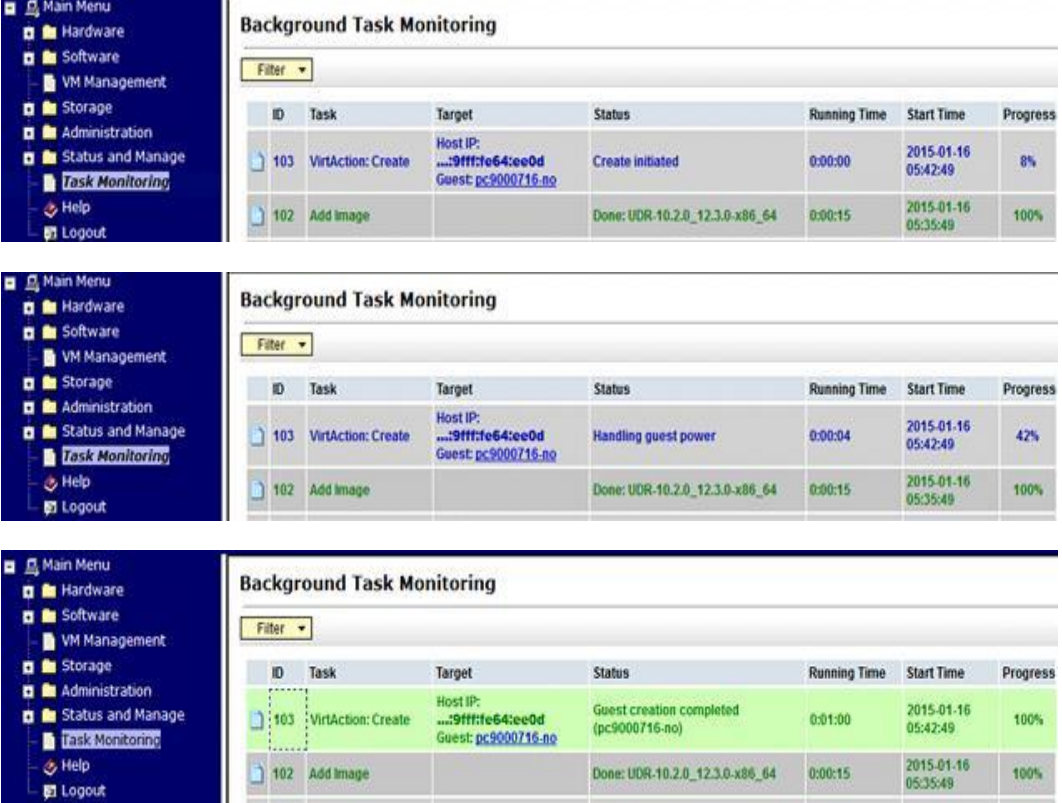
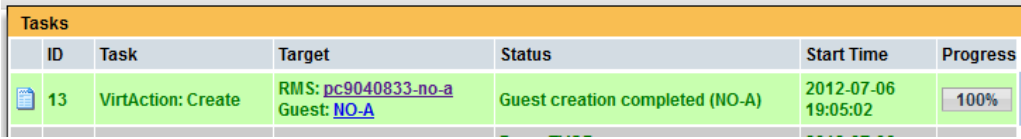
Procedure 10: Create, IPM and Install Application on all Virtual Machines

Step	Procedure	Result
<p>6.</p> <input type="checkbox"/>	<p>PM&C GUI:</p> <p>Select the desired ISO/Profile</p> <p><i>Select the desired ISO/Profile value</i></p>	<p>Select the desired ISO/Profile.</p> <ul style="list-style-type: none"> - If creating a VM for a NOAMP server, use the “UDR_NO_LowCapacity” profile. - If creating a VM for a SOAM server, use the “UDR_SO_LowCapacity” profile. - If creating a VM for an MP, use the “UDR_MP_LowCapacity” profile.  <p>Click “Select Profile” button.</p> <ul style="list-style-type: none"> • Check-off the associated Check Box as addition is completed for the VM. <p><input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP-B <input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B</p> <p><input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2</p>
<p>7.</p> <input type="checkbox"/>	<p>PM&C GUI:</p> <p>Customize the NICs list to suit your deployment</p>	<p>The default Virtual NICs are configured for a deployment with two XSI networks.</p> <ul style="list-style-type: none"> - If your deployment has only a single XSI network, select the row for “xsi2” by clicking on it then click the Delete button:  <ul style="list-style-type: none"> - If your deployment has more than two XSI networks, click the Add button, select them from the Host Bridge drop box and type in the same name into Guest Dev Name. <ul style="list-style-type: none"> • Check-off the associated Check Box as addition is completed for the VM. <p><input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP-B <input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B</p> <p><input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2</p>

Procedure 10: Create, IPM and Install Application on all Virtual Machines

Step	Procedure	Result
<p>8.</p> <p><input type="checkbox"/></p>	<p>PM&C GUI:</p> <p>Override the VM Guest Name to make it unique for the site</p>	<p>A “Create VM Guest” window is displayed that is similar to the below..</p>  <p>Override the Name field to something like: NOA, NOB, SOA, SOB, MP1 or MP2, etc. (Don't use hyphens in the name) You could also include a location within the Name value such as SOMRSVNCA. (This will not become the ultimate hostname. It is just an internal tag for the VM host manager.)</p> <p>Click Create button</p> <ul style="list-style-type: none"> Record the Site VM Guest Name of each VM that is added in the space provided below: Check-off the associated Check Box as addition is completed for the VM. <p><input type="checkbox"/> NOAMP-A: _____ <input type="checkbox"/> NOAMP-B _____</p> <p><input type="checkbox"/> SOAM-A: _____ <input type="checkbox"/> SOAM-B: _____</p> <p><input type="checkbox"/> MP-1: _____ <input type="checkbox"/> MP-2: _____</p>

Procedure 10: Create, IPM and Install Application on all Virtual Machines

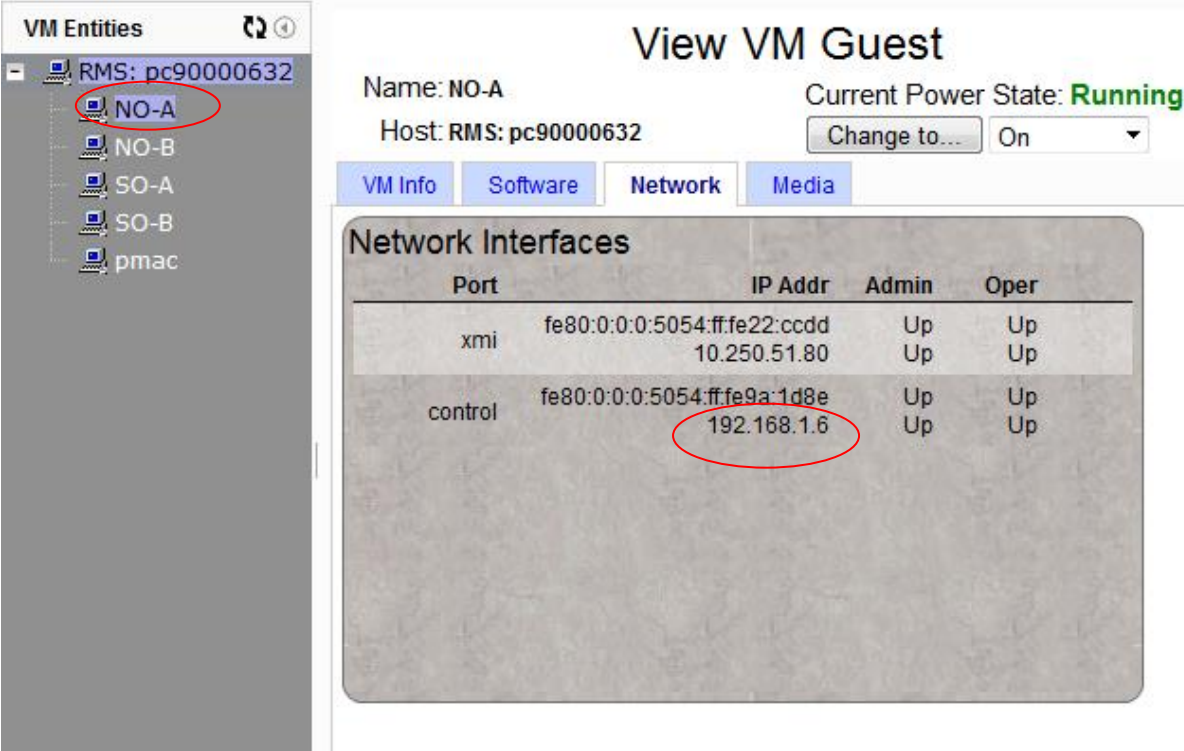
Step	Procedure	Result
<p>9.</p> <p><input type="checkbox"/></p>	<p>PM&C GUI:</p> <p>Select...</p> <p>Main Menu → Task Monitoring</p> <p>...as shown on the right.</p>	 <p>• Check-off the associated Check Box as addition is completed for the VM.</p> <p><input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP-B <input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B</p> <p><input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2</p>
<p>10.</p> <p><input type="checkbox"/></p>	<p>PM&C GUI:</p> <p>Verify that <i>Create VM task</i> successfully completes.</p> <p>The user should see a screen similar to the one on the right with Progress value of 100%.</p>	 <p>• Check-off the associated Check Box as addition is completed for the VM.</p> <p><input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP-B <input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B</p> <p><input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2</p>
<p>Note: The steps above may be completed for each VM Guest that this PM&C administers before proceeding on to the next step. This way you may install and upgrade multiple VM Guests in parallel.</p>		

OCUDR 10.0.1 Installation and Configuration Guide

Procedure 10: Create, IPM and Install Application on all Virtual Machines

Step	Procedure	Result
11. <input type="checkbox"/>	<i>Install Operating System (TPD)</i>	Follow steps defined in ... Appendix F.2 Installing Operating Systems with PM&C ... to install TPD software on VM Guests. <ul style="list-style-type: none">• Check-off the associated Check Box as addition is completed for the VM. <input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP-B <input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B <input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2

Procedure 10: Create, IPM and Install Application on all Virtual Machines

Step	Procedure	Result																		
<p>12.</p> <p><input type="checkbox"/></p>	<p>PM&C GUI:</p> <p><i>Get and record control IP address of VM Guest</i></p>	<p>Navigate to the VM Management menu</p> <p>Select the VM Guest Name from the VM Entities list, and click “Network” tab</p>  <p>The screenshot shows the 'VM Entities' list on the left with 'NO-A' circled in red. The 'View VM Guest' window on the right shows the 'Network' tab selected. The 'Network Interfaces' table has the following data:</p> <table border="1"> <thead> <tr> <th>Port</th> <th>IP Addr</th> <th>Admin</th> <th>Oper</th> </tr> </thead> <tbody> <tr> <td rowspan="2">xmi</td> <td>fe80:0:0:5054:ff:fe22:ccd</td> <td>Up</td> <td>Up</td> </tr> <tr> <td>10.250.51.80</td> <td>Up</td> <td>Up</td> </tr> <tr> <td rowspan="2">control</td> <td>fe80:0:0:5054:ff:fe9a:1d8e</td> <td>Up</td> <td>Up</td> </tr> <tr> <td>192.168.1.6</td> <td>Up</td> <td>Up</td> </tr> </tbody> </table> <p>The IP address 192.168.1.6 is circled in red in the original image.</p> <p>Determine control IP address of VM Guest and record it.</p> <ul style="list-style-type: none"> Record the Site control IP Address of each VM that is added in the space provided below: Check-off the associated Check Box as addition is completed for the VM. <p><input type="checkbox"/> NOAMP-A: _____ <input type="checkbox"/> NOAMP-B _____</p> <p><input type="checkbox"/> SOAM-A: _____ <input type="checkbox"/> SOAM-B: _____</p> <p><input type="checkbox"/> MP-1: _____ <input type="checkbox"/> MP-2: _____</p>	Port	IP Addr	Admin	Oper	xmi	fe80:0:0:5054:ff:fe22:ccd	Up	Up	10.250.51.80	Up	Up	control	fe80:0:0:5054:ff:fe9a:1d8e	Up	Up	192.168.1.6	Up	Up
Port	IP Addr	Admin	Oper																	
xmi	fe80:0:0:5054:ff:fe22:ccd	Up	Up																	
	10.250.51.80	Up	Up																	
control	fe80:0:0:5054:ff:fe9a:1d8e	Up	Up																	
	192.168.1.6	Up	Up																	

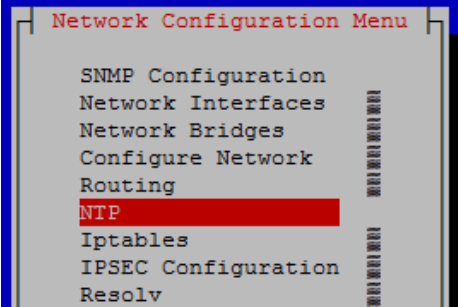
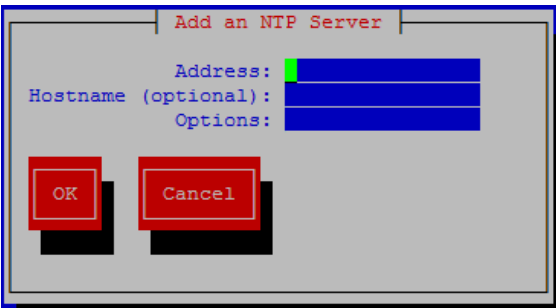
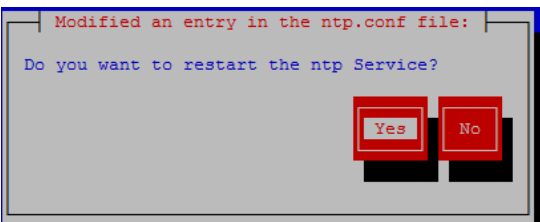
OCUDR 10.0.1 Installation and Configuration Guide

Procedure 10: Create, IPM and Install Application on all Virtual Machines

Step	Procedure	Result
13.	<p>For NOAMP-A only:</p> <p><i>Prepare NOAMP for installation of OCUDR application software</i></p> <p><i>Connect to the NOAMP server Control IPaddress</i></p>	<p>Manually configure XMI network on the first NOAMP guest only, (NO-A); the below steps must be executed before installing OCUDR:</p> <pre>[root@hostname1260476221 ~] # netAdm set --device=xmi --onboot=yes -- netmask=<XMI_NETMASK> --address=<XMI_IP_Address_for_NOAMP_A> Interface xmi updated [root@hostname1260476221 ~] # netAdm add --device=xmi --route=default -- gateway=<XMI_IP_Address_for_default_gateway> Route to xmi added</pre> <p>Restart the network by running the following:</p> <pre>root@hostname1260476221 ~] # service network restart</pre>
14.	<p>For NOAMP-A only:</p> <p>Enter Platform configuration menu</p>	<p>Enter platform configuration by running the following:</p> <pre># su - platcfg</pre>

OCUDR 10.0.1 Installation and Configuration Guide

Procedure 10: Create, IPM and Install Application on all Virtual Machines

Step	Procedure	Result
15.	For NOAMP-A only: Configure NTP for NOAMP-A	<ol style="list-style-type: none"><li>1. Navigate to Network Configuration > NTP. A screenshot of the 'Network Configuration Menu' with 'NTP' highlighted in red. The menu items are: SNMP Configuration, Network Interfaces, Network Bridges, Configure Network, Routing, NTP, Iptables, IPSEC Configuration, and Resolv.<li>2. Select Edit, then “Add a New NTP Server.”<li>3. Enter the IP Address of the TVOE Host. A screenshot of the 'Add an NTP Server' dialog box. It has fields for 'Address:', 'Hostname (optional):', and 'Options:'. There are 'OK' and 'Cancel' buttons at the bottom.<li>4. Select OK, then “Exit.”<li>5. Select Yes to restart ntp Service. A screenshot of a dialog box titled 'Modified an entry in the ntp.conf file:'. It asks 'Do you want to restart the ntp Service?' with 'Yes' and 'No' buttons.<li>6. Exit platcfg.

OCUDR 10.0.1 Installation and Configuration Guide

Procedure 10: Create, IPM and Install Application on all Virtual Machines

Step	Procedure	Result
16.	<p><i>Prepare NOAMP for installation of OCUDR application software</i></p> <p><i>Connect to the NOAMP server Control IPaddress</i></p>	<p>Create a logical volume from NOAMP VM Guest:</p> <pre>root@hostname1260476221 ~] # vgcreate stripe_vg /dev/pool_vg</pre> <p>Volume group "stripe_vg" successfully created</p> <p>Create a logical volume rundb:</p> <pre>root@hostname1260476221 ~] # lvcreate -L 385G --alloc anywhere --name rundb stripe_vg</pre> <p>Logical volume "rundb" created</p> <p>Make filesystem on rundb:</p> <pre>root@hostname1260476221 ~] # mkfs -t ext4 /dev/stripe_vg/rundb</pre> <pre>mke2fs 1.41.12 (17-May-2010) Filesystem label= OS type: Linux Block size=4096 (log=2) Fragment size=4096 (log=2) Stride=64 blocks, Stripe width=192 blocks 45883392 inodes, 183502848 blocks 9175142 blocks (5.00%) reserved for the super user First data block=0 Maximum filesystem blocks=4294967296 5601 block groups 32768 blocks per group, 32768 fragments per group 8192 inodes per group Superblock backups stored on blocks: 32768, 98304, 163840, 229376, 294912, 819200, 884736, 1605632, 2654208, 4096000, 7962624, 11239424, 20480000, 23887872, 71663616, 78675968 Allocating group tables: done Writing inode tables: done Creating journal (32768 blocks): done Writing superblocks and filesystem accounting information: done</pre>
17. <input type="checkbox"/>	<p><i>Install OCUDR application software.</i></p>	<p>Follow steps defined in ...</p> <p>Appendix G.2 Installing OCUDR Application with PM&C</p> <p>... to install OCUDR software.</p> <ul style="list-style-type: none"> • Check-off the associated Check Box as addition is completed for the VM. <input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP-B <input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B <input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2
18. <input type="checkbox"/>	Repeat Steps 4 - 17 for each Virtual Machine to install its operating system and application software.	

OCUDR 10.0.1 Installation and Configuration Guide

Procedure 10: Create, IPM and Install Application on all Virtual Machines

Step	Procedure	Result
19. <input type="checkbox"/>	Perform upgrade acceptance.	Follow steps defined in ... Appendix H Accept Application Installation on PM&C Managed Servers ... to accept upgrade.
20. <input type="checkbox"/>	Access the NOAMP server's console.	Connect to the server's console using one of the access methods described in <i>Section 2.1.2</i> .
21. <input type="checkbox"/>	Log into the server console as the "root" user.	CentOS release 5.6 (Final) Kernel 2.6.18-238.19.1.el5prere15.0.0_72.22.0 on an x86_64 hostname1260476221 login: root Password: <root_password>
22. <input type="checkbox"/>	NOAMP: Transfer file to TVOE Host	# scp /var/TKLC/db/filemgmt/udrInitConfig.sh \admusr@<tvoe_host_name>:/var/tmp admusr@<tvoe_host_name>'s password: <admusr_password> <ul style="list-style-type: none"> Check-off the associated Check Box as addition is completed for the TVOE host. <input type="checkbox"/> TVOE Host (NOAMP-A / SOAM-A / MP-1) <input type="checkbox"/> TVOE Host (NOAMP-B / SOAM-B / MP-2)
23. <input type="checkbox"/>	Login to TVOE Host: 1) SSH to server. 2) Log into the server as the "admusr" user..	# ssh admusr@<tvoe_host_name> admusr@<tvoe_host_name>'s password: <admusr_password> <ul style="list-style-type: none"> Check-off the associated Check Box as addition is completed for the TVOE host. <input type="checkbox"/> TVOE Host (NOAMP-A / SOAM-A / MP-1) <input type="checkbox"/> TVOE Host (NOAMP-B / SOAM-B / MP-2)
24. <input type="checkbox"/>	TVOE host: Switch to root user.	[admusr@hostname1326744539 ~]\$ su - password: <root_password> <ul style="list-style-type: none"> Check-off the associated Check Box as addition is completed for the TVOE host. <input type="checkbox"/> TVOE Host (NOAMP-A / SOAM-A / MP-1) <input type="checkbox"/> TVOE Host (NOAMP-B / SOAM-B / MP-2)

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Procedure 10: Create, IPM and Install Application on all Virtual Machines

Step	Procedure	Result
25. <input type="checkbox"/>	TVOE host: Change directory.	# <code>cd /var/tmp</code> <ul style="list-style-type: none"> Check-off the associated Check Box as addition is completed for the TVOE host. <input type="checkbox"/> TVOE Host (NOAMP-A / SOAM-A / MP-1) <input type="checkbox"/> TVOE Host (NOAMP-B / SOAM-B / MP-2)
26. <input type="checkbox"/>	TVOE host: Update script permissions.	# <code>chmod 555 udrInitConfig.sh</code> <ul style="list-style-type: none"> Check-off the associated Check Box as addition is completed for the TVOE host. <input type="checkbox"/> TVOE Host (NOAMP-A / SOAM-A / MP-1) <input type="checkbox"/> TVOE Host (NOAMP-B / SOAM-B / MP-2)
27. <input type="checkbox"/>	TVOE host: Run configuration script as root.	# <code>./udrInitConfig.sh</code> Verify no failures are reported. A trace to display the settings for all VM Guests on this server should be shown in output. In case of failures, save the log file <code>/var/TKLC/log/udrVMCf/udrInitConfig.log</code> and contact My Oracle Support (MOS) for assistance. <ul style="list-style-type: none"> Check-off the associated Check Box as addition is completed for the TVOE host. <input type="checkbox"/> TVOE Host (NOAMP-A / SOAM-A / MP-1) <input type="checkbox"/> TVOE Host (NOAMP-B / SOAM-B / MP-2)
28. <input type="checkbox"/>	TVOE host: Reboot the server.	# <code>init 6</code> <ul style="list-style-type: none"> Check-off the associated Check Box as addition is completed for the TVOE host. <input type="checkbox"/> TVOE Host (NOAMP-A / SOAM-A / MP-1) <input type="checkbox"/> TVOE Host (NOAMP-B / SOAM-B / MP-2)
THIS PROCEDURE HAS BEEN COMPLETED		

8.0 CONFIGURATION PROCEDURES

8.1 Configuring NOAMP-A Server (1st NOAMP site only)

This procedure does all steps that are necessary for configuring the first NOAMP server. This includes configuring a temporary interface to the NOAMP-A GUI, creating Network Elements for all required networks, configuring Services and creating/configuring the first NOAMP-A server.

Requirements:

- **Procedure 1: Install NOAMP Servers (NO and DR Network Elements)**
- **or Procedure 4: Install NOAMP / SOAM / MP Servers**
- **or Procedure 6: Install NOAMP Servers (NO and DR Network Elements)**
- **or Procedure 9: Install NOAMP /SOAM / MP Servers** has been completed.

Assumptions:

- This procedure assumes that the OCUDR Network Element XML file for the Primary Provisioning NOAMP site has previously been created, as described in Appendix N: Creating an XML file for Installing OCUDR Network Elements.
- 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 OCUDR GUI prior to configuring the first OCUDR server. This can be done either by one of two procedures:

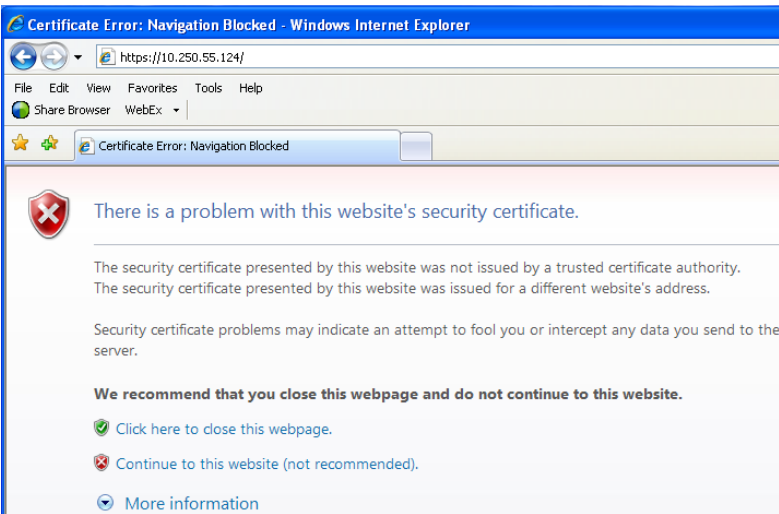

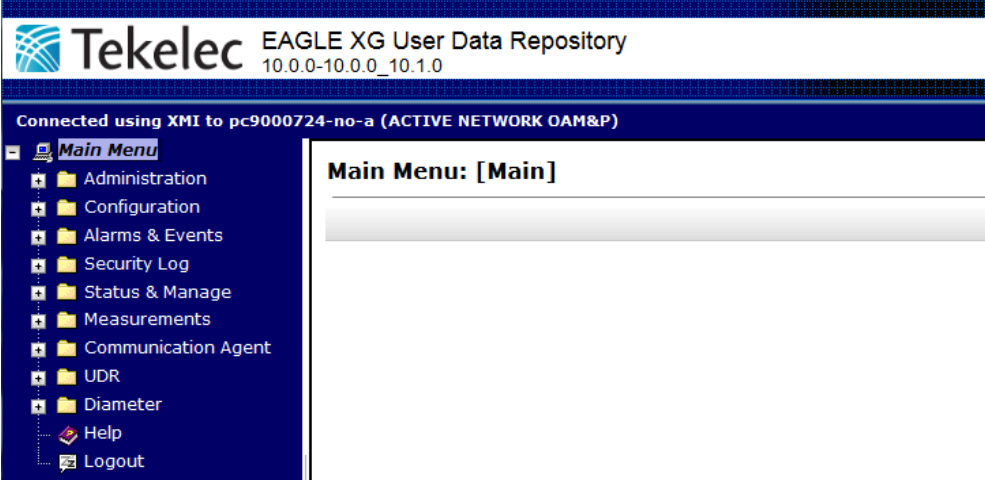
1. Configuring a Temporary External XMI IP Address, as described in **Appendix B.1 Creating Temporary External XMI IP Address** or optionally, **Appendix B.2 Creating Temporary External XMI IP Address without Interface Bonding**
2. Plugging a laptop into an unused, unconfigured port on the NOAMP-A server using a direct-connect Ethernet cable, as described in **Appendix B.3: Establishing a Local Connection for Accessing OCUDR GUI (RMS only)**

Check off (√) each step as it is completed. Boxes have been provided for this purpose under each step number.

IF THIS PROCEDURE FAILS, CONTACT MY ORACLE SUPPORT (MOS) FOR ASSISTANCE.

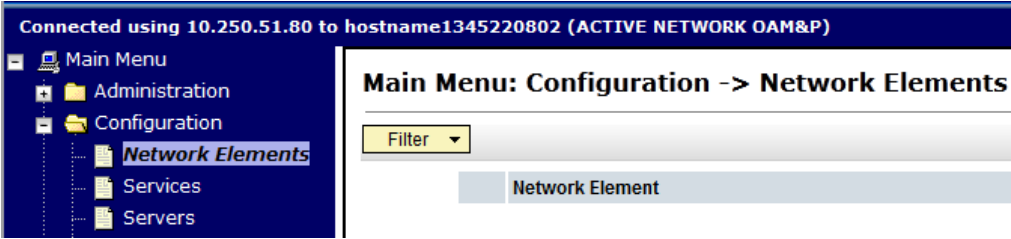
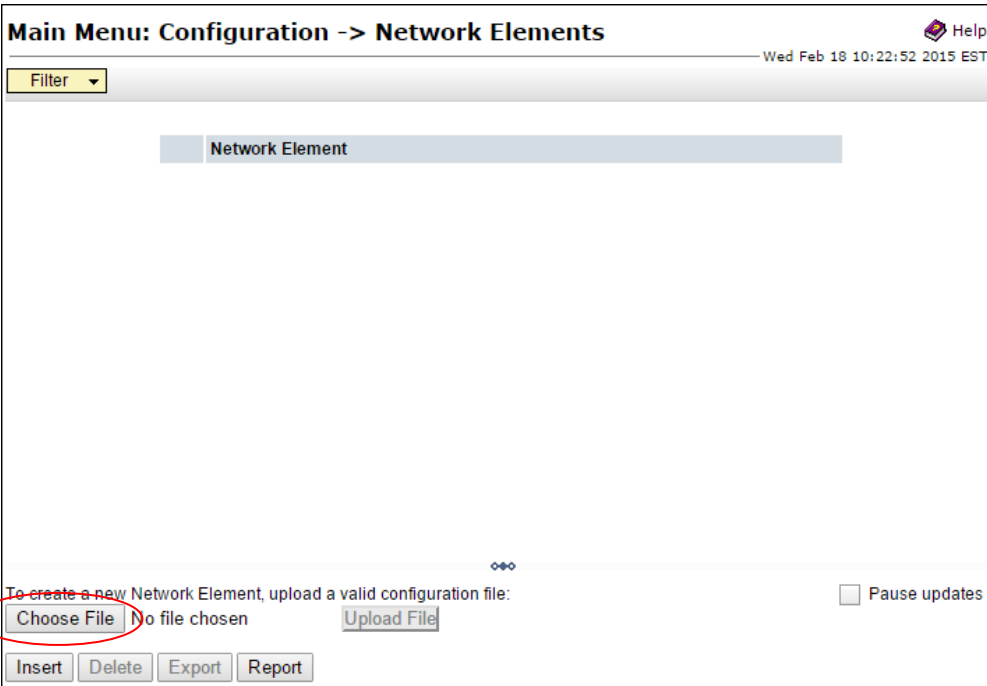
OCUDR 10.0.1 Installation and Configuration Guide

Procedure 11: Configuring NOAMP-A Server (1st NOAMP site only)

Step	Procedure	Result
<p>1.</p> <input type="checkbox"/>	<p>NOAMP Server A:</p> <p>Launch an approved web browser and connect to the NOAMP Server A IP address</p> <p>NOTE: If presented with the “security certificate” warning screen shown to the right, choose the following option: “Continue to this website (not recommended)”.</p>	
<p>2.</p> <input type="checkbox"/>	<p>NOAMP Server A:</p> <p>The user should be presented the login screen shown on the right.</p> <p>Login to the GUI using the default user and password.</p>	
<p>3.</p> <input type="checkbox"/>	<p>NOAMP Server A:</p> <p>The user should be presented the OCUDR Main Menu as shown on the right.</p>	

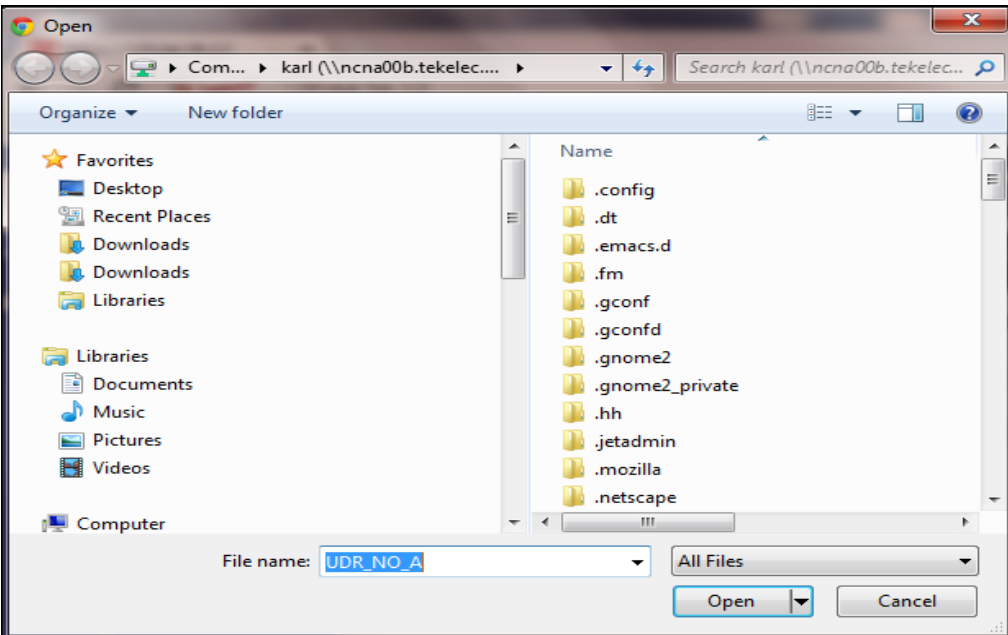
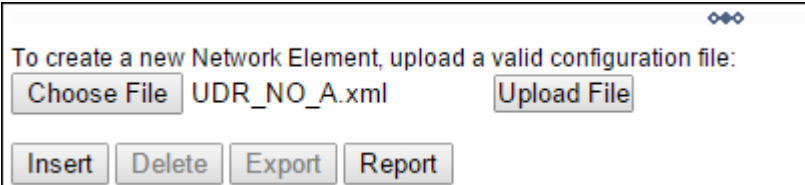
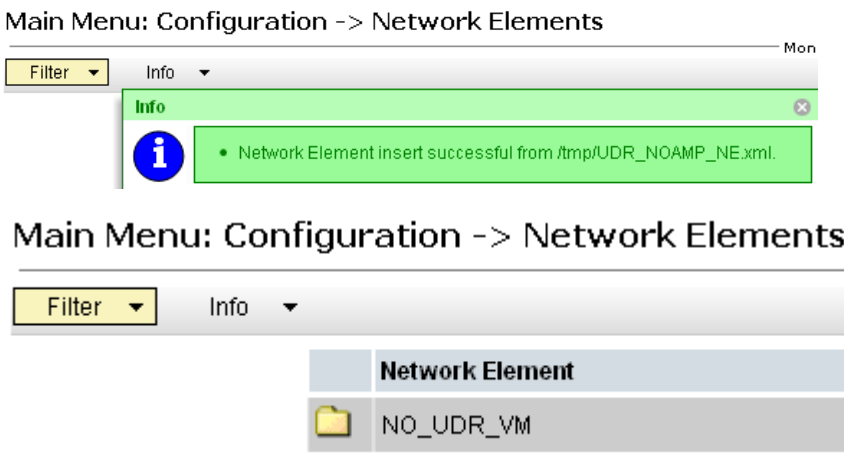
OCUDR 10.0.1 Installation and Configuration Guide

Procedure 11: Configuring NOAMP-A Server (1st NOAMP site only)

Step	Procedure	Result
<p>4.</p> <p><input type="checkbox"/></p>	<p>NOAMP Server A:</p> <p><i>Configuring Network Element</i></p> <p>Select...</p> <p>Main Menu → Configuration → Network Elements</p> <p>...as shown on the right.</p>	 <p>The screenshot shows a web interface with a dark blue header indicating a connection to 10.250.51.80. On the left is a navigation tree with 'Main Menu', 'Administration', 'Configuration', 'Network Elements', 'Services', and 'Servers'. The 'Network Elements' item is selected. The main content area is titled 'Main Menu: Configuration -> Network Elements' and contains a 'Filter' dropdown and a 'Network Element' button.</p>
<p>5.</p> <p><input type="checkbox"/></p>	<p>NOAMP Server A:</p> <p>From the Configuration / Network Elements screen...</p> <p>Select the “Choose File” dialogue button (scroll to bottom left corner of screen).</p>	 <p>The screenshot shows the 'Main Menu: Configuration -> Network Elements' page. At the bottom, there is a section for creating a new Network Element. The text reads: 'To create a new Network Element, upload a valid configuration file:'. Below this text are buttons for 'Choose File', 'No file chosen', and 'Upload File'. The 'Choose File' button is circled in red. Other buttons at the bottom include 'Insert', 'Delete', 'Export', and 'Report'. A 'Pause updates' checkbox is also visible.</p>

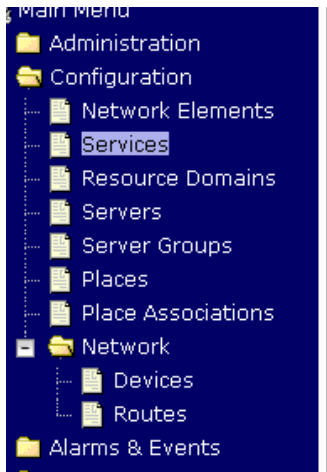
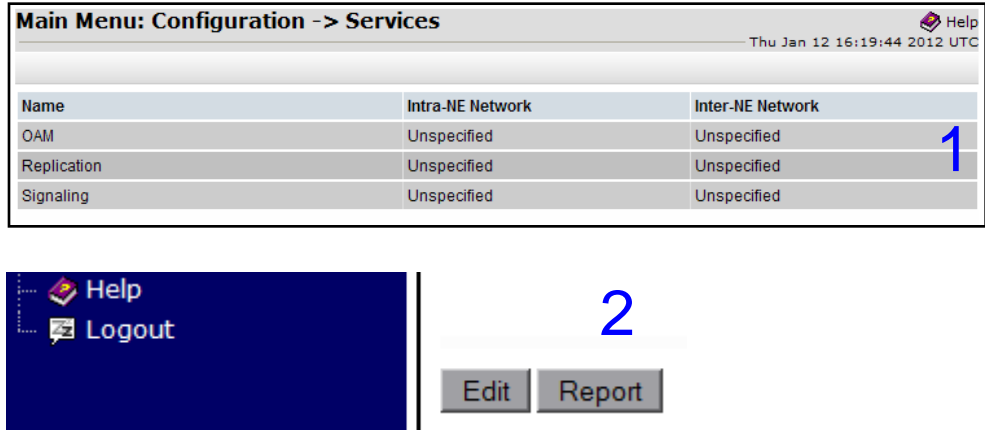
OCUDR 10.0.1 Installation and Configuration Guide

Procedure 11: Configuring NOAMP-A Server (1st NOAMP site only)

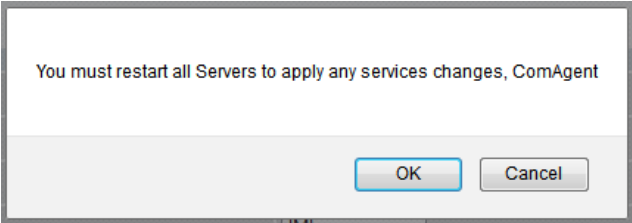

Step	Procedure	Result
<p>6.</p> <input type="checkbox"/>	<p>NOAMP Server A:</p> <p>Note: This step assumes that the .xml files were previously prepared, as described in Appendix N.</p> <p>1) Select the location containing the site .xml file.</p> <p>2) Select the .xml file and click the “Open” dialogue button.</p>	
<p>7.</p> <input type="checkbox"/>	<p>NOAMP Server A:</p> <p>Select the “Upload File” dialogue button (bottom middle of the screen).</p>	
<p>8.</p> <input type="checkbox"/>	<p>NOAMP Server A:</p> <p>If the values in the .xml file pass validation rules, the user receives a banner information message showing that the data has been successfully committed to the DB.</p> <p>Note: You may have to left mouse click the “Info” banner option in order to see the banner output.</p>	<p>Main Menu: Configuration -> Network Elements</p> 

OCUDR 10.0.1 Installation and Configuration Guide

Procedure 11: Configuring NOAMP-A Server (1st NOAMP site only)


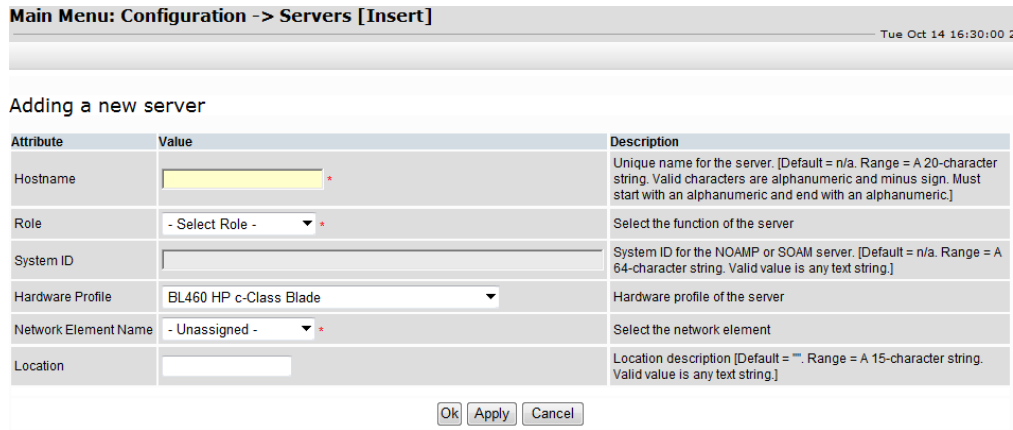
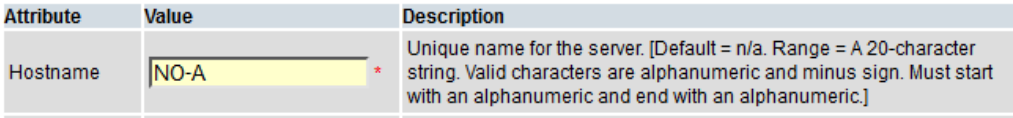
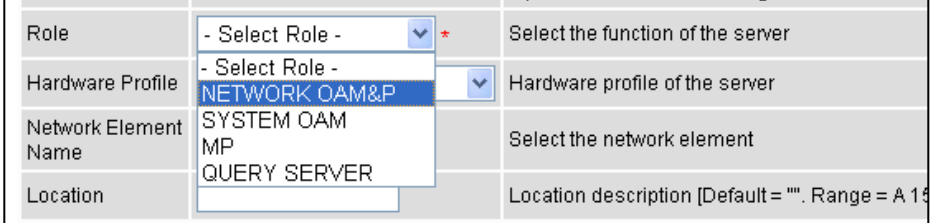

Step	Procedure	Result																								
<p>9.</p> <p><input type="checkbox"/></p>	<p>Select...</p> <p>Main Menu → Configuration → Services</p> <p>...as shown on the right.</p>	 <p>Main Menu: Configuration -> Services</p> <table border="1"> <thead> <tr> <th>Name</th> <th>Intra-NE Network</th> <th>Inter-NE Network</th> </tr> </thead> <tbody> <tr> <td>OAM</td> <td>Unspecified</td> <td>Unspecified</td> </tr> <tr> <td>Replication</td> <td>Unspecified</td> <td>Unspecified</td> </tr> <tr> <td>Signaling</td> <td>Unspecified</td> <td>Unspecified</td> </tr> <tr> <td>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> </tbody> </table>	Name	Intra-NE Network	Inter-NE Network	OAM	Unspecified	Unspecified	Replication	Unspecified	Unspecified	Signaling	Unspecified	Unspecified	HA_Secondary	Unspecified	Unspecified	HA_MP_Secondary	Unspecified	Unspecified	Replication_MP	Unspecified	Unspecified	ComAgent	Unspecified	Unspecified
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HA_MP_Secondary	Unspecified	Unspecified																								
Replication_MP	Unspecified	Unspecified																								
ComAgent	Unspecified	Unspecified																								
<p>10.</p> <p><input type="checkbox"/></p>	<p>NOAMP Server A:</p> <p>1) The user will be presented with the “Services” configuration screen as shown on the right.</p> <p>2) Select the “Edit” dialogue button.</p>	 <p>Main Menu: Configuration -> Services</p> <p>Thu Jan 12 16:19:44 2012 UTC</p> <table border="1"> <thead> <tr> <th>Name</th> <th>Intra-NE Network</th> <th>Inter-NE Network</th> </tr> </thead> <tbody> <tr> <td>OAM</td> <td>Unspecified</td> <td>Unspecified</td> </tr> <tr> <td>Replication</td> <td>Unspecified</td> <td>Unspecified</td> </tr> <tr> <td>Signaling</td> <td>Unspecified</td> <td>Unspecified</td> </tr> </tbody> </table> <p>1</p> <p>2</p> <p>Edit Report</p>	Name	Intra-NE Network	Inter-NE Network	OAM	Unspecified	Unspecified	Replication	Unspecified	Unspecified	Signaling	Unspecified	Unspecified												
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Procedure 11: Configuring NOAMP-A Server (1st NOAMP site only)

Step	Procedure	Result																								
<p>11.</p> <p><input type="checkbox"/></p>	<p>NOAMP Server A:</p> <p>1) Set the services values as shown on the right.</p> <p>2) Select the “Apply” dialogue button.</p> <p>3) Select the “OK” dialogue button in the popup window.</p>	<p>Services</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>Unspecified</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> <p>Ok Apply Cancel</p>  <p>Note: Servers do not need to be restarted if this is a fresh installation.</p> <p>Note: ComAgent Service can also be configured to run on Signaling Network. Please configure as shown above and continue. ComAgent Service shall be configured again later as described in Section 8.11 Configure ComAgent Service on Signaling Network.</p> <p>Note: ComAgent Service is used for NOAMP ↔ MP and MP ↔ MP communication.</p>	Name	Intra-NE Network	Inter-NE Network	OAM	IMI	XMI	Replication	IMI	XMI	Signaling	Unspecified	Unspecified	HA_Secondary	IMI	XMI	HA_MP_Secondary	IMI	XMI	Replication_MP	IMI	XMI	ComAgent	IMI	XMI
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<p>12.</p> <p><input type="checkbox"/></p>	<p>NOAMP Server A:</p> <p>The user will be presented with the “Services” configuration screen as shown on the right</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>Unspecified</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	Unspecified	HA_Secondary	IMI	XMI	HA_MP_Secondary	IMI	XMI	Replication_MP	IMI	XMI	ComAgent	IMI	XMI
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<p>13.</p> <p><input type="checkbox"/></p>	<p>NOAMP Server A:</p> <p>Configuring OCUDR Server</p> <p>Select...</p> <p>Main Menu → Configuration → Servers</p> <p>...as shown on the right.</p>																									



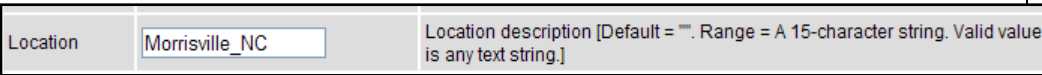
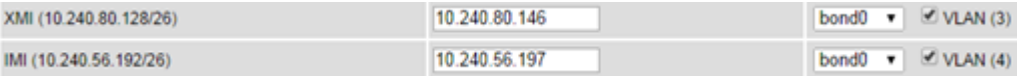
OCUDR 10.0.1 Installation and Configuration Guide

Procedure 11: Configuring NOAMP-A Server (1st NOAMP site only)

Step	Procedure	Result
14. <input type="checkbox"/>	NOAMP Server A: Select the “ Insert ” dialogue button from the bottom left corner of the screen.	
15. <input type="checkbox"/>	NOAMP Server A: The user is now presented with the “ Adding a new server ” configuration screen.	
16. <input type="checkbox"/>	NOAMP Server A: Input the assigned “ hostname ” for the NOAMP-A Server.	
17. <input type="checkbox"/>	NOAMP Server A: Select “ NETWORK OAM&P ” for the server “ Role ” from the pull-down menu.	
18. <input type="checkbox"/>	NOAMP Server A: Input the “ System ID ” for the NOAMP Server.	

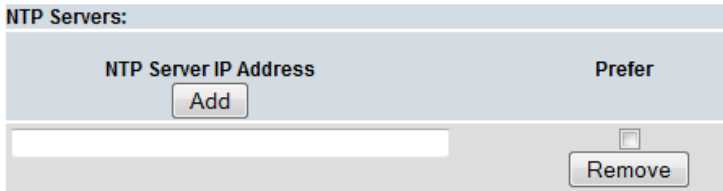
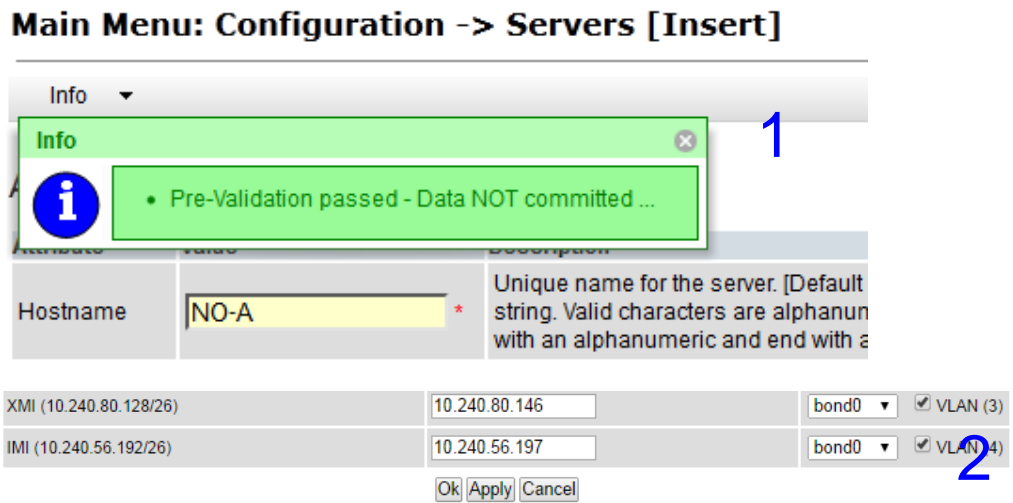
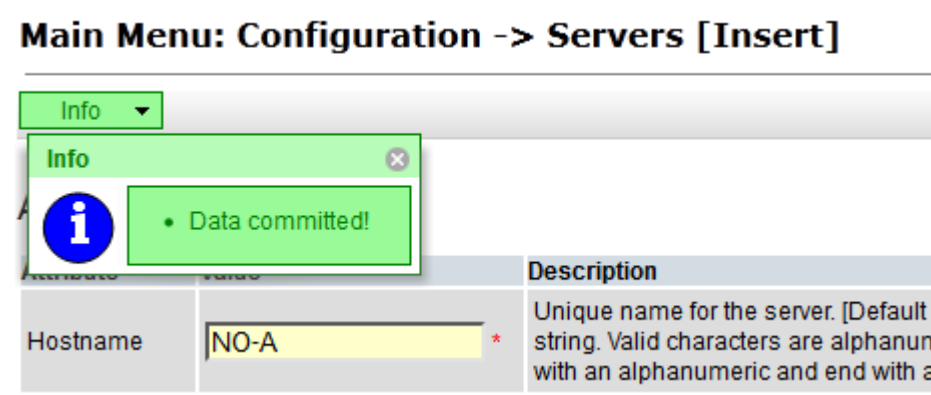
OCUDR 10.0.1 Installation and Configuration Guide

Procedure 11: Configuring NOAMP-A Server (1st NOAMP site only)

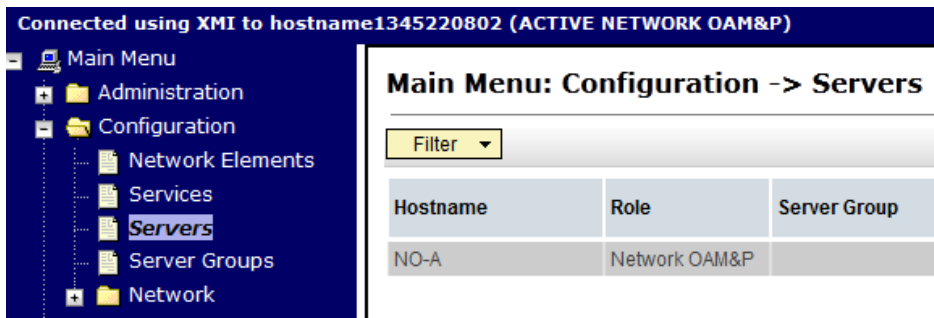
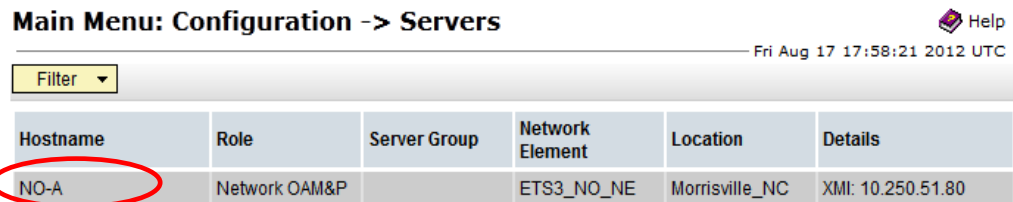
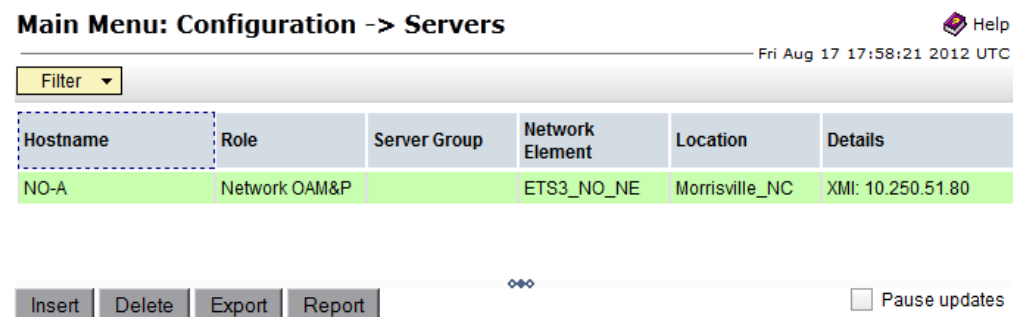
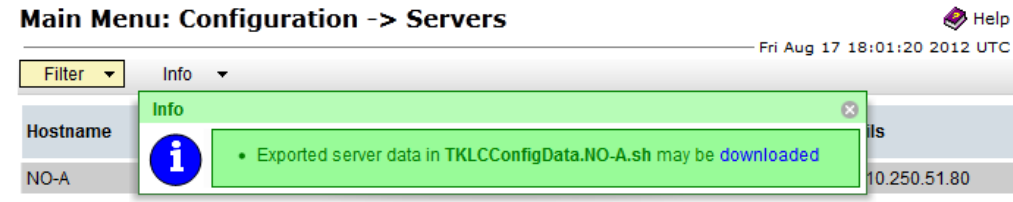
Step	Procedure	Result
<p>19.</p> <input type="checkbox"/>	<p>NOAMP Server A:</p> <p>Select the correct Hardware Profile from the pull-down menu.</p>	<p>Select Hardware Profile:</p> <ul style="list-style-type: none"> • UDR DL380 for RMS NOAMP installations • BL 460 c-Class Blade for blade NOAMP installations • UDR_NO_LowCapacity for NO virtual server installations • UDR_SO for SO virtual server installations (not used in this procedure) • UDR_MP for MP virtual server installations (not used in this procedure) 
<p>20.</p> <input type="checkbox"/>	<p>NOAMP Server A:</p> <p>Select the Network Element Name from the pull-down menu.</p> <p>NOTE: After the Network Element Name is selected, the Interfaces fields will be displayed.</p>	
<p>21.</p> <input type="checkbox"/>	<p>NOAMP Server A:</p> <p>Enter the site location.</p> <p>NOTE: Location is an optional field.</p>	
<p>22.</p> <input type="checkbox"/>	<p>NOAMP Server A:</p> <p>1) Enter the XMI and IMI IP addresses for the OCUDR Server.</p> <p>2) Set XMI and IMI Interfaces according to to bond0. Check VLAN boxes.</p>	 <p>Note: Normal Capacity C-Class Configuration: Set XMI and IMI Interfaces according to bond0. Check VLAN boxes.</p> <p>Note: Virtual NO on Low Capacity Systems, set XMI to "xmi" , IMI to "imi". VLAN boxes are not checked in this case.</p> <p>Note: RMS Lab systems without bonded interfaces conform to Section 8 of [6]. Set XMI to "eth01", IMI to "eth02". VLAN boxes are not checked in this case.</p>

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Procedure 11: Configuring NOAMP-A Server (1st NOAMP site only)

Step	Procedure	Result
<p>23.</p> <input type="checkbox"/>	<p>NOAMP Server A:</p> <p>Click the “Add” button under NTP Servers and add the address of the customer supplied NTP server.</p> <p>Note: This step may be repeated for as many NTP servers as the customer supplies.</p> <p>Note: In case of NOAMP virtual server: Set the NTP Server IP Address to the TVOE server hosting the NO.</p>	
<p>24.</p> <input type="checkbox"/>	<p>NOAMP Server A:</p> <p>1) The user should be presented with a banner information message stating “Pre-Validation passed”.</p> <p>2) Click the “Apply” dialogue button.</p>	<p>Main Menu: Configuration -> Servers [Insert]</p> 
<p>25.</p> <input type="checkbox"/>	<p>NOAMP Server A:</p> <p><i>If the values provided match the network ranges assigned to the NOAMP NE, the user will receive a banner information message showing that the data has been validated and committed to the DB.</i></p>	<p>Main Menu: Configuration -> Servers [Insert]</p> 

Procedure 11: Configuring NOAMP-A Server (1st NOAMP site only)

Step	Procedure	Result												
<p>26.</p> <p><input type="checkbox"/></p>	<p>NOAMP Server A:</p> <p>Applying the OCUDR Server Configuration File</p> <p>Select...</p> <p>Main Menu → Configuration → Servers</p> <p>...as shown on the right.</p>	 <p>Connected using XMI to hostname1345220802 (ACTIVE NETWORK OAM&P)</p> <p>Main Menu: Configuration -> Servers</p> <table border="1"> <thead> <tr> <th>Hostname</th> <th>Role</th> <th>Server Group</th> </tr> </thead> <tbody> <tr> <td>NO-A</td> <td>Network OAM&P</td> <td></td> </tr> </tbody> </table>	Hostname	Role	Server Group	NO-A	Network OAM&P							
Hostname	Role	Server Group												
NO-A	Network OAM&P													
<p>27.</p> <p><input type="checkbox"/></p>	<p>NOAMP Server A:</p> <p>The “Configuration →Servers” screen should now show the newly added OCUDR Server in the list.</p>	 <p>Main Menu: Configuration -> Servers</p> <p>Help</p> <p>Fri Aug 17 17:58:21 2012 UTC</p> <table border="1"> <thead> <tr> <th>Hostname</th> <th>Role</th> <th>Server Group</th> <th>Network Element</th> <th>Location</th> <th>Details</th> </tr> </thead> <tbody> <tr> <td>NO-A</td> <td>Network OAM&P</td> <td></td> <td>ETS3_NO_NE</td> <td>Morrisville_NC</td> <td>XMI: 10.250.51.80</td> </tr> </tbody> </table>	Hostname	Role	Server Group	Network Element	Location	Details	NO-A	Network OAM&P		ETS3_NO_NE	Morrisville_NC	XMI: 10.250.51.80
Hostname	Role	Server Group	Network Element	Location	Details									
NO-A	Network OAM&P		ETS3_NO_NE	Morrisville_NC	XMI: 10.250.51.80									
<p>28.</p> <p><input type="checkbox"/></p>	<p>NOAMP Server A:</p> <p>1) Use the cursor to select the OCUDR Server entry added in Steps 14 - 25.</p> <p>The row containing the desired Server should now be highlighted in GREEN.</p> <p>2) Select the “Export” dialogue button.</p>	 <p>Main Menu: Configuration -> Servers</p> <p>Help</p> <p>Fri Aug 17 17:58:21 2012 UTC</p> <table border="1"> <thead> <tr> <th>Hostname</th> <th>Role</th> <th>Server Group</th> <th>Network Element</th> <th>Location</th> <th>Details</th> </tr> </thead> <tbody> <tr> <td>NO-A</td> <td>Network OAM&P</td> <td></td> <td>ETS3_NO_NE</td> <td>Morrisville_NC</td> <td>XMI: 10.250.51.80</td> </tr> </tbody> </table> <p>Insert Delete Export Report</p> <p>Pause updates</p>	Hostname	Role	Server Group	Network Element	Location	Details	NO-A	Network OAM&P		ETS3_NO_NE	Morrisville_NC	XMI: 10.250.51.80
Hostname	Role	Server Group	Network Element	Location	Details									
NO-A	Network OAM&P		ETS3_NO_NE	Morrisville_NC	XMI: 10.250.51.80									
<p>29.</p> <p><input type="checkbox"/></p>	<p>NOAMP Server A:</p> <p>The user will receive a banner information message showing a download link for the OCUDR Server configuration data.</p>	 <p>Main Menu: Configuration -> Servers</p> <p>Help</p> <p>Fri Aug 17 18:01:20 2012 UTC</p> <table border="1"> <thead> <tr> <th>Hostname</th> <th>Role</th> <th>Server Group</th> <th>Network Element</th> <th>Location</th> <th>Details</th> </tr> </thead> <tbody> <tr> <td>NO-A</td> <td></td> <td></td> <td></td> <td></td> <td>10.250.51.80</td> </tr> </tbody> </table> <p>Info</p> <p>Exported server data in TKLCConfigData.NO-A.sh may be downloaded</p> <p>The configuration file was created and stored in the /var/TKLC/db/filemgmt directory. The configuration file will have a file name like TKLCConfigData.<hostname>.sh.</p>	Hostname	Role	Server Group	Network Element	Location	Details	NO-A					10.250.51.80
Hostname	Role	Server Group	Network Element	Location	Details									
NO-A					10.250.51.80									

OCUDR 10.0.1 Installation and Configuration Guide

Procedure 11: Configuring NOAMP-A Server (1st NOAMP site only)

Step	Procedure	Result
30. <input type="checkbox"/>	<p>NOAMP Server A:</p> <p>1) Access the command prompt.</p> <p>2) Log into the NOAMP-A server as the “admusr” user..</p>	<pre>login as: admusr root@10.250.xx.yy's password: <admusr_password> Last login: Mon Jul 30 10:33:19 2012 from 10.25.80.199 [root@pc9040833-no-a ~]#</pre>
31. <input type="checkbox"/>	<p>NOAMP Server A:</p> <p>Output similar to that shown on the right will appear as the server access the command prompt.</p>	<p>*** TRUNCATED OUTPUT ***</p> <pre>VPATH=/opt/TKLCcomcol/runcm5.16:/opt/TKLCcomcol/cm5.16 PRODPATH= RELEASE=5.16 RUNID=00 VPATH=/var/TKLC/rundb:/usr/TKLC/appworks:/usr/TKLC/awpcommon:/usr/TKLC/awptransportmgr:/usr/TKLC/awpss7:/usr/TKLC/exhr PRODPATH=/opt/comcol/prod RUNID=00 [admusr@pc9040833-no-a ~]#</pre>
32. <input type="checkbox"/>	<p>NOAMP Server A:</p> <p>Switch to “root” user.</p>	<pre>[admusr@ pc9040833-no-a ~]\$ su - password: <root_password></pre>
33. <input type="checkbox"/>	<p>NOAMP Server A:</p> <p>Copy the server configuration file to the “/var/tmp” directory on the server, making sure to rename the file by omitting the server hostname from the file name.</p> <p>NOTE: <i>The server will poll the /var/tmp directory for the presence of the configuration file and automatically execute it when found.</i></p>	<p>Example:</p> <p>TKLCConfigData<.server_hostname>.sh → will translate to →TKLCConfigData.sh</p> <pre># cp -p /var/TKLC/db/filemgmt/TKLCConfigData.NO-A.sh /var/tmp/TKLCConfigData.sh</pre>

OCUDR 10.0.1 Installation and Configuration Guide

Procedure 11: Configuring NOAMP-A Server (1st NOAMP site only)

Step	Procedure	Result
34. <input type="checkbox"/>	<p>NOAMP Server A:</p> <p>After the script completes, a broadcast message will be sent to the terminal.</p> <p>Ignore the output shown and press the <ENTER> key to return to the command prompt.</p> <p>NOTE: <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>*** NO OUTPUT FOR ≈ 3–20 MINUTES ***</p> <p>Broadcast message from root (Thu Dec 1 09:41:24 2011):</p> <p>Server configuration completed successfully! See /var/TKLC/appw/logs/Process/install.log for details.</p> <p>Please remove the USB flash drive if connected and reboot the server. <ENTER></p>
35. <input type="checkbox"/>	<p>NOAMP Server A:</p> <p>Configure the time zone.</p>	<p># set_ini_tz.pl <time zone></p> <p>Note: The following command example uses America/New_York time zone. Replace, as appropriate, with the time zone you have selected for this installation. For UTC, use "Etc/UTC". See Appendix P for a list of valid time zones.</p> <p># set_ini_tz.pl "America/New_York"</p>
36. <input type="checkbox"/>	<p>NOAMP Server A:</p> <p>Initiate a reboot of the NOAMP Server.</p>	<p># init 6</p>
37. <input type="checkbox"/>	<p>NOAMP Server A:</p> <p>Wait until server reboot is done. Then, SSH into the NOAMP-A server.</p> <p>Output similar to that shown on the right may be observed</p>	<p>Wait about 9 minutes until the server reboot is done.</p> <p>Using an SSH client such as putty, ssh to the NOAMP-A server.</p> <pre>login as: admusr root@10.250.xx.yy's password: <admusr_password> Last login: Mon Jul 30 10:33:19 2012 from 10.25.80.199</pre> <p>Note: If the server isn't up, wait a few minutes and re-enter the ssh command. You can also try running the "ping" command to see if the server is up.</p>

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Procedure 11: Configuring NOAMP-A Server (1st NOAMP site only)

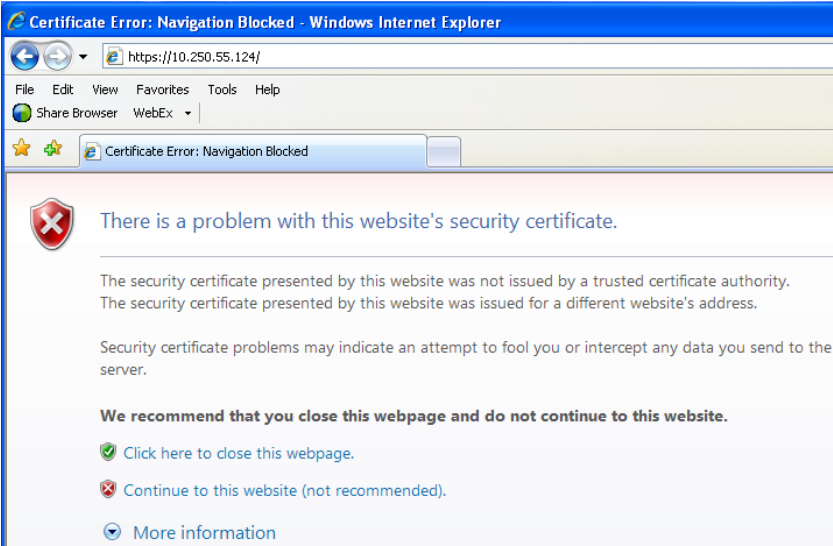
Step	Procedure	Result
38. <input type="checkbox"/>	<p>NOAMP Server A:</p> <p>Output similar to that shown on the right will appear as the server access the command prompt.</p>	<p>*** TRUNCATED OUTPUT ***</p> <pre> VPATH=/opt/TKLCcomcol/runcm5.16:/opt/TKLCcomcol/cm5.16 PRODPATH= RELEASE=5.16 RUNID=00 VPATH=/var/TKLC/rundb:/usr/TKLC/appworks:/usr/TKLC/awpcommon:/usr/TKLC/awptransportmgr:/usr/TKLC/awpss7:/usr/TKLC/exhr PRODPATH=/opt/comcol/prod RUNID=00 [admusr@pc9040833-no-a ~]\$ </pre>
39. <input type="checkbox"/>	<p>NOAMP Server A:</p> <p>Switch to “root” user.</p>	<pre> [admusr@ pc9040833-no-a ~]\$ su - password: <root_password> </pre>
40. <input type="checkbox"/>	<p>NOAMP Server A:</p> <p>Verify that the XMI and IMI IP addresses entered in Step 22 have been applied</p> <p>NOTE: <i>The server's XMI and IMI addresses can be verified by reviewing the server configuration through the OCUDR GUI.</i></p> <p><i>i.e.</i></p> <p><u>Main Menu</u></p> <p>→ Configuration</p> <p>→ Servers</p> <p><i>Scroll to line entry containing the server's hostname.</i></p>	<pre> # ifconfig grep in grep -v inet6 bond0.3 Link encap:Ethernet HWaddr F0:92:1C:18:59:10 inet addr:10.240.80.146 Bcast:10.240.80.191 Mask:255.255.255.192 bond0.4 Link encap:Ethernet HWaddr F0:92:1C:18:59:10 inet addr:10.240.56.197 Bcast:10.240.56.255 Mask:255.255.255.192 </pre>
41. <input type="checkbox"/>	<p>NOAMP Server A:</p> <p>Use the “ntpq” command to verify that the server has connectivity to the assigned Primary (and Secondary if one was provided) 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 651 1024 377 0.339 0.583 0.048 +10.250.32.51 192.5.41.209 2 u 656 1024 377 0.416 0.641 0.086 </pre>



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

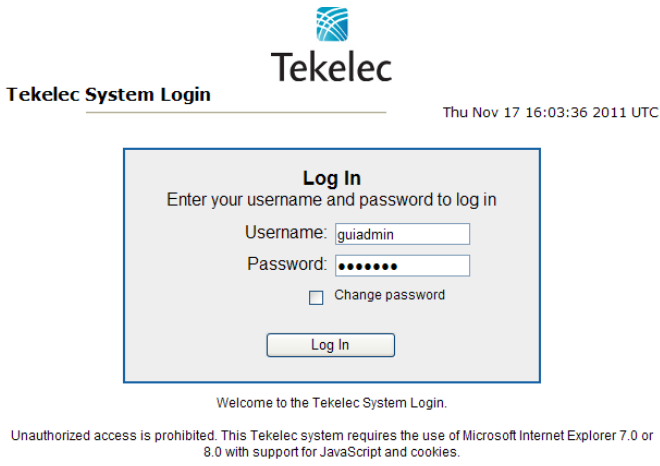
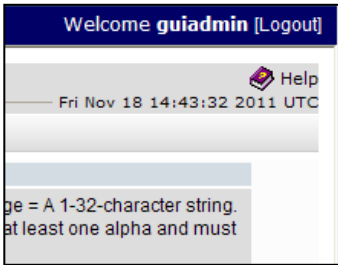
OCUDR 10.0.1 Installation and Configuration Guide

Procedure 11: Configuring NOAMP-A Server (1st NOAMP site only)

Step	Procedure	Result
<ul style="list-style-type: none"> Have the customer IT group provide a network path from the OAM server IP to the assigned NTP IP addresses. <p>ONCE NETWORK CONNECTIVITY IS ESTABLISHED TO THE ASSIGNED NTP IP ADDRESSES, THEN RESTART THIS PROCEDURE BEGINNING WITH STEP 36.</p>		
<p>42.</p> <input type="checkbox"/>	<p>NOAMP Server A:</p> <p>Execute a “alarmMgr” to verify the current health of the server</p>	<pre># alarmMgr --alarmStatus</pre> <p>NOTE: This command should return no output on a healthy system. If any alarms are reported as SNMP traps, please contact My Oracle Support (MOS) for assistance.</p>
<p>43.</p> <input type="checkbox"/>	<p>NOAMP Server A:</p> <p>Exit the SSH session for the NOAMP-A server</p>	<pre># exit</pre>
<p>44.</p> <input type="checkbox"/>	<p>NOAMP Server A:</p> <p>Verify that you can log back into the GUI.</p> <p>Launch an approved web browser and connect to the NOAMP Server A IP address.</p> <p>NOTE: <i>If presented with the “security certificate” warning screen shown to the right, choose the following option:</i></p> <p>“Continue to this website (not recommended)”.</p>	

OCUDR 10.0.1 Installation and Configuration Guide

Procedure 11: Configuring NOAMP-A Server (1st NOAMP site only)

Step	Procedure	Result
<p>45.</p> <input type="checkbox"/>	<p>NOAMP Server A:</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>46.</p> <input type="checkbox"/>	<p>NOAMP Server A:</p> <p>Click the “Logout” link on the server GUI..</p>	
<p>THIS PROCEDURE HAS BEEN COMPLETED</p>		

8.2 Create Configuration for Remaining Servers (All Sites)

This procedure is used to create and configure all OCUDR Servers (Primary and DR servers) except the first NOAMP-A server.

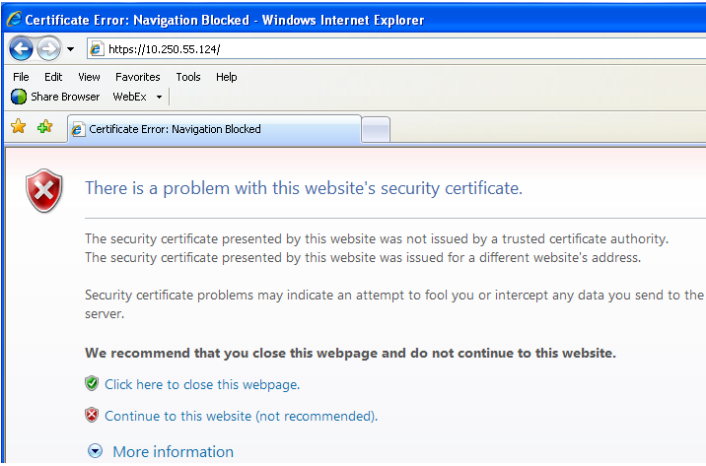
Requirements:

- **Procedure 3: Create, IPM and Install Application on all Virtual Machines OR**
- **Procedure 5: Create, IPM and Install Application on all Virtual Machines OR**
- **Procedure 8: Create, IPM and Install Application on all Virtual Machines (SO Network Elements) OR**
- **Procedure 10: Create, IPM and Install Application on all Virtual Machines** has been completed on all servers being configured by this procedure.
- **Procedure 11: Configuring NOAMP-A Server** has been completed.

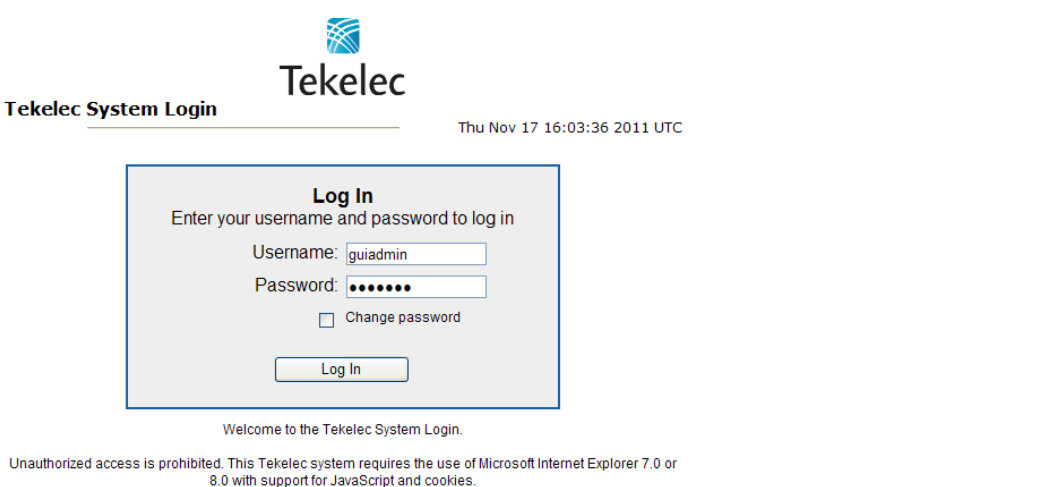
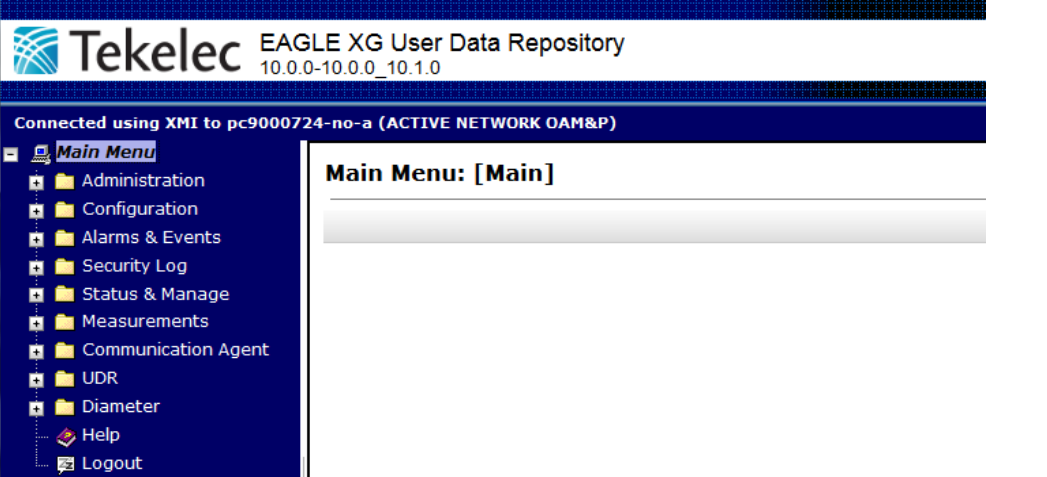
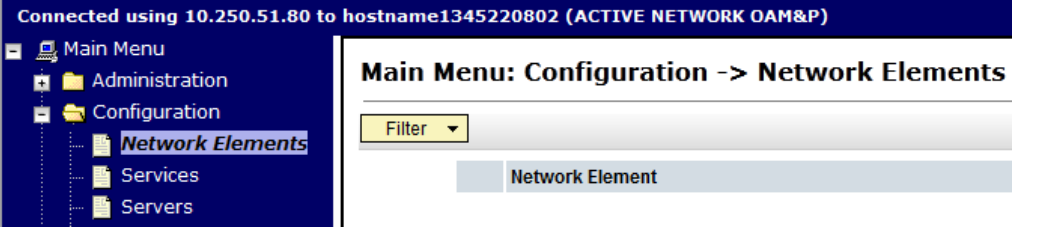
Check off (✓) each step as it is completed. Boxes have been provided for this purpose under each step number.

IF THIS PROCEDURE FAILS, CONTACT MY ORACLE SUPPORT (MOS) FOR ASSISTANCE.

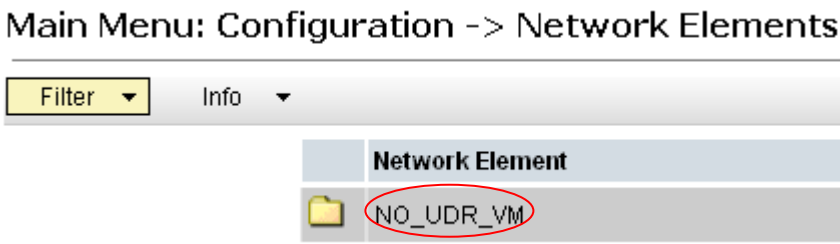
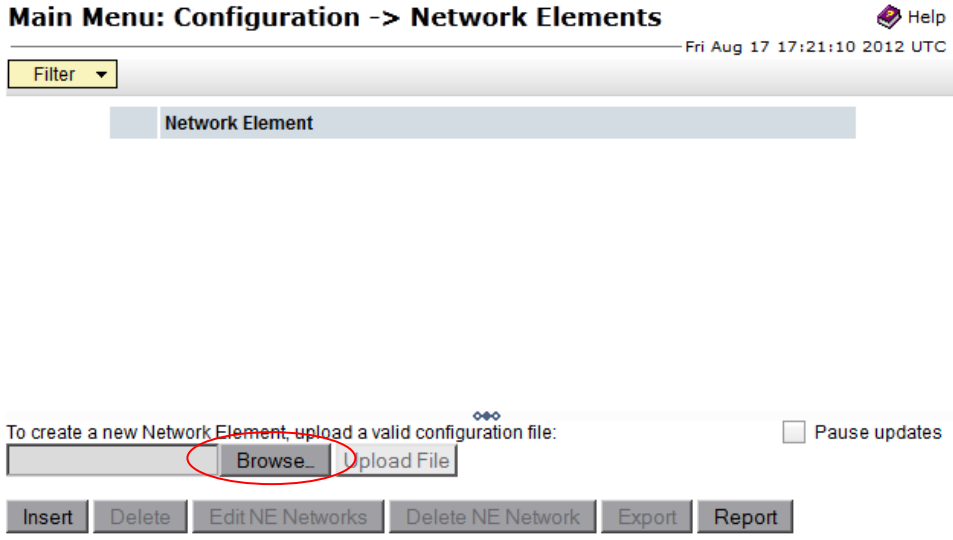
Procedure 12: Create Configuration for Remaining Servers

Step	Procedure	Result
<p>1.</p> <input type="checkbox"/>	<p>NOAMP Server A:</p> <p>Launch an approved web browser and connect to the NOAMP Server A IP address</p> <p>NOTE: If presented with the security warning screen shown to the right, choose the following option:</p> <p>“Proceed to xxx.xx.xx.xx (unsafe)”.</p>	

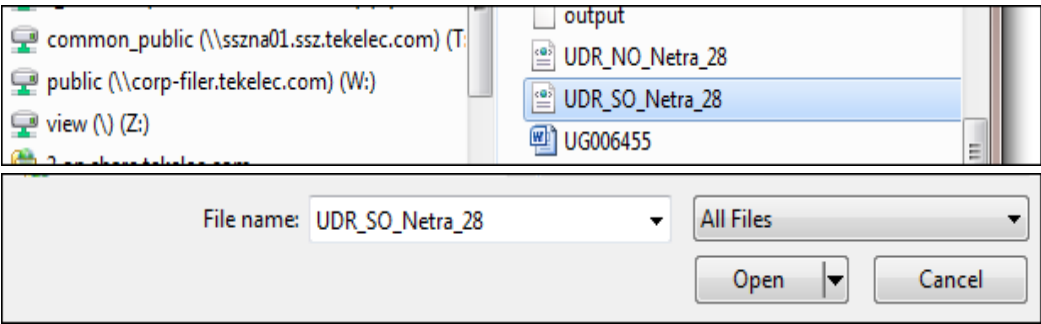
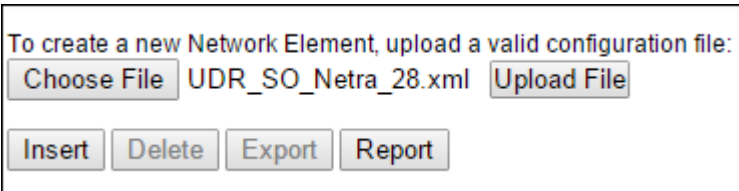
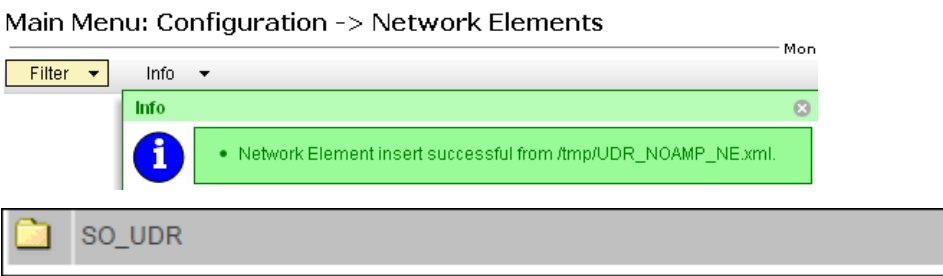
Procedure 12: Create Configuration for Remaining Servers

Step	Procedure	Result
<p>2.</p> <input type="checkbox"/>	<p>NOAMP Server A:</p> <p>The user should be presented the login screen shown on the right.</p> <p>Login to the GUI using the default user and password.</p>	
<p>3.</p> <input type="checkbox"/>	<p>NOAMP Server A:</p> <p>The user should be presented the OCUDR Main Menu as shown on the right.</p>	
<p>Note: The following steps need to run for all servers EXCEPT the first NOAMP-A server. These steps include a check box for NOAMP-A server. That check box is only referring to NOAMP-A servers that are not at the primary provisioning site, such as the NOAMP-A server at the Disaster Recovery (DR) site.</p>		
<p>4.</p> <input type="checkbox"/>	<p>NOAMP Server A:</p> <p><i>Configuring Network Element</i></p> <p>Select...</p> <p>Main Menu → Configuration → Network Elements</p> <p>...as shown on the right.</p>	 <p> <input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP-B <input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B <input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2 <input type="checkbox"/> MP-3 <input type="checkbox"/> MP-4 </p>

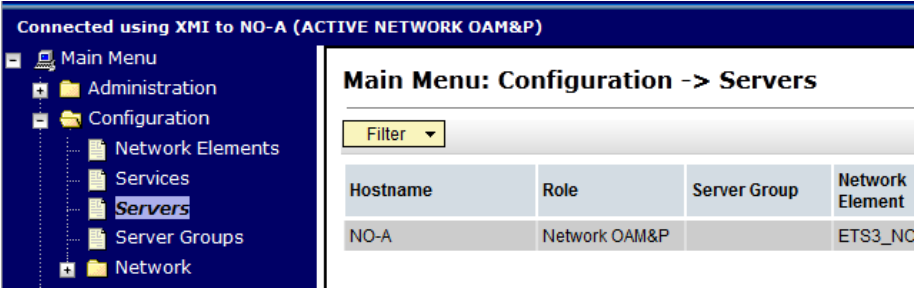

Procedure 12: Create Configuration for Remaining Servers

Step	Procedure	Result
<p>5.</p> <input type="checkbox"/>	<p>NOAMP Server A:</p> <p>Look for the Network Element into which you are installing servers.</p> <p>Note: You may have to left mouse click the "Info" banner option in order to see the banner output.</p>	<p>Main Menu: Configuration -> Network Elements</p>  <ul style="list-style-type: none"> • If the Network Element you need is already present, skip to Step 10. • Otherwise, continue with the next step. <p> <input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP-B <input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B <input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2 <input type="checkbox"/> MP-3 <input type="checkbox"/> MP-4 </p>
<p>6.</p> <input type="checkbox"/>	<p>NOAMP Server A:</p> <p>From the Configuration / Network Elements screen...</p> <p>Select the "Browse" dialogue button (scroll to bottom left corner of screen).</p>	<p>Main Menu: Configuration -> Network Elements Help</p> <p style="text-align: right;">Fri Aug 17 17:21:10 2012 UTC</p>  <p> <input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP-B <input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B <input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2 <input type="checkbox"/> MP-3 <input type="checkbox"/> MP-4 </p>

Procedure 12: Create Configuration for Remaining Servers

Step	Procedure	Result
<p>7.</p> <input type="checkbox"/>	<p>NOAMP Server A:</p> <p>Note: This step assumes that the xml files were previously prepared, as described in Appendix N.</p> <p>1) Select the location containing the site .xml file.</p> <p>2) Select the .xml file and click the “Open” dialogue button.</p>	 <p><input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP-B <input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B</p> <p><input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2 <input type="checkbox"/> MP-3 <input type="checkbox"/> MP-4</p>
<p>8.</p> <input type="checkbox"/>	<p>NOAMP Server A:</p> <p>Select the “Upload File” dialogue button (bottom left corner of screen).</p>	 <p><input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP-B <input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B</p> <p><input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2 <input type="checkbox"/> MP-3 <input type="checkbox"/> MP-4</p>
<p>9.</p> <input type="checkbox"/>	<p>NOAMP Server A:</p> <p>If the values in the .xml file pass validation rules, the user receives a banner information message showing that the data has been successfully committed to the DB.</p> <p>Note: You may have to left mouse click the “Info” banner option in order to see the banner output.</p>	 <p><input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP-B <input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B</p> <p><input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2 <input type="checkbox"/> MP-3 <input type="checkbox"/> MP-4</p>

Procedure 12: Create Configuration for Remaining Servers

Step	Procedure	Result
<p>10.</p> <input type="checkbox"/>	<p>NOAMP Server A:</p> <p>Select...</p> <p>Main Menu → Configuration → Servers</p> <p>...as shown on the right.</p>	 <p>• “Check off” the associated Check Box as addition is completed for each Server.</p> <p><input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP-B <input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B</p> <p><input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2 <input type="checkbox"/> MP-3 <input type="checkbox"/> MP-4</p>
<p>11.</p> <input type="checkbox"/>	<p>NOAMP Server A:</p> <p>Select the “Insert” dialogue button.</p>	 <p>• “Check off” the associated Check Box as addition is completed for each Server.</p> <p><input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP-B <input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B</p> <p><input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2 <input type="checkbox"/> MP-3 <input type="checkbox"/> MP-4</p>

Procedure 12: Create Configuration for Remaining Servers

Step	Procedure	Result																					
<p>12.</p> <p><input type="checkbox"/></p>	<p>NOAMP Server A:</p> <p>The user is now presented with the “Adding a new server” configuration screen.</p>	<p>Main Menu: Configuration -> Servers [Insert]</p> <p style="text-align: right;">Tue Oct 14 16:07:40 2</p> <hr/> <p>Adding a new server</p> <table border="1"> <thead> <tr> <th>Attribute</th> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Hostname</td> <td><input type="text"/></td> <td>Unique name for the server. [Default = n/a. Range = A 20-character string. Valid characters are alphanumeric and minus sign. Must start with an alphanumeric and end with an alphanumeric.]</td> </tr> <tr> <td>Role</td> <td>- Select Role -</td> <td>Select the function of the server</td> </tr> <tr> <td>System ID</td> <td><input type="text"/></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> <tr> <td>Hardware Profile</td> <td>UDR SO</td> <td>Hardware profile of the server</td> </tr> <tr> <td>Network Element Name</td> <td>- Unassigned -</td> <td>Select the network element</td> </tr> <tr> <td>Location</td> <td><input type="text"/></td> <td>Location description [Default = "". Range = A 15-character string. Valid value is any text string.]</td> </tr> </tbody> </table> <p style="text-align: right;"><input type="button" value="Ok"/> <input type="button" value="Apply"/> <input type="button" value="Cancel"/></p> <ul style="list-style-type: none"> • “Check off” the associated Check Box as addition is completed for each Server. <p> <input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP-B <input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B <input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2 <input type="checkbox"/> MP-3 <input type="checkbox"/> MP-4 </p>	Attribute	Value	Description	Hostname	<input type="text"/>	Unique name for the server. [Default = n/a. Range = A 20-character string. Valid characters are alphanumeric and minus sign. Must start with an alphanumeric and end with an alphanumeric.]	Role	- Select Role -	Select the function of the server	System ID	<input type="text"/>	System ID for the NOAMP or SOAM server. [Default = n/a. Range = A 64-character string. Valid value is any text string.]	Hardware Profile	UDR SO	Hardware profile of the server	Network Element Name	- Unassigned -	Select the network element	Location	<input type="text"/>	Location description [Default = "". Range = A 15-character string. Valid value is any text string.]
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Network Element Name	- Unassigned -	Select the network element																					
Location	<input type="text"/>	Location description [Default = "". Range = A 15-character string. Valid value is any text string.]																					
<p>13.</p> <p><input type="checkbox"/></p>	<p>NOAMP Server A:</p> <p>Input the assigned “hostname” for the server.</p>	<table border="1"> <thead> <tr> <th>Attribute</th> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Hostname</td> <td>NO-B</td> <td>Unique name for the server. [Default = n/a. Range = A 20-character string. Valid characters are alphanumeric and minus sign. Must start with an alphanumeric and end with an alphanumeric.]</td> </tr> </tbody> </table> <ul style="list-style-type: none"> • “Check off” the associated Check Box as addition is completed for each Server. <p> <input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP-B <input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B <input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2 <input type="checkbox"/> MP-3 <input type="checkbox"/> MP-4 </p>	Attribute	Value	Description	Hostname	NO-B	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.]															
Attribute	Value	Description																					
Hostname	NO-B	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.]																					
<p>14.</p> <p><input type="checkbox"/></p>	<p>NOAMP Server A:</p> <p>Select the appropriate server “Role” from the pull-down menu.</p>	<table border="1"> <tbody> <tr> <td>Role</td> <td>- Select Role -</td> <td>Select the function of the server</td> </tr> <tr> <td>Hardware Profile</td> <td>- Select Role -</td> <td>Hardware profile of the server</td> </tr> <tr> <td>Network Element Name</td> <td>SYSTEM OAM MP QUERY SERVER</td> <td>Select the network element</td> </tr> <tr> <td>Location</td> <td><input type="text"/></td> <td>Location description [Default = "". Range = A 15</td> </tr> </tbody> </table> <ul style="list-style-type: none"> • “Check off” the associated Check Box as addition is completed for each Server. <p> <input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP-B <input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B <input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2 <input type="checkbox"/> MP-3 <input type="checkbox"/> MP-4 </p>	Role	- Select Role -	Select the function of the server	Hardware Profile	- Select Role -	Hardware profile of the server	Network Element Name	SYSTEM OAM MP QUERY SERVER	Select the network element	Location	<input type="text"/>	Location description [Default = "". Range = A 15									
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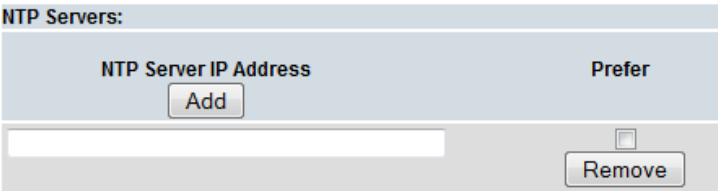
Procedure 12: Create Configuration for Remaining Servers

Step	Procedure	Result
<p>15.</p> <input type="checkbox"/>	<p>NOAMP Server A:</p> <p>Input the “System ID” for the server.</p> <p>NOTE: <i>System ID is not required for MP.</i></p>	<div style="border: 1px solid gray; padding: 5px; margin-bottom: 10px;"> <p>System ID <input style="width: 100%; border: 1px solid gray;" type="text" value="NOAMP"/></p> <p style="font-size: small; margin-top: 5px;">System ID for the NOAMP or SOAM server. [Default = n/a. Range = A 64-character string. Valid value is any text string.]</p> </div> <ul style="list-style-type: none"> • “Check off” the associated Check Box as addition is completed for each Server. <p> <input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP-B <input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B <input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2 <input type="checkbox"/> MP-3 <input type="checkbox"/> MP-4 </p>
<p>16.</p> <input type="checkbox"/>	<p>NOAMP Server A:</p> <p>Select the correct Hardware Profile from the pull-down menu.</p>	<p>Select Hardware Profile:</p> <ul style="list-style-type: none"> • UDR DL380 for RMS NOAMP installations • BL460 HP c-Class Blade for Normal Capacity C-Class NOAMP installations • UDR_NO_LowCapacity for NO virtual server installations • UDR SO for SO virtual server installations • UDR MP for MP virtual server installations <div style="border: 1px solid gray; padding: 5px; margin-bottom: 10px;"> <p>Hardware Profile <input style="width: 100%; border: 1px solid gray;" type="text" value="UDR SO"/> Hardware profile of the server</p> </div> <ul style="list-style-type: none"> • “Check off” the associated Check Box as addition is completed for each Server. <p> <input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP-B <input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B <input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2 <input type="checkbox"/> MP-3 <input type="checkbox"/> MP-4 </p>
<p>17.</p> <input type="checkbox"/>	<p>NOAMP Server A:</p> <p>Select the Network Element Name from the pull-down menu.</p> <p>NOTE: <i>After the Network Element Name is selected, the Interfaces fields will be displayed.</i></p> <p>NOTE: <i>NO and DR pairs will have their own Network element as per Appendix N. SO pairs will also have their own Network Element which they share with their associated MP.</i></p>	<div style="border: 1px solid gray; padding: 5px; margin-bottom: 10px;"> <p>Network Element Name <input style="width: 100%; border: 1px solid gray;" type="text" value="NO_UDR_VM"/> * Select the network element</p> </div> <ul style="list-style-type: none"> • “Check off” the associated Check Box as addition is completed for each Server. <p> <input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP-B <input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B <input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2 <input type="checkbox"/> MP-3 <input type="checkbox"/> MP-4 </p>

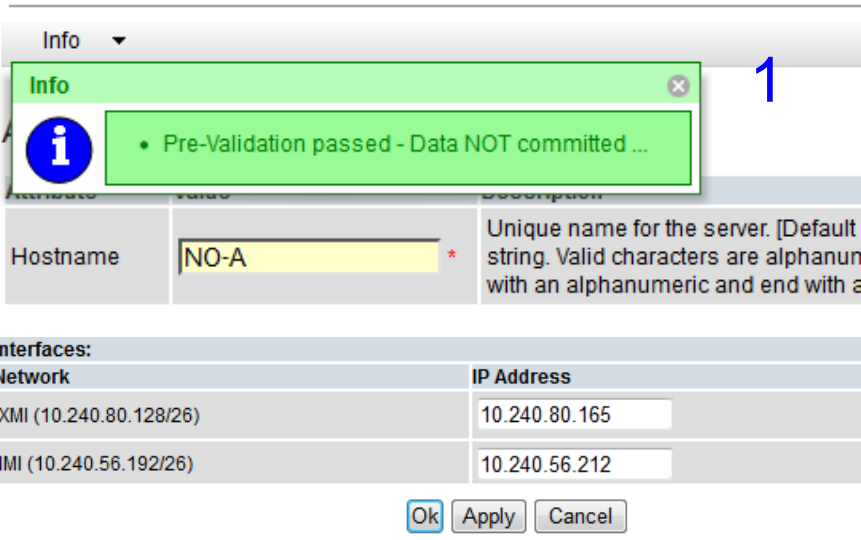
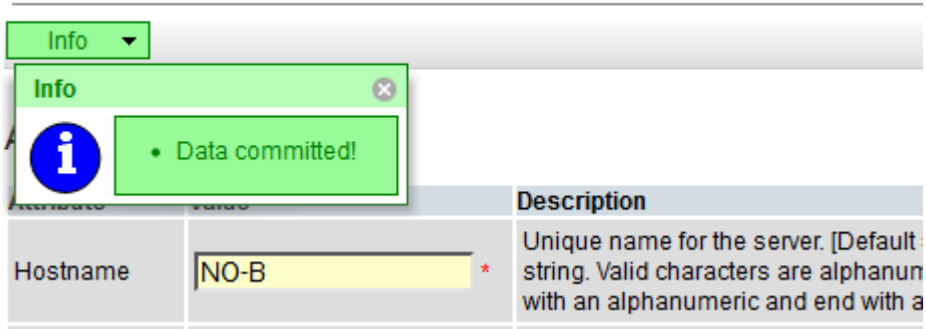
Procedure 12: Create Configuration for Remaining Servers

Step	Procedure	Result									
<p>18.</p> <input type="checkbox"/>	<p>NOAMP Server A:</p> <p>Enter the site location.</p> <p>NOTE: Location is an optional field.</p>	<div style="border: 1px solid gray; padding: 2px;"> <p>Location <input type="text" value="Morrisville_NC"/> Location description [Default = "". Range = A 15-character string. Valid value is any text string.]</p> </div> <ul style="list-style-type: none"> • “Check off” the associated Check Box as addition is completed for each Server. <p> <input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP-B <input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B <input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2 <input type="checkbox"/> MP-3 <input type="checkbox"/> MP-4 </p>									
<p>19.</p> <input type="checkbox"/>	<p>NOAMP Server A:</p> <p>1) Enter the XMI and IMI IP addresses for the OCUDR Server.</p> <p>2) Set the XMI and IMI Interface according to deployment type.</p>	<div style="border: 1px solid gray; padding: 2px;"> <p>Interfaces:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="background-color: #e0e0e0;">Network</th> <th style="background-color: #e0e0e0;">IP Address</th> <th style="background-color: #e0e0e0;">Interface</th> </tr> </thead> <tbody> <tr> <td>XMI (10.240.37.128/26)</td> <td><input type="text"/></td> <td>xmi ▾ <input type="checkbox"/> VLAN (3)</td> </tr> <tr> <td>IMI (10.240.37.192/27)</td> <td><input type="text"/></td> <td>imi ▾ <input type="checkbox"/> VLAN (4)</td> </tr> </tbody> </table> <p style="text-align: center;"> <input type="button" value="Ok"/> <input type="button" value="Apply"/> <input type="button" value="Cancel"/> </p> </div> <p>Interface according to deployment type:</p> <ul style="list-style-type: none"> • SO: Set XMI to “xmi” and set IMI to “imi”. VLAN boxes are <i>not</i> checked. • MP: Set XMI to “xmi” and set IMI to “imi”. VLAN boxes are <i>not</i> checked. • NOAMP: Set both XMI and IMI to bond0. Check all VLAN boxes. (Not for Low Capacity Systems) <p>Note: In case of NOAMP virtual server on Low Capacity C-Class or Low Capacity RMS systems, Set XMI to “xmi” and set IMI to “imi”. VLAN boxes are <i>not</i> checked.</p> <p>Note: RMS NOAMP Lab systems without bonded interfaces conform to Section 8 of [6]. Set XMI to “eth01” and IMI to “eth02”. VLAN boxes are <i>not</i> checked in this case.</p> <p>“Check off” the associated Check Box as addition is completed for each Server.</p> <p> <input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP-B <input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B <input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2 <input type="checkbox"/> MP-3 <input type="checkbox"/> MP-4 </p>	Network	IP Address	Interface	XMI (10.240.37.128/26)	<input type="text"/>	xmi ▾ <input type="checkbox"/> VLAN (3)	IMI (10.240.37.192/27)	<input type="text"/>	imi ▾ <input type="checkbox"/> VLAN (4)
Network	IP Address	Interface									
XMI (10.240.37.128/26)	<input type="text"/>	xmi ▾ <input type="checkbox"/> VLAN (3)									
IMI (10.240.37.192/27)	<input type="text"/>	imi ▾ <input type="checkbox"/> VLAN (4)									

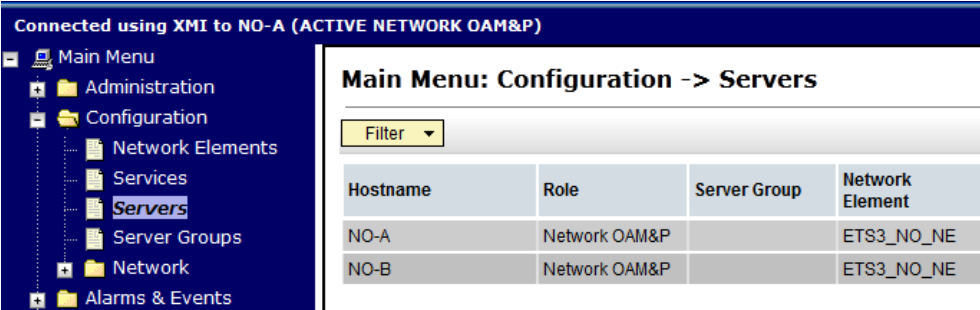
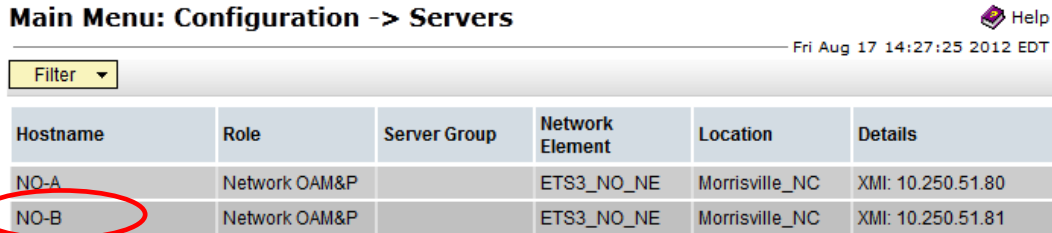
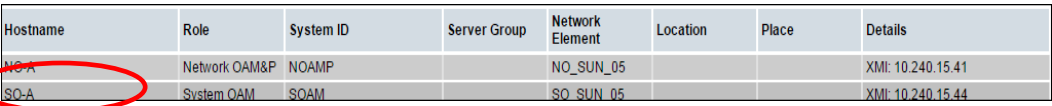
Procedure 12: Create Configuration for Remaining Servers

Step	Procedure	Result
<p>20.</p> <input type="checkbox"/>	<p>NOAMP Server A:</p> <p>Click the “Add” button under NTP Servers and add the address(s) of the NTP server(s).</p>	 <p>NTP Servers:</p> <p>NTP Server IP Address Prefer</p> <p style="text-align: center;"><input type="button" value="Add"/></p> <p><input type="text"/></p> <p style="text-align: right;"><input type="button" value="Remove"/></p> <p>NTP Server according to server type:</p> <ul style="list-style-type: none"> • NOAMP: Set one ore more NTP Server IP Address(es) to customer supplied NTP server(s). • SOAM and MP: Set the NTP Server IP Address to the host server, given as “<TVOE_XML_address>” in Appendix L Configure TVOE Network. <p>“Check off” the associated Check Box as addition is completed for each Server.</p> <p><input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP-B <input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B</p> <p><input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2 <input type="checkbox"/> MP-3 <input type="checkbox"/> MP-4</p>

Procedure 12: Create Configuration for Remaining Servers

Step	Procedure	Result									
<p>21.</p> <p><input type="checkbox"/></p>	<p>NOAMP Server A:</p> <p>1) The user should be presented with a banner information message stating “Pre-Validation passed”.</p> <p>2) Click the “Apply” dialogue button.</p>	<p>Main Menu: Configuration -> Servers [Insert]</p>  <p>Info</p> <p>Info</p> <p>• Pre-Validation passed - Data NOT committed ...</p> <p>Hostname: NO-A</p> <p>Unique name for the server. [Default string. Valid characters are alphanumeric with an alphanumeric and end with a</p> <table border="1"> <thead> <tr> <th>Network</th> <th>IP Address</th> <th>Interface</th> </tr> </thead> <tbody> <tr> <td>XMI (10.240.80.128/26)</td> <td>10.240.80.165</td> <td>xmi</td> </tr> <tr> <td>IMI (10.240.56.192/26)</td> <td>10.240.56.212</td> <td>imi</td> </tr> </tbody> </table> <p>Ok Apply Cancel</p> <ul style="list-style-type: none"> • “Check off” the associated Check Box as addition is completed for each Server. <p> <input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP-B <input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B <input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2 <input type="checkbox"/> MP-3 <input type="checkbox"/> MP-4 </p>	Network	IP Address	Interface	XMI (10.240.80.128/26)	10.240.80.165	xmi	IMI (10.240.56.192/26)	10.240.56.212	imi
Network	IP Address	Interface									
XMI (10.240.80.128/26)	10.240.80.165	xmi									
IMI (10.240.56.192/26)	10.240.56.212	imi									
<p>22.</p> <p><input type="checkbox"/></p>	<p>NOAMP Server A:</p> <p>If the values provided match the network ranges assigned to the OCUDR NE, the user will receive a banner information message showing that the data has been validated and committed to the DB.</p>	<p>Main Menu: Configuration -> Servers [Insert]</p>  <p>Info</p> <p>Info</p> <p>• Data committed!</p> <p>Hostname: NO-B</p> <p>Unique name for the server. [Default string. Valid characters are alphanumeric with an alphanumeric and end with a</p> <ul style="list-style-type: none"> • “Check off” the associated Check Box as addition is completed for each Server. <p> <input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP-B <input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B <input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2 <input type="checkbox"/> MP-3 <input type="checkbox"/> MP-4 </p>									

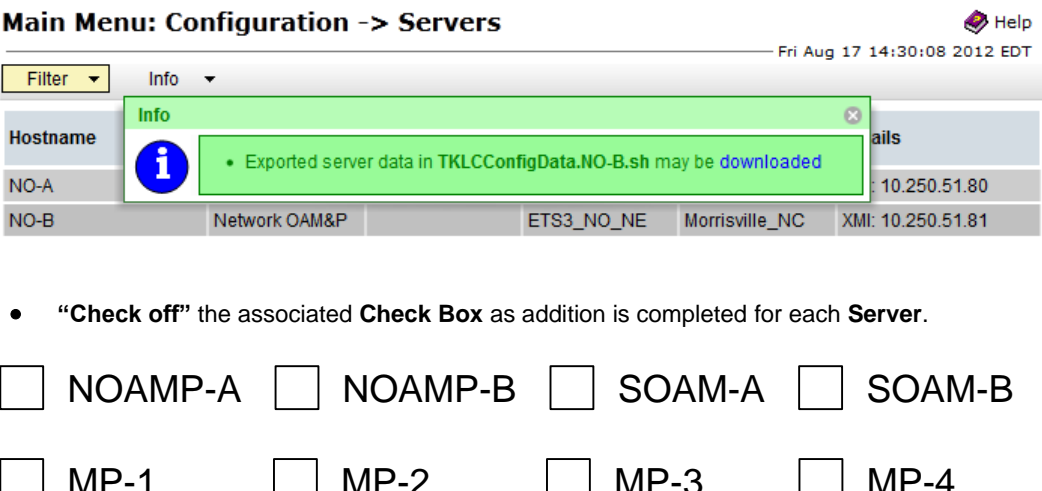
Procedure 12: Create Configuration for Remaining Servers

Step	Procedure	Result
<p>23.</p> <p><input type="checkbox"/></p>	<p>NOAMP Server A:</p> <p><i>Applying the Server Configuration File</i></p> <p>Select...</p> <p>Main Menu → Configuration → Servers</p> <p>...as shown on the right.</p>	 <p>• “Check off” the associated Check Box as addition is completed for each Server.</p> <p><input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP-B <input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B</p> <p><input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2 <input type="checkbox"/> MP-3 <input type="checkbox"/> MP-4</p>
<p>24.</p> <p><input type="checkbox"/></p>	<p>NOAMP Server A:</p> <p>The “Configuration → Servers” screen should now show the newly added OCUDR Server in the list.</p>	<p>Normal or Low Capacity Configuration:</p>  <p>Single Server Configuration:</p>  <p>• “Check off” the associated Check Box as addition is completed for each Server.</p> <p><input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP-B <input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B</p> <p><input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2 <input type="checkbox"/> MP-3 <input type="checkbox"/> MP-4</p>

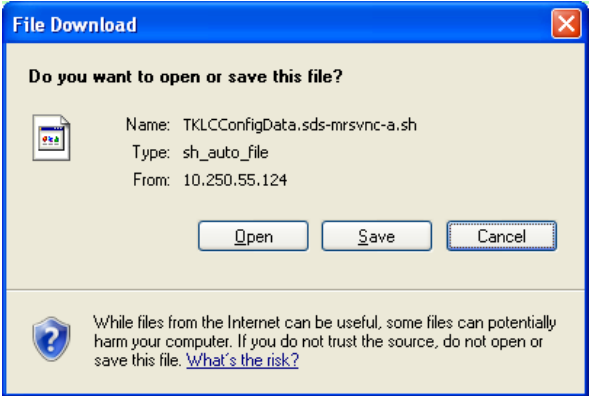
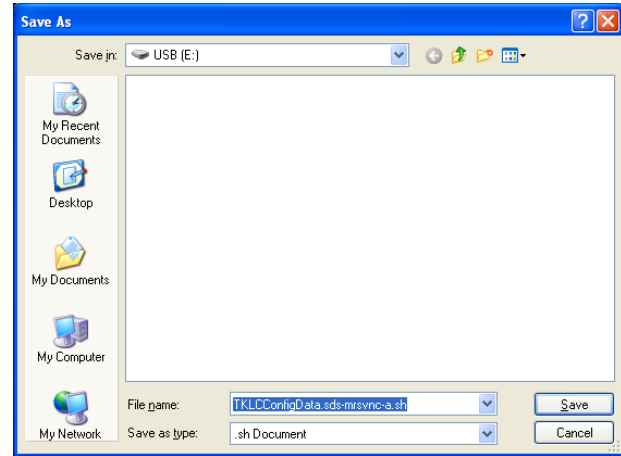
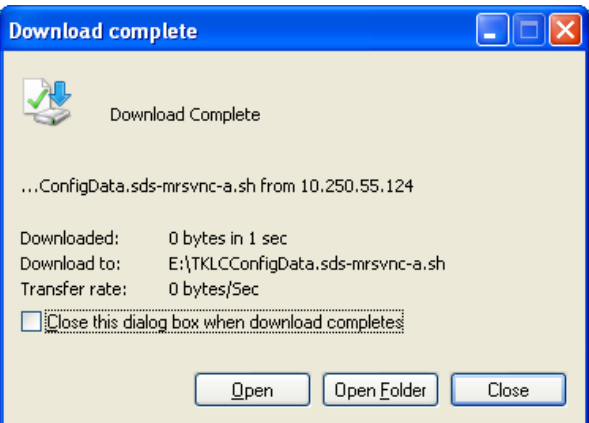
Procedure 12: Create Configuration for Remaining Servers

Step	Procedure	Result																																										
<p>25.</p> <p><input type="checkbox"/></p>	<p>NOAMP Server A:</p> <p>1) Use the cursor to select the OCUDR Server entry added in Steps 10 - 22.</p> <p>The row containing the desired Server should now be highlighted in GREEN.</p> <p>2) Select the “Export” dialogue button.</p>	<p>Normal or Low Capacity Configuration:</p> <p>Main Menu: Configuration -> Servers Help</p> <p style="text-align: right;">Fri Aug 17 14:27:25 2012 EDT</p> <p>Filter <input type="text"/></p> <table border="1"> <thead> <tr> <th>Hostname</th> <th>Role</th> <th>Server Group</th> <th>Network Element</th> <th>Location</th> <th>Details</th> </tr> </thead> <tbody> <tr> <td>NO-A</td> <td>Network OAM&P</td> <td></td> <td>ETS3_NO_NE</td> <td>Morrisville_NC</td> <td>XMI: 10.250.51.80</td> </tr> <tr style="background-color: #e0ffe0;"> <td>NO-B</td> <td>Network OAM&P</td> <td></td> <td>ETS3_NO_NE</td> <td>Morrisville_NC</td> <td>XMI: 10.250.51.81</td> </tr> </tbody> </table> <p>Insert Delete Export Report <input type="checkbox"/> Pause updates</p> <p>Single Server Configuration:</p> <table border="1"> <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>NO-A</td> <td>Network OAM&P</td> <td>NOAMP</td> <td></td> <td>NO_SUN_05</td> <td></td> <td></td> <td>XMI: 10.240.15.41</td> </tr> <tr style="background-color: #e0ffe0;"> <td>SO-A</td> <td>System OAM</td> <td>SOAM</td> <td></td> <td>SO_SUN_05</td> <td></td> <td></td> <td>XMI: 10.240.15.44</td> </tr> </tbody> </table> <p>Insert Edit Delete Export Report</p> <ul style="list-style-type: none"> • “Check off” the associated Check Box as addition is completed for each Server. <p><input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP-B <input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B</p> <p><input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2 <input type="checkbox"/> MP-3 <input type="checkbox"/> MP-4</p>	Hostname	Role	Server Group	Network Element	Location	Details	NO-A	Network OAM&P		ETS3_NO_NE	Morrisville_NC	XMI: 10.250.51.80	NO-B	Network OAM&P		ETS3_NO_NE	Morrisville_NC	XMI: 10.250.51.81	Hostname	Role	System ID	Server Group	Network Element	Location	Place	Details	NO-A	Network OAM&P	NOAMP		NO_SUN_05			XMI: 10.240.15.41	SO-A	System OAM	SOAM		SO_SUN_05			XMI: 10.240.15.44
Hostname	Role	Server Group	Network Element	Location	Details																																							
NO-A	Network OAM&P		ETS3_NO_NE	Morrisville_NC	XMI: 10.250.51.80																																							
NO-B	Network OAM&P		ETS3_NO_NE	Morrisville_NC	XMI: 10.250.51.81																																							
Hostname	Role	System ID	Server Group	Network Element	Location	Place	Details																																					
NO-A	Network OAM&P	NOAMP		NO_SUN_05			XMI: 10.240.15.41																																					
SO-A	System OAM	SOAM		SO_SUN_05			XMI: 10.240.15.44																																					
<p>26.</p> <p><input type="checkbox"/></p>	<p>NOAMP Server A:</p> <p>The user will receive a banner information message showing a download link for the OCUDR Server configuration data.</p>	<p>Main Menu: Configuration -> Servers Help</p> <p style="text-align: right;">Fri Aug 17 14:30:08 2012 EDT</p> <p>Filter <input type="text"/> Info <input type="text"/></p> <table border="1"> <thead> <tr> <th>Hostname</th> <th>Role</th> <th>Server Group</th> <th>Network Element</th> <th>Location</th> <th>Details</th> </tr> </thead> <tbody> <tr> <td>NO-A</td> <td></td> <td></td> <td></td> <td></td> <td>10.250.51.80</td> </tr> <tr> <td>NO-B</td> <td>Network OAM&P</td> <td></td> <td>ETS3_NO_NE</td> <td>Morrisville_NC</td> <td>XMI: 10.250.51.81</td> </tr> </tbody> </table> <div style="border: 1px solid green; background-color: #e0ffe0; padding: 5px; margin: 10px 0;"> <p>Info x</p> <p>• Exported server data in TKLCConfigData.NO-B.sh may be downloaded</p> </div> <p>The configuration file was created and stored in the /var/TKLC/db/filemgmt directory on the primary NOAMP-A server. The configuration file will have a file name like TKLCConfigData.<hostname>.sh.</p> <ul style="list-style-type: none"> • “Check off” the associated Check Box as addition is completed for each Server. <p><input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP-B <input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B</p> <p><input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2 <input type="checkbox"/> MP-3 <input type="checkbox"/> MP-4</p>	Hostname	Role	Server Group	Network Element	Location	Details	NO-A					10.250.51.80	NO-B	Network OAM&P		ETS3_NO_NE	Morrisville_NC	XMI: 10.250.51.81																								
Hostname	Role	Server Group	Network Element	Location	Details																																							
NO-A					10.250.51.80																																							
NO-B	Network OAM&P		ETS3_NO_NE	Morrisville_NC	XMI: 10.250.51.81																																							

Procedure 12: Create Configuration for Remaining Servers

Step	Procedure	Result
<p>27.</p> <input type="checkbox"/>	<p>NOAMP Server A:</p> <p>Click on the “downloaded” link inside the Info box.</p>	 <p>Main Menu: Configuration -> Servers</p> <p>Filter Info</p> <p>Info</p> <ul style="list-style-type: none"> Exported server data in TKLCConfigData.NO-B.sh may be downloaded <p>• “Check off” the associated Check Box as addition is completed for each Server.</p> <p><input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP-B <input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B</p> <p><input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2 <input type="checkbox"/> MP-3 <input type="checkbox"/> MP-4</p>

Procedure 12: Create Configuration for Remaining Servers

Step	Procedure	Result
<p>28.</p> <p><input type="checkbox"/></p>	<p>NOAMP Server A:</p> <p>1) Click the “Save” dialogue button.</p> <p>2) Save the configuration file to a USB flash drive.</p> <p>3) Click the “Close” dialogue button</p>	<div style="display: flex; flex-direction: column; align-items: center;"> <div style="display: flex; align-items: center; margin-bottom: 20px;">  1 </div> <div style="display: flex; align-items: center; margin-bottom: 20px;">  2 </div> <div style="display: flex; align-items: center;">  3 </div> <ul style="list-style-type: none"> • “Check off” the associated Check Box as addition is completed for each Server. <div style="display: flex; justify-content: space-between; width: 100%; margin-top: 20px;"> <div style="display: flex; gap: 20px;"> <input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP-B </div> <div style="display: flex; gap: 20px;"> <input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B </div> </div> <div style="display: flex; justify-content: space-between; width: 100%; margin-top: 20px;"> <div style="display: flex; gap: 20px;"> <input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2 </div> <div style="display: flex; gap: 20px;"> <input type="checkbox"/> MP-3 <input type="checkbox"/> MP-4 </div> </div> </div>

Procedure 12: Create Configuration for Remaining Servers

Step	Procedure	Result
<p>Note: The steps above may be completed for one or all servers listed in the "Check Off" section before continuing...</p>		
<p>29. <input type="checkbox"/></p>	<p>NOAMP Server A: Apply server configuration scripts.</p>	<p>Use the configuration scripts created and exported in the steps above to apply configuration to each server:</p> <ul style="list-style-type: none"> • For rack mount NOAMP and DR servers: Follow Appendix K.1 Applying Server Configuration with ILO • For other servers: Follow Appendix K.2 Applying Server Configuration with PM&C • "Check off" the associated Check Box as addition is completed for each Server. <p><input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP-B <input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B</p> <p><input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2 <input type="checkbox"/> MP-3 <input type="checkbox"/> MP-4</p>
<p>30. <input type="checkbox"/></p>	<p>TVOE Servers: Add NOAMP-B servers as second NTP server for all TVOE hosts.</p>	<p>** Don't execute on Low Capacity C-Class Systems.</p> <p>Follow Appendix L.4: Configure Additional NTP Server to add NOAMP-B to each TVOE host server as a second NTP Server.</p> <p><i>Note: If NOAMP-B is running on a virtual machine, use the management IP of its TVOE host instead for an NTP server.</i></p> <p><input type="checkbox"/> TVOE Host (SOAM-A, MP-1, MP-2)</p> <p><input type="checkbox"/> TVOE Host (SOAM-B, MP-3, MP-4)</p>
<p>THIS PROCEDURE HAS BEEN COMPLETED</p>		

8.3 Configure XSI Networks (All SOAM Sites)

This procedure configures the XSI networks used on MP to support signaling traffic.

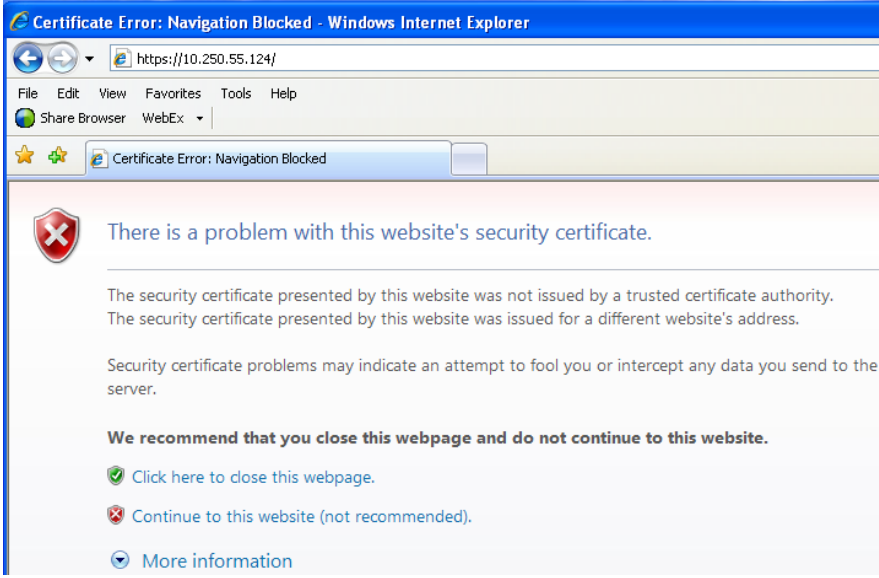
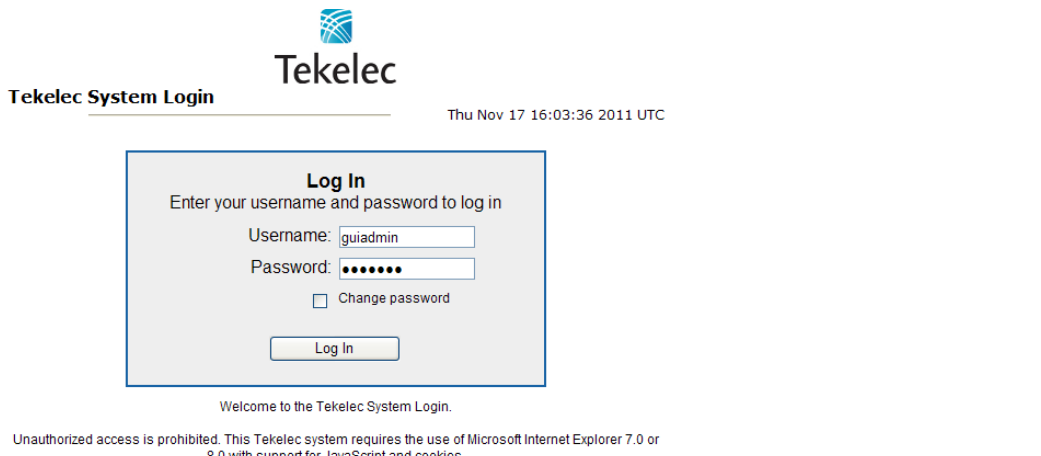
Requirements:

- **Procedure 12: Create Configuration for Remaining Servers** has been completed.

Check off (✓) each step as it is completed. Boxes have been provided for this purpose under each step number.

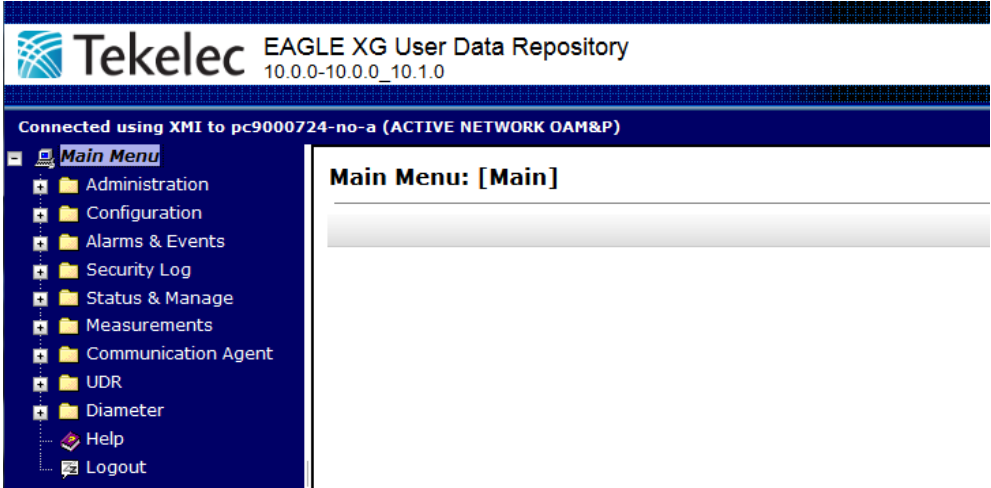
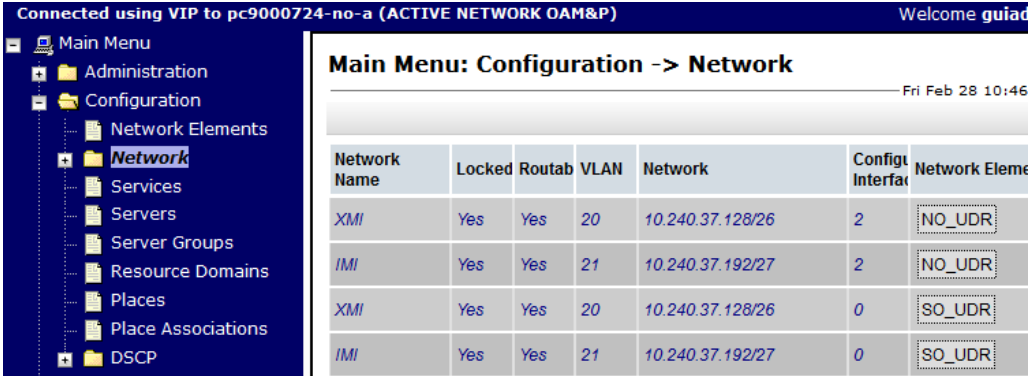
IF THIS PROCEDURE FAILS, CONTACT MY ORACLE SUPPORT (MOS) FOR ASSISTANCE.

Procedure 13: Configure XSI Networks


Step	Procedure	Result
<p>1.</p> <input type="checkbox"/>	<p>NOAMP Server A</p> <p>Launch an approved web browser and connect to the XMI IP address assigned to NOAMP Server A using https://</p> <p>NOTE: If presented with the “security certificate” warning screen shown to the right, choose the following option: “Continue to this website (not recommended)”.</p>	
<p>2.</p> <input type="checkbox"/>	<p>NOAMP Server A</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>	

OCUDR 10.0.1 Installation and Configuration Guide


Procedure 13: Configure XSI Networks

Step	Procedure	Result																																			
<p>3.</p> <input type="checkbox"/>	<p>NOAMP Server A</p> <p>The user should be presented the Main Menu as shown on the right.</p>																																				
<p>4.</p> <input type="checkbox"/>	<p>Select...</p> <p>Main Menu → Configuration → Network</p> <p>...as shown on the right.</p>	 <table border="1"> <thead> <tr> <th>Network Name</th> <th>Locked</th> <th>Routab</th> <th>VLAN</th> <th>Network</th> <th>Config Interfac</th> <th>Network Eleme</th> </tr> </thead> <tbody> <tr> <td>XMI</td> <td>Yes</td> <td>Yes</td> <td>20</td> <td>10.240.37.128/26</td> <td>2</td> <td>NO_UDR</td> </tr> <tr> <td>IMI</td> <td>Yes</td> <td>Yes</td> <td>21</td> <td>10.240.37.192/27</td> <td>2</td> <td>NO_UDR</td> </tr> <tr> <td>XMI</td> <td>Yes</td> <td>Yes</td> <td>20</td> <td>10.240.37.128/26</td> <td>0</td> <td>SO_UDR</td> </tr> <tr> <td>IMI</td> <td>Yes</td> <td>Yes</td> <td>21</td> <td>10.240.37.192/27</td> <td>0</td> <td>SO_UDR</td> </tr> </tbody> </table>	Network Name	Locked	Routab	VLAN	Network	Config Interfac	Network Eleme	XMI	Yes	Yes	20	10.240.37.128/26	2	NO_UDR	IMI	Yes	Yes	21	10.240.37.192/27	2	NO_UDR	XMI	Yes	Yes	20	10.240.37.128/26	0	SO_UDR	IMI	Yes	Yes	21	10.240.37.192/27	0	SO_UDR
Network Name	Locked	Routab	VLAN	Network	Config Interfac	Network Eleme																															
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Procedure 13: Configure XSI Networks

Step	Procedure	Result																											
<p>5.</p> <p><input type="checkbox"/></p>	<p>NOAMP Server A</p> <p>Add the XSI1 network</p>	<div style="text-align: center; margin-bottom: 10px;">  </div> <p>Click the Insert button.</p> <p>Output similar to that shown below may be observed.</p> <p>Insert Network</p> <table border="1"> <thead> <tr> <th>Field</th> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Network Name</td> <td>XSI1 *</td> <td>The name of this network. [Default = N/A. Range = Alphanumeric string up to 31 chars, starting with a letter.]</td> </tr> <tr> <td>Network Element</td> <td>- Unassigned - *</td> <td>The network element this network is a part of. If not specified, the network will be available to servers in all network elements.</td> </tr> <tr> <td>VLAN ID</td> <td>17 *</td> <td>The VLAN ID to use for this network. [Default = N/A. Range = 1-4094.]</td> </tr> <tr> <td>Network Address</td> <td>10.240.162.96 *</td> <td>The network address of this network. [Default = N/A. Range = Valid Network Address of the network in dotted decimal (IPv4) or colon hex (IPv6) format.]</td> </tr> <tr> <td>Netmask</td> <td>255.255.255.224 *</td> <td>Subnetting to apply to servers within this network. [Default = N/A. Range = Valid Netmask for the network in prefix length (IPv4 or IPv6) or dotted decimal (IPv4) format.]</td> </tr> <tr> <td>Router IP</td> <td>10.240.162.97</td> <td>The IP address of a router on this network. If this is a default network, this will be used as the gateway address of the default route on servers with interfaces on this network. If customer router monitoring is enabled, this address will be the one monitored.</td> </tr> <tr> <td>Default Network</td> <td><input type="radio"/> Yes <input checked="" type="radio"/> No</td> <td>A selection indicating whether this is the network with a default gateway.</td> </tr> <tr> <td>Routeable</td> <td><input checked="" type="radio"/> Yes <input type="radio"/> No</td> <td>Whether or not this network is routeable outside its network element. If it is not assigned to a network element, it is assumed to be possibly present in all network elements.</td> </tr> </tbody> </table> <div style="text-align: center; margin-top: 10px;"> <input type="button" value="Ok"/> <input type="button" value="Apply"/> <input type="button" value="Cancel"/> </div> <p>Enter all of the above fields for the XSI1 network according to the customer's network parameters. The default values for Network Element (Unassigned), Default Network (No) and Routeable (Yes) should be retained.</p> <p>If ComAgent Service is is configured to run on XSI1 in Section 8.11 Configure ComAgent Service on Signaling Network, this network would be used for MP ↔ NOAMP ComAgent Traffic.</p> <p>This network may or may not be used for MP Signaling Traffic.</p> <p>Note: Network names can be overloaded to support multiple subnets. If defining network for ComAgent Service, use same network name for Primary and DR Site.</p>	Field	Value	Description	Network Name	XSI1 *	The name of this network. [Default = N/A. Range = Alphanumeric string up to 31 chars, starting with a letter.]	Network Element	- Unassigned - *	The network element this network is a part of. If not specified, the network will be available to servers in all network elements.	VLAN ID	17 *	The VLAN ID to use for this network. [Default = N/A. Range = 1-4094.]	Network Address	10.240.162.96 *	The network address of this network. [Default = N/A. Range = Valid Network Address of the network in dotted decimal (IPv4) or colon hex (IPv6) format.]	Netmask	255.255.255.224 *	Subnetting to apply to servers within this network. [Default = N/A. Range = Valid Netmask for the network in prefix length (IPv4 or IPv6) or dotted decimal (IPv4) format.]	Router IP	10.240.162.97	The IP address of a router on this network. If this is a default network, this will be used as the gateway address of the default route on servers with interfaces on this network. If customer router monitoring is enabled, this address will be the one monitored.	Default Network	<input type="radio"/> Yes <input checked="" type="radio"/> No	A selection indicating whether this is the network with a default gateway.	Routeable	<input checked="" type="radio"/> Yes <input type="radio"/> No	Whether or not this network is routeable outside its network element. If it is not assigned to a network element, it is assumed to be possibly present in all network elements.
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<p>6.</p> <p><input type="checkbox"/></p>	<p>Repeat Step 5 of this procedure to Insert additional signaling networks (XSI2, etc) as required.</p>																												

Procedure 13: Configure XSI Networks

Step	Procedure	Result																																																														
7. <input type="checkbox"/>	NOAMP Server A New XSI network is displayed along with a success message.	<p>Main Menu: Configuration -> Network</p>  <table border="1"> <thead> <tr> <th></th> <th>Configure Interfaces</th> <th>Network</th> </tr> </thead> <tbody> <tr> <td>10.240.162.0/26</td> <td>2</td> <td>NO_UD</td> </tr> <tr> <td>IMI</td> <td>Yes</td> <td>Yes</td> </tr> <tr> <td>16</td> <td>10.240.162.64/27</td> <td>2</td> <td>NO_UD</td> </tr> <tr> <td>XMI</td> <td>Yes</td> <td>Yes</td> </tr> <tr> <td>15</td> <td>10.240.162.0/26</td> <td>6</td> <td>SO_UDI</td> </tr> <tr> <td>IMI</td> <td>Yes</td> <td>Yes</td> </tr> <tr> <td>16</td> <td>10.240.162.64/27</td> <td>6</td> <td>SO_UDI</td> </tr> <tr> <td>XMI</td> <td>Yes</td> <td>Yes</td> </tr> <tr> <td>23</td> <td>10.240.162.192/26</td> <td>2</td> <td>NO_UD</td> </tr> <tr> <td>IMI</td> <td>Yes</td> <td>Yes</td> </tr> <tr> <td>21</td> <td>10.240.162.128/27</td> <td>2</td> <td>NO_UD</td> </tr> <tr> <td>XMI</td> <td>Yes</td> <td>Yes</td> </tr> <tr> <td>23</td> <td>10.240.162.192/26</td> <td>6</td> <td>SO_UDI</td> </tr> <tr> <td>IMI</td> <td>Yes</td> <td>Yes</td> </tr> <tr> <td>21</td> <td>10.240.162.128/27</td> <td>6</td> <td>SO_UDI</td> </tr> <tr> <td>XSI1</td> <td>No</td> <td>Yes</td> </tr> <tr> <td>17</td> <td>10.240.162.96/27</td> <td>0</td> <td></td> </tr> </tbody> </table>		Configure Interfaces	Network	10.240.162.0/26	2	NO_UD	IMI	Yes	Yes	16	10.240.162.64/27	2	NO_UD	XMI	Yes	Yes	15	10.240.162.0/26	6	SO_UDI	IMI	Yes	Yes	16	10.240.162.64/27	6	SO_UDI	XMI	Yes	Yes	23	10.240.162.192/26	2	NO_UD	IMI	Yes	Yes	21	10.240.162.128/27	2	NO_UD	XMI	Yes	Yes	23	10.240.162.192/26	6	SO_UDI	IMI	Yes	Yes	21	10.240.162.128/27	6	SO_UDI	XSI1	No	Yes	17	10.240.162.96/27	0	
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8.4 OAM Pairing for the Primary NOAMP Servers (1st NOAMP 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.

This procedure creates active/standby pair for the NOAMP servers at the Primary Provisioning Site..

Requirements:

- **Procedure 12: Create Configuration for Remaining Servers** has been completed.

Check off (✓) each step as it is completed. Boxes have been provided for this purpose under each step number.

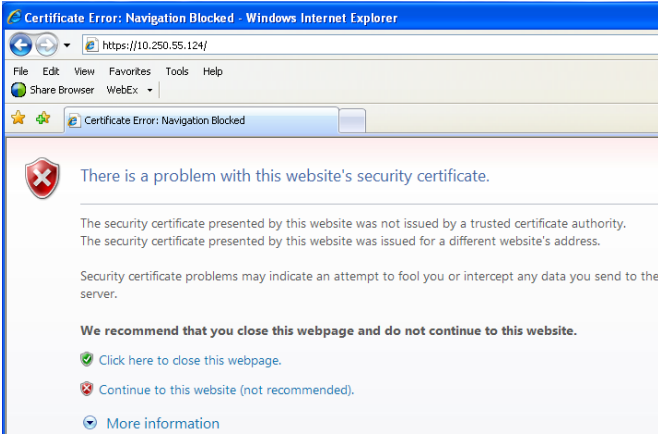
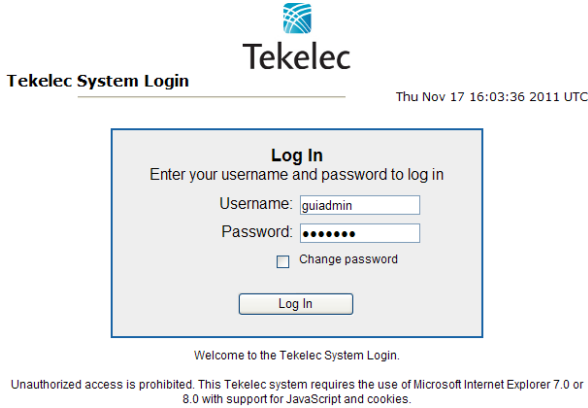
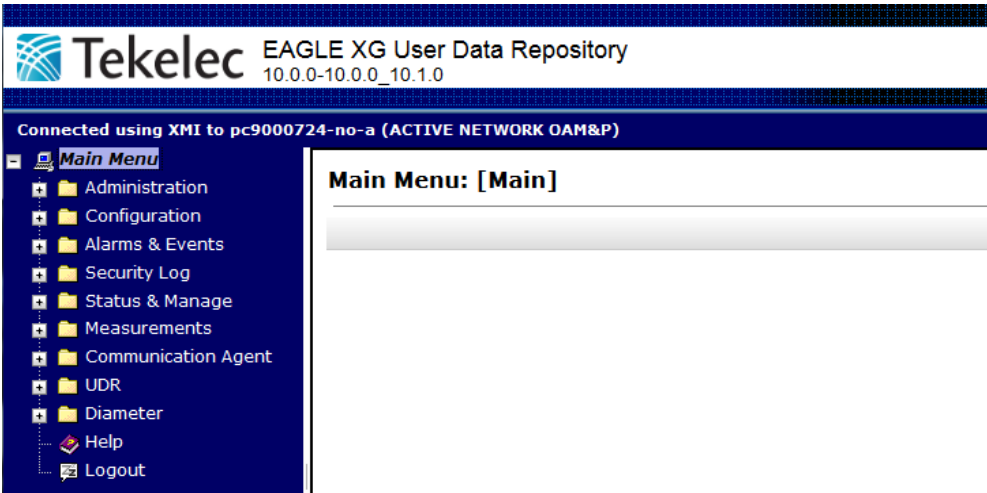
IF THIS PROCEDURE FAILS, CONTACT MY ORACLE SUPPORT (MOS) FOR ASSISTANCE.

Procedure 14: OAM Pairing for the Primary NOAMP Servers

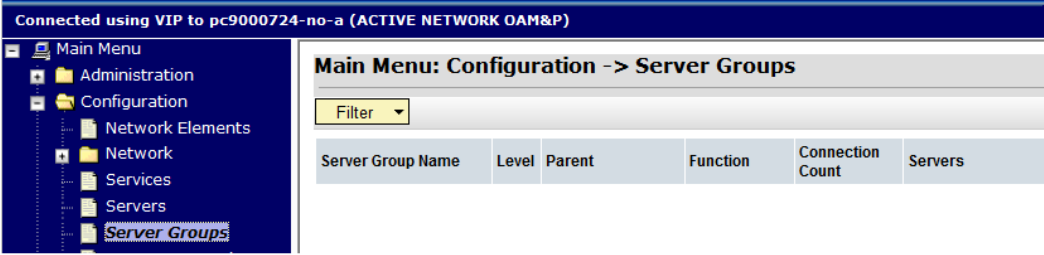
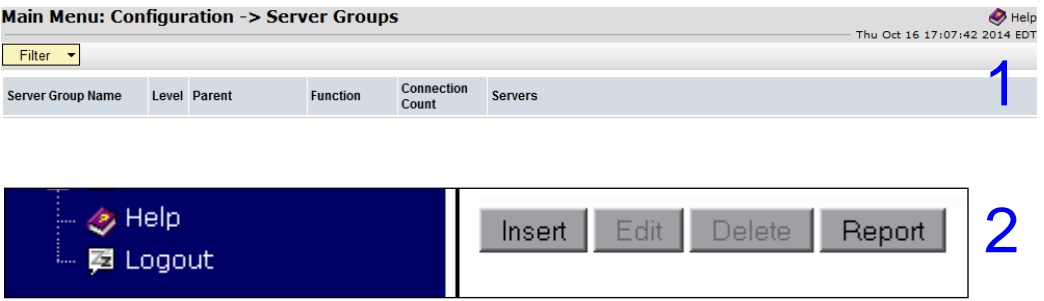
Step	Procedure	Result
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OCUDR 10.0.1 Installation and Configuration Guide

Procedure 14: OAM Pairing for the Primary NOAMP Servers

Step	Procedure	Result
<p>1.</p> <input type="checkbox"/>	<p>NOAMP Server A:</p> <p>Launch an approved web browser and connect to the XMI IP address assigned to NOAMP Server A using “https://”</p>	
<p>2.</p> <input type="checkbox"/>	<p>NOAMP Server A:</p> <p>The user should be presented the login screen shown on the right.</p> <p>Login to the GUI using the default user and password.</p>	
<p>3.</p> <input type="checkbox"/>	<p>NOAMP Server A:</p> <p>The user should be presented the Main Menu as shown on the right.</p>	

Procedure 14: OAM Pairing for the Primary NOAMP Servers

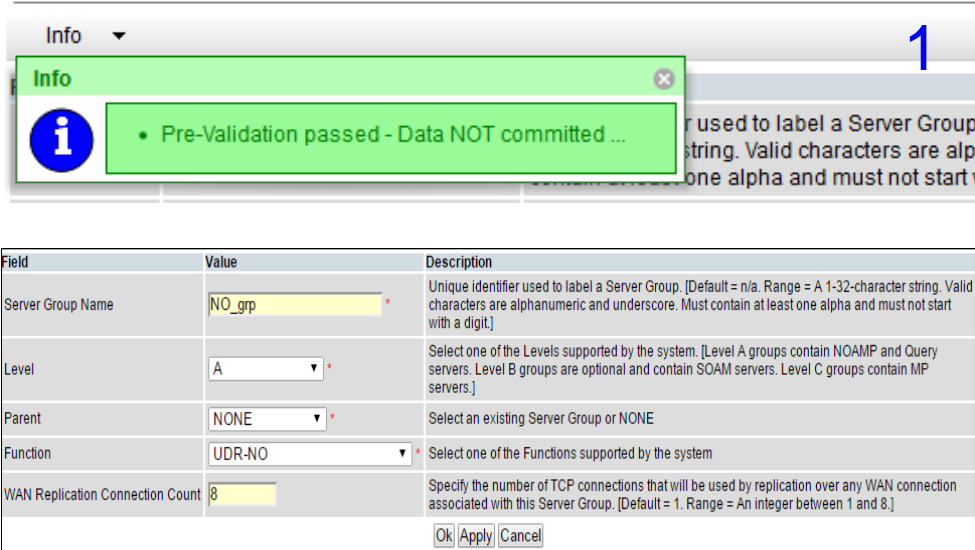
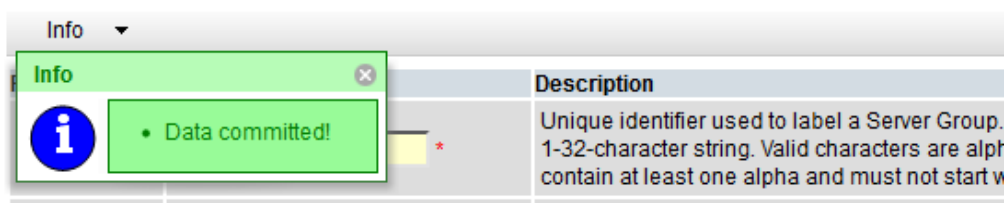
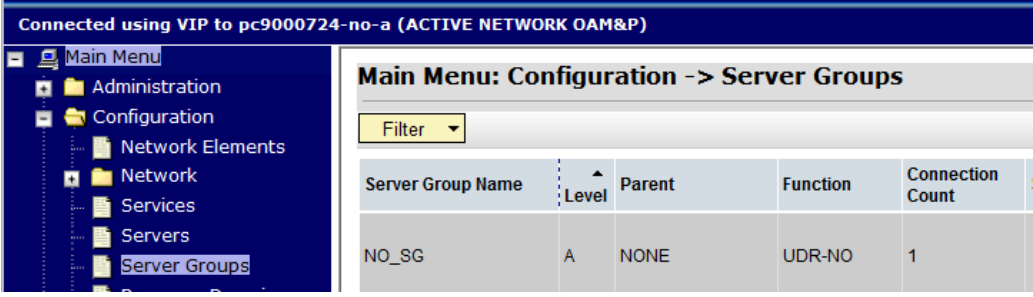
Step	Procedure	Result																		
<p>4.</p> <p><input type="checkbox"/></p>	<p>NOAMP Server A:</p> <p><i>Configuring Server Group</i></p> <p>Select...</p> <p>Main Menu → Configuration → Server Groups</p> <p>...as shown on the right.</p>																			
<p>5.</p> <p><input type="checkbox"/></p>	<p>NOAMP Server A:</p> <p>1) The user will be presented with the “Server Groups” configuration screen as shown on the right.</p> <p>2) Select the “Insert” dialogue button from the bottom left corner of the screen.</p> <p>NOTE: <i>The user may need to use the vertical scroll-bar in order to make the “Insert” dialogue button visible.</i></p>																			
<p>6.</p> <p><input type="checkbox"/></p>	<p>NOAMP Server A:</p> <p>The user will be presented with the “Server Groups [Insert]” screen as shown on the right.</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 label a Server Group. [Default = n/a. Range = A 1-32-character string. Valid characters are alphanumeric and underscore. Must contain at least one alpha and must not start with a digit.]</td> </tr> <tr> <td>Level</td> <td>- Select Level -</td> <td>Select one of the Levels supported by the system. [Level A groups contain NOAMP and Query servers. Level B groups are optional and contain SOAM servers. Level C groups contain MP servers.]</td> </tr> <tr> <td>Parent</td> <td>- Select Parent -</td> <td>Select an existing Server Group or NONE</td> </tr> <tr> <td>Function</td> <td>- Select Function -</td> <td>Select one of the Functions supported by the system</td> </tr> <tr> <td>WAN Replication Connection Count</td> <td><input type="text"/></td> <td>Specify the number of TCP connections that will be used by replication over any WAN connection associated with this Server Group. [Default = 1. Range = An integer between 1 and 8.]</td> </tr> </tbody> </table> <p style="text-align: right;">Ok Apply Cancel</p>	Field	Value	Description	Server Group Name	<input type="text"/>	Unique identifier used to label a Server Group. [Default = n/a. Range = A 1-32-character string. Valid characters are alphanumeric and underscore. Must contain at least one alpha and must not start with a digit.]	Level	- Select Level -	Select one of the Levels supported by the system. [Level A groups contain NOAMP and Query servers. Level B groups are optional and contain SOAM servers. Level C groups contain MP servers.]	Parent	- Select Parent -	Select an existing Server Group or NONE	Function	- Select Function -	Select one of the Functions supported by the system	WAN Replication Connection Count	<input type="text"/>	Specify the number of TCP connections that will be used by replication over any WAN connection associated with this Server Group. [Default = 1. Range = An integer between 1 and 8.]
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OCUDR 10.0.1 Installation and Configuration Guide

Procedure 14: OAM Pairing for the Primary NOAMP Servers

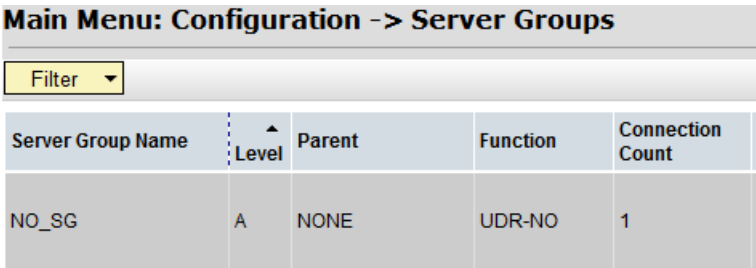
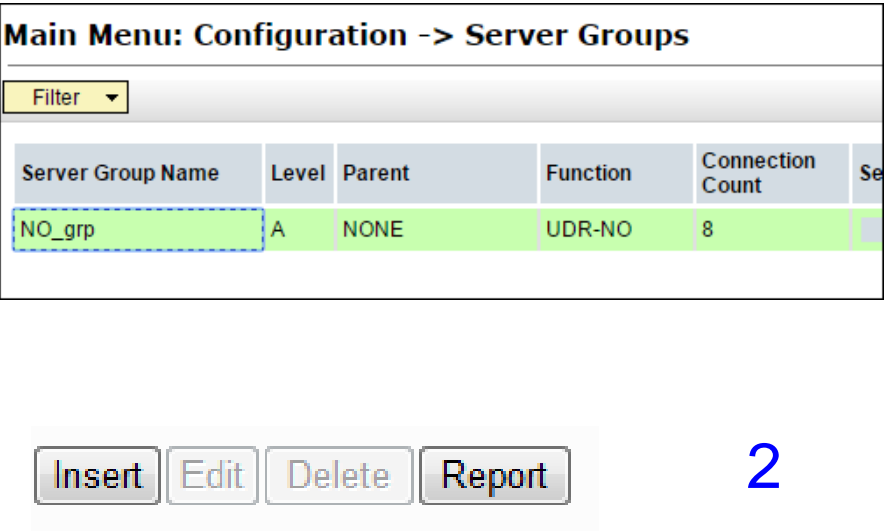
Step	Procedure	Result						
7. <input type="checkbox"/>	NOAMP Server A: Input the Server Group Name .	<table border="1"> <thead> <tr> <th>Field</th> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Server Group Name</td> <td>NO_grp *</td> <td>Unique identifier used to label a Server Group. string. Valid characters are alphanumeric and underscore and must not start with a digit.]</td> </tr> </tbody> </table>	Field	Value	Description	Server Group Name	NO_grp *	Unique identifier used to label a Server Group. string. Valid characters are alphanumeric and underscore and must not start with a digit.]
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8. <input type="checkbox"/>	NOAMP Server A: Select "A" on the "Level" pull-down menu.	<table border="1"> <tbody> <tr> <td>Level</td> <td>- Select Level - * - Select Level -</td> <td>Select one of the Levels supported by the system. Query servers. Level B groups are optional and do not contain MP servers.]</td> </tr> <tr> <td>Parent</td> <td>A * Select Parent</td> <td>Select an existing Server Group or NONE</td> </tr> </tbody> </table>	Level	- Select Level - * - Select Level -	Select one of the Levels supported by the system. Query servers. Level B groups are optional and do not contain MP servers.]	Parent	A * Select Parent	Select an existing Server Group or NONE
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9. <input type="checkbox"/>	NOAMP Server A: Select "None" on the "Parent" pull-down menu.	<table border="1"> <tbody> <tr> <td>Parent</td> <td>- Select Parent - * - Select Parent -</td> <td>Select an existing Server Group or NONE</td> </tr> <tr> <td>Function</td> <td>NONE *</td> <td>Select one of the Functions supported by</td> </tr> </tbody> </table>	Parent	- Select Parent - * - Select Parent -	Select an existing Server Group or NONE	Function	NONE *	Select one of the Functions supported by
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10. <input type="checkbox"/>	NOAMP Server A: Select "UDR-NO" on the "Function" pull-down menu.	<table border="1"> <tbody> <tr> <td>Function</td> <td>UDR-NO *</td> <td></td> </tr> </tbody> </table>	Function	UDR-NO *				
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11. <input type="checkbox"/>	NOAMP Server A: Input value "8" into "WAN Replication Connection Count" .	<table border="1"> <tbody> <tr> <td>WAN Replication Connection Count</td> <td>8</td> <td>Specify the number of connections associated with this group.</td> </tr> </tbody> </table>	WAN Replication Connection Count	8	Specify the number of connections associated with this group.			
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Procedure 14: OAM Pairing for the Primary NOAMP Servers

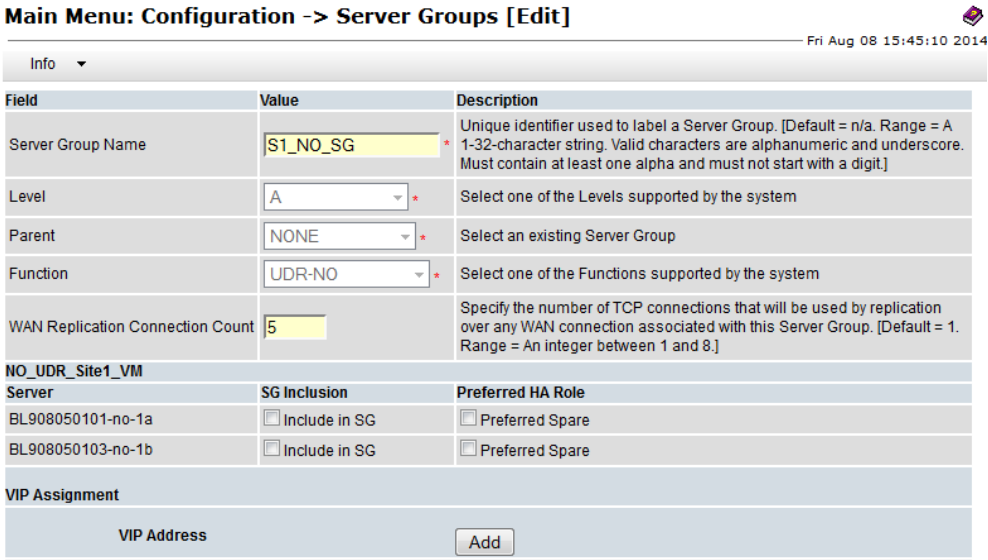
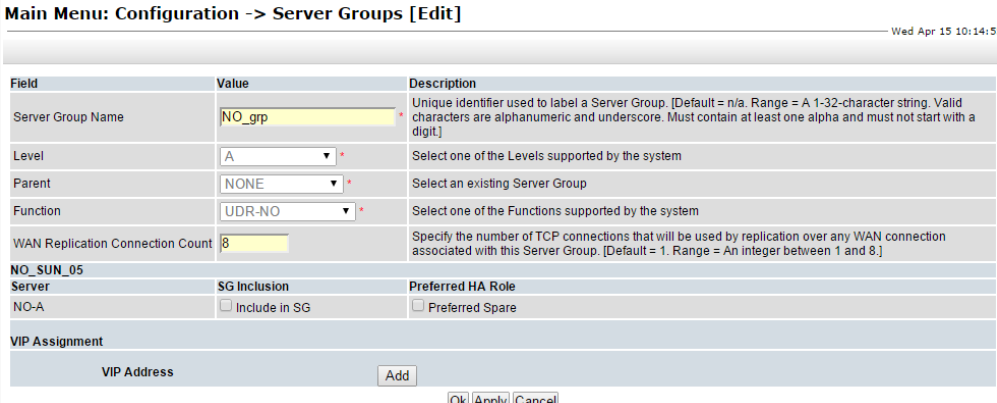
Step	Procedure	Result																		
<p>12.</p> <p><input type="checkbox"/></p>	<p>NOAMP Server A:</p> <p>1) The user should be presented with a banner information message stating “Pre-Validation passed”.</p> <p>2) Select the “Apply” dialogue button.</p>	<p>Main Menu: Configuration -> Server Groups [Insert]</p>  <p>Info</p> <p>Info</p> <ul style="list-style-type: none"> Pre-Validation passed - Data NOT committed ... <table border="1"> <thead> <tr> <th>Field</th> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Server Group Name</td> <td>NO_grp *</td> <td>Unique identifier used to label a Server Group. [Default = n/a. Range = A 1-32-character string. Valid characters are alphanumeric and underscore. Must contain at least one alpha and must not start with a digit.]</td> </tr> <tr> <td>Level</td> <td>A *</td> <td>Select one of the Levels supported by the system. [Level A groups contain NOAMP and Query servers. Level B groups are optional and contain SOAM servers. Level C groups contain MP servers.]</td> </tr> <tr> <td>Parent</td> <td>NONE *</td> <td>Select an existing Server Group or NONE</td> </tr> <tr> <td>Function</td> <td>UDR-NO *</td> <td>Select one of the Functions supported by the system</td> </tr> <tr> <td>WAN Replication Connection Count</td> <td>8</td> <td>Specify the number of TCP connections that will be used by replication over any WAN connection associated with this Server Group. [Default = 1. Range = An integer between 1 and 8.]</td> </tr> </tbody> </table> <p>Ok Apply Cancel</p>	Field	Value	Description	Server Group Name	NO_grp *	Unique identifier used to label a Server Group. [Default = n/a. Range = A 1-32-character string. Valid characters are alphanumeric and underscore. Must contain at least one alpha and must not start with a digit.]	Level	A *	Select one of the Levels supported by the system. [Level A groups contain NOAMP and Query servers. Level B groups are optional and contain SOAM servers. Level C groups contain MP servers.]	Parent	NONE *	Select an existing Server Group or NONE	Function	UDR-NO *	Select one of the Functions supported by the system	WAN Replication Connection Count	8	Specify the number of TCP connections that will be used by replication over any WAN connection associated with this Server Group. [Default = 1. Range = An integer between 1 and 8.]
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<p>13.</p> <p><input type="checkbox"/></p>	<p>NOAMP Server A:</p> <p>The user should be presented with a banner information message stating “Data committed”.</p>	<p>Main Menu: Configuration -> Server Groups [Insert]</p>  <p>Info</p> <p>Info</p> <ul style="list-style-type: none"> Data committed! <table border="1"> <thead> <tr> <th>Field</th> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Server Group Name</td> <td>NO_grp *</td> <td>Unique identifier used to label a Server Group. [Default = n/a. Range = A 1-32-character string. Valid characters are alphanumeric and underscore. Must contain at least one alpha and must not start with a digit.]</td> </tr> <tr> <td>Level</td> <td>A *</td> <td>Select one of the Levels supported by the system. [Level A groups contain NOAMP and Query servers. Level B groups are optional and contain SOAM servers. Level C groups contain MP servers.]</td> </tr> <tr> <td>Parent</td> <td>NONE *</td> <td>Select an existing Server Group or NONE</td> </tr> <tr> <td>Function</td> <td>UDR-NO *</td> <td>Select one of the Functions supported by the system</td> </tr> <tr> <td>WAN Replication Connection Count</td> <td>8</td> <td>Specify the number of TCP connections that will be used by replication over any WAN connection associated with this Server Group. [Default = 1. Range = An integer between 1 and 8.]</td> </tr> </tbody> </table>	Field	Value	Description	Server Group Name	NO_grp *	Unique identifier used to label a Server Group. [Default = n/a. Range = A 1-32-character string. Valid characters are alphanumeric and underscore. Must contain at least one alpha and must not start with a digit.]	Level	A *	Select one of the Levels supported by the system. [Level A groups contain NOAMP and Query servers. Level B groups are optional and contain SOAM servers. Level C groups contain MP servers.]	Parent	NONE *	Select an existing Server Group or NONE	Function	UDR-NO *	Select one of the Functions supported by the system	WAN Replication Connection Count	8	Specify the number of TCP connections that will be used by replication over any WAN connection associated with this Server Group. [Default = 1. Range = An integer between 1 and 8.]
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<p>14.</p> <p><input type="checkbox"/></p>	<p>NOAMP Server A:</p> <p>Select...</p> <p>Main Menu → Configuration → Server Groups</p> <p>...as shown on the right.</p>	 <p>Connected using VIP to pc9000724-no-a (ACTIVE NETWORK OAM&P)</p> <p>Main Menu</p> <ul style="list-style-type: none"> Administration Configuration Network Elements Network Services Servers Server Groups <p>Main Menu: Configuration -> Server Groups</p> <p>Filter</p> <table border="1"> <thead> <tr> <th>Server Group Name</th> <th>Level</th> <th>Parent</th> <th>Function</th> <th>Connection Count</th> </tr> </thead> <tbody> <tr> <td>NO_SG</td> <td>A</td> <td>NONE</td> <td>UDR-NO</td> <td>1</td> </tr> </tbody> </table>	Server Group Name	Level	Parent	Function	Connection Count	NO_SG	A	NONE	UDR-NO	1								
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OCUDR 10.0.1 Installation and Configuration Guide

Procedure 14: OAM Pairing for the Primary NOAMP Servers

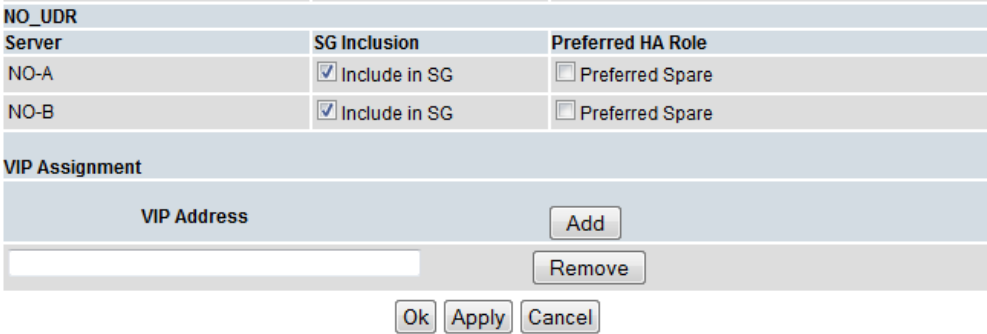
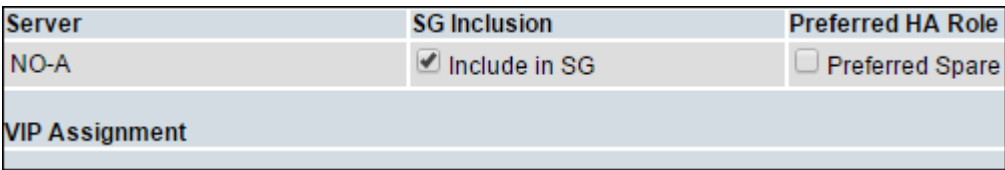
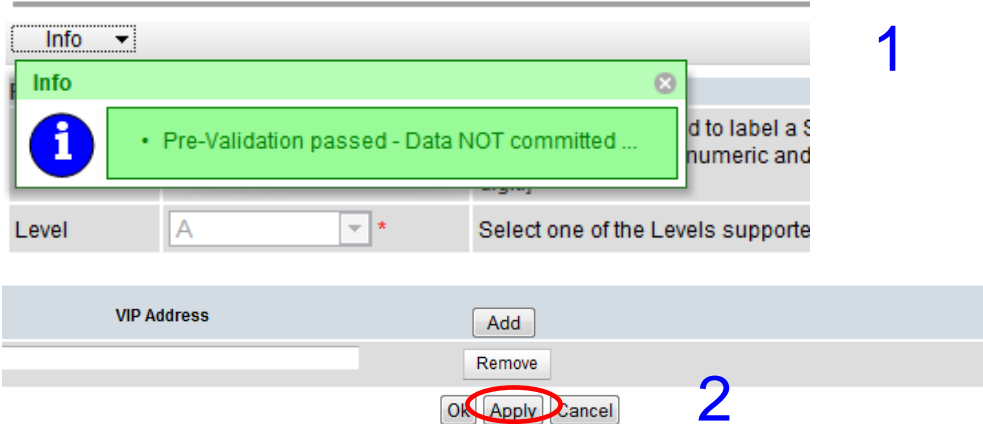
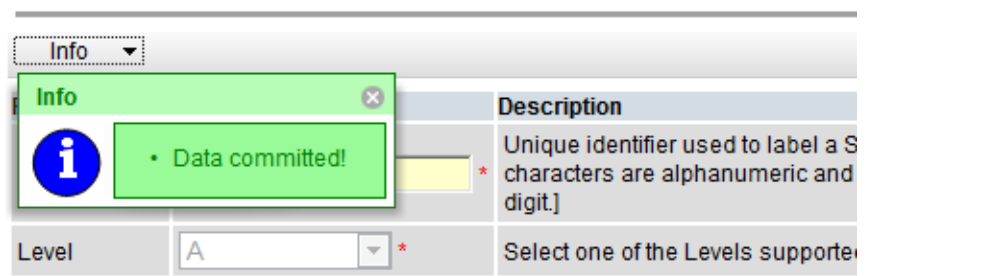
Step	Procedure	Result												
<p>15.</p> <input type="checkbox"/>	<p>NOAMP Server A:</p> <p>The Server Group entry added in Steps 6 - 13 should now appear on the “Server Groups” configuration screen as shown on the right.</p>	 <p>Main Menu: Configuration -> Server Groups</p> <p>Filter ▾</p> <table border="1"> <thead> <tr> <th>Server Group Name</th> <th>Level</th> <th>Parent</th> <th>Function</th> <th>Connection Count</th> </tr> </thead> <tbody> <tr> <td>NO_SG</td> <td>A</td> <td>NONE</td> <td>UDR-NO</td> <td>1</td> </tr> </tbody> </table>	Server Group Name	Level	Parent	Function	Connection Count	NO_SG	A	NONE	UDR-NO	1		
Server Group Name	Level	Parent	Function	Connection Count										
NO_SG	A	NONE	UDR-NO	1										
<p>16.</p> <input type="checkbox"/>	<p>NOAMP Server A:</p> <p>1) Select the Server Group entry added in Steps 6 - 13. The line entry should now be highlighted in GREEN.</p> <p>2) Select the “Edit” dialogue button from the bottom left corner of the screen.</p> <p>NOTE: <i>The user may need to use the vertical scroll-bar in order to make the “Edit” dialogue button visible.</i></p>	 <p>Main Menu: Configuration -> Server Groups</p> <p>Filter ▾</p> <table border="1"> <thead> <tr> <th>Server Group Name</th> <th>Level</th> <th>Parent</th> <th>Function</th> <th>Connection Count</th> <th>Se</th> </tr> </thead> <tbody> <tr> <td>NO_grp</td> <td>A</td> <td>NONE</td> <td>UDR-NO</td> <td>8</td> <td></td> </tr> </tbody> </table> <p>Insert Edit Delete Report</p> <p style="text-align: right; color: blue; font-size: 2em;">1</p> <p style="text-align: right; color: blue; font-size: 2em;">2</p>	Server Group Name	Level	Parent	Function	Connection Count	Se	NO_grp	A	NONE	UDR-NO	8	
Server Group Name	Level	Parent	Function	Connection Count	Se									
NO_grp	A	NONE	UDR-NO	8										

Procedure 14: OAM Pairing for the Primary NOAMP Servers

Step	Procedure	Result
<p>17.</p> <p><input type="checkbox"/></p>	<p>NOAMP Server A:</p> <p>The user will be presented with the “Server Groups [Edit]” screen as shown on the right.</p>	<p>Normal or Low Capacity Configuration:</p> <p>Main Menu: Configuration -> Server Groups [Edit]</p>  <p>Single Server Configuration:</p> 

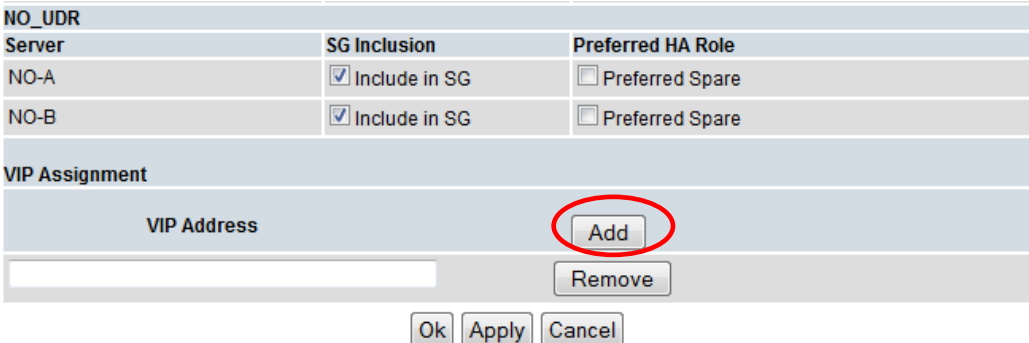
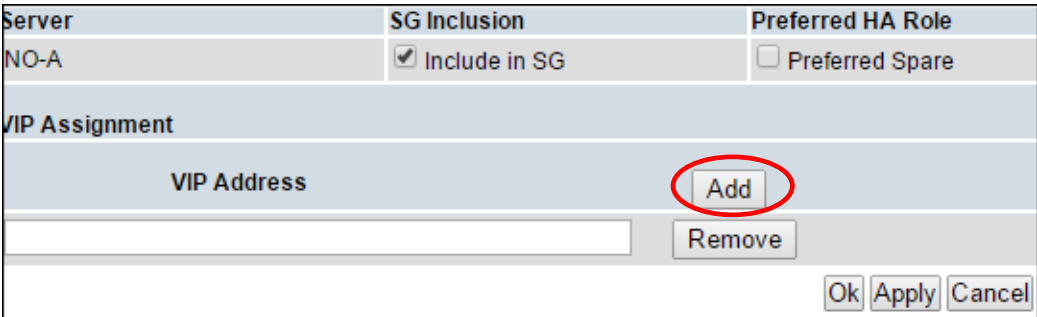

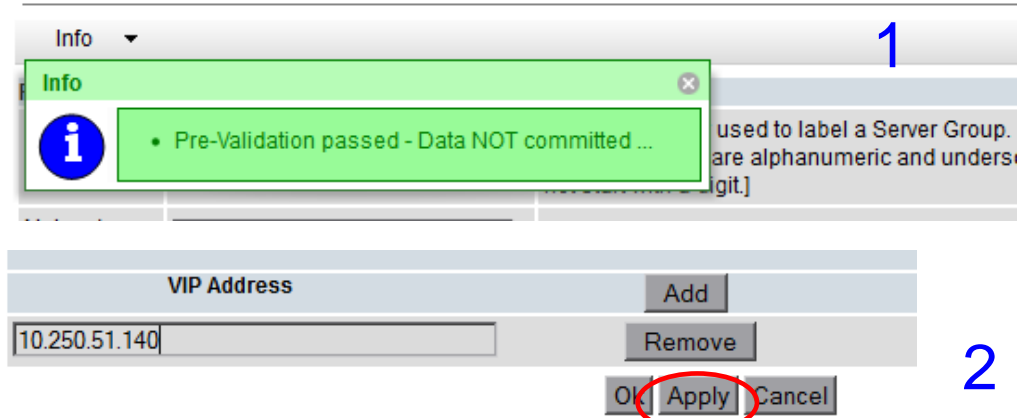
OCUDR 10.0.1 Installation and Configuration Guide

Procedure 14: OAM Pairing for the Primary NOAMP Servers

Step	Procedure	Result
<p>18.</p> <input type="checkbox"/>	<p>NOAMP Server A:</p> <p>Check the boxes to include the “A” server and the “B” server into the NOAMP Server Group.</p> <p>Note: For Single Server Installation, only NO-A will be displayed; therefore only one box will be selected.</p>	<p>Normal or Low Capacity Configuration:</p>  <p>Single Server Configuration:</p> 
<p>19.</p> <input type="checkbox"/>	<p>NOAMP Server A:</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 -> Server Groups [Edit]</p>  <p style="text-align: right; color: blue; font-size: 2em;">1</p> <p style="text-align: right; color: blue; font-size: 2em;">2</p>
<p>20.</p> <input type="checkbox"/>	<p>NOAMP Server A:</p> <p>The user should be presented with a banner information message stating “Data committed”.</p>	<p>Main Menu: Configuration -> Server Groups [Edit]</p>  <p style="text-align: right; color: blue; font-size: 2em;">2</p>

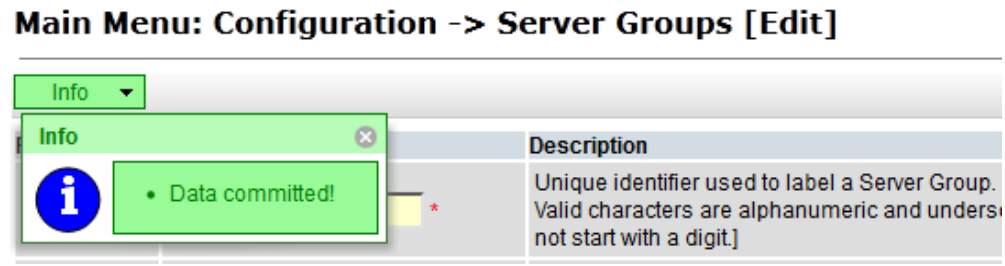
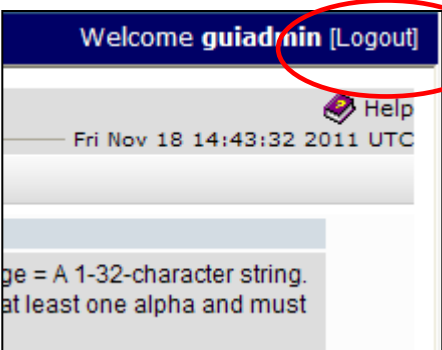
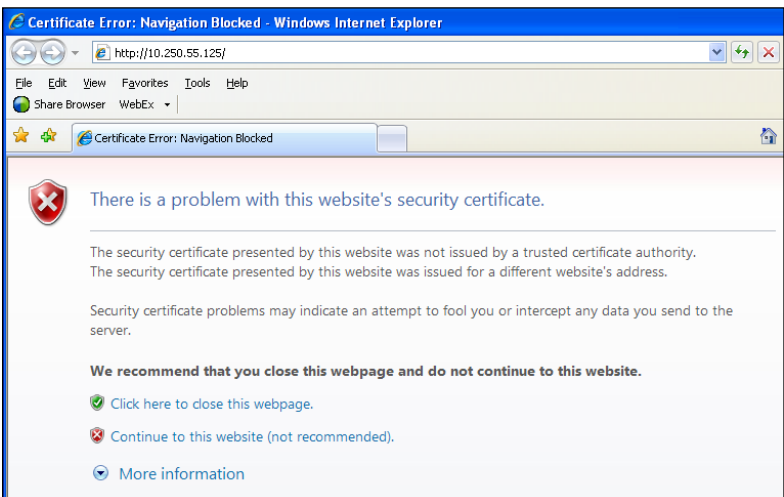
OCUDR 10.0.1 Installation and Configuration Guide

Procedure 14: OAM Pairing for the Primary NOAMP Servers

Step	Procedure	Result
<p>21.</p> <input type="checkbox"/>	<p>NOAMP Server A:</p> <p>Click the “Add” dialogue button for the VIP Address.</p>	<p>Normal or Low Capacity Configuration:</p>  <p>Single Server Configuration (Optional for Single Server):</p> 
<p>22.</p> <input type="checkbox"/>	<p>NOAMP Server A:</p> <p>Input the VIP Address</p>	
<p>23.</p> <input type="checkbox"/>	<p>NOAMP Server A:</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 -> Server Groups [Edit]</p> 

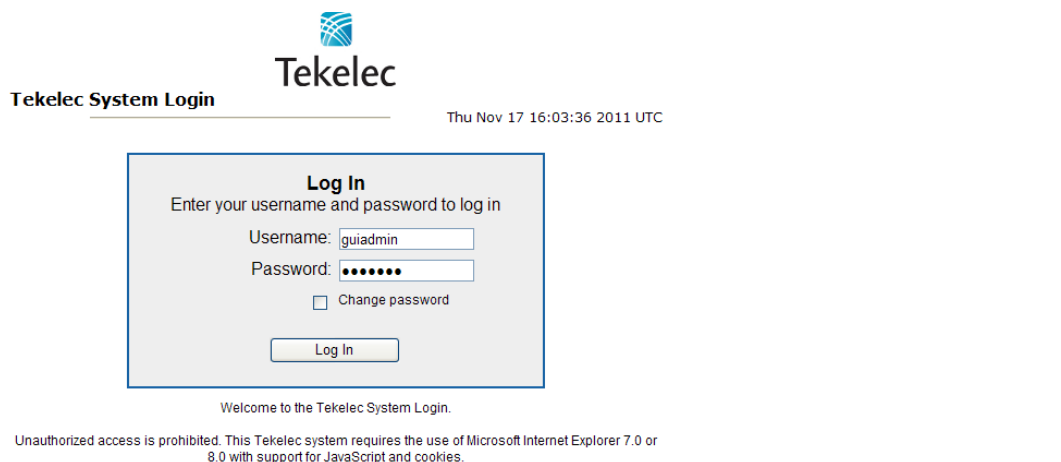
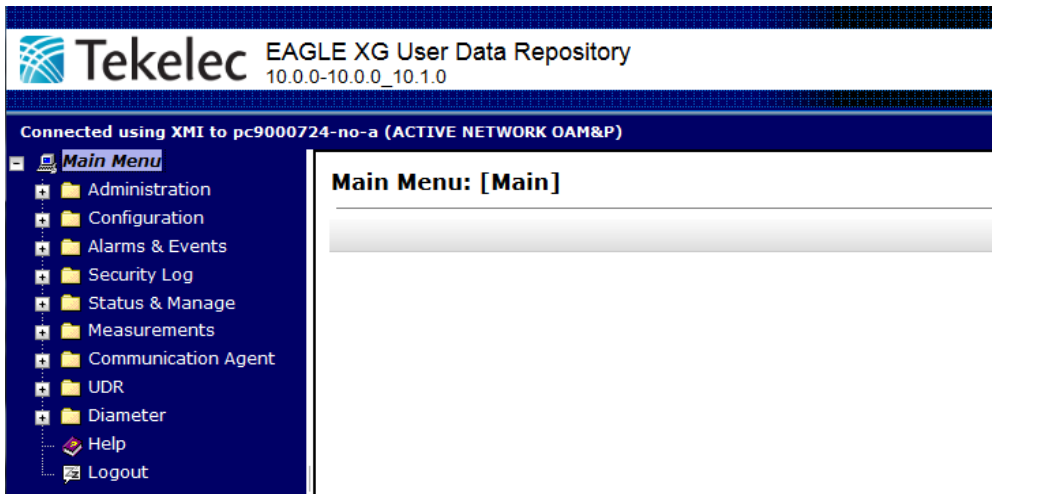
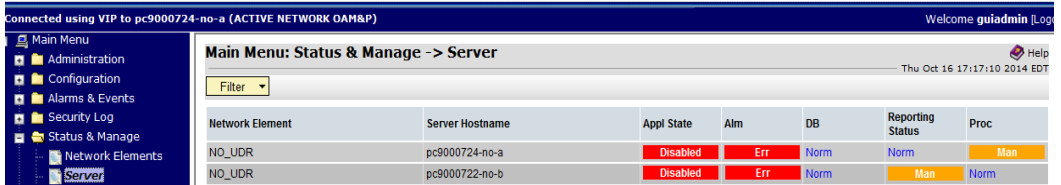

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Procedure 14: OAM Pairing for the Primary NOAMP Servers

Step	Procedure	Result
24. <input type="checkbox"/>	NOAMP Server A: The user should be presented with a banner information message stating “Data committed” .	 <p>Main Menu: Configuration -> Server Groups [Edit]</p> <p>Info</p> <p>Info</p> <p>• Data committed!</p> <p>Description</p> <p>Unique identifier used to label a Server Group. Valid characters are alphanumeric and underscores, not start with a digit.]</p>
25. <input type="checkbox"/>	NOAMP Server A: Click the “Logout” link on the OAM A server GUI.	 <p>Welcome guidadmin [Logout]</p> <p>Help</p> <p>Fri Nov 18 14:43:32 2011 UTC</p> <p>ge = A 1-32-character string. at least one alpha and must</p>
26. <input type="checkbox"/>	IMPORTANT: Wait at least 5 minutes before proceeding on to the next Step.	<ul style="list-style-type: none"> 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. Note: Single Server Configuration will not need to establish the master/slave relationship for High Availability (HA). <p>Allow a minimum of 5 minutes before continuing to the next Step.</p>
27. <input type="checkbox"/>	NOAMP VIP: Launch an approved web browser and connect to the XMI Virtual IP Address (VIP) assigned in STEP 22 to the OCUDR Server Group using “https://” .	 <p>Certificate Error: Navigation Blocked - Windows Internet Explorer</p> <p>http://10.250.55.125/</p> <p>File Edit View Favorites Tools Help</p> <p>Share Browser WebEx</p> <p>Certificate Error: Navigation Blocked</p> <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 trusted certificate authority. The security certificate presented by this website was issued for a different website's address.</p> <p>Security certificate problems may indicate an attempt to fool you or intercept any data you send to the server.</p> <p>We recommend that you close this webpage and do not continue to this website.</p> <p>Click here to close this webpage.</p> <p>Continue to this website (not recommended).</p> <p>More information</p>

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Procedure 14: OAM Pairing for the Primary NOAMP Servers

Step	Procedure	Result
<p>28.</p> <p><input type="checkbox"/></p>	<p>NOAMP VIP:</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>29.</p> <p><input type="checkbox"/></p>	<p>NOAMP VIP:</p> <p>The user should be presented the Main Menu as shown on the right.</p>	
<p>30.</p> <p><input type="checkbox"/></p>	<p>NOAMP VIP:</p> <p><i>Restarting the NOAMP Server Application</i></p> <p>Select...</p> <p>Main Menu → Status & Manage → Server</p> <p>...as shown on the right.</p>	<p>Normal or Low Capacity Configuration:</p>  <p>Single Server Configuration:</p> 

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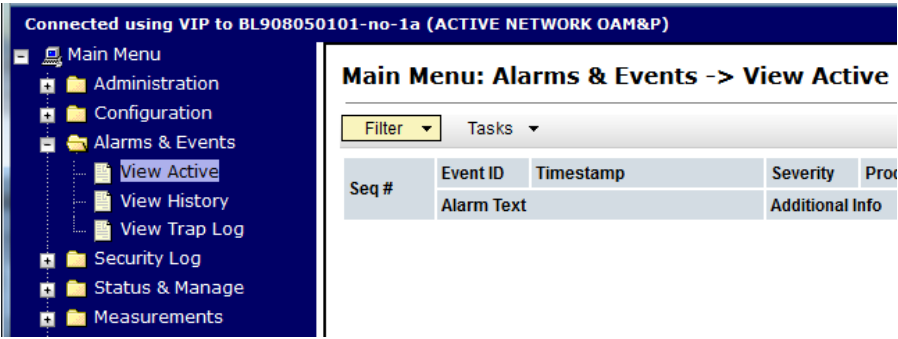
Procedure 14: OAM Pairing for the Primary NOAMP Servers

Step	Procedure	Result																																			
<p>31.</p> <input type="checkbox"/>	<p>NOAMP VIP:</p> <p>1) The “A” and “B” servers should now appear in the right panel. Note: For single server, only the “A” server will appear.</p> <p>2) Verify that the “DB” status shows “Norm” and the “Proc” status shows “Man” for one/both servers before proceeding to the next Step.</p>	<p>Normal or Low Capacity Configuration:</p> <table border="1"> <thead> <tr> <th>Network Element</th> <th>Server Hostname</th> <th>Appl State</th> <th>Alm</th> <th>DB</th> <th>Reporting Status</th> <th>Proc</th> </tr> </thead> <tbody> <tr> <td>NO_UDR</td> <td>pc9000722-no-b</td> <td>Disabled</td> <td>Err</td> <td>Norm</td> <td>Norm</td> <td>Man</td> </tr> <tr> <td>NO_UDR</td> <td>pc9000724-no-a</td> <td>Disabled</td> <td>Err</td> <td>Norm</td> <td>Norm</td> <td>Man</td> </tr> </tbody> </table> <p>Single Server Configuration:</p> <table border="1"> <thead> <tr> <th>Network Element</th> <th>Server Hostname</th> <th>Appl State</th> <th>Alm</th> <th>DB</th> <th>Reporting Status</th> <th>Proc</th> </tr> </thead> <tbody> <tr> <td>NO_UDR</td> <td>pc9000722-no a</td> <td>Disabled</td> <td>Err</td> <td>Norm</td> <td>Norm</td> <td>Man</td> </tr> </tbody> </table>	Network Element	Server Hostname	Appl State	Alm	DB	Reporting Status	Proc	NO_UDR	pc9000722-no-b	Disabled	Err	Norm	Norm	Man	NO_UDR	pc9000724-no-a	Disabled	Err	Norm	Norm	Man	Network Element	Server Hostname	Appl State	Alm	DB	Reporting Status	Proc	NO_UDR	pc9000722-no a	Disabled	Err	Norm	Norm	Man
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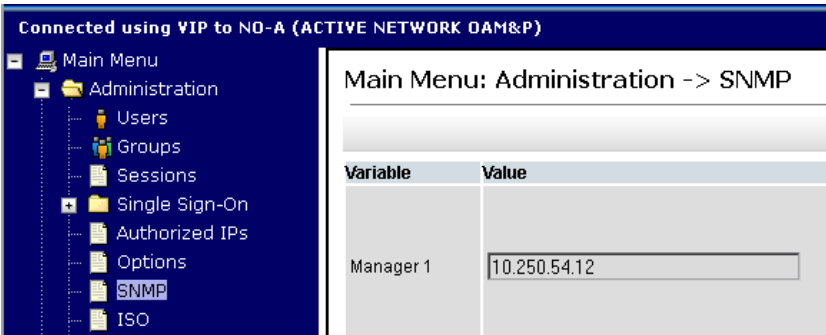
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<p>32.</p> <p><input type="checkbox"/></p>	<p>NOAMP VIP:</p> <p>1) Using the mouse, select NOAMP Server A. The line entry should now be highlighted in GREEN.</p> <p>2) Select the “Restart” dialogue button from the bottom left corner of the screen.</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 NOAMP Server A stating: “Successfully restarted application”.</p> <p>NOTE: The user may need to use the vertical scroll-bar in order to make the “Restart” dialogue button visible.</p>	<p>Normal or Low Capacity Configuration:</p> <p>Main Menu: Status & Manage -> Server</p> <p>1</p> <table border="1"> <thead> <tr> <th>Network Element</th> <th>Server Hostname</th> <th>Appl State</th> <th>Alm</th> <th>Repl</th> <th>Coll</th> <th>DB</th> <th>HA</th> <th>Proc</th> </tr> </thead> <tbody> <tr> <td>ETS3_NO_NE</td> <td>NO-A</td> <td>Disabled</td> <td>Err</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Err</td> <td>Man</td> </tr> <tr> <td>ETS3_NO_NE</td> <td>NO-B</td> <td>Disabled</td> <td>Warn</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Err</td> <td>Man</td> </tr> </tbody> </table> <p>Single Server Configuration:</p> <p>Main Menu: Status & Manage -> Server</p> <p>1</p> <p>2</p> <p>Are you sure you wish to restart application software on the following server(s)?</p> <p>NO-A</p> <p>3</p> <p>OK Cancel</p> <p>Main Menu: Status & Manage -> Server [Restart]</p> <p>4</p> <table border="1"> <thead> <tr> <th>Network Element</th> <th>Server Hostname</th> <th>Appl State</th> <th>Alm</th> <th>Repl</th> <th>Coll</th> <th>DB</th> <th>HA</th> <th>Proc</th> </tr> </thead> <tbody> <tr> <td>ETS3_NO_NE</td> <td>NO-A</td> <td>Disabled</td> <td>Err</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Err</td> <td>Man</td> </tr> <tr> <td>ETS3_NO_NE</td> <td>NO-B</td> <td>Disabled</td> <td>Warn</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Err</td> <td>Man</td> </tr> </tbody> </table>	Network Element	Server Hostname	Appl State	Alm	Repl	Coll	DB	HA	Proc	ETS3_NO_NE	NO-A	Disabled	Err	Norm	Norm	Norm	Err	Man	ETS3_NO_NE	NO-B	Disabled	Warn	Norm	Norm	Norm	Err	Man	Network Element	Server Hostname	Appl State	Alm	Repl	Coll	DB	HA	Proc	ETS3_NO_NE	NO-A	Disabled	Err	Norm	Norm	Norm	Err	Man	ETS3_NO_NE	NO-B	Disabled	Warn	Norm	Norm	Norm	Err	Man
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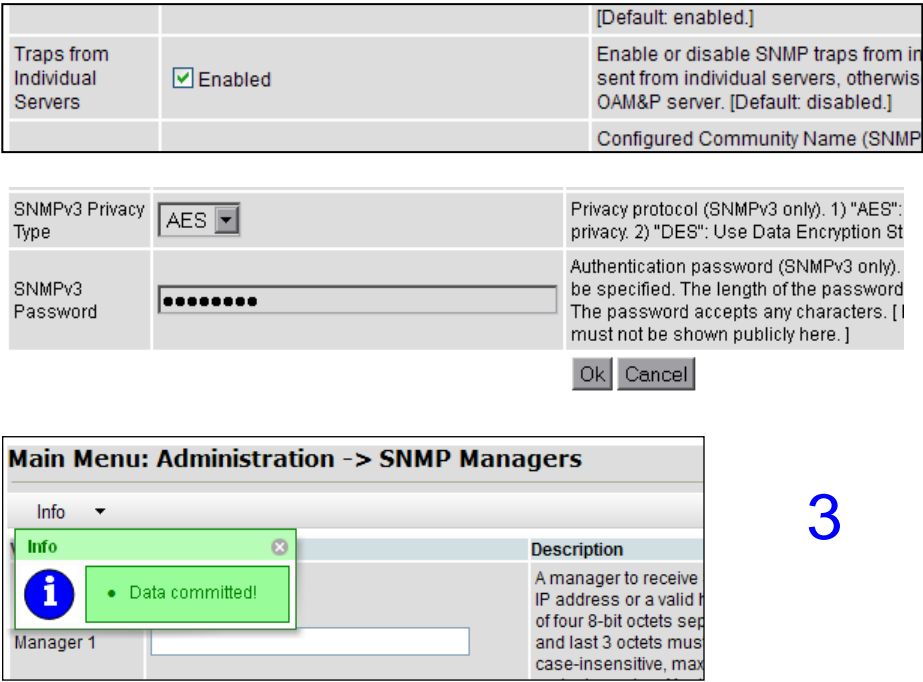
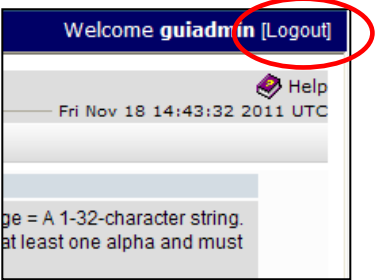
Step	Procedure	Result																																													
<p>33.</p> <p><input type="checkbox"/></p>	<p>NOAMP VIP:</p> <p>Verify that the “Appl State” now shows “Enabled” and that the “Repl, Coll, DB, HA & Proc” status columns all show “Norm” for NOAMP Server A before proceeding to the next Step.</p> <p>NOTE: If user chooses to refresh the Server status screen in advance of the default setting (15-30 sec.). This may be done by simply reselecting the “Status & Manage → Server” option from the Main menu on the left.</p>	<p>Normal or Low Capacity Configuration:</p> <table border="1"> <thead> <tr> <th>Network Element</th> <th>Server Hostname</th> <th>Appl State</th> <th>Alm</th> <th>Repl</th> <th>Coll</th> <th>DB</th> <th>HA</th> <th>Proc</th> </tr> </thead> <tbody> <tr> <td>ETS3_NO_NE</td> <td>NO-A</td> <td>Enabled</td> <td>Err</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>ETS3_NO_NE</td> <td>NO-B</td> <td>Disabled</td> <td>Warn</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Err</td> <td>Man</td> </tr> </tbody> </table> <p>Single Server Configuration:</p> <table border="1"> <thead> <tr> <th>Network Element</th> <th>Server Hostname</th> <th>Appl State</th> <th>Alm</th> <th>Repl</th> <th>Coll</th> <th>DB</th> <th>HA</th> <th>Proc</th> </tr> </thead> <tbody> <tr> <td>ETS3_NO_NE</td> <td>NO-A</td> <td>Enabled</td> <td>Err</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> </tbody> </table>	Network Element	Server Hostname	Appl State	Alm	Repl	Coll	DB	HA	Proc	ETS3_NO_NE	NO-A	Enabled	Err	Norm	Norm	Norm	Norm	Norm	ETS3_NO_NE	NO-B	Disabled	Warn	Norm	Norm	Norm	Err	Man	Network Element	Server Hostname	Appl State	Alm	Repl	Coll	DB	HA	Proc	ETS3_NO_NE	NO-A	Enabled	Err	Norm	Norm	Norm	Norm	Norm
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ETS3_NO_NE	NO-A	Enabled	Err	Norm	Norm	Norm	Norm	Norm																																							
<p>34.</p> <p><input type="checkbox"/></p>	<p>NOAMP VIP:</p> <p>Restart NOAMP Server B.</p>	<p>Note: Don’t perform this step for single server installations.</p> <p>Repeat steps 32 and 33 above to restart NOAMP Server B.</p>																																													
<p>35.</p> <p><input type="checkbox"/></p>	<p>NOAMP VIP:</p> <p>Verifying the NOAMP Server Alarm status</p> <p>Select...</p> <p>Main Menu → Alarms & Events → View Active</p> <p>...as shown on the right.</p>																																														

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Procedure 14: OAM Pairing for the Primary NOAMP Servers

Step	Procedure	Result																																										
<p>36.</p> <input type="checkbox"/>	<p>NOAMP VIP:</p> <p>Verify that the noted Event IDs are the only alarms present on the system at this time.</p>	<table border="1"> <tr> <td>102</td> <td>19820</td> <td>2014-04-03 16:59:37.583 EDT</td> <td>MAJOR</td> <td>CAF</td> <td>udrbe</td> <td>NO_UD</td> </tr> <tr> <td colspan="3">Communication Agent Routed Service Unavailable</td> <td colspan="4">GN_INFOWRN ^^ [43603:ComAgentStack.C:2792]</td> </tr> <tr> <td>784</td> <td>13027</td> <td>2014-04-03 16:53:28.091 EDT</td> <td>MAJOR</td> <td>Provisioning</td> <td>xsas</td> <td>NO_UD</td> </tr> <tr> <td colspan="3">No Remote XSAS Client Connections</td> <td colspan="4">GN_INFOWRN for information only [SoapListener.C: More...]</td> </tr> <tr> <td>777</td> <td>19820</td> <td>2014-04-03 16:53:23.841 EDT</td> <td>MAJOR</td> <td>CAF</td> <td>udrbe</td> <td>NO_UD</td> </tr> <tr> <td colspan="3">Communication Agent Routed Service Unavailable</td> <td colspan="4">GN_INFOWRN ^^ [48369:ComAgentStack.C:2792]</td> </tr> </table> <p>Verify that only the following Event IDs are the only alarms present:</p> <ul style="list-style-type: none"> - 13001 (<i>No Remote RAS Client Connections</i>) - 13027 (<i>"No Remote XSAS Client Connections"</i>) - 19820 (<i>"Communicaton Agent Routed Service Unavailable"</i>) <p>Note: <i>It may take a few minutes for residual process alarms to clear.</i></p>	102	19820	2014-04-03 16:59:37.583 EDT	MAJOR	CAF	udrbe	NO_UD	Communication Agent Routed Service Unavailable			GN_INFOWRN ^^ [43603:ComAgentStack.C:2792]				784	13027	2014-04-03 16:53:28.091 EDT	MAJOR	Provisioning	xsas	NO_UD	No Remote XSAS Client Connections			GN_INFOWRN for information only [SoapListener.C: More...]				777	19820	2014-04-03 16:53:23.841 EDT	MAJOR	CAF	udrbe	NO_UD	Communication Agent Routed Service Unavailable			GN_INFOWRN ^^ [48369:ComAgentStack.C:2792]			
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<p>37.</p> <input type="checkbox"/>	<p>NOAMP VIP:</p> <p>Configuring SNMP for Traps from Individual Servers</p> <p>Select...</p> <p>Main Menu → Administration → Remote Servers → SNMP Trapping ...as shown on the right.</p>	 <p>Connected using VIP to NO-A (ACTIVE NETWORK OAM&P)</p> <p>Main Menu: Administration -> SNMP</p> <table border="1"> <thead> <tr> <th>Variable</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>Manager 1</td> <td>10.250.54.12</td> </tr> </tbody> </table>	Variable	Value	Manager 1	10.250.54.12																																						
Variable	Value																																											
Manager 1	10.250.54.12																																											

Procedure 14: OAM Pairing for the Primary NOAMP Servers

Step	Procedure	Result
<p>38.</p> <p><input type="checkbox"/></p>	<p>NOAMP VIP:</p> <p>1) Using the cursor, place a “check” in the check box for “Traps from Individual Servers”.</p> <p>2) Click the “Apply” dialogue button located at the top right corner of the right panel.</p> <p>3) Verify that a banner message stating “Data committed” is received.</p>	 <p>[Default: enabled.]</p> <p>Traps from Individual Servers <input checked="" type="checkbox"/> Enabled Enable or disable SNMP traps from individual servers, otherwise sent from individual servers, otherwise OAM&P server. [Default: disabled.]</p> <p>Configured Community Name (SNMP)</p> <p>SNMPv3 Privacy Type AES Privacy protocol (SNMPv3 only). 1) "AES": privacy. 2) "DES": Use Data Encryption St</p> <p>SNMPv3 Password Authentication password (SNMPv3 only). be specified. The length of the password The password accepts any characters. [must not be shown publicly here.]</p> <p>Ok Cancel</p> <p>Main Menu: Administration -> SNMP Managers</p> <p>Info</p> <p>Info</p> <p>• Data committed!</p> <p>Manager 1</p> <p>Description</p> <p>A manager to receive IP address or a valid of four 8-bit octets sep and last 3 octets must case-insensitive, max</p>
<p>39.</p> <p><input type="checkbox"/></p>	<p>NOAMP VIP:</p> <p>Click the “Logout” link on the server GUI.</p>	 <p>Welcome guidm in [Logout]</p> <p>Help</p> <p>Fri Nov 18 14:43:32 2011 UTC</p> <p>ge = A 1-32-character string. at least one alpha and must</p>
<p>THIS PROCEDURE HAS BEEN COMPLETED</p>		

8.5 OAM Pairing for SOAM and DR sites (All SOAM and DR 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.

The steps in this procedure are for all SOAM servers and the DR NOAMP servers.

This procedure creates active/standby pair for the SOAM servers at any site or the DR NOAMP Servers.

Requirements:

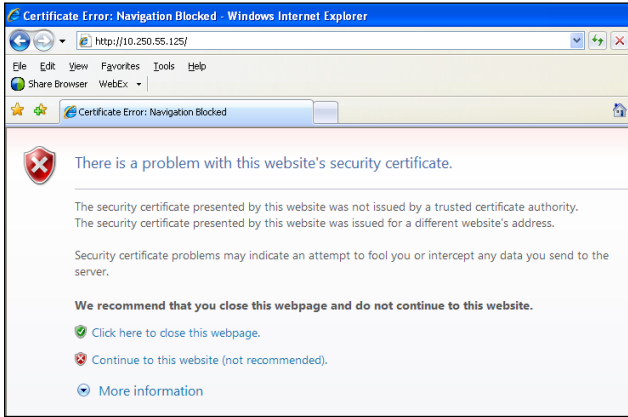
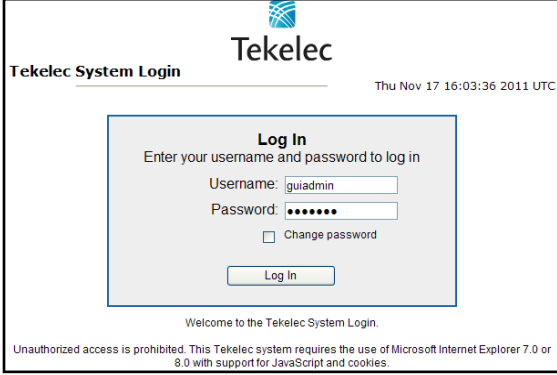
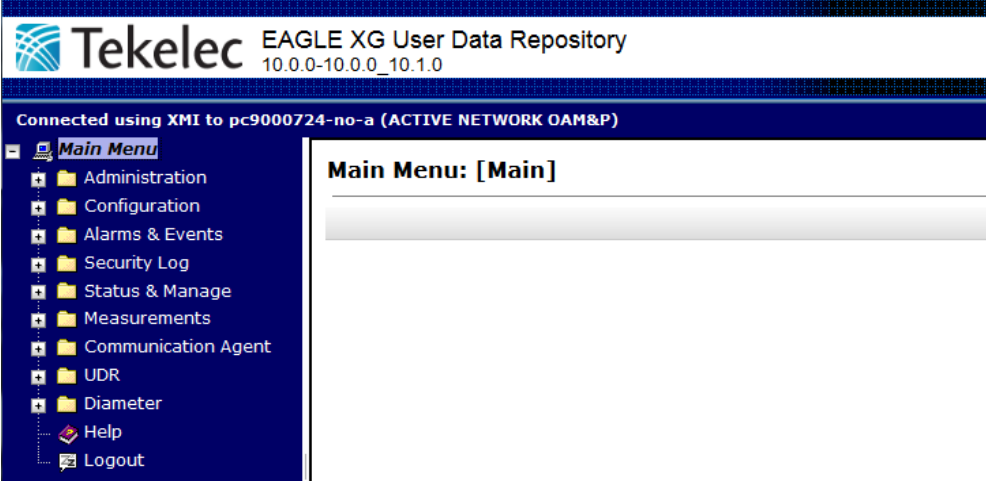
- **Procedure 12: Create Configuration for Remaining Servers** has been completed.
- **Procedure 14: OAM Pairing for the Primary NOAMP Servers** has been completed.

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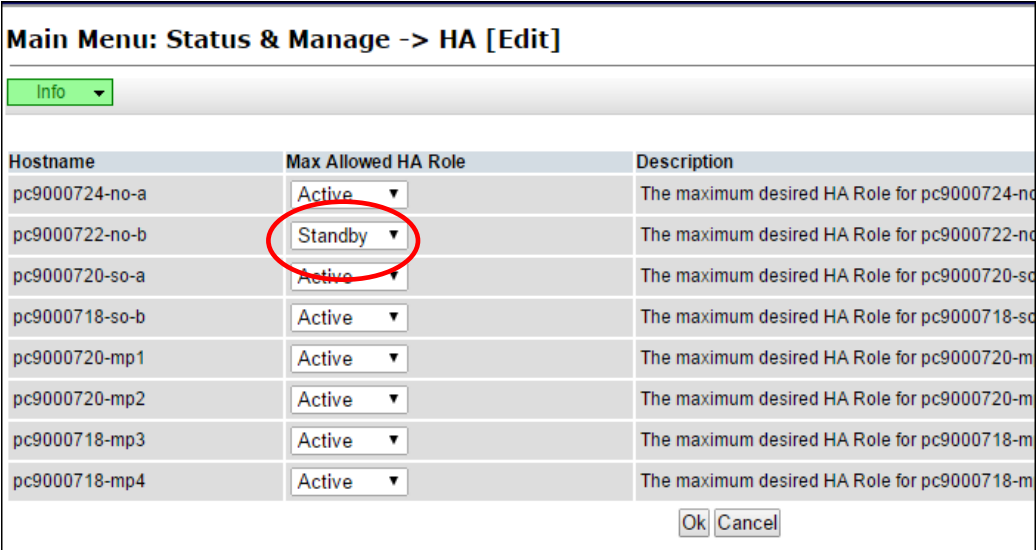
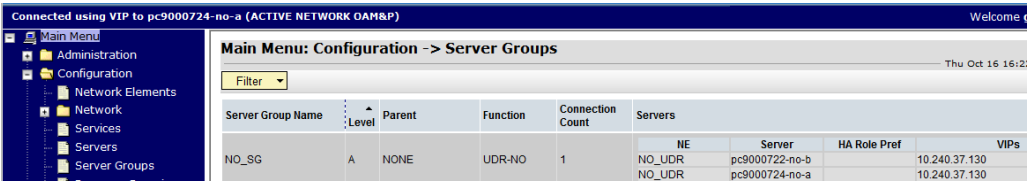
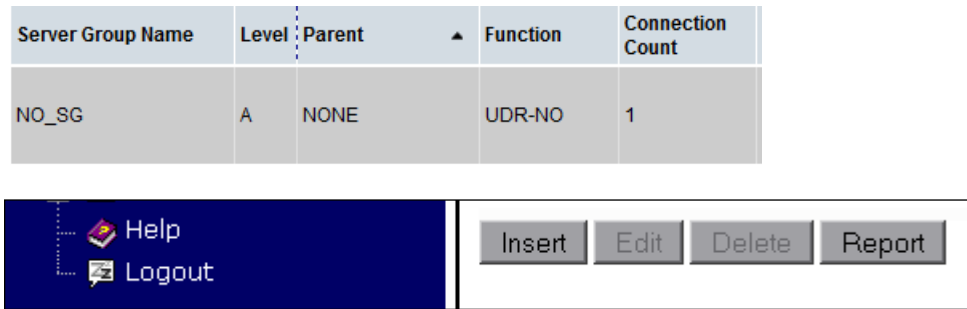
Check off (✓) each step as it is completed. Boxes have been provided for this purpose under each step number.

IF THIS PROCEDURE FAILS, CONTACT MY ORACLE SUPPORT (MOS) FOR ASSISTANCE.

Procedure 15: Pairing the OAM Servers for SOAM or DR NOAMP sites

Step	Procedure	Result
<p>1.</p> <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>Launch an approved web browser and connect to the XMI Virtual IP Address (VIP) of the Active NOAMP site using "https://"</p>	
<p>2.</p> <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>The user should be presented the login screen shown on the right.</p> <p>Login to the GUI using the default user and password.</p>	
<p>3.</p> <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>The user should be presented the Main Menu as shown on the right.</p>	

Procedure 15: Pairing the OAM Servers for SOAM or DR NOAMP sites

Step	Procedure	Result																											
<p>4.</p> <p><input type="checkbox"/></p>	<p>Active NOAMP VIP:</p> <p>For Primary NOAMP Standby server only: Mark the server 'forced standby'</p> <p>Main Menu → Status & Manage → HA</p> <p>Find the row for the Primary NOAMP Standby server and change "Max Allowed HA Role" to "Standby".</p>	<p>** Note: Don't perform this step for single server installations.</p>  <p>Main Menu: Status & Manage -> HA [Edit]</p> <p>Info</p> <table border="1"> <thead> <tr> <th>Hostname</th> <th>Max Allowed HA Role</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>pc9000724-no-a</td> <td>Active</td> <td>The maximum desired HA Role for pc9000724-no-a</td> </tr> <tr> <td>pc9000722-no-b</td> <td>Standby</td> <td>The maximum desired HA Role for pc9000722-no-b</td> </tr> <tr> <td>pc9000720-so-a</td> <td>Active</td> <td>The maximum desired HA Role for pc9000720-so-a</td> </tr> <tr> <td>pc9000718-so-b</td> <td>Active</td> <td>The maximum desired HA Role for pc9000718-so-b</td> </tr> <tr> <td>pc9000720-mp1</td> <td>Active</td> <td>The maximum desired HA Role for pc9000720-mp1</td> </tr> <tr> <td>pc9000720-mp2</td> <td>Active</td> <td>The maximum desired HA Role for pc9000720-mp2</td> </tr> <tr> <td>pc9000718-mp3</td> <td>Active</td> <td>The maximum desired HA Role for pc9000718-mp3</td> </tr> <tr> <td>pc9000718-mp4</td> <td>Active</td> <td>The maximum desired HA Role for pc9000718-mp4</td> </tr> </tbody> </table> <p>Ok Cancel</p>	Hostname	Max Allowed HA Role	Description	pc9000724-no-a	Active	The maximum desired HA Role for pc9000724-no-a	pc9000722-no-b	Standby	The maximum desired HA Role for pc9000722-no-b	pc9000720-so-a	Active	The maximum desired HA Role for pc9000720-so-a	pc9000718-so-b	Active	The maximum desired HA Role for pc9000718-so-b	pc9000720-mp1	Active	The maximum desired HA Role for pc9000720-mp1	pc9000720-mp2	Active	The maximum desired HA Role for pc9000720-mp2	pc9000718-mp3	Active	The maximum desired HA Role for pc9000718-mp3	pc9000718-mp4	Active	The maximum desired HA Role for pc9000718-mp4
Hostname	Max Allowed HA Role	Description																											
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pc9000718-mp3	Active	The maximum desired HA Role for pc9000718-mp3																											
pc9000718-mp4	Active	The maximum desired HA Role for pc9000718-mp4																											
<p>5.</p> <p><input type="checkbox"/></p>	<p>Active NOAMP VIP:</p> <p>Select...</p> <p>Main Menu → Configuration → Server Groups</p> <p>...as shown on the right.</p>	 <p>Connected using VIP to pc9000724-no-a (ACTIVE NETWORK OAM&P) Welcome</p> <p>Main Menu: Configuration -> Server Groups Thu Oct 16 16:2</p> <table border="1"> <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>NO_SG</td> <td>A</td> <td>NONE</td> <td>UDR-NO</td> <td>1</td> <td> <table border="1"> <thead> <tr> <th>NE</th> <th>Server</th> <th>HA Role Pref</th> <th>VIPs</th> </tr> </thead> <tbody> <tr> <td>NO_UDR</td> <td>pc9000722-no-b</td> <td></td> <td>10.240.37.130</td> </tr> <tr> <td>NO_UDR</td> <td>pc9000724-no-a</td> <td></td> <td>10.240.37.130</td> </tr> </tbody> </table> </td> </tr> </tbody> </table>	Server Group Name	Level	Parent	Function	Connection Count	Servers	NO_SG	A	NONE	UDR-NO	1	<table border="1"> <thead> <tr> <th>NE</th> <th>Server</th> <th>HA Role Pref</th> <th>VIPs</th> </tr> </thead> <tbody> <tr> <td>NO_UDR</td> <td>pc9000722-no-b</td> <td></td> <td>10.240.37.130</td> </tr> <tr> <td>NO_UDR</td> <td>pc9000724-no-a</td> <td></td> <td>10.240.37.130</td> </tr> </tbody> </table>	NE	Server	HA Role Pref	VIPs	NO_UDR	pc9000722-no-b		10.240.37.130	NO_UDR	pc9000724-no-a		10.240.37.130			
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<p>6.</p> <p><input type="checkbox"/></p>	<p>Active NOAMP VIP:</p> <p>1) The user will be presented with the "Server Groups" configuration screen as shown on the right.</p> <p>2) Select the "Insert" dialogue button from the bottom left corner of the screen.</p> <p>NOTE: The user may need to use the vertical scroll-bar in order to make the "Insert" dialogue button visible.</p>	 <table border="1"> <thead> <tr> <th>Server Group Name</th> <th>Level</th> <th>Parent</th> <th>Function</th> <th>Connection Count</th> </tr> </thead> <tbody> <tr> <td>NO_SG</td> <td>A</td> <td>NONE</td> <td>UDR-NO</td> <td>1</td> </tr> </tbody> </table> <p>1</p> <p>2</p>	Server Group Name	Level	Parent	Function	Connection Count	NO_SG	A	NONE	UDR-NO	1																	
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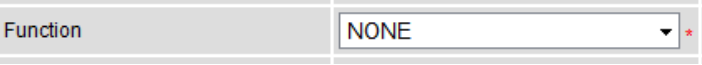

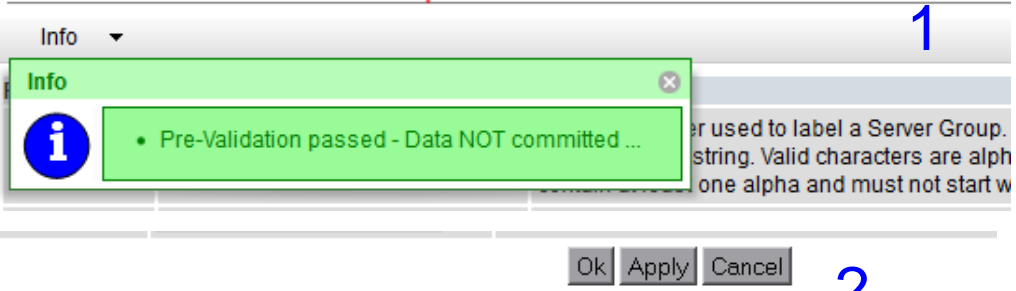

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Procedure 15: Pairing the OAM Servers for SOAM or DR NOAMP sites

Step	Procedure	Result																		
7. <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>Configuring the SOAM or DR NOAMP Server Group</p> <p>The user will be presented with the “Server Groups [Insert]” screen as shown on the right.</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 label a Server Group. [Default = n/a. Range = A 1-32-character string. Valid characters are alphanumeric and underscore. Must contain at least one alpha and must not start with a digit.]</td> </tr> <tr> <td>Level</td> <td>- Select Level - *</td> <td>Select one of the Levels supported by the system. [Level A groups contain NOAMP and Query servers. Level B groups are optional and contain SOAM servers. Level C groups contain MP servers.]</td> </tr> <tr> <td>Parent</td> <td>- Select Parent - *</td> <td>Select an existing Server Group or NONE</td> </tr> <tr> <td>Function</td> <td>- Select Function - *</td> <td>Select one of the Functions supported by the system</td> </tr> <tr> <td>WAN Replication Connection Count</td> <td><input type="text"/></td> <td>Specify the number of TCP connections that will be used by replication over any WAN connection associated with this Server Group. [Default = 1. Range = An integer between 1 and 8.]</td> </tr> </tbody> </table> <p style="text-align: right;"><input type="button" value="Ok"/> <input type="button" value="Apply"/> <input type="button" value="Cancel"/></p>	Field	Value	Description	Server Group Name	<input type="text"/>	Unique identifier used to label a Server Group. [Default = n/a. Range = A 1-32-character string. Valid characters are alphanumeric and underscore. Must contain at least one alpha and must not start with a digit.]	Level	- Select Level - *	Select one of the Levels supported by the system. [Level A groups contain NOAMP and Query servers. Level B groups are optional and contain SOAM servers. Level C groups contain MP servers.]	Parent	- Select Parent - *	Select an existing Server Group or NONE	Function	- Select Function - *	Select one of the Functions supported by the system	WAN Replication Connection Count	<input type="text"/>	Specify the number of TCP connections that will be used by replication over any WAN connection associated with this Server Group. [Default = 1. Range = An integer between 1 and 8.]
Field	Value	Description																		
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WAN Replication Connection Count	<input type="text"/>	Specify the number of TCP connections that will be used by replication over any WAN connection associated with this Server Group. [Default = 1. Range = An integer between 1 and 8.]																		
8. <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>Input the Server Group Name.</p>	<table border="1"> <thead> <tr> <th>Field</th> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Server Group Name</td> <td>SO_grp *</td> <td>Unique identifier used to label a Server Group. 1-32-character string. Valid characters are alph contain at least one alpha and must not start w</td> </tr> </tbody> </table>	Field	Value	Description	Server Group Name	SO_grp *	Unique identifier used to label a Server Group. 1-32-character string. Valid characters are alph contain at least one alpha and must not start w												
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Server Group Name	SO_grp *	Unique identifier used to label a Server Group. 1-32-character string. Valid characters are alph contain at least one alpha and must not start w																		
9. <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>Assign the correct group Level.</p>	<table border="1"> <tbody> <tr> <td>Level</td> <td>- Select Level - * - Select Level -</td> <td>Select one of the Levels supported by the servers. Level B groups are optional and servers.]</td> </tr> <tr> <td>Parent</td> <td>B C *</td> <td>Select an existing Server Group or NONE</td> </tr> </tbody> </table> <p>Note: Use these setting for group level:</p> <ul style="list-style-type: none"> For DR NOAMP server group: select “A” on the “Level” pull-down menu.. For SOAM server group: select “B” on the “Level” pull-down menu.. 	Level	- Select Level - * - Select Level -	Select one of the Levels supported by the servers. Level B groups are optional and servers.]	Parent	B C *	Select an existing Server Group or NONE												
Level	- Select Level - * - Select Level -	Select one of the Levels supported by the servers. Level B groups are optional and servers.]																		
Parent	B C *	Select an existing Server Group or NONE																		
10. <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>Assign the correct Parent.</p>	<table border="1"> <tbody> <tr> <td>Parent</td> <td>NO_grp *</td> <td>Select an existing Server Group or NONE</td> </tr> </tbody> </table> <p>Note: Use these setting for parent:</p> <ul style="list-style-type: none"> For DR NOAMP server group: select “NONE” on the “Parent” pull-down menu. For SOAM server group: select the 1st NOAMP Site’s server group, as entered in Procedure 15, Step 7 on the “Parent” pull-down menu. 	Parent	NO_grp *	Select an existing Server Group or NONE															
Parent	NO_grp *	Select an existing Server Group or NONE																		

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Procedure 15: Pairing the OAM Servers for SOAM or DR NOAMP sites

Step	Procedure	Result
11. <input type="checkbox"/>	Active NOAMP VIP: Assign the correct Function .	 <p>Note: Use these setting for function:</p> <ul style="list-style-type: none"> For DR NOAMP server group: select “UDR-NO” on the “Function” pull-down menu. For SOAM server group: select “NONE” on the “Function” pull-down menu.
12. <input type="checkbox"/>	Active NOAMP VIP: <i>For DR NOAMP only:</i> Input value “ 8 ” into “ WAN Replication Connection Count ”.	
13. <input type="checkbox"/>	Active NOAMP VIP: 1) The user should be presented with a banner information message stating “ Pre-Validation passed ”. 2) Select the “ Apply ” dialogue button.	<p>Main Menu: Configuration -> Server Groups [Insert]</p>  <p>1</p> <p>2</p>
14. <input type="checkbox"/>	Active NOAMP VIP: The user should be presented with a banner information message stating “ Data committed ”.	<p>Main Menu: Configuration -> Server Groups [Insert]</p> 

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Procedure 15: Pairing the OAM Servers for SOAM or DR NOAMP sites

Step	Procedure	Result
15. <input type="checkbox"/>	<p>Active NOAMP VIP: Select...</p> <p>Main Menu → Configuration → Server Groups</p> <p>...as shown on the right.</p>	
16. <input type="checkbox"/>	<p>Active NOAMP VIP: The Server Group entry should be shown on the “Server Groups” configuration screen as shown on the right.</p>	
17. <input type="checkbox"/>	<p>NOAMP Server A:</p> <p>1) Select the Server Group entry applied in Step 7. The line entry should now be highlighted in GREEN.</p> <p>2) Select the “Edit” dialogue button from the bottom left corner of the screen.</p> <p>NOTE: The user may need to use the vertical scroll-bar in order to make the “Edit” dialogue button visible.</p>	

Procedure 15: Pairing the OAM Servers for SOAM or DR NOAMP sites

Step	Procedure	Result																																																			
<p>18.</p> <p><input type="checkbox"/></p>	<p>Active NOAMP VIP:</p> <p>Adding a Server to the OAM Server Group (SOAM or DR NOAMP)</p> <p>The user will be presented with the “Server Groups [Edit]” screen as shown on the right.</p>	<p>Normal or Low Capacity Configuration:</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>SO_SG *</td> <td>Unique identifier used to label a Server Group. [Default = n/a. Range = A 1-32-character string. Valid characters are alphanumeric and underscore. 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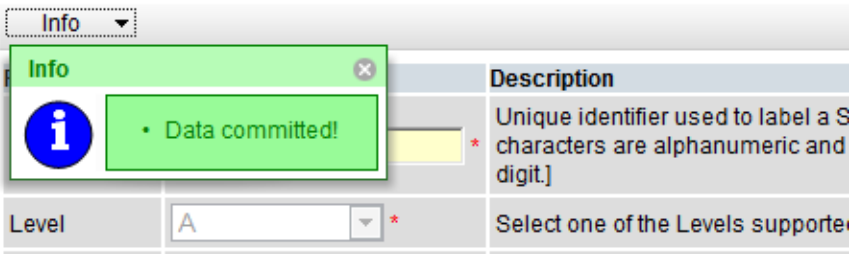
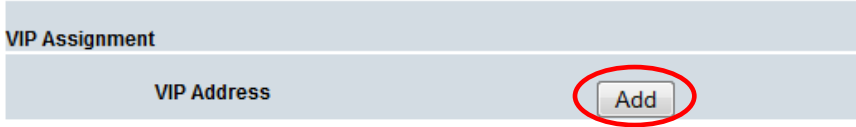
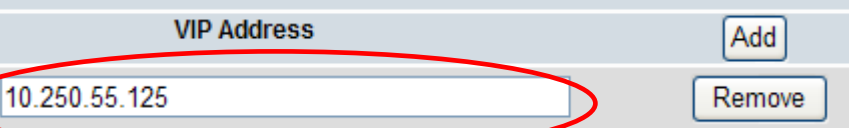
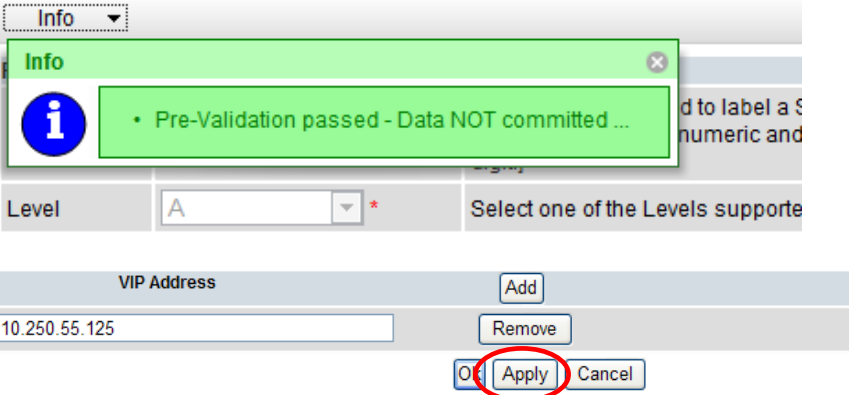
OCUDR 10.0.1 Installation and Configuration Guide

Procedure 15: Pairing the OAM Servers for SOAM or DR NOAMP sites

Step	Procedure	Result																		
<p>19.</p> <p><input type="checkbox"/></p>	<p>Active NOAMP VIP:</p> <p>Select the “A” server and the “B” server from the list of “Servers” by clicking the check box next to their names.</p> <p>Note: For Single Server Installation, only SO-A will be displayed; therefore only one box will be selected.</p>	<p>Normal or Low Capacity Configuration:</p> <table border="1"> <thead> <tr> <th colspan="3">SO_UDR</th> </tr> <tr> <th>Server</th> <th>SG Inclusion</th> <th>Preferred HA Role</th> </tr> </thead> <tbody> <tr> <td>SO-A</td> <td><input checked="" type="checkbox"/> Include in SG</td> <td><input type="checkbox"/> Preferred Spare</td> </tr> <tr> <td>SO-B</td> <td><input checked="" type="checkbox"/> Include in SG</td> <td><input type="checkbox"/> Preferred Spare</td> </tr> </tbody> </table> <p>VIP Assignment</p> <p>Single Server Configuration:</p> <table border="1"> <thead> <tr> <th>Server</th> <th>SG Inclusion</th> <th>Preferred HA Role</th> </tr> </thead> <tbody> <tr> <td>SO-A</td> <td><input checked="" type="checkbox"/> Include in SG</td> <td><input type="checkbox"/> Preferred Spare</td> </tr> </tbody> </table> <p>VIP Assignment</p>	SO_UDR			Server	SG Inclusion	Preferred HA Role	SO-A	<input checked="" type="checkbox"/> Include in SG	<input type="checkbox"/> Preferred Spare	SO-B	<input checked="" type="checkbox"/> Include in SG	<input type="checkbox"/> Preferred Spare	Server	SG Inclusion	Preferred HA Role	SO-A	<input checked="" type="checkbox"/> Include in SG	<input type="checkbox"/> Preferred Spare
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<p>20.</p> <p><input type="checkbox"/></p>	<p>Active NOAMP VIP:</p> <p>For DR NOAMP servers only:</p> <p>Check the Preferred Spare boxes 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></td> <td><input checked="" type="checkbox"/> Include in SG</td> <td><input checked="" type="checkbox"/> Preferred Spare</td> </tr> <tr> <td></td> <td><input checked="" type="checkbox"/> Include in SG</td> <td><input checked="" type="checkbox"/> Preferred Spare</td> </tr> </tbody> </table> <p>NOTE: DR NOAMP will not be accessible via their VIP unless they become the Active NOAMP. Individual servers in the DR NOAMP server group are always accessible by their XMI addresses.</p>	Server	SG Inclusion	Preferred HA Role		<input checked="" type="checkbox"/> Include in SG	<input checked="" type="checkbox"/> Preferred Spare		<input checked="" type="checkbox"/> Include in SG	<input checked="" type="checkbox"/> Preferred Spare									
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<p>21.</p> <p><input type="checkbox"/></p>	<p>Active NOAMP VIP:</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 -> Server Groups [Edit]</p> <p>The screenshot shows a configuration page with a dropdown menu set to 'Info'. A green information box displays the message: 'Pre-Validation passed - Data NOT committed ...'. Below this, there is a 'Level' dropdown set to 'A' and a 'VIP Address' field. At the bottom, there are 'Add', 'Remove', 'Ok', 'Apply', and 'Cancel' buttons. The 'Apply' button is circled in red. Blue numbers '1' and '2' are overlaid on the screenshot to indicate specific elements.</p>																		

OCUDR 10.0.1 Installation and Configuration Guide

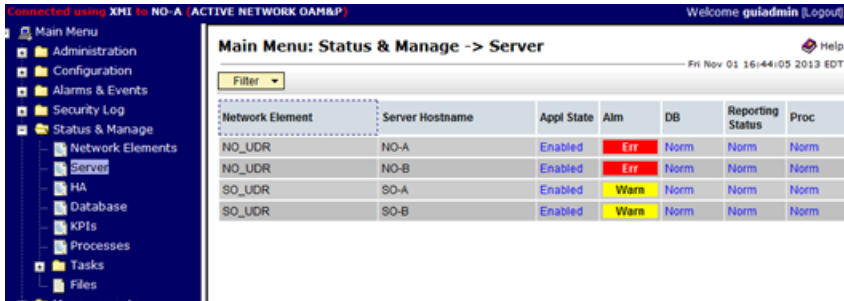
Procedure 15: Pairing the OAM Servers for SOAM or DR NOAMP sites

Step	Procedure	Result
<p>22.</p> <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>The user should be presented with a banner information message stating “Data committed”.</p>	<p>Main Menu: Configuration -> Server Groups [Edit]</p>  <p>The screenshot shows a web interface with a green information box in the foreground that says "Data committed!". In the background, there is a table with columns for "Info", "Description", and "Level". The "Level" dropdown is set to "A".</p>
<p>23.</p> <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>Click the “Add” dialogue button for the VIP Address.</p> <p>Note: Optional for Single server Installation</p>	 <p>The screenshot shows a section titled "VIP Assignment" with a "VIP Address" label and an "Add" button circled in red.</p>
<p>24.</p> <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>Input the VIP Address</p>	 <p>The screenshot shows the "VIP Address" input field containing the text "10.250.55.125", which is circled in red. There are "Add" and "Remove" buttons next to it.</p>
<p>25.</p> <input type="checkbox"/>	<p>Active NOAMP VIP:</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 -> Server Groups [Edit]</p>  <p>The screenshot shows a green information box with the message "Pre-Validation passed - Data NOT committed ...". Below it, the "VIP Address" field contains "10.250.55.125". At the bottom, an "Apply" button is circled in red. A blue number "1" is on the right side of the top part of the screenshot, and a blue number "2" is on the right side of the bottom part.</p>

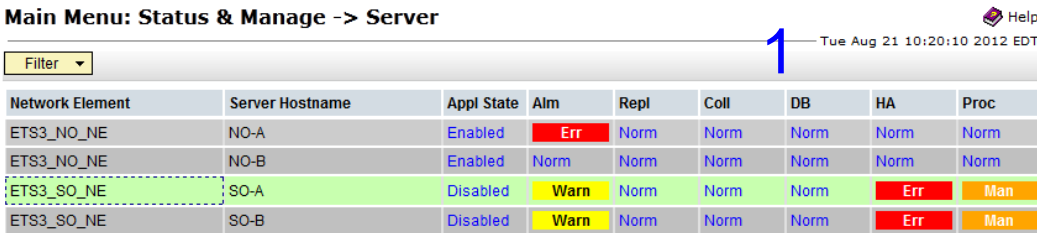
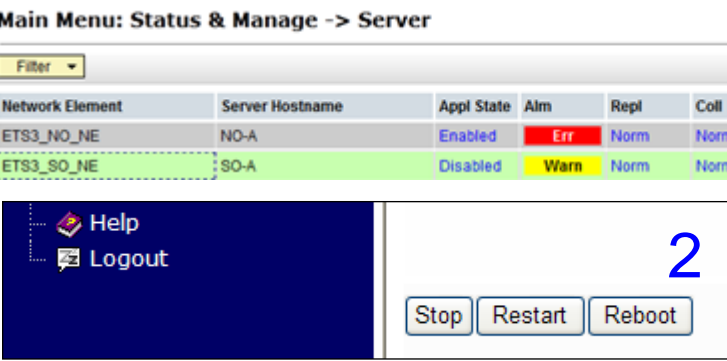
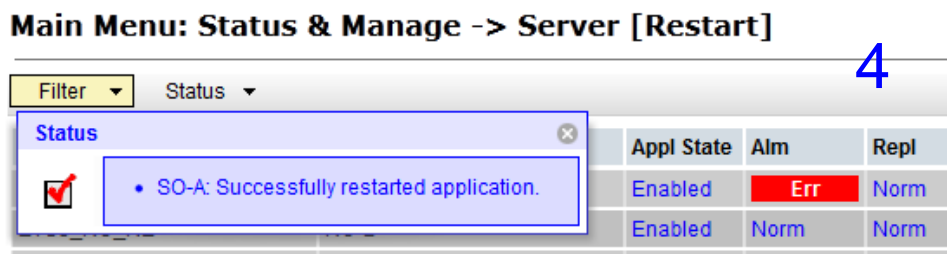
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27. <input type="checkbox"/>	<p>IMPORTANT:</p> <p>Wait at least 5 minutes before proceeding on to the next Step.</p>	<ul style="list-style-type: none"> Now that the server(s) have been paired within a Server Group they must establish a master/slave relationship for High Availability (HA). It may take several minutes for this process to be completed. Note: Single Server Configurations do not establish master/slave relationship for High Availability (HA). Allow a minimum of 5 minutes before continuing to the next Step. 																																																																																																
28. <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>Select...</p> <p>Main Menu → Status & Manage → HA</p> <p>...as shown on the right.</p>																																																																																																	
29. <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>Note:</p> <p>DRNO servers will have OAM MAX HA Role of Spare and no Active VIPs (shown in red).</p> <p>SOAM server(s) will have OAM MAX HA Role of Active or Standby and an Active VIP.</p>	<p>Normal or Low Capacity Configuration:</p> <table border="1"> <thead> <tr> <th>Hostname</th> <th>OAM Max HA Role</th> <th>Application Max HA Role</th> <th>Max Allowed HA Role</th> <th>Mate Hostname List</th> <th>Network Element</th> <th>Server Role</th> <th>Active VIPs</th> </tr> </thead> <tbody> <tr> <td>BL119122305-SO-1A</td> <td>Active</td> <td>OOS</td> <td>Active</td> <td>BL119122306-SO-1B</td> <td>SO_UDR_Site1_VM</td> <td>System OAM</td> <td>10.240.168.</td> </tr> <tr> <td>BL119122306-SO-1B</td> <td>Standby</td> <td>OOS</td> <td>Active</td> <td>BL119122305-SO-1A</td> <td>SO_UDR_Site1_VM</td> <td>System OAM</td> <td></td> </tr> <tr> <td>BL119121305-SO-2A</td> <td>Active</td> <td>OOS</td> <td>Active</td> <td>BL119121306-SO-2B</td> <td>SO_UDR_Site2_VM</td> <td>System OAM</td> <td>10.240.168.</td> </tr> <tr> <td>BL119121306-SO-2B</td> <td>Standby</td> <td>OOS</td> <td>Active</td> <td>BL119121305-SO-2A</td> <td>SO_UDR_Site2_VM</td> <td>System OAM</td> <td></td> </tr> <tr> <td>BL119122301-NO-1A</td> <td>Standby</td> <td>OOS</td> <td>Active</td> <td>BL119122303-NO-1B</td> <td>NO_UDR_Site1_VM</td> <td>Network OAM&P</td> <td></td> </tr> <tr> <td>BL119122303-NO-1B</td> <td>Active</td> <td>OOS</td> <td>Active</td> <td>BL119122301-NO-1A</td> <td>NO_UDR_Site1_VM</td> <td>Network OAM&P</td> <td>10.240.168.</td> </tr> <tr> <td>BL119121301-NO-2A</td> <td>Spare</td> <td>OOS</td> <td>Active</td> <td>BL119121303-NO-2B</td> <td>NO_UDR_Site2_VM</td> <td>Network OAM&P</td> <td></td> </tr> <tr> <td>BL119121303-NO-2B</td> <td>Spare</td> <td>OOS</td> <td>Active</td> <td>BL119121301-NO-2A</td> <td>NO_UDR_Site2_VM</td> <td>Network OAM&P</td> <td></td> </tr> </tbody> </table> <p>Single Server Configuration:</p> <table border="1"> <thead> <tr> <th>Hostname</th> <th>OAM HA Role</th> <th>Application HA Role</th> <th>Max Allowed HA Role</th> <th>Mate Hostname List</th> <th>Network Element</th> <th>Server Role</th> <th>Active VIPs</th> </tr> </thead> <tbody> <tr> <td>NO-A</td> <td>Active</td> <td>OOS</td> <td>Active</td> <td></td> <td>NO_SUN_05</td> <td>Network OAM&P</td> <td>10.240.15.40</td> </tr> <tr> <td>SO-A</td> <td>Active</td> <td>OOS</td> <td>Active</td> <td></td> <td>SO_SUN_05</td> <td>System OAM</td> <td>10.240.15.41</td> </tr> </tbody> </table>	Hostname	OAM Max HA Role	Application Max HA Role	Max Allowed HA Role	Mate Hostname List	Network Element	Server Role	Active VIPs	BL119122305-SO-1A	Active	OOS	Active	BL119122306-SO-1B	SO_UDR_Site1_VM	System OAM	10.240.168.	BL119122306-SO-1B	Standby	OOS	Active	BL119122305-SO-1A	SO_UDR_Site1_VM	System OAM		BL119121305-SO-2A	Active	OOS	Active	BL119121306-SO-2B	SO_UDR_Site2_VM	System OAM	10.240.168.	BL119121306-SO-2B	Standby	OOS	Active	BL119121305-SO-2A	SO_UDR_Site2_VM	System OAM		BL119122301-NO-1A	Standby	OOS	Active	BL119122303-NO-1B	NO_UDR_Site1_VM	Network OAM&P		BL119122303-NO-1B	Active	OOS	Active	BL119122301-NO-1A	NO_UDR_Site1_VM	Network OAM&P	10.240.168.	BL119121301-NO-2A	Spare	OOS	Active	BL119121303-NO-2B	NO_UDR_Site2_VM	Network OAM&P		BL119121303-NO-2B	Spare	OOS	Active	BL119121301-NO-2A	NO_UDR_Site2_VM	Network OAM&P		Hostname	OAM HA Role	Application HA Role	Max Allowed HA Role	Mate Hostname List	Network Element	Server Role	Active VIPs	NO-A	Active	OOS	Active		NO_SUN_05	Network OAM&P	10.240.15.40	SO-A	Active	OOS	Active		SO_SUN_05	System OAM	10.240.15.41
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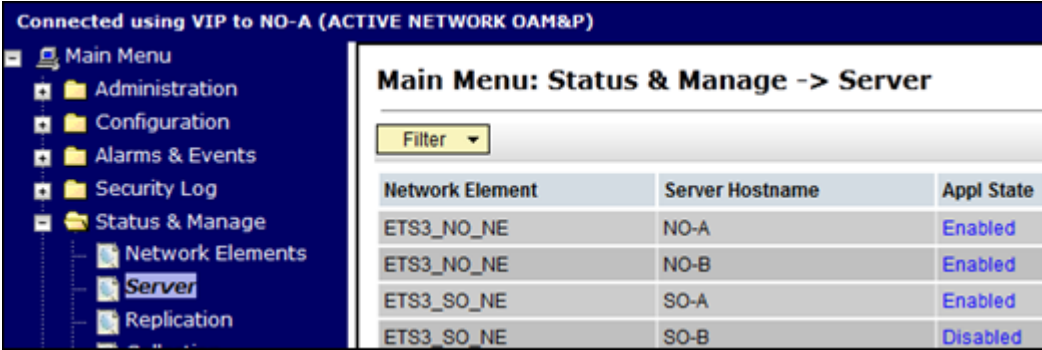
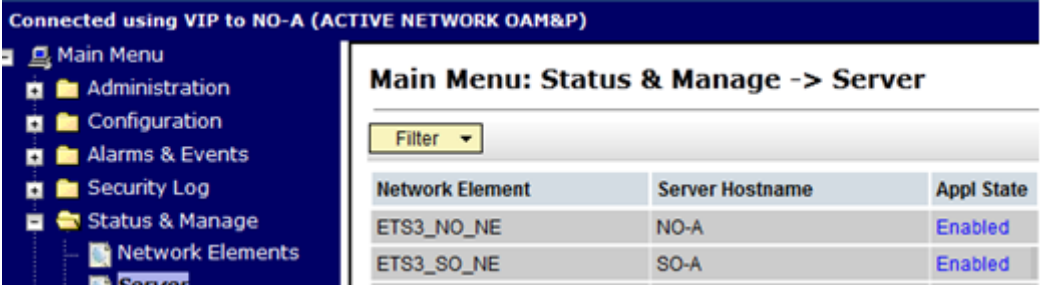
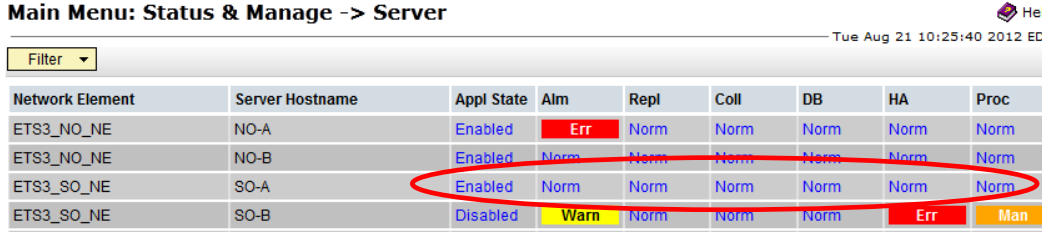
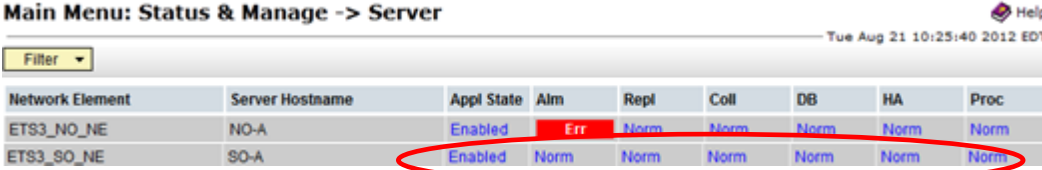
Procedure 15: Pairing the OAM Servers for SOAM or DR NOAMP sites

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<p>30.</p> <p><input type="checkbox"/></p>	<p>Active NOAMP VIP:</p> <p>Restarting the OAM Server Application</p> <p>Select...</p> <p>Main Menu → Status & Manage → Server</p> <p>...as shown on the right.</p>	 <table border="1"> <thead> <tr> <th>Network Element</th> <th>Server Hostname</th> <th>Appl State</th> <th>Alm</th> <th>DB</th> <th>Reporting Status</th> <th>Proc</th> </tr> </thead> <tbody> <tr> <td>NO_UDR</td> <td>NO-A</td> <td>Enabled</td> <td>Err</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>NO_UDR</td> <td>NO-B</td> <td>Enabled</td> <td>Err</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>SO_UDR</td> <td>SO-A</td> <td>Enabled</td> <td>Warn</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>SO_UDR</td> <td>SO-B</td> <td>Enabled</td> <td>Warn</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> </tbody> </table>	Network Element	Server Hostname	Appl State	Alm	DB	Reporting Status	Proc	NO_UDR	NO-A	Enabled	Err	Norm	Norm	Norm	NO_UDR	NO-B	Enabled	Err	Norm	Norm	Norm	SO_UDR	SO-A	Enabled	Warn	Norm	Norm	Norm	SO_UDR	SO-B	Enabled	Warn	Norm	Norm	Norm							
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SO_UDR	SO-B	Enabled	Warn	Norm	Norm	Norm																																						
<p>31.</p> <p><input type="checkbox"/></p>	<p>Active NOAMP VIP:</p> <p>1) The “A” and “B” servers should now appear in the right panel. (Only “A” for single server installs)</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. (Only “A” server for single server configuration)</p>	<p>Normal or Low Capacity Configuration:</p> <table border="1"> <thead> <tr> <th>Network Element</th> <th>Server Hostname</th> <th>Appl State</th> <th>Alm</th> <th>DB</th> <th>Reporting Status</th> <th>Proc</th> </tr> </thead> <tbody> <tr> <td>SO_UDR</td> <td>pc9000722-so-b</td> <td>Disabled</td> <td>Err</td> <td>Norm</td> <td>Norm</td> <td>Man</td> </tr> <tr> <td>SO_UDR</td> <td>pc9000720-so-a</td> <td>Disabled</td> <td>Err</td> <td>Norm</td> <td>Norm</td> <td>Man</td> </tr> </tbody> </table> <p>Single Server Configuration:</p> <table border="1"> <thead> <tr> <th>Network Element</th> <th>Server Hostname</th> <th>Appl State</th> <th>Alm</th> <th>DB</th> <th>Reporting Status</th> <th>Proc</th> </tr> </thead> <tbody> <tr> <td>NO_UDR</td> <td>pc9000724-no-a</td> <td>Enabled</td> <td>Err</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>SO_UDR</td> <td>pc9000720-so-a</td> <td>Disabled</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Man</td> </tr> </tbody> </table>	Network Element	Server Hostname	Appl State	Alm	DB	Reporting Status	Proc	SO_UDR	pc9000722-so-b	Disabled	Err	Norm	Norm	Man	SO_UDR	pc9000720-so-a	Disabled	Err	Norm	Norm	Man	Network Element	Server Hostname	Appl State	Alm	DB	Reporting Status	Proc	NO_UDR	pc9000724-no-a	Enabled	Err	Norm	Norm	Norm	SO_UDR	pc9000720-so-a	Disabled	Norm	Norm	Norm	Man
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Step	Procedure	Result																																																																								
<p>32.</p> <p><input type="checkbox"/></p>	<p>Active NOAMP VIP:</p> <p>1) Using the mouse, select Server A. The line entry should now be highlighted in GREEN.</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 Server A stating: “Successfully restarted application”.</p> <p>NOTE: The user may need to use the vertical scroll-bar in order to make the “Restart” dialogue button visible.</p>	<p>Normal or Low Capacity Configuration:</p> <p>Main Menu: Status & Manage -> Server</p> <p>1</p>  <table border="1"> <thead> <tr> <th>Network Element</th> <th>Server Hostname</th> <th>Appl State</th> <th>Alm</th> <th>Repl</th> <th>Coll</th> <th>DB</th> <th>HA</th> <th>Proc</th> </tr> </thead> <tbody> <tr> <td>ETS3_NO_NE</td> <td>NO-A</td> <td>Enabled</td> <td>Err</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>ETS3_NO_NE</td> <td>NO-B</td> <td>Enabled</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr style="background-color: #e0ffe0;"> <td>ETS3_SO_NE</td> <td>SO-A</td> <td>Disabled</td> <td>Warn</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Err</td> <td>Man</td> </tr> <tr> <td>ETS3_SO_NE</td> <td>SO-B</td> <td>Disabled</td> <td>Warn</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Err</td> <td>Man</td> </tr> </tbody> </table> <p>Single Server Configuration:</p> <p>Main Menu: Status & Manage -> Server</p> <p>2</p>  <p>Are you sure you wish to restart application software on the following server(s)?</p> <p>SO-A</p> <p>3</p> <p>OK Cancel</p> <p>Main Menu: Status & Manage -> Server [Restart]</p> <p>4</p>  <table border="1"> <thead> <tr> <th>Network Element</th> <th>Server Hostname</th> <th>Appl State</th> <th>Alm</th> <th>Repl</th> <th>Coll</th> <th>DB</th> <th>HA</th> <th>Proc</th> </tr> </thead> <tbody> <tr> <td>ETS3_NO_NE</td> <td>NO-A</td> <td>Enabled</td> <td>Err</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr style="background-color: #e0ffe0;"> <td>ETS3_SO_NE</td> <td>SO-A</td> <td>Disabled</td> <td>Warn</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Err</td> <td>Man</td> </tr> </tbody> </table>	Network Element	Server Hostname	Appl State	Alm	Repl	Coll	DB	HA	Proc	ETS3_NO_NE	NO-A	Enabled	Err	Norm	Norm	Norm	Norm	Norm	ETS3_NO_NE	NO-B	Enabled	Norm	Norm	Norm	Norm	Norm	Norm	ETS3_SO_NE	SO-A	Disabled	Warn	Norm	Norm	Norm	Err	Man	ETS3_SO_NE	SO-B	Disabled	Warn	Norm	Norm	Norm	Err	Man	Network Element	Server Hostname	Appl State	Alm	Repl	Coll	DB	HA	Proc	ETS3_NO_NE	NO-A	Enabled	Err	Norm	Norm	Norm	Norm	Norm	ETS3_SO_NE	SO-A	Disabled	Warn	Norm	Norm	Norm	Err	Man
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Step	Procedure	Result
<p>33.</p> <p><input type="checkbox"/></p>	<p>Active NOAMP VIP: Select...</p> <p>Main Menu → Status & Manage → Server</p> <p>...as shown on the right.</p>	<p>Normal or Low Capacity Configuration:</p>  <p>Single Server Configuration:</p> 
<p>34.</p> <p><input type="checkbox"/></p>	<p>Active NOAMP VIP:</p> <p>Verify that the “Appl State” now shows “Enabled” and that the “Alm, Repl, Coll, DB, HA & Proc” status columns all show “Norm” for OAM Server A before proceeding to the next Step.</p> <p>NOTE: If user chooses to refresh the Server status screen in advance of the default setting (15-30 sec.). This may be done by simply reselecting the “Status & Manage → Server” option from the Main menu on the left.</p>	<p>Normal or Low Capacity Configuration:</p>  <p>Single Server Configuration:</p> 
<p>35.</p>	<p>Perform steps 36 – 40 for Normal or Low Capacity Configurations only.</p>	

Procedure 15: Pairing the OAM Servers for SOAM or DR NOAMP sites

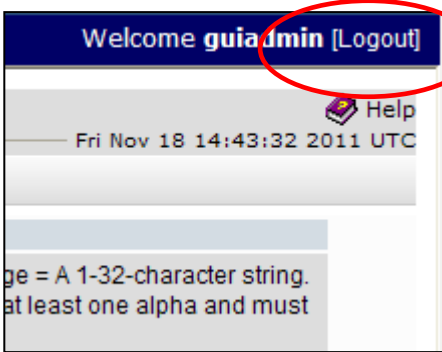
Step	Procedure	Result																																																																																										
<p>36.</p> <p><input type="checkbox"/></p>	<p>Active NOAMP VIP:</p> <p>1) Using the mouse, select Server B. The line entry should now be highlighted in GREEN.</p> <p>2) Select the “Restart” 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 Server B stating: “Successfully restarted application”.</p> <p>NOTE: The user may need to use the vertical scroll-bar in order to make the “Restart” dialogue button visible.</p>	<p>Main Menu: Status & Manage -> Server Help</p> <p style="text-align: right;">Tue Aug 21 10:25:40 2012 EDT</p> <p>Filter ▾</p> <table border="1"> <thead> <tr> <th>Network Element</th> <th>Server Hostname</th> <th>Appl State</th> <th>Alm</th> <th>Repl</th> <th>Coll</th> <th>DB</th> <th>HA</th> <th>Proc</th> </tr> </thead> <tbody> <tr> <td>ETS3_NO_NE</td> <td>NO-A</td> <td>Enabled</td> <td>Err</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>ETS3_NO_NE</td> <td>NO-B</td> <td>Enabled</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>ETS3_SO_NE</td> <td>SO-A</td> <td>Enabled</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr style="background-color: #e0ffe0;"> <td>ETS3_SO_NE</td> <td>SO-B</td> <td>Disabled</td> <td>Warn</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Err</td> <td>Man</td> </tr> </tbody> </table> <div style="border: 1px solid black; padding: 5px;"> <p>Help Logout</p> <p style="text-align: right; font-size: 2em; color: blue;">2</p> <p>Stop Restart Reboot</p> </div> <p>Are you sure you wish to restart application software on the following server(s)?</p> <p style="text-align: center; font-size: 2em; color: blue;">3</p> <p style="text-align: center;">OK Cancel</p> <p>Main Menu: Status & Manage -> Server [Restart] Help</p> <p style="text-align: right;">Tue Aug 21 10:30:31 2012 EDT</p> <p>Filter ▾ Status ▾</p> <div style="border: 1px solid blue; padding: 5px; margin-bottom: 5px;"> <p>Status</p> <ul style="list-style-type: none"> SO-B: Successfully restarted application. </div> <table border="1"> <thead> <tr> <th>Network Element</th> <th>Server Hostname</th> <th>Appl State</th> <th>Alm</th> <th>Repl</th> <th>Coll</th> <th>DB</th> <th>HA</th> <th>Proc</th> </tr> </thead> <tbody> <tr> <td>ETS3_NO_NE</td> <td>NO-A</td> <td>Enabled</td> <td>Err</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>ETS3_NO_NE</td> <td>NO-B</td> <td>Enabled</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>ETS3_SO_NE</td> <td>SO-A</td> <td>Enabled</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>ETS3_SO_NE</td> <td>SO-B</td> <td>Enabled</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> </tbody> </table> <p style="text-align: right; font-size: 2em; color: blue;">4</p>	Network Element	Server Hostname	Appl State	Alm	Repl	Coll	DB	HA	Proc	ETS3_NO_NE	NO-A	Enabled	Err	Norm	Norm	Norm	Norm	Norm	ETS3_NO_NE	NO-B	Enabled	Norm	Norm	Norm	Norm	Norm	Norm	ETS3_SO_NE	SO-A	Enabled	Norm	Norm	Norm	Norm	Norm	Norm	ETS3_SO_NE	SO-B	Disabled	Warn	Norm	Norm	Norm	Err	Man	Network Element	Server Hostname	Appl State	Alm	Repl	Coll	DB	HA	Proc	ETS3_NO_NE	NO-A	Enabled	Err	Norm	Norm	Norm	Norm	Norm	ETS3_NO_NE	NO-B	Enabled	Norm	Norm	Norm	Norm	Norm	Norm	ETS3_SO_NE	SO-A	Enabled	Norm	Norm	Norm	Norm	Norm	Norm	ETS3_SO_NE	SO-B	Enabled	Norm	Norm	Norm	Norm	Norm	Norm
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<p>37.</p> <p><input type="checkbox"/></p>	<p>Active NOAMP VIP:</p> <p>Select...</p> <p>Main Menu → Status & Manage → Server</p> <p>...as shown on the right.</p>	<p>Connected using VIP to NO-A (ACTIVE NETWORK OAM&P)</p> <div style="border: 1px solid blue; padding: 5px;"> <p>Main Menu</p> <ul style="list-style-type: none"> Administration Configuration Alarms & Events Security Log Status & Manage <ul style="list-style-type: none"> Network Elements Server Replication Collection HA Database </div> <p>Main Menu: Status & Manage -> Server</p> <p>Filter ▾</p> <table border="1"> <thead> <tr> <th>Network Element</th> <th>Server Hostname</th> <th>Appl State</th> <th>Alm</th> <th>Repl</th> </tr> </thead> <tbody> <tr> <td>ETS3_NO_NE</td> <td>NO-A</td> <td>Enabled</td> <td>Err</td> <td>Norm</td> </tr> <tr> <td>ETS3_NO_NE</td> <td>NO-B</td> <td>Enabled</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>ETS3_SO_NE</td> <td>SO-A</td> <td>Enabled</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>ETS3_SO_NE</td> <td>SO-B</td> <td>Enabled</td> <td>Norm</td> <td>Norm</td> </tr> <tr style="background-color: #ffe0e0;"> <td>ETS3_SO_NE</td> <td>MP-2</td> <td>Unk</td> <td>Unk</td> <td>Unk</td> </tr> <tr style="background-color: #ffe0e0;"> <td>ETS3_SO_NE</td> <td>MP-1</td> <td>Unk</td> <td>Unk</td> <td>Unk</td> </tr> </tbody> </table>	Network Element	Server Hostname	Appl State	Alm	Repl	ETS3_NO_NE	NO-A	Enabled	Err	Norm	ETS3_NO_NE	NO-B	Enabled	Norm	Norm	ETS3_SO_NE	SO-A	Enabled	Norm	Norm	ETS3_SO_NE	SO-B	Enabled	Norm	Norm	ETS3_SO_NE	MP-2	Unk	Unk	Unk	ETS3_SO_NE	MP-1	Unk	Unk	Unk																																																							
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<p>38.</p> <p><input type="checkbox"/></p>	<p>Active NOAMP VIP:</p> <p>Verify that the “Appl State” now shows “Enabled” and that the “Alm, Repl, Coll, DB, HA & Proc” status columns all show “Norm” for OAM Server A and OAM Server B before proceeding to the next Step.</p> <p>NOTE: If user chooses to refresh the Server status screen in advance of the default setting (15-30 sec.). This may be done by simply reselecting the “Status & Manage → Server” option from the Main menu on the left.</p>	<p>Main Menu: Status & Manage -> Server</p> <p style="text-align: right;">Help Tue Aug 21 10:31:29 2012 EDT</p> <p>Filter ▾</p> <table border="1"> <thead> <tr> <th>Network Element</th> <th>Server Hostname</th> <th>Appl State</th> <th>Alm</th> <th>Repl</th> <th>Coll</th> <th>DB</th> <th>HA</th> <th>Proc</th> </tr> </thead> <tbody> <tr> <td>ETS3_NO_NE</td> <td>NO-A</td> <td>Enabled</td> <td>Err</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>ETS3_NO_NE</td> <td>NO-B</td> <td>Enabled</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>ETS3_SO_NE</td> <td>SO-A</td> <td>Enabled</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>ETS3_SO_NE</td> <td>SO-B</td> <td>Enabled</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> </tbody> </table>	Network Element	Server Hostname	Appl State	Alm	Repl	Coll	DB	HA	Proc	ETS3_NO_NE	NO-A	Enabled	Err	Norm	Norm	Norm	Norm	Norm	ETS3_NO_NE	NO-B	Enabled	Norm	Norm	Norm	Norm	Norm	Norm	ETS3_SO_NE	SO-A	Enabled	Norm	Norm	Norm	Norm	Norm	Norm	ETS3_SO_NE	SO-B	Enabled	Norm	Norm	Norm	Norm	Norm	Norm
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<p>39.</p> <p><input type="checkbox"/></p>	<p>Repeat the steps above for each DR NOAMP and SOAM site being installed.</p>																																														
<p>40.</p> <p><input type="checkbox"/></p>	<p>Active NOAMP VIP:</p> <p>For Primary NOAMP Standby server only:</p> <p>Move the server back to ‘Active’</p> <p>Main Menu → Status & Manage → HA[Edit]</p> <p>Find the row for the Primary NOAMP Standby server and change “Max Allowed HA Role” back to “Active”.</p>	<p>Main Menu: Status & Manage -> HA [Edit]</p> <table border="1"> <thead> <tr> <th>Hostname</th> <th>Max Allowed HA Role</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>pc9000724-no-a</td> <td>Active ▾</td> <td>The maximum desired HA Role for pc9000724-no-a</td> </tr> <tr> <td>pc9000722-no-b</td> <td>Active ▾</td> <td>The maximum desired HA Role for pc9000722-no-b</td> </tr> <tr> <td>pc9000720-so-a</td> <td>Active ▾</td> <td>The maximum desired HA Role for pc9000720-so-a</td> </tr> <tr> <td>pc9000718-so-b</td> <td>Active ▾</td> <td>The maximum desired HA Role for pc9000718-so-b</td> </tr> <tr> <td>pc9000720-mp1</td> <td>Active ▾</td> <td>The maximum desired HA Role for pc9000720-mp1</td> </tr> <tr> <td>pc9000720-mp2</td> <td>Active ▾</td> <td>The maximum desired HA Role for pc9000720-mp2</td> </tr> <tr> <td>pc9000718-mp3</td> <td>Active ▾</td> <td>The maximum desired HA Role for pc9000718-mp3</td> </tr> </tbody> </table>	Hostname	Max Allowed HA Role	Description	pc9000724-no-a	Active ▾	The maximum desired HA Role for pc9000724-no-a	pc9000722-no-b	Active ▾	The maximum desired HA Role for pc9000722-no-b	pc9000720-so-a	Active ▾	The maximum desired HA Role for pc9000720-so-a	pc9000718-so-b	Active ▾	The maximum desired HA Role for pc9000718-so-b	pc9000720-mp1	Active ▾	The maximum desired HA Role for pc9000720-mp1	pc9000720-mp2	Active ▾	The maximum desired HA Role for pc9000720-mp2	pc9000718-mp3	Active ▾	The maximum desired HA Role for pc9000718-mp3																					
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pc9000722-no-b	Active ▾	The maximum desired HA Role for pc9000722-no-b																																													
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pc9000718-so-b	Active ▾	The maximum desired HA Role for pc9000718-so-b																																													
pc9000720-mp1	Active ▾	The maximum desired HA Role for pc9000720-mp1																																													
pc9000720-mp2	Active ▾	The maximum desired HA Role for pc9000720-mp2																																													
pc9000718-mp3	Active ▾	The maximum desired HA Role for pc9000718-mp3																																													

OCUDR 10.0.1 Installation and Configuration Guide

Procedure 15: Pairing the OAM Servers for SOAM or DR NOAMP sites

Step	Procedure	Result
41.	<p>Active NOAMP VIP:</p> <p>Click the “Logout” link on the server GUI.</p>	
42.	<p>TVOE Servers:</p> <p>Add DRNO-A and DRNO-B servers as additional NTP servers for all TVOE hosts.</p>	<p>** For configurations with DR sites only:</p> <p>** Don't execute for RMS servers</p> <p>Follow Appendix 0: Configure Additional NTP Server to add two NTP Servers (DRNO-A and DRNO-B) to each TVOE host server as additional NTP Servers.</p> <p><i>Note:</i> If DRNO-A and DRNO-B are running on virtual machines, use the management IP of their TVOE host instead for NTP servers.</p> <p><input type="checkbox"/> TVOE Host (SOAM-A, MP-1, MP-2)</p> <p><input type="checkbox"/> TVOE Host (SOAM-B, MP-3, MP-4)</p>
<p>THIS PROCEDURE HAS BEEN COMPLETED</p>		

8.6 Configuring MP Server Groups (All SOAM sites)

The user should be aware that during the Message Processor (MP) 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.

This procedure creates server groups for each MP..

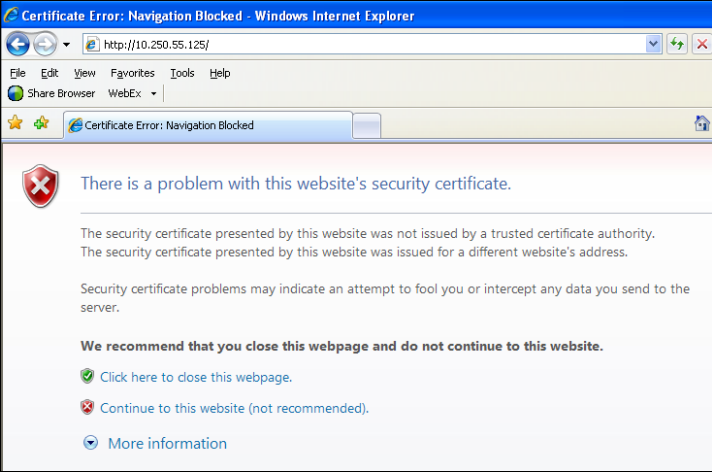
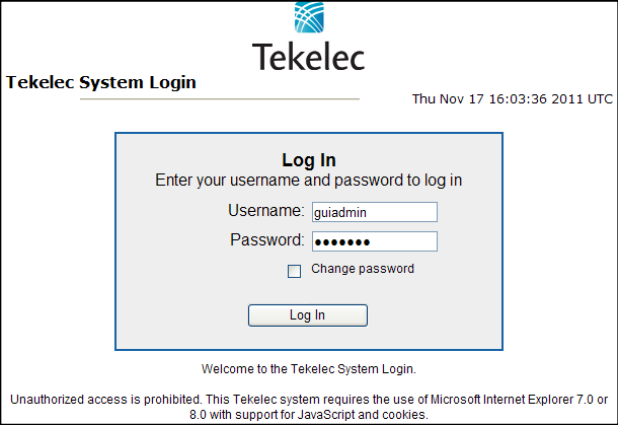
Requirements:

- **Procedure 12: Create Configuration for Remaining Servers** has been completed.
- **Procedure 14: OAM Pairing for the Primary NOAMP Servers** has been completed.
- **Procedure 15: OAM Pairing for SOAM and DR sites (All SOAM and DR sites)** has been completed.

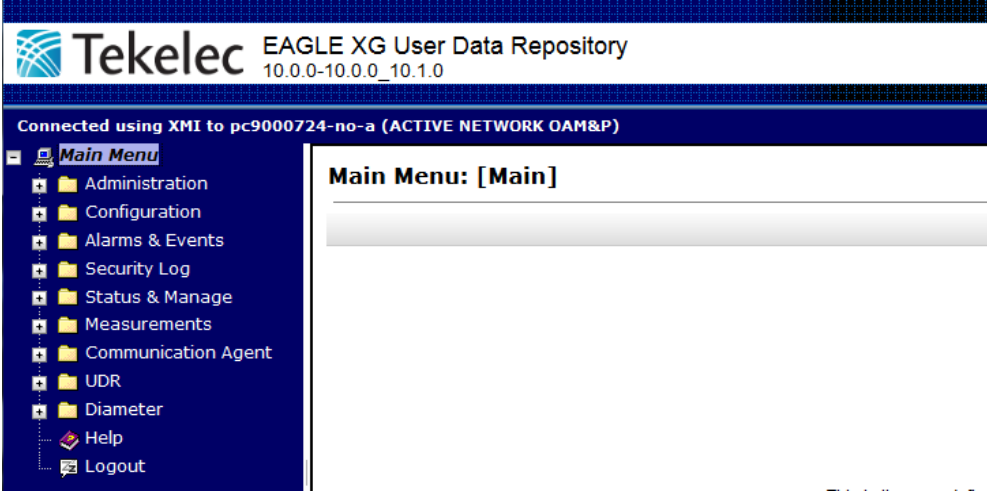
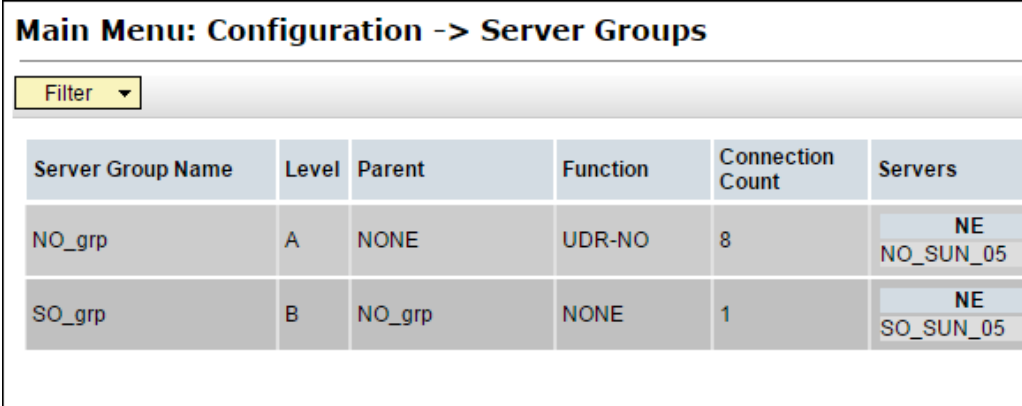
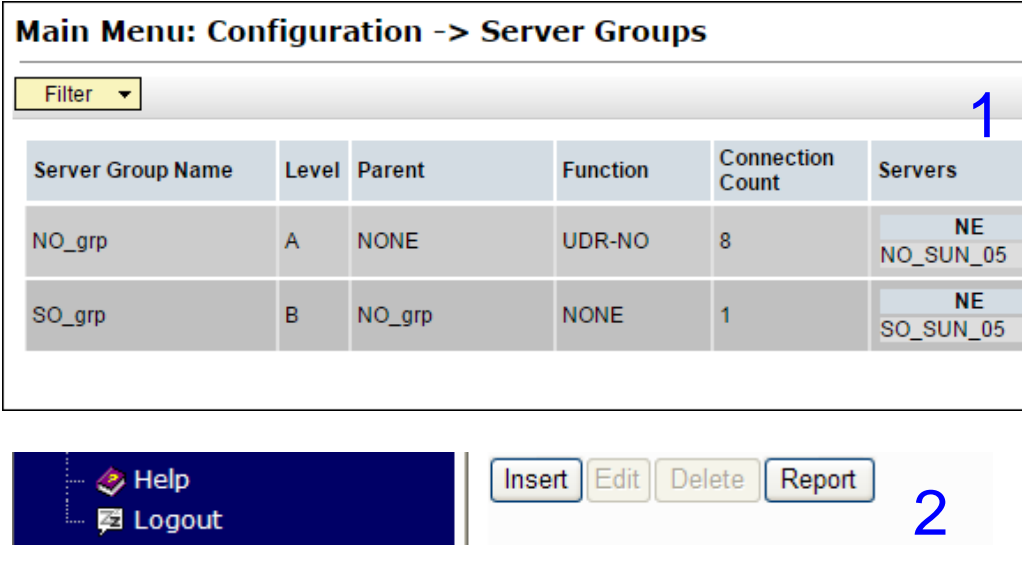
Check off (✓) each step as it is completed. Boxes have been provided for this purpose under each step number.

IF THIS PROCEDURE FAILS, CONTACT MY ORACLE SUPPORT (MOS) FOR ASSISTANCE.

Procedure 16: Configuring MP Server Groups

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

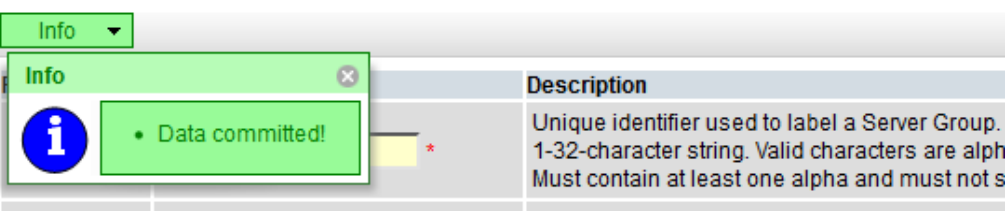
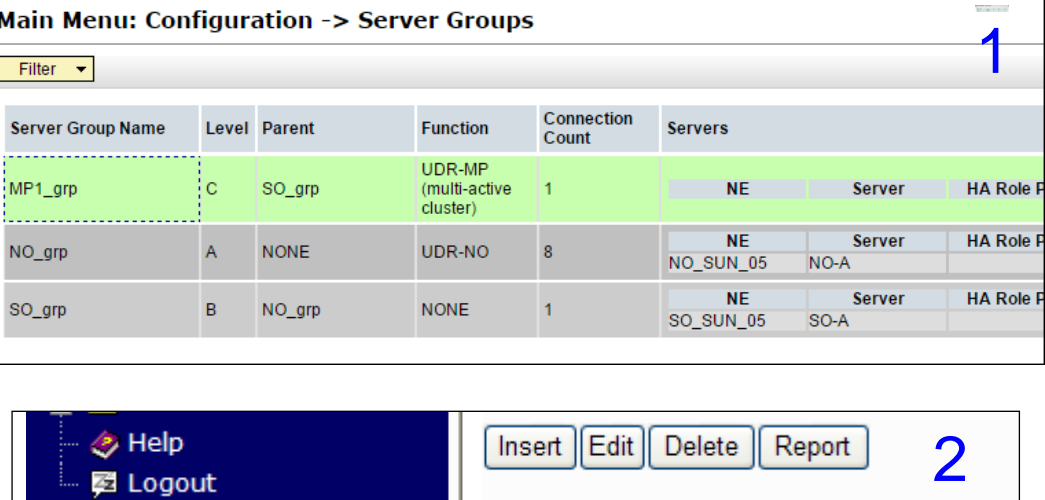
Procedure 16: Configuring MP Server Groups

Step	Procedure	Result
<p>3.</p> <p><input type="checkbox"/></p>	<p>Active NOAMP VIP:</p> <p>The user should be presented the Main Menu as shown on the right.</p>	
<p>4.</p> <p><input type="checkbox"/></p>	<p>Active NOAMP VIP:</p> <p>Select...</p> <p>Main Menu → Configuration → Server Groups</p> <p>...as shown on the right.</p>	
<p>5.</p> <p><input type="checkbox"/></p>	<p>Active NOAMP VIP:</p> <p>1) The user will be presented with the “Server Groups” configuration screen as shown on the right.</p> <p>2) Select the “Insert” dialogue button from the bottom left corner of the screen.</p> <p>NOTE: The user may need to use the vertical scroll-bar in order to make the “Insert” dialogue button visible.</p>	

Procedure 16: Configuring MP Server Groups

Step	Procedure	Result																		
6. <input type="checkbox"/>	Active NOAMP VIP: The user will be presented with the “ Server Groups [Insert] ” screen as shown on the right	<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 label a Server Group. [Default = n/a. Range = A 1-32-character string. Valid characters are alphanumeric and underscore. Must contain at least one alpha and must not start with a digit.]</td> </tr> <tr> <td>Level</td> <td>- Select Level - *</td> <td>Select one of the Levels supported by the system. [Level A groups contain NOAMP and Query servers. Level B groups are optional and contain SOAM servers. Level C groups contain MP servers.]</td> </tr> <tr> <td>Parent</td> <td>- Select Parent - *</td> <td>Select an existing Server Group or NONE</td> </tr> <tr> <td>Function</td> <td>- Select Function - *</td> <td>Select one of the Functions supported by the system</td> </tr> <tr> <td>WAN Replication Connection Count</td> <td><input type="text"/></td> <td>Specify the number of TCP connections that will be used by replication over any WAN connection associated with this Server Group. [Default = 1. Range = An integer between 1 and 8.]</td> </tr> </tbody> </table> <p style="text-align: right;">Ok Apply Cancel</p>	Field	Value	Description	Server Group Name	<input type="text"/>	Unique identifier used to label a Server Group. [Default = n/a. Range = A 1-32-character string. Valid characters are alphanumeric and underscore. Must contain at least one alpha and must not start with a digit.]	Level	- Select Level - *	Select one of the Levels supported by the system. [Level A groups contain NOAMP and Query servers. Level B groups are optional and contain SOAM servers. Level C groups contain MP servers.]	Parent	- Select Parent - *	Select an existing Server Group or NONE	Function	- Select Function - *	Select one of the Functions supported by the system	WAN Replication Connection Count	<input type="text"/>	Specify the number of TCP connections that will be used by replication over any WAN connection associated with this Server Group. [Default = 1. Range = An integer between 1 and 8.]
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8. <input type="checkbox"/>	Active NOAMP VIP: Select “ C ” on the “ Level ” pull-down menu..	<table border="1"> <tbody> <tr> <td>Level</td> <td>C *</td> <td>Select one of the Levels supported by the system. [Level A groups contain NOAMP and Query servers. Level B groups are optional and contain SOAM servers. Level C groups contain MP servers.]</td> </tr> </tbody> </table>	Level	C *	Select one of the Levels supported by the system. [Level A groups contain NOAMP and Query servers. Level B groups are optional and contain SOAM servers. Level C groups contain MP servers.]															
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9. <input type="checkbox"/>	Active NOAMP VIP: Select the desired SOAM server group on the “ Parent ” pull-down menu.	<table border="1"> <tbody> <tr> <td>Parent</td> <td>SO_grp *</td> <td>Select an existing Server Group or NONE</td> </tr> </tbody> </table>	Parent	SO_grp *	Select an existing Server Group or NONE															
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10. <input type="checkbox"/>	Active NOAMP VIP: Select “ UDR-MP (multi-active cluster) ” on the “ Function ” pull-down menu.	<table border="1"> <tbody> <tr> <td>Function</td> <td>UDR-MP (multi-active cluster) *</td> <td></td> </tr> </tbody> </table>	Function	UDR-MP (multi-active cluster) *																
Function	UDR-MP (multi-active cluster) *																			
11. <input type="checkbox"/>	Active NOAMP VIP: 1) The user should be presented with a banner information message stating “ Pre-Validation passed ”. 2) Select the “ Apply ” dialogue button.	<p>Main Menu: Configuration -> Server Groups [Insert]</p> <p>The screenshot shows the configuration form with a green information dialog box overlaid. The dialog box contains an information icon and the text "Pre-Validation passed - Data NOT committed ...". A blue number "1" is placed to the right of the "Server Group Name" field. At the bottom of the form, the "Apply" button is highlighted with a blue number "2".</p> <p style="text-align: right;">Ok Apply Cancel</p>																		

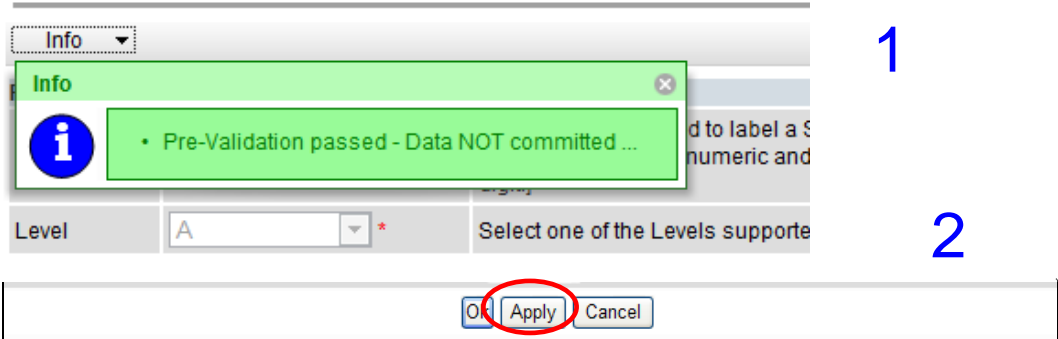
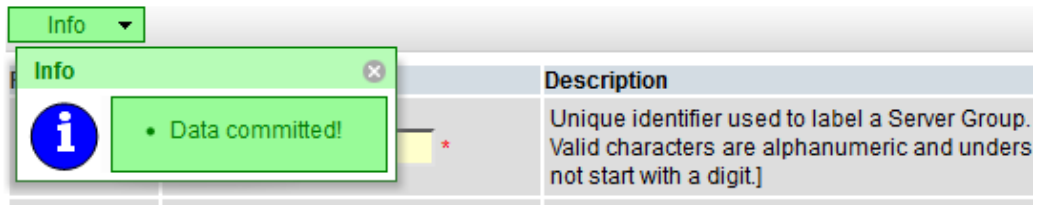
Procedure 16: Configuring MP Server Groups

Step	Procedure	Result																								
<p>12.</p> <p><input type="checkbox"/></p>	<p>Active NOAMP VIP:</p> <p>The user should be presented with a banner information message stating “Data committed”.</p>	<p>Main Menu: Configuration -> Server Groups [Insert]</p>  <p>The screenshot shows a web interface titled 'Main Menu: Configuration -> Server Groups [Insert]'. A green 'Info' message box is overlaid on the page, displaying a blue information icon and the text 'Data committed!'. Below the message box, a table with the header 'Description' is visible, containing the text: 'Unique identifier used to label a Server Group. 1-32-character string. Valid characters are alph... Must contain at least one alpha and must not s...'</p>																								
<p>13.</p> <p><input type="checkbox"/></p>	<p>Active NOAMP VIP:</p> <p>1) Using the mouse, select the MP Server Group associated with the MP being installed.</p> <p>2) Select the “Edit” dialogue button from the bottom left corner of the screen.</p>	<p>Main Menu: Configuration -> Server Groups</p>  <p>The screenshot shows the 'Server Groups' configuration page with a table of server groups. A blue '1' is placed in the top right corner of the table area. At the bottom of the page, there is a navigation bar with buttons for 'Insert', 'Edit', 'Delete', and 'Report', and a blue '2' is placed to the right of these buttons.</p> <table border="1"> <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>MP1_grp</td> <td>C</td> <td>SO_grp</td> <td>UDR-MP (multi-active cluster)</td> <td>1</td> <td>NE Server HA Role P</td> </tr> <tr> <td>NO_grp</td> <td>A</td> <td>NONE</td> <td>UDR-NO</td> <td>8</td> <td>NE NO_SUN_05 NO-A Server HA Role P</td> </tr> <tr> <td>SO_grp</td> <td>B</td> <td>NO_grp</td> <td>NONE</td> <td>1</td> <td>NE SO_SUN_05 SO-A Server HA Role P</td> </tr> </tbody> </table>	Server Group Name	Level	Parent	Function	Connection Count	Servers	MP1_grp	C	SO_grp	UDR-MP (multi-active cluster)	1	NE Server HA Role P	NO_grp	A	NONE	UDR-NO	8	NE NO_SUN_05 NO-A Server HA Role P	SO_grp	B	NO_grp	NONE	1	NE SO_SUN_05 SO-A Server HA Role P
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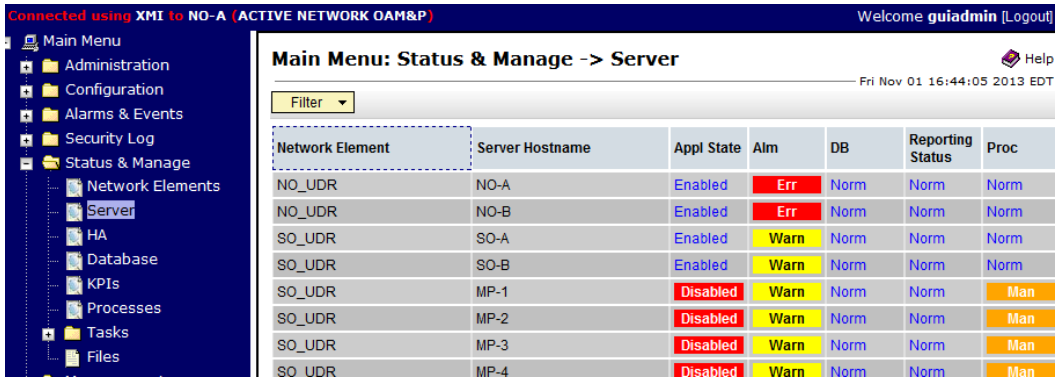
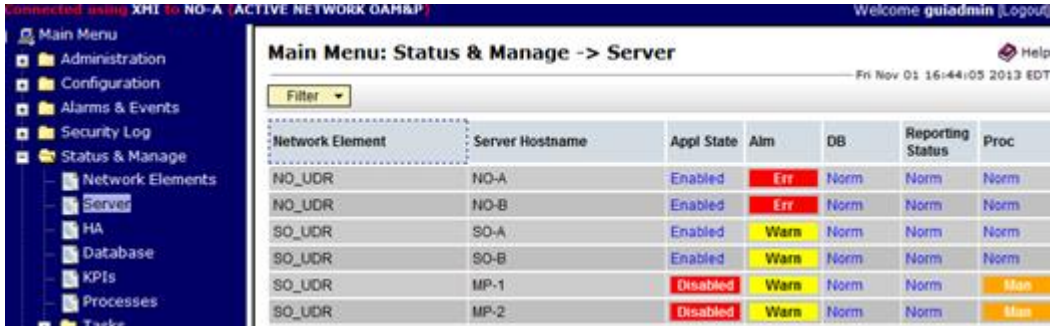
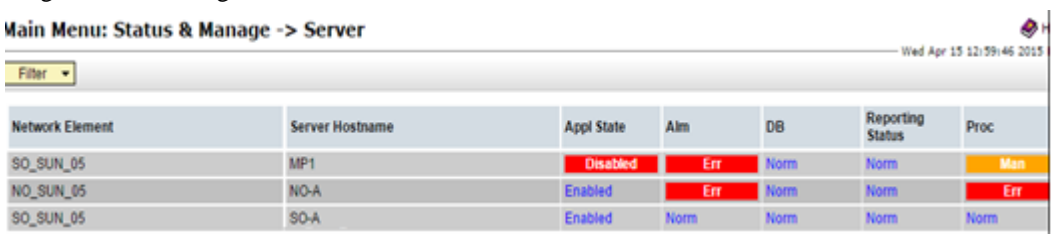
Procedure 16: Configuring MP Server Groups

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<p>14.</p> <p><input type="checkbox"/></p>	<p>Active NOAMP VIP:</p> <p>The user will be presented with the “Configuration → Server Groups [Edit]” screen as shown on the right</p>	<p>Normal Capacity Configuration:</p> <table border="1"> <tr> <td>Server Group Name</td> <td>MP_SG *</td> <td>A 1-32-character string. Valid characters are alphanumeric and underscore. Must contain at least one alpha and must not start with a digit.]</td> </tr> <tr> <td>Level</td> <td>C *</td> <td>Select one of the Levels supported by the system</td> </tr> <tr> <td>Parent</td> <td>SO_SG *</td> <td>Select an existing Server Group or NONE</td> </tr> <tr> <td>Function</td> <td>UDR-MP (multi-active cluster) *</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 used by replication over any WAN connection associated with this Server Group. [Default = 1. 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[Defa</td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th colspan="3">SO_UDR_VM</th> </tr> <tr> <th>Server</th> <th>SG Inclusion</th> <th>Preferred HA Role</th> </tr> </thead> <tbody> <tr> <td>UDRPV01-MP-1</td> <td><input type="checkbox"/> Include in SG</td> <td><input type="checkbox"/> Preferred Spare</td> </tr> <tr> <td>UDRPV01-MP-2</td> <td><input type="checkbox"/> Include in SG</td> <td><input type="checkbox"/> Preferred Spare</td> </tr> </tbody> </table> <p>VIP Assignment</p> <p>Single Server Configuration:</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>MP1_grp *</td> <td>Unique identifier used to label a Server Group. [Default = n/a. Range = A 1-32-character string. Valid characters are alphanumeric and underscore. 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SO_SUN_05																																																																																																		
Server	SG Inclusion	Preferred HA Role																																																																																																
MP1	<input type="checkbox"/> Include in SG	<input type="checkbox"/> Preferred Spare																																																																																																

Procedure 16: Configuring MP Server Groups

Step	Procedure	Result																														
<p>15.</p> <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>Put a check mark in the box labeled “Include in SG” for each MP to be included in this Server Group.</p> <p>Note: Low Capacity Configurations have 2 MPs and Single Server Configurations have 1 MP.</p>	<p>Normal Capacity Configuration:</p> <table border="1"> <thead> <tr> <th>SO_UDR Server</th> <th>SG Inclusion</th> <th>Preferred HA Role</th> </tr> </thead> <tbody> <tr> <td>MP-1</td> <td><input checked="" type="checkbox"/> Include in SG</td> <td><input type="checkbox"/> Preferred Spare</td> </tr> <tr> <td>MP-2</td> <td><input checked="" type="checkbox"/> Include in SG</td> <td><input type="checkbox"/> Preferred Spare</td> </tr> <tr> <td>MP-3</td> <td><input checked="" type="checkbox"/> Include in SG</td> <td><input type="checkbox"/> Preferred Spare</td> </tr> <tr> <td>MP-4</td> <td><input checked="" type="checkbox"/> Include in SG</td> <td><input type="checkbox"/> Preferred Spare</td> </tr> </tbody> </table> <p>Low Capacity Configuration:</p> <table border="1"> <thead> <tr> <th>SO_UDR Server</th> <th>SG Inclusion</th> <th>Preferred HA Role</th> </tr> </thead> <tbody> <tr> <td>MP-1</td> <td><input checked="" type="checkbox"/> Include in SG</td> <td><input type="checkbox"/> Preferred Spare</td> </tr> <tr> <td>MP-2</td> <td><input checked="" type="checkbox"/> Include in SG</td> <td><input type="checkbox"/> Preferred Spare</td> </tr> </tbody> </table> <p>Single Server Configuration:</p> <table border="1"> <thead> <tr> <th>SO_UDR Server</th> <th>SG Inclusion</th> <th>Preferred HA Role</th> </tr> </thead> <tbody> <tr> <td>MP-1</td> <td><input checked="" type="checkbox"/> Include in SG</td> <td><input type="checkbox"/> Preferred Spare</td> </tr> </tbody> </table>	SO_UDR Server	SG Inclusion	Preferred HA Role	MP-1	<input checked="" type="checkbox"/> Include in SG	<input type="checkbox"/> Preferred Spare	MP-2	<input checked="" type="checkbox"/> Include in SG	<input type="checkbox"/> Preferred Spare	MP-3	<input checked="" type="checkbox"/> Include in SG	<input type="checkbox"/> Preferred Spare	MP-4	<input checked="" type="checkbox"/> Include in SG	<input type="checkbox"/> Preferred Spare	SO_UDR Server	SG Inclusion	Preferred HA Role	MP-1	<input checked="" type="checkbox"/> Include in SG	<input type="checkbox"/> Preferred Spare	MP-2	<input checked="" type="checkbox"/> Include in SG	<input type="checkbox"/> Preferred Spare	SO_UDR Server	SG Inclusion	Preferred HA Role	MP-1	<input checked="" type="checkbox"/> Include in SG	<input type="checkbox"/> Preferred Spare
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<p>16.</p> <input type="checkbox"/>	<p>Active NOAMP VIP:</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 -> Server Groups [Edit]</p> 																														
<p>17.</p> <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>The user should be presented with a banner information message stating “Data committed”.</p>	<p>Main Menu: Configuration -> Server Groups [Edit]</p> 																														
<p>18.</p> <input type="checkbox"/>	<p>IMPORTANT:</p> <p>Wait at least 5 minutes before proceeding on to the next Step.</p>	<ul style="list-style-type: none"> Now that the Message Processor(s) have been placed within their respective Server Groups, each must establish DB replication with the Active SOAM server at the NE. It may take several minutes for this process to be completed. UDR processs alarms may be present until Section 8.8 Configure SPR Application on MP (All SOAM Sites) is completed. Allow a minimum of 5 minutes before continuing to the next Step. 																														

Procedure 16: Configuring MP Server Groups

Step	Procedure	Result
<p>19.</p> <p><input type="checkbox"/></p>	<p>Active NOAMP VIP:</p> <p>Select...</p> <p>Main Menu → Status & Manage → Server</p> <p>...as shown on the right.</p>	<p>Normal Capacity Configuration:</p>  <p>Low Capacity Configuration:</p>  <p>Single Server Configuration:</p> 

Procedure 16: Configuring MP Server Groups

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<p>20.</p> <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>Verify that the “DB & Reporting Status” status columns show “Norm” for the MPs at this point. The “Proc” column should show “Man”.</p>	<p>Normal Capacity Configuration :</p> <table border="1"> <tr> <td>SO_UDR</td> <td>MP-1</td> <td>Disabled</td> <td>Warn</td> <td>Norm</td> <td>Norm</td> <td>Man</td> </tr> <tr> <td>SO_UDR</td> <td>MP-2</td> <td>Disabled</td> <td>Warn</td> <td>Norm</td> <td>Norm</td> <td>Man</td> </tr> <tr> <td>SO_UDR</td> <td>MP-3</td> <td>Disabled</td> <td>Warn</td> <td>Norm</td> <td>Norm</td> <td>Man</td> </tr> <tr> <td>SO_UDR</td> <td>MP-4</td> <td>Disabled</td> <td>Warn</td> <td>Norm</td> <td>Norm</td> <td>Man</td> </tr> </table> <p>Low Capacity Configuration :</p> <table border="1"> <tr> <td>SO_UDR</td> <td>MP-1</td> <td>Disabled</td> <td>Warn</td> <td>Norm</td> <td>Norm</td> <td>Man</td> </tr> <tr> <td>SO_UDR</td> <td>MP-2</td> <td>Disabled</td> <td>Warn</td> <td>Norm</td> <td>Norm</td> <td>Man</td> </tr> </table> <p>Single Server Configuration :</p> <table border="1"> <tr> <td>SO_UDR</td> <td>MP-1</td> <td>Disabled</td> <td>Warn</td> <td>Norm</td> <td>Norm</td> <td>Man</td> </tr> </table>	SO_UDR	MP-1	Disabled	Warn	Norm	Norm	Man	SO_UDR	MP-2	Disabled	Warn	Norm	Norm	Man	SO_UDR	MP-3	Disabled	Warn	Norm	Norm	Man	SO_UDR	MP-4	Disabled	Warn	Norm	Norm	Man	SO_UDR	MP-1	Disabled	Warn	Norm	Norm	Man	SO_UDR	MP-2	Disabled	Warn	Norm	Norm	Man	SO_UDR	MP-1	Disabled	Warn	Norm	Norm	Man
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Procedure 16: Configuring MP Server Groups

Step	Procedure	Result																																																																																													
<p>21.</p> <p><input type="checkbox"/></p>	<p>Active NOAMP VIP:</p> <p>1) Select each “MP” with “Man” status using the mouse and holding the Ctrl key. The line entries should be highlighted in GREEN.</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) stating: “Successfully restarted application”.</p> <p>NOTE: The user may need to use the vertical scroll-bar in order to make the “Restart” dialogue button visible.</p>	<p>Normal Capacity Configuration:</p> <p>Main Menu: Status & Manage -> Server Help</p> <p style="text-align: right;">Fri Nov 01 17:05:48 2013 EDT</p> <p>Filter</p> <table border="1"> <thead> <tr> <th>Network Element</th> <th>Server Hostname</th> <th>Appl State</th> <th>Alm</th> <th>DB</th> <th>Reporting Status</th> <th>Proc</th> </tr> </thead> <tbody> <tr><td>NO_UDR</td><td>NO-A</td><td>Enabled</td><td>Err</td><td>Norm</td><td>Norm</td><td>Norm</td></tr> <tr><td>NO_UDR</td><td>NO-B</td><td>Enabled</td><td>Err</td><td>Norm</td><td>Norm</td><td>Norm</td></tr> <tr><td>SO_UDR</td><td>SO-A</td><td>Enabled</td><td>Norm</td><td>Norm</td><td>Norm</td><td>Norm</td></tr> <tr><td>SO_UDR</td><td>SO-B</td><td>Enabled</td><td>Norm</td><td>Norm</td><td>Norm</td><td>Norm</td></tr> <tr style="background-color: #e0ffe0;"><td>SO_UDR</td><td>MP-1</td><td>Disabled</td><td>Err</td><td>Norm</td><td>Norm</td><td>Man</td></tr> <tr style="background-color: #e0ffe0;"><td>SO_UDR</td><td>MP-2</td><td>Disabled</td><td>Err</td><td>Norm</td><td>Norm</td><td>Man</td></tr> <tr style="background-color: #e0ffe0;"><td>SO_UDR</td><td>MP-3</td><td>Disabled</td><td>Err</td><td>Norm</td><td>Norm</td><td>Man</td></tr> <tr style="background-color: #e0ffe0;"><td>SO_UDR</td><td>MP-4</td><td>Disabled</td><td>Err</td><td>Norm</td><td>Norm</td><td>Man</td></tr> </tbody> </table> <p>Low Capacity Configuration:</p> <table border="1"> <tbody> <tr style="background-color: #e0ffe0;"><td>SO_UDR</td><td>MP-1</td><td>Disabled</td><td>Err</td><td>Norm</td><td>Norm</td><td>Man</td></tr> <tr style="background-color: #e0ffe0;"><td>SO_UDR</td><td>MP-2</td><td>Disabled</td><td>Err</td><td>Norm</td><td>Norm</td><td>Man</td></tr> </tbody> </table> <p>Single Server Configuration:</p> <table border="1"> <tbody> <tr style="background-color: #e0ffe0;"><td>SO_UDR</td><td>MP-1</td><td>Disabled</td><td>Err</td><td>Norm</td><td>Norm</td><td>Man</td></tr> </tbody> </table> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> Help Logout <div style="float: right;"> 2 Stop Restart Reboot </div> </div> <div style="border: 1px solid gray; padding: 10px; margin-top: 10px;"> <p>Are you sure you wish to restart application software on the following server(s)? MP-1,MP-2,MP-3,MP-4</p> <div style="text-align: center;"> 3 OK Cancel </div> </div> <p>Main Menu: Status & Manage -> Server [Restart]</p> <p>Filter Status</p> <table border="1"> <thead> <tr> <th>Status</th> <th>Appl State</th> <th>Alm</th> </tr> </thead> <tbody> <tr> <td><input checked="" type="checkbox"/></td> <td>Enabled</td> <td>Err</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Enabled</td> <td>Norm</td> </tr> </tbody> </table> <p style="text-align: right; color: blue; font-size: 2em;">4</p>	Network Element	Server Hostname	Appl State	Alm	DB	Reporting Status	Proc	NO_UDR	NO-A	Enabled	Err	Norm	Norm	Norm	NO_UDR	NO-B	Enabled	Err	Norm	Norm	Norm	SO_UDR	SO-A	Enabled	Norm	Norm	Norm	Norm	SO_UDR	SO-B	Enabled	Norm	Norm	Norm	Norm	SO_UDR	MP-1	Disabled	Err	Norm	Norm	Man	SO_UDR	MP-2	Disabled	Err	Norm	Norm	Man	SO_UDR	MP-3	Disabled	Err	Norm	Norm	Man	SO_UDR	MP-4	Disabled	Err	Norm	Norm	Man	SO_UDR	MP-1	Disabled	Err	Norm	Norm	Man	SO_UDR	MP-2	Disabled	Err	Norm	Norm	Man	SO_UDR	MP-1	Disabled	Err	Norm	Norm	Man	Status	Appl State	Alm	<input checked="" type="checkbox"/>	Enabled	Err	<input type="checkbox"/>	Enabled	Norm
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Procedure 16: Configuring MP Server Groups

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<p>22.</p> <p><input type="checkbox"/></p>	<p>Active NOAMP VIP:</p> <p>Select...</p> <p>Main Menu → Status & Manage → Server</p> <p>...as shown on the right.</p> <p>Note: Low Capacity Configuration has 2 MP servers and Single Server configuration has 1 MP server.</p>	<p>Connected using XMI to NO-A (ACTIVE NETWORK OAM&P)</p> <p>Main Menu: Status & Manage -> Server</p> <table border="1"> <thead> <tr> <th>Network Element</th> <th>Server Hostname</th> <th>Appl State</th> <th>Alm</th> <th>DB</th> </tr> </thead> <tbody> <tr> <td>NO_U DR</td> <td>NO-A</td> <td>Enabled</td> <td>Err</td> <td>Norm</td> </tr> <tr> <td>NO_U DR</td> <td>NO-B</td> <td>Enabled</td> <td>Err</td> <td>Norm</td> </tr> <tr> <td>SO_U DR</td> <td>SO-A</td> <td>Enabled</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>SO_U DR</td> <td>SO-B</td> <td>Enabled</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>SO_U DR</td> <td>MP-1</td> <td>Enabled</td> <td>Err</td> <td>Norm</td> </tr> <tr> <td>SO_U DR</td> <td>MP-2</td> <td>Enabled</td> <td>Err</td> <td>Norm</td> </tr> <tr> <td>SO_U DR</td> <td>MP-3</td> <td>Enabled</td> <td>Err</td> <td>Norm</td> </tr> </tbody> </table>	Network Element	Server Hostname	Appl State	Alm	DB	NO_U DR	NO-A	Enabled	Err	Norm	NO_U DR	NO-B	Enabled	Err	Norm	SO_U DR	SO-A	Enabled	Norm	Norm	SO_U DR	SO-B	Enabled	Norm	Norm	SO_U DR	MP-1	Enabled	Err	Norm	SO_U DR	MP-2	Enabled	Err	Norm	SO_U DR	MP-3	Enabled	Err	Norm
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<p>23.</p> <p><input type="checkbox"/></p>	<p>Active NOAMP VIP:</p> <p>Verify that the “Appl State” now shows “Enabled” and that the “DB & Reporting Status” status columns all show “Norm” for the MPs. The “Alm & Proc” columns may show “Err” at this point.</p>	<p>Normal Capacity Configuration:</p> <p>Main Menu: Status & Manage -> Server Help</p> <p style="text-align: right;">Fri Nov 01 17:02:40 2013 EDT</p> <p>Filter ▾</p> <table border="1"> <thead> <tr> <th>Network Element</th> <th>Server Hostname</th> <th>Appl State</th> <th>Alm</th> <th>DB</th> <th>Reporting Status</th> <th>Proc</th> </tr> </thead> <tbody> <tr><td>NO_UDR</td><td>NO-A</td><td>Enabled</td><td>Err</td><td>Norm</td><td>Norm</td><td>Norm</td></tr> <tr><td>NO_UDR</td><td>NO-B</td><td>Enabled</td><td>Err</td><td>Norm</td><td>Norm</td><td>Norm</td></tr> <tr><td>SO_UDR</td><td>SO-A</td><td>Enabled</td><td>Norm</td><td>Norm</td><td>Norm</td><td>Norm</td></tr> <tr><td>SO_UDR</td><td>SO-B</td><td>Enabled</td><td>Norm</td><td>Norm</td><td>Norm</td><td>Norm</td></tr> <tr><td>SO_UDR</td><td>MP-1</td><td>Enabled</td><td>Err</td><td>Norm</td><td>Norm</td><td>Err</td></tr> <tr><td>SO_UDR</td><td>MP-2</td><td>Enabled</td><td>Err</td><td>Norm</td><td>Norm</td><td>Err</td></tr> <tr><td>SO_UDR</td><td>MP-3</td><td>Enabled</td><td>Err</td><td>Norm</td><td>Norm</td><td>Err</td></tr> <tr><td>SO_UDR</td><td>MP-4</td><td>Enabled</td><td>Err</td><td>Norm</td><td>Norm</td><td>Err</td></tr> </tbody> </table> <p>Low Capacity Configuration:</p> <p>Main Menu: Status & Manage -> Server Help</p> <p style="text-align: right;">Fri Nov 01 17:02:40 2013 EDT</p> <p>Filter ▾</p> <table border="1"> <thead> <tr> <th>Network Element</th> <th>Server Hostname</th> <th>Appl State</th> <th>Alm</th> <th>DB</th> <th>Reporting Status</th> <th>Proc</th> </tr> </thead> <tbody> <tr><td>NO_UDR</td><td>NO-A</td><td>Enabled</td><td>Err</td><td>Norm</td><td>Norm</td><td>Norm</td></tr> <tr><td>NO_UDR</td><td>NO-B</td><td>Enabled</td><td>Err</td><td>Norm</td><td>Norm</td><td>Norm</td></tr> <tr><td>SO_UDR</td><td>SO-A</td><td>Enabled</td><td>Norm</td><td>Norm</td><td>Norm</td><td>Norm</td></tr> <tr><td>SO_UDR</td><td>SO-B</td><td>Enabled</td><td>Norm</td><td>Norm</td><td>Norm</td><td>Norm</td></tr> <tr><td>SO_UDR</td><td>MP-1</td><td>Enabled</td><td>Err</td><td>Norm</td><td>Norm</td><td>Err</td></tr> <tr><td>SO_UDR</td><td>MP-2</td><td>Enabled</td><td>Err</td><td>Norm</td><td>Norm</td><td>Err</td></tr> </tbody> </table> <p>Single Server Configuration:</p> <p>Main Menu: Status & Manage -> Server Help</p> <p style="text-align: right;">Fri Nov 01 17:02:40 2013 EDT</p> <p>Filter ▾</p> <table border="1"> <thead> <tr> <th>Network Element</th> <th>Server Hostname</th> <th>Appl State</th> <th>Alm</th> <th>DB</th> <th>Reporting Status</th> <th>Proc</th> </tr> </thead> <tbody> <tr><td>NO_UDR</td><td>NO-A</td><td>Enabled</td><td>Err</td><td>Norm</td><td>Norm</td><td>Norm</td></tr> <tr><td>SO_UDR</td><td>SO-A</td><td>Enabled</td><td>Norm</td><td>Norm</td><td>Norm</td><td>Norm</td></tr> <tr><td>SO_UDR</td><td>MP-1</td><td>Enabled</td><td>Err</td><td>Norm</td><td>Norm</td><td>Err</td></tr> </tbody> </table>	Network Element	Server Hostname	Appl State	Alm	DB	Reporting Status	Proc	NO_UDR	NO-A	Enabled	Err	Norm	Norm	Norm	NO_UDR	NO-B	Enabled	Err	Norm	Norm	Norm	SO_UDR	SO-A	Enabled	Norm	Norm	Norm	Norm	SO_UDR	SO-B	Enabled	Norm	Norm	Norm	Norm	SO_UDR	MP-1	Enabled	Err	Norm	Norm	Err	SO_UDR	MP-2	Enabled	Err	Norm	Norm	Err	SO_UDR	MP-3	Enabled	Err	Norm	Norm	Err	SO_UDR	MP-4	Enabled	Err	Norm	Norm	Err	Network Element	Server Hostname	Appl State	Alm	DB	Reporting Status	Proc	NO_UDR	NO-A	Enabled	Err	Norm	Norm	Norm	NO_UDR	NO-B	Enabled	Err	Norm	Norm	Norm	SO_UDR	SO-A	Enabled	Norm	Norm	Norm	Norm	SO_UDR	SO-B	Enabled	Norm	Norm	Norm	Norm	SO_UDR	MP-1	Enabled	Err	Norm	Norm	Err	SO_UDR	MP-2	Enabled	Err	Norm	Norm	Err	Network Element	Server Hostname	Appl State	Alm	DB	Reporting Status	Proc	NO_UDR	NO-A	Enabled	Err	Norm	Norm	Norm	SO_UDR	SO-A	Enabled	Norm	Norm	Norm	Norm	SO_UDR	MP-1	Enabled	Err	Norm	Norm	Err
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NO_UDR	NO-A	Enabled	Err	Norm	Norm	Norm																																																																																																																																								
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SO_UDR	MP-1	Enabled	Err	Norm	Norm	Err																																																																																																																																								
<p>THIS PROCEDURE HAS BEEN COMPLETED</p>																																																																																																																																														

8.7 Configure MP Signaling Interfaces (All SOAM Sites)

This procedure configures XSI IP Interface and adds the XSI signaling route for all MP Servers.

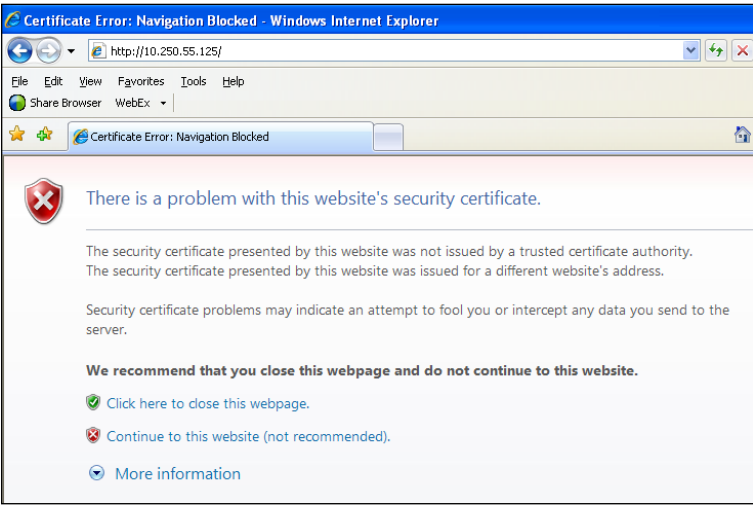
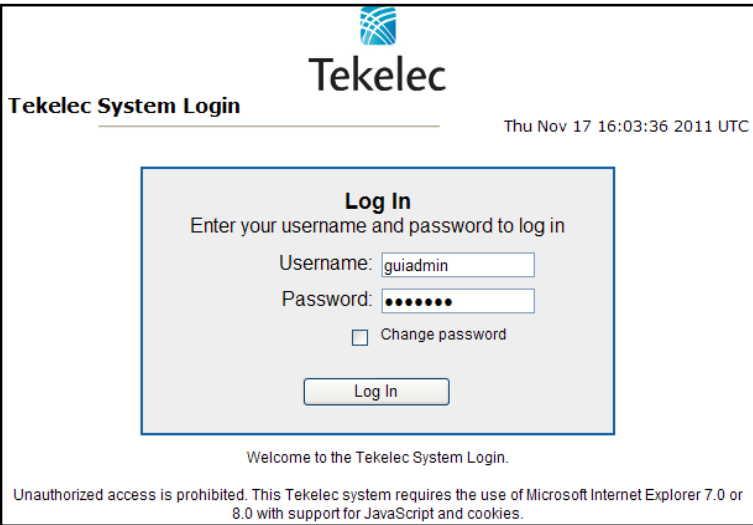
Requirements:

Procedure 16: Configuring MP Server Groups has been completed.

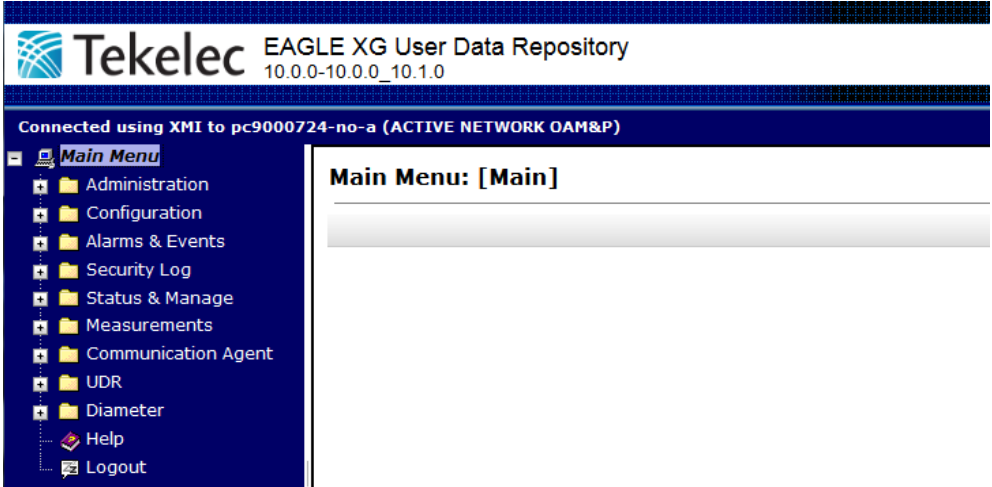
Check off (✓) each step as it is completed. Boxes have been provided for this purpose under each step number.

IF THIS PROCEDURE FAILS, CONTACT MY ORACLE SUPPORT (MOS) FOR ASSISTANCE.

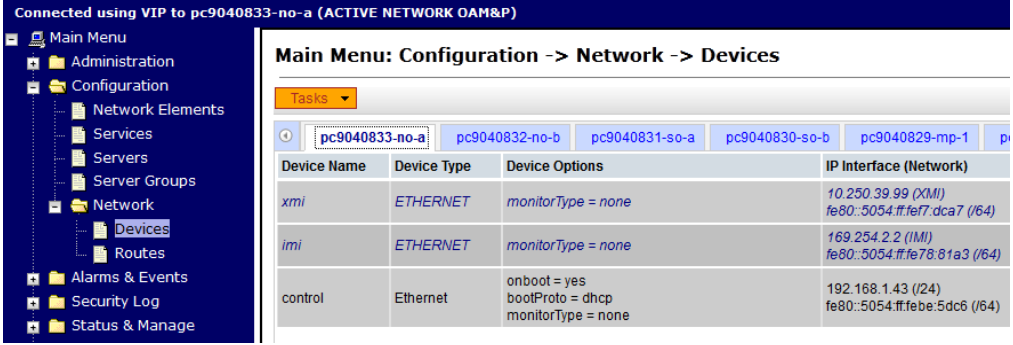
Procedure 17: Configure MP Signaling Interfaces

Step	Procedure	Result
<p>1.</p> <input type="checkbox"/>	<p>Active NOAMP VIP</p> <p>Launch an approved web browser and connect to the XMI Virtual IP Address (VIP) of the Active NOAMP site using "https://"</p>	
<p>2.</p> <input type="checkbox"/>	<p>Active NOAMP VIP</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 17: Configure MP Signaling Interfaces

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

Note: Repeat the steps below (Steps 4 - 8) for each MP.

<p>4.</p> <input type="checkbox"/>	<p>Active NOAMP VIP</p> <p>Select...</p> <p>Main Menu → Configuration → Network → Devices</p> <p>...as shown on the right.</p>	 <p>• “Check off” the associated Check Box as addition is completed for each Server.</p> <p> <input type="checkbox"/> MP-1 (XSI-1) <input type="checkbox"/> MP-2 (XSI-1) <input type="checkbox"/> MP-3(XSI-1) <input type="checkbox"/> MP-4 (XSI-1) <input type="checkbox"/> MP-1 (XSI-2) <input type="checkbox"/> MP-2 (XSI-2) <input type="checkbox"/> MP-3(XSI-2) <input type="checkbox"/> MP-4 (XSI-2) </p>
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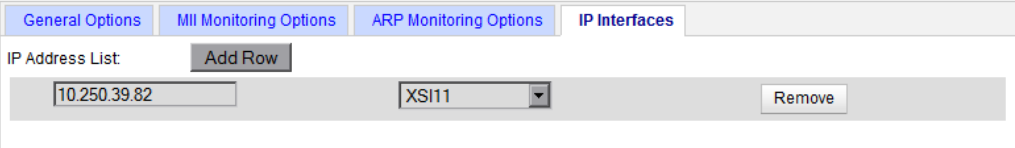
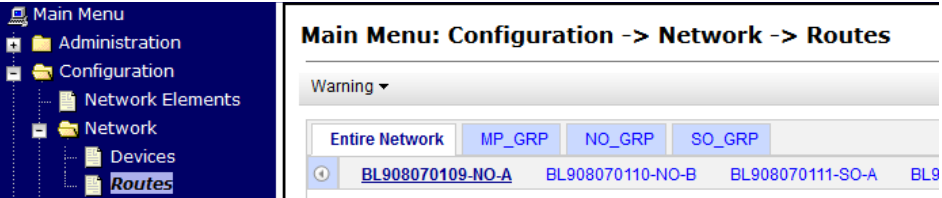
Procedure 17: Configure MP Signaling Interfaces

Step	Procedure	Result																														
<p>5.</p> <p><input type="checkbox"/></p>	<p>Active NOAMP VIP</p> <p>Select the xsi device for the desired MP</p>	<p>Click on the desired MP tab.</p> <p>Select the xsi1 device.</p> <p>Output similar to that shown below may be observed.</p> <p>Main Menu: Configuration -> Network -> Devices</p> <p style="text-align: right;">Help Tue Aug 21 14:39:44 2012 EDT</p> <p>Tasks</p> <table border="1"> <thead> <tr> <th>Device Name</th> <th>Device Type</th> <th>Device Options</th> <th>IP Interface (Network)</th> <th>Configuration Status</th> </tr> </thead> <tbody> <tr> <td>xmi</td> <td>ETHERNET</td> <td>monitorType = none</td> <td>10.250.39.105 (XMI) fe80::5054:ff:fe69:dade (/64)</td> <td>Discovered</td> </tr> <tr> <td>imi</td> <td>ETHERNET</td> <td>monitorType = none</td> <td>169.254.2.6 (IMI) fe80::5054:ff:fe67:dc6 (/64)</td> <td>Discovered</td> </tr> <tr> <td>control</td> <td>Ethernet</td> <td>onboot = yes bootProto = dhcp monitorType = none</td> <td>192.168.1.47 (/24) fe80::5054:ff:fe2d:92e1 (/64)</td> <td>Discovered</td> </tr> <tr style="background-color: #e0ffe0;"> <td>xsi1</td> <td>Ethernet</td> <td>onboot = yes bootProto = none monitorType = none</td> <td>10.250.39.82 (XSI11) fe80::5054:ff:feaf:7285 (/64)</td> <td>Configured</td> </tr> <tr> <td>xsi2</td> <td>Ethernet</td> <td>onboot = yes bootProto = none monitorType = none</td> <td>10.250.39.90 (XSI12) fe80::5054:ff:feaf:1937 (/64)</td> <td>Configured</td> </tr> </tbody> </table> <ul style="list-style-type: none"> • “Check off” the associated Check Box as addition is completed for each Server. <p> <input type="checkbox"/> MP-1 (XSI-1) <input type="checkbox"/> MP-2 (XSI-1) <input type="checkbox"/> MP-3(XSI-1) <input type="checkbox"/> MP-4 (XSI-1) <input type="checkbox"/> MP-1 (XSI-2) <input type="checkbox"/> MP-2 (XSI-2) <input type="checkbox"/> MP-3(XSI-2) <input type="checkbox"/> MP-4 (XSI-2) </p>	Device Name	Device Type	Device Options	IP Interface (Network)	Configuration Status	xmi	ETHERNET	monitorType = none	10.250.39.105 (XMI) fe80::5054:ff:fe69:dade (/64)	Discovered	imi	ETHERNET	monitorType = none	169.254.2.6 (IMI) fe80::5054:ff:fe67:dc6 (/64)	Discovered	control	Ethernet	onboot = yes bootProto = dhcp monitorType = none	192.168.1.47 (/24) fe80::5054:ff:fe2d:92e1 (/64)	Discovered	xsi1	Ethernet	onboot = yes bootProto = none monitorType = none	10.250.39.82 (XSI11) fe80::5054:ff:feaf:7285 (/64)	Configured	xsi2	Ethernet	onboot = yes bootProto = none monitorType = none	10.250.39.90 (XSI12) fe80::5054:ff:feaf:1937 (/64)	Configured
Device Name	Device Type	Device Options	IP Interface (Network)	Configuration Status																												
xmi	ETHERNET	monitorType = none	10.250.39.105 (XMI) fe80::5054:ff:fe69:dade (/64)	Discovered																												
imi	ETHERNET	monitorType = none	169.254.2.6 (IMI) fe80::5054:ff:fe67:dc6 (/64)	Discovered																												
control	Ethernet	onboot = yes bootProto = dhcp monitorType = none	192.168.1.47 (/24) fe80::5054:ff:fe2d:92e1 (/64)	Discovered																												
xsi1	Ethernet	onboot = yes bootProto = none monitorType = none	10.250.39.82 (XSI11) fe80::5054:ff:feaf:7285 (/64)	Configured																												
xsi2	Ethernet	onboot = yes bootProto = none monitorType = none	10.250.39.90 (XSI12) fe80::5054:ff:feaf:1937 (/64)	Configured																												
<p>6.</p> <p><input type="checkbox"/></p>	<p>Active NOAMP VIP</p> <p>Edit the xsi device for the desired MP</p>	<p style="text-align: center;"> 2 1 </p> <p style="text-align: center;"> <input type="button" value="Insert"/> <input type="button" value="Edit"/> <input type="button" value="Delete"/> <input type="button" value="Report"/> <input type="button" value="Report All"/> <input type="button" value="Take Ownership"/> </p> <ol style="list-style-type: none"> 1. Click on the Take Ownership button. 2. Re-select the xsi1 device. 3. Click on the Edit button. <ul style="list-style-type: none"> • “Check off” the associated Check Box as addition is completed for each Server. <p> <input type="checkbox"/> MP-1 (XSI-1) <input type="checkbox"/> MP-2 (XSI-1) <input type="checkbox"/> MP-3(XSI-1) <input type="checkbox"/> MP-4 (XSI-1) <input type="checkbox"/> MP-1 (XSI-2) <input type="checkbox"/> MP-2 (XSI-2) <input type="checkbox"/> MP-3(XSI-2) <input type="checkbox"/> MP-4 (XSI-2) </p>																														

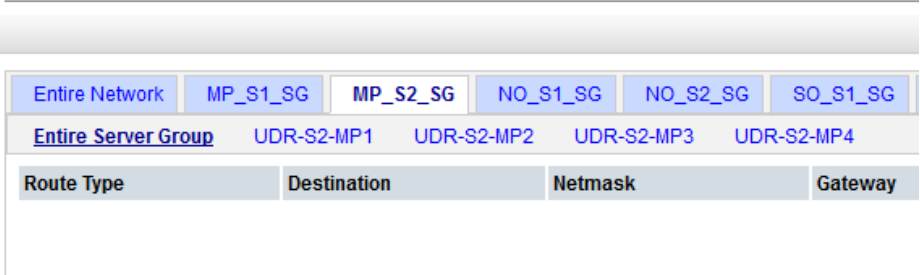

Procedure 17: Configure MP Signaling Interfaces

Step	Procedure	Result																		
<p>7.</p> <p><input type="checkbox"/></p>	<p>Active NOAMP VIP</p> <p>Enable “Start On Boot”</p>	<p>Click on the General Options tab.</p> <p>Check the Start on Boot check box (to make it enabled).</p> <p>Output similar to that shown below may be observed.</p> <p>Main Menu: Configuration -> Network -> Devices [Edit]</p> <p style="text-align: right;">Help Tue Aug 21 14:40:26 2012 EDT</p> <p>Edit Ethernet device xsi1 on pc9040829-mp-1</p> <table border="1"> <thead> <tr> <th>Field</th> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Device Type</td> <td> <input checked="" type="radio"/> Ethernet <input type="radio"/> Bonding <input type="radio"/> Vlan <input type="radio"/> Alias </td> <td>Select the device type. It cannot be changed after device is created. [Default = N/A. Range = Bonding, Vlan, Alias.]</td> </tr> <tr> <td>Device Monitoring</td> <td>-- Monitoring Type--</td> <td>Choose a monitoring style to use with a bonded device. Disabled for non-bonded devices. [Default = MII. Options = MII, ARP]</td> </tr> <tr> <td>Start On Boot</td> <td><input checked="" type="checkbox"/> Enable</td> <td>Start the device, and also start on boot. [Default = enabled]</td> </tr> <tr> <td>Boot Protocol</td> <td>None</td> <td>Select the boot protocol. [Default = None, Range = [None, DHCP]]</td> </tr> <tr> <td>Base Device(s)</td> <td> <input type="checkbox"/> xmi <input type="checkbox"/> imi <input type="checkbox"/> control <input type="checkbox"/> xsi1 <input type="checkbox"/> xsi2 </td> <td>The base device(s) for Bonding, Alias and Vlan device types. Alias and Vlan devices require 1 selection; Bonding devices require 2 selections. It cannot be changed after device is created. [Default = N/A. Range = available base devices per device type.]</td> </tr> </tbody> </table> <p>Ok Apply Cancel</p> <ul style="list-style-type: none"> • “Check off” the associated Check Box as addition is completed for each Server. <p> <input type="checkbox"/> MP-1 (XSI-1) <input type="checkbox"/> MP-2 (XSI-1) <input type="checkbox"/> MP-3(XSI-1) <input type="checkbox"/> MP-4 (XSI-1) <input type="checkbox"/> MP-1 (XSI-2) <input type="checkbox"/> MP-2 (XSI-2) <input type="checkbox"/> MP-3(XSI-2) <input type="checkbox"/> MP-4 (XSI-2) </p>	Field	Value	Description	Device Type	<input checked="" type="radio"/> Ethernet <input type="radio"/> Bonding <input type="radio"/> Vlan <input type="radio"/> Alias	Select the device type. It cannot be changed after device is created. [Default = N/A. Range = Bonding, Vlan, Alias.]	Device Monitoring	-- Monitoring Type--	Choose a monitoring style to use with a bonded device. Disabled for non-bonded devices. [Default = MII. Options = MII, ARP]	Start On Boot	<input checked="" type="checkbox"/> Enable	Start the device, and also start on boot. [Default = enabled]	Boot Protocol	None	Select the boot protocol. [Default = None, Range = [None, DHCP]]	Base Device(s)	<input type="checkbox"/> xmi <input type="checkbox"/> imi <input type="checkbox"/> control <input type="checkbox"/> xsi1 <input type="checkbox"/> xsi2	The base device(s) for Bonding, Alias and Vlan device types. Alias and Vlan devices require 1 selection; Bonding devices require 2 selections. It cannot be changed after device is created. [Default = N/A. Range = available base devices per device type.]
Field	Value	Description																		
Device Type	<input checked="" type="radio"/> Ethernet <input type="radio"/> Bonding <input type="radio"/> Vlan <input type="radio"/> Alias	Select the device type. It cannot be changed after device is created. [Default = N/A. Range = Bonding, Vlan, Alias.]																		
Device Monitoring	-- Monitoring Type--	Choose a monitoring style to use with a bonded device. Disabled for non-bonded devices. [Default = MII. Options = MII, ARP]																		
Start On Boot	<input checked="" type="checkbox"/> Enable	Start the device, and also start on boot. [Default = enabled]																		
Boot Protocol	None	Select the boot protocol. [Default = None, Range = [None, DHCP]]																		
Base Device(s)	<input type="checkbox"/> xmi <input type="checkbox"/> imi <input type="checkbox"/> control <input type="checkbox"/> xsi1 <input type="checkbox"/> xsi2	The base device(s) for Bonding, Alias and Vlan device types. Alias and Vlan devices require 1 selection; Bonding devices require 2 selections. It cannot be changed after device is created. [Default = N/A. Range = available base devices per device type.]																		

Procedure 17: Configure MP Signaling Interfaces

Step	Procedure	Result
<p>8.</p> <input type="checkbox"/>	<p>Active NOAMP VIP</p> <p>Add an xsi IP Address.</p>	<p>Click on the IP Interfaces tab.</p> <p>Click the Add Row button.</p> <p>Output similar to that shown below may be observed.</p> <p>Main Menu: Configuration -> Network -> Devices [Edit]</p> <hr/> <p>Edit Ethernet device xsi1 on pc9040829-mp-1</p>  <p>Set the Network Name to xsi1.</p> <p>Enter the xsi1 IP Address.</p> <p>Click on the Ok button.</p> <ul style="list-style-type: none"> • “Check off” the associated Check Box as addition is completed for each Server. <p> <input type="checkbox"/> MP-1 (XSI-1) <input type="checkbox"/> MP-2 (XSI-1) <input type="checkbox"/> MP-3(XSI-1) <input type="checkbox"/> MP-4 (XSI-1) <input type="checkbox"/> MP-1 (XSI-2) <input type="checkbox"/> MP-2 (XSI-2) <input type="checkbox"/> MP-3(XSI-2) <input type="checkbox"/> MP-4 (XSI-2) </p>
<p>9.</p> <input type="checkbox"/>	<p>Repeat Steps 4 - 8 for each MP and its Signaling network(s).</p> <p>NOTE: If a second XSI network is present (XSI-2), steps 4 - 8 must be run for each MP’s XSI-2 network.</p>	
<p>10.</p> <input type="checkbox"/>	<p>Active NOAMP VIP</p> <p>Select...</p> <p>Main Menu → Configuration → Network → Routes</p> <p>...as shown on the right.</p>	

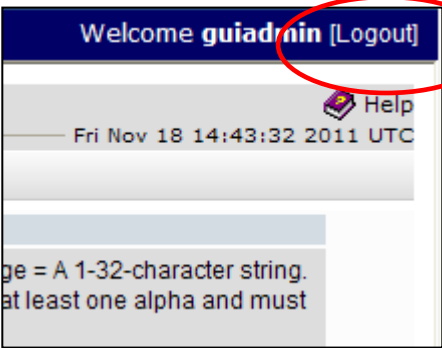
Procedure 17: Configure MP Signaling Interfaces

Step	Procedure	Result
<p>11.</p> <p><input type="checkbox"/></p>	<p>Active NOAMP VIP</p> <p>Insert a new route for the MP.</p>	<p>Click on the desired Server Group tab on the top line.</p> <p>Then click on the Entire Server Group tab on the line below Server Group line.</p> <p>Output similar to that shown below may be observed.</p> <p>Main Menu: Configuration -> Network -> Routes</p>  <p>The screenshot shows a configuration page with several tabs: 'Entire Network', 'MP_S1_SG', 'MP_S2_SG', 'NO_S1_SG', 'NO_S2_SG', and 'SO_S1_SG'. Below these is another set of tabs: 'Entire Server Group', 'UDR-S2-MP1', 'UDR-S2-MP2', 'UDR-S2-MP3', and 'UDR-S2-MP4'. A table with columns 'Route Type', 'Destination', 'Netmask', and 'Gateway' is visible. An 'Insert' button is located below the table.</p> <p>Click on the Insert button </p> <ul style="list-style-type: none"> • “Check off” the associated Check Box as addition is completed for each Network. <p><input type="checkbox"/> XSI-1 <input type="checkbox"/> XSI-2</p>

Procedure 17: Configure MP Signaling Interfaces

Step	Procedure	Result																		
<p>12.</p> <input type="checkbox"/>	<p>Active NOAMP VIP</p> <p>Add xsi signaling route to MP</p>	<p>Output similar to that shown below may be observed.</p> <p>Main Menu: Configuration -> Network -> Routes [Insert]</p> <p style="text-align: right;">Thu Mar 20 19:09:27 2014</p> <p>Info ▾</p> <p>Insert Route on MP_S2_SG</p> <table border="1"> <thead> <tr> <th>Field</th> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Route Type</td> <td> <input checked="" type="radio"/> Net <input type="radio"/> Default <input type="radio"/> Host * </td> <td>Select a route type. [Default = N/A. Options = Net, Default, Host. You can configure at most one IPV4 default route and one IPV6 default route on a given target machine.]</td> </tr> <tr> <td>Device</td> <td>xsi1 ▾ *</td> <td>Select the network device name through which traffic is being routed. The selection of AUTO will result in the device being selected automatically, if possible. [Default = N/A. Range = Provisioned devices on the selected server.]</td> </tr> <tr> <td>Destination</td> <td>10.240.37.224</td> <td>The destination network address. [Default = N/A. Range = Valid Network Address of the network in dotted decimal (IPv4) or colon hex (IPv6) format.]</td> </tr> <tr> <td>Netmask</td> <td>255.255.255.240</td> <td>A valid netmask for the network route destination IP address. [Default = N/A. Range = Valid Netmask for the network in prefix length (IPv4 or IPv6) or dotted decimal (IPv4) format.]</td> </tr> <tr> <td>Gateway IP</td> <td>10.240.162.161 *</td> <td>The IP address of the gateway for this route. [Default = N/A. Range = Valid IP address of the gateway in dotted decimal (IPv4) or colon hex (IPv6) format.]</td> </tr> </tbody> </table> <p style="text-align: center;">Ok Apply Cancel</p> <p>Set Route Type to desired value Set Device to xsi1 Enter Destination: This is the address of the Diameter Sh clients that will connect to OCUDR on the signaling network. Enter Netmask for the Diameter Sh client network. Enter Gateway IP : This is the gateway for OCUDR signaling network Click Apply button</p> <ul style="list-style-type: none"> • “Check off” the associated Check Box as addition is completed for each Network. <p><input type="checkbox"/> XSI-1 <input type="checkbox"/> XSI-2</p>	Field	Value	Description	Route Type	<input checked="" type="radio"/> Net <input type="radio"/> Default <input type="radio"/> Host *	Select a route type. [Default = N/A. Options = Net, Default, Host. You can configure at most one IPV4 default route and one IPV6 default route on a given target machine.]	Device	xsi1 ▾ *	Select the network device name through which traffic is being routed. The selection of AUTO will result in the device being selected automatically, if possible. [Default = N/A. Range = Provisioned devices on the selected server.]	Destination	10.240.37.224	The destination network address. [Default = N/A. Range = Valid Network Address of the network in dotted decimal (IPv4) or colon hex (IPv6) format.]	Netmask	255.255.255.240	A valid netmask for the network route destination IP address. [Default = N/A. Range = Valid Netmask for the network in prefix length (IPv4 or IPv6) or dotted decimal (IPv4) format.]	Gateway IP	10.240.162.161 *	The IP address of the gateway for this route. [Default = N/A. Range = Valid IP address of the gateway in dotted decimal (IPv4) or colon hex (IPv6) format.]
Field	Value	Description																		
Route Type	<input checked="" type="radio"/> Net <input type="radio"/> Default <input type="radio"/> Host *	Select a route type. [Default = N/A. Options = Net, Default, Host. You can configure at most one IPV4 default route and one IPV6 default route on a given target machine.]																		
Device	xsi1 ▾ *	Select the network device name through which traffic is being routed. The selection of AUTO will result in the device being selected automatically, if possible. [Default = N/A. Range = Provisioned devices on the selected server.]																		
Destination	10.240.37.224	The destination network address. [Default = N/A. Range = Valid Network Address of the network in dotted decimal (IPv4) or colon hex (IPv6) format.]																		
Netmask	255.255.255.240	A valid netmask for the network route destination IP address. [Default = N/A. Range = Valid Netmask for the network in prefix length (IPv4 or IPv6) or dotted decimal (IPv4) format.]																		
Gateway IP	10.240.162.161 *	The IP address of the gateway for this route. [Default = N/A. Range = Valid IP address of the gateway in dotted decimal (IPv4) or colon hex (IPv6) format.]																		
<p>13.</p> <input type="checkbox"/>	<p>Repeat Step 11-12 for each Network.</p>																			
<p>14.</p> <input type="checkbox"/>	<p>Repeat Step 11-12 if MP ↔ ComAgent communication is intended to be configured on XSI1 as described in 8.11: Configure ComAgent Service on Signaling Network</p> <p>Note: Destination would be DR Site XSI1 Address if configuring Primary Site and vice-versa. Note: Netmask would be DR Site XSI1 Address if configuring Primary Site and vice-versa. Note: Gateway IP would be Primary Site XSI1 Gateway if configuring Primary Site and vice-versa.</p>																			

Procedure 17: Configure MP Signaling Interfaces

Step	Procedure	Result
<p>15.</p> <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>Click the “Logout” link on the server GUI.</p>	
<p>THIS PROCEDURE HAS BEEN COMPLETED</p>		

8.8 Configure SPR Application on MP (All SOAM Sites)

This procedure configures the SPR application for MP Servers on each SOAM site.

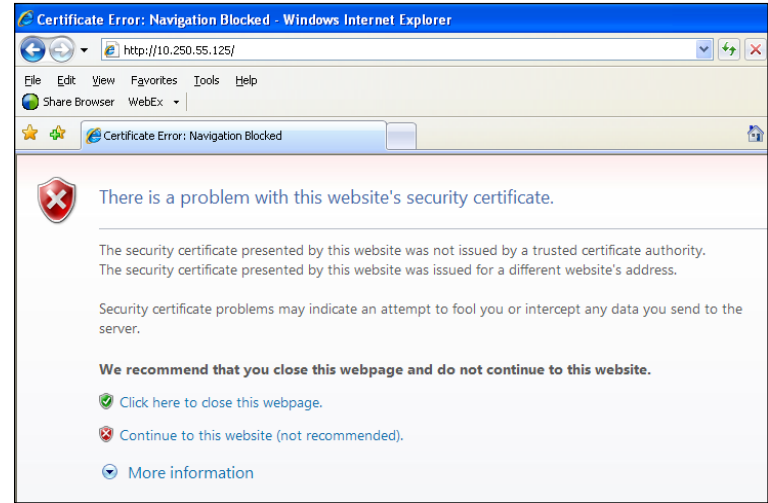
Requirements:

Procedure 17: Configure MP Signaling Interfaces (All SOAM Sites) has been completed.

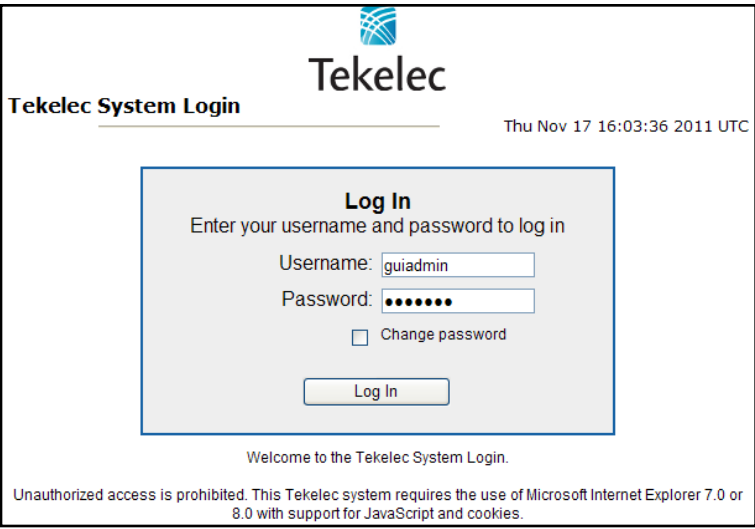
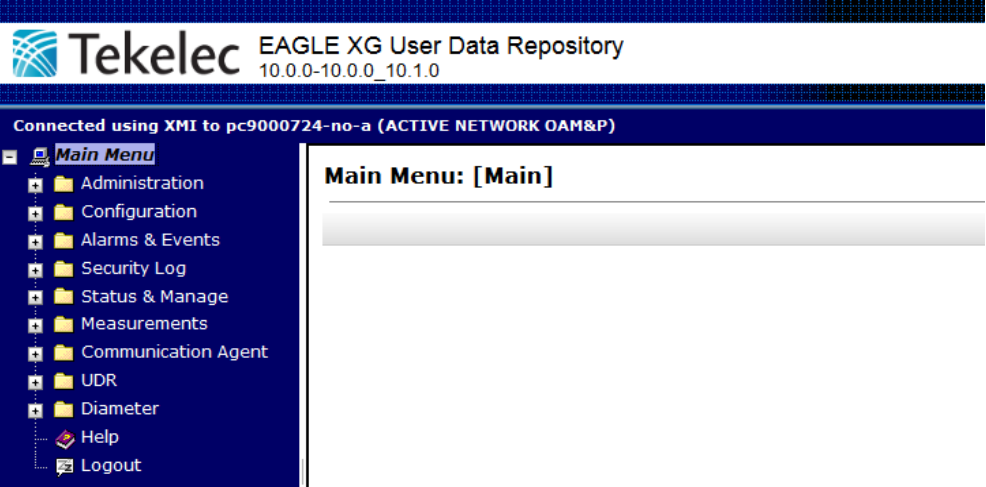
Check off (✓) each step as it is completed. Boxes have been provided for this purpose under each step number.

IF THIS PROCEDURE FAILS, CONTACT MY ORACLE SUPPORT (MOS) FOR ASSISTANCE.

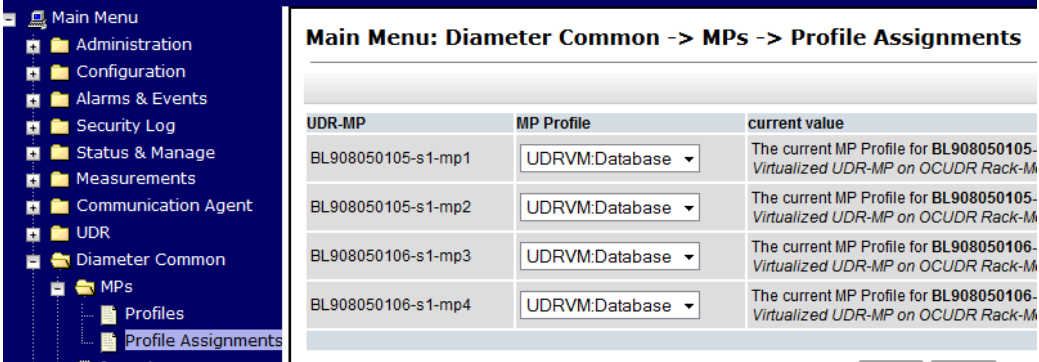
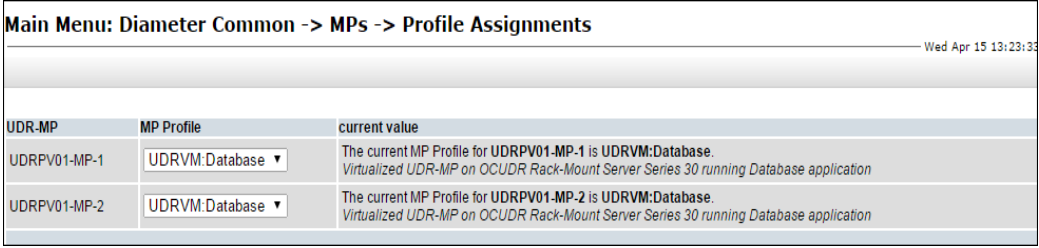
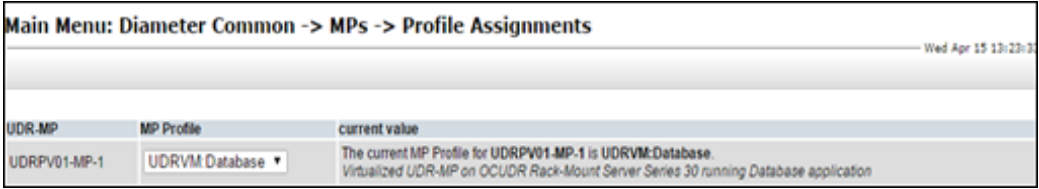
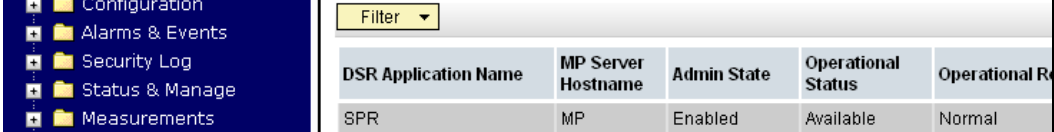
Procedure 18: Configure SPR Application on MP

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

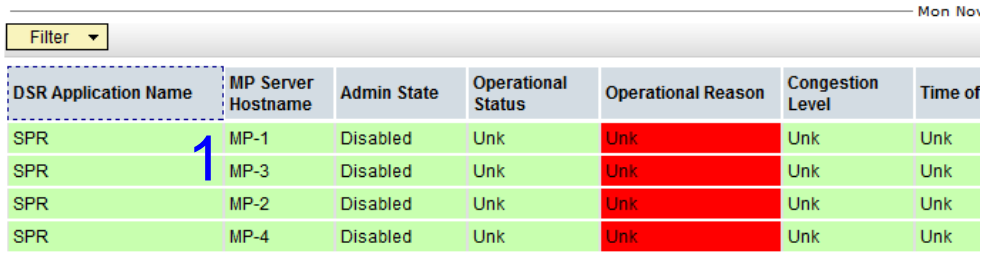
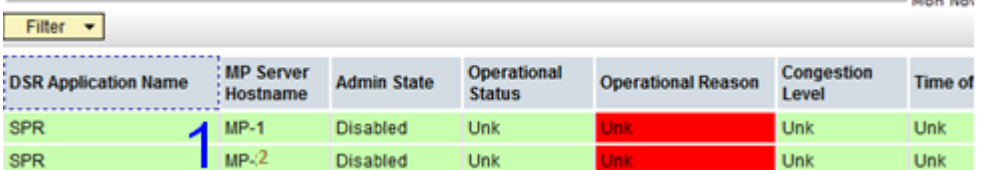
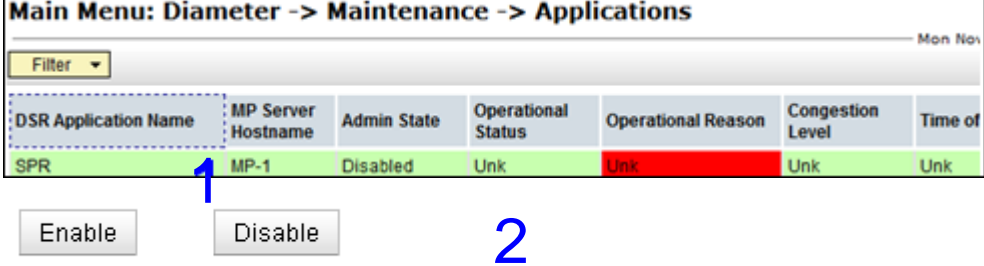
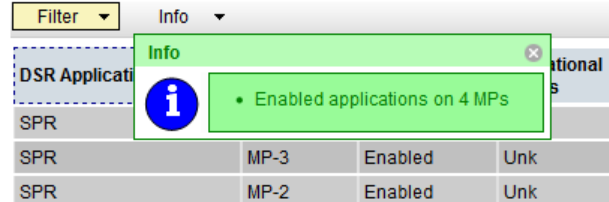
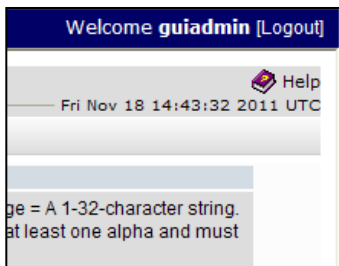
Procedure 18: Configure SPR Application on MP

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

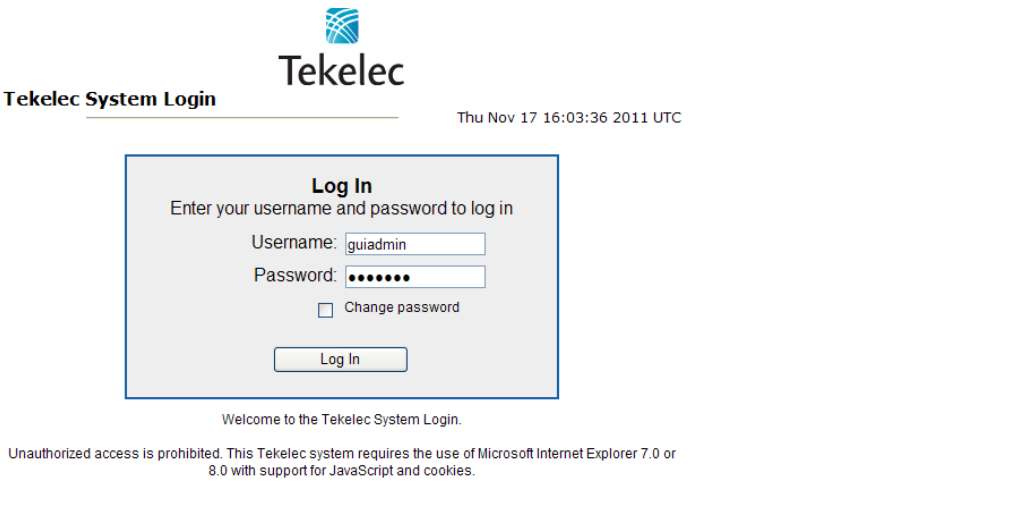
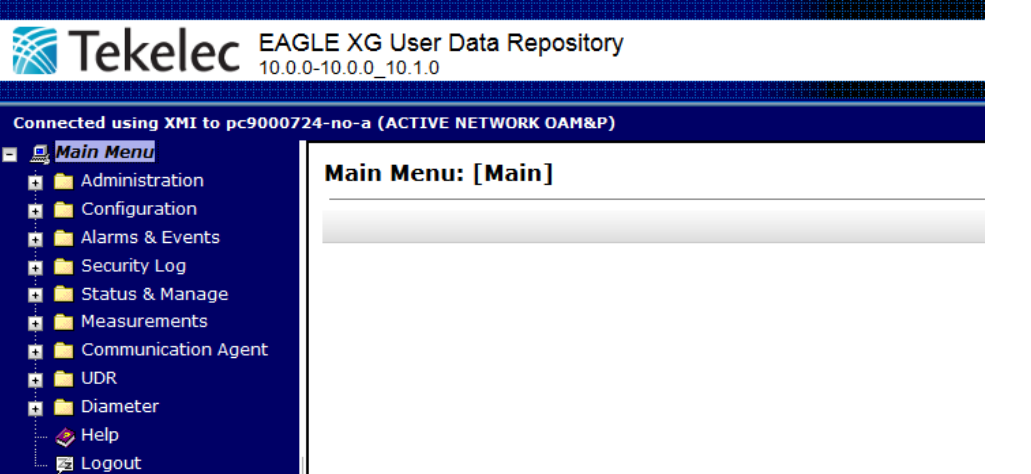
Procedure 18: Configure SPR Application on MP

Step	Procedure	Result
<p>4.</p> <p><input type="checkbox"/></p>	<p>Active SOAM VIP</p> <p>Select...</p> <p>Main Menu → <i>Diameter Common</i> → <i>MPs</i> → <i>Profile Assignments</i></p> <p>Select profile as UDRVM:Database and click on Assign</p>	<p>Normal Capacity Configuration:</p>  <p>Low Capacity Configuration:</p>  <p>Single Server Configuration:</p> 
<p>5.</p> <p><input type="checkbox"/></p>	<p>Active SOAM VIP</p> <p>Select...</p> <p>Main Menu → <i>Diameter</i> → <i>Maintenance</i> → <i>Applications</i></p> <p>...as shown on the right.</p>	<p>Main Menu: Diameter -> Maintenance -> Applications</p> 

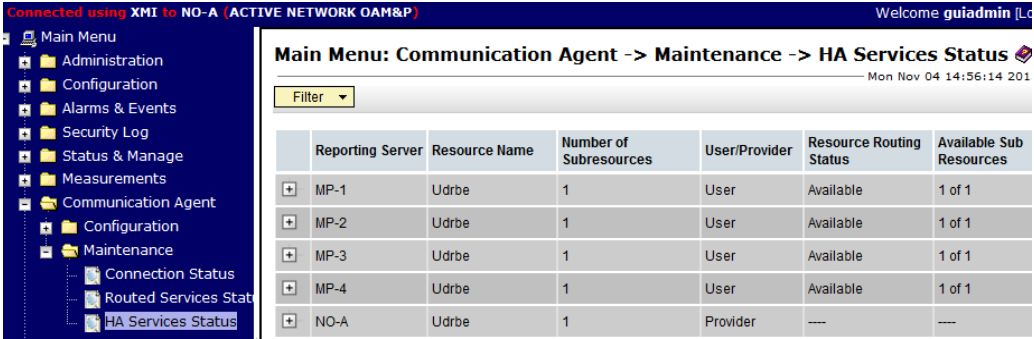
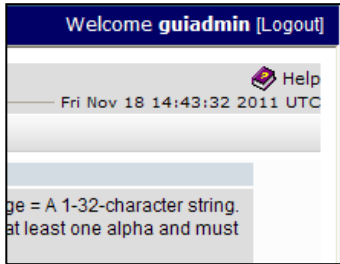
Procedure 18: Configure SPR Application on MP

Step	Procedure	Result																																																																						
<p>6.</p> <p><input type="checkbox"/></p>	<p>Active SOAM VIP</p> <p>1) Select the “SPR” Application on each “MP” using the mouse and holding the Ctrl key. The line entries should be highlighted in GREEN.</p> <p>2) Click on Enable Button</p>	<p>Normal Capacity Configuration:</p> <p>Main Menu: Diameter -> Maintenance -> Applications</p>  <table border="1"> <thead> <tr> <th>DSR Application Name</th> <th>MP Server Hostname</th> <th>Admin State</th> <th>Operational Status</th> <th>Operational Reason</th> <th>Congestion Level</th> <th>Time of</th> </tr> </thead> <tbody> <tr> <td>SPR</td> <td>MP-1</td> <td>Disabled</td> <td>Unk</td> <td>Unk</td> <td>Unk</td> <td>Unk</td> </tr> <tr> <td>SPR</td> <td>MP-3</td> <td>Disabled</td> <td>Unk</td> <td>Unk</td> <td>Unk</td> <td>Unk</td> </tr> <tr> <td>SPR</td> <td>MP-2</td> <td>Disabled</td> <td>Unk</td> <td>Unk</td> <td>Unk</td> <td>Unk</td> </tr> <tr> <td>SPR</td> <td>MP-4</td> <td>Disabled</td> <td>Unk</td> <td>Unk</td> <td>Unk</td> <td>Unk</td> </tr> </tbody> </table> <p>Low Capacity Configuration:</p> <p>Main Menu: Diameter -> Maintenance -> Applications</p>  <table border="1"> <thead> <tr> <th>DSR Application Name</th> <th>MP Server Hostname</th> <th>Admin State</th> <th>Operational Status</th> <th>Operational Reason</th> <th>Congestion Level</th> <th>Time of</th> </tr> </thead> <tbody> <tr> <td>SPR</td> <td>MP-1</td> <td>Disabled</td> <td>Unk</td> <td>Unk</td> <td>Unk</td> <td>Unk</td> </tr> <tr> <td>SPR</td> <td>MP-2</td> <td>Disabled</td> <td>Unk</td> <td>Unk</td> <td>Unk</td> <td>Unk</td> </tr> </tbody> </table> <p>Single Server Configuration:</p> <p>Main Menu: Diameter -> Maintenance -> Applications</p>  <table border="1"> <thead> <tr> <th>DSR Application Name</th> <th>MP Server Hostname</th> <th>Admin State</th> <th>Operational Status</th> <th>Operational Reason</th> <th>Congestion Level</th> <th>Time of</th> </tr> </thead> <tbody> <tr> <td>SPR</td> <td>MP-1</td> <td>Disabled</td> <td>Unk</td> <td>Unk</td> <td>Unk</td> <td>Unk</td> </tr> </tbody> </table> <p>Buttons: <input type="button" value="Enable"/> <input type="button" value="Disable"/></p>	DSR Application Name	MP Server Hostname	Admin State	Operational Status	Operational Reason	Congestion Level	Time of	SPR	MP-1	Disabled	Unk	Unk	Unk	Unk	SPR	MP-3	Disabled	Unk	Unk	Unk	Unk	SPR	MP-2	Disabled	Unk	Unk	Unk	Unk	SPR	MP-4	Disabled	Unk	Unk	Unk	Unk	DSR Application Name	MP Server Hostname	Admin State	Operational Status	Operational Reason	Congestion Level	Time of	SPR	MP-1	Disabled	Unk	Unk	Unk	Unk	SPR	MP-2	Disabled	Unk	Unk	Unk	Unk	DSR Application Name	MP Server Hostname	Admin State	Operational Status	Operational Reason	Congestion Level	Time of	SPR	MP-1	Disabled	Unk	Unk	Unk	Unk
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<p>7.</p> <p><input type="checkbox"/></p>	<p>Active SOAM VIP</p> <p>The user should be presented with a banner information message stating “Enabled application”.</p>	 <p>Info: Enabled applications on 4 MPs</p> <table border="1"> <thead> <tr> <th>DSR Application Name</th> <th>MP Server Hostname</th> <th>Admin State</th> <th>Operational Status</th> </tr> </thead> <tbody> <tr> <td>SPR</td> <td>MP-3</td> <td>Enabled</td> <td>Unk</td> </tr> <tr> <td>SPR</td> <td>MP-2</td> <td>Enabled</td> <td>Unk</td> </tr> </tbody> </table>	DSR Application Name	MP Server Hostname	Admin State	Operational Status	SPR	MP-3	Enabled	Unk	SPR	MP-2	Enabled	Unk																																																										
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Procedure 18: Configure SPR Application on MP

Step	Procedure	Result
<p>9.</p> <p><input type="checkbox"/></p>	<p>Active NOAMP VIP</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>10.</p> <p><input type="checkbox"/></p>	<p>Active NOAMP VIP</p> <p>The user should be presented the OCUDR Main Menu as shown on the right.</p>	

Procedure 18: Configure SPR Application on MP

Step	Procedure	Result																																																																								
11. <input type="checkbox"/>	<p>Active NOAMP VIP</p> <p>Verify service appears on NOAMP GUI page</p> <p>Select...</p> <p>Main Menu → Communication Agent → Maintenance → HA Services Status</p> <p>...as shown on the right.</p>	<p>Normal Capacity Configuration:</p>  <table border="1"> <thead> <tr> <th>Reporting Server</th> <th>Resource Name</th> <th>Number of Subresources</th> <th>User/Provider</th> <th>Resource Routing Status</th> <th>Available Sub Resources</th> </tr> </thead> <tbody> <tr><td>MP-1</td><td>Udrbe</td><td>1</td><td>User</td><td>Available</td><td>1 of 1</td></tr> <tr><td>MP-2</td><td>Udrbe</td><td>1</td><td>User</td><td>Available</td><td>1 of 1</td></tr> <tr><td>MP-3</td><td>Udrbe</td><td>1</td><td>User</td><td>Available</td><td>1 of 1</td></tr> <tr><td>MP-4</td><td>Udrbe</td><td>1</td><td>User</td><td>Available</td><td>1 of 1</td></tr> <tr><td>NO-A</td><td>Udrbe</td><td>1</td><td>Provider</td><td>---</td><td>---</td></tr> </tbody> </table> <p>Low Capacity Configuration:</p> <table border="1"> <thead> <tr> <th>Reporting Server</th> <th>Resource Name</th> <th>Number of Subresources</th> <th>User/Provider</th> <th>Resource Routing Status</th> <th>Available Sub Resources</th> </tr> </thead> <tbody> <tr><td>UDRPV01-MP-1</td><td>UDR-HAS-UDR-App</td><td>1</td><td>User</td><td>Available</td><td>1 of 1</td></tr> <tr><td>UDRPV01-MP-2</td><td>UDR-HAS-UDR-App</td><td>1</td><td>User</td><td>Available</td><td>1 of 1</td></tr> <tr><td>UDRPV01-NO-A</td><td>UDR-HAS-UDR-App</td><td>1</td><td>Provider</td><td>---</td><td>---</td></tr> </tbody> </table> <p>Single Server Configuration:</p> <table border="1"> <thead> <tr> <th>Reporting Server</th> <th>Resource Name</th> <th>Number of Subresources</th> <th>User/Provider</th> <th>Resource Routing Status</th> <th>Available Sub Resources</th> </tr> </thead> <tbody> <tr><td>UDRPV01-MP-1</td><td>UDR-HAS-UDR-App</td><td>1</td><td>User</td><td>Available</td><td>1 of 1</td></tr> </tbody> </table>	Reporting Server	Resource Name	Number of Subresources	User/Provider	Resource Routing Status	Available Sub Resources	MP-1	Udrbe	1	User	Available	1 of 1	MP-2	Udrbe	1	User	Available	1 of 1	MP-3	Udrbe	1	User	Available	1 of 1	MP-4	Udrbe	1	User	Available	1 of 1	NO-A	Udrbe	1	Provider	---	---	Reporting Server	Resource Name	Number of Subresources	User/Provider	Resource Routing Status	Available Sub Resources	UDRPV01-MP-1	UDR-HAS-UDR-App	1	User	Available	1 of 1	UDRPV01-MP-2	UDR-HAS-UDR-App	1	User	Available	1 of 1	UDRPV01-NO-A	UDR-HAS-UDR-App	1	Provider	---	---	Reporting Server	Resource Name	Number of Subresources	User/Provider	Resource Routing Status	Available Sub Resources	UDRPV01-MP-1	UDR-HAS-UDR-App	1	User	Available	1 of 1
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12. <input type="checkbox"/>	<p>Active NOAMP VIP</p> <p>Click the “Logout” link on the server GUI.</p>																																																																									
<p>THIS PROCEDURE HAS BEEN COMPLETED</p>																																																																										

8.9 Configure NOAMP Signaling Interfaces (All NOAM Sites)

This procedure configures XSI IP Interface and adds the XSI signaling route for all NOAMP Servers. **This procedure is optional and should be executed only if ComAgent Service is required to be configured on XSI Network.**

Requirements:

- **Procedure 14: OAM Pairing for the Primary NOAMP Servers** has been completed.
- **Procedure 15: Pairing the OAM Servers for SOAM or DR NOAMP sites** has been completed.

OCUDR 10.0.1 Installation and Configuration Guide

- **Procedure 16: Configuring MP Server Groups** has been completed.

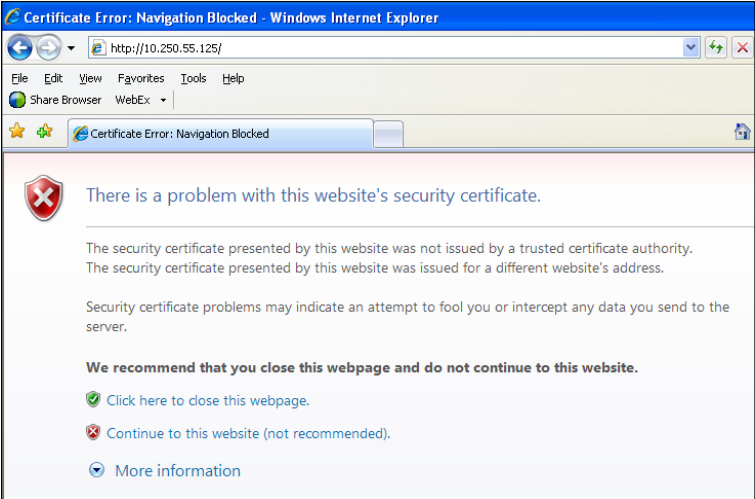
Check off (✓) each step as it is completed. Boxes have been provided for this purpose under each step number.

IF THIS PROCEDURE FAILS, CONTACT MY ORACLE SUPPORT (MOS) FOR ASSISTANCE.

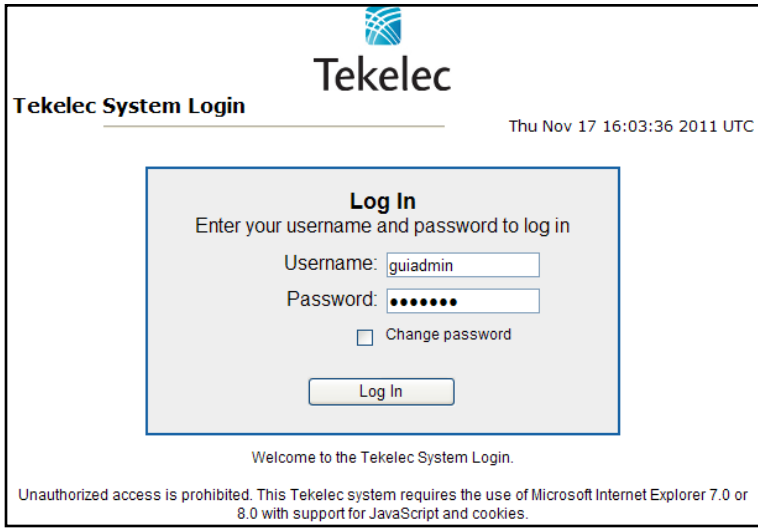
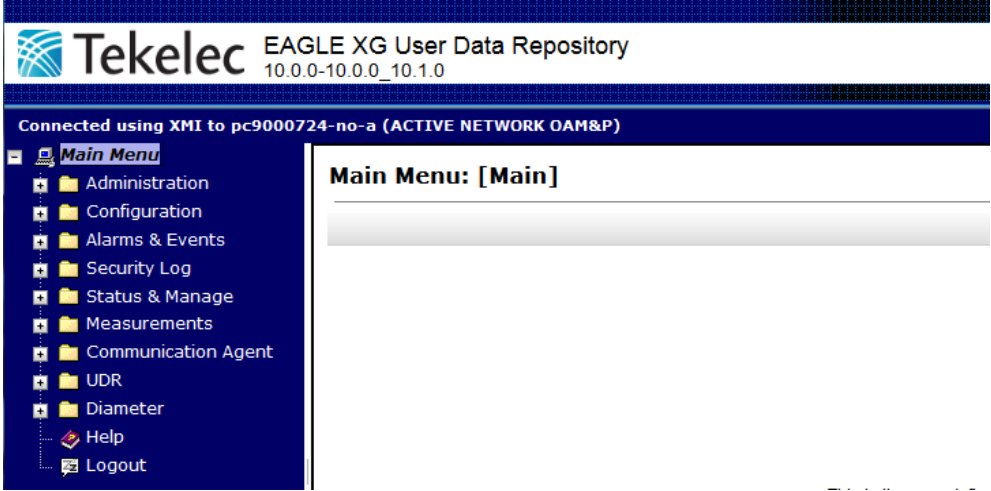
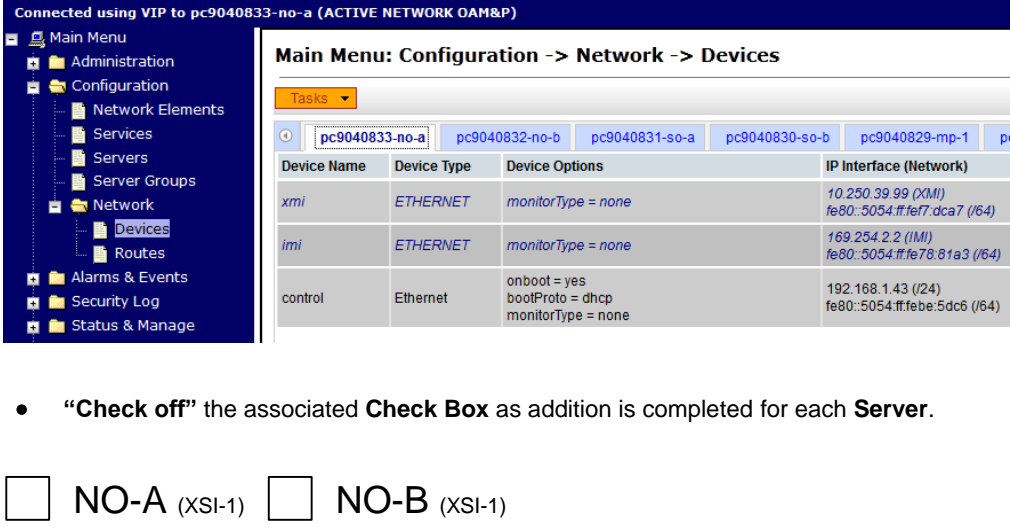
Procedure 19: Configure NOAMP Signaling Interfaces

Step	Procedure	Result
<p>NOTE: This procedure is optional and should be executed only if ComAgent Service is required to be configured on XSI Network.</p>		
1. <input type="checkbox"/>	Create bond interface for signaling network on NOAMP for Topology 4 and Topology 4A ONLY	<p><u>For Toplogy 4 and Topology 4A ONLY:</u></p> <p>Deployments with two pairs of enclosure switches (Topology 4 and Topology 4A in reference [6]) will host XSI on bond1:</p> <p>Execute Step 2 - 7 on all NOAMP servers</p>
2. <input type="checkbox"/>	<p>NOAMP Server :</p> <p>1) Access the command prompt.</p> <p>2) Log into the NOAMP server as the "admusr" user..</p>	<pre>login as: admusr admusr@10.250.xx.yy's password: <admusr_password> Last login: Mon Jul 30 10:33:19 2012 from 10.25.80.199 [admusr@pc9040833-no-a ~]#</pre>
3. <input type="checkbox"/>	<p>NOAMP Server:</p> <p>Output similar to that shown on the right will appear as the server access the command prompt.</p>	<p>*** TRUNCATED OUTPUT ***</p> <pre>VPATH=/opt/TKLCcomcol/runcm5.16:/opt/TKLCcomcol/cm5.16 PRODPATH= RELEASE=5.16 RUNID=00 VPATH=/var/TKLC/rundb:/usr/TKLC/appworks:/usr/TKLC/awpcommon:/usr/TKLC/awptransportmgr:/usr/TKLC/awps7:/usr/TKLC/exhr PRODPATH=/opt/comcol/prod RUNID=00 [admusr@pc9040833-no-a ~]#</pre>
4. <input type="checkbox"/>	<p>NOAMP Server :</p> <p>Switch to "root" user.</p>	<pre>[admusr@ pc9040833-no-a ~]\$ su - password: <root_password></pre>

Procedure 19: Configure NOAMP Signaling Interfaces

Step	Procedure	Result
<p>5.</p> <input type="checkbox"/>	<p>NOAMP Server:</p> <p>Add bond for signaling</p> <p>[Topology 4 only]</p>	<p>Topology 4 and Topology 4A ONLY:</p> <p>Deployments with two pairs of enclosure switches (Topology 4 and Topology 4A in reference [6]) will host XSI on bond1:</p> <pre># netAdm add --device=bond1 --onboot=yes --bootproto=none</pre> <p>Interface bond1 added</p>
<p>6.</p> <input type="checkbox"/>	<p>NOAMP Server:</p> <p>Bond interfaces eth11 and eth12 for signaling</p> <p>[Topology 4 only]</p>	<p>Topology 4 and Topology 4A ONLY:</p> <p>Deployments with two pairs of enclosure switches (Topology 4 and Topology 4A in reference [6]) will host XSI on bond1:</p> <pre># netAdm set --device=bond1 --bondInterfaces=eth11,eth12</pre> <p>Interface bond1 updated</p>
<p>7.</p> <input type="checkbox"/>	<p>NOAMP Server:</p> <p>Bring up bond1 on the server</p> <p>Note: Output similar to that shown on the right may be observed</p>	<p>Restart the network interfaces:</p> <pre># ifup bond1</pre> <p>RTNETLINK answers: File exists</p> <p>Note: If the output returns any errors like FAILED, please stop and contact My Oracle Support (MOS) before continuing.</p>
<p>8.</p> <input type="checkbox"/>	<p>Active NOAMP VIP</p> <p>Launch an approved web browser and connect to the XMI Virtual IP Address (VIP) of the Active NOAMP site using "https://"</p>	

Procedure 19: Configure NOAMP Signaling Interfaces

Step	Procedure	Result
<p>9.</p> <p><input type="checkbox"/></p>	<p>Active NOAMP VIP</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>10.</p> <p><input type="checkbox"/></p>	<p>Active NOAMP VIP</p> <p>The user should be presented the Main Menu as shown on the right.</p>	
<p>11.</p> <p><input type="checkbox"/></p>	<p>Active NOAMP VIP</p> <p>Select...</p> <p>Main Menu → Configuration → Network → Devices</p> <p>...as shown on the right.</p>	 <p>• “Check off” the associated Check Box as addition is completed for each Server.</p> <p><input type="checkbox"/> NO-A (XSI-1) <input type="checkbox"/> NO-B (XSI-1)</p>

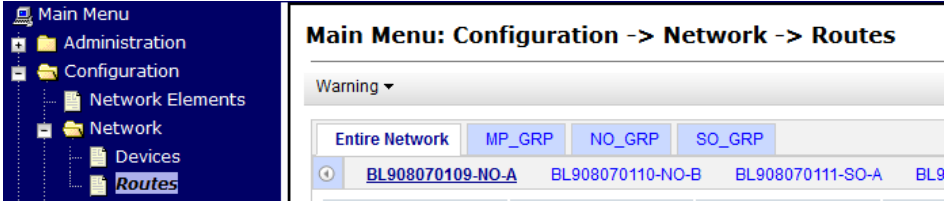
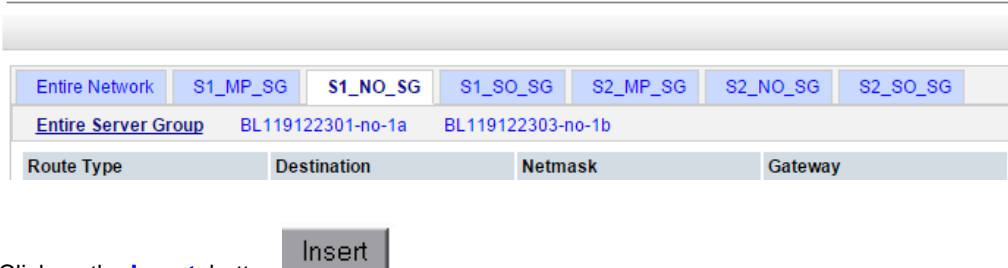
Procedure 19: Configure NOAMP Signaling Interfaces

Step	Procedure	Result																																																																														
<p>12.</p> <p><input type="checkbox"/></p>	<p>Active NOAMP VIP</p> <p>Click on Insert.</p>	<p>Click on the desired NOAMP tab.</p> <p>Output similar to that shown below may be observed.</p> <p>Insert Device on BL119122301-no-1a</p> <table border="1"> <thead> <tr> <th colspan="3">General Options</th> <th colspan="3">MII Monitoring Options</th> <th colspan="3">ARP Monitoring Options</th> <th colspan="3">IP Interfaces</th> </tr> <tr> <th>Field</th> <th>Value</th> <th colspan="9">Description</th> </tr> </thead> <tbody> <tr> <td>Device Type</td> <td> <input type="radio"/> Bonding <input type="radio"/> Vlan <input type="radio"/> Alias </td> <td colspan="9">Select the device type. It cannot be changed after device is created. [Default = N/A. Range = Bonding, Vlan, Alias.]</td> </tr> <tr> <td>Device Monitoring</td> <td>Monitoring Type--</td> <td colspan="9">Choose a monitoring style to use with a bonding device. Disabled for non-bonding devices. [Default = MII. Options = MII, ARP.]</td> </tr> <tr> <td>Start On Boot</td> <td><input checked="" type="checkbox"/> Enable</td> <td colspan="9">Start the device, and also start on boot. [Default = enabled]</td> </tr> <tr> <td>Boot Protocol</td> <td>None</td> <td colspan="9">Select the boot protocol. [Default = None, Range = None,DHCP]</td> </tr> <tr> <td>Base Device(s)</td> <td> <input type="checkbox"/> bond0 <input type="checkbox"/> bond0.3 <input type="checkbox"/> bond0.4 <input type="checkbox"/> bond0.5 <input type="checkbox"/> eth01 <input type="checkbox"/> eth02 <input type="checkbox"/> eth11 <input type="checkbox"/> eth12 <input type="checkbox"/> eth21 <input type="checkbox"/> eth22 </td> <td colspan="9">The base device(s) for Bonding, Alias and Vlan device types. Alias and Vlan devices require 1 selection; Bonding devices require 2 selections. It cannot be changed after device is created. [Default = N/A. Range = available base devices per device type.]</td> </tr> </tbody> </table> <ul style="list-style-type: none"> • “Check off” the associated Check Box as addition is completed for each Server. <p><input type="checkbox"/> NO-A (XSI-1) <input type="checkbox"/> NO-B (XSI-1)</p>	General Options			MII Monitoring Options			ARP Monitoring Options			IP Interfaces			Field	Value	Description									Device Type	<input type="radio"/> Bonding <input type="radio"/> Vlan <input type="radio"/> Alias	Select the device type. It cannot be changed after device is created. [Default = N/A. Range = Bonding, Vlan, Alias.]									Device Monitoring	Monitoring Type--	Choose a monitoring style to use with a bonding device. Disabled for non-bonding devices. [Default = MII. Options = MII, ARP.]									Start On Boot	<input checked="" type="checkbox"/> Enable	Start the device, and also start on boot. [Default = enabled]									Boot Protocol	None	Select the boot protocol. [Default = None, Range = None,DHCP]									Base Device(s)	<input type="checkbox"/> bond0 <input type="checkbox"/> bond0.3 <input type="checkbox"/> bond0.4 <input type="checkbox"/> bond0.5 <input type="checkbox"/> eth01 <input type="checkbox"/> eth02 <input type="checkbox"/> eth11 <input type="checkbox"/> eth12 <input type="checkbox"/> eth21 <input type="checkbox"/> eth22	The base device(s) for Bonding, Alias and Vlan device types. Alias and Vlan devices require 1 selection; Bonding devices require 2 selections. It cannot be changed after device is created. [Default = N/A. Range = available base devices per device type.]								
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Base Device(s)	<input type="checkbox"/> bond0 <input type="checkbox"/> bond0.3 <input type="checkbox"/> bond0.4 <input type="checkbox"/> bond0.5 <input type="checkbox"/> eth01 <input type="checkbox"/> eth02 <input type="checkbox"/> eth11 <input type="checkbox"/> eth12 <input type="checkbox"/> eth21 <input type="checkbox"/> eth22	The base device(s) for Bonding, Alias and Vlan device types. Alias and Vlan devices require 1 selection; Bonding devices require 2 selections. It cannot be changed after device is created. [Default = N/A. Range = available base devices per device type.]																																																																														
<p>13.</p> <p><input type="checkbox"/></p>	<p>Active NOAMP VIP</p> <ol style="list-style-type: none"> 1. Select Device Type as Vlan and 2. Select Base Device as Signaling Bond Interface i.e. bond0 on Topology 1 and Topology 1A and bond1 on Topology 4 and Topology 4A 	<p>Click on the General Options tab.</p> <p>Select Device Type as Vlan and</p> <p>Select Base Device as Signaling Bond Interface i.e. bond0 on Topology 1 and Topology 1A and bond1 on Topology 4 and Topology 4A</p> <p>Output similar to that shown below may be observed.</p> <p>Insert Device on BL119122301-no-1a</p> <table border="1"> <thead> <tr> <th colspan="3">General Options</th> <th colspan="3">MII Monitoring Options</th> <th colspan="3">ARP Monitoring Options</th> <th colspan="3">IP Interfaces</th> </tr> <tr> <th>Field</th> <th>Value</th> <th colspan="9">Description</th> </tr> </thead> <tbody> <tr> <td>Device Type</td> <td> <input type="radio"/> Bonding <input checked="" type="radio"/> Vlan <input type="radio"/> Alias </td> <td colspan="9">Select the device type. It cannot be changed after device is created. [Default = N/A. Range = Bonding, Vlan, Alias.]</td> </tr> <tr> <td>Device Monitoring</td> <td>Monitoring Type--</td> <td colspan="9">Choose a monitoring style to use with a bonding device. Disabled for non-bonding devices. [Default = MII. Options = MII, ARP.]</td> </tr> <tr> <td>Start On Boot</td> <td><input checked="" type="checkbox"/> Enable</td> <td colspan="9">Start the device, and also start on boot. [Default = enabled]</td> </tr> <tr> <td>Boot Protocol</td> <td>None</td> <td colspan="9">Select the boot protocol. [Default = None, Range = None,DHCP]</td> </tr> <tr> <td>Base Device(s)</td> <td> <input checked="" type="checkbox"/> bond0 <input type="checkbox"/> bond0.3 <input type="checkbox"/> bond0.4 <input type="checkbox"/> eth01 <input type="checkbox"/> eth02 <input type="checkbox"/> eth11 </td> <td colspan="9">The base device(s) for Bonding, Alias and Vlan device types. Alias and Vlan devices require 1 selection; Bonding devices require 2 selections. It cannot be changed after device is created. [Default = N/A. Range = available base devices per device type.]</td> </tr> </tbody> </table> <ul style="list-style-type: none"> • “Check off” the associated Check Box as addition is completed for each Server. <p><input type="checkbox"/> NO-A (XSI-1) <input type="checkbox"/> NO-B (XSI-1)</p>	General Options			MII Monitoring Options			ARP Monitoring Options			IP Interfaces			Field	Value	Description									Device Type	<input type="radio"/> Bonding <input checked="" type="radio"/> Vlan <input type="radio"/> Alias	Select the device type. It cannot be changed after device is created. [Default = N/A. Range = Bonding, Vlan, Alias.]									Device Monitoring	Monitoring Type--	Choose a monitoring style to use with a bonding device. Disabled for non-bonding devices. [Default = MII. Options = MII, ARP.]									Start On Boot	<input checked="" type="checkbox"/> Enable	Start the device, and also start on boot. [Default = enabled]									Boot Protocol	None	Select the boot protocol. [Default = None, Range = None,DHCP]									Base Device(s)	<input checked="" type="checkbox"/> bond0 <input type="checkbox"/> bond0.3 <input type="checkbox"/> bond0.4 <input type="checkbox"/> eth01 <input type="checkbox"/> eth02 <input type="checkbox"/> eth11	The base device(s) for Bonding, Alias and Vlan device types. Alias and Vlan devices require 1 selection; Bonding devices require 2 selections. It cannot be changed after device is created. [Default = N/A. Range = available base devices per device type.]								
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Base Device(s)	<input checked="" type="checkbox"/> bond0 <input type="checkbox"/> bond0.3 <input type="checkbox"/> bond0.4 <input type="checkbox"/> eth01 <input type="checkbox"/> eth02 <input type="checkbox"/> eth11	The base device(s) for Bonding, Alias and Vlan device types. Alias and Vlan devices require 1 selection; Bonding devices require 2 selections. It cannot be changed after device is created. [Default = N/A. Range = available base devices per device type.]																																																																														

Procedure 19: Configure NOAMP Signaling Interfaces

Step	Procedure	Result			
<p>14.</p> <input type="checkbox"/>	<p>Active NOAMP VIP</p> <p>Add an xsi IP Address.</p>	<p>Click on the IP Interfaces tab.</p> <p>Click the Add Row button.</p> <p>Output similar to that shown below may be observed.</p> <p>Insert Device on BL119122301-no-1a</p> <div style="border: 1px solid #ccc; padding: 5px;"> <p> <input type="button" value="General Options"/> <input type="button" value="MII Monitoring Options"/> <input type="button" value="ARP Monitoring Options"/> <input type="button" value="IP Interfaces"/> </p> <p>IP Address List: <input type="button" value="Add Row"/></p> <table border="1"> <tr> <td style="width: 150px;">10.240.168.91</td> <td style="width: 150px;">XSI1 (10.240.168.96/27) ▼</td> <td style="width: 50px;"><input type="button" value="Remove"/></td> </tr> </table> </div> <p><input type="button" value="Ok"/> <input type="button" value="Apply"/> <input type="button" value="Cancel"/></p> <p>Set the Network Name to xsi1.</p> <p>Enter the xsi1 IP Address.</p> <p>Click on the Ok button.</p> <ul style="list-style-type: none"> • “Check off” the associated Check Box as addition is completed for each Server. <p> <input type="checkbox"/> NO-A (XSI-1) <input type="checkbox"/> NO-B (XSI-1) </p>	10.240.168.91	XSI1 (10.240.168.96/27) ▼	<input type="button" value="Remove"/>
10.240.168.91	XSI1 (10.240.168.96/27) ▼	<input type="button" value="Remove"/>			
<p>15.</p> <input type="checkbox"/>	<p>Repeat Steps 11-14 for each NOAMP and its Signaling network to be used for ComAgent.</p>				

Procedure 19: Configure NOAMP Signaling Interfaces

Step	Procedure	Result
<p>16.</p> <p><input type="checkbox"/></p>	<p>Active NOAMP VIP</p> <p>Select...</p> <p>Main Menu → Configuration → Network → Routes</p> <p>...as shown on the right.</p>	
<p>17.</p> <p><input type="checkbox"/></p>	<p>Active NOAMP VIP</p> <p>Insert a new route for the NOAMP for Primary Site.</p>	<p>Click on the desired Primary Site Server Group tab on the top line. Then click on the Entire Server Group tab on the line below Server Group line. Output similar to that shown below may be observed.</p> <p>Main Menu: Configuration -> Network -> Routes</p>  <p>Click on the Insert button</p> <ul style="list-style-type: none"> • “Check off” the associated Check Box as addition is completed for each Network. <p><input type="checkbox"/> XSI-1</p>

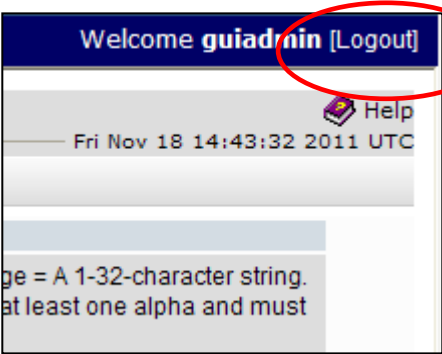
Procedure 19: Configure NOAMP Signaling Interfaces

Step	Procedure	Result																		
<p>18.</p> <p><input type="checkbox"/></p>	<p>Active NOAMP VIP</p> <p>Add xsi signaling route to NOAMP for Primary Site</p>	<p>Output similar to that shown below may be observed.</p> <p>Main Menu: Configuration -> Network -> Routes [Insert]</p> <hr/> <p>Insert Route on S1_NO_SG</p> <table border="1"> <thead> <tr> <th>Field</th> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Route Type</td> <td> <input checked="" type="radio"/> Net <input type="radio"/> Default <input type="radio"/> Host * </td> <td>Select a route type. [Default = N/A. Options = Net, Default, Host. default route on a given target machine.]</td> </tr> <tr> <td>Device</td> <td>bond0.5 *</td> <td>Select the network device name through which traffic is being routed automatically, if possible. [Default = N/A. Range = Provisioned devices]</td> </tr> <tr> <td>Destination</td> <td>10.240.168.64</td> <td>The destination network address. [Default = N/A. Range = Valid (IPv6) format.]</td> </tr> <tr> <td>Netmask</td> <td>255.255.255.224</td> <td>A valid netmask for the network route destination IP address. [Default = N/A. Range = Valid (IPv4 or IPv6) or dotted decimal (IPv4) format.]</td> </tr> <tr> <td>Gateway IP</td> <td>10.240.168.97 *</td> <td>The IP address of the gateway for this route. [Default = N/A. Range = Valid (IPv6) or hex (IPv6) format.]</td> </tr> </tbody> </table> <p style="text-align: right;"><input type="button" value="Ok"/> <input type="button" value="Apply"/> <input type="button" value="Cancel"/></p> <p>Set Route Type to desired value Set Device to Signaling Interface Enter Destination: This is the address of the DR Site Signaling network address of MPs that will connect to Primary Site NOAMP on the signaling network, Enter Netmask for the DR Site Signaling network. Enter Gateway IP : This is the gateway for OCUDR Primary Site signaling network Click Apply button</p> <ul style="list-style-type: none"> • “Check off” the associated Check Box as addition is completed for each Network. <p><input type="checkbox"/> XSI-1</p>	Field	Value	Description	Route Type	<input checked="" type="radio"/> Net <input type="radio"/> Default <input type="radio"/> Host *	Select a route type. [Default = N/A. Options = Net, Default, Host. default route on a given target machine.]	Device	bond0.5 *	Select the network device name through which traffic is being routed automatically, if possible. [Default = N/A. Range = Provisioned devices]	Destination	10.240.168.64	The destination network address. [Default = N/A. Range = Valid (IPv6) format.]	Netmask	255.255.255.224	A valid netmask for the network route destination IP address. [Default = N/A. Range = Valid (IPv4 or IPv6) or dotted decimal (IPv4) format.]	Gateway IP	10.240.168.97 *	The IP address of the gateway for this route. [Default = N/A. Range = Valid (IPv6) or hex (IPv6) format.]
Field	Value	Description																		
Route Type	<input checked="" type="radio"/> Net <input type="radio"/> Default <input type="radio"/> Host *	Select a route type. [Default = N/A. Options = Net, Default, Host. default route on a given target machine.]																		
Device	bond0.5 *	Select the network device name through which traffic is being routed automatically, if possible. [Default = N/A. Range = Provisioned devices]																		
Destination	10.240.168.64	The destination network address. [Default = N/A. Range = Valid (IPv6) format.]																		
Netmask	255.255.255.224	A valid netmask for the network route destination IP address. [Default = N/A. Range = Valid (IPv4 or IPv6) or dotted decimal (IPv4) format.]																		
Gateway IP	10.240.168.97 *	The IP address of the gateway for this route. [Default = N/A. Range = Valid (IPv6) or hex (IPv6) format.]																		

Procedure 19: Configure NOAMP Signaling Interfaces

Step	Procedure	Result																						
<p>19.</p> <input type="checkbox"/>	<p>Active NOAMP VIP</p> <p>Insert a new route for the NOAMP for DR Site.</p>	<p>Click on the desired DR Site Server Group tab on the top line. Then click on the Entire Server Group tab on the line below Server Group line. Output similar to that shown below may be observed.</p> <p>Main Menu: Configuration -> Network -> Routes</p> <hr/> <div> <table border="1"> <tr> <td>Entire Network</td> <td>S1_MP_SG</td> <td>S1_NO_SG</td> <td>S1_SO_SG</td> <td>S2_MP_SG</td> <td>S2_NO_SG</td> <td>S2_SO_SG</td> </tr> <tr> <td><u>Entire Server Group</u></td> <td>BL121081301-NO-2A</td> <td>BL121081303-NO-2B</td> <td></td> <td></td> <td></td> <td></td> </tr> </table> </div> <table border="1"> <thead> <tr> <th>Route Type</th> <th>Destination</th> <th>Netmask</th> <th>Gateway</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p>Click on the Insert button <input type="button" value="Insert"/></p> <ul style="list-style-type: none"> • “Check off” the associated Check Box as addition is completed for each Network. <p><input type="checkbox"/> XSI-1</p>	Entire Network	S1_MP_SG	S1_NO_SG	S1_SO_SG	S2_MP_SG	S2_NO_SG	S2_SO_SG	<u>Entire Server Group</u>	BL121081301-NO-2A	BL121081303-NO-2B					Route Type	Destination	Netmask	Gateway				
Entire Network	S1_MP_SG	S1_NO_SG	S1_SO_SG	S2_MP_SG	S2_NO_SG	S2_SO_SG																		
<u>Entire Server Group</u>	BL121081301-NO-2A	BL121081303-NO-2B																						
Route Type	Destination	Netmask	Gateway																					

Procedure 19: Configure NOAMP Signaling Interfaces

Step	Procedure	Result																		
<p>20.</p> <p><input type="checkbox"/></p>	<p>Active NOAMP VIP</p> <p>Add xsi signaling route to NOAMP for DR Site</p>	<p>Output similar to that shown below may be observed.</p> <p>Main Menu: Configuration -> Network -> Routes [Insert]</p> <hr/> <p>Insert Route on S2_NO_SG</p> <table border="1"> <thead> <tr> <th>Field</th> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Route Type</td> <td> <input checked="" type="radio"/> Net <input type="radio"/> Default <input type="radio"/> Host * </td> <td>Select a route type. [Default = N/A. Options = Net, Default, Host. default route on a given target machine.]</td> </tr> <tr> <td>Device</td> <td>bond0.5 *</td> <td>Select the network device name through which traffic is being routed automatically, if possible. [Default = N/A. Range = Provisioned devices]</td> </tr> <tr> <td>Destination</td> <td>10.240.168.96</td> <td>The destination network address. [Default = N/A. Range = Valid (IPv6) format.]</td> </tr> <tr> <td>Netmask</td> <td>255.255.255.224</td> <td>A valid netmask for the network route destination IP address. [Default = N/A. Range = Valid (IPv4 or IPv6) or dotted decimal (IPv4) format.]</td> </tr> <tr> <td>Gateway IP</td> <td>10.240.168.65 *</td> <td>The IP address of the gateway for this route. [Default = N/A. Range = Valid (IPv4 or IPv6) or hex (IPv6) format.]</td> </tr> </tbody> </table> <p style="text-align: right;"><input type="button" value="Ok"/> <input type="button" value="Apply"/> <input type="button" value="Cancel"/></p> <p>Set Route Type to desired value Set Device to Signaling Interface Enter Destination: This is the address of the Primary Site Signaling network address of MPs that will connect to DR Site NOAMP on the signaling network, Enter Netmask for the Primary Site Signaling network. Enter Gateway IP : This is the gateway for OCUDR DR Site signaling network as configured in Procedure 3, Step 10. Click Apply button</p> <ul style="list-style-type: none"> • “Check off” the associated Check Box as addition is completed for each Network. <p><input type="checkbox"/> XSI-1</p>	Field	Value	Description	Route Type	<input checked="" type="radio"/> Net <input type="radio"/> Default <input type="radio"/> Host *	Select a route type. [Default = N/A. Options = Net, Default, Host. default route on a given target machine.]	Device	bond0.5 *	Select the network device name through which traffic is being routed automatically, if possible. [Default = N/A. Range = Provisioned devices]	Destination	10.240.168.96	The destination network address. [Default = N/A. Range = Valid (IPv6) format.]	Netmask	255.255.255.224	A valid netmask for the network route destination IP address. [Default = N/A. Range = Valid (IPv4 or IPv6) or dotted decimal (IPv4) format.]	Gateway IP	10.240.168.65 *	The IP address of the gateway for this route. [Default = N/A. Range = Valid (IPv4 or IPv6) or hex (IPv6) format.]
Field	Value	Description																		
Route Type	<input checked="" type="radio"/> Net <input type="radio"/> Default <input type="radio"/> Host *	Select a route type. [Default = N/A. Options = Net, Default, Host. default route on a given target machine.]																		
Device	bond0.5 *	Select the network device name through which traffic is being routed automatically, if possible. [Default = N/A. Range = Provisioned devices]																		
Destination	10.240.168.96	The destination network address. [Default = N/A. Range = Valid (IPv6) format.]																		
Netmask	255.255.255.224	A valid netmask for the network route destination IP address. [Default = N/A. Range = Valid (IPv4 or IPv6) or dotted decimal (IPv4) format.]																		
Gateway IP	10.240.168.65 *	The IP address of the gateway for this route. [Default = N/A. Range = Valid (IPv4 or IPv6) or hex (IPv6) format.]																		
<p>21.</p> <p><input type="checkbox"/></p>	<p>Active NOAMP VIP:</p> <p>Click the “Logout” link on the server GUI.</p>																			
<p>THIS PROCEDURE HAS BEEN COMPLETED</p>																				

OCUDR 10.0.1 Installation and Configuration Guide

8.10 Configure NOAMP Signaling Interfaces (virtual NOAMP servers on Low Capacity RMS or Low Capacity C-Class)

This procedure configures XSI IP Interface and adds the XSI signaling route for all NOAMP Virtual Servers on Low Capacity C-Class.

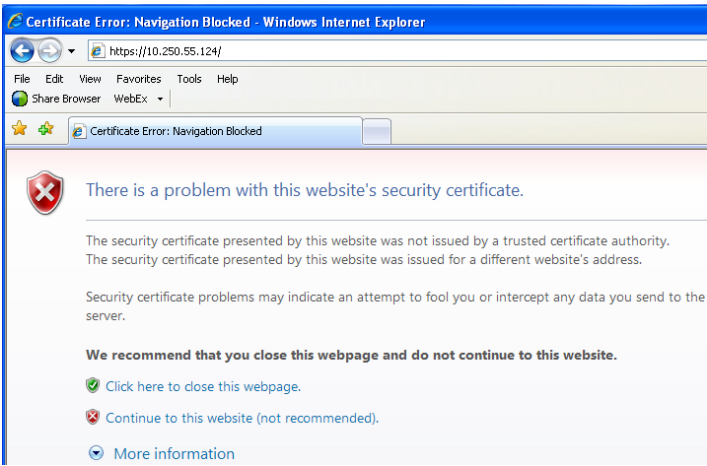
Requirements:

- **Procedure 14: OAM Pairing for the Primary NOAMP Servers** has been completed.
- **Procedure 15: Pairing the OAM Servers for SOAM or DR NOAMP sites** has been completed.
- **Procedure 16: Configuring MP Server Groups** has been completed.

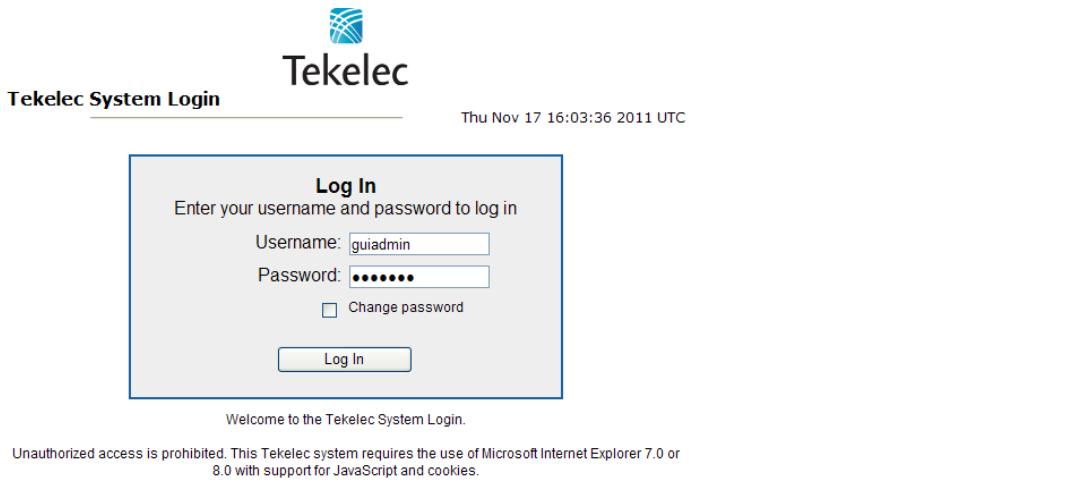
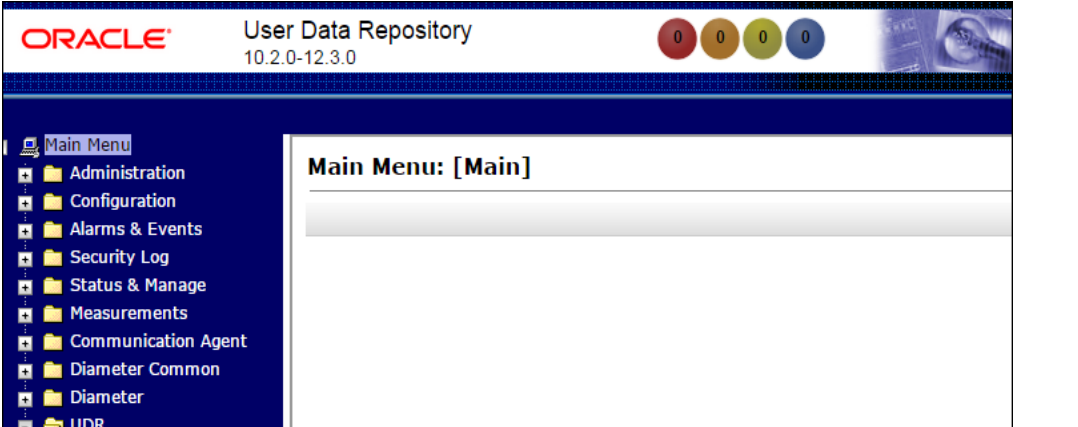

Check off (✓) each step as it is completed. Boxes have been provided for this purpose under each step number.

IF THIS PROCEDURE FAILS, CONTACT MY ORACLE SUPPORT (MOS) FOR ASSISTANCE.

Procedure 20: Configure NOAMP Signaling Interfaces (virtual NOAMP servers on Low Capacity C-Class)

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

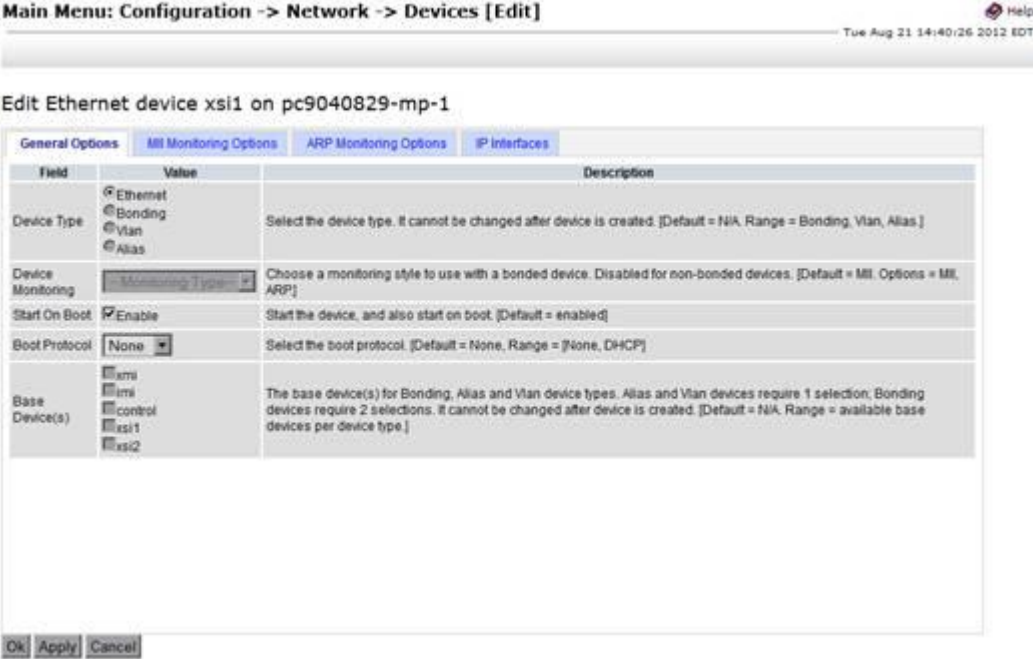
Procedure 20: Configure NOAMP Signaling Interfaces (virtual NOAMP servers on Low Capacity C-Class)

Step	Procedure	Result
<p>2.</p> <p><input type="checkbox"/></p>	<p>Active NOAMP VIP</p> <p>The user should be presented the login screen shown on the right.</p> <p>Login to the GUI using the default user and password.</p>	
<p>3.</p> <p><input type="checkbox"/></p>	<p>Active NOAMP VIP</p> <p>The user should be presented the Main Menu as shown on the right.</p>	
<p>Note: Repeat the steps below (Steps 4 - 8) for each NOAMP.</p>		
<p>4.</p> <p><input type="checkbox"/></p>	<p>Active NOAMP VIP</p> <p>Select...</p> <p>Main Menu → Configuration → Network → Devices</p> <p>...as shown on the right.</p>	 <p>• “Check off” the associated Check Box as addition is completed for each Server.</p> <p><input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP-B</p>

Procedure 20: Configure NOAMP Signaling Interfaces (virtual NOAMP servers on Low Capacity C-Class)

Step	Procedure	Result																																				
<p>5.</p> <input type="checkbox"/>	<p>Active NOAMP VIP</p> <p>Select the xsi device for the desired NOAMP</p>	<p>Click on the desired NOAMP tab. Select the xsi1 device. Output similar to that shown below may be observed.</p> <div style="border: 1px solid black; padding: 5px;"> <p>Main Menu: Configuration -> Network -> Devices</p> <hr/> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">BL908050103-no</td> <td style="text-align: center;">BL908050101-no</td> <td style="text-align: center;">BL908050103-so</td> <td style="text-align: center;">BL908050101-so</td> <td style="text-align: center;">BL908050103-mp</td> <td style="text-align: center;">BL908050101-mp</td> </tr> <tr> <th>Device Name</th> <th>Device Type</th> <th>Device Options</th> <th>IP Interface (Network)</th> <td colspan="2"></td> </tr> <tr style="background-color: #e0ffe0;"> <td>xsi1</td> <td>Ethernet</td> <td>onboot = yes bootProto = none</td> <td>10.196.62.200 (XSI1) fe80::b0:80ff:fe4d:fe9d (/64)</td> <td colspan="2"></td> </tr> <tr> <td>xmi</td> <td>Ethernet</td> <td>bootProto = none onboot = yes</td> <td>10.240.80.145 (XMI) 10.240.80.144 (/26) fe80::95:21ff:feb3:9433 (/64)</td> <td colspan="2"></td> </tr> <tr> <td>control</td> <td>"Ethernet"</td> <td>bootProto = "dhcp" hwAddr = "02:2A:91:F8:8F:18" onboot = "yes" persistent_dhclient = yes</td> <td>192.168.1.199 (/24) fe80::2a:91ff:feb8:8f18 (/64)</td> <td colspan="2"></td> </tr> <tr> <td>imi</td> <td>Ethernet</td> <td>bootProto = none onboot = yes</td> <td>169.254.0.2 (IMI) fe80::38:33ff:feb3:9466 (/64)</td> <td colspan="2"></td> </tr> </table> </div> <ul style="list-style-type: none"> • "Check off" the associated Check Box as addition is completed for each Server. <p><input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP-B</p>	BL908050103-no	BL908050101-no	BL908050103-so	BL908050101-so	BL908050103-mp	BL908050101-mp	Device Name	Device Type	Device Options	IP Interface (Network)			xsi1	Ethernet	onboot = yes bootProto = none	10.196.62.200 (XSI1) fe80::b0:80ff:fe4d:fe9d (/64)			xmi	Ethernet	bootProto = none onboot = yes	10.240.80.145 (XMI) 10.240.80.144 (/26) fe80::95:21ff:feb3:9433 (/64)			control	"Ethernet"	bootProto = "dhcp" hwAddr = "02:2A:91:F8:8F:18" onboot = "yes" persistent_dhclient = yes	192.168.1.199 (/24) fe80::2a:91ff:feb8:8f18 (/64)			imi	Ethernet	bootProto = none onboot = yes	169.254.0.2 (IMI) fe80::38:33ff:feb3:9466 (/64)		
BL908050103-no	BL908050101-no	BL908050103-so	BL908050101-so	BL908050103-mp	BL908050101-mp																																	
Device Name	Device Type	Device Options	IP Interface (Network)																																			
xsi1	Ethernet	onboot = yes bootProto = none	10.196.62.200 (XSI1) fe80::b0:80ff:fe4d:fe9d (/64)																																			
xmi	Ethernet	bootProto = none onboot = yes	10.240.80.145 (XMI) 10.240.80.144 (/26) fe80::95:21ff:feb3:9433 (/64)																																			
control	"Ethernet"	bootProto = "dhcp" hwAddr = "02:2A:91:F8:8F:18" onboot = "yes" persistent_dhclient = yes	192.168.1.199 (/24) fe80::2a:91ff:feb8:8f18 (/64)																																			
imi	Ethernet	bootProto = none onboot = yes	169.254.0.2 (IMI) fe80::38:33ff:feb3:9466 (/64)																																			
<p>6.</p> <input type="checkbox"/>	<p>Active NOAMP VIP</p> <p>Edit the xsi device for the desired NOAMP</p>	<div style="border: 1px solid gray; padding: 5px;"> <p style="text-align: center; font-size: 2em; color: blue;">2</p> <p style="text-align: right; font-size: 2em; color: blue;">1</p> <p style="text-align: right; font-size: 0.8em;">☰</p> <p style="text-align: center;"> <input type="button" value="Insert"/> <input type="button" value="Edit"/> <input type="button" value="Delete"/> <input type="button" value="Report"/> <input type="button" value="Report All"/> <input type="button" value="Take Ownership"/> </p> </div> <ol style="list-style-type: none"> 1. Click on the Take Ownership button. 2. Re-select the xsi1 device. 3. Click on the Edit button. <ul style="list-style-type: none"> • "Check off" the associated Check Box as addition is completed for each Server. <p><input type="checkbox"/> NOAMP-A) <input type="checkbox"/> NOAMP-B</p>																																				


Procedure 20: Configure NOAMP Signaling Interfaces (virtual NOAMP servers on Low Capacity C-Class)

Step	Procedure	Result
<p>7.</p> <p><input type="checkbox"/></p>	<p>Active NOAMP VIP</p> <p>Enable “Start On Boot”</p>	<p>Click on the General Options tab.</p> <p>Check the Start on Boot check box (to make it enabled).</p> <p>Output similar to that shown below may be observed.</p>  <p>• “Check off” the associated Check Box as addition is completed for each Server.</p> <p><input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP-B</p>

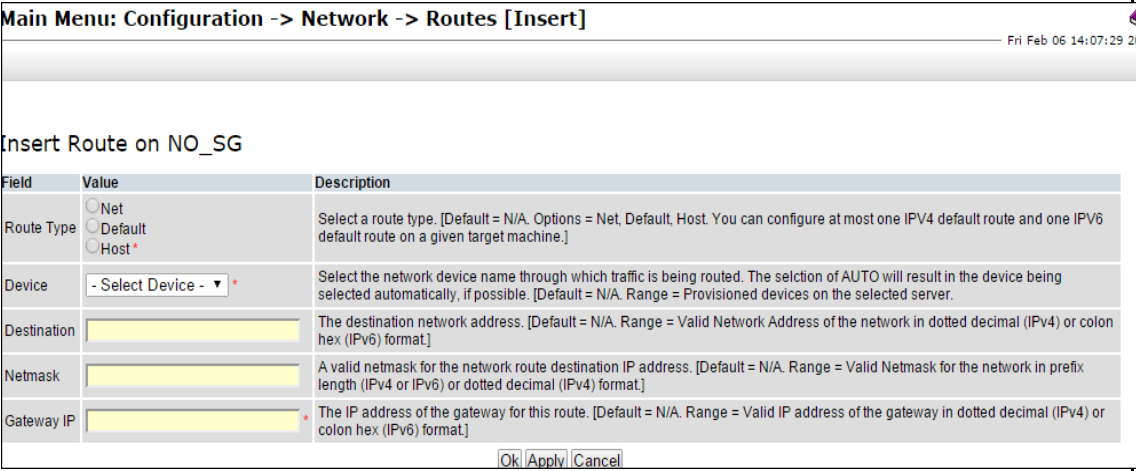
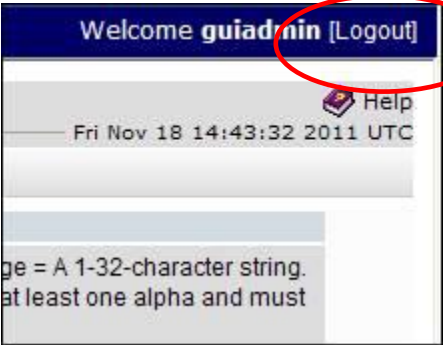
Procedure 20: Configure NOAMP Signaling Interfaces (virtual NOAMP servers on Low Capacity C-Class)

Step	Procedure	Result					
<p>8.</p> <p><input type="checkbox"/></p>	<p>Active NOAMP VIP</p> <p>Add an xsi IP Address.</p>	<p>Click on the IP Interfaces tab.</p> <p>Click the Add Row button.</p> <p>Output similar to that shown below may be observed.</p> <p>Main Menu: Configuration -> Network -> Devices [Edit]</p> <hr/> <p>Edit Ethernet device xsi1 on pc9040829-mp-1</p> <p>General Options MII Monitoring Options ARP Monitoring Options IP Interfaces</p> <p>IP Address List: Add Row</p> <p><input type="text" value="10.250.39.82"/> <input type="text" value="XSI11"/> Remove</p> <p>Set the Network Name to xsi1.</p> <p>Enter the xsi1 IP Address.</p> <p>Click on the Ok button.</p> <ul style="list-style-type: none"> • “Check off” the associated Check Box as addition is completed for each Server. <p><input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP-B</p>					
<p>9.</p> <p><input type="checkbox"/></p>	<p>Repeat Steps 4 - 8 for each NOAMP and its Signaling network(s).</p> <p>NOTE: If a second XSI network is present (XSI-2), Steps 4 - 8 must be run for each NOAMP’s XSI-2 network.</p>						
<p>10.</p> <p><input type="checkbox"/></p>	<p>Active NOAMP VIP</p> <p>Select...</p> <p>Main Menu → Configuration → Network → Routes</p> <p>...as shown on the right.</p>	 <p>Main Menu: Configuration -> Network -> Routes</p> <p>Warning ▾</p> <p>Entire Network MP_GRP NO_GRP SO_GRP</p> <table border="1"> <tr> <td><input type="radio"/></td> <td>BL908070109-NO-A</td> <td>BL908070110-NO-B</td> <td>BL908070111-SO-A</td> <td>BL908070111-SO-B</td> </tr> </table>	<input type="radio"/>	BL908070109-NO-A	BL908070110-NO-B	BL908070111-SO-A	BL908070111-SO-B
<input type="radio"/>	BL908070109-NO-A	BL908070110-NO-B	BL908070111-SO-A	BL908070111-SO-B			

Procedure 20: Configure NOAMP Signaling Interfaces (virtual NOAMP servers on Low Capacity C-Class)

Step	Procedure	Result
<p>11.</p> <p><input type="checkbox"/></p>	<p>Active NOAMP VIP</p> <p>Insert a new route for the MP.</p>	<p>Click on the desired Server Group tab on the top line. Then click on the Entire Server Group tab on the line below Server Group line. Output similar to that shown below may be observed.</p> <p>Main Menu: Configuration -> Network -> Routes</p>  <p>The screenshot shows a configuration interface with the following elements:</p> <ul style="list-style-type: none"> Top navigation bar: Entire Network, MP_S1_SG, MP_S2_SG, NO_S1_SG, NO_S2_SG, SO_S1_SG Sub-navigation bar: Entire Server Group, UDR-S2-MP1, UDR-S2-MP2, UDR-S2-MP3, UDR-S2-MP4 Table with columns: Route Type, Destination, Netmask, Gateway Bottom right: Insert button <p>Click on the Insert button <input type="button" value="Insert"/></p> <ul style="list-style-type: none"> • “Check off” the associated Check Box as addition is completed for each Network. <p><input type="checkbox"/> XSI-1</p>

Procedure 20: Configure NOAMP Signaling Interfaces (virtual NOAMP servers on Low Capacity C-Class)

Step	Procedure	Result
<p>12.</p> <input type="checkbox"/>	<p>Active NOAMP VIP</p> <p>Add xsi signaling route to MP</p>	<p>Output similar to that shown below may be observed.</p>  <p>Set Route Type to desired value Set Device to xsi1 Enter Destination: This is the address of the Diameter Sh clients that will connect to OCUDR on the signaling network, Enter Netmask for the Diameter Sh client network. Enter Gateway IP: This is the gateway for OCUDR signaling network as configured in Procedure 3, Step 10. Click Apply button</p> <ul style="list-style-type: none"> • “Check off” the associated Check Box as addition is completed for each Network. <p><input type="checkbox"/> XSI-1</p>
<p>13.</p> <input type="checkbox"/>	<p>Repeat Step 11-12 for each Network.</p>	
<p>14.</p> <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>Click the “Logout” link on the server GUI.</p>	
<p>THIS PROCEDURE HAS BEEN COMPLETED</p>		

8.11 Configure ComAgent Service on Signaling Network

This procedure configures ComAgent communication between NOAMP and MP to use Signaling Network. **This procedure is optional and should be executed only if ComAgent Service is required to be configured on XSI Network.**

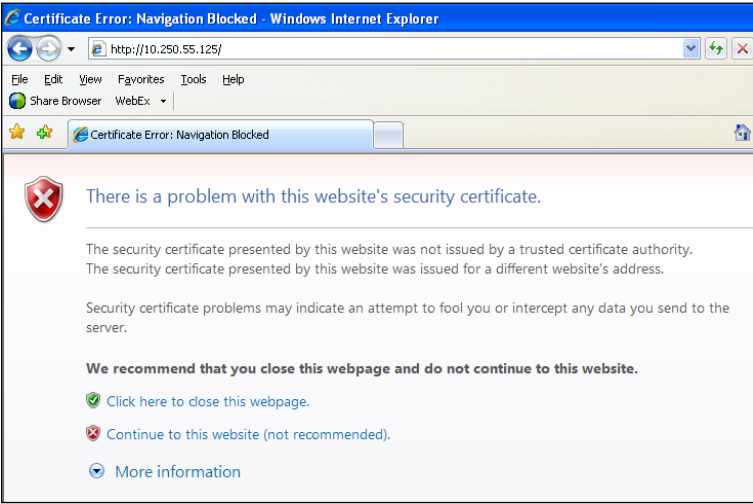
Requirements:

- **Procedure 17: Configure MP Signaling Interfaces (All SOAM Sites)** has been completed.
- **Procedure 19: Configure NOAMP Signaling Interfaces (All NOAM Sites) OR**
- **Procedure 20: Configure NOAMP Signaling Interfaces (virtual NOAMP servers on Low Capacity RMS or Low Capacity C-Class)** has been completed.

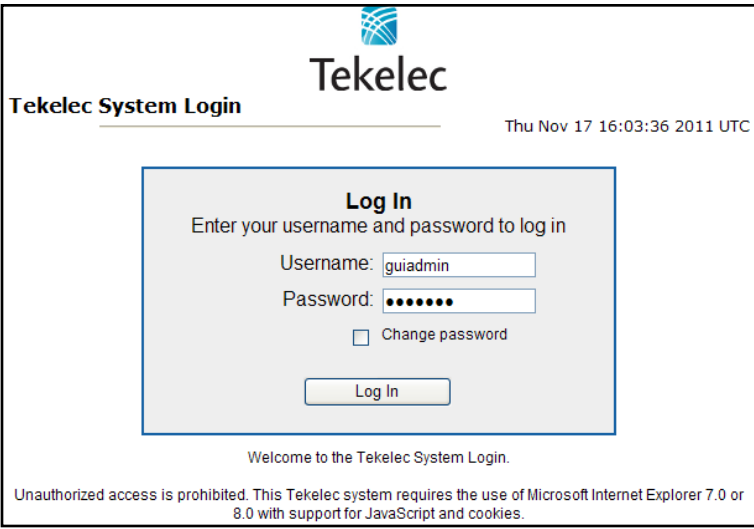
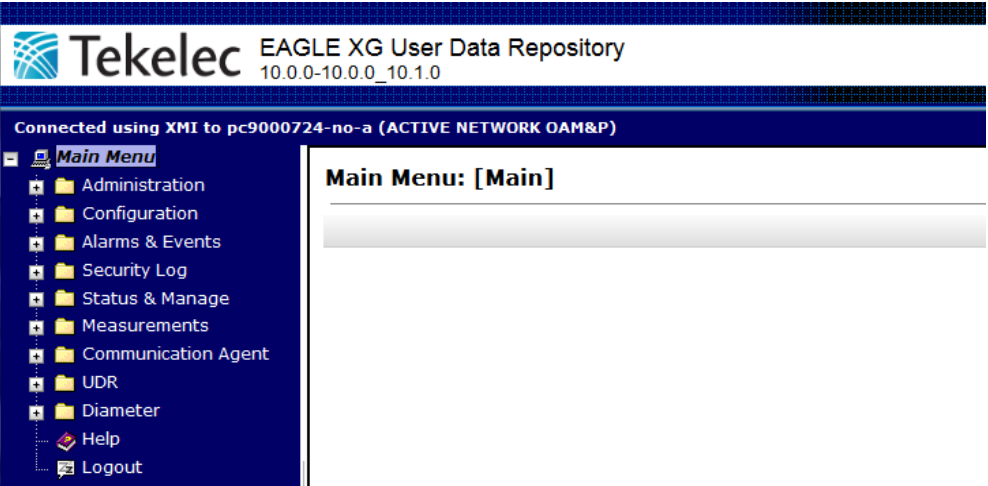
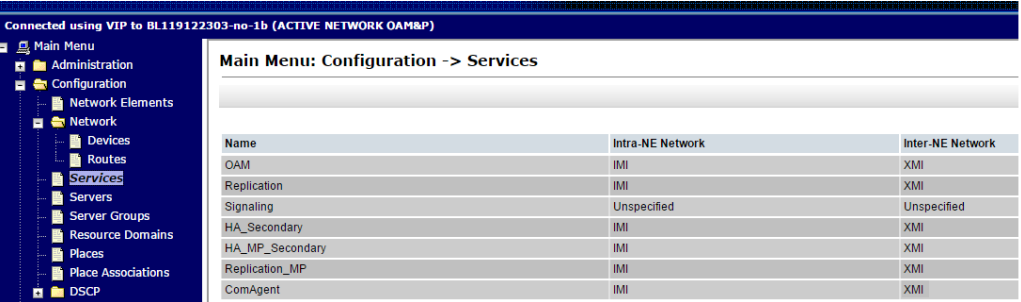
Check off (✓) each step as it is completed. Boxes have been provided for this purpose under each step number.

IF THIS PROCEDURE FAILS, CONTACT MY ORACLE SUPPORT (MOS) FOR ASSISTANCE.

Procedure 21: Configure ComAgent Service on Signaling Network

Step	Procedure	Result
<p>NOTE: This procedure is optional and should be executed only if ComAgent Service is required to be configured on XSI Network.</p>		
<p>1. <input type="checkbox"/></p>	<p>Active NOAMP VIP</p> <p>Launch an approved web browser and connect to the XMI Virtual IP Address (VIP) of the Active NOAMP site using "https://"</p>	

Procedure 21: Configure ComAgent Service on Signaling Network

Step	Procedure	Result																								
<p>2.</p> <p><input type="checkbox"/></p>	<p>Active NOAMP VIP</p> <p>The user should be presented the login screen shown on the right.</p> <p>Login to the GUI using the default user and password.</p>																									
<p>3.</p> <p><input type="checkbox"/></p>	<p>Active NOAMP VIP</p> <p>The user should be presented the Main Menu as shown on the right.</p>																									
<p>4.</p> <p><input type="checkbox"/></p>	<p>Active NOAMP VIP</p> <p>Select...</p> <p>Main Menu → Configuration → Services</p> <p>...as shown on the right.</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>Unspecified</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	Unspecified	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	Unspecified																								
HA_Secondary	IMI	XMI																								
HA_MP_Secondary	IMI	XMI																								
Replication_MP	IMI	XMI																								
ComAgent	IMI	XMI																								

Procedure 21: Configure ComAgent Service on Signaling Network

Step	Procedure	Result																								
<p>5.</p> <input type="checkbox"/>	<p>NOAMP Server A:</p> <p>1) Set the services values as shown on the right.</p> <p>2) Select the “Apply” dialogue button.</p> <p>3) Select the “OK” dialogue button in the popup window.</p>	<p>Services</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>Unspecified</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>XSI1</td> </tr> </tbody> </table> <p style="text-align: center;">Ok Apply Cancel</p> <div style="border: 1px solid gray; padding: 10px; margin: 10px 0;"> <p style="text-align: center;">You must restart all Servers to apply any services changes, ComAgent</p> <p style="text-align: center;">OK Cancel</p> </div> <p>NOAMP and MP Servers need to be restarted.</p> <p>Note:</p> <p>For Topology 1, any of the following configurations can be used for ComAgent service :</p> <p>Intra-NE Network : Inter-NE Network IMI : XSI1 XSI1 : XSI1</p> <p>For Topology 4, any of the following configurations can be used for ComAgent service :</p> <p>Intra-NE Network : Inter-NE Network XSI1 : XSI1</p>	Name	Intra-NE Network	Inter-NE Network	OAM	IMI	XMI	Replication	IMI	XMI	Signaling	Unspecified	Unspecified	HA_Secondary	IMI	XMI	HA_MP_Secondary	IMI	XMI	Replication_MP	IMI	XMI	ComAgent	IMI	XSI1
Name	Intra-NE Network	Inter-NE Network																								
OAM	IMI	XMI																								
Replication	IMI	XMI																								
Signaling	Unspecified	Unspecified																								
HA_Secondary	IMI	XMI																								
HA_MP_Secondary	IMI	XMI																								
Replication_MP	IMI	XMI																								
ComAgent	IMI	XSI1																								
<p>6.</p> <input type="checkbox"/>	<p>Active NOAMP VIP</p> <p>The user will be presented with the “Services” configuration screen as shown on the right</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>Unspecified</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>XSI1</td> </tr> </tbody> </table>	Name	Intra-NE Network	Inter-NE Network	OAM	IMI	XMI	Replication	IMI	XMI	Signaling	Unspecified	Unspecified	HA_Secondary	IMI	XMI	HA_MP_Secondary	IMI	XMI	Replication_MP	IMI	XMI	ComAgent	IMI	XSI1
Name	Intra-NE Network	Inter-NE Network																								
OAM	IMI	XMI																								
Replication	IMI	XMI																								
Signaling	Unspecified	Unspecified																								
HA_Secondary	IMI	XMI																								
HA_MP_Secondary	IMI	XMI																								
Replication_MP	IMI	XMI																								
ComAgent	IMI	XSI1																								
<p>7.</p> <input type="checkbox"/>	<p>Restart all NOAMP and MP Servers</p>	<pre># init 6</pre> <p>Note: This should be executed on all NOAMPs and MPs.</p>																								
<p>THIS PROCEDURE HAS BEEN COMPLETED</p>																										

9.0 POST INSTALLATION STEPS

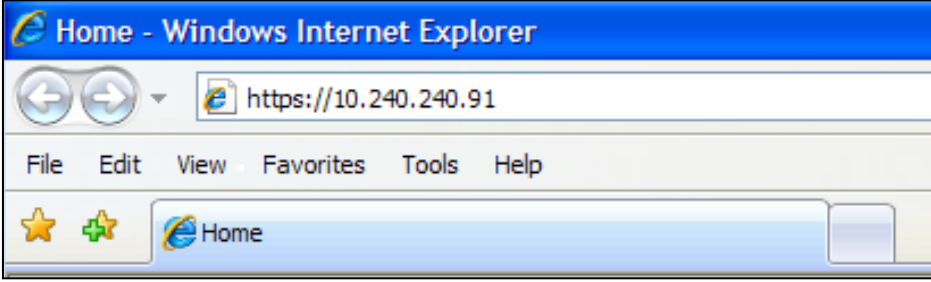
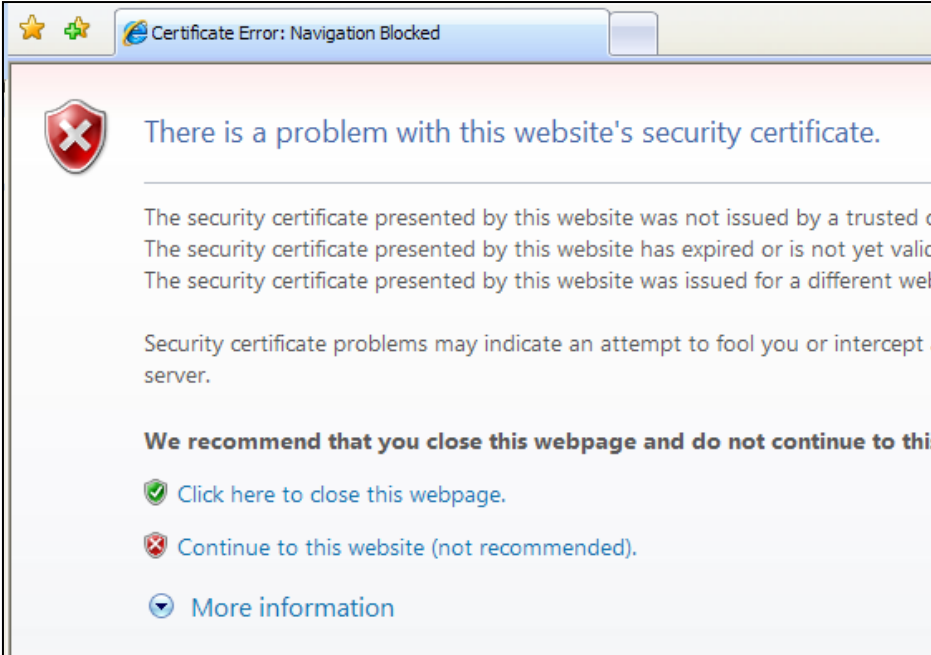
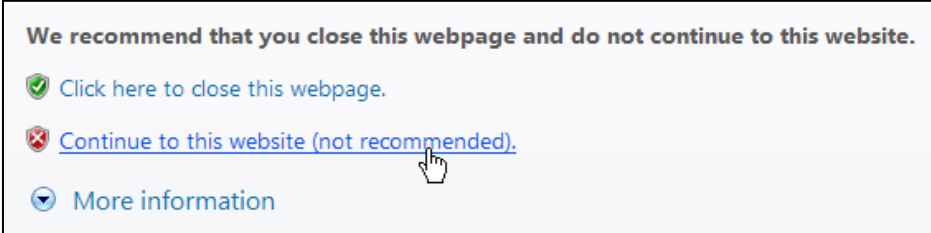
The following items are required for post installation steps.

9.1 Steps to Enable Accelerated Provisioning

1.	<p>Active NOAMP Server:</p> <p>1) Access the command prompt.</p> <p>2) Log into the Active NOAMP server as the “admusr” user.</p>	<pre>login as: admusr root@10.250.xx.yy's password: <admusr_password> Last login: Mon Jul 30 10:33:19 2012 from 10.25.80.199 [admusr@pc9040833-no-a ~]#</pre>
2.	<p>Active NOAMP Server :</p> <p>Output similar to that shown on the right will appear as the server returns to a command prompt.</p>	<pre>*** TRUNCATED OUTPUT *** VPATH=/opt/TKLCcomcol/runcm5.16:/opt/TKLCcomcol/cm5.16 PRODPATH= RELEASE=5.16 RUNID=00 VPATH=/var/TKLC/rundb:/usr/TKLC/appworks:/usr/TKLC/awpcommon:/usr/TKLC/awptransportmgr:/usr/TKLC/awps7:/usr/TKLC/exhr PRODPATH=/opt/comcol/prod RUNID=00 [admusr@pc9040833-no-a ~]#</pre>
3.	<p>Active NOAMP Server:</p> <p>Switch to “root” user.</p>	<pre>[admusr@ pc9040833-no-a ~]\$ su - password: <root_password></pre>
4.	<p><i>Enable Accelerated Provisioning from Active NOAMP</i></p>	<pre>Execute the following command on Active NOAMP # iset -fvalue=TRUE ProvOptions where "var='acceleratedResponse'"</pre>

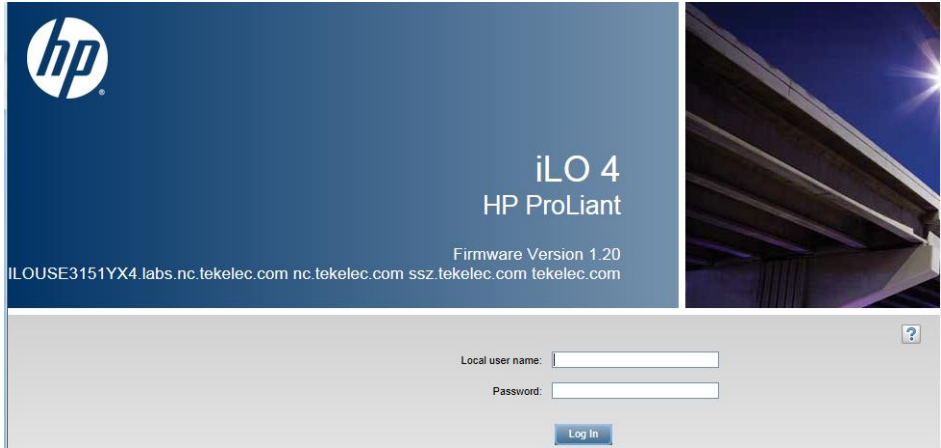
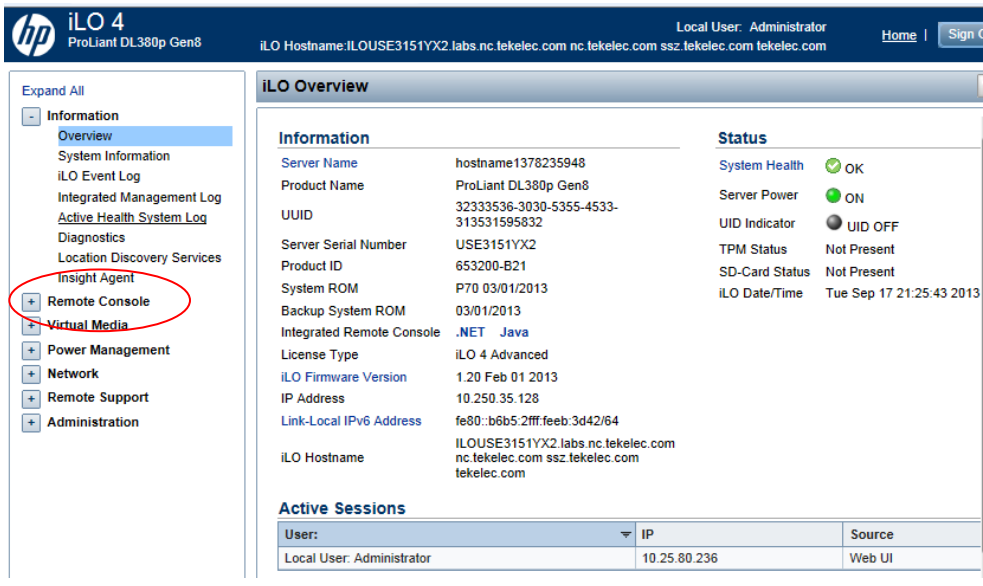
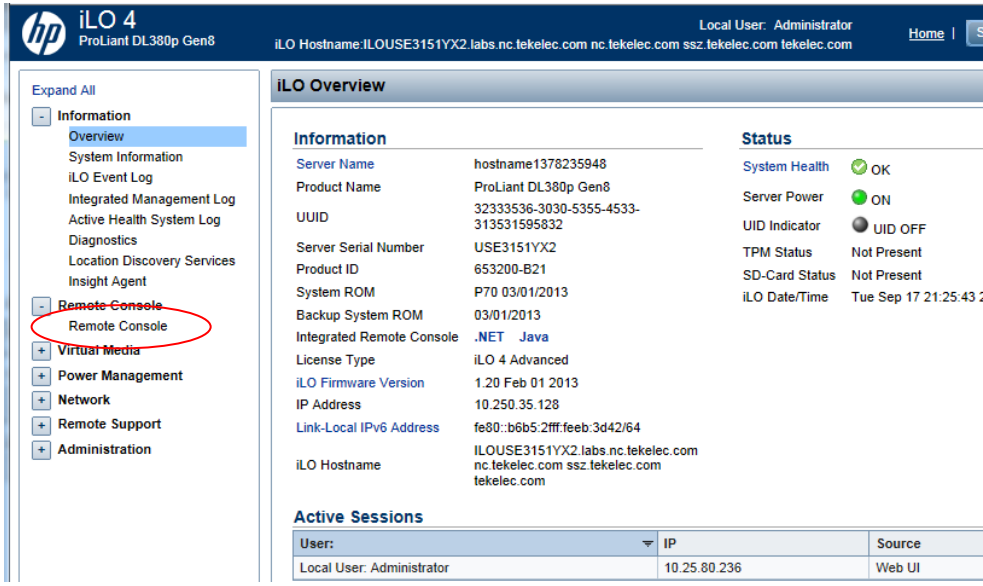
Appendix A. Accessing the iLO VGA Redirection Window

Appendix A: Accessing the iLO VGA Redirection Window

Step	Procedure	Result
<p>1.</p> <input type="checkbox"/>	<p>Launch an approved web browser and connect to the iLO interface</p> <p>NOTE: Always use <i>https://</i> for iLO GUI access..</p>	
<p>2.</p> <input type="checkbox"/>	<p>The web browser will display a warning message regarding the Security Certificate.</p>	
<p>3.</p> <input type="checkbox"/>	<p>Select the option to "Continue to the website (not recommended)"</p>	

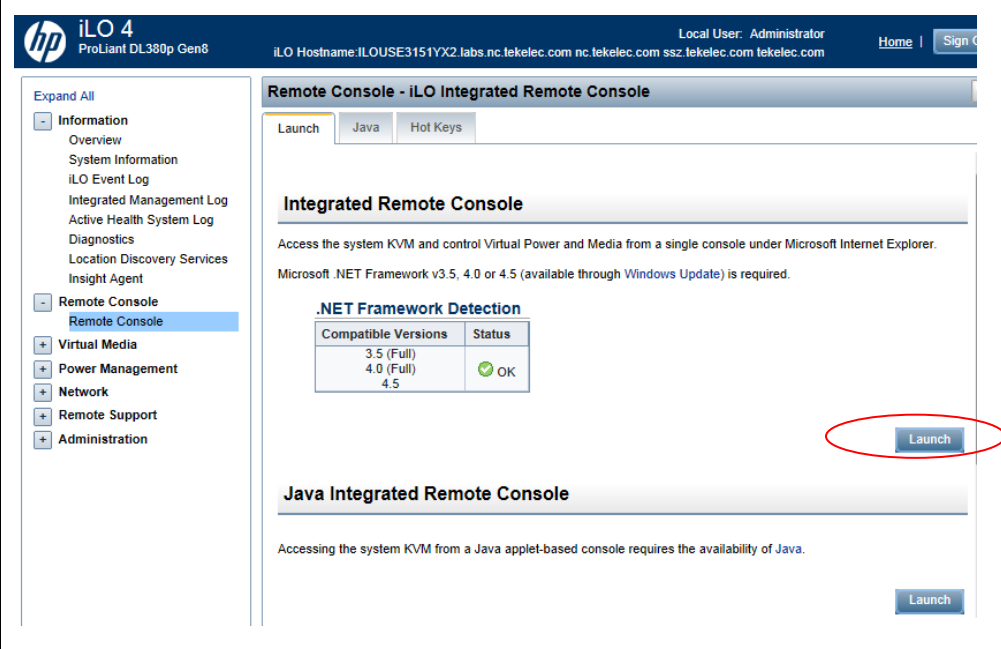
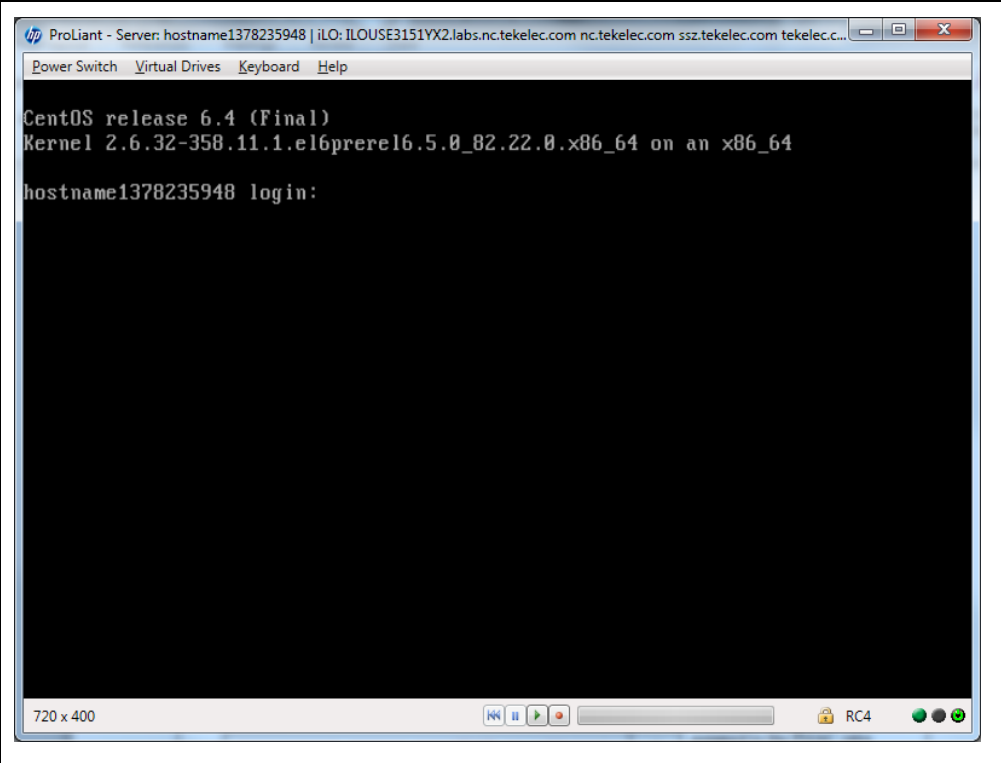
OCUDR 10.0.1 Installation and Configuration Guide

Appendix A: Accessing the iLO VGA Redirection Window

<p>4.</p> <p><input type="checkbox"/></p>	<p>Login to the iLO console as "Administrator"</p>	
<p>5.</p> <p><input type="checkbox"/></p>	<p>The admin GUI is displayed.</p> <p>Expand the "Remote Console" tab in the left panel of the GUI.</p>	
<p>6.</p> <p><input type="checkbox"/></p>	<p>The Remote Console tab is expanded</p> <p>Click on the "Remote Console" option</p>	

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Appendix A: Accessing the iLO VGA Redirection Window

<p>7.</p> <p><input type="checkbox"/></p>	<p>The Remote Console GUI is displayed</p> <p>Click on the “Launch” button under “Integrated Remote Console”</p>	 <p>The screenshot shows the HP iLO 4 ProLiant DL380p Gen8 interface. The left sidebar lists various management options, with 'Remote Console' expanded. The main content area is titled 'Remote Console - iLO Integrated Remote Console' and features tabs for 'Launch', 'Java', and 'Hot Keys'. Under the 'Launch' tab, there is a section for 'Integrated Remote Console' with a 'Launch' button circled in red. Below this is a '.NET Framework Detection' table and a 'Java Integrated Remote Console' section with another 'Launch' button.</p> <table border="1"><thead><tr><th>Compatible Versions</th><th>Status</th></tr></thead><tbody><tr><td>3.5 (Full)</td><td></td></tr><tr><td>4.0 (Full)</td><td>OK</td></tr><tr><td>4.5</td><td></td></tr></tbody></table>	Compatible Versions	Status	3.5 (Full)		4.0 (Full)	OK	4.5	
Compatible Versions	Status									
3.5 (Full)										
4.0 (Full)	OK									
4.5										
<p>8.</p> <p><input type="checkbox"/></p>	<p>The iLO Console window is displayed.</p> <p>NOTE: <i>The console window resembles an MS-DOS window but DOES NOT have a scroll-back buffer.</i></p>	 <p>The screenshot shows a terminal window titled 'ProLiant - Server: hostname1378235948 iLO: ILOUSE3151YX2.labs.nc.tekelec.com'. The terminal output displays 'CentOS release 6.4 (Final)', 'Kernel 2.6.32-358.11.1.el6prere16.5.0_82.22.0.x86_64 on an x86_64', and a login prompt 'hostname1378235948 login:'. The window has a resolution of 720 x 400 and a status bar at the bottom showing 'RC4' and system icons.</p>								

THIS PROCEDURE HAS BEEN COMPLETED

Appendix B. Accessing the OCUDR GUI

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

B.1 Creating Temporary External XMI IP Address

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

Appendix B.1: Creating Temporary External XMI IP Address

Step	In this procedure you will configure a temporary external XMI IP Address for NOAMP Server A for the 1 st NOAMP site. The user will use this IP Address in a web browser to access the GUI to configure the first OCUDR server.	
<p>1.</p> <input type="checkbox"/>	<p>Log onto the Server A ILO as indicated in Appendix A.</p> <p>NOTE: <i>Output similar to that shown on the right will appear.</i></p>	<pre>CentOS release 5.6 (Final) Kernel 2.6.18-238.19.1.el5prere15.0.0_72.22.0 on an x86_64 hostname1260476221 login: root Password: <root_password></pre>
<p>2.</p> <input type="checkbox"/>	<p>Server ILO:</p> <p>Add XMI VLAN to the first OCUDR server (NOAMP-A)</p>	<pre># netAdm add --device=bond0.<xmi_vlan> --onboot=yes --netmask=<XMI_NETMASK> --address=<XMI_IP_Address_for_NOAMP_A> Interface bond0.# added</pre>
<p>3.</p> <input type="checkbox"/>	<p>Server ILO:</p> <p>Add route to the default gateway for the first OCUDR site</p>	<pre># netAdm add --device=bond0.<xmi_vlan> --route=default --gateway=<XMI_IP_Address_for_default_gateway> Route to bond0.# added</pre>
<p>4.</p> <input type="checkbox"/>	<p>Server ILO:</p> <p>Restart the network on the server</p>	<p>Restart the network by running the following:</p> <pre># service network restart</pre>
<p>5.</p> <input type="checkbox"/>	<p>Server ILO:</p> <p>Ping the default gateway to ensure connectivity.</p>	<pre>[root@hostname1260476221 ~]# ping <XMI_IP_Address_for_default_gateway> [root@hostname1260476221 ~]#</pre>
<p>6.</p> <input type="checkbox"/>	<p>Server ILO</p> <p>Log off the ILO</p>	<pre>[root@hostname1260476221 ~]# exit CentOS release 5.6 (Final) Kernel 2.6.18-238.19.1.el5prere15.0.0_72.22.0 on an x86_64 [root@hostname1260476221 ~] login:</pre>

Appendix B.1: Creating Temporary External XMI IP Address

THIS PROCEDURE HAS BEEN COMPLETED

B.2 Creating Temporary External XMI IP Address without Interface Bonding

Note: This section presents a recommendation to accommodate lab environments that, due to equipment constraint, do not have the support of switches capable of providing bonded interfaces. **This configuration is not meant or implied to be an officially supported topology for OCUDR deployments.**

Note: Interconnects should conform to Section 8 of reference [6].

Appendix B.2: Creating Temporary External XMI IP Address without Interface Bonding

Step	In this procedure you will configure a temporary external XMI IP Address for NOAMP Server A for the 1 st NOAMP site. The user will use this IP Address in a web browser to access the GUI to configure the first OCUDR server.	
1. <input type="checkbox"/>	<p>Log onto the Server A ILO as indicated in Appendix A.</p> <p>NOTE: Output similar to that shown on the right will appear.</p>	<pre>CentOS release 5.6 (Final) Kernel 2.6.18-238.19.1.el5prere15.0.0_72.22.0 on an x86_64 hostname1260476221 login: root Password: <root_password></pre>
2. <input type="checkbox"/>	<p>Server ILO:</p> <p>Add XMI IP address to the first OCUDR server (NOAMP-A) and have it use interface eth01</p>	<pre>[root@hostname1260476221 ~]# netAdm set --device=eth01 --onboot=yes --netmask=<XMI_NETMASK> --address=<XMI_IP_Address_for_NOAMP_A> Interface eth01 updated [root@hostname1260476221 ~]#</pre>
3. <input type="checkbox"/>	<p>Server ILO:</p> <p>Add route to the default gateway for the first OCUDR site</p>	<pre>[root@hostname1260476221 ~]# netAdm add --device=eth01 --route=default --gateway=<XMI_IP_Address_for_default_gateway> Route to eth01 added [root@hostname1260476221 ~]#</pre>
4. <input type="checkbox"/>	<p>Server ILO:</p> <p>Restart the network on the server</p>	<p>Restart the network by running the following:</p> <pre># service network restart</pre>
5. <input type="checkbox"/>	<p>Server ILO:</p> <p>Ping the default gateway to ensure connectivity.</p>	<pre>[root@hostname1260476221 ~]# ping <XMI_IP_Address_for_default_gateway> [root@hostname1260476221 ~]#</pre>

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Appendix B.2: Creating Temporary External XMI IP Address without Interface Bonding

6. <input type="checkbox"/>	Server ILO Log off the ILO	<pre>[root@hostname1260476221 ~]# exit</pre> <pre>CentOS release 5.6 (Final)</pre> <pre>Kernel 2.6.18-238.19.1.el5prere15.0.0_72.22.0 on an x86_64</pre> <pre>[root@hostname1260476221 ~] login:</pre>
THIS PROCEDURE HAS BEEN COMPLETED		

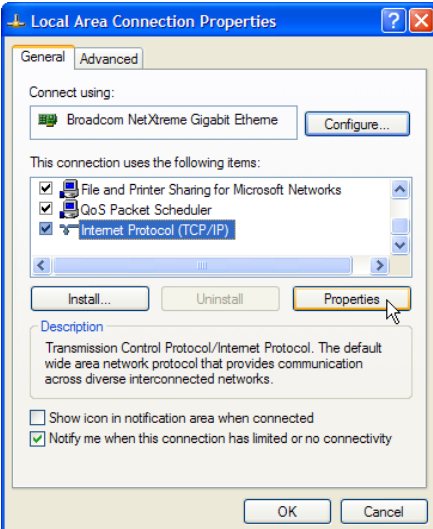
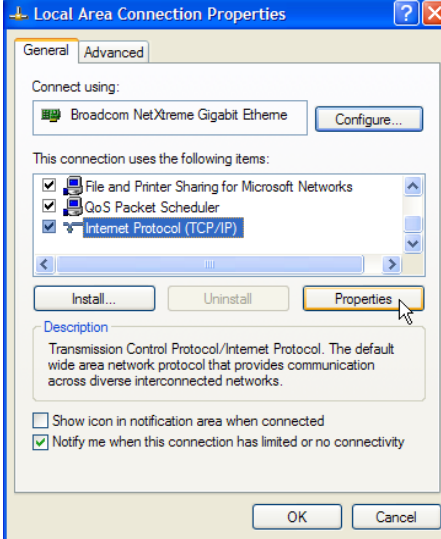
B.3 Establishing a Local Connection for Accessing the OCUDR GUI (RMS only)

This procedure contains steps to connect a laptop to the SDM-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 OCUDR GUI prior to configuring the first OCUDR server.

Appendix B.3: Establishing a Local Connection for Accessing OCUDR GUI (RMS only)

Step	In this procedure you will configure a temporary external XMI IP Address for NOAMP Server A for the 1 st NOAMP site. The user will use this IP Address in a web browser to access the GUI to configure the first OCUDR server.	
1. <input type="checkbox"/>	Access the SDM-A server's console.	Connect to the UDR-A server's console using one of the access methods described in Section 2.1.2 .
2. <input type="checkbox"/>	1) Access the command prompt. 2) Log into the SDM-A server as the "root" user.	<pre>CentOS release 5.6 (Final)</pre> <pre>Kernel 2.6.18-238.19.1.el5prere15.0.0_72.22.0 on an x86_64</pre> <pre>hostname1260476221 login: root</pre> <pre>Password: <root_password></pre>
3. <input type="checkbox"/>	Configure static IP 192.168.100.11 on the eth14 port of the SDM-A server.	<pre>[root@hostname1260476221 ~]# netAdm set --device=eth14 --</pre> <pre>address=192.168.100.11 --netmask=255.255.255.0 --onboot=yes</pre> <pre>[root@hostname1260476221 ~]#</pre>
4. <input type="checkbox"/>	1) Plug in one end of the Ethernet cable (straight-thru) into the back of SDM-A server ETH14 (top left port). 2) Plug the other end of the Ethernet cable into the laptop's Ethernet jack.	

Appendix B.3: Establishing a Local Connection for Accessing OCUDR GUI (RMS only)

<p>5.</p> <p><input type="checkbox"/></p>	<p>Access the laptop network interface card's TCP/IP "Properties" screen.</p> <p>NOTE: For this step follow the instruction specific to the laptop's OS (XP, Vista or Win 7).</p>	<p>Windows XP</p> <ul style="list-style-type: none"> Go to Control Panel Double-click on Network Connections Right-click the wired Ethernet Interface icon and select "Properties" <p>Select "Internet Protocol (TCP/IP)" and select "Properties"</p> 	<p>Windows Vista / Win 7</p> <ul style="list-style-type: none"> Go to Control Panel. Double-click on Network and Sharing Center Select Manage Network Connections (left menu) Right-click the wired Ethernet Interface icon and select "Properties" <p>Select "Internet Protocol Version 4 (TCP/IPv4)"</p> 
<p>6.</p> <p><input type="checkbox"/></p>	<p>1) Set the IP address and netmask of the laptop's network interface card to an IP address within the same network subnet as the statically assigned IP address used in Step 3 of this procedure (192.168.100.100 is suggested) and click "OK".</p> <p>2) Click "Close" from the network interface card's main "Properties" screen.</p>	<p>Internet Protocol (TCP/IP) Properties</p> <p>General</p> <p>You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.</p> <p><input type="radio"/> Obtain an IP address automatically</p> <p><input checked="" type="radio"/> Use the following IP address:</p> <p>IP address: 192 . 168 . 100 . 100 1</p> <p>Subnet mask: 255 . 255 . 255 . 0</p> <p>Default gateway: . . .</p> <p><input type="radio"/> Obtain DNS server address automatically</p> <p><input checked="" type="radio"/> Use the following DNS server addresses:</p> <p>Preferred DNS server: . . .</p> <p>Alternate DNS server: . . .</p> <p>Advanced...</p> <p>OK 1 Cancel</p>	<p>Local Area Connection Properties</p> <p>General Advanced</p> <p>Connect using: Broadcom NetXtreme Gigabit Ethernet Configure...</p> <p>This connection uses the following items:</p> <ul style="list-style-type: none"> Client for Microsoft Networks Deteministic Network Enhancer Wireless Intermediate Driver File and Printer Sharina for Microsoft Networks <p>Install... Uninstall Properties</p> <p>Description: Allows your computer to access resources on a Microsoft network.</p> <p>Show icon in notification area when connected</p> <p>Notify me when this connection has limited or no connectivity</p> <p>Close 2 Cancel</p>
<p>THIS PROCEDURE HAS BEEN COMPLETED</p>			

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

Appendix C. Mounting Media on HP Servers

C.1 Mounting Physical Media on HP Servers (RMS only)


This procedure contains steps to mount electronic and physical media on HP rack mount servers.

Appendix C.1: Mounting Physical Media on HP Rack Mount Servers

Step	In this procedure you will mount media on HP rack mount servers, for ISO access or other file transfer.	
<p>1.</p> <input type="checkbox"/>	<p>Access the server's console.</p>	<p>Connect to the server's console using one of the access methods described in Section 2.1.2.</p>
<p>2.</p> <input type="checkbox"/>	<p>1) Access the command prompt.</p> <p>2) Log into the SDM-A server as the "root" user.</p>	<pre>CentOS release 5.6 (Final) Kernel 2.6.18-238.19.1.el5prere15.0.0_72.22.0 on an x86_64 hostname1260476221 login: root Password: <root_password></pre>
<p>3.</p> <input type="checkbox"/>	<p>HP Server:</p> <p>Insert the USB flash drive containing the server configuration file into the USB port on the front panel of HP Server.</p>	 <p>Figure 4 - HP DL380 Front Panel: USB Port</p>
<p>4.</p> <input type="checkbox"/>	<p>HP Server:</p> <p>Output similar to that shown on the right will appear as the USB flash drive is inserted into the HP Server front USB port.</p> <p>Press the <ENTER> key to return to the command prompt.</p>	<pre>[root@hostname1260476099 ~]# sd 3:0:0:0: [sdb] Assuming drive cache: write through sd 3:0:0:0: [sdb] Assuming drive cache: write through <ENTER> [root@hostname1260476099 ~]#</pre>
<p>5.</p> <input type="checkbox"/>	<p>HP Server:</p> <p>Verify that the USB flash drive's partition has been mounted by the OS: Search df for the device named in the previous step's output .</p>	<pre>[root@hostname1260476099 ~]# df grep sdb /dev/sdb1 2003076 8 2003068 1% /media/sdb1 [root@hostname1260476099 ~]#</pre>

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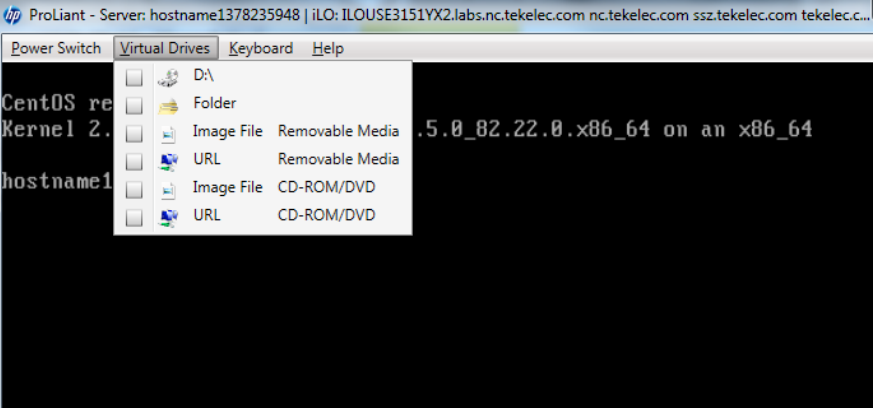
Appendix C.1: Mounting Physical Media on HP Rack Mount Servers

<p>6.</p> <input type="checkbox"/>	<p>HP Server:</p> <p>UDB media may be accessed via the path shown</p>	<pre>[root@hostname1260476099 ~]# cd /media/sdb1 [root@hostname1260476099 ~]#</pre>
<p>7.</p> <input type="checkbox"/>	<p>HP Server:</p> <p>When you are finished using the mounted drive, remove the USB flash drive from the USB port on the front panel of the server.</p>	 <p>Figure 5 - HP DL380 Front Panel: USB Port</p>
<p>THIS PROCEDURE HAS BEEN COMPLETED</p>		

C.2 Mounting Virtual Media on HP Servers

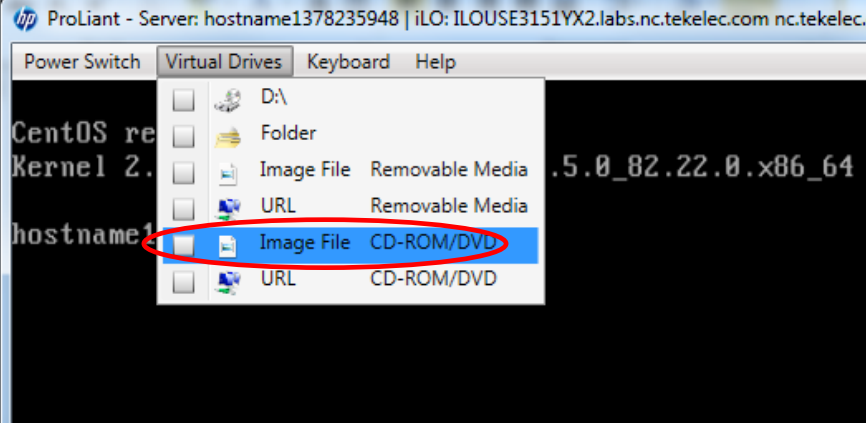
This procedure contains steps to mount virtual media on HP rack mount servers via ILO.

Appendix C.2: Mounting Virtual Media on HP Rack Mount Servers

<p>Step</p>	<p>In this procedure you will mount media on HP rack mount servers via ILO, for ISO access or other file transfer.</p>	
<p>1.</p> <input type="checkbox"/>	<p>Access the server's ILO VGA.</p>	<p>Connect to the server's ILO VGA using the access method described in Appendix A.</p>
<p>2.</p> <input type="checkbox"/>	<p>ILO Remote Console:</p> <p>Select "Virtual Drives" from the top menu bar.</p>	

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Appendix C.2: Mounting Virtual Media on HP Rack Mount Servers

<p>3.</p> <input type="checkbox"/>	<p>HP Server:</p> <p>Select from the menu options presented:</p> <p>Image File to access files on your laptop client machine.</p> <p>URL to access files on the network.</p> <p>Folder to open a directory on your client machine.</p> <p>CD-ROM/DVD to mount ISO type files.</p> <p>Removable Media for other file types.</p>	 <p>The screenshot shows the BIOS interface for an HP ProLiant server. The 'Virtual Drives' menu is open, displaying several options: D:\, Folder, Image File Removable Media, URL Removable Media, Image File CD-ROM/DVD (highlighted with a red circle), and URL CD-ROM/DVD. The background shows a terminal window with text including 'CentOS re', 'Kernel 2.', and 'hostname1'.</p>
<p>4.</p> <input type="checkbox"/>	<p>HP Server:</p> <p>Folder mounting will cause device information to display to console.</p> <p>or</p> <p>CD-ROM/DVD media may be accessed via the device shown by getCDROM</p>	<pre>[root@pc9000724-no-a ~]# sd 4:0:0:0: [sde] Assuming drive sd 4:0:0:0: [sde] Assuming drive cache: write through sd 4:0:0:0: [sde] Assuming drive cache: write through</pre> <pre>[root@hostname1260476099 ~]# getCDROM Virtual_DVD-ROM sr0 /dev/sr0</pre>

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Appendix C.2: Mounting Virtual Media on HP Rack Mount Servers

<p>5.</p> <input type="checkbox"/>	<p>HP Server:</p> <p>Mount device to access its data</p>	<pre>[root@pc9000724-no-a ~]# sd 4:0:0:0: [sde] Assuming drive sd 4:0:0:0: [sde] Assuming drive cache: write through sd 4:0:0:0: [sde] Assuming drive cache: write through</pre> <pre># mount /dev/<device_name> /mnt/<mount_name> mount: block device /dev/sde is write-protected, mounting read-only</pre>
<p>6.</p> <input type="checkbox"/>	<p>HP Server:</p> <p><i>When you are finished using the mounted drive, unmount it by...</i></p> <p>1) running umount</p> <p>2) Selecting Virtual Drives menu and clicking the drive option in use to remove its check mark.</p>	<pre># umount /dev/<device_name></pre> 

THIS PROCEDURE HAS BEEN COMPLETED

Appendix D. HP Hardware Setup

D.1 HP Blade Firmware Upgrade

This procedure will upgrade the blade server firmware.

Needed material:

- HP Firmware Maintenance CD/DVD
- HP Solutions Firmware Upgrade Pack Release Notes [5]

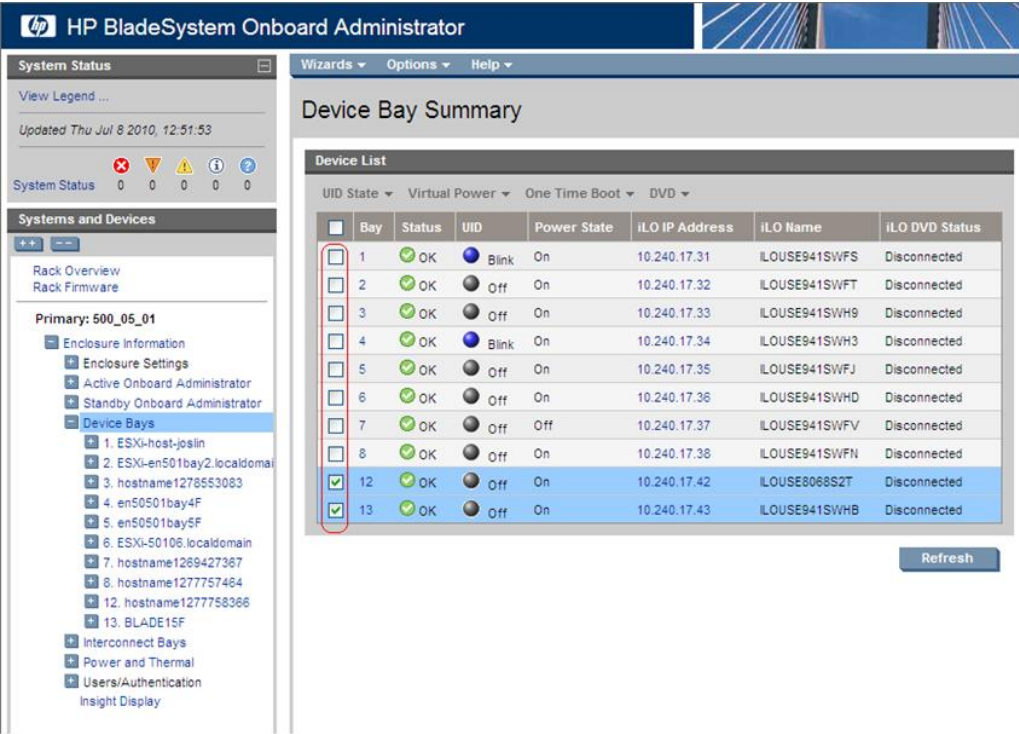
Check off (✓) each step as it is completed. Boxes have been provided for this purpose under each step number.

IF THIS PROCEDURE FAILS, CONTACT MY ORACLE SUPPORT (MOS) AND ASK FOR ASSISTANCE.

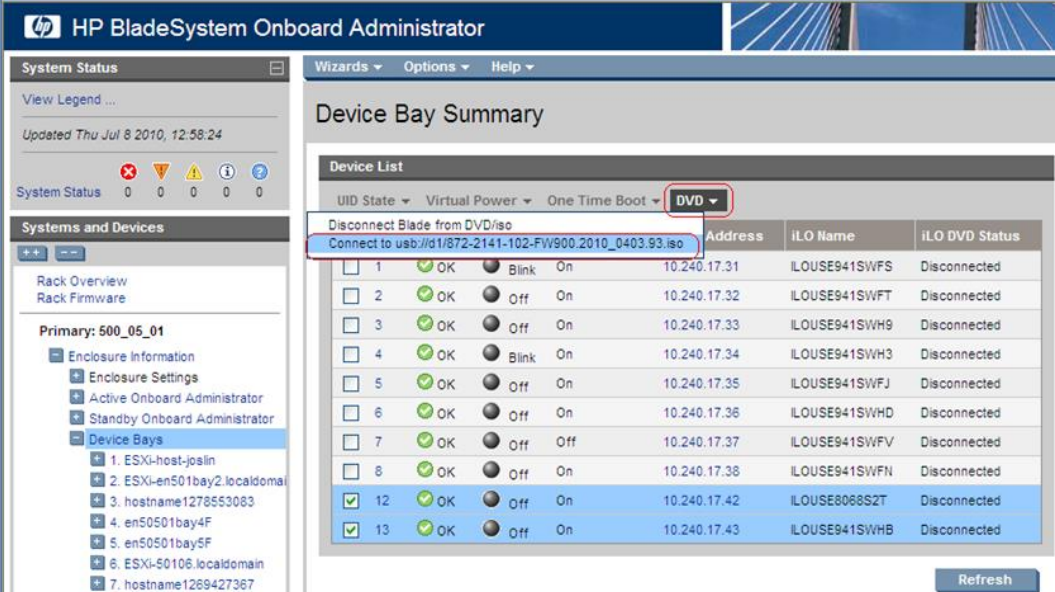
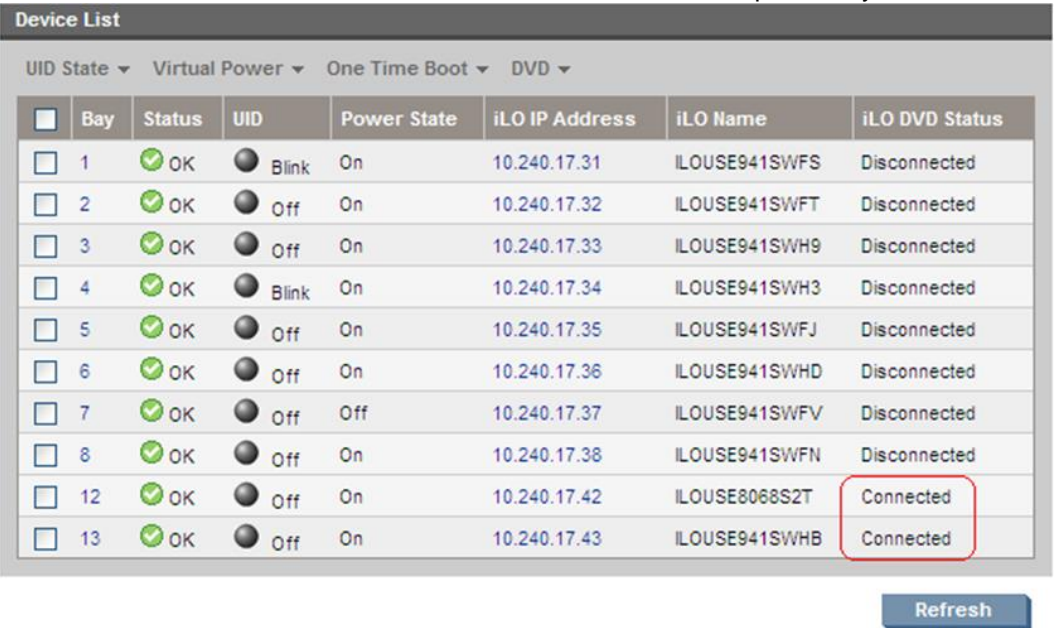
Appendix D.1: HP Blade Firmware Upgrade

Step	Procedure	Result
1. <input type="checkbox"/>	<i>Mount the media containing the Firmware software.</i>	Follow steps defined in ... C.1 Mounting Physical Media on HP Servers or C.2 Mounting Virtual Media on HP Servers ... to mount the Firmware software on the Active OA Module.
2. <input type="checkbox"/>	Active OA GUI Login	Navigate to the IP address of the active OA. Login as an administrative user.

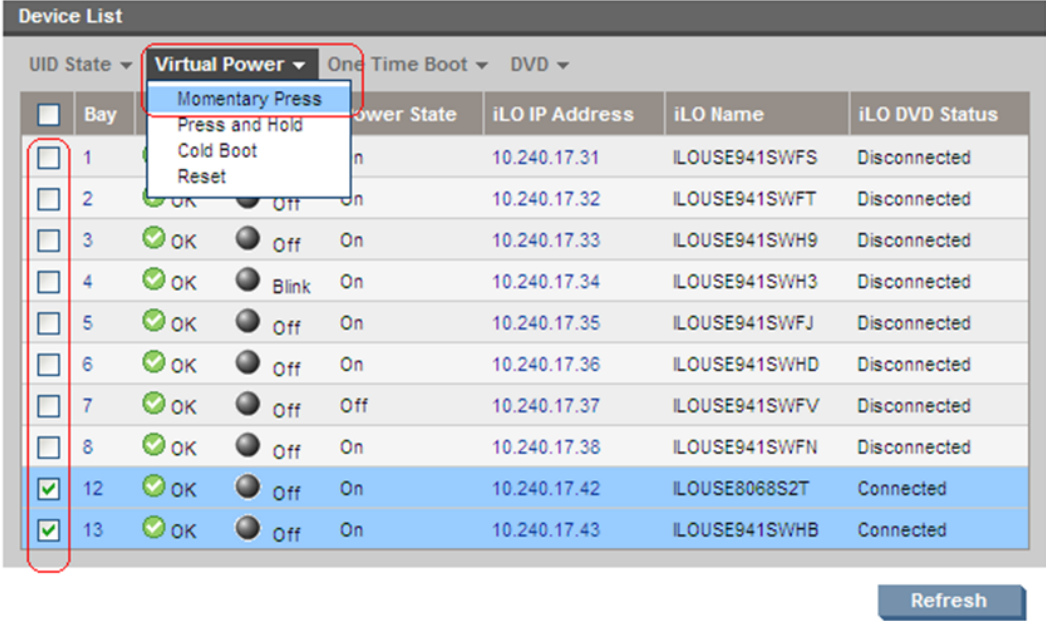
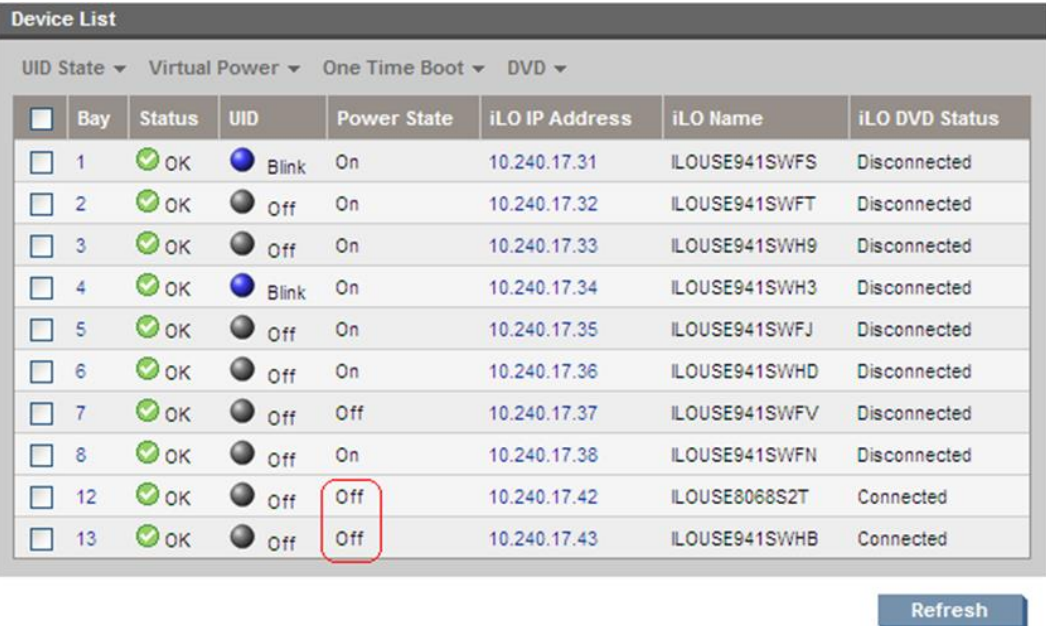
Appendix D.1: HP Blade Firmware Upgrade

Step	Procedure	Result
<p>3.</p> <div style="border: 1px solid black; width: 20px; height: 20px; margin-left: 5px;"></div>	<p>OA Web GUI: Access the Device Summary page</p>	<p>On the left pane, expand the Device Bays node to display the Device Bay Summary window.</p> <p>Select the individual blades to be upgraded by clicking and enabling the corresponding UID checkbox.</p>  <p>Note: A maximum of 8 blades should be upgraded concurrently at one time. If the c7000enclosure has more than 8 blades they will need to be upgraded in multiple sessions.</p>

Appendix D.1: HP Blade Firmware Upgrade

Step	Procedure	Result																																																																																																								
<p>4.</p> <p><input type="checkbox"/></p>	<p>OA Web GUI: Connect to USB Drive</p>	<p>Once the blades are selected, connect them to the ISO on the USB Drive, by selecting the Connect to usb... item from the DVD menu.</p>  <table border="1"> <thead> <tr> <th colspan="8">Device List</th> </tr> <tr> <th colspan="8">UID State Virtual Power One Time Boot DVD</th> </tr> <tr> <th></th> <th></th> <th></th> <th></th> <th></th> <th>Address</th> <th>iLO Name</th> <th>iLO DVD Status</th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/></td> <td>1</td> <td>OK</td> <td>Blink</td> <td>On</td> <td>10.240.17.31</td> <td>ILOUSE941SWFS</td> <td>Disconnected</td> </tr> <tr> <td><input type="checkbox"/></td> <td>2</td> <td>OK</td> <td>Off</td> <td>On</td> <td>10.240.17.32</td> <td>ILOUSE941SWFT</td> <td>Disconnected</td> </tr> <tr> <td><input type="checkbox"/></td> <td>3</td> <td>OK</td> <td>Off</td> <td>On</td> <td>10.240.17.33</td> <td>ILOUSE941SWH9</td> <td>Disconnected</td> </tr> <tr> <td><input type="checkbox"/></td> <td>4</td> <td>OK</td> <td>Blink</td> <td>On</td> <td>10.240.17.34</td> <td>ILOUSE941SWH3</td> <td>Disconnected</td> </tr> <tr> <td><input type="checkbox"/></td> <td>5</td> <td>OK</td> <td>Off</td> <td>On</td> <td>10.240.17.35</td> <td>ILOUSE941SWFJ</td> <td>Disconnected</td> </tr> <tr> <td><input type="checkbox"/></td> <td>6</td> <td>OK</td> <td>Off</td> <td>On</td> <td>10.240.17.36</td> <td>ILOUSE941SWHD</td> <td>Disconnected</td> </tr> <tr> <td><input type="checkbox"/></td> <td>7</td> <td>OK</td> <td>Off</td> <td>Off</td> <td>10.240.17.37</td> <td>ILOUSE941SWFV</td> <td>Disconnected</td> </tr> <tr> <td><input type="checkbox"/></td> <td>8</td> <td>OK</td> <td>Off</td> <td>On</td> <td>10.240.17.38</td> <td>ILOUSE941SWFN</td> <td>Disconnected</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td>12</td> <td>OK</td> <td>Off</td> <td>On</td> <td>10.240.17.42</td> <td>ILOUSE8068S2T</td> <td>Disconnected</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td>13</td> <td>OK</td> <td>Off</td> <td>On</td> <td>10.240.17.43</td> <td>ILOUSE941SWHB</td> <td>Disconnected</td> </tr> </tbody> </table>	Device List								UID State Virtual Power One Time Boot DVD													Address	iLO Name	iLO DVD Status	<input type="checkbox"/>	1	OK	Blink	On	10.240.17.31	ILOUSE941SWFS	Disconnected	<input type="checkbox"/>	2	OK	Off	On	10.240.17.32	ILOUSE941SWFT	Disconnected	<input type="checkbox"/>	3	OK	Off	On	10.240.17.33	ILOUSE941SWH9	Disconnected	<input type="checkbox"/>	4	OK	Blink	On	10.240.17.34	ILOUSE941SWH3	Disconnected	<input type="checkbox"/>	5	OK	Off	On	10.240.17.35	ILOUSE941SWFJ	Disconnected	<input type="checkbox"/>	6	OK	Off	On	10.240.17.36	ILOUSE941SWHD	Disconnected	<input type="checkbox"/>	7	OK	Off	Off	10.240.17.37	ILOUSE941SWFV	Disconnected	<input type="checkbox"/>	8	OK	Off	On	10.240.17.38	ILOUSE941SWFN	Disconnected	<input checked="" type="checkbox"/>	12	OK	Off	On	10.240.17.42	ILOUSE8068S2T	Disconnected	<input checked="" type="checkbox"/>	13	OK	Off	On	10.240.17.43	ILOUSE941SWHB	Disconnected
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<p>5.</p> <p><input type="checkbox"/></p>	<p>OA Web GUI: Verify Drive Connection</p>	<p>Once each blade has mounted the ISO media the Device List table should indicate an iLO DVD Status as Connected for each blade that was previously selected.</p>  <table border="1"> <thead> <tr> <th colspan="8">Device List</th> </tr> <tr> <th colspan="8">UID State Virtual Power One Time Boot DVD</th> </tr> <tr> <th></th> <th>Bay</th> <th>Status</th> <th>UID</th> <th>Power State</th> <th>iLO IP Address</th> <th>iLO Name</th> <th>iLO DVD Status</th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/></td> <td>1</td> <td>OK</td> <td>Blink</td> <td>On</td> <td>10.240.17.31</td> <td>ILOUSE941SWFS</td> <td>Disconnected</td> </tr> <tr> <td><input type="checkbox"/></td> <td>2</td> <td>OK</td> <td>Off</td> <td>On</td> <td>10.240.17.32</td> <td>ILOUSE941SWFT</td> <td>Disconnected</td> </tr> <tr> <td><input type="checkbox"/></td> <td>3</td> <td>OK</td> <td>Off</td> <td>On</td> <td>10.240.17.33</td> <td>ILOUSE941SWH9</td> <td>Disconnected</td> </tr> <tr> <td><input type="checkbox"/></td> <td>4</td> <td>OK</td> <td>Blink</td> <td>On</td> <td>10.240.17.34</td> <td>ILOUSE941SWH3</td> <td>Disconnected</td> </tr> <tr> <td><input type="checkbox"/></td> <td>5</td> <td>OK</td> <td>Off</td> <td>On</td> <td>10.240.17.35</td> <td>ILOUSE941SWFJ</td> <td>Disconnected</td> </tr> <tr> <td><input type="checkbox"/></td> <td>6</td> <td>OK</td> <td>Off</td> <td>On</td> <td>10.240.17.36</td> <td>ILOUSE941SWHD</td> <td>Disconnected</td> </tr> <tr> <td><input type="checkbox"/></td> <td>7</td> <td>OK</td> <td>Off</td> <td>Off</td> <td>10.240.17.37</td> <td>ILOUSE941SWFV</td> <td>Disconnected</td> </tr> <tr> <td><input type="checkbox"/></td> <td>8</td> <td>OK</td> <td>Off</td> <td>On</td> <td>10.240.17.38</td> <td>ILOUSE941SWFN</td> <td>Disconnected</td> </tr> <tr> <td><input type="checkbox"/></td> <td>12</td> <td>OK</td> <td>Off</td> <td>On</td> <td>10.240.17.42</td> <td>ILOUSE8068S2T</td> <td>Connected</td> </tr> <tr> <td><input type="checkbox"/></td> <td>13</td> <td>OK</td> <td>Off</td> <td>On</td> <td>10.240.17.43</td> <td>ILOUSE941SWHB</td> <td>Connected</td> </tr> </tbody> </table> <p>Note: The Refresh button may need to be clicked in order to see the current status of all blades.</p>	Device List								UID State Virtual Power One Time Boot DVD									Bay	Status	UID	Power State	iLO IP Address	iLO Name	iLO DVD Status	<input type="checkbox"/>	1	OK	Blink	On	10.240.17.31	ILOUSE941SWFS	Disconnected	<input type="checkbox"/>	2	OK	Off	On	10.240.17.32	ILOUSE941SWFT	Disconnected	<input type="checkbox"/>	3	OK	Off	On	10.240.17.33	ILOUSE941SWH9	Disconnected	<input type="checkbox"/>	4	OK	Blink	On	10.240.17.34	ILOUSE941SWH3	Disconnected	<input type="checkbox"/>	5	OK	Off	On	10.240.17.35	ILOUSE941SWFJ	Disconnected	<input type="checkbox"/>	6	OK	Off	On	10.240.17.36	ILOUSE941SWHD	Disconnected	<input type="checkbox"/>	7	OK	Off	Off	10.240.17.37	ILOUSE941SWFV	Disconnected	<input type="checkbox"/>	8	OK	Off	On	10.240.17.38	ILOUSE941SWFN	Disconnected	<input type="checkbox"/>	12	OK	Off	On	10.240.17.42	ILOUSE8068S2T	Connected	<input type="checkbox"/>	13	OK	Off	On	10.240.17.43	ILOUSE941SWHB	Connected
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Appendix D.1: HP Blade Firmware Upgrade

Step	Procedure	Result
<p>6.</p> <p><input type="checkbox"/></p>	<p>OA Web GUI: Power Down Blades</p>	<p>If needed, reselect the UID checkbox for each blade to be upgraded and then select the Momentary Press option under the Virtual Power menu.</p>  <p>When prompted click the OK button to confirm the action.</p>
<p>7.</p> <p><input type="checkbox"/></p>	<p>OA Web GUI: Verify Power Down</p>	<p>The power down sequence can take several minutes to complete. When it completes the Device List table will indicate the Power State of each select blade to be Off.</p>  <p>Note: The Refresh button may need to be clicked in order to see the current status of all blades.</p>

Appendix D.1: HP Blade Firmware Upgrade

Step	Procedure	Result																																																																																								
8. <input type="checkbox"/>	OA Web GUI: Initiate Firmware Upgrade	To power the blades back on and begin the automated firmware upgrade process, repeat Steps 7 and 8 this time being sure the Power State indicates On for each selected blade.																																																																																								
9. <input type="checkbox"/>	OA Web GUI: Monitor Firmware Upgrade	<p>From this point on each blade will boot into an automated firmware upgrade process that will last between 20 to 25 minutes. During this time all feedback is provided through the UID lights. While the update process is running, the UID light blinks.</p> <p>The UID lights will not blink until the server fully boots and the firmware upgrades have started to be applied. If no upgrades are needed the UID lights will not blink, but the server will still reboot and the iLO DVD will disconnected after completion.</p> <div> <p>Device List</p> <p>UID State ▾ Virtual Power ▾ One Time Boot ▾ DVD ▾</p> <table border="1"> <thead> <tr> <th><input type="checkbox"/></th> <th>Bay</th> <th>Status</th> <th>UID</th> <th>Power State</th> <th>iLO IP Address</th> <th>iLO Name</th> <th>iLO DVD Status</th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/></td> <td>1</td> <td>OK</td> <td>Blink</td> <td>On</td> <td>10.240.17.31</td> <td>ILOUSE941SWFS</td> <td>Disconnected</td> </tr> <tr> <td><input type="checkbox"/></td> <td>2</td> <td>OK</td> <td>Off</td> <td>On</td> <td>10.240.17.32</td> <td>ILOUSE941SWFT</td> <td>Disconnected</td> </tr> <tr> <td><input type="checkbox"/></td> <td>3</td> <td>OK</td> <td>Off</td> <td>On</td> <td>10.240.17.33</td> <td>ILOUSE941SWH9</td> <td>Disconnected</td> </tr> <tr> <td><input type="checkbox"/></td> <td>4</td> <td>OK</td> <td>Blink</td> <td>On</td> <td>10.240.17.34</td> <td>ILOUSE941SWH3</td> <td>Disconnected</td> </tr> <tr> <td><input type="checkbox"/></td> <td>5</td> <td>OK</td> <td>Off</td> <td>On</td> <td>10.240.17.35</td> <td>ILOUSE941SWFJ</td> <td>Disconnected</td> </tr> <tr> <td><input type="checkbox"/></td> <td>6</td> <td>OK</td> <td>Off</td> <td>On</td> <td>10.240.17.36</td> <td>ILOUSE941SWHD</td> <td>Disconnected</td> </tr> <tr> <td><input type="checkbox"/></td> <td>7</td> <td>OK</td> <td>Off</td> <td>Off</td> <td>10.240.17.37</td> <td>ILOUSE941SWFV</td> <td>Disconnected</td> </tr> <tr> <td><input type="checkbox"/></td> <td>8</td> <td>OK</td> <td>Off</td> <td>On</td> <td>10.240.17.38</td> <td>ILOUSE941SWFN</td> <td>Disconnected</td> </tr> <tr> <td><input type="checkbox"/></td> <td>12</td> <td>OK</td> <td>Off</td> <td>On</td> <td>10.240.17.42</td> <td>ILOUSE8068S2T</td> <td>Disconnected</td> </tr> <tr> <td><input type="checkbox"/></td> <td>13</td> <td>OK</td> <td>Off</td> <td>On</td> <td>10.240.17.43</td> <td>ILOUSE941SWHB</td> <td>Disconnected</td> </tr> </tbody> </table> <p style="text-align: right;"><input type="button" value="Refresh"/></p> </div> <p>Upon a successful firmware upgrade, the Device List table will list each blade with a Status of OK, UID of Off and the iLO DVD Status as Disconnected. At this time the blades will automatically be rebooted.</p> <p>Note: Make sure all blades have disconnected before continuing. If any blades are still connected after their UIDs have stopped blinking and Status=OK, disconnect them manually by selecting Disconnect Blade from DVD/ISO from the DVD menu. If the UID led is solid, a failure has occurred during the firmware upgrade. Use the iLO's integrated remote console or a kvm connection to view the error.</p> <p>If necessary, repeat Steps 4 through 10 for the remaining blades in the enclosure to be upgraded. Proceed to the next step.</p>	<input type="checkbox"/>	Bay	Status	UID	Power State	iLO IP Address	iLO Name	iLO DVD Status	<input type="checkbox"/>	1	OK	Blink	On	10.240.17.31	ILOUSE941SWFS	Disconnected	<input type="checkbox"/>	2	OK	Off	On	10.240.17.32	ILOUSE941SWFT	Disconnected	<input type="checkbox"/>	3	OK	Off	On	10.240.17.33	ILOUSE941SWH9	Disconnected	<input type="checkbox"/>	4	OK	Blink	On	10.240.17.34	ILOUSE941SWH3	Disconnected	<input type="checkbox"/>	5	OK	Off	On	10.240.17.35	ILOUSE941SWFJ	Disconnected	<input type="checkbox"/>	6	OK	Off	On	10.240.17.36	ILOUSE941SWHD	Disconnected	<input type="checkbox"/>	7	OK	Off	Off	10.240.17.37	ILOUSE941SWFV	Disconnected	<input type="checkbox"/>	8	OK	Off	On	10.240.17.38	ILOUSE941SWFN	Disconnected	<input type="checkbox"/>	12	OK	Off	On	10.240.17.42	ILOUSE8068S2T	Disconnected	<input type="checkbox"/>	13	OK	Off	On	10.240.17.43	ILOUSE941SWHB	Disconnected
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10. <input type="checkbox"/>	OA Web GUI: Remove USB Flash Drive	The USB flash drive may now safely be removed from the Active OA module.																																																																																								
11. <input type="checkbox"/>	OA Web GUI: Update Firmware Errata	<p>Check the HP Solutions Firmware Upgrade Pack Release Notes [3] to see if there are any firmware errata items that apply to the server being upgraded.</p> <p>If there is, there will be a directory matching the errata's ID in the /errata directory of the HP Misc Firmware ISO. The errata directories contain the errata firmware and a README file detailing the installation steps.</p>																																																																																								

OCUDR 10.0.1 Installation and Configuration Guide

Appendix D.1: HP Blade Firmware Upgrade

Step	Procedure	Result
THIS PROCEDURE HAS BEEN COMPLETED		

D.2 BIOS Settings for HP Blade and Rack Mount Servers

This procedure will configure HP BIOS settings for Blade and RMS.

Needed material:

- None

Check off (✓) each step as it is completed. Boxes have been provided for this purpose under each step number.

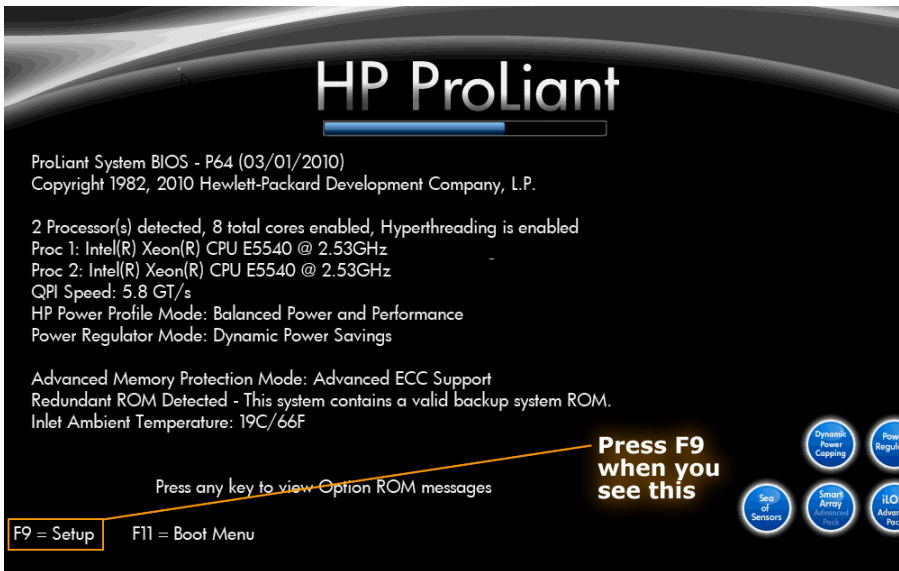
IF THIS PROCEDURE FAILS, CONTACT MY ORACLE SUPPORT (MOS) AND ASK FOR ASSISTANCE.

Appendix D.2: BIOS Settings for HP Blade and Rack Mount Servers

Step	In this procedure you will configure BIOS settings for HP hardware.	
<p>1.</p> <input type="checkbox"/>	<p>Access the HP server's console.</p>	<p>Connect to the server's console using one of the access methods described in Section 2.1.2.</p>
<p>2.</p> <input type="checkbox"/>	<p>Access the HP server's console according to its hardware type</p>	<p>For Rack Mount Servers (RMS), connect to the server's console using one of the access methods described in Section 2.1.2.</p> <p>For Blade servers:</p> <ol style="list-style-type: none"> 1. Navigate to the IP address of the active OA. Login as an administrative user. 2. Navigate to Enclosure Information > Device Bays > <Blade 1> > iLO 3. Click on Integrated Remote Console <div style="border: 1px solid #ccc; padding: 5px;"> </div> <p>Note: This will launch the iLO interface for that blade. If this is the first time the iLO is being accessed, you will be prompted to install an addon to your web browser, follow the on screen instructions to do so.</p>

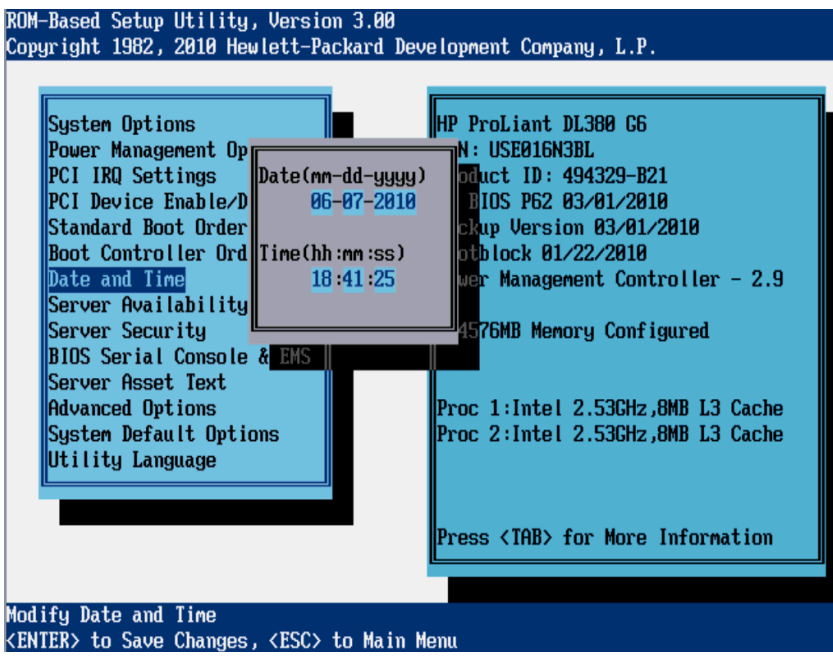
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Appendix D.2: BIOS Settings for HP Blade and Rack Mount Servers

<p>3.</p> <input type="checkbox"/>	<p>Access the Server BIOS</p>	<p>Reboot the server.</p> <p>For Blade, this can be achieved by selecting Cold Boot from under the Integrated Console's Power Switch menu.</p> <p>For RMS, 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 F9=Setup in the lower left corner of the screen, press [F9] to access the BIOS setup screen. You may be required to press [F9] 2-3 times. The F9=Setup will change to F9 Pressed once it is accepted. See example below.</p>  <p>Expected Result: ROM-Based Setup Utility is accessed and the ROM-Based Setup Utility menu will be displayed.</p>
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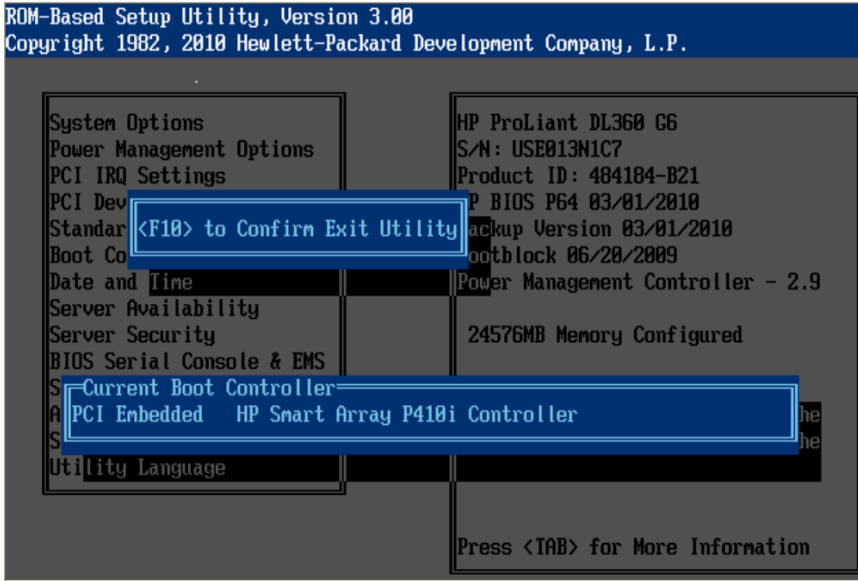
OCUDR 10.0.1 Installation and Configuration Guide

Appendix D.2: BIOS Settings for HP Blade and Rack Mount Servers

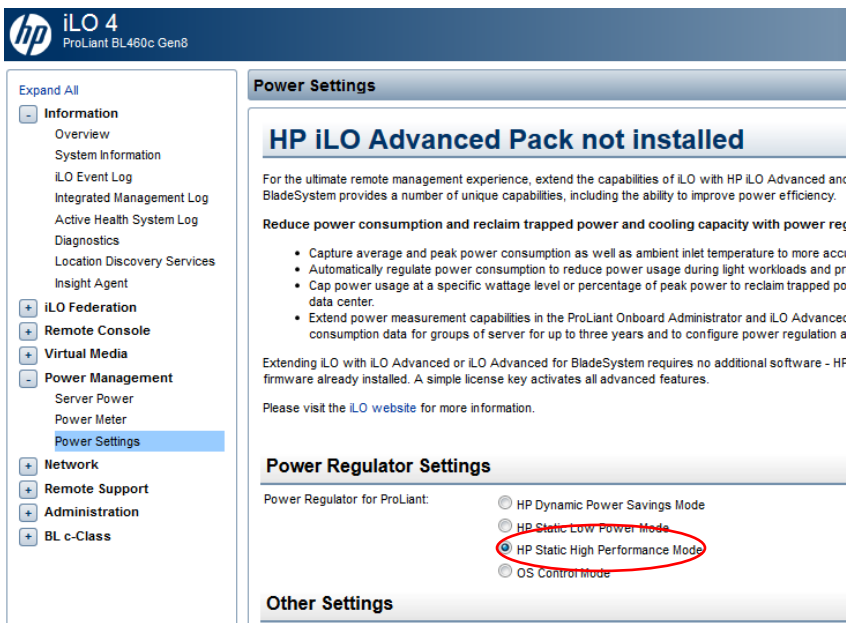
<p>4.</p> <input type="checkbox"/>	<p>Set Server CMOS Clock</p>	<p>Scroll to <i>Date and Time</i> and press [ENTER]</p> <p>Set the date and time and press [ENTER].</p>  <p>Expected Result: Correct Time & Date is set.</p>
<p>5.</p> <input type="checkbox"/>	<p>Configure iLO serial port settings <i>(RMS Only)</i></p>	<p>For RMS only, the serial ports on HP DL360 G6 rack mount servers need to be configured so the serial port used by the BIOS and TPD are connected to the “VSP” on the iLO. This will allow the remote administration of the servers without the need for external terminal servers. If this configuration has not been completed correctly and the server rebooted, the syscheck “syscheck -v hardware serial” test will fail.</p> <p>Select System Options option and press [ENTER].</p> <p>Select Serial Port Options option and press [ENTER].</p> <p>Change Embedded Serial Port to COM2 and press [ENTER].</p> <p>Change Virtual Serial Port to COM1 and press [ENTER].</p> <p>Press <ESC> two times</p>
<p>6.</p> <input type="checkbox"/>	<p>Configure Power Profile settings</p>	<p>The Power Profile on HP servers used in OCUDR need to be configured for optimum OCUDR software performance on both RMS and blade hardware.</p> <p>Select Power Management Options option and press [ENTER].</p> <p>Select HP Power Profile option and press [ENTER].</p> <p>Change it to Maximum Performance and press [ENTER].</p>

OCUDR 10.0.1 Installation and Configuration Guide

Appendix D.2: BIOS Settings for HP Blade and Rack Mount Servers

<p>7.</p> <input type="checkbox"/>	<p>Configure Power Regulator settings</p>	<p>The Power Regulator on HP servers used in SDM need to be configured for optimum SDM software performance on both RMS and blade hardware.</p> <p>Still under Power Management Options options ...</p> <p>Select HP Power Regulator option and press [ENTER].</p> <p><i>Note:</i> A note may appear to say certain processors support only one power state. If this appears, press [ESC] to clear it.</p> <p>Change setting to HP Static High Performance Mode and press [ENTER].</p>
<p>8.</p> <input type="checkbox"/>	<p>Save Configuration and Exit</p>	<p>Press <ESC> two times</p> <p>Press [F10] to save the configuration and exit. The server will reboot</p>  <p>Expected Result: Settings are saved and server reboots.</p>

Appendix D.2: BIOS Settings for HP Blade and Rack Mount Servers

<p>9.</p> <div style="border: 1px solid black; width: 20px; height: 20px; margin-left: 5px;"></div>	<p>Confirm the HP server's Power Regulator setting.</p>	<p>If not already connected to the server's iLO, connect using Appendix A: Accessing the iLO VGA Redirection Window.</p> <p>On the HP Server's iLO:</p> <ol style="list-style-type: none"> 1. 2. Navigate to Power Management > Power Settings 3. Confirm Power Regulator for ProLiant is set to: 'HP Static High Performance Mode'
		
<p>THIS PROCEDURE HAS BEEN COMPLETED</p>		

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

D.3 HP Rack Mount Firmware Upgrade

This procedure will upgrade the rack mount server firmware

Needed material:

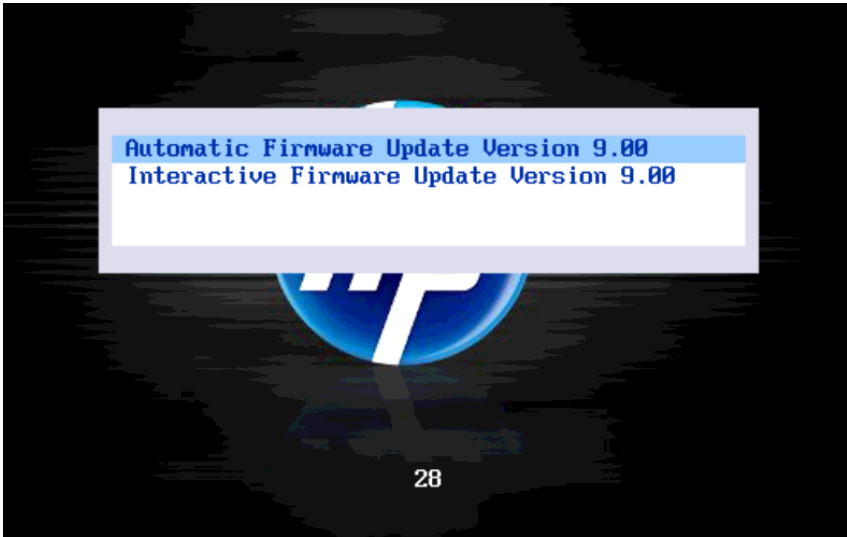
- HP Firmware Maintenance CD/DVD
- HP Solutions Firmware Upgrade Pack Release Notes [5]

Check off (✓) each step as it is completed. Boxes have been provided for this purpose under each step number.

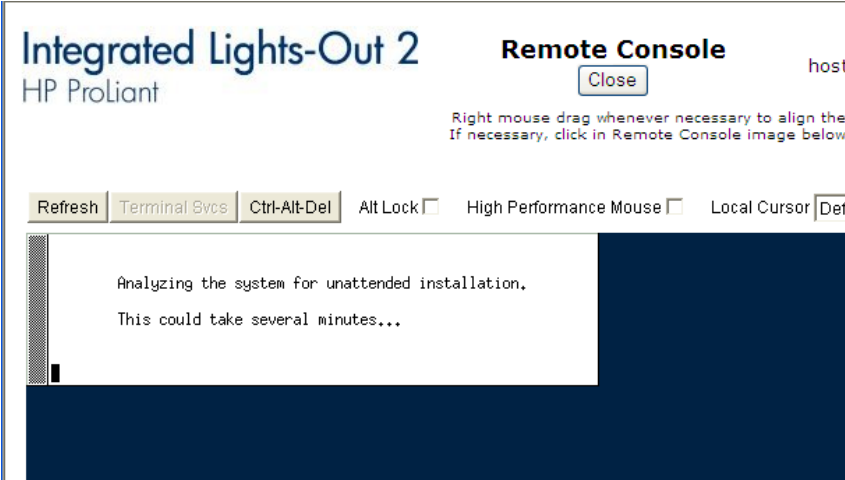
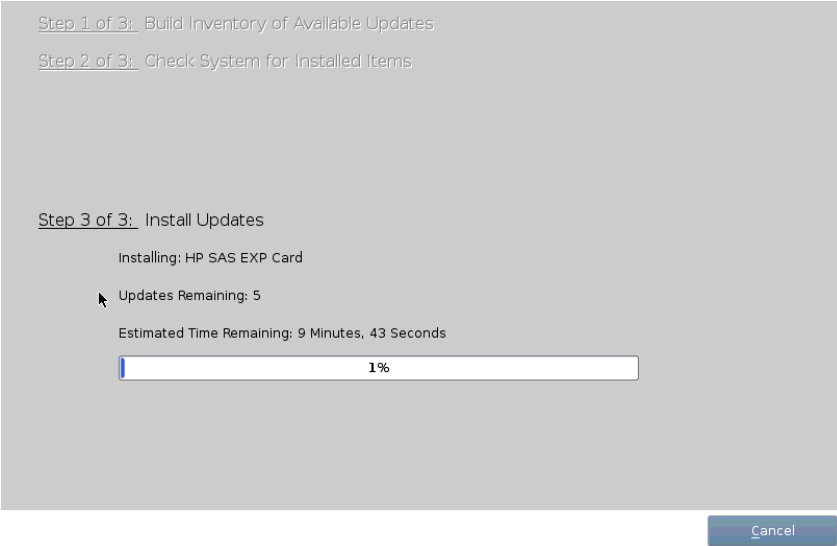
IF THIS PROCEDURE FAILS, CONTACT MY ORACLE SUPPORT (MOS) AND ASK FOR ASSISTANCE.

Appendix D.3: HP Rack Mount Firmware Upgrade

OCUDR 10.0.1 Installation and Configuration Guide

Step	Procedure	Result
1. <input type="checkbox"/>	Access the HP server's console.	Connect to the HP server's console using one of the access methods described in Section 2.1.2 .
2. <input type="checkbox"/>	Mount the media containing the Firmware software .	Follow steps defined in ... C.1 Mounting Physical Media on HP Servers or C.2 Mounting Virtual Media on HP Servers ... to mount the Firmware software.
3. <input type="checkbox"/>	Initiate a reboot of the server.	# <code>shutdown -r now</code> Broadcast message from sathiya@sathiya-laptop (/dev/pts/1) at 11:28 ... The system is going down for reboot NOW!
4. <input type="checkbox"/>	Remote Console: Perform an unattended firmware upgrade	The server will reboot into the <i>HP Smart Update Firmware</i> ISO and present the following boot prompt. Press [Enter] to select the Automatic Firmware Update procedure.  If no key is pressed in 30 seconds the system will automatically perform an Automatic Firmware Update.

Appendix D.3: HP Rack Mount Firmware Upgrade

Step	Procedure	Result
<p>5.</p> <input type="checkbox"/>	<p>Remote Console: System analysis</p>	<p>The firmware install will perform a system scan of the server in which it will identify all of the firmware components that are eligible for upgrade. This process may take up to 10 minutes and during that time the following screen is displayed on the console.</p>  <p>Note: No progress indication is displayed during the system scan and analysis stage. In about 10 minutes the installation will automatically proceed to the next step.</p>
<p>6.</p> <input type="checkbox"/>	<p>Remote Console: Monitor installation</p>	<p>Once analysis is complete the installer will begin to upgrade the eligible firmware components. A progress indicator is displayed at this time as shown below.</p>  <p>Note: If the iLO2 firmware is to be upgraded it will be upgraded last. At this point the iLO2 session will be terminated and you will lose the remote console, virtual media and Web GUI connections to the server. This is expected and will not impact the firmware upgrade process.</p>
<p>7.</p> <input type="checkbox"/>	<p>Local Workstation: Clean up</p>	<p>Once the firmware updates have been completed the server will automatically be rebooted. At this time you may close the remote console and the iLO2 Web GUI browser session.</p>

OCUDR 10.0.1 Installation and Configuration Guide

Appendix D.3: HP Rack Mount Firmware Upgrade

Step	Procedure	Result
8. <input type="checkbox"/>	Local Workstation: Verify server availability	Wait 3 to 5 minutes and verify the server has rebooted and is available by gaining access to the login prompt.
9. <input type="checkbox"/>	Management server iLO: Remove the firmware CD	Remove the HP Smart Update Firmware DVD from the removable media drive. Exit from the Integrated Remote Console.
THIS PROCEDURE HAS BEEN COMPLETED		

Appendix E. Configuring Disk Array (NO Network Element Servers)

This procedure contains steps to configure disk array before installing the application.

E.1 Configuring RMS Disk Array (NO Network Element Servers)

Appendix E.1: Configuring RMS Disk Array on NO Network Element Servers

Step	Procedure	Result
1. <input type="checkbox"/>	<i>Access the HP server's console.</i>	Connect to the HP server's console using one of the access methods described in Section 2.1.2.
2. <input type="checkbox"/>	<i>Enter command to show physical drives</i>	Execute For Normal Capacity RMS Configuration only: # <code>hpacucli ctrl all show config</code> Execute For Low Capacity RMS Configuration only: # <code>hpssacli ctrl all show config</code>

Appendix E.1: Configuring RMS Disk Array on NO Network Element Servers

Step	Procedure	Result
<p>3.</p> <input type="checkbox"/>	<p>View output from the above command</p>	<p>Verify that there are two slots: Slot 2 should have eight unassigned physical drives, Slot 1 should have one logical drive with two 900.1 GB physical drives and four unassigned physical drives.</p> <p><i>NOTE: If this command does not show two slots with fourteen total physical drives, the hardware does not conform to a disk array system and neither the material in this or the next section applies to the system (in such case, this procedure must be skipped). If you believe your system should come with an array, please contact MY ORACLE SUPPORT (MOS) FOR ASSISTANCE.</i></p> <pre> Smart Array P420 in Slot 2 (sn: PDKRH0ARH3X0CO) unassigned physicaldrive 1I:1:1 (port 1I:box 1:bay 1, SAS, 146 GB, OK) physicaldrive 1I:1:2 (port 1I:box 1:bay 2, SAS, 146 GB, OK) physicaldrive 1I:1:3 (port 1I:box 1:bay 3, SAS, 146 GB, OK) physicaldrive 1I:1:4 (port 1I:box 1:bay 4, SAS, 146 GB, OK) physicaldrive 2I:1:5 (port 2I:box 1:bay 5, SAS, 146 GB, OK) physicaldrive 2I:1:6 (port 2I:box 1:bay 6, SAS, 146 GB, OK) physicaldrive 2I:1:7 (port 2I:box 1:bay 7, SAS, 146 GB, OK) physicaldrive 2I:1:8 (port 2I:box 1:bay 8, SAS, 146 GB, OK) SEP (Vendor ID PMCSIERA, Model SRCv8x6G) 380 (WWID: 5001438025183C4F) Smart Array P420i in Slot 0 (Embedded) (sn: 5001438025A44EF0) array A (SAS, Unused Space: 0 MB) logicaldrive 1 (838.3 GB, RAID 1, OK) physicaldrive 1I:2:1 (port 1I:box 2:bay 1, SAS, 900.1 GB, OK) physicaldrive 1I:2:2 (port 1I:box 2:bay 2, SAS, 900.1 GB, OK) unassigned physicaldrive 1I:2:3 (port 1I:box 2:bay 3, SAS, 146 GB, OK) physicaldrive 1I:2:4 (port 1I:box 2:bay 4, SAS, 146 GB, OK) physicaldrive 2I:2:5 (port 2I:box 2:bay 5, SAS, 146 GB, OK) physicaldrive 2I:2:6 (port 2I:box 2:bay 6, SAS, 146 GB, OK) SEP (Vendor ID PMCSIERA, Model SRCv8x6G) 380 (WWID: 5001438025A44EFF) </pre>
<p>4.</p> <input type="checkbox"/>	<p>Create first Slot 2 assignment</p>	<p>Execute For Normal Capacity RMS Configuration only: # hpacucli ctrl slot=2 create type=ld \ drives=1I:1:1,1I:1:2,1I:1:3,1I:1:4 raid=1+0 stripsize=256</p> <p>Execute For Low Capacity RMS Configuration only: # hpssacli ctrl slot=2 create type=ld \ drives=1I:1:1,1I:1:2,1I:1:3,1I:1:4 raid=1+0 stripsize=256</p> <p><i>NOTE: This command returns no output.</i></p>

Appendix E.1: Configuring RMS Disk Array on NO Network Element Servers

Step	Procedure	Result
<p>5.</p> <input type="checkbox"/>	<p>Create second Slot 2 assignment</p>	<p>Execute For Normal Capacity RMS Configuration only: # <code>hpacucli ctrl slot=2 create type=ld \</code> <code>drives=2I:1:5,2I:1:6,2I:1:7,2I:1:8 raid=1+0 stripsize=256</code></p> <p>Execute For Low Capacity RMS Configuration only: # <code>hpssacli ctrl slot=2 create type=ld \</code> <code>drives=2I:1:5,2I:1:6,2I:1:7,2I:1:8 raid=1+0 stripsize=256</code></p> <p><i>NOTE: This command returns no output.</i></p>
<p>6.</p> <input type="checkbox"/>	<p>Create Slot 0 assignment</p>	<p>Execute For Normal Capacity RMS Configuration only: # <code>hpacucli ctrl slot=0 create type=ld drives=allunassigned \</code> <code>raid=1+0 stripsize=256</code></p> <p>Execute For Low Capacity RMS Configuration only: # <code>hpssacli ctrl slot=0 create type=ld drives=allunassigned \</code> <code>raid=1+0 stripsize=256</code></p> <p><i>NOTE: This command returns no output.</i></p>
<p>7.</p> <input type="checkbox"/>	<p>Enter command to show physical drives</p>	<p>Execute For Normal Capacity RMS Configuration only: # <code>hpacucli ctrl all show config</code></p> <p>Execute For Low Capacity RMS Configuration only: # <code>hpssacli ctrl all show config</code></p>

Appendix E.1: Configuring RMS Disk Array on NO Network Element Servers

Step	Procedure	Result
<p>8.</p> <div style="border: 1px solid black; width: 20px; height: 20px; margin-left: 5px;"></div>	<p><i>View output from the above command</i></p>	<p>Verify output of the previous command. This should appear like the example output below. Verify that there are four logical drives total: three of the logical drives contain four physical drives, and one of the logical drives contains two physical drives.</p> <pre> Smart Array P420 in Slot 2 (sn: PDKRH0ARH3X0HB) array A (SAS, Unused Space: 0 MB) logicaldrive 1 (273.4 GB, OK, RAID 1+0, OK) physicaldrive 1I:1:1 (port 1I:box 1:bay 1, SAS, 146 GB, OK) physicaldrive 1I:1:2 (port 1I:box 1:bay 2, SAS, 146 GB, OK) physicaldrive 1I:1:3 (port 1I:box 1:bay 3, SAS, 146 GB, OK) physicaldrive 1I:1:4 (port 1I:box 1:bay 4, SAS, 146 GB, OK) array B (SAS, Unused Space: 0 MB) logicaldrive 2 (273.4 GB, OK, RAID 1+0, OK) physicaldrive 2I:1:5 (port 2I:box 1:bay 5, SAS, 146 GB, OK) physicaldrive 2I:1:6 (port 2I:box 1:bay 6, SAS, 146 GB, OK) physicaldrive 2I:1:7 (port 2I:box 1:bay 7, SAS, 146 GB, OK) physicaldrive 2I:1:8 (port 2I:box 1:bay 8, SAS, 146 GB, OK) SEP (Vendor ID PMCSIERA, Model SRCv8x6G) 380 (WWID: 500143802518449F) Smart Array P420i in Slot 0 (Embedded) (sn: 5001438025A465B0) array A (SAS, Unused Space: 0 MB) logicaldrive 1 (838.3 GB, RAID 1, OK) physicaldrive 1I:2:1 (port 1I:box 2:bay 1, SAS, 900.1 GB, OK) physicaldrive 1I:2:2 (port 1I:box 2:bay 2, SAS, 900.1 GB, OK) array B (SAS, Unused Space: 0 MB) logicaldrive 2 (273.4 GB, OK, RAID 1+0, OK) physicaldrive 1I:2:3 (port 1I:box 2:bay 3, SAS, 146 GB, OK) physicaldrive 1I:2:4 (port 1I:box 2:bay 4, SAS, 146 GB, OK) physicaldrive 2I:2:5 (port 2I:box 2:bay 5, SAS, 146 GB, OK) physicaldrive 2I:2:6 (port 2I:box 2:bay 6, SAS, 146 GB, OK) SEP (Vendor ID PMCSIERA, Model SRCv8x6G) 380 (WWID: 5001438025A465BF) </pre>

Appendix E.1: Configuring RMS Disk Array on NO Network Element Servers

Step	Procedure	Result
9. <input type="checkbox"/>	Check for existing physical volumes	<pre># pvs</pre> <pre>[root@hostname1380908951 ~]# pvs PV VG Fmt Attr PSize PFree /dev/sda2 vgroot lvm2 a-- 838.06g 827.06g</pre> <p>NOTE: If additional devices /dev/sdb, /dev/sdc/, and /dev/sdd are displayed by this command then physical volumes are already configured. In such case continue to Step 13 of this procedure.</p>
10. <input type="checkbox"/>	Create physical volume sdb	<pre># pvcreate /dev/sdb</pre> <pre>Physical volume "/dev/sdb" successfully created</pre>
11. <input type="checkbox"/>	Create physical volume sdc	<pre># pvcreate /dev/sdc</pre> <pre>Physical volume "/dev/sdc" successfully created</pre>
12. <input type="checkbox"/>	Create physical volume sdd	<pre># pvcreate /dev/sdd</pre> <pre>Physical volume "/dev/sdd" successfully created</pre>
13. <input type="checkbox"/>	Create volume group stripe_vg	<p>**Don't execute for Low Capacity RMS Configuration</p> <pre># vgcreate stripe_vg /dev/sdb /dev/sdc /dev/sdd</pre> <pre>Volume group "stripe_vg" successfully created</pre>
14. <input type="checkbox"/>	Create logical volume rundb	<p>**Don't execute for Low Capacity RMS Configuration</p> <pre># lvcreate -i 3 -I 256 -L 385G --alloc anywhere \ --name rundb stripe_vg</pre> <pre>Rounding size (179200 extents) up to stripe boundary size (179202 extents) Logical volume "rundb" created</pre>

Appendix E.1: Configuring RMS Disk Array on NO Network Element Servers

Step	Procedure	Result
15. <input type="checkbox"/>	Make filesystem on <i>rundb</i>	<p>**Don't execute for Low Capacity RMS Configuration</p> <pre># mkfs -t ext4 /dev/strip_vg/rundb mke2fs 1.41.12 (17-May-2010) Filesystem label= OS type: Linux Block size=4096 (log=2) Fragment size=4096 (log=2) Stride=64 blocks, Stripe width=192 blocks 45883392 inodes, 183502848 blocks 9175142 blocks (5.00%) reserved for the super user First data block=0 Maximum filesystem blocks=4294967296 5601 block groups 32768 blocks per group, 32768 fragments per group 8192 inodes per group Superblock backups stored on blocks: 32768, 98304, 163840, 229376, 294912, 819200, 884736, 1605632, 2654208, 4096000, 7962624, 11239424, 20480000, 23887872, 71663616, 78675968, 102400000 Writing inode tables: done Creating journal (32768 blocks): done Writing superblocks and filesystem accounting information: done This filesystem will be automatically checked every 22 mounts or 180 days, whichever comes first. Use tune2fs -c or -i to override.</pre>
THIS PROCEDURE HAS BEEN COMPLETED		

E.2 Configuring Blade Disk Array (NO Network Element Servers with Sidecar)

Appendix E.2: Configuring Blade Disk Array on NO Network Element Servers with Sidecar

Step	Procedure	Result
1. <input type="checkbox"/>	Access the HP server's console.	Connect to the HP server's console using one of the access methods described in Section 2.1.2 .
2. <input type="checkbox"/>	Enter command to show physical drives	<p>Execute For Normal Capacity Blade Configuration only: # hpacucli ctrl all show config</p> <p>Execute For Low Capacity Blade Configuration only: # hpssacli ctrl all show config</p>

Appendix E.2: Configuring Blade Disk Array on NO Network Element Servers with Sidecar

Step	Procedure	Result
<p>3.</p> <p><input type="checkbox"/></p>	<p>View output from the above command</p>	<p>Verify that there are two slots: Slot 0 should one logical drive with two 900.1 GB physical drives, Slot 3 should have an twelve (12) unassigned physical drives.</p> <p><i>NOTE: If this command does not show two slots with fourteen total physical drives, the hardware does not conform to a disk array system and neither the material in this or the next section applies to the system (in such case, this procedure must be skipped). If you believe your system should come with an array, please contact MY ORACLE SUPPORT (MOS) FOR ASSISTANCE.</i></p> <pre> Smart Array P220i in Slot 0 (Embedded) (sn: PCQVU0CRH5V2JU) array A (SAS, Unused Space: 0 MB) logicaldrive 1 (838.3 GB, RAID 1, OK) physicaldrive 1I:1:1 (port 1I:box 1:bay 1, SAS, 900.1 GB, OK) physicaldrive 1I:1:2 (port 1I:box 1:bay 2, SAS, 900.1 GB, OK) SEP (Vendor ID PMCSIERA, Model SRCv4x6G) 380 (WWID: 5001438028DDB56F) Smart Array P410i in Slot 3 (sn: 5001438025905EB0) unassigned physicaldrive 1I:1:1 (port 1I:box 1:bay 1, SAS, 146 GB, OK) physicaldrive 1I:1:2 (port 1I:box 1:bay 2, SAS, 146 GB, OK) physicaldrive 1I:1:3 (port 1I:box 1:bay 3, SAS, 146 GB, OK) physicaldrive 1I:1:4 (port 1I:box 1:bay 4, SAS, 146 GB, OK) physicaldrive 1I:1:5 (port 1I:box 1:bay 5, SAS, 146 GB, OK) physicaldrive 1I:1:6 (port 1I:box 1:bay 6, SAS, 146 GB, OK) physicaldrive 1I:1:7 (port 1I:box 1:bay 7, SAS, 146 GB, OK) physicaldrive 1I:1:8 (port 1I:box 1:bay 8, SAS, 146 GB, OK) physicaldrive 1I:1:9 (port 1I:box 1:bay 9, SAS, 146 GB, OK) physicaldrive 1I:1:10 (port 1I:box 1:bay 10, SAS, 146 GB, OK) physicaldrive 1I:1:11 (port 1I:box 1:bay 11, SAS, 146 GB, OK) physicaldrive 1I:1:12 (port 1I:box 1:bay 12, SAS, 146 GB, OK) Expander 250 (WWID: 50014380251F83E6, Port: 1I, Box: 1) </pre>
<p>4.</p> <p><input type="checkbox"/></p>	<p>Create Slot 3 assignment</p>	<p>Execute For Normal Capacity Blade Configuration only: # hpacucli ctrl slot=3 create type=ld \ drives=allunassigned raid=1+0 stripsize=256</p> <p>Execute For Low Capacity Blade Configuration only: # hpssacli ctrl slot=3 create type=ld \ drives=allunassigned raid=1+0 stripsize=256</p> <p><i>NOTE: This command returns no output.</i></p>

Appendix E.2: Configuring Blade Disk Array on NO Network Element Servers with Sidecar

Step	Procedure	Result
<p>5.</p> <input type="checkbox"/>	<p>Enter command to show physical drives</p>	<p>Execute For Normal Capacity Blade Configuration only: # <code>hpacucli ctrl all show config</code></p> <p>Execute For Low Capacity Blade Configuration only: # <code>hpssacli ctrl all show config</code></p>
<p>6.</p> <input type="checkbox"/>	<p>View output from the above command</p>	<p>Verify output of the previous command. This should appear like the example output below. Verify that there are four logical drives total: three of the logical drives contain four physical drives, and one of the logical drives contains two physical drives.</p> <pre> Smart Array P220i in Slot 0 (Embedded) (sn: PCQVU0CRH5V2JU) array A (SAS, Unused Space: 0 MB) logicaldrive 1 (838.3 GB, RAID 1, OK) physicaldrive 1I:1:1 (port 1I:box 1:bay 1, SAS, 900.1 GB, OK) physicaldrive 1I:1:2 (port 1I:box 1:bay 2, SAS, 900.1 GB, OK) SEP (Vendor ID PMCSIERA, Model SRCv4x6G) 380 (WWID: 5001438028DDB56F) Smart Array P410i in Slot 3 (sn: 5001438025905EB0) array A (SAS, Unused Space: 0 MB) logicaldrive 1 (820.2 GB, RAID 1+0, OK) physicaldrive 1I:1:1 (port 1I:box 1:bay 1, SAS, 146 GB, OK) physicaldrive 1I:1:2 (port 1I:box 1:bay 2, SAS, 146 GB, OK) physicaldrive 1I:1:3 (port 1I:box 1:bay 3, SAS, 146 GB, OK) physicaldrive 1I:1:4 (port 1I:box 1:bay 4, SAS, 146 GB, OK) physicaldrive 1I:1:5 (port 1I:box 1:bay 5, SAS, 146 GB, OK) physicaldrive 1I:1:6 (port 1I:box 1:bay 6, SAS, 146 GB, OK) physicaldrive 1I:1:7 (port 1I:box 1:bay 7, SAS, 146 GB, OK) physicaldrive 1I:1:8 (port 1I:box 1:bay 8, SAS, 146 GB, OK) physicaldrive 1I:1:9 (port 1I:box 1:bay 9, SAS, 146 GB, OK) physicaldrive 1I:1:10 (port 1I:box 1:bay 10, SAS, 146 GB, OK) physicaldrive 1I:1:11 (port 1I:box 1:bay 11, SAS, 146 GB, OK) physicaldrive 1I:1:12 (port 1I:box 1:bay 12, SAS, 146 GB, OK) Expander 250 (WWID: 50014380251F83E6, Port: 1I, Box: 1) </pre>
<p>7.</p> <input type="checkbox"/>	<p>Check for existing physical volumes</p>	<pre> # pvs [root@hostname1380908951 ~]# pvs PV VG Fmt Attr PSize PFree /dev/sda2 vgroot lvm2 a-- 838.06g 827.06g </pre> <p>NOTE: If an additional device <code>/dev/sdb</code> is displayed by this command then physical volumes are already configured. In such case continue to Step 9 of this procedure.</p>

Appendix E.2: Configuring Blade Disk Array on NO Network Element Servers with Sidecar

Step	Procedure	Result
8. <input type="checkbox"/>	Create physical volume <i>sdb</i>	<pre># pvcreate /dev/sdb Physical volume "/dev/sdb" successfully created</pre>
9. <input type="checkbox"/>	Create volume group <i>stripe_vg</i>	<p>**Don't execute for Low Capacity C-Class Configuration</p> <pre># vgcreate stripe_vg /dev/sdb Volume group "stripe_vg" successfully created</pre>
10. <input type="checkbox"/>	Create logical volume <i>rundb</i>	<p>**Don't execute for Low Capacity C-Class Configuration</p> <pre># lvcreate -L 385G --alloc anywhere --name rundb stripe_vg Rounding size (98560 extents) up to stripe boundary size (98562 extents) Logical volume "rundb" created</pre>
11. <input type="checkbox"/>	Make filesystem on <i>rundb</i>	<p>**Don't execute for Low Capacity C-Class Configuration</p> <pre># mkfs -t ext4 /dev/strip_vg/rundb mke2fs 1.43-WIP (20-Jun-2013) Filesystem label= OS type: Linux Block size=4096 (log=2) Fragment size=4096 (log=2) Stride=0 blocks, Stripe width=0 blocks 25231360 inodes, 100925440 blocks 5046272 blocks (5.00%) reserved for the super user First data block=0 Maximum filesystem blocks=4294967296 3080 block groups 32768 blocks per group, 32768 fragments per group 8192 inodes per group Superblock backups stored on blocks: 32768, 98304, 163840, 229376, 294912, 819200, 884736, 1605632, 2654208, 4096000, 7962624, 11239424, 20480000, 23887872, 71663616, 78675968 Allocating group tables: done Writing inode tables: done Creating journal (32768 blocks): done Writing superblocks and filesystem accounting information: done This filesystem will be automatically checked every 22 mounts or 180 days, whichever comes first. Use tune2fs -c or -i to override.</pre>
THIS PROCEDURE HAS BEEN COMPLETED		

Appendix F. Installing Operating Systems

This procedure contains steps to apply server configuration scripts to rack mount servers.

F.1 Installing Operating Systems with ILO

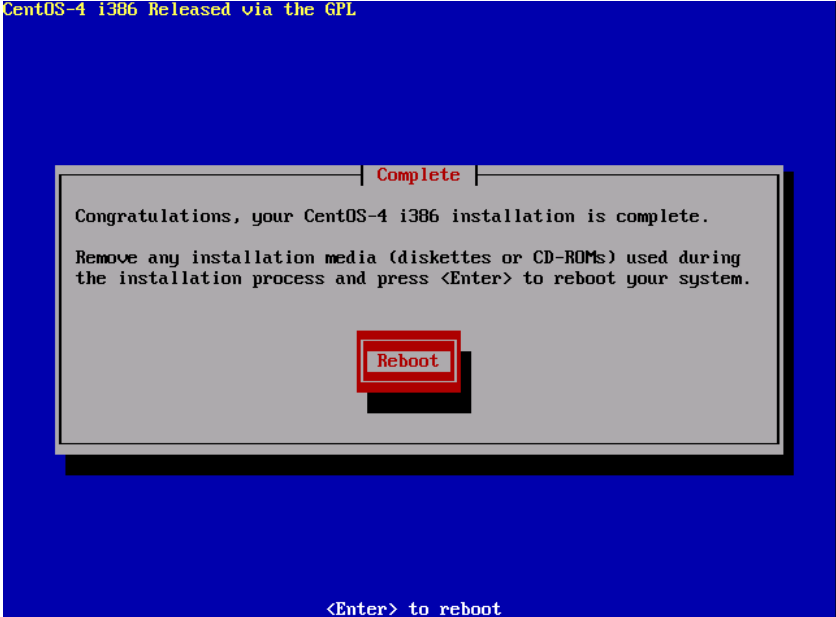
Appendix F.1: Installing Operating Systems with ILO

Step	Procedure	Result
1. <input type="checkbox"/>	Access the HP server's console.	Connect to the HP server's console using one of the access methods described in Section 2.1.2 .
2. <input type="checkbox"/>	Verify server hardware is ProLiant DL	# <code>hardwareInfo grep Hardware</code> Hardware ID: ProLiantDL380Gen8 or ProLiantDL380Gen8+
3. <input type="checkbox"/>	Mount the media containing the TPD software.	Follow steps defined in ... Appendix C.1 Mounting Physical Media on HP Servers or Appendix C.2 Mounting Virtual Media on HP Servers ... to mount the OS software.
4. <input type="checkbox"/>	Initiate a reboot of the server.	# <code>reboot</code> Broadcast message from sathiya@sathiya-laptop (/dev/pts/1) at 11:28 ... The system is going down for reboot NOW!

Appendix F.1: Installing Operating Systems with ILO

Step	Procedure	Result
<p>5.</p> <input type="checkbox"/>	<p><i>Begin Platform Installation process</i></p>	<p>Once the server reboots, it will reboot from the TPD media and a boot prompt shall be displayed. IPM the server using the following command <u>exactly</u> as shown below <i>Note: no space between the HPHW, comma, and force: HPHW,force</i></p> <p>TPDnoraid diskconfig=HPHW,force console=tty0</p> <pre> Welcome to Tekelec Platform Distribution! Release: 6.7.0.0_84.8.0 Arch: x86_64 For a detailed description of all the supported commands and their options, please refer to the Initial Platform Manufacture document for this release. In addition to linux & rescue TPD provides the following kickstart profiles: [TPD TPDnoraid TPDblade TPDcompact HDD] Commonly used options are: [console=<console_option>[,<console_option>]] [primaryConsole=<console_option>] [rdate=<server_ip>] [scrub] [reserved=<size1>[,<sizeN>]] [diskconfig=HWRaid[,<force>]] [drives=<device>[,<device>]] [guestArchive] To install using a monitor and a local keyboard, add console=tty0 boot: TPDnoraid diskconfig=HPHW,force console=tty0_ </pre>

Appendix F.1: Installing Operating Systems with iLO


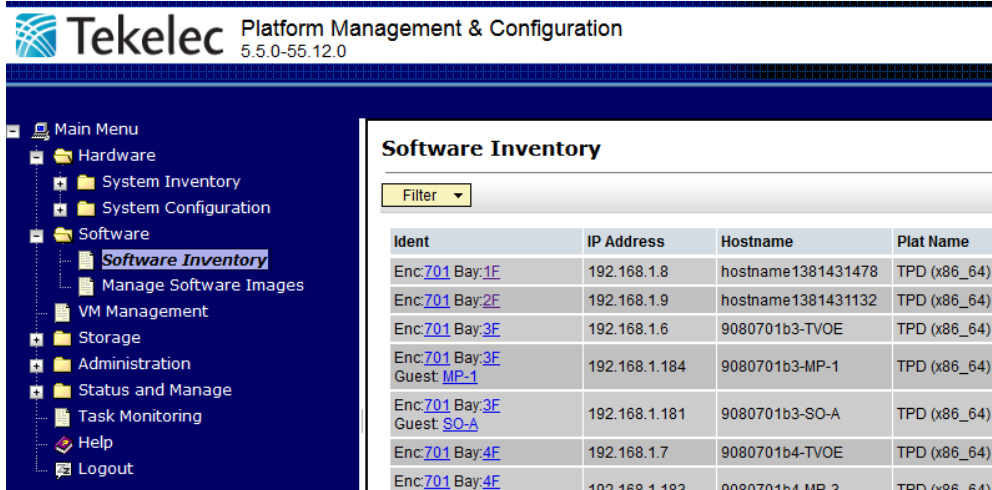
Step	Procedure	Result
<p>6.</p> <input type="checkbox"/>	<p><i>Platform installation Complete</i></p>	<p>Platform installation process takes about 30 minutes, you will see several messages and screens in the process. Once the Platform installation is complete, you will be prompted to press Enter as shown below.</p> <p>Remove the USB drive or unmount the ISO image from the iLO and press Enter to reboot the server. Note that the CD may eject automatically.</p> 
<p>7.</p> <input type="checkbox"/>	<p><i>Server Reboot</i></p>	<p>Once the management server reboots, you should see a login prompt. Note that during the first system boot, swap files may be initialized and activated. Each swap file will take about 2 minutes.</p> <p><i>NOTE: If no login prompt is displayed after waiting 15 minutes, contact My Oracle Support (MOS) for assistance.</i></p>
<p>8.</p> <input type="checkbox"/>	<p><i>Verify that the TPD release is 6.7.x.</i></p>	<pre># getPlatRev 6.7.0.0.1-84.17.0</pre>
<p>9.</p> <input type="checkbox"/>	<p><i>Execute "alarmMgr" command to verify health of the server before Application install.</i></p>	<pre># alarmMgr --alarmStatus</pre> <p><i>NOTE: This command should return no output on a healthy system. If any alarms are reported as SNMP traps, please contact My Oracle Support (MOS) for assistance.</i></p>
<p>10.</p> <input type="checkbox"/>	<p><i>Execute "verifyIPM" as a secondary way to verify health of the server before Application install.</i></p>	<pre># verifyIPM</pre> <p><i>NOTE: This command should return no output on a healthy system. If any errors are reported, please contact My Oracle Support (MOS) for assistance.</i></p>

Appendix F.1: Installing Operating Systems with ILO

Step	Procedure	Result
THIS PROCEDURE HAS BEEN COMPLETED		

F.2 Installing Operating Systems with PM&C

Appendix F.2: Installing Operating Systems with PM&C

Step	Procedure	Result																																
1. <input type="checkbox"/>	<p>PM&C GUI:</p> <p>Login to PM&C GUI</p>	<p>Open web browser and enter: <a href="http://<pmac_management_network_ip>">http://<pmac_management_network_ip></p> <p>Login as pmacadmin user.</p> 																																
2. <input type="checkbox"/>	<p>PM&C GUI:</p> <p>Select...</p> <p>Main Menu → Software → Software Inventory</p> <p>...as shown on the right.</p>	 <table border="1"> <thead> <tr> <th>Ident</th> <th>IP Address</th> <th>Hostname</th> <th>Plat Name</th> </tr> </thead> <tbody> <tr> <td>Enc:701 Bay:1F</td> <td>192.168.1.8</td> <td>hostname1381431478</td> <td>TPD (x86_64)</td> </tr> <tr> <td>Enc:701 Bay:2F</td> <td>192.168.1.9</td> <td>hostname1381431132</td> <td>TPD (x86_64)</td> </tr> <tr> <td>Enc:701 Bay:3F</td> <td>192.168.1.6</td> <td>9080701b3-TVOE</td> <td>TPD (x86_64)</td> </tr> <tr> <td>Enc:701 Bay:3F Guest MP-1</td> <td>192.168.1.184</td> <td>9080701b3-MP-1</td> <td>TPD (x86_64)</td> </tr> <tr> <td>Enc:701 Bay:3F Guest SQ-A</td> <td>192.168.1.181</td> <td>9080701b3-SO-A</td> <td>TPD (x86_64)</td> </tr> <tr> <td>Enc:701 Bay:4F</td> <td>192.168.1.7</td> <td>9080701b4-TVOE</td> <td>TPD (x86_64)</td> </tr> <tr> <td>Enc:701 Bay:4F</td> <td>192.168.1.183</td> <td>9080701b4-MP-3</td> <td>TPD (x86_64)</td> </tr> </tbody> </table>	Ident	IP Address	Hostname	Plat Name	Enc:701 Bay:1F	192.168.1.8	hostname1381431478	TPD (x86_64)	Enc:701 Bay:2F	192.168.1.9	hostname1381431132	TPD (x86_64)	Enc:701 Bay:3F	192.168.1.6	9080701b3-TVOE	TPD (x86_64)	Enc:701 Bay:3F Guest MP-1	192.168.1.184	9080701b3-MP-1	TPD (x86_64)	Enc:701 Bay:3F Guest SQ-A	192.168.1.181	9080701b3-SO-A	TPD (x86_64)	Enc:701 Bay:4F	192.168.1.7	9080701b4-TVOE	TPD (x86_64)	Enc:701 Bay:4F	192.168.1.183	9080701b4-MP-3	TPD (x86_64)
Ident	IP Address	Hostname	Plat Name																															
Enc:701 Bay:1F	192.168.1.8	hostname1381431478	TPD (x86_64)																															
Enc:701 Bay:2F	192.168.1.9	hostname1381431132	TPD (x86_64)																															
Enc:701 Bay:3F	192.168.1.6	9080701b3-TVOE	TPD (x86_64)																															
Enc:701 Bay:3F Guest MP-1	192.168.1.184	9080701b3-MP-1	TPD (x86_64)																															
Enc:701 Bay:3F Guest SQ-A	192.168.1.181	9080701b3-SO-A	TPD (x86_64)																															
Enc:701 Bay:4F	192.168.1.7	9080701b4-TVOE	TPD (x86_64)																															
Enc:701 Bay:4F	192.168.1.183	9080701b4-MP-3	TPD (x86_64)																															

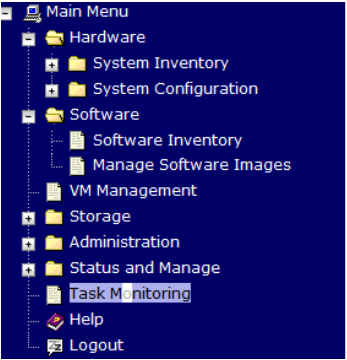
Appendix F.2: Installing Operating Systems with PM&C

Step	Procedure	Result																																																						
<p>3.</p> <p><input type="checkbox"/></p>	<p>PM&C GUI:</p> <p>1) Highlight the desired servers based on its hardware Identity...</p> <p><i>Note: You may select multiple blades for simultaneous upgrade to the same release by holding the Ctrl (Control) key while selecting lines with the mouse.</i></p> <p>2) Click on the Install button.</p>	<p>Software Inventory</p> <p>Filter ▾</p> <table border="1"> <thead> <tr> <th>Ident</th> <th>IP Address</th> <th>Hostname</th> <th>Plat Name</th> <th>Plat Version</th> <th>App</th> </tr> </thead> <tbody> <tr> <td>Enc:11901 Bay:1F</td> <td>192.168.1.132</td> <td>hostname2486a3ab0f86</td> <td>TPD (x86_64)</td> <td>6.7.0.0.0-84.8.0</td> <td></td> </tr> <tr> <td>Enc:11901 Bay:3F</td> <td>192.168.1.131</td> <td>hostname4ac7d19a257e</td> <td>TPD (x86_64)</td> <td>6.7.0.0.0-84.8.0</td> <td></td> </tr> <tr> <td>Enc:11901 Bay:5F</td> <td>192.168.1.133</td> <td>BL119111305-TVOE</td> <td>TPD (x86_64)</td> <td>6.7.0-84.7.0</td> <td>TVOE</td> </tr> <tr> <td>Enc:11901 Bay:5F Guest: UDR_S2_MP1</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Enc:11901 Bay:5F Guest: UDR_S2_MP2</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Enc:11901 Bay:5F Guest: UDR_SO_2A</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Enc:11901 Bay:6F</td> <td>192.168.1.130</td> <td>BL119111306-TVOE</td> <td>TPD (x86_64)</td> <td>6.7.0-84.7.0</td> <td>TVOE</td> </tr> <tr> <td>Enc:11901 Bay:6F Guest: UDR_S2_MP3</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p style="text-align: right;">1</p> <p style="text-align: center;"> <input checked="" type="button" value="Install OS"/> <input type="button" value="Upgrade"/> <input type="button" value="Accept Upgrade"/> <input type="button" value="Reject Upgrade"/> </p> <p style="text-align: center;"> <input type="button" value="Regenerate Guest Device Mapping ISO"/> <input type="button" value="Refresh"/> </p> <p style="text-align: right;">2</p>	Ident	IP Address	Hostname	Plat Name	Plat Version	App	Enc: 11901 Bay:1F	192.168.1.132	hostname2486a3ab0f86	TPD (x86_64)	6.7.0.0.0-84.8.0		Enc: 11901 Bay:3F	192.168.1.131	hostname4ac7d19a257e	TPD (x86_64)	6.7.0.0.0-84.8.0		Enc: 11901 Bay:5F	192.168.1.133	BL119111305-TVOE	TPD (x86_64)	6.7.0-84.7.0	TVOE	Enc: 11901 Bay:5F Guest: UDR_S2_MP1						Enc: 11901 Bay:5F Guest: UDR_S2_MP2						Enc: 11901 Bay:5F Guest: UDR_SO_2A						Enc: 11901 Bay:6F	192.168.1.130	BL119111306-TVOE	TPD (x86_64)	6.7.0-84.7.0	TVOE	Enc: 11901 Bay:6F Guest: UDR_S2_MP3					
Ident	IP Address	Hostname	Plat Name	Plat Version	App																																																			
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Appendix F.2: Installing Operating Systems with PM&C

Step	Procedure	Result																		
<p>4.</p> <p><input type="checkbox"/></p>	<p>PM&C GUI:</p> <p>1) Select the desired Image Name of the OS software.</p> <p>2) Click on the Start Install button.</p> <p>3) Click on the popup dialog box OK button.</p>	<p>Software Upgrade - Select Image</p> <p>Thu Oct 10 15:39:57 2013 EDT</p> <table border="1"> <thead> <tr> <th>Entity</th> <th>Status</th> <th>Image Name</th> <th>Type</th> <th>Architecture</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Enc:701 Bay:1F</td> <td></td> <td>872-2525-101-2.5.0_82.22.0-TVOE-x86_64</td> <td>Bootable</td> <td>x86_64</td> <td></td> </tr> <tr> <td></td> <td></td> <td>872-2553-101-10.0.0_10.1.0-UDR-x86_64</td> <td>Upgrade</td> <td>x86_64</td> <td></td> </tr> </tbody> </table> <p>Start Install</p> <p>You have selected to install a bootable OS iso on the selected targets.</p> <p>The following targets already have an Application:</p> <p>Enc:11901 Bay:5F ==> TVOE Enc:11901 Bay:6F ==> TVOE Enc:11902 Bay:5F ==> TVOE Enc:11902 Bay:6F ==> TVOE</p> <p>Are you sure you want to install TVOE-2.7.0.0.0_84.8.0-x86_64 on the listed entities?</p> <p>OK Cancel</p>	Entity	Status	Image Name	Type	Architecture	Description	Enc:701 Bay:1F		872-2525-101-2.5.0_82.22.0-TVOE-x86_64	Bootable	x86_64				872-2553-101-10.0.0_10.1.0-UDR-x86_64	Upgrade	x86_64	
Entity	Status	Image Name	Type	Architecture	Description															
Enc:701 Bay:1F		872-2525-101-2.5.0_82.22.0-TVOE-x86_64	Bootable	x86_64																
		872-2553-101-10.0.0_10.1.0-UDR-x86_64	Upgrade	x86_64																
<p>5.</p> <p><input type="checkbox"/></p>	<p>PM&C GUI:</p> <p><i>Upgrade Tasks</i> will appear for each upgrade started this way under the left column Status.</p>	<p>Software Upgrade - Select Image</p> <table border="1"> <thead> <tr> <th>Entity</th> <th>Status</th> <th>Image Name</th> </tr> </thead> <tbody> <tr> <td>Enc:701 Bay:1F</td> <td>Task 116</td> <td>872-2525-101-2.5.0_82.22.0-TVOE-x86_64</td> </tr> <tr> <td></td> <td></td> <td>872-2553-101-10.0.0_10.1.0-UDR-x86_64</td> </tr> </tbody> </table>	Entity	Status	Image Name	Enc:701 Bay:1F	Task 116	872-2525-101-2.5.0_82.22.0-TVOE-x86_64			872-2553-101-10.0.0_10.1.0-UDR-x86_64									
Entity	Status	Image Name																		
Enc:701 Bay:1F	Task 116	872-2525-101-2.5.0_82.22.0-TVOE-x86_64																		
		872-2553-101-10.0.0_10.1.0-UDR-x86_64																		

Appendix F.2: Installing Operating Systems with PM&C

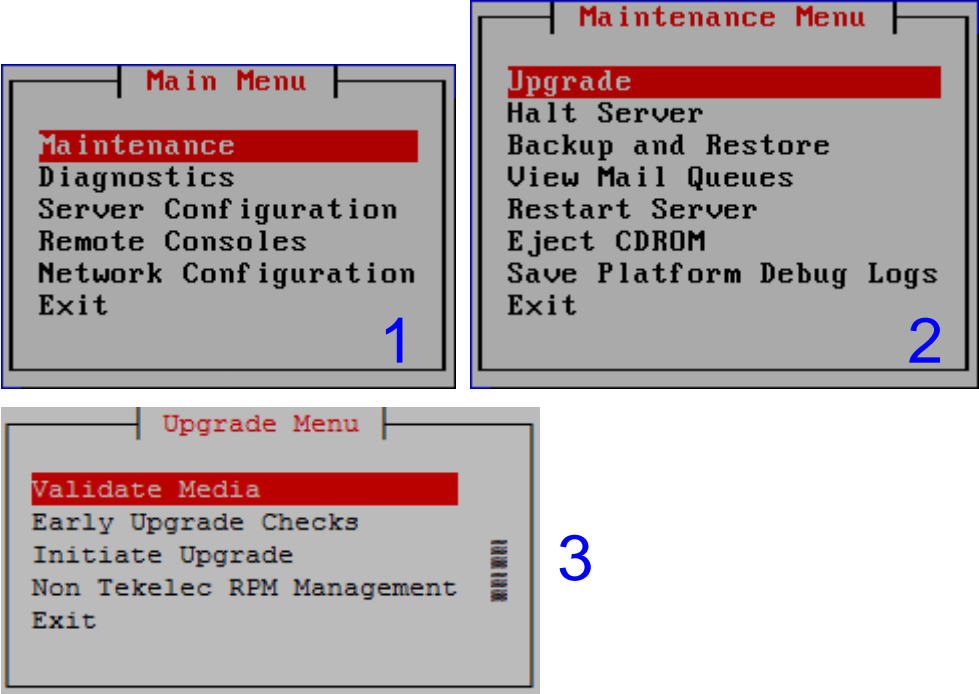
Step	Procedure	Result																								
<p>6.</p> <p><input type="checkbox"/></p>	<p>PM&C GUI:</p> <p>Select...</p> <p>Main Menu → Task Monitoring</p> <p>...as shown on the right.</p> <p><i>Note: Install tasks may be monitored for completion on this screen.</i></p>	 <p>Background Task Monitoring</p> <p>Filter ▾</p> <table border="1"> <thead> <tr> <th>ID</th> <th>Task</th> <th>Target</th> <th>Status</th> </tr> </thead> <tbody> <tr> <td>125</td> <td>Install OS</td> <td>Enc:701 Bay:4F Guest: SO-B</td> <td>Waiting for target server to boot</td> </tr> <tr> <td>124</td> <td>Install OS</td> <td>Enc:701 Bay:4F Guest: MP-3</td> <td>Waiting for target server to boot</td> </tr> <tr> <td>123</td> <td>Install OS</td> <td>Enc:701 Bay:3F Guest: SO-A</td> <td>Waiting for target server to boot</td> </tr> <tr> <td>122</td> <td>Install OS</td> <td>Enc:701 Bay:3F Guest: MP-1</td> <td>Waiting for target server to boot</td> </tr> <tr> <td>121</td> <td>Upgrade</td> <td>Enc:701 Bay:2F</td> <td>Success</td> </tr> </tbody> </table>	ID	Task	Target	Status	125	Install OS	Enc:701 Bay:4F Guest: SO-B	Waiting for target server to boot	124	Install OS	Enc:701 Bay:4F Guest: MP-3	Waiting for target server to boot	123	Install OS	Enc:701 Bay:3F Guest: SO-A	Waiting for target server to boot	122	Install OS	Enc:701 Bay:3F Guest: MP-1	Waiting for target server to boot	121	Upgrade	Enc:701 Bay:2F	Success
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<p>7.</p> <p><input type="checkbox"/></p>	<p>PM&C GUI:</p> <p>Look for install completion in the Status column.</p>	<table border="1"> <thead> <tr> <th>ID</th> <th>Task</th> <th>Target</th> <th>Status</th> </tr> </thead> <tbody> <tr> <td>173</td> <td>Install OS</td> <td>Enc:701 Bay:4F Guest: SO-B</td> <td>Done: TPD.install-6.5.0_82.22.0-CentOS6.4-x86_64</td> </tr> <tr> <td>172</td> <td>Install OS</td> <td>Enc:701 Bay:4F Guest: MP-3</td> <td>Done: TPD.install-6.5.0_82.22.0-CentOS6.4-x86_64</td> </tr> <tr> <td>171</td> <td>Install OS</td> <td>Enc:701 Bay:3F Guest: SO-A</td> <td>Done: TPD.install-6.5.0_82.22.0-CentOS6.4-x86_64</td> </tr> </tbody> </table>	ID	Task	Target	Status	173	Install OS	Enc:701 Bay:4F Guest: SO-B	Done: TPD.install-6.5.0_82.22.0-CentOS6.4-x86_64	172	Install OS	Enc:701 Bay:4F Guest: MP-3	Done: TPD.install-6.5.0_82.22.0-CentOS6.4-x86_64	171	Install OS	Enc:701 Bay:3F Guest: SO-A	Done: TPD.install-6.5.0_82.22.0-CentOS6.4-x86_64								
ID	Task	Target	Status																							
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171	Install OS	Enc:701 Bay:3F Guest: SO-A	Done: TPD.install-6.5.0_82.22.0-CentOS6.4-x86_64																							
<p>THIS PROCEDURE HAS BEEN COMPLETED</p>																										

Appendix G. Installing OCUDR Application

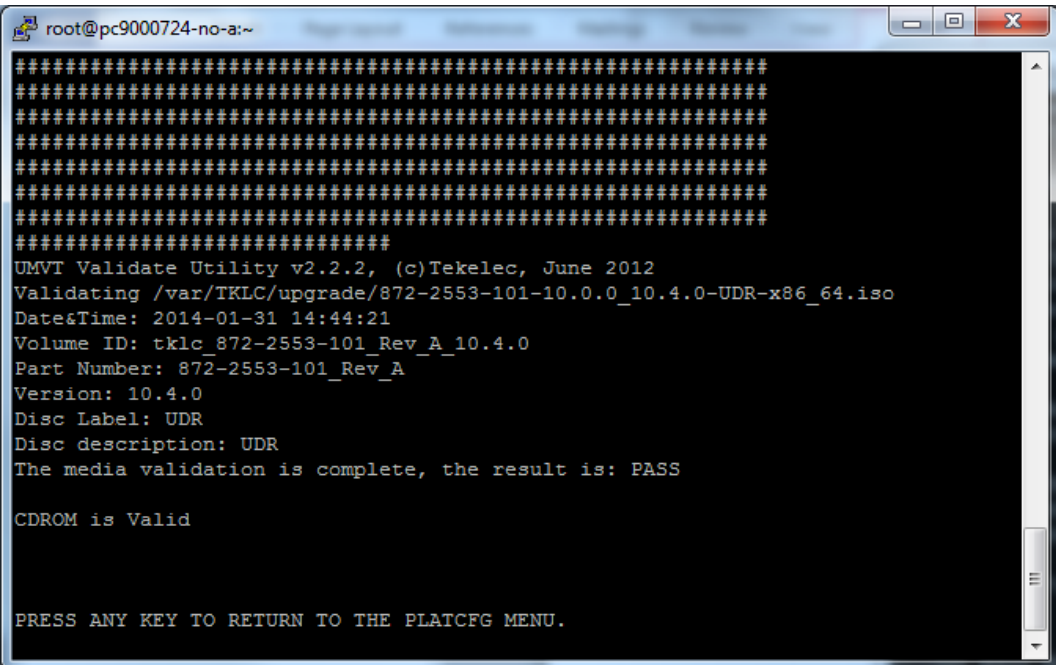
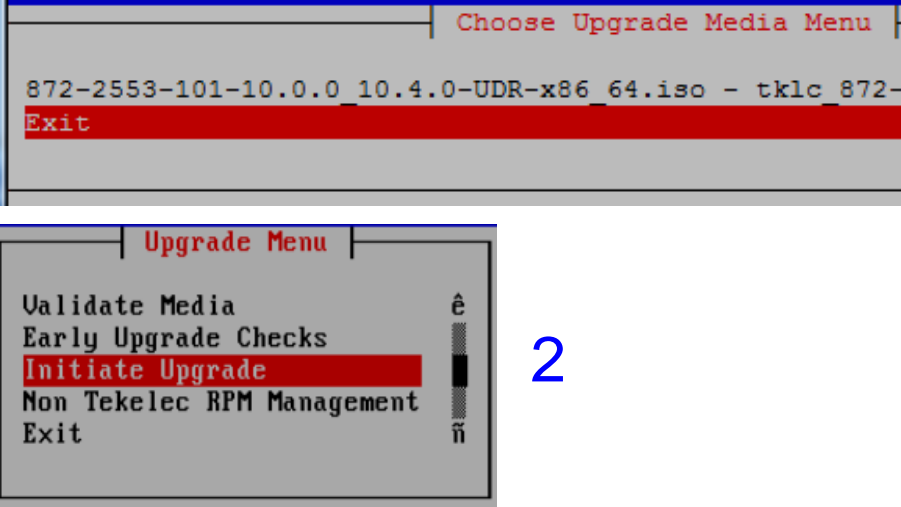
This procedure contains steps to apply server configuration scripts to rack mount servers.

G.1 Installing OCUDR Application with ILO

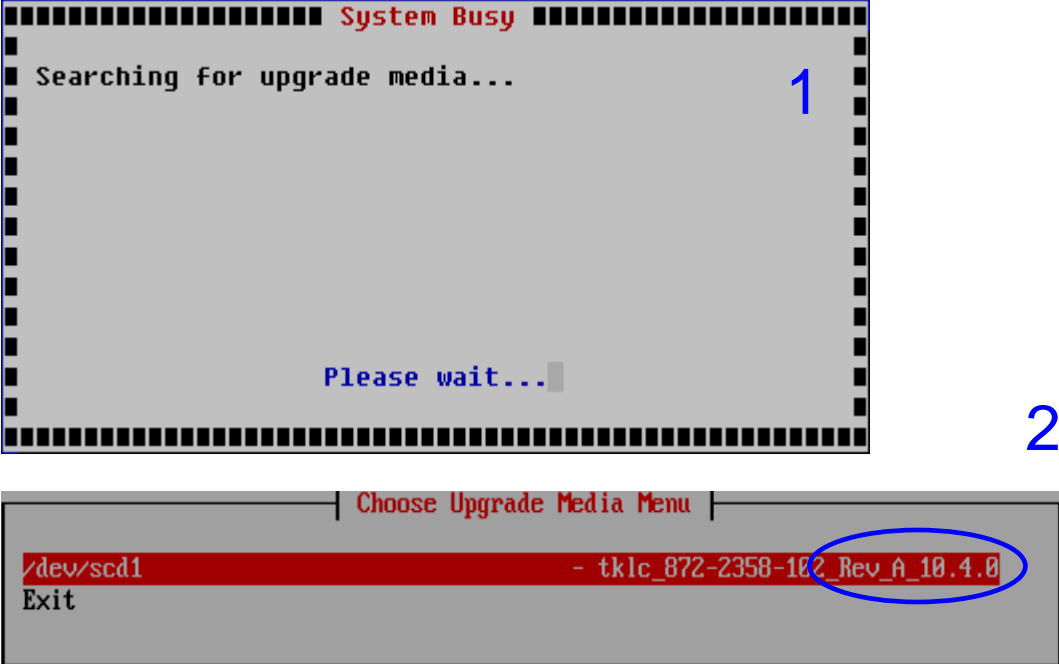
Appendix G.1: Install OCUDR Application with ILO

Step	Procedure	Result
1. <input type="checkbox"/>	Access the HP server's console.	Connect to the HP server's console using one of the access methods described in Section 2.1.2.
2. <input type="checkbox"/>	Mount the media containing the OCUDR software.	Follow steps defined in ... C.1 Mounting Physical Media on HP Servers or C.2 Mounting Virtual Media on HP Servers ... to mount the OCUDR software.
3. <input type="checkbox"/>	Login to the "platcfg" utility.	[root@hostname1260476221 ~]# <code>su - platcfg</code>
4. <input type="checkbox"/>	From the "platcfg" Main Menu... Select each option as shown on the right, pressing the <ENTER> key after each selection.	 <p>The screenshots show the following menu options:</p> <ul style="list-style-type: none"> Main Menu (1): Maintenance (highlighted), Diagnostics, Server Configuration, Remote Consoles, Network Configuration, Exit. Maintenance Menu (2): Upgrade (highlighted), Halt Server, Backup and Restore, View Mail Queues, Restart Server, Eject CDROM, Save Platform Debug Logs, Exit. Upgrade Menu (3): Validate Media (highlighted), Early Upgrade Checks, Initiate Upgrade, Non Tekelec RPM Management, Exit.

Appendix G.1: Install OCUDR Application with ILO

Step	Procedure	Result
<p>5.</p> <p><input type="checkbox"/></p>	<p>From the “platcfg” Main Menu...</p> <p>Verify “CDROM is Valid.”</p> <p>If CDROM is invalid, see Appendix Q to access My Oracle Support (MOS)</p> <p>..... then press any key to return to platcfg menu.</p>	
<p>6.</p> <p><input type="checkbox"/></p>	<p>From the “platcfg” Main Menu...</p> <p>Select each option as shown on the right, pressing the <ENTER> key after each selection.</p>	

Appendix G.1: Install OCUDR Application with ILO

Step	Procedure	Result
<p>7.</p> <input type="checkbox"/>	<p>Verify that the Application release level shown matches the target release.</p>	
<p>8.</p> <input type="checkbox"/>	<p>Output similar to that shown on the right may be observed as the Application install progresses.</p>	<pre> Determining if we should upgrade... Install product is TPD Install product record exists in /etc/tekelec.cfg Install products match Stopping cron service... Checking for stale RPM DB locks... Installing public key /mnt/upgrade/upgrade/pub_keys/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>

Appendix G.1: Install OCUDR Application with ILO

Step	Procedure	Result
<p>9.</p> <input type="checkbox"/>	<p>Output similar to that shown on the right may be observed as the Application install progresses.</p>	<pre>Adding /usr/TKLC/plat/etc/rpm.d/plat.TKLCplat.macro to /etc/rpm/macros... [OK] Adding /usr/TKLC/plat/etc/rpm.d/plat.TPD-provd.macro to /etc/rpm/macros... [OK] Updating /etc/rpm/macros... Now dispatching /mnt/upgrade/upgrade/ugwrap --noexecdispatch OK] Initializing Upgrade Wrapper... package TKLCappworks is not installed TKLCappworks is not installed, therefore this must be an initial install. Validating Distribution... Validating cdrom... ##### #####</pre>
<p>10.</p> <input type="checkbox"/>	<p>Output similar to that shown on the right may be observed as the server initiates a post-install reboot.</p>	<pre>scsi7 : SCSI emulation for USB Mass Storage devices scsi8 : SCSI emulation for USB Mass Storage devices input: Intel(R) Multidevice as /class/input/input3 input: USB HID v1.01 Mouse [Intel(R) Multidevice] on usb-0000:00:1d.3-1 input: Intel(R) Multidevice as /class/input/input4 input: USB HID v1.01 Keyboard [Intel(R) Multidevice] on usb-0000:00:1d.3-1 Restarting system. - machine restart █</pre>
<p>11.</p> <input type="checkbox"/>	<p>After the server has completed reboot... Log back into the server as the "root" user.</p>	<pre>CentOS release 5.6 (Final) Kernel 2.6.18-238.19.1.el5prere15.0.0_72.22.0 on an x86_64 hostname1260476221 login: root Password: <root_password></pre>
<p>12.</p> <input type="checkbox"/>	<p>Output similar to that shown on the right will appear as the server returns to a command prompt.</p>	<pre>*** TRUNCATED OUTPUT *** ===== This system has been upgraded but the upgrade has not yet been accepted or rejected. Please accept or reject the upgrade soon. ===== VPATH=/opt/TKLCcomcol/runcm5.16:/opt/TKLCcomcol/cm5.16 PRODPATH= RELEASE=5.16 RUNID=00 VPATH=/var/TKLC/rundb:/usr/TKLC/appworks:/usr/TKLC/awpcommon:/usr/TKLC/co magent-gui:/usr/TKLC/comagent:/usr/TKLC/udr PRODPATH=/opt/comcol/prod RUNID=00 [root@hostname1260476221 ~]#</pre>

OCUDR 10.0.1 Installation and Configuration Guide

Appendix G.1: Install OCUDR Application with ILO


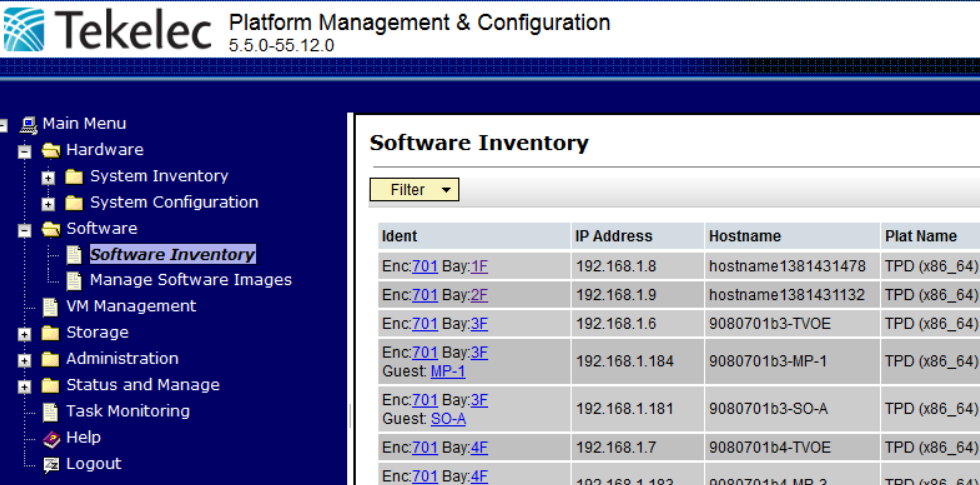
Step	Procedure	Result
13. <input type="checkbox"/>	<p>Verify successful upgrade.</p> <p>Command will generate no output if no issues are found.</p>	<pre># verifyUpgrade</pre> <p><i>NOTE: This command should return no output on a healthy system. If any errors are reported, please contact My Oracle Support (MOS) for assistance.</i></p>
14. <input type="checkbox"/>	<p>Verify that the Application release level shown matches the target release.</p>	<pre>[root@hostname1260476221 ~]# appRev Install Time: Fri Aug 8 08:39:26 2014 Product Name: OCUDR Product Release: 10.0.1_10.11.2 Base Distro Product: TPD Base Distro Release: 6.7.0.0.1_84.17.0 Base Distro ISO: TPD.install-6.7.0.0.1_84.17.0-OracleLinux6.5- x86_64.iso OS: OracleLinux 6.5</pre>
15. <input type="checkbox"/>	<p>TVOE Management Server iLO:</p> <p>Reboot the server</p>	<p>Reboot the server:</p> <pre># init 6</pre> <p>Wait until the reboot completes and re-login with TVOE root credentials.</p>
16. <input type="checkbox"/>	<p>TVOE Management Server iLO:</p> <p>Verify server health</p>	<p>Verify server health:</p> <pre># alarmMgr -alarmStatus</pre> <p><i>Note: This command should return only one alarm related to pending upgrade acceptance. If any other alarms are reported, please stop and contact My Oracle Support (MOS) before continuing.</i></p>
THIS PROCEDURE HAS BEEN COMPLETED		

G.2 Installing OCUDR Application with PM&C

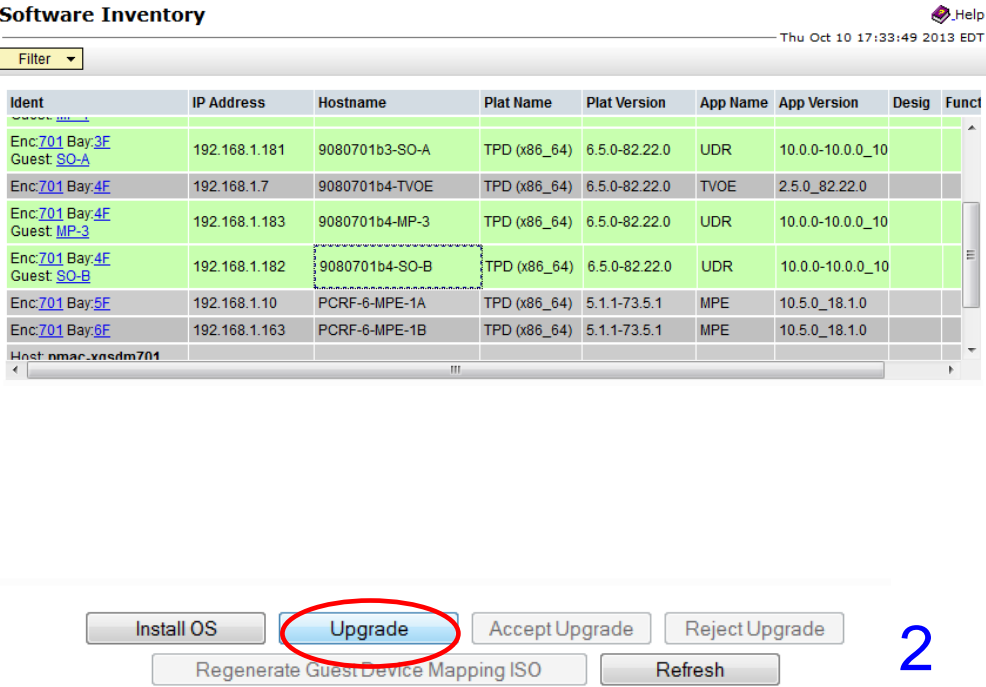
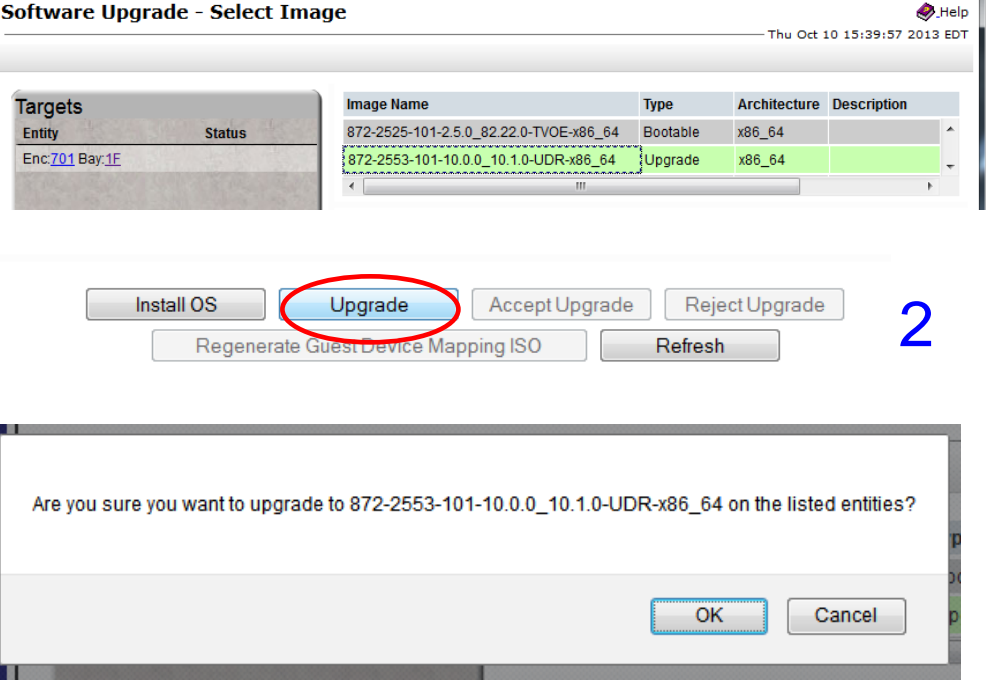
Appendix G.2: Installing OCUDR Application with PM&C

Step	Procedure	Result
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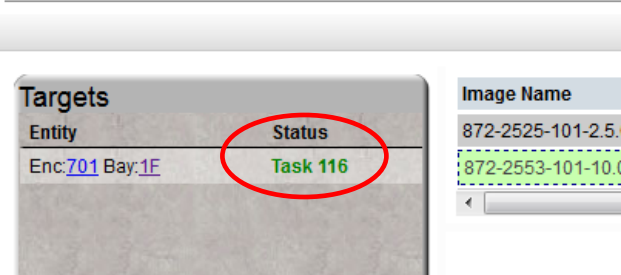
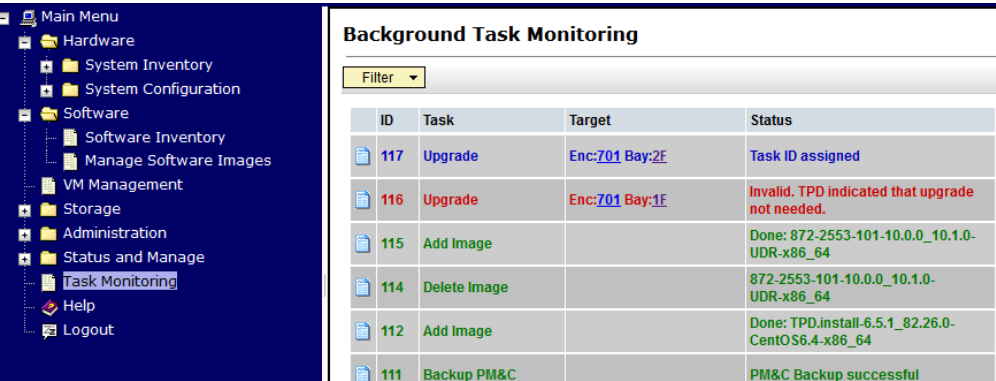
Appendix G.2: Installing OCUDR Application with PM&C

Step	Procedure	Result																																
<p>8.</p> <p><input type="checkbox"/></p>	<p>PM&C GUI:</p> <p>Login to PM&C GUI</p>	<p>Open web browser and enter: <a href="http://<pmac_management_network_ip>">http://<pmac_management_network_ip></p> <p>Login as pmacadmin user.</p> 																																
<p>9.</p> <p><input type="checkbox"/></p>	<p>PM&C GUI:</p> <p>Select...</p> <p>Main Menu</p> <p>→ Software</p> <p>→ Software Inventory</p> <p>...as shown on the right.</p>	 <table border="1"> <thead> <tr> <th>Ident</th> <th>IP Address</th> <th>Hostname</th> <th>Plat Name</th> </tr> </thead> <tbody> <tr> <td>Enc:701 Bay:1F</td> <td>192.168.1.8</td> <td>hostname1381431478</td> <td>TPD (x86_64)</td> </tr> <tr> <td>Enc:701 Bay:2F</td> <td>192.168.1.9</td> <td>hostname1381431132</td> <td>TPD (x86_64)</td> </tr> <tr> <td>Enc:701 Bay:3F</td> <td>192.168.1.6</td> <td>9080701b3-TVOE</td> <td>TPD (x86_64)</td> </tr> <tr> <td>Enc:701 Bay:3F Guest MP-1</td> <td>192.168.1.184</td> <td>9080701b3-MP-1</td> <td>TPD (x86_64)</td> </tr> <tr> <td>Enc:701 Bay:3F Guest SO-A</td> <td>192.168.1.181</td> <td>9080701b3-SO-A</td> <td>TPD (x86_64)</td> </tr> <tr> <td>Enc:701 Bay:4F</td> <td>192.168.1.7</td> <td>9080701b4-TVOE</td> <td>TPD (x86_64)</td> </tr> <tr> <td>Enc:701 Bay:4F</td> <td>192.168.1.183</td> <td>9080701b4-MP-3</td> <td>TPD (x86_64)</td> </tr> </tbody> </table>	Ident	IP Address	Hostname	Plat Name	Enc:701 Bay:1F	192.168.1.8	hostname1381431478	TPD (x86_64)	Enc:701 Bay:2F	192.168.1.9	hostname1381431132	TPD (x86_64)	Enc:701 Bay:3F	192.168.1.6	9080701b3-TVOE	TPD (x86_64)	Enc:701 Bay:3F Guest MP-1	192.168.1.184	9080701b3-MP-1	TPD (x86_64)	Enc:701 Bay:3F Guest SO-A	192.168.1.181	9080701b3-SO-A	TPD (x86_64)	Enc:701 Bay:4F	192.168.1.7	9080701b4-TVOE	TPD (x86_64)	Enc:701 Bay:4F	192.168.1.183	9080701b4-MP-3	TPD (x86_64)
Ident	IP Address	Hostname	Plat Name																															
Enc:701 Bay:1F	192.168.1.8	hostname1381431478	TPD (x86_64)																															
Enc:701 Bay:2F	192.168.1.9	hostname1381431132	TPD (x86_64)																															
Enc:701 Bay:3F	192.168.1.6	9080701b3-TVOE	TPD (x86_64)																															
Enc:701 Bay:3F Guest MP-1	192.168.1.184	9080701b3-MP-1	TPD (x86_64)																															
Enc:701 Bay:3F Guest SO-A	192.168.1.181	9080701b3-SO-A	TPD (x86_64)																															
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Appendix G.2: Installing OCUDR Application with PM&C

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<p>10.</p>	<p>PM&C GUI:</p> <p>1) Highlight the desired blade or blades based on the Guest name and hardware host Identity...</p> <p><i>Note: You may select multiple blades for simultaneous upgrade to the same release by holding the Ctrl (Control) key while selecting lines with the mouse.</i></p> <p>2) Click on the Upgrade button.</p>	 <p>Software Inventory .Help Thu Oct 10 17:33:49 2013 EDT</p> <p>Filter</p> <table border="1"> <thead> <tr> <th>Ident</th> <th>IP Address</th> <th>Hostname</th> <th>Plat Name</th> <th>Plat Version</th> <th>App Name</th> <th>App Version</th> <th>Desig</th> <th>Funct</th> </tr> </thead> <tbody> <tr> <td>Enc:701 Bay:3F Guest:SO-A</td> <td>192.168.1.181</td> <td>9080701b3-SO-A</td> <td>TPD (x86_64)</td> <td>6.5.0-82.22.0</td> <td>UDR</td> <td>10.0.0-10.0.0_10</td> <td></td> <td></td> </tr> <tr> <td>Enc:701 Bay:4E</td> <td>192.168.1.7</td> <td>9080701b4-TVOE</td> <td>TPD (x86_64)</td> <td>6.5.0-82.22.0</td> <td>TVOE</td> <td>2.5.0_82.22.0</td> <td></td> <td></td> </tr> <tr> <td>Enc:701 Bay:4E Guest:MP-3</td> <td>192.168.1.183</td> <td>9080701b4-MP-3</td> <td>TPD (x86_64)</td> <td>6.5.0-82.22.0</td> <td>UDR</td> <td>10.0.0-10.0.0_10</td> <td></td> <td></td> </tr> <tr> <td>Enc:701 Bay:4E Guest:SO-B</td> <td>192.168.1.182</td> <td>9080701b4-SO-B</td> <td>TPD (x86_64)</td> <td>6.5.0-82.22.0</td> <td>UDR</td> <td>10.0.0-10.0.0_10</td> <td></td> <td></td> </tr> <tr> <td>Enc:701 Bay:5F</td> <td>192.168.1.10</td> <td>PCRf-6-MPE-1A</td> <td>TPD (x86_64)</td> <td>5.1.1-73.5.1</td> <td>MPE</td> <td>10.5.0_18.1.0</td> <td></td> <td></td> </tr> <tr> <td>Enc:701 Bay:6E</td> <td>192.168.1.163</td> <td>PCRf-6-MPE-1B</td> <td>TPD (x86_64)</td> <td>5.1.1-73.5.1</td> <td>MPE</td> <td>10.5.0_18.1.0</td> <td></td> <td></td> </tr> </tbody> </table> <p>Host: nmac.vnsdm701</p> <p>Buttons: Install OS, Upgrade, Accept Upgrade, Reject Upgrade, Regenerate Guest Device Mapping ISO, Refresh</p>	Ident	IP Address	Hostname	Plat Name	Plat Version	App Name	App Version	Desig	Funct	Enc:701 Bay:3F Guest:SO-A	192.168.1.181	9080701b3-SO-A	TPD (x86_64)	6.5.0-82.22.0	UDR	10.0.0-10.0.0_10			Enc:701 Bay:4E	192.168.1.7	9080701b4-TVOE	TPD (x86_64)	6.5.0-82.22.0	TVOE	2.5.0_82.22.0			Enc:701 Bay:4E Guest:MP-3	192.168.1.183	9080701b4-MP-3	TPD (x86_64)	6.5.0-82.22.0	UDR	10.0.0-10.0.0_10			Enc:701 Bay:4E Guest:SO-B	192.168.1.182	9080701b4-SO-B	TPD (x86_64)	6.5.0-82.22.0	UDR	10.0.0-10.0.0_10			Enc:701 Bay:5F	192.168.1.10	PCRf-6-MPE-1A	TPD (x86_64)	5.1.1-73.5.1	MPE	10.5.0_18.1.0			Enc:701 Bay:6E	192.168.1.163	PCRf-6-MPE-1B	TPD (x86_64)	5.1.1-73.5.1	MPE	10.5.0_18.1.0		
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<p>11.</p>	<p>PM&C GUI:</p> <p>1) Select the desired Image Name of the OCUDR software.</p> <p>2) Click on the Upgrade button.</p> <p>3) Click on the popup dialog box OK button.</p>	 <p>Software Upgrade - Select Image .Help Thu Oct 10 15:39:57 2013 EDT</p> <table border="1"> <thead> <tr> <th>Image Name</th> <th>Type</th> <th>Architecture</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>872-2525-101-2.5.0_82.22.0-TVOE-x86_64</td> <td>Bootable</td> <td>x86_64</td> <td></td> </tr> <tr> <td>872-2553-101-10.0.0_10.1.0-UDR-x86_64</td> <td>Upgrade</td> <td>x86_64</td> <td></td> </tr> </tbody> </table> <p>Buttons: Install OS, Upgrade, Accept Upgrade, Reject Upgrade, Regenerate Guest Device Mapping ISO, Refresh</p> <p>Dialog Box: Are you sure you want to upgrade to 872-2553-101-10.0.0_10.1.0-UDR-x86_64 on the listed entities? Buttons: OK, Cancel</p>	Image Name	Type	Architecture	Description	872-2525-101-2.5.0_82.22.0-TVOE-x86_64	Bootable	x86_64		872-2553-101-10.0.0_10.1.0-UDR-x86_64	Upgrade	x86_64																																																				
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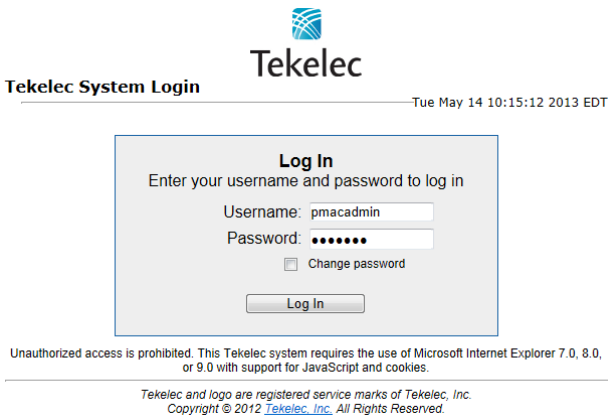
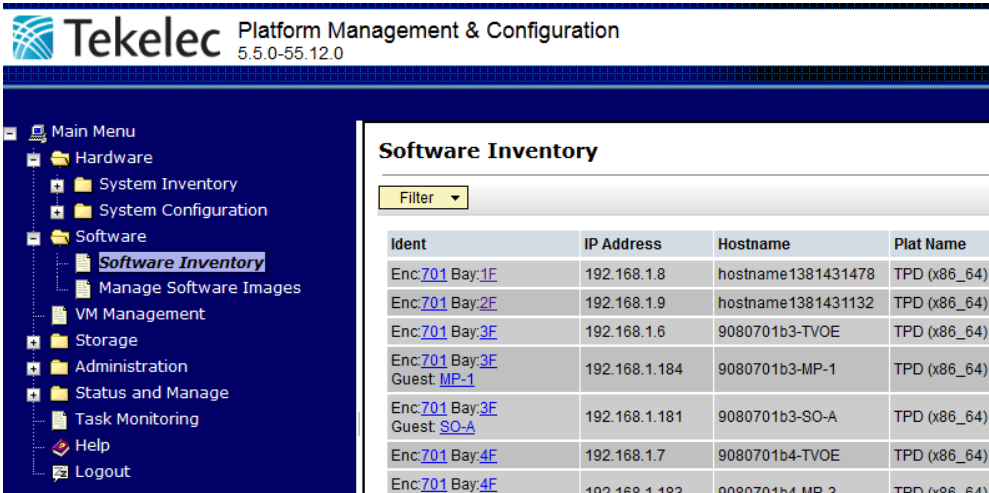
Appendix G.2: Installing OCUDR Application with PM&C

Step	Procedure	Result																												
<p>12.</p> <p><input type="checkbox"/></p>	<p>PM&C GUI:</p> <p><i>Upgrade Tasks</i> will appear for each upgrade started this way under the left column Status.</p>	<p>Software Upgrade - Select Image</p> 																												
<p>13.</p> <p><input type="checkbox"/></p>	<p>PM&C GUI:</p> <p>Select...</p> <p>Main Menu → Task Monitoring</p> <p>...as shown on the right.</p> <p><i>Note: Upgrade tasks may be monitored for completion on this screen.</i></p>	 <p>Background Task Monitoring</p> <table border="1"> <thead> <tr> <th>ID</th> <th>Task</th> <th>Target</th> <th>Status</th> </tr> </thead> <tbody> <tr> <td>117</td> <td>Upgrade</td> <td>Enc:701 Bay:2E</td> <td>Task ID assigned</td> </tr> <tr> <td>116</td> <td>Upgrade</td> <td>Enc:701 Bay:1F</td> <td>Invalid. TPD indicated that upgrade not needed.</td> </tr> <tr> <td>115</td> <td>Add Image</td> <td></td> <td>Done: 872-2553-101-10.0.0_10.1.0-UDR-x86_64</td> </tr> <tr> <td>114</td> <td>Delete Image</td> <td></td> <td>872-2553-101-10.0.0_10.1.0-UDR-x86_64</td> </tr> <tr> <td>112</td> <td>Add Image</td> <td></td> <td>Done: TPD.install-6.5.1_82.26.0-CentOS6.4-x86_64</td> </tr> <tr> <td>111</td> <td>Backup PM&C</td> <td></td> <td>PM&C Backup successful</td> </tr> </tbody> </table>	ID	Task	Target	Status	117	Upgrade	Enc:701 Bay:2E	Task ID assigned	116	Upgrade	Enc:701 Bay:1F	Invalid. TPD indicated that upgrade not needed.	115	Add Image		Done: 872-2553-101-10.0.0_10.1.0-UDR-x86_64	114	Delete Image		872-2553-101-10.0.0_10.1.0-UDR-x86_64	112	Add Image		Done: TPD.install-6.5.1_82.26.0-CentOS6.4-x86_64	111	Backup PM&C		PM&C Backup successful
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<p>14.</p> <p><input type="checkbox"/></p>	<p>PM&C GUI:</p> <p><i>Look for successful upgrade completion under the Status column</i></p>	<table border="1"> <thead> <tr> <th>ID</th> <th>Task</th> <th>Target</th> <th>Status</th> </tr> </thead> <tbody> <tr> <td>105</td> <td>Upgrade</td> <td>RMS: pc9000712 Guest: SOA</td> <td>Success</td> </tr> <tr> <td>104</td> <td>Upgrade</td> <td>RMS: pc9000712 Guest: MP2</td> <td>Success</td> </tr> <tr> <td>103</td> <td>Upgrade</td> <td>RMS: pc9000712 Guest: MP1</td> <td>Success</td> </tr> </tbody> </table>	ID	Task	Target	Status	105	Upgrade	RMS: pc9000712 Guest: SOA	Success	104	Upgrade	RMS: pc9000712 Guest: MP2	Success	103	Upgrade	RMS: pc9000712 Guest: MP1	Success												
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<p>THIS PROCEDURE HAS BEEN COMPLETED</p>																														

Appendix H. Accept Application Installation on PM&C Managed Servers

This procedure will accept the OCUDR Application Installation / Upgrade with PM&C.

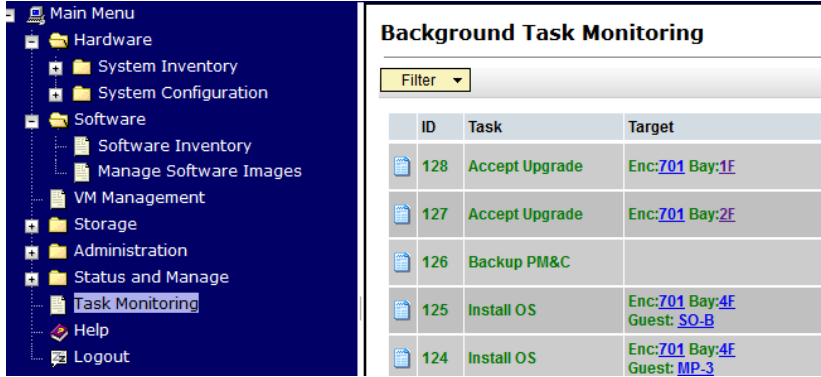
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Step	Procedure	Result																																
<p>1.</p> <p><input type="checkbox"/></p>	<p>PM&C GUI:</p> <p>Login to PM&C GUI</p>	<p>Open web browser and enter: <a href="http://<pmac_management_network_ip>">http://<pmac_management_network_ip></p> <p>Login as pmacadmin user.</p> 																																
<p>2.</p> <p><input type="checkbox"/></p>	<p>PM&C GUI:</p> <p>Select...</p> <p>Main Menu</p> <p>→ Software</p> <p>→ Software Inventory</p> <p>...as shown on the right.</p>	 <table border="1"> <thead> <tr> <th>Ident</th> <th>IP Address</th> <th>Hostname</th> <th>Plat Name</th> </tr> </thead> <tbody> <tr> <td>Enc:701 Bay:1F</td> <td>192.168.1.8</td> <td>hostname1381431478</td> <td>TPD (x86_64)</td> </tr> <tr> <td>Enc:701 Bay:2F</td> <td>192.168.1.9</td> <td>hostname1381431132</td> <td>TPD (x86_64)</td> </tr> <tr> <td>Enc:701 Bay:3F</td> <td>192.168.1.6</td> <td>9080701b3-TVOE</td> <td>TPD (x86_64)</td> </tr> <tr> <td>Enc:701 Bay:3F Guest: MP-1</td> <td>192.168.1.184</td> <td>9080701b3-MP-1</td> <td>TPD (x86_64)</td> </tr> <tr> <td>Enc:701 Bay:3F Guest: SQ-A</td> <td>192.168.1.181</td> <td>9080701b3-SO-A</td> <td>TPD (x86_64)</td> </tr> <tr> <td>Enc:701 Bay:4F</td> <td>192.168.1.7</td> <td>9080701b4-TVOE</td> <td>TPD (x86_64)</td> </tr> <tr> <td>Enc:701 Bay:4F</td> <td>192.168.1.183</td> <td>9080701b4-MP-3</td> <td>TPD (x86_64)</td> </tr> </tbody> </table>	Ident	IP Address	Hostname	Plat Name	Enc:701 Bay:1F	192.168.1.8	hostname1381431478	TPD (x86_64)	Enc:701 Bay:2F	192.168.1.9	hostname1381431132	TPD (x86_64)	Enc:701 Bay:3F	192.168.1.6	9080701b3-TVOE	TPD (x86_64)	Enc:701 Bay:3F Guest: MP-1	192.168.1.184	9080701b3-MP-1	TPD (x86_64)	Enc:701 Bay:3F Guest: SQ-A	192.168.1.181	9080701b3-SO-A	TPD (x86_64)	Enc:701 Bay:4F	192.168.1.7	9080701b4-TVOE	TPD (x86_64)	Enc:701 Bay:4F	192.168.1.183	9080701b4-MP-3	TPD (x86_64)
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Appendix H: Accept Application Installatin on PM&C Managed Servers

Step	Procedure	Result																		
<p>4.</p> <p><input type="checkbox"/></p>	<p>PM&C GUI:</p> <p>Select...</p> <p>Main Menu → Task Monitoring</p> <p>...as shown on the right.</p> <p>Note: Acceptance tasks may be monitored for completion on this screen.</p>	 <p>The screenshot shows the PM&C GUI. On the left is a dark blue 'Main Menu' with a tree structure: Main Menu, Hardware, System Inventory, System Configuration, Software, Software Inventory, Manage Software Images, VM Management, Storage, Administration, Status and Manage, Task Monitoring (highlighted), Help, and Logout. On the right is the 'Background Task Monitoring' window, which includes a 'Filter' dropdown and a table of tasks.</p> <table border="1"> <thead> <tr> <th>ID</th> <th>Task</th> <th>Target</th> </tr> </thead> <tbody> <tr> <td>128</td> <td>Accept Upgrade</td> <td>Enc:701 Bay:1F</td> </tr> <tr> <td>127</td> <td>Accept Upgrade</td> <td>Enc:701 Bay:2F</td> </tr> <tr> <td>126</td> <td>Backup PM&C</td> <td></td> </tr> <tr> <td>125</td> <td>Install OS</td> <td>Enc:701 Bay:4F Guest: SO-B</td> </tr> <tr> <td>124</td> <td>Install OS</td> <td>Enc:701 Bay:4F Guest: MP-3</td> </tr> </tbody> </table>	ID	Task	Target	128	Accept Upgrade	Enc:701 Bay:1F	127	Accept Upgrade	Enc:701 Bay:2F	126	Backup PM&C		125	Install OS	Enc:701 Bay:4F Guest: SO-B	124	Install OS	Enc:701 Bay:4F Guest: MP-3
ID	Task	Target																		
128	Accept Upgrade	Enc:701 Bay:1F																		
127	Accept Upgrade	Enc:701 Bay:2F																		
126	Backup PM&C																			
125	Install OS	Enc:701 Bay:4F Guest: SO-B																		
124	Install OS	Enc:701 Bay:4F Guest: MP-3																		
<p>THIS PROCEDURE HAS BEEN COMPLETED</p>																				

Appendix I. PM&C Deployment and Configuration

This procedure contains steps to deploy and configure PM&C on TVOE Servers.

I.1 Deploying PM&C on TVOE Server

Appendix I.1: Deploying PM&C on TVOE Server

Step	Procedure	Result
1. <input type="checkbox"/>	Access the TVOE Server console.	Connect to the TVOE Server console using one of the access methods as described in Section 0.
2. <input type="checkbox"/>	TVOE Server (SSH): Login as "admusr" user.	1. login as: <code>admusr</code> password: <code><admusr_password></code>
3. <input type="checkbox"/>	TVOE Server (SSH): Switch to "root" user.	\$ <code>su -</code> password: <code><root_password></code>
4. <input type="checkbox"/>	TVOE Server (SSH): Mount the media containing the PM&C software.	Follow steps defined in ... C.1 Mounting Physical Media on HP Servers or C.2 Mounting Virtual Media on HP Servers ... to mount the PM&C software.
5. <input type="checkbox"/>	TVOE Server (SSH): Mount PM&C media location	Using the device location identified in C.1 or C.2, mount the PM&C ISO with this command: # <code>mount -o loop <media_device> /mnt</code>

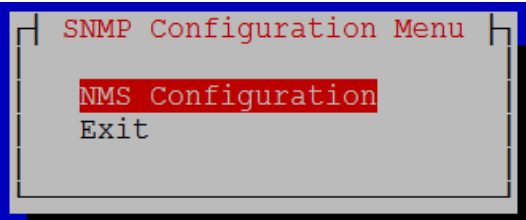
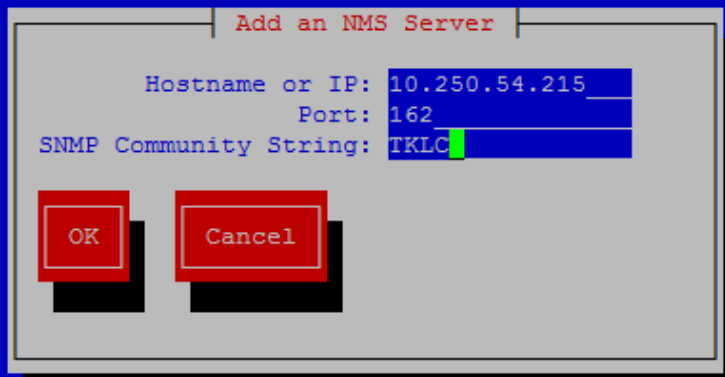
Appendix I.1: Deploying PM&C on TVOE Server

Step	Procedure	Result
<p>6.</p> <input type="checkbox"/>	<p>TVOE Management Server (SSH):</p> <p>Deploy PM&C</p>	<p>Using the pmac-deploy script, deploy the PM&C</p> <pre># cd /mnt/upgrade</pre> <p>Deploy PM&C by running the following command (on one line, without line breaks):</p> <p><u>Command Syntax:</u></p> <pre># ./pmac-deploy --controlIP=192.168.1.1 --managementBridge=management --guest=<PMAC_Name> --hostname=<PMAC_Hostname> --managementIP=<PMAC_Management_ip_address> --managementNM=<PMAC_Management_netmask> --routeGW=<PMAC_Management_gateway_address> --ntpserver=<TVOE_Management_server_ip_address></pre> <p><u>Example:</u></p> <pre># ./pmac-deploy --controlIP=192.168.1.1 -- managementBridge=management --guest=pmac --hostname=pc9000712-pmac --managementIP=10.240.37.149 --managementNM=255.255.255.192 --routeGW=10.240.37.129 --ntpserver=10.240.37.147</pre> <p>The PM&C will deploy and boot.</p> <p>The management and control network will come up based on the settings that were provided to the pmac-deploy script. This process takes about 5-10 minutes.</p> <p><i>Note:</i> Some lab deployments may host TVOE and PMAC on the XMI network/bridge instead of on a separate routable management network.</p>
<p>7.</p> <input type="checkbox"/>	<p>TVOE Management Server (SSH):</p> <p>Unmount the media</p>	<p>Unmount the DVD media using the following command:</p> <pre># cd / # umount /mnt</pre>

Appendix I.1: Deploying PM&C on TVOE Server


Step	Procedure	Result
<p>8.</p> <input type="checkbox"/>	<p>TVOE Server (SSH):</p> <p>Log into the virtual PM&C server</p>	<p>Login using virsh, and wait until you see the login prompt:</p> <pre># virsh Welcome to virsh, the virtualization interactive terminal. Type: 'help' for help with commands 'quit' to quit virsh # list ----- Id Name State ----- 2 pmac running</pre> <p>Log into the virtual PM&C server using PM&C root credentials.</p> <pre>virsh # console pmac Connected to domain pmac Escape character is ^] <ENTER></pre> <pre>CentOS release 6.2 (Final) Kernel 2.6.32-220.17.1.el6prere16.0.0_80.17.0.x86_64 on an x86_64 PMAC-pc9000632 login: root Password:<password> Last login: Wed Aug 15 20:34:49 from 10.250.51.71 [root@PMAC-pc9000632 ~]#</pre>
<p>9.</p> <input type="checkbox"/>	<p>Virtual PM&C:</p> <p>Verify the PM&C is configured correctly on the first boot</p>	<p>Verify the PM&C configured correctly on first boot.</p> <pre># ls /usr/TKLC/plat/etc/deployment.d/</pre> <p><i>NOTE: This command should return no output on a healthy system. Otherwise please contact My Oracle Support (MOS) for assistance.</i></p>
<p>10.</p> <input type="checkbox"/>	<p>Virtual PM&C:</p> <p>Set Timezone</p>	<p>Determine the Time Zone to be used for the PM&C, and set the PM&C timezone</p> <p><i>Note: Valid time zones can be found in Appendix P.</i></p> <pre># set_pmac_tz.pl <timezone></pre> <p>Example:</p> <pre># set_pmac_tz.pl America/New_York</pre>

Appendix I.1: Deploying PM&C on TVOE Server

Step	Procedure	Result
<p>11.</p> <input type="checkbox"/>	<p>Virtual PM&C: <i>Configure SNMP</i></p>	<p>Configure SNMP trap destination by running the following:</p> <pre># su - platcfg</pre> <ol style="list-style-type: none"> 1. Navigate to Network Configuration > SNMP Configuration > NMS Configuration.  <ol style="list-style-type: none"> 2. Select Edit and then choose 'Add a New NMS Server'. 3. The 'Add an NMS Server' page will be displayed.  <ol style="list-style-type: none"> 4. Complete the form by entering in all information about the SNMP trap destination. 5. Select OK to finalize the configuration. 6. The 'NMS Server Action Menu' will now be displayed. 7. Select Exit. The following dialogue will then be presented: 'Do you want to restart the Alarm Routing Service?' 8. Select Yes and then wait a few seconds while the Alarm Routing Service is restarted. 9. At that time the 'SNMP Configuration Menu' will be presented. 10. Exit platcfg. <p><i>Note: All alarm information will then be sent to the NMS located at the destination.</i></p>
<p>12.</p> <input type="checkbox"/>	<p>Virtual PM&C: <i>Reboot PM&C server</i></p>	<p>Reboot the PM&C server to ensure all processes are started with the new Time Zone:</p> <pre># init 6</pre>
<p>THIS PROCEDURE HAS BEEN COMPLETED</p>		

I.2 Configure PM&C Application

Appendix I.2: Configure PM&C Application

Step	Procedure	Result
<p>1.</p> <p><input type="checkbox"/></p>	<p>PM&C GUI:</p> <p><i>Login to PM&C GUI</i></p>	<p>Open web browser and enter: <a href="http://<pmac_management_network_ip>">http://<pmac_management_network_ip></p> <p>Login as pmacadmin user.</p> <div style="text-align: center;">  Tekelec Tekelec System Login </div> <p style="text-align: right;">Tue May 14 10:15:12 2013 EDT</p> <div style="border: 1px solid #ccc; padding: 10px; margin: 10px auto; width: 300px;"> <p style="text-align: center;">Log In</p> <p style="text-align: center;">Enter your username and password to log in</p> <p>Username: <input type="text" value="pmacadmin"/></p> <p>Password: <input type="password" value="••••••"/></p> <p style="text-align: center;"><input type="checkbox"/> Change password</p> <p style="text-align: center;"><input type="button" value="Log In"/></p> </div> <p>Unauthorized access is prohibited. This Tekelec system requires the use of Microsoft Internet Explorer 7.0, 8.0, or 9.0 with support for JavaScript and cookies.</p> <hr/> <p style="text-align: center;"><small>Tekelec and logo are registered service marks of Tekelec, Inc. Copyright © 2012 Tekelec, Inc. All Rights Reserved.</small></p>

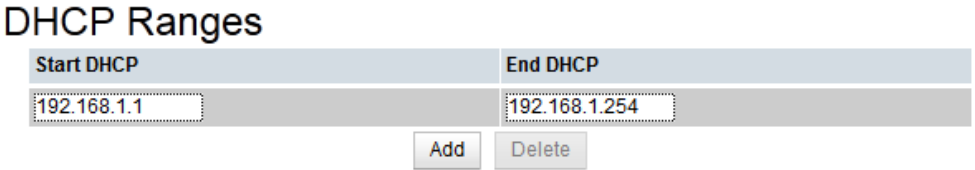
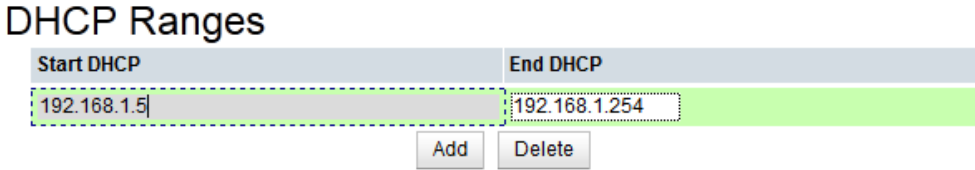
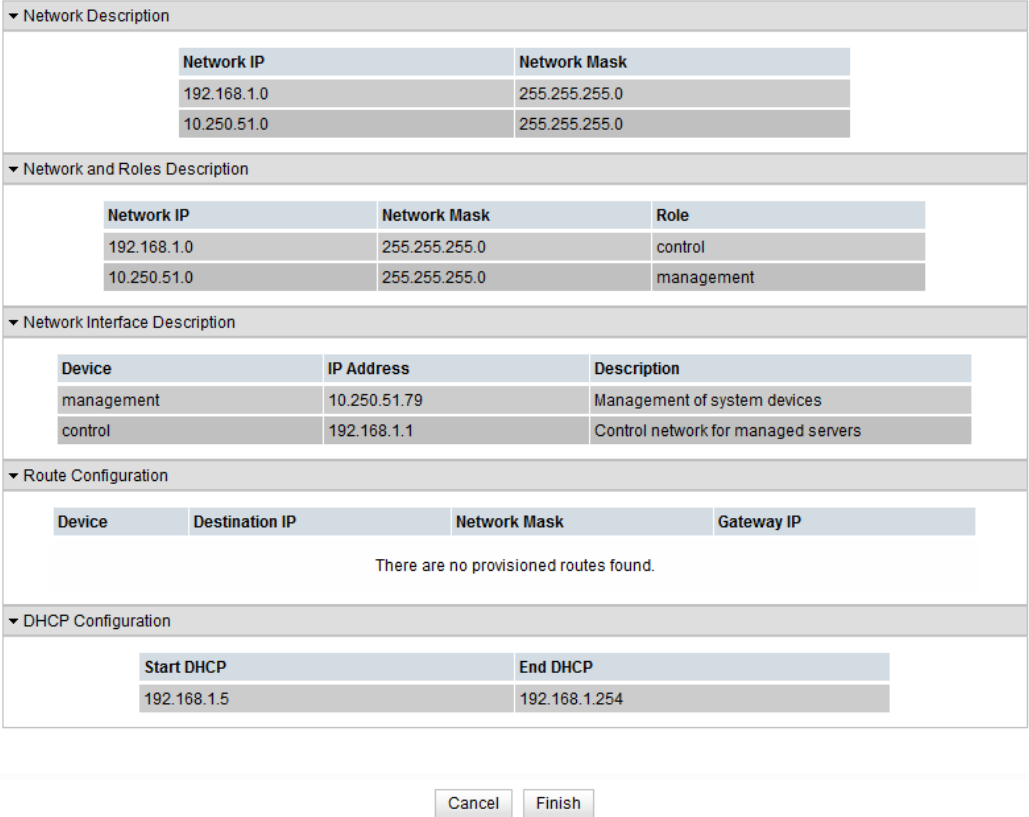
Appendix I.2: Configure PM&C Application

Step	Procedure	Result																																
<p>2.</p> <p><input type="checkbox"/></p>	<p>PM&C GUI:</p> <p>Select a profile</p>	<p>The first time that the PM&C GUI is opened, an initialization screen appears and will look similar to the screen shown below:</p> <div style="border: 1px solid #ccc; padding: 5px;"> <p>Profiles</p> <table border="1"> <thead> <tr> <th>File Name</th> <th>Name</th> <th>Comment</th> <th>Version</th> </tr> </thead> <tbody> <tr> <td>TVOE</td> <td>PM&C TVOE Guest</td> <td>Manage systems from a TVOE hosted PM&C</td> <td>6.0.0</td> </tr> </tbody> </table> <p style="text-align: center;"><input type="button" value="Initialize"/></p> </div> <p>Select the TVOE profile and click on “Initialize” button, then following screen will display</p> <div style="text-align: center;"> <p><input type="button" value="Cancel"/> <input type="button" value="Next"/></p> </div> <div style="border: 1px solid #ccc; padding: 5px;"> <table border="1"> <thead> <tr> <th>Feature</th> <th>Description</th> <th>Role</th> <th>Enabled</th> </tr> </thead> <tbody> <tr> <td>DEVICE.NETWORK.NETBOOT</td> <td>Network device PXE initialization</td> <td>management</td> <td><input type="checkbox"/></td> </tr> <tr> <td>DEVICE.NTP</td> <td>PM&C as a time server</td> <td>management</td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>PMAC.MANAGED</td> <td>Remote management of PM&C server</td> <td>management</td> <td><input type="checkbox"/></td> </tr> <tr> <td>PMAC.REMOTE.BACKUP</td> <td>Remote server for backup</td> <td>management</td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>PMAC.NETBACKUP</td> <td>NetBackup client</td> <td>management</td> <td><input type="checkbox"/></td> </tr> </tbody> </table> <p style="text-align: center;"><input type="button" value="Add Role"/></p> </div> <p><i>Note: If you have missed the initialization process, please navigate to this GUI page: Administration → PM&C Configuration → Feature Configuration</i></p> <p>Make sure that the enable checkbox is checked for the following features only:</p> <ol style="list-style-type: none"> 1. DEVICE.NTP 2. PMAC,REMOTE.BACKUP <p>Click on “Next” button</p> <p><i>Note: If you have missed the initialization process, you will need to click on “Apply” button, then navigate to this GUI page Administration → PM&C Configuration → Network Configuration and click on the “ReConfigure” button.</i></p>	File Name	Name	Comment	Version	TVOE	PM&C TVOE Guest	Manage systems from a TVOE hosted PM&C	6.0.0	Feature	Description	Role	Enabled	DEVICE.NETWORK.NETBOOT	Network device PXE initialization	management	<input type="checkbox"/>	DEVICE.NTP	PM&C as a time server	management	<input checked="" type="checkbox"/>	PMAC.MANAGED	Remote management of PM&C server	management	<input type="checkbox"/>	PMAC.REMOTE.BACKUP	Remote server for backup	management	<input checked="" type="checkbox"/>	PMAC.NETBACKUP	NetBackup client	management	<input type="checkbox"/>
File Name	Name	Comment	Version																															
TVOE	PM&C TVOE Guest	Manage systems from a TVOE hosted PM&C	6.0.0																															
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DEVICE.NETWORK.NETBOOT	Network device PXE initialization	management	<input type="checkbox"/>																															
DEVICE.NTP	PM&C as a time server	management	<input checked="" type="checkbox"/>																															
PMAC.MANAGED	Remote management of PM&C server	management	<input type="checkbox"/>																															
PMAC.REMOTE.BACKUP	Remote server for backup	management	<input checked="" type="checkbox"/>																															
PMAC.NETBACKUP	NetBackup client	management	<input type="checkbox"/>																															

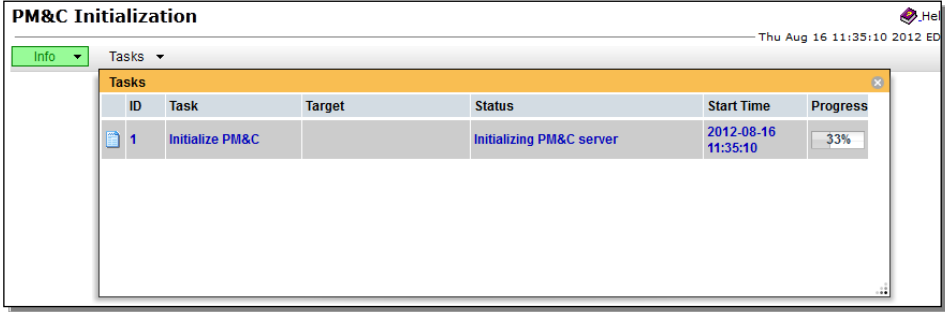
Appendix I.2: Configure PM&C Application

Step	Procedure	Result									
<p>3.</p> <input type="checkbox"/>	<p>PM&C GUI: <i>Network Description</i></p>	<p>You will see this default screen similar to:</p> <table border="1"> <thead> <tr> <th>Network IP</th> <th>Network Mask</th> </tr> </thead> <tbody> <tr> <td>192.168.1.0</td> <td>255.255.255.0</td> </tr> <tr> <td>10.250.51.0</td> <td>255.255.255.0</td> </tr> </tbody> </table> <p style="text-align: center;"> <input type="button" value="Add"/> <input type="button" value="Delete"/> </p> <p>Enter the <code>Network IPs</code> and <code>Netmasks</code> for the control and Management Networks.</p> <p>Click on “Next” button.</p>	Network IP	Network Mask	192.168.1.0	255.255.255.0	10.250.51.0	255.255.255.0			
Network IP	Network Mask										
192.168.1.0	255.255.255.0										
10.250.51.0	255.255.255.0										
<p>4.</p> <input type="checkbox"/>	<p>PM&C GUI: <i>Network Roles</i></p>	<p>You will see this default screen similar to:</p> <table border="1"> <thead> <tr> <th>Network IP</th> <th>Network Mask</th> <th>Role</th> </tr> </thead> <tbody> <tr> <td>192.168.1.0</td> <td>255.255.255.0</td> <td>control</td> </tr> <tr> <td>10.250.51.0</td> <td>255.255.255.0</td> <td>management</td> </tr> </tbody> </table> <p style="text-align: center;"> <input type="button" value="Add"/> <input type="button" value="Delete"/> </p> <p>Verify the roles and update if necessary.</p> <p>Click on “Next” button.</p>	Network IP	Network Mask	Role	192.168.1.0	255.255.255.0	control	10.250.51.0	255.255.255.0	management
Network IP	Network Mask	Role									
192.168.1.0	255.255.255.0	control									
10.250.51.0	255.255.255.0	management									
<p>5.</p> <input type="checkbox"/>	<p>PM&C GUI: <i>Network Interface</i></p>	<p>You will see this default screen similar to:</p> <table border="1"> <thead> <tr> <th>Device</th> <th>IP Address</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>control</td> <td>192.168.1.1</td> <td>Control network for managed servers</td> </tr> <tr> <td>management</td> <td>10.250.51.89</td> <td>Management of system devices</td> </tr> </tbody> </table> <p style="text-align: center;"> <input type="button" value="Add"/> <input type="button" value="Delete"/> </p> <p>Verify the IP addresses for each Device and update if necessary.</p> <p>Click on “Next” button.</p>	Device	IP Address	Description	control	192.168.1.1	Control network for managed servers	management	10.250.51.89	Management of system devices
Device	IP Address	Description									
control	192.168.1.1	Control network for managed servers									
management	10.250.51.89	Management of system devices									
<p>6.</p> <input type="checkbox"/>	<p>PM&C GUI: <i>Network Route</i></p>	<p>You will see this default screen similar to:</p> <table border="1"> <thead> <tr> <th>Device</th> <th>Destination IP</th> <th>Network Mask</th> <th>Gateway IP</th> </tr> </thead> <tbody> </tbody> </table> <p style="text-align: center;"> <input type="button" value="Add"/> <input type="button" value="Delete"/> </p> <p>No routes are required.</p> <p>Click on “Next” button when done.</p>	Device	Destination IP	Network Mask	Gateway IP					
Device	Destination IP	Network Mask	Gateway IP								

Appendix I.2: Configure PM&C Application

Step	Procedure	Result
<p>7.</p> <input type="checkbox"/>	<p>PM&C GUI: <i>DHCP Ranges</i></p>	<p>You will see this default screen similar to:</p>  <p>Set the Starting address in range to 192.168.1.5 and the Ending address in range to 192.168.1.254.</p>  <p>Click on “Next” button when done.</p>
<p>8.</p> <input type="checkbox"/>	<p>PM&C GUI: <i>Summary Settings</i></p>	<p>The following summary screen will be displayed.</p>  <p>Verify the values, and click “Finish” button when done</p>

Appendix I.2: Configure PM&C Application

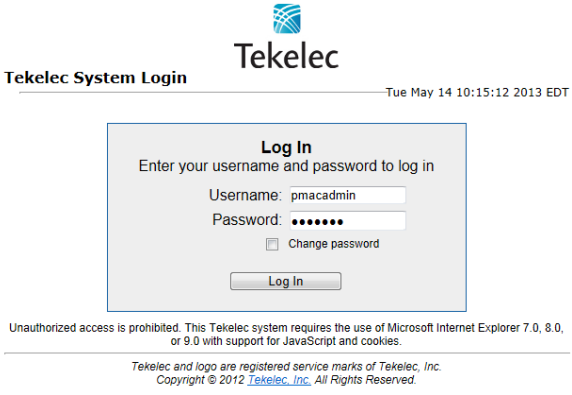
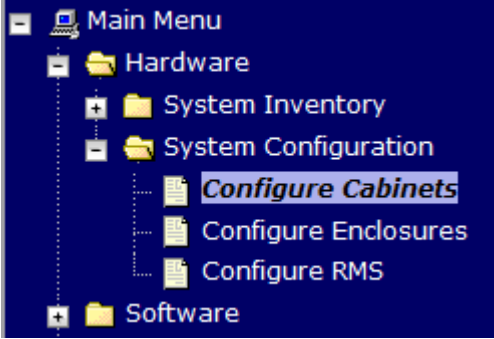
Step	Procedure	Result														
<p>9.</p> <input type="checkbox"/>	<p>PM&C GUI: Complete the configuration</p>	<p>The following summary screen will be displayed, click on Tasks to view the Initialization Progress</p>  <p>Navigate to GUI page “Main Menu → Task Monitoring” for status of this task.</p> <table border="1"> <thead> <tr> <th>ID</th> <th>Task</th> <th>Target</th> <th>Status</th> <th>Running Time</th> <th>Start Time</th> <th>Progress</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Initialize PM&C</td> <td></td> <td>PM&C initialized</td> <td>0:00:25</td> <td>2012-08-16 11:35:10</td> <td>100%</td> </tr> </tbody> </table> <p>Wait till the Progress bar turns green, that signifies that the PM&C Initialization was successful.</p>	ID	Task	Target	Status	Running Time	Start Time	Progress	1	Initialize PM&C		PM&C initialized	0:00:25	2012-08-16 11:35:10	100%
ID	Task	Target	Status	Running Time	Start Time	Progress										
1	Initialize PM&C		PM&C initialized	0:00:25	2012-08-16 11:35:10	100%										
<p>10.</p> <input type="checkbox"/>	<p>PM&C GUI: Set the PM&C Application GUI Site Settings</p>	<p>Navigate to GUI page: Main Menu → Administration → GUI Site Settings</p> <p>Set the "Site name" field to a descriptive name</p> <p>Set the "Welcome Message" field that is displayed upon login.</p> <p>Verify values, and click “Update Settings” button when done</p>														
<p>11.</p> <input type="checkbox"/>	<p>Virtual PM&C SSH: Perform PM&C application backup and save backup file</p>	<p>Perform PM&C application backup by executing this command: # pmacadm backup</p> <p>The command output will be similar to this: # PM&C backup been successfully initiated as task ID 7</p> <p><i>Note: The backup runs as a background task. To check the status of the background task use the PM&C GUI Task Monitor page, or issue the command " pmaccli getBgTasks ". The result should eventually be "PM&C Backup successful" and the background task should indicate "COMPLETE".</i></p> <p><i>Note: The "pmacadm backup" command uses a naming convention which includes a date/time stamp in the file name (Example file name: backupPmac_20111025_100251.pef). In the example provided, the backup file name indicates that it was created on 10/25/2011 at 10:02:51 am server time.</i></p> <p>The PM&C backup must be moved to a remote server. Transfer (sftp, scp, rsync, or preferred utility) the PM&C backup file to an appropriate remote server.</p>														

Appendix I.2: Configure PM&C Application

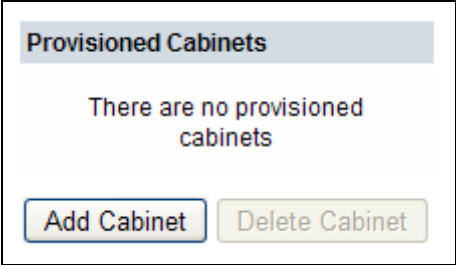
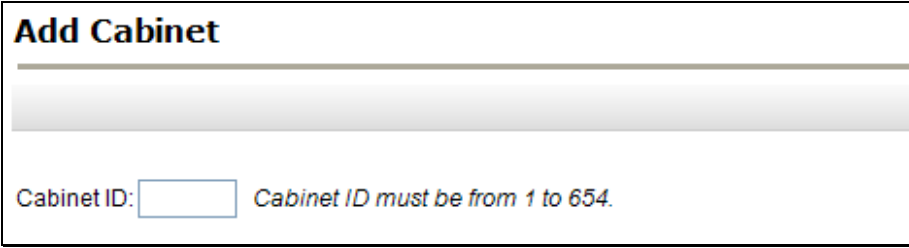
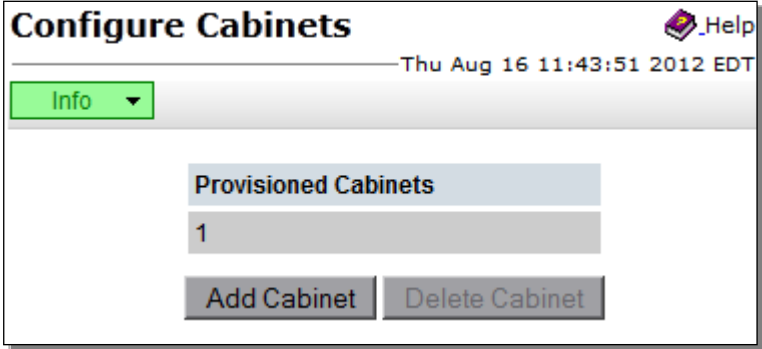
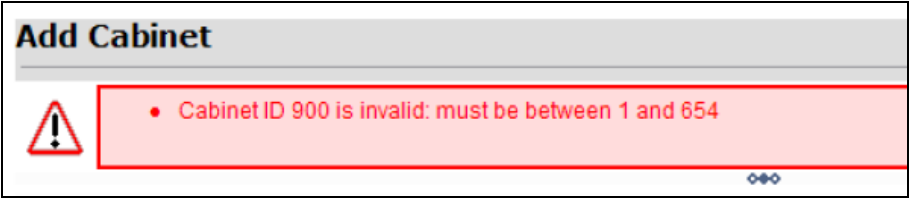
Step	Procedure	Result
THIS PROCEDURE HAS BEEN COMPLETED		

I.3 Add Cabinet to PM&C System Inventory

Appendix I.3: Add Cabinet to PM&C System Inventory

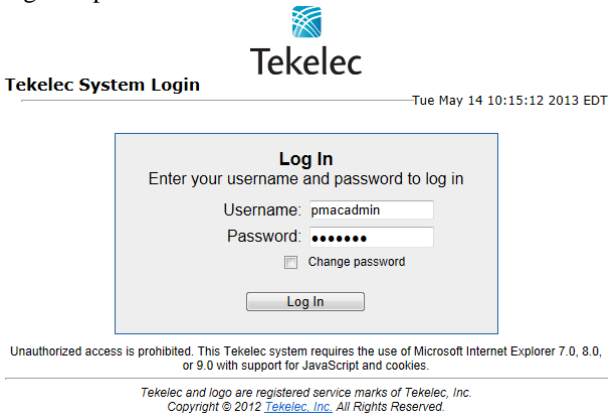
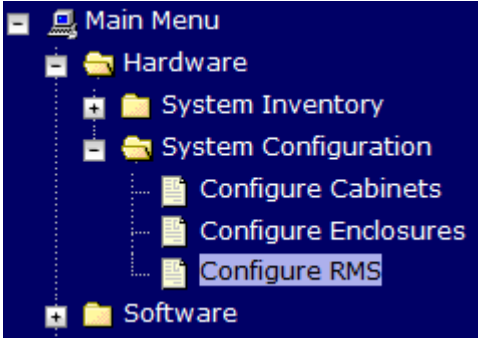
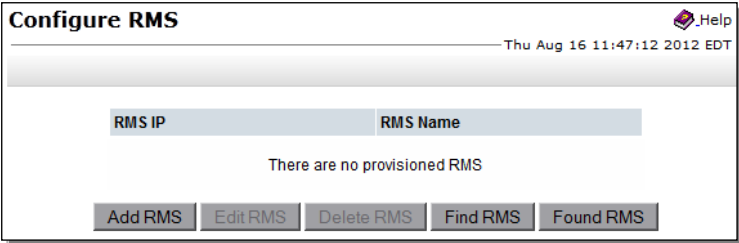
Step	Procedure	Result
1. <input type="checkbox"/>	<p>PM&C GUI: <i>Login to PM&C GUI</i></p>	<p>Open web browser and enter: <a href="http://<pmac_management_network_ip>">http://<pmac_management_network_ip></p> <p>Login as pmacadmin user.</p> 
2. <input type="checkbox"/>	<p>PM&C GUI: <i>Configure Cabinets</i></p>	<p>Navigate to this GUI page: Main Menu → Hardware → System Configuration → Configure Cabinets.</p> 

Appendix I.3: Add Cabinet to PM&C System Inventory

Step	Procedure	Result
<p>3.</p> <input type="checkbox"/>	<p>PM&C GUI: <i>Navigate to Configure Cabinet</i></p>	<p>On the Configure Cabinets panel click on “Add Cabinet” button</p> 
<p>4.</p> <input type="checkbox"/>	<p>PM&C GUI: <i>Enter Cabinet ID</i></p>	<p>Enter the value for CabinetID and press Add Cabinet.</p> 
<p>5.</p> <input type="checkbox"/>	<p>PM&C GUI: <i>Check Errors</i></p>	<p>If no error is reported to the user you will see the following:</p>  <p>Or you will see an error message:</p> 
<p>THIS PROCEDURE HAS BEEN COMPLETED</p>		

I.4 Add Rack Mount Server to PM&C System Inventory

Appendix I.4: Add Rack Mount Server To PM&C System Inventory

Step	Procedure	Result
<p>1.</p> <p><input type="checkbox"/></p>	<p>PM&C GUI:</p> <p><i>Login to PM&C GUI</i></p>	<p>Open web browser and enter: <a href="http://<pmac_management_network_ip>">http://<pmac_management_network_ip></p> <p>Login as pmacadmin user.</p> 
<p>2.</p> <p><input type="checkbox"/></p>	<p>PM&C GUI:</p> <p>Configure RMS</p>	<p>Navigate to this GUI page:</p> <p>Main Menu → Hardware → System Configuration → Configure RMS</p> 
<p>3.</p> <p><input type="checkbox"/></p>	<p>PM&C GUI:</p> <p><i>Add RMS</i></p>	<p>On the Configure Cabinets panel click on Add RMS</p> 

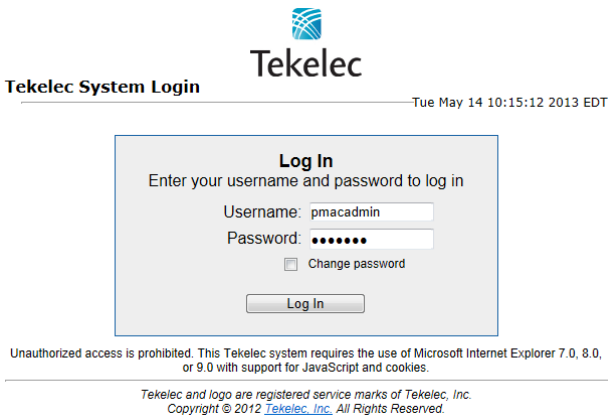
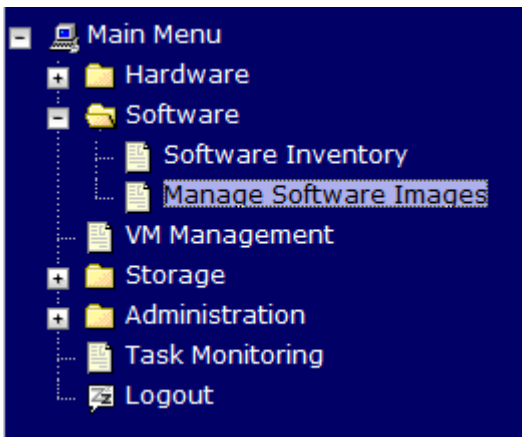
Appendix I.4: Add Rack Mount Server To PM&C System Inventory

Step	Procedure	Result
<p>4.</p> <input type="checkbox"/>	<p>PM&C GUI: <i>Enter RMS Information</i></p>	<p>Enter the management port (iLO) IP Address of the rack mount server (this is the TVOE server upon which the current PM&C is hosted). Enter the User and Password login credentials for the ILO. Then press Add RMS.</p> <div style="border: 1px solid black; padding: 10px;"> <p>Add RMS</p> <hr/> <p>IP: <input type="text"/> *</p> <p>Name: <input type="text"/></p> <p>Cabinet ID: <input type="text"/></p> <p>User: <input type="text"/></p> <p>Password: <input type="password"/></p> <p style="text-align: right;"><input type="button" value="Add RMS"/></p> </div> <p>Note: The PM&C contains default credentials for the management port, however if you know the default credentials will not work to log into the RMS ILO then please enter valid credentials for the rack mount server management port.</p>
<p>5.</p> <input type="checkbox"/>	<p>PM&C GUI: <i>Check Errors</i></p>	<p>If no error is reported to the user you will see the following:</p> <div style="border: 1px solid black; padding: 10px;"> <p>Configure RMS Thu Aug</p> <p>Info ▾</p> <div style="border: 1px solid green; background-color: #e0ffe0; padding: 5px; margin-bottom: 10px;"> <p>Info ✕</p> <p>i • RMS 10.250.35.28 was added to the system.</p> </div> <p>RMS Name <input type="text" value="pc90000632"/></p> <p style="text-align: center;"> <input type="button" value="Add RMS"/> <input type="button" value="Edit RMS"/> <input type="button" value="Delete RMS"/> <input type="button" value="Find RMS"/> <input type="button" value="Found RMS"/> </p> </div>
<p>THIS PROCEDURE HAS BEEN COMPLETED</p>		

Appendix J. Adding Software Images to PM&C Server

This procedure contains steps to add software images to PM&C, including TPD, TVOE, and OCUDR application images.

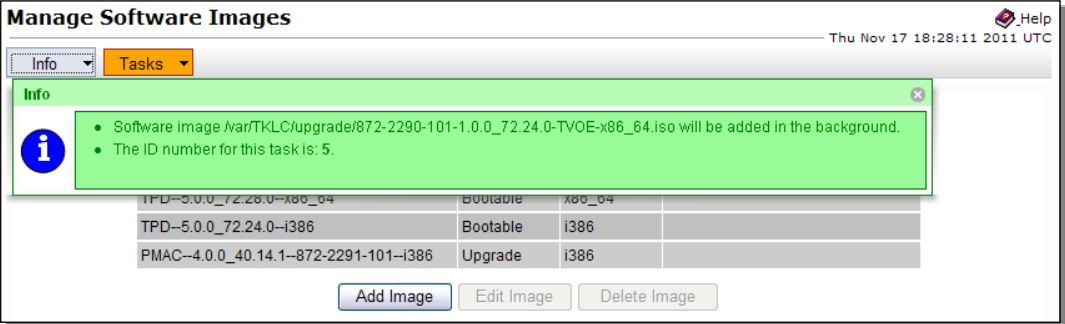
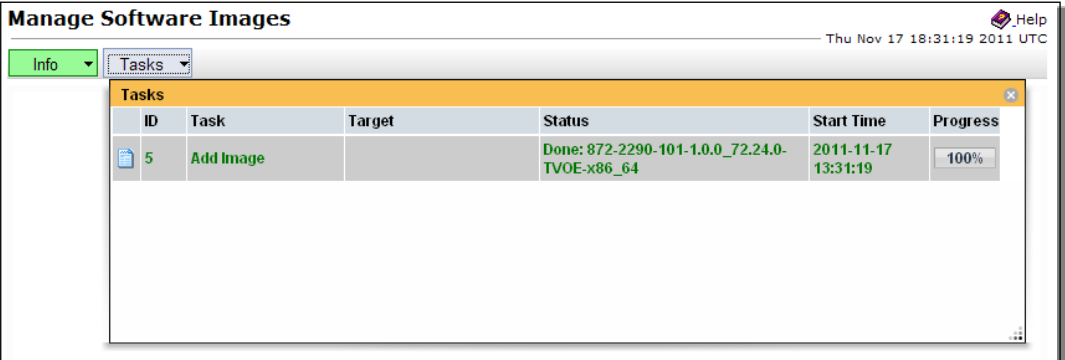
Appendix J: Add Software Images To PM&C Server

Step	Procedure	Result
<p>1.</p> <input type="checkbox"/>	<p>Load TPD ISO image to PM&C server</p>	<p>Use sftp to transfer the iso image to the PM&C server in the <code>/var/TKLC/smac/image/isoimages/home/smacftpusr/</code> directory as pmacftpusr user:</p> <ul style="list-style-type: none"> • Change to the directory where your TPD, TVOE, or OCUDR ISO images are located • Using sftp, connect to the PM&C management server <pre># sftp pmacftpusr@<pmac_management_network_ip> # put <image>.iso</pre> • After the image transfer is 100% complete, close the connection <pre># quit</pre>
<p>2.</p> <input type="checkbox"/>	<p>PM&C GUI: Login to PM&C GUI</p>	<p>Open web browser and enter: <a href="http://<pmac_management_network_ip>">http://<pmac_management_network_ip></p> <p>Login as pmacadmin user.</p> 
<p>3.</p> <input type="checkbox"/>	<p>PM&C GUI: Navigate to Manage Software Images</p>	<p>Navigate to this GUI page: Main Menu → Software → Manage Software Images</p> 

Appendix J: Add Software Images To PM&C Server

Step	Procedure	Result												
<p>4.</p> <p><input type="checkbox"/></p>	<p>PM&C GUI:</p> <p>Add TPD image</p>	<p>Press “Add Image” button.</p> <p>Use the dropdown to select the image.</p> <div style="border: 1px solid black; padding: 10px; margin: 10px 0;"> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 30%;">Image Name</th> <th style="width: 15%;">Type</th> <th style="width: 20%;">Architecture</th> <th style="width: 35%;">Description</th> </tr> </thead> <tbody> <tr> <td colspan="4" style="text-align: center;">There are no images in repository</td> </tr> <tr> <td colspan="3" style="text-align: center;"> <input type="button" value="Add Image"/> <input type="button" value="Edit Image"/> <input type="button" value="Delete Image"/> </td> <td></td> </tr> </tbody> </table> </div> <p>The image transferred to PM&C will appear in the list as a local file "/var/TKLC/...".</p> <div style="border: 1px solid black; padding: 10px; margin: 10px 0;"> <p>Images may be added from any of these sources:</p> <ul style="list-style-type: none"> • Tekelec-provided media in the PM&C host's CD/DVD drive (See Note) • USB media attached to the PM&C's host (See Note) • External mounts. Prefix the directory with "extfile:/". • These local search paths: <ul style="list-style-type: none"> ○ /var/TKLC/upgrade/*.iso ○ /var/TKLC/smac/image/isoimages/home/smacftpusr/*.iso <p>Note: CD and USB images mounted on PM&C's VM host must first be made accessible to the PM&C VM guest. To do this, go to the Media tab of the PM&C guest's View VM Guest page.</p> <p>Path: <input type="text" value="/var/TKLC/smac/image/isoimages/home/smacftpusr/872-2442-107-2.0.0_80.28.1-TVOE-x86_"/></p> <p>Description: <input type="text"/></p> <p style="text-align: center;"><input type="button" value="Add New Image"/></p> </div> <p>Select the appropriate path, enter an appropriate image description and press “Add New Image” button.</p>	Image Name	Type	Architecture	Description	There are no images in repository				<input type="button" value="Add Image"/> <input type="button" value="Edit Image"/> <input type="button" value="Delete Image"/>			
Image Name	Type	Architecture	Description											
There are no images in repository														
<input type="button" value="Add Image"/> <input type="button" value="Edit Image"/> <input type="button" value="Delete Image"/>														

Appendix J: Add Software Images To PM&C Server

Step	Procedure	Result												
<p>5.</p> <input type="checkbox"/>	<p>PM&C GUI: Monitor the Add Image status</p>	<p>The “Manage Software Images” page is then re-displayed with a new background task entry in the table at the top of the page:</p>  <p>The screenshot shows the 'Manage Software Images' interface. A green info box displays the following information:</p> <ul style="list-style-type: none"> Software image <code>/var/TKLC/upgrade/872-2290-101-1.0.0_72.24.0-TVOE-x86_64.iso</code> will be added in the background. The ID number for this task is: 5. <p>Below the info box is a table of software images:</p> <table border="1"> <thead> <tr> <th>Image Name</th> <th>Bootable</th> <th>Architecture</th> </tr> </thead> <tbody> <tr> <td>TPD--5.0.0_72.24.0--x86_64</td> <td>Bootable</td> <td>x86_64</td> </tr> <tr> <td>TPD--5.0.0_72.24.0--i386</td> <td>Bootable</td> <td>i386</td> </tr> <tr> <td>PMAC--4.0.0_40.14.1--872-2291-101--i386</td> <td>Upgrade</td> <td>i386</td> </tr> </tbody> </table> <p>Buttons for 'Add Image', 'Edit Image', and 'Delete Image' are visible at the bottom.</p>	Image Name	Bootable	Architecture	TPD--5.0.0_72.24.0--x86_64	Bootable	x86_64	TPD--5.0.0_72.24.0--i386	Bootable	i386	PMAC--4.0.0_40.14.1--872-2291-101--i386	Upgrade	i386
Image Name	Bootable	Architecture												
TPD--5.0.0_72.24.0--x86_64	Bootable	x86_64												
TPD--5.0.0_72.24.0--i386	Bootable	i386												
PMAC--4.0.0_40.14.1--872-2291-101--i386	Upgrade	i386												
<p>6.</p> <input type="checkbox"/>	<p>PM&C GUI: Wait until the Add Image task finishes</p>	<p>When the task is complete, its text changes to green and its Progress column indicates "100%". Check that the correct image name appears in the Status column:</p>  <p>The screenshot shows the 'Manage Software Images' interface with a 'Tasks' table. The task 'Add Image' is shown as completed with a status of 'Done' and 100% progress.</p> <table border="1"> <thead> <tr> <th>ID</th> <th>Task</th> <th>Target</th> <th>Status</th> <th>Start Time</th> <th>Progress</th> </tr> </thead> <tbody> <tr> <td>5</td> <td>Add Image</td> <td></td> <td>Done: 872-2290-101-1.0.0_72.24.0-TVOE-x86_64</td> <td>2011-11-17 13:31:19</td> <td>100%</td> </tr> </tbody> </table>	ID	Task	Target	Status	Start Time	Progress	5	Add Image		Done: 872-2290-101-1.0.0_72.24.0-TVOE-x86_64	2011-11-17 13:31:19	100%
ID	Task	Target	Status	Start Time	Progress									
5	Add Image		Done: 872-2290-101-1.0.0_72.24.0-TVOE-x86_64	2011-11-17 13:31:19	100%									
<p>7.</p> <input type="checkbox"/>	<p>PM&C GUI: Load OCUDR ISO image to PM&C server</p>	<p>To load OCUDR ISO image to PM&C server, repeat steps 1 through 6 of this Procedure.</p>												
<p>8.</p>	<p>PM&C Server: SSH to Server</p>	<p>SSH to PM&C Server as admusr.</p>												
<p>9.</p>	<p>PM&C Server: Switch to root</p>	<p><code>% sudo su -</code></p>												

Appendix J: Add Software Images To PM&C Server

Step	Procedure	Result
10.	PM&C Server: Create new xml directory	% mkdir -p /usr/TKLC/smac/etc/switch/xml
11.	PM&C Server: Create new backup directory	% mkdir -p /usr/TKLC/smac/etc/switch/backup
12.	PM&C Server: cd to new xml directory	% cd /usr/TKLC/smac/etc/switch/xml
13.	PM&C Server: Follow correct instruction paths based on release	For release 10.0.1_10.16.0, follow steps 14 through 16. For all other releases, follow steps 17 through 20.
14.	PM&C Server: Copy xml zip file	Please download the patch corresponding to Bug 20176264 from MOS (My Oracle Support https://support.oracle.com) and copy to /usr/TKLC/smac/etc/switch/xml. <ul style="list-style-type: none"> • Go to “Patches and Updates” tab on the top of the page • Click on “Product or Family (Advanced) • Choose product as “Oracle Communications User Data Repository” • Select proper release
15.	PM&C Server: Unzip the xml templates	% unzip the contents of the patch
16.	10.16.0 steps complete	PROCEDURE COMPLETED for release 10.0.1_10.16.0
17.	PM&C Server: Mount ISO	% mount /var/TKLC/smac/image/repository/UDR-<release>-x86_64.iso /mnt -o loop
18.	PM&C Server: Copy the xml templates	% cp /mnt/upgrade/overlay/UDR_NetConfig_Templates.zip /usr/TKLC/smac/etc/switch/xml
19.	PM&C Server: Unmount the directory	% umount /mnt
20.	PM&C Server: Unzip the xml templates	% unzip UDR_NetConfig_Templates.zip
THIS PROCEDURE HAS BEEN COMPLETED		

Appendix K. Applying Server Configuration

K.1 Applying Server Configuration with ILO

This procedure contains steps to apply server configuration scripts to rack mount servers.

Appendix K.1: Applying Server Configuration with ILO

Step	In this procedure you will apply server configuration scripts to rack mount servers.	
<p>1.</p> <input type="checkbox"/>	<p>Access the server's ILO VGA.</p>	<p>Connect to the server's ILO VGA using the access method described in Appendix A.</p>
<p>2.</p> <input type="checkbox"/>	<p>ILO Remote Console:</p> <p><i>Mount the media containing the server configuration script.</i></p>	<p>Follow steps defined in ...</p> <p>C.1 Mounting Physical Media on HP Servers</p> <p style="text-align: center;">or</p> <p>C.2 Mounting Virtual Media on HP Servers</p> <p>... to mount the physical (USB) or local (virtual) media containing the server configuration script.</p> <ul style="list-style-type: none"> • “Check off” the associated Check Box as addition is completed for each Server. <p style="text-align: center;"> <input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP -B </p>

Appendix K.1: Applying Server Configuration with ILO

<p>3.</p> <input type="checkbox"/>	<p>ILO Remote Console:</p> <p>Copy the server configuration file to the “/var/tmp” directory on the server, making sure to rename the file by omitting the server hostname from the file name.</p> <p>NOTE: <i>The server will poll the /var/tmp directory for the presence of the configuration file and automatically execute it when found.</i></p>	<p>Example: TKLCConfigData<server_hostname>.sh → will translate to →TKLCConfigData.sh</p> <pre>[root@pc9040833-no-a ~]# cp -p /<mount-point>/TKLCConfigData.NO-A.sh /var/tmp/TKLCConfigData.sh [root@pc9040833-no-a ~]#</pre> <ul style="list-style-type: none"> • “Check off” the associated Check Box as addition is completed for each Server. <p style="text-align: center;"> <input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP -B </p>
<p>4.</p> <input type="checkbox"/>	<p>ILO Remote Console:</p> <p>After the script completes, a broadcast message will be sent to the terminal.</p> <p>Ignore the output shown and press the <ENTER> key to return to the command prompt.</p> <p>NOTE: <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>*** NO OUTPUT FOR ≈ 3-20 MINUTES ***</p> <pre>Broadcast message from root (Thu Dec 1 09:41:24 2011): Server configuration completed successfully! See /var/TKLC/appw/logs/Process/install.log for details. Please remove the USB flash drive if connected and reboot the server. <ENTER> [root@pc9040833-no-a ~]#</pre> <ul style="list-style-type: none"> • “Check off” the associated Check Box as addition is completed for each Server. <p style="text-align: center;"> <input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP -B </p>

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Appendix K.1: Applying Server Configuration with ILO

<p>5.</p> <input type="checkbox"/>	<p>ILO Remote Console:</p> <p>Configure the time zone.</p>	<pre>[root@pc9040833-no-a ~]# set_ini_tz.pl <time zone></pre> <p>Note: The following command example uses America/New_York time zone. Replace, as appropriate, with the time zone you have selected for this installation. For UTC, use "Etc/UTC". See Appendix P for a list of valid time zones.</p> <pre>[root@pc9040833-no-a ~]# set_ini_tz.pl "America/New_York"</pre> <ul style="list-style-type: none"> • “Check off” the associated Check Box as addition is completed for each Server. <p style="text-align: center;"> <input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP -B </p>
<p>6.</p> <input type="checkbox"/>	<p>ILO Remote Console:</p> <p>Initiate a reboot of the OCUDR Server.</p>	<pre>[root@pc9040833-no-a ~]# init 6</pre> <ul style="list-style-type: none"> • “Check off” the associated Check Box as addition is completed for each Server. <p style="text-align: center;"> <input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP -B </p>
<p>7.</p> <input type="checkbox"/>	<p>ILO Remote Console:</p> <p>Output similar to that shown on the right may be observed as the server initiates a post-install reboot.</p>	<pre>scsi7 : SCSI emulation for USB Mass Storage devices scsi8 : SCSI emulation for USB Mass Storage devices input: Intel(R) Multidevice as /class/input/input3 input: USB HID v1.01 Mouse [Intel(R) Multidevice] on usb-0000:00:1 input: Intel(R) Multidevice as /class/input/input4 input: USB HID v1.01 Keyboard [Intel(R) Multidevice] on usb-0000:0 Restarting system. - machine restart █</pre>
<p>8.</p> <input type="checkbox"/>	<p>ILO Remote Console:</p> <p>After the server has completed reboot...</p> <p>Log back into the server as the “root” user.</p>	<pre>CentOS release 5.6 (Final) Kernel 2.6.18-238.19.1.el5prere15.0.0_72.22.0 on an x86_64 hostname1260476221 login: root Password: <root_password></pre>


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Appendix K.1: Applying Server Configuration with ILO

<p>9.</p> <input type="checkbox"/>	<p>ILO Remote Console:</p> <p>Output similar to that shown on the right will appear as the server access the command prompt.</p>	<p>*** TRUNCATED OUTPUT ***</p> <pre> VPATH=/opt/TKLCComcol/runcm5.16:/opt/TKLCComcol/cm5.16 PRODPATH= RELEASE=5.16 RUNID=00 VPATH=/var/TKLC/rundb:/usr/TKLC/appworks:/usr/TKLC/awpcommon:/usr/TKLC/awptransportmgr:/usr/TKLC/awpss7:/usr/TKLC/exhr PRODPATH=/opt/comcol/prod RUNID=00 [root@pc9040833-no-a ~]# </pre> <ul style="list-style-type: none"> • “Check off” the associated Check Box as addition is completed for each Server. <p style="text-align: center;"> <input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP -B </p>
<p>10.</p> <input type="checkbox"/>	<p>ILO Remote Console:</p> <p>Verify that the XMI and IMI IP addresses entered in Procedure 5 Step 19 have been applied.</p> <p>NOTE: For RMS systems XMI and IMI are called by their device names: XMI = eth01 IMI = eth02</p> <p>NOTE: The server's XMI & IMI addresses can be verified by reviewing the server configuration through the OCUDR GUI.</p> <p><i>i.e.</i> <u>Main Menu</u> → Configuration → Servers</p> <p>Scroll to line entry containing the server's hostname.</p>	<pre> [root@pc9040725-no-a ~]# ifconfig grep in grep -v inet6 control Link encap:Ethernet HWaddr 52:54:00:6C:3C:B4 inet addr:192.168.1.11 Bcast:192.168.1.255 Mask:255.255.255.0 imi Link encap:Ethernet HWaddr 52:54:00:F6:DC:4A inet addr:169.254.2.2 Bcast:169.254.2.255 Mask:255.255.255.0 lo Link encap:Local Loopback inet addr:127.0.0.1 Mask:255.0.0.0 xmi Link encap:Ethernet HWaddr 52:54:00:0F:1F:3B inet addr:10.250.39.19 Bcast:10.250.39.31 Mask:255.255.255.240 </pre> <ul style="list-style-type: none"> • “Check off” the associated Check Box as addition is completed for each Server. <p style="text-align: center;"> <input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP -B </p>

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Appendix K.1: Applying Server Configuration with ILO

<p>11.</p> <input type="checkbox"/>	<p>ILO Remote Console:</p> <p>Use the “ntpq” command to verify that the server has connectivity to the assigned Primary and Secondary NTP server(s).</p>	<pre>[root@pc9040725-no-a ~]# ntpq -np remote refid st t when poll reach delay offset jitter ===== *10.250.32.10 192.5.41.209 2 u 651 1024 377 0.339 0.583 0.048 +10.250.32.51 192.5.41.209 2 u 656 1024 377 0.416 0.641 0.086 [root@pc9040725-no-a ~]#</pre> <ul style="list-style-type: none"> • “Check off” the associated Check Box as addition is completed for each Server. <p style="text-align: center;"> <input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP -B </p>
 <p>IF CONNECTIVITY TO THE NTP SERVER(S) CANNOT BE ESTABLISHED, STOP AND EXECUTE THE FOLLOWING STEPS:</p>		
<ul style="list-style-type: none"> • Have the customer IT group provide a network path from the OAM server IP to the assigned NTP IP addresses. <p>ONCE NETWORK CONNECTIVITY IS ESTABLISHED TO THE ASSIGNED NTP IP ADDRESSES, THEN RESTART THIS PROCEDURE BEGINNING WITH STEP 6.</p>		
<p>12.</p> <input type="checkbox"/>	<p>ILO Remote Console:</p> <p>Execute a “alarmMgr” to verify the current health of the server</p>	<pre># alarmMgr --alarmStatus</pre> <p>NOTE: This command should return no output on a healthy system. If any alarms are reported as SNMP traps, please contact MY ORACLE SUPPORT (MOS) for assistance.</p> <ul style="list-style-type: none"> • “Check off” the associated Check Box as addition is completed for each Server. <p style="text-align: center;"> <input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP -B </p>
<p>13.</p> <input type="checkbox"/>	<p>ILO Remote Console:</p> <p>Exit session for the desired server</p>	<pre># exit logout Connection to 192.168.1.16 closed. #</pre> <ul style="list-style-type: none"> • “Check off” the associated Check Box as addition is completed for each Server. <p style="text-align: center;"> <input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP -B </p>
<p>THIS PROCEDURE HAS BEEN COMPLETED</p>		

K.2 Applying Server Configuration with PM&C

This procedure contains steps to apply server configuration scripts to virtual servers.

Appendix K.2: Applying Server Configuration with PM&C

Step	In this procedure you will apply server configuration scripts to virtual servers.	
<p>1.</p> <input type="checkbox"/>	<p>NOAMP Server A:</p> <p>Connect to the NOAMP-A Server terminal at the Primary NOAMP site</p>	<p>Use the Primary NOAMP-A XMI IP_address that was entered in</p> <p>Procedure 11: Configuring NOAMP-A Server (1st NOAMP site only)</p> <hr/> <p>, Step 22.</p> <ul style="list-style-type: none"> • “Check off” the associated Check Box as addition is completed for each Server. <p><input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP-B <input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B</p> <p><input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2 <input type="checkbox"/> MP-3 <input type="checkbox"/> MP-4</p>
<p>2.</p> <input type="checkbox"/>	<p>NOAMP Server A:</p> <p>1) Access the command prompt.</p> <p>2) Log into the Primary NOAMP-A server as the “admusr” user..</p>	<pre>login as: admusr root@10.250.xx.yy's password: <admusr_password> Last login: Mon Jul 30 10:33:19 2012 from 10.25.80.199 \$</pre> <ul style="list-style-type: none"> • “Check off” the associated Check Box as addition is completed for each Server. <p><input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP-B <input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B</p> <p><input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2 <input type="checkbox"/> MP-3 <input type="checkbox"/> MP-4</p>
<p>3.</p> <input type="checkbox"/>	<p>NOAMP Server A:</p> <p>Output similar to that shown on the right will appear as the server access the command prompt.</p>	<p>*** TRUNCATED OUTPUT ***</p> <pre>VPATH=/opt/TKLCcomcol/runcm5.16:/opt/TKLCcomcol/cm5.16 PRODPATH= RELEASE=5.16 RUNID=00 VPATH=/var/TKLC/rundb:/usr/TKLC/appworks:/usr/TKLC/awpcommon:/usr/TKLC/awptransportmgr:/usr/TKLC/awpss7:/usr/TKLC/exhr PRODPATH=/opt/comcol/prod RUNID=00 [admusr@pc9040833-no-a ~]\$</pre> <ul style="list-style-type: none"> • “Check off” the associated Check Box as addition is completed for each Server. <p><input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP-B <input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B</p> <p><input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2 <input type="checkbox"/> MP-3 <input type="checkbox"/> MP-4</p>

Appendix K.2: Applying Server Configuration with PM&C

<p>4.</p> <input type="checkbox"/>	<p>NOAMP Server A:</p> <p>Switch to root user.</p>	<pre>2. [admusr@pc9040833-no-a ~]\$ su - password: <root_password></pre> <ul style="list-style-type: none"> • “Check off” the associated Check Box as addition is completed for each Server. <p> <input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP-B <input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B <input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2 <input type="checkbox"/> MP-3 <input type="checkbox"/> MP-4 </p>
<p>5.</p> <input type="checkbox"/>	<p>NOAMP Server A:</p> <p>Change directory into the file management space</p>	<pre>[root@pc9040833-no-a ~]# cd /var/TKLC/db/filemgmt</pre> <ul style="list-style-type: none"> • “Check off” the associated Check Box as addition is completed for each Server. <p> <input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP-B <input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B <input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2 <input type="checkbox"/> MP-3 <input type="checkbox"/> MP-4 </p>
<p>6.</p> <input type="checkbox"/>	<p>NOAMP Server A:</p> <p>Get a directory listing and find the desired servers configuration files</p> <p>Note: Server names are in red.</p>	<pre>[root@pc9040833-no-a ~]# ls -ltr TKLCConfigData*.sh</pre> <p>*** TRUNCATED OUTPUT ***</p> <pre>-rw-rw-rw- 1 root root 1257 Aug 17 14:01 TKLCConfigData.NOAMP-A.sh -rw-rw-rw- 1 root root 1311 Aug 17 14:30 TKLCConfigData.NO-B.sh</pre> <ul style="list-style-type: none"> • “Check off” the associated Check Box as addition is completed for each Server. <p> <input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP-B <input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B <input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2 <input type="checkbox"/> MP-3 <input type="checkbox"/> MP-4 </p>

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<p>7.</p> <input type="checkbox"/>	<p>NOAMP Server A:</p> <p>Copy the configuration files found in the previous step to the PM&C. server that manages the desired server</p>	<p>Note: The below example shows copying 2 files. Any number of configuration files can be copied in one step.</p> <pre>[root@pc9040833-no-a ~]# scp -p <configuration_file-a> <configuration_file-b> admusr@<Desired_PMAC_IP>:/tmp admusr@10.240.39.4's password: <admusr_password> TKLCConfigData.so-carync-a.sh 100% 1741 1.7KB/s 00:00 TKLCConfigData.so-carync-b.sh 100% 1741 1.7KB/s 00:00 [root@no-mrsvnc-a filemgmt]#</pre> <ul style="list-style-type: none"> • “Check off” the associated Check Box as addition is completed for each Server. <p> <input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP-B <input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B <input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2 <input type="checkbox"/> MP-3 <input type="checkbox"/> MP-4 </p>
<p>8.</p> <input type="checkbox"/>	<p>NOAMP Server A:</p> <p>Exit the ssh session to NOAMP Server A:</p>	<pre>[root@pc9040833-no-a ~]# exit logout Connection to 192.168.1.4 closed. #</pre> <ul style="list-style-type: none"> • “Check off” the associated Check Box as addition is completed for each Server. <p> <input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP-B <input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B <input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2 <input type="checkbox"/> MP-3 <input type="checkbox"/> MP-4 </p>
<p>9.</p> <input type="checkbox"/>	<p>PM&C Server:</p> <p>Connect to the PM&C Server terminal that manages the desired server</p>	<p>Connect to the PM&C server's terminal using one of the access methods described in Section 2.1.2.</p> <ul style="list-style-type: none"> • “Check off” the associated Check Box as addition is completed for each Server. <p> <input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP-B <input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B <input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2 <input type="checkbox"/> MP-3 <input type="checkbox"/> MP-4 </p>

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<p>10.</p> <input type="checkbox"/>	<p>PM&C Server:</p> <p>Copy the server configuration file to the Control IP for the desired server</p> <p>Note: The Control IP is listed in, Procedure 3: Create, IPM and Install Application on all Virtual Machines, Step 12.</p>	<p>Note: The name of the configuration file varies for each server. The output is just an example.</p> <pre>admusr@pmac ~]\$ scp -p /tmp/<configuration_file> admusr@<DesiredServer_Control_IP>:/tmp/ admusr@192.168.1.10's password: <admusr_password> TKLCConfigData.so-carync-a.sh 100% 1741 1.7KB/s 00:00 [root@pmac ~]</pre> <ul style="list-style-type: none"> • “Check off” the associated Check Box as addition is completed for each Server. <p><input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP-B <input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B</p> <p><input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2 <input type="checkbox"/> MP-3 <input type="checkbox"/> MP-4</p>
<p>11.</p> <input type="checkbox"/>	<p>PM&C Server:</p> <p>Connect to the desired server console from the PM&C Server Console</p>	<p>Using an SSH client such as putty, ssh to the virtual server using root credentials and the < Control IP Address> from listed in, Procedure 3: Create, IPM and Install Application on all Virtual Machines, Step 12.</p> <pre>[root@PMAC-pc9040833 ~]# ssh admusr@<DesiredServer_Control_IP> admusr@192.168.1.10's password: <admusr_password></pre> <ul style="list-style-type: none"> • “Check off” the associated Check Box as addition is completed for each Server. <p><input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP-B <input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B</p> <p><input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2 <input type="checkbox"/> MP-3 <input type="checkbox"/> MP-4</p>
<p>12.</p> <input type="checkbox"/>	<p>Desired Server:</p> <p>Output similar to that shown on the right will appear as the server access the command prompt</p>	<p>*** TRUNCATED OUTPUT ***</p> <pre>VPATH=/opt/TKLCcomcol/runcm5.16:/opt/TKLCcomcol/cm5.16 PRODPATH= RELEASE=5.16 RUNID=00 VPATH=/var/TKLC/rundb:/usr/TKLC/appworks:/usr/TKLC/awpcommon:/usr/TKLC/comagent-gui:/usr/TKLC/comagent:/usr/TKLC/exhr PRODPATH=/opt/comcol/prod RUNID=00 [admusr@hostname1326744539 ~]\$</pre> <ul style="list-style-type: none"> • “Check off” the associated Check Box as addition is completed for each Server. <p><input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP-B <input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B</p> <p><input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2 <input type="checkbox"/> MP-3 <input type="checkbox"/> MP-4</p>

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<p>13.</p> <input type="checkbox"/>	<p>Desired Server:</p> <p>Switch to root user.</p>	<pre>[admusr@hostname1326744539 ~]\$ su - password: <root_password></pre> <ul style="list-style-type: none"> • “Check off” the associated Check Box as addition is completed for each Server. <p> <input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP-B <input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B <input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2 <input type="checkbox"/> MP-3 <input type="checkbox"/> MP-4 </p>
<p>14.</p> <input type="checkbox"/>	<p>Desired Server:</p> <p>Copy the server configuration file to the “/var/tmp” directory on the server, making sure to rename the file by omitting the server hostname from the file name.</p> <p>NOTE: <i>The server will poll the /var/tmp directory for the presence of the configuration file and automatically execute it when found.</i></p>	<p>Example:</p> <pre>TKLCConfigData<.server_hostname>.sh → will translate to →TKLCConfigData.sh</pre> <pre>[root@pc9040833-no-a ~]# cp -p /tmp/TKLCConfigData.NO-B.sh /var/tmp/TKLCConfigData.sh [root@pc9040833-no-a ~]#</pre> <ul style="list-style-type: none"> • “Check off” the associated Check Box as addition is completed for each Server. <p> <input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP-B <input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B <input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2 <input type="checkbox"/> MP-3 <input type="checkbox"/> MP-4 </p>
<p>15.</p> <input type="checkbox"/>	<p>Desired Server:</p> <p>After the script completes, a broadcast message will be sent to the terminal.</p> <p>Ignore the output shown and press the <ENTER> key to return to the command prompt.</p> <p>NOTE: <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>*** NO OUTPUT FOR ≈ 3-20 MINUTES ***</p> <pre>Broadcast message from root (Thu Dec 1 09:41:24 2011): Server configuration completed successfully! See /var/TKLC/appw/logs/Process/install.log for details. Please remove the USB flash drive if connected and reboot the server. <ENTER></pre> <pre>[root@pc9040833-no-a ~]#</pre> <ul style="list-style-type: none"> • “Check off” the associated Check Box as addition is completed for each Server. <p> <input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP-B <input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B <input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2 <input type="checkbox"/> MP-3 <input type="checkbox"/> MP-4 </p>

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<p>16.</p> <input type="checkbox"/>	<p>Desired Server:</p> <p>Configure the time zone.</p>	<pre>[root@pc9040833-no-a ~]# set_ini_tz.pl <time zone></pre> <p>Note: The following command example uses America/New_York time zone. Replace, as appropriate, with the time zone you have selected for this installation. For UTC, use "Etc/UTC". See Appendix P for a list of valid time zones.</p> <pre>[root@pc9040833-no-a ~]# set_ini_tz.pl "America/New_York"</pre> <ul style="list-style-type: none"> • “Check off” the associated Check Box as addition is completed for each Server. <p> <input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP-B <input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B <input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2 <input type="checkbox"/> MP-3 <input type="checkbox"/> MP-4 </p>
<p>17.</p> <input type="checkbox"/>	<p>Desired Server:</p> <p>Initiate a reboot of the OCUDR Server.</p>	<pre>[root@pc9040833-no-a ~]# init 6</pre> <ul style="list-style-type: none"> • “Check off” the associated Check Box as addition is completed for each Server. <p> <input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP-B <input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B <input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2 <input type="checkbox"/> MP-3 <input type="checkbox"/> MP-4 </p>
<p>18.</p> <input type="checkbox"/>	<p>PM&C Server:</p> <p>The SSH session for the desired server was terminated by previous step.</p> <p>Output similar to that shown on the right may be observed.</p>	<p>The previous step should cause the ssh session to the desired server to close and user should return to the PM&C server console prompt. The user should see output similar to the below output:</p> <pre>Connection to 192.168.1.16 closed by remote host. Connection to 192.168.1.16 closed. #</pre> <ul style="list-style-type: none"> • “Check off” the associated Check Box as addition is completed for each Server. <p> <input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP-B <input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B <input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2 <input type="checkbox"/> MP-3 <input type="checkbox"/> MP-4 </p>

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<p>19.</p> <input type="checkbox"/>	<p>PM&C Server:</p> <p>Wait until server reboot is done. Then, SSH into the desired server using the Control IP Address.</p> <p>Output similar to that shown on the right may be observed</p>	<p>Wait about 9 minutes until the server reboot is done.</p> <p>Using an SSH client such as putty, ssh to the desired server using root credentials and the <Control IP Address> from listed in Procedure 3, Procedure 3: Create, IPM and Install Application on all Virtual Machines, Step 12.</p> <pre>[root@PMAC-pc9040833 ~]# ssh admusr@192.168.1.xx admusr@192.168.1.20's password: <admusr_password></pre> <p>Note: If the server isn't up, wait a few minutes and re-enter the <code>ssh</code> command. You can also try running the <code>"ping 192.168.1.xx"</code> command to see if the server is up.</p> <ul style="list-style-type: none"> • "Check off" the associated Check Box as addition is completed for each Server. <p><input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP-B <input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B</p> <p><input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2 <input type="checkbox"/> MP-3 <input type="checkbox"/> MP-4</p>
<p>20.</p> <input type="checkbox"/>	<p>Desired Server:</p> <p>Output similar to that shown on the right will appear as the server access the command prompt.</p>	<p>*** TRUNCATED OUTPUT ***</p> <pre>VPATH=/opt/TKLCcomcol/runcm5.16:/opt/TKLCcomcol/cm5.16 PRODPATH= RELEASE=5.16 RUNID=00 VPATH=/var/TKLC/rundb:/usr/TKLC/appworks:/usr/TKLC/awpcommon:/usr/TKLC/awptransportmgr:/usr/TKLC/awpss7:/usr/TKLC/exhr PRODPATH=/opt/comcol/prod RUNID=00 [admusr@pc9040833-no-a ~]\$</pre> <ul style="list-style-type: none"> • "Check off" the associated Check Box as addition is completed for each Server. <p><input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP-B <input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B</p> <p><input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2 <input type="checkbox"/> MP-3 <input type="checkbox"/> MP-4</p>
<p>21.</p> <input type="checkbox"/>	<p>Desired Server:</p> <p>Switch to root user.</p>	<pre>[admusr@hostname1326744539 ~]\$ su - password: <root_password></pre> <ul style="list-style-type: none"> • "Check off" the associated Check Box as addition is completed for each Server. <p><input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP-B <input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B</p> <p><input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2 <input type="checkbox"/> MP-3 <input type="checkbox"/> MP-4</p>

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<p>22.</p> <p><input type="checkbox"/></p>	<p>Desired Server:</p> <p>Verify that the XMI and IMI IP addresses entered in Procedure 5 Step 19 have been applied</p> <p>NOTE: The server's XMI and IMI addresses can be verified by reviewing the server configuration through the OCUDR GUI.</p> <p><i>i.e.</i></p> <p>Main Menu → Configuration → Servers</p> <p>Scroll to line entry containing the server's hostname.</p>	<pre>[root@pc9040725-no-a ~]# ifconfig grep in grep -v inet6 control Link encap:Ethernet HWaddr 52:54:00:6C:3C:B4 inet addr:192.168.1.11 Bcast:192.168.1.255 Mask:255.255.255.0 imi Link encap:Ethernet HWaddr 52:54:00:F6:DC:4A inet addr:169.254.2.2 Bcast:169.254.2.255 Mask:255.255.255.0 lo Link encap:Local Loopback inet addr:127.0.0.1 Mask:255.0.0.0 xmi Link encap:Ethernet HWaddr 52:54:00:0F:1F:3B inet addr:10.250.39.19 Bcast:10.250.39.31 Mask:255.255.255.240</pre> <ul style="list-style-type: none"> • “Check off” the associated Check Box as addition is completed for each Server. <p><input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP-B <input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B</p> <p><input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2 <input type="checkbox"/> MP-3 <input type="checkbox"/> MP-4</p>
<p>23.</p> <p><input type="checkbox"/></p>	<p>Desired Server:</p> <p>Use the “ntpq” command to verify that the server has connectivity to the assigned Primary and Secondary NTP server(s).</p>	<pre>[root@pc9040725-no-a ~]# ntpq -np remote refid st t when poll reach delay offset jitter ===== ***** *10.250.32.10 192.5.41.209 2 u 651 1024 377 0.339 0.583 0.048 +10.250.32.51 192.5.41.209 2 u 656 1024 377 0.416 0.641 0.086 [root@pc9040725-no-a ~]#</pre> <ul style="list-style-type: none"> • “Check off” the associated Check Box as addition is completed for each Server. <p><input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP-B <input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B</p> <p><input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2 <input type="checkbox"/> MP-3 <input type="checkbox"/> MP-4</p>
<div style="display: flex; align-items: center;">  <p>IF CONNECTIVITY TO THE NTP SERVER(S) CANNOT BE ESTABLISHED, STOP AND EXECUTE THE FOLLOWING STEPS:</p> </div>		

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Appendix K.2: Applying Server Configuration with PM&C

	<ul style="list-style-type: none"> Have the customer IT group provide a network path from the OAM server IP to the assigned NTP IP addresses. <p>ONCE NETWORK CONNECTIVITY IS ESTABLISHED TO THE ASSIGNED NTP IP ADDRESSES, THEN RESTART THIS PROCEDURE BEGINNING WITH STEP 17</p>	
<p>24.</p> <input type="checkbox"/>	<p>Desired Server:</p> <p>Execute a “alarmMgr” to verify the current health of the server</p>	<pre># alarmMgr --alarmStatus</pre> <p>NOTE: This command should return no output on a healthy system. If any alarms are reported as SNMP traps, please contact MY ORACLE SUPPORT (MOS) for assistance.</p> <ul style="list-style-type: none"> “Check off” the associated Check Box as addition is completed for each Server. <p> <input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP-B <input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B <input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2 <input type="checkbox"/> MP-3 <input type="checkbox"/> MP-4 </p>
<p>25.</p> <input type="checkbox"/>	<p>Desired Server:</p> <p>Exit the SSH session for the desired server</p>	<pre># exit logout Connection to 192.168.1.16 closed. #</pre> <ul style="list-style-type: none"> “Check off” the associated Check Box as addition is completed for each Server. <p> <input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP-B <input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B <input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2 <input type="checkbox"/> MP-3 <input type="checkbox"/> MP-4 </p>
<p>26.</p> <input type="checkbox"/>	<p>PM&C Server:</p> <p>Optional Step: If the desired server is managed by a different PM&C server, do this step.</p> <p>Exit the SSH session for the second PM&C server</p>	<pre># exit logout Connection to 192.168.1.4 closed. #</pre> <ul style="list-style-type: none"> “Check off” the associated Check Box as addition is completed for each Server. <p> <input type="checkbox"/> NOAMP-A <input type="checkbox"/> NOAMP-B <input type="checkbox"/> SOAM-A <input type="checkbox"/> SOAM-B <input type="checkbox"/> MP-1 <input type="checkbox"/> MP-2 <input type="checkbox"/> MP-3 <input type="checkbox"/> MP-4 </p>
<p>27.</p> <input type="checkbox"/>	Repeat steps 1 - 26 for each remaining server	
<p>28.</p> <input type="checkbox"/>	<p>PM&C Server:</p> <p>Close PM&C Server Console</p>	<p>PM&C Server:</p> <p>Close PM&C Server Console</p>

THIS PROCEDURE HAS BEEN COMPLETED

Appendix L. Configure TVOE Network

This procedure contains steps to apply server configuration scripts to virtual servers.

L.1 Configure TVOE Network for Normal or Low Capacity C-Class Configurations

This procedure will configure the network on TVOE servers that will host SOAM and MP VM Guests. (Normal capacity configuration) or NOAMP/SOAM and MP VM Guests (Low capacity configuration).





Requirements:

- An understanding of the topology being deployed, as outlined in reference [6].
- Interconnects should conform to reference [6].

Appendix L.1: Configure TVOE Server Network

Step	Procedure	Result
1. <input type="checkbox"/>	Access the server's console.	Connect to the tvoe server's console using one of the access methods described in Section 2.1.2. (switch to root user)
2. <input type="checkbox"/>	TVOE server: Add VLAN for XMI	<pre># netAdm add --device=bond0.<xmi_vlan> Interface bond0.# added</pre>
3. <input type="checkbox"/>	TVOE server: Add VLAN for IMI	<pre># netAdm add --device=bond0.<imi_vlan> Interface bond0.# added</pre>
4.	TVOE server: Add VLAN for management	<p>Note: Some lab deployments may host TVOE and PMAC on the XMI network/bridge instead of a separate routable management. This step is only required if the deployment has a separate management network.</p> <pre># netAdm add --device=bond0.<management_vlan> Interface bond0.# added</pre>

Appendix L.1: Configure TVOE Server Network

Step	Procedure	Result
<p>5.</p> <p><input type="checkbox"/></p>	<p>TVOE server:</p> <p><i>Topology Check</i></p>	<p><u>The next steps will depend on your system topology. If you are unfamiliar with which topology you are deploying, access your Onboard Administrator (OA) web interface and look at "Rack Overview."</u></p> <p><u>This will present the rear view of the enclosure.</u></p> <p><u>Highlighted in red are a single pair of enclosure switches on a Topology 1/1A system:</u></p> <div> <p>Rack Topology Rack Power and Thermal</p> <hr/> <p>Enclosure: xgSDM-6_and_xgSDM-7</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>Front View</p>  </div> <div style="text-align: center;"> <p>Rear View</p>  </div> </div> </div> <p><u>Highlighted in red are two pairs of enclosure switches on a Topology 4/4A system:</u></p> <div> <p>Rack Topology Rack Power and Thermal</p> <hr/> <p>Enclosure: 121_08_23_xgSDM5_Site1</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>Front View</p>  </div> <div style="text-align: center;"> <p>Rear View</p>  </div> </div> </div>

Appendix L.1: Configure TVOE Server Network

Step	Procedure	Result
6. <input type="checkbox"/>	TVOE server: Add bond for signalling [Topology 4 only]	Topology 4 and Topology 4A ONLY: Deployments with two pairs of enclosure switches (Topology 4 and Topology 4A in reference [6]) will host XSI on bond1 : # netAdm add --device=bond1 --onboot=yes --bootproto=none Interface bond1 added
7. <input type="checkbox"/>	TVOE server: Bond interfaces eth11 and eth12 for signalling [Topology 4 only]	Topology 4 and Topology 4A ONLY: Deployments with two pairs of enclosure switches (Topology 4 and Topology 4A in reference [6]) will host XSI on bond1 : # netAdm set --device=bond1 --bondInterfaces=eth11,eth12 Interface bond1 updated
8. <input type="checkbox"/>	TVOE server: Add VLAN for XSI-1	Deployments with only one pair of enclosure switches (Topology 1 and Topology 1A in reference [6]) will create XSI VLAN on bond0 : # netAdm add --device=bond0.<xsi1_vlan> Interface bond0.# added . . . OR . . . Deployments with two pairs of enclosure switches (Topology 4 and Topology 4A in reference [6]) will create XSI VLAN on bond1 : # netAdm add --device=bond1.<xsi1_vlan> Interface bond1.# added
9. <input type="checkbox"/>	Repeat Step 8 for additional XSI networks if they are present, each using its own unique <xsi_vlan> number.	
10. <input type="checkbox"/>	TVOE server: Add bridge network for XMI	# netAdm add --name=xmi --type=Bridge --bridgeInterface=bond0.<xmi_vlan> Bridge xmi added!
11. <input type="checkbox"/>	TVOE server: Add bridge network for IMI	# netAdm add --name=imi --type=Bridge --bridgeInterface=bond0.<imi_vlan> Bridge imi added!
12.	TVOE server: Add bridge network for management	Note: Some lab deployments may host TVOE and PMAC on the XMI network/bridge instead of a separate routable management. This step is only required if the deployment has a separate management network. # netAdm add --name=management --type=Bridge \ --bridgeInterface=bond0.<management_vlan> Bridge management added!

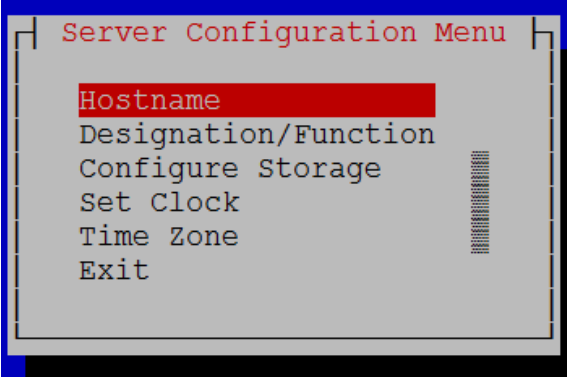
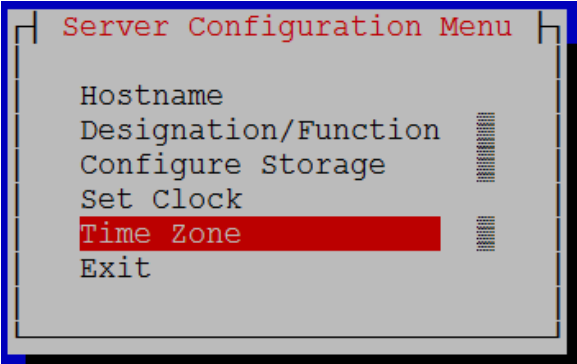
Appendix L.1: Configure TVOE Server Network

Step	Procedure	Result
13. <input type="checkbox"/>	TVOE server: Add bridge network for XSI-1	Deployments with only one pair of enclosure switches (Topology 1 and Topology 1A in reference [6]) will create XSI VLAN on bond0 : # netAdm add --name=xsil --type=Bridge \ --bridgeInterface=bond0.<xsil_vlan> Bridge xsil added! . . . or . . . Deployments with two pairs of enclosure switches (Topology 4 and Topology 4A in reference [6]) will create XSI VLAN on bond1 : # netAdm add --name=xsil --type=Bridge \ --bridgeInterface=bond1.<xsil_vlan> Bridge xsil added!
14. <input type="checkbox"/>	Repeat Step 13 for additional XSI networks if they are present, each using its own unique <xsil_vlan> number.	
15.	Execute steps 16 and 17 if lab deployment hosts TVOE and PMAC on the XMI network/bridge.	
16. <input type="checkbox"/>	TVOE server: Assign TVOE host an address on XMI network	# netAdm set --type=Bridge --name=xmi --bootproto=none \ --address=<TVOE_XMI_address> --netmask=<tvoe_xmi_netmask> Bridge XMI updated!
17. <input type="checkbox"/>	TVOE Server: Add the default route to XMI	# netAdm add --route=default --gateway=<xmi_default_route_ip> \ --device=xmi Route to XMI added!
18.	Execute steps 19 and 20 if lab deployment hosts TVOE and PMAC on a separate routable management network.	
19.	TVOE server: Assign TVOE host an address on management network	# netAdm set --type=Bridge --name=management --bootproto=none \ --address=<TVOE_management_address> --netmask=<management_netmask> Bridge management updated!
20.	TVOE Server: Add the default route to management	# netAdm add --route=default -- gateway=<management_default_route_ip> \ --device=management Route to management added

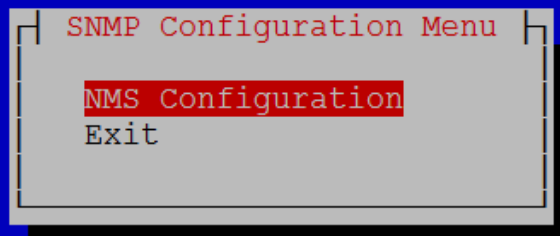
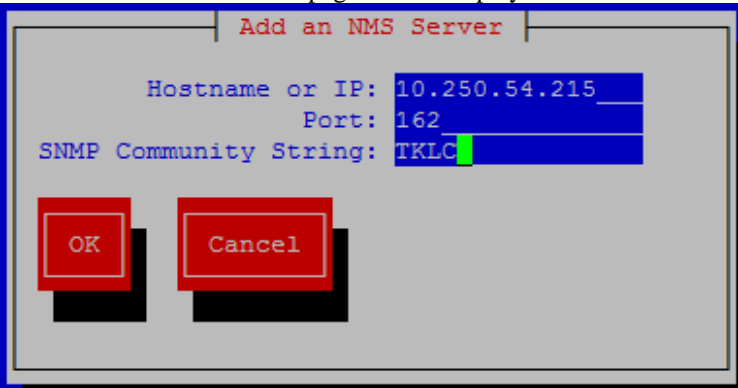
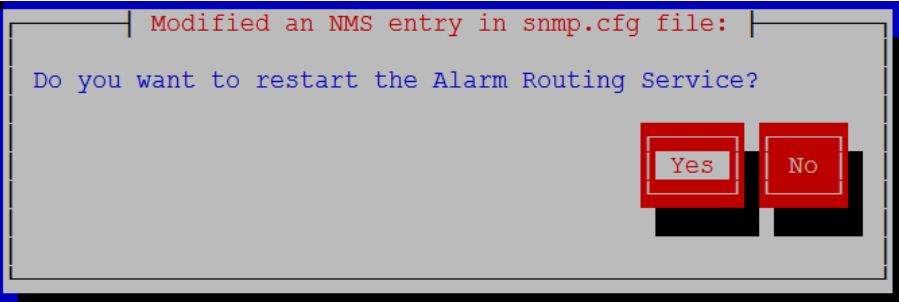
Appendix L.1: Configure TVOE Server Network

Step	Procedure	Result
<p>21.</p> <p><input type="checkbox"/></p>	<p>TVOE Server:</p> <p>Restart the network on the server</p> <p>Note: Output similar to that shown on the right may be observed</p>	<p>Restart the network interfaces:</p> <pre># service network restart</pre> <pre>Shutting down interface control: [OK] Shutting down interface imi: [OK] Shutting down interface management: [OK] Shutting down interface xmi: [OK] Shutting down interface xsil: [OK] Shutting down interface xsil: [OK] Shutting down interface bond0.2: [OK] Shutting down interface bond0.3: [OK] Shutting down interface bond0.4: [OK] Shutting down interface bond0.5: [OK] Shutting down interface bond0.6: [OK] Shutting down loopback interface: [OK] Bringing up loopback interface: [OK] Bringing up interface bond0: [OK] Bringing up interface bond0.2: [OK] Bringing up interface bond0.3: [OK] Bringing up interface bond0.4: [OK] Bringing up interface bond0.5: [OK] Bringing up interface bond0.6: [OK] Bringing up interface control: [OK] Determining IP information for control... done. Bringing up interface imi: [OK] Bringing up interface management: Determining if ip address 10.240.55.190 is already in use for device management... [OK] Bringing up interface xmi: [OK] Bringing up interface xsil: [OK] Bringing up interface xsi2: [OK]</pre> <p>Note: If the output returns any errors like FAILED, please stop and contact My Oracle Support (MOS) before continuing.</p>

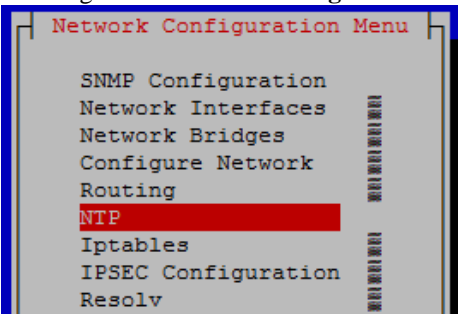
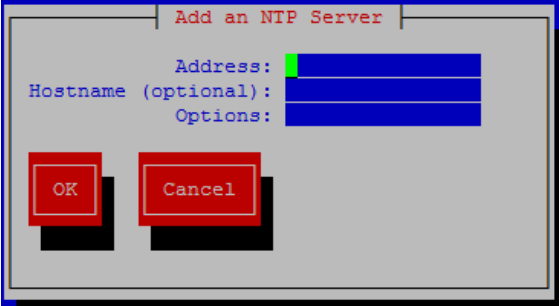
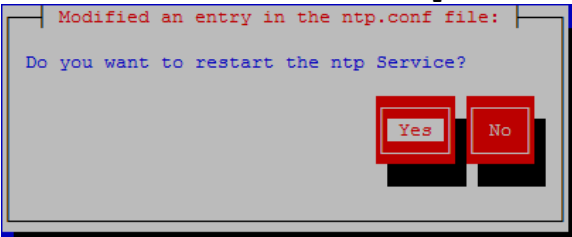
Appendix L.1: Configure TVOE Server Network

Step	Procedure	Result
<p>22.</p> <input type="checkbox"/>	<p>TVOE Server: Set Hostname</p>	<p>Set the server hostname by running the following: # <code>su - platcfg</code></p> <ol style="list-style-type: none"> 1. Navigate to Server Configuration > Hostname  <ol style="list-style-type: none"> 2. Select Edit 3. Set TVOE Management Server hostname 4. Press OK. 5. Navigate out of Hostname
<p>23.</p> <input type="checkbox"/>	<p>TVOE Server: Set Time Zone and/or Hardware Clock</p>	<p>Set the time zone and/or hardware clock</p> <ol style="list-style-type: none"> 1. Navigate to Server Configuration > Time Zone  <ol style="list-style-type: none"> 2. Select Edit. 3. Select the time zone and hit [enter]. 4. Set hardware clock to GMT? [Select NO and enter] 5. Navigate out of Server Configuration

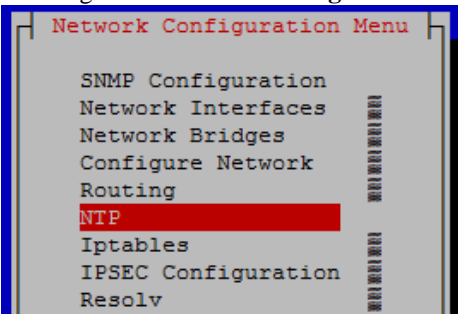
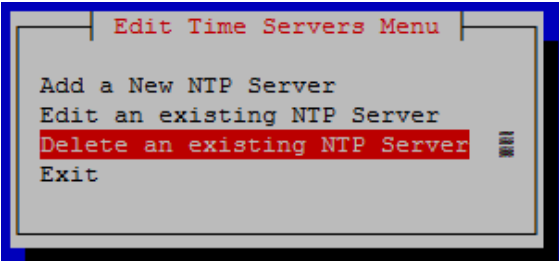
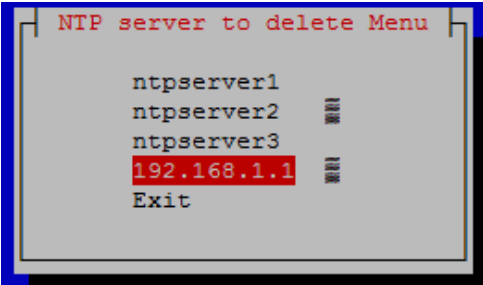
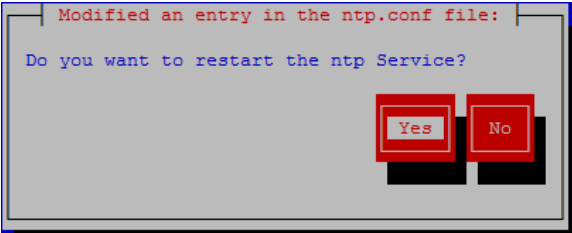
Appendix L.1: Configure TVOE Server Network

Step	Procedure	Result
<p>24.</p> <p><input type="checkbox"/></p>	<p>TVOE Server:</p> <p>Configure SNMP trap destination</p>	<p>Configure SNMP trap destination.</p> <ol style="list-style-type: none"> Navigate to Network Configuration > SNMP Configuration > NMS Configuration.  <p>The screenshot shows a terminal window titled "SNMP Configuration Menu" with the following text: "NMS Configuration" and "Exit".</p> <ol style="list-style-type: none"> Select Edit and then choose 'Add a New NMS Server'. The 'Add an NMS Server' page will be displayed.  <p>The screenshot shows a dialog box titled "Add an NMS Server" with the following text: "Hostname or IP: 10.250.54.215", "Port: 162", and "SNMP Community String: TKLC". There are "OK" and "Cancel" buttons at the bottom.</p> <ol style="list-style-type: none"> Complete the form by entering in all information about the SNMP trap destination. Select OK to finalize the configuration and exit out. The 'NMS Server Action Menu' will now be displayed. Select Exit. The following dialogue will then be presented:  <p>The screenshot shows a dialog box titled "Modified an NMS entry in snmp.cfg file:" with the text: "Do you want to restart the Alarm Routing Service?". There are "Yes" and "No" buttons at the bottom.</p> <ol style="list-style-type: none"> Select Yes and then wait a few seconds while the Alarm Routing Service is restarted. At that time the SNMP Configuration Menu will be presented. [exit out of this] <p><i>Note: All alarm information will then be sent to the NMS located at the destination.</i></p>

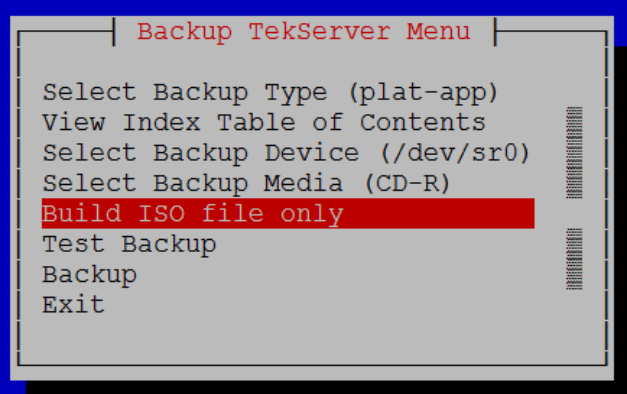
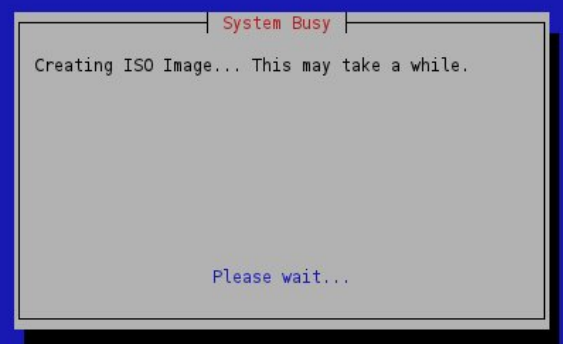
Appendix L.1: Configure TVOE Server Network

Step	Procedure	Result
<p>25.</p> <p><input type="checkbox"/></p>	<p>TVOE Server:</p> <p>Configure NTP as NOAMP-A or Customer-provided IP Address</p>	<ol style="list-style-type: none"> Navigate to Network Configuration > NTP.  <ol style="list-style-type: none"> Select Edit, then “Add a New NTP Server.” Enter the XMI IP Address of the NOAMP-A server. (Customer-provided for Low Capacity C-Class Systems)  <ol style="list-style-type: none"> Select OK. Select Exit. Select Yes to restart ntp Service.  <ol style="list-style-type: none"> Select Exit to leavemenu.

Appendix L.1: Configure TVOE Server Network

Step	Procedure	Result
<p>26.</p> <p><input type="checkbox"/></p>	<p>TVOE Server:</p> <p>Delete default NTP server.</p>	<ol style="list-style-type: none"> Navigate to Network Configuration > NTP.  <ol style="list-style-type: none"> Select Edit, then “Delete an existing NTP Server.”  <ol style="list-style-type: none"> Select the 192.168.1.1 server.  <ol style="list-style-type: none"> Hit Enter. Select Exit. Select Yes to restart ntp Service.  <ol style="list-style-type: none"> Select Exit twice to leave platcfg.
<p>27.</p> <p><input type="checkbox"/></p>	<p>TVOE Server:</p> <p>Reboot the server</p>	<p>Reboot the server:</p> <pre># init 6</pre> <p>Wait until the reboot completes and re-login with TVOE root credentials.</p>

Appendix L.1: Configure TVOE Server Network

Step	Procedure	Result
<p>28.</p> <input type="checkbox"/>	<p>TVOE Server: Verify server health</p>	<p>Verify server health: # <code>alarmMgr -alarmStatus</code></p> <p><i>Note: This command should return no output on a healthy system. If any alarms are reported, please stop and contact My Oracle Support (MOS) before continuing.</i></p>
<p>29.</p> <input type="checkbox"/>	<p>TVOE Server: Perform a TVOE backup</p>	<p>Login as platcfg user. The platcfg main menu will be shown</p> <p># <code>su - platcfg</code></p> <ol style="list-style-type: none"> 1. Navigate to Maintenance > Backup and Restore > Backup Platform (CD/DVD) 2. The 'Backup TekServer Menu' page will now be shown.  <ol style="list-style-type: none"> 3. Select Build ISO file only. <p><i>Note: Creating the ISO image may happen so quickly that this screen may only appear for an instant.</i></p>  <ol style="list-style-type: none"> 4. After the ISO is created, platcfg will return to the Backup TekServer Menu as shown in step 2. 5. The ISO has been created and is located in the <code>/var/TKLC/bkp/</code> directory. An example filename of a backup file that was created is: <code>"hostname1307466752-plat-app-201104171705.iso"</code> 6. Exit platcfg.

Appendix L.1: Configure TVOE Server Network

Step	Procedure	Result
30. <input type="checkbox"/>	<p>Customer Server SSH:</p> <p>Copy backup image to the customer server</p>	<p>Login to the customer server and copy backup image to the customer server where it can be safely stored.</p> <p>If the customer system is a Linux system, please execute the following command to copy the backup image to the customer system.</p> <pre># scp tvoexfer@<TVOE_IP_Address>:backup/* /path/to/destination/</pre> <p>When prompted, enter the tvoexfer user password and press Enter.</p> <p>An example of the output looks like:</p> <pre># scp tvoexfer@<TVOE IP Address>:backup/* /path/to/destination/ tvoexfer@10.24.34.73's password: hostname1301859532-plat-app-301104171705.iso 100% 134MB 26.9MB/s 00:05</pre> <p>The TVOE backup file has now been successfully placed on the Customer System.</p>
THIS PROCEDURE HAS BEEN COMPLETED		

L.2 Configure TVOE Network without Interface Bonding

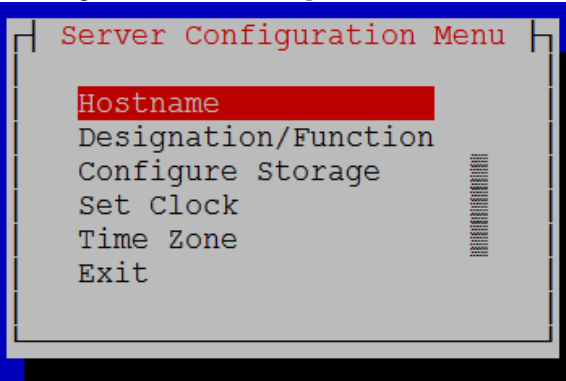
Note: This section presents a recommendation to accommodate lab environments that, due to equipment constraint, do not have the support of switches capable of providing bonded interfaces. **This configuration is not meant or implied to be an officially supported topology for OCUDR deployments.**

Note: Interconnects should conform to **Section 8** of reference [6].

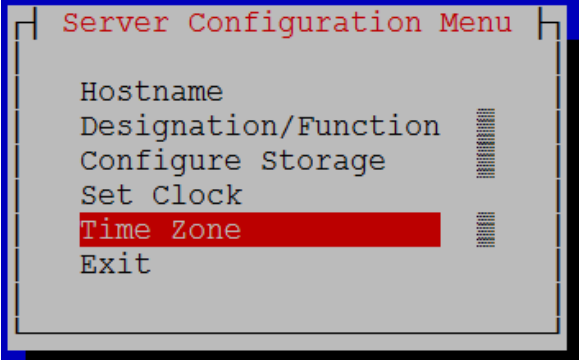
Appendix L.2: Configure TVOE Server Network without Interface Bonding

Step	Procedure	Result
1. <input type="checkbox"/>	Access the HP DL380 server's console.	Connect to the HP DL380 server's console using one of the access methods described in Section 2.1.2. (switch to root user)
2. <input type="checkbox"/>	<p>TVOE server:</p> <p>Delete bond0</p>	<pre># netAdm delete --device=bond0</pre>
3. <input type="checkbox"/>	<p>TVOE server:</p> <p>Create XSI1</p>	<pre># netAdm add --name=xsi1 --type=Bridge --bridgeInterface=eth03</pre>

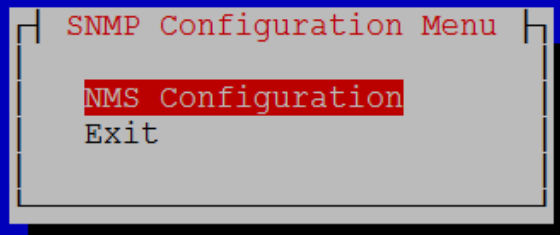
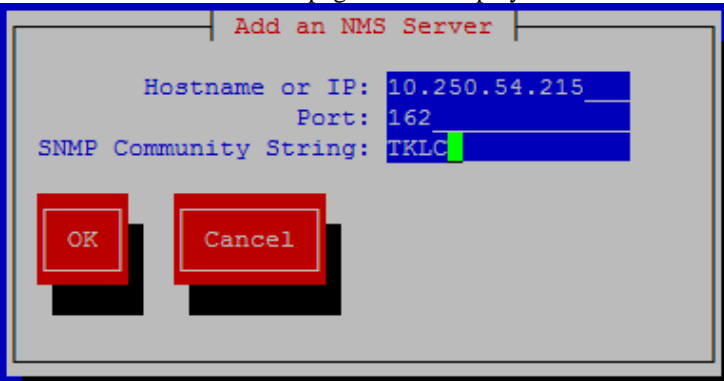
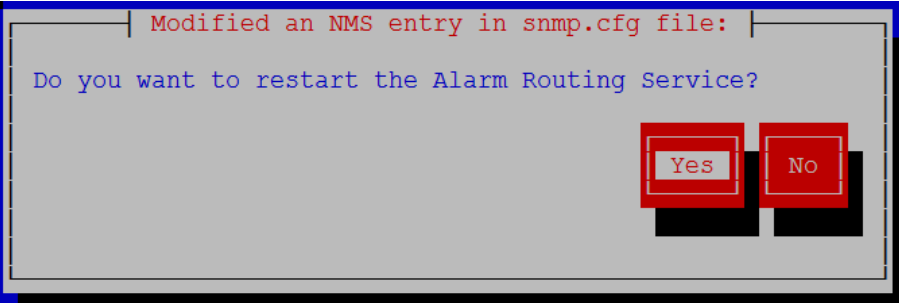
Appendix L.2: Configure TVOE Server Network without Interface Bonding

Step	Procedure	Result
<p>4.</p> <input type="checkbox"/>	<p>TVOE server: <i>(optional)</i> Create XSI2</p>	<p>Optional: For deployments with a second XSI interface, create it now. # netAdm add --name=xsi2 --type=Bridge --bridgeInterface=eth04</p>
<p>5.</p> <input type="checkbox"/>	<p>TVOE server: Create IMI</p>	<p># netAdm add --name=imi --type=Bridge --bridgeInterface=eth02</p>
<p>6.</p> <input type="checkbox"/>	<p>TVOE server: Create XMI</p>	<p># netAdm add --name=xmi --type=Bridge --bridgeInterface=eth01 \ --bootproto=none --address=<TVOE_XMI_address> \ --netmask=<tvoe_xmi_netmask></p>
<p>7.</p> <input type="checkbox"/>	<p>TVOE Server: Add the default route to XMI</p>	<p># netAdm add --route=default --gateway=<xmi_default_route_ip> \ --device=xmi</p>
<p>8.</p> <input type="checkbox"/>	<p>TVOE Server: Restart the network on the server Note: Output similar to that shown on the right may be observed</p>	<p>Restart the network interfaces: # service network restart Note: If the output returns any errors like FAILED, please stop and contact My Oracle Support (MOS) before continuing.</p>
<p>9.</p> <input type="checkbox"/>	<p>TVOE Server: Set Hostname</p>	<p>Set the server hostname by running the following: # su - platcfg 1. Navigate to Server Configuration > Hostname  2. Select Edit 3. Set TVOE Management Server hostname 4. Press OK. 5. Navigate out of Hostname</p>

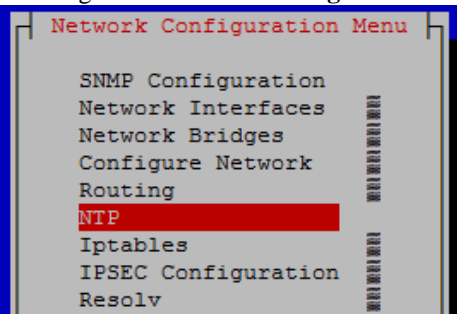
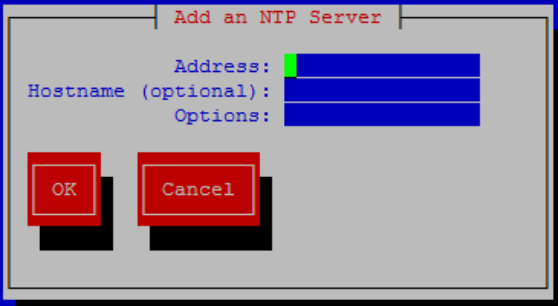
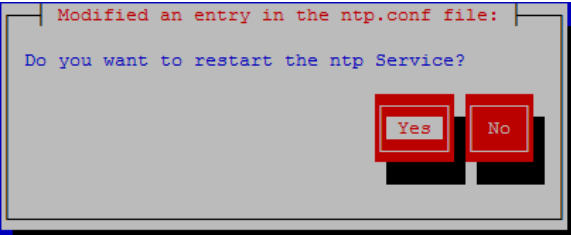
Appendix L.2: Configure TVOE Server Network without Interface Bonding

Step	Procedure	Result
<p>10.</p> <input type="checkbox"/>	<p>TVOE Server: Set Time Zone and/or Hardware Clock</p>	<p>Set the time zone and/or hardware clock</p> <ol style="list-style-type: none"> 1. Navigate to <i>Server Configuration > Time Zone</i>  <p>The screenshot shows a terminal window titled "Server Configuration Menu". The menu items are: Hostname, Designation/Function, Configure Storage, Set Clock, Time Zone (highlighted with a red bar), and Exit. There are small vertical lists of options on the right side of the menu.</p> <ol style="list-style-type: none"> 2. Select Edit. 3. Set the time zone and/or hardware clock. 4. Press OK. 5. Navigate out of Server Configuration

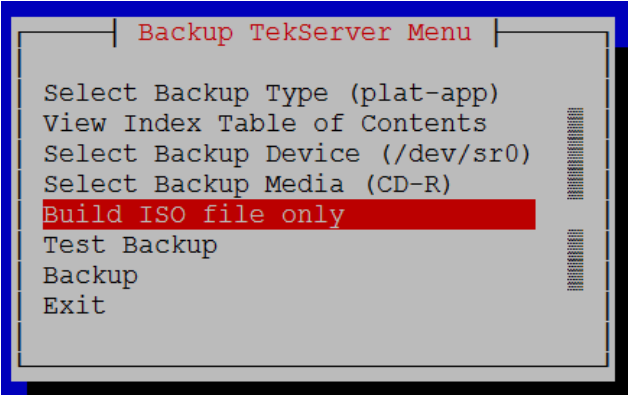
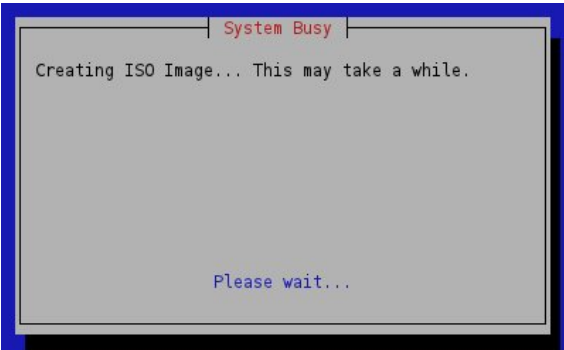
Appendix L.2: Configure TVOE Server Network without Interface Bonding

Step	Procedure	Result
<p>11.</p> <p><input type="checkbox"/></p>	<p>TVOE Server:</p> <p>Configure SNMP trap destination</p>	<p>Configure SNMP trap destination.</p> <ol style="list-style-type: none"> Navigate to Network Configuration > SNMP Configuration > NMS Configuration.  <p>The screenshot shows a terminal window titled "SNMP Configuration Menu" with the following options: "NMS Configuration" (highlighted in red) and "Exit".</p> <ol style="list-style-type: none"> Select Edit and then choose 'Add a New NMS Server'. The 'Add an NMS Server' page will be displayed.  <p>The screenshot shows a form titled "Add an NMS Server" with the following fields: "Hostname or IP: 10.250.54.215", "Port: 162", and "SNMP Community String: TKLC". There are "OK" and "Cancel" buttons at the bottom.</p> <ol style="list-style-type: none"> Complete the form by entering in all information about the SNMP trap destination. Select OK to finalize the configuration. The 'NMS Server Action Menu' will now be displayed. Select Exit. The following dialogue will then be presented:  <p>The screenshot shows a dialog box titled "Modified an NMS entry in snmp.cfg file:" with the question "Do you want to restart the Alarm Routing Service?" and "Yes" and "No" buttons.</p> <ol style="list-style-type: none"> Select Yes and then wait a few seconds while the Alarm Routing Service is restarted. At that time the SNMP Configuration Menu will be presented. <p><i>Note: All alarm information will then be sent to the NMS located at the destination.</i></p>

Appendix L.2: Configure TVOE Server Network without Interface Bonding

Step	Procedure	Result
<p>12.</p> <p><input type="checkbox"/></p>	<p>TVOE Server:</p> <p>Configure NTP NOAMP-A</p>	<ol style="list-style-type: none"> 1. Navigate to Network Configuration > NTP.  <ol style="list-style-type: none"> 2. Select Edit, then “Add a New NTP Server.” 3. Enter the XMI IP Address of the NOAMP-A server. . (Customer-provided for Low Capacity Systems)  <ol style="list-style-type: none"> 4. Select OK. 5. Select Exit. 6. Select Yes to restart ntp Service.  <ol style="list-style-type: none"> 7. Select Exit twice to leave platcfg.
<p>13.</p> <p><input type="checkbox"/></p>	<p>TVOE Server:</p> <p>Reboot the server</p>	<p>Reboot the server:</p> <pre># init 6</pre> <p>Wait until the reboot completes and re-login with TVOE root credentials.</p>
<p>14.</p> <p><input type="checkbox"/></p>	<p>TVOE Server:</p> <p>Verify server health</p>	<p>Verify server health:</p> <pre># alarmMgr -alarmStatus</pre> <p><i>Note: This command should return no output on a healthy system. If any alarms are reported, please stop and contact My Oracle Support (MOS) before continuing.</i></p>

Appendix L.2: Configure TVOE Server Network without Interface Bonding

Step	Procedure	Result
<p>15.</p> <p><input type="checkbox"/></p>	<p>TVOE Server:</p> <p>Perform a TVOE backup</p>	<p>Login as platcfg user. The platcfg main menu will be shown</p> <pre># su - platcfg</pre> <ol style="list-style-type: none"> 1. Navigate to Maintenance > Backup and Restore > Backup Platform (CD/DVD) 2. The 'Backup TekServer Menu' page will now be shown.  <ol style="list-style-type: none"> 3. Select Build ISO file only. <p><i>Note: Creating the ISO image may happen so quickly that this screen may only appear for an instant.</i></p>  <ol style="list-style-type: none"> 4. After the ISO is created, platcfg will return to the Backup TekServer Menu as shown in step 2. 5. The ISO has been created and is located in the /var/TKLC/bkp/ directory. An example filename of a backup file that was created is: "hostname1307466752-plat-app-201104171705.iso" 6. Exit platcfg.

Appendix L.2: Configure TVOE Server Network without Interface Bonding

Step	Procedure	Result
<p>16.</p> <input type="checkbox"/>	<p>Customer Server SSH:</p> <p><i>Copy backup image to the customer server</i></p>	<p>Login to the customer server and copy backup image to the customer server where it can be safely stored.</p> <p>If the customer system is a Linux system, please execute the following command to copy the backup image to the customer system.</p> <pre># scp tvoexfer@<TVOE_IP_Address>:backup/* /path/to/destination/</pre> <p>When prompted, enter the tvoexfer user password and press Enter.</p> <p>An example of the output looks like:</p> <pre># scp tvoexfer@<TVOE IP Address>:backup/* /path/to/destination/ tvoexfer@10.24.34.73's password: hostname1301859532-plat-app-301104171705.iso 100% 134MB 26.9MB/s 00:05</pre> <p>The TVOE backup file has now been successfully placed on the Customer System.</p>
<p>THIS PROCEDURE HAS BEEN COMPLETED</p>		

L.3 Configure TVOE Network for Topology 7 (RMS Configuration)

This section for Topology 7 deployment requires **HP DL360** rack mount servers.

Requirements:

- An understanding of the topology being deployed, as outlined in reference [6].
- Interconnects should conform to reference [6]. (** <nicx> values in the procedure below can be found in a table in this document)

Appendix L.3: Configure TVOE Server Network for Topology 7

Step	Procedure	Result
<p>1.</p> <div style="border: 1px solid black; width: 20px; height: 20px; margin-left: 5px;"></div>	<p>TVOE server:</p> <p>Create <i>bond0</i> device</p>	<p>** Note: Switch to root user, if not already.</p> <p>Verify the bond0 network by running the following command</p> <pre># netAdm query --device=bond0 Protocol: none IP Address: Netmask: On Boot: yes Bonded Mode: active-backup Monitor: MII Interval: 100 Enslaving: eth01 eth02 Type: Bonding</pre> <p>If bond0 exists and is enslaving nic1 and nic2 (refer to TR007403 for device name assignment), continue onto Step 2. Otherwise the bond must be created with these following commands:</p> <pre># netAdm add --device=bond0 --onboot=yes --type=Bonding --mode=active-backup --miimon=100 Interface bond0 added</pre> <p>Execute the following to set the slave interfaces:</p> <pre># netAdm set --device=<nic1> --type=Ethernet --master=control --slave=yes Interface <ethernet_interface_1> updated</pre> <pre># netAdm set --device=<nic2> --type=Ethernet --master=control --slave=yes Interface <ethernet_interface_2> updated</pre>

Appendix L.3: Configure TVOE Server Network for Topology 7

Step	Procedure	Result
2. <input type="checkbox"/>	TVOE server: <i>Reset control network</i>	Verify the control network by running the following command: # netAdm query --type=Bridge --name=control Bridge Name: control On Boot: yes Protocol: dhcp Persistent: yes Promiscuous: no Bridge Interface: bond0 If the output matches the one above with Bridge Interface bond0 , the Control Bridge must be modified with the following command to remove bond interface zero . Otherwise continue onto Step 3. # netAdm set --type=Bridge --name=control \ --delBridgeInt=bond0 # netAdm set --device=bond0 --onboot=yes
3. <input type="checkbox"/>	TVOE server: <i>Add VLAN for IMI</i>	# netAdm add --device=bond0.<imi_vlan>
4. <input type="checkbox"/>	TVOE server: <i>Add bridge network for IMI</i>	# netAdm add --name=imi --type=Bridge --bridgeInterface=bond0.<imi_vlan>
5. <input type="checkbox"/>	TVOE server: <i>Add Bond for XMI network</i>	# netAdm add --device=bond1 --onboot=yes --bootproto=none
6. <input type="checkbox"/>	TVOE server: <i>Bond interfaces eth11 and eth12 for XMI network</i>	# netAdm set --device=bond1 --bondInterfaces=<nic5>,<nic6>
7. <input type="checkbox"/>	TVOE server: <i>Add VLAN for XMI</i>	# netAdm add --device=bond1.<xmi_vlan>
8. <input type="checkbox"/>	TVOE server: <i>Add Bridge for XMI network</i>	# netAdm add --name=xmi --type=Bridge --bridgeInterface=bond1.<xmi_vlan>
9.	Execute steps 10 - 12 if lab deployment hosts TVOE and PMAC on a separate routable management network.	
10.	TVOE server: <i>Add VLAN for management</i>	# netAdm add --device=bond1.<management_vlan> Interface bond0.# added

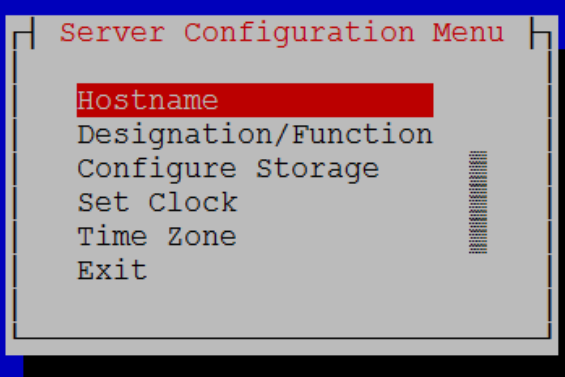
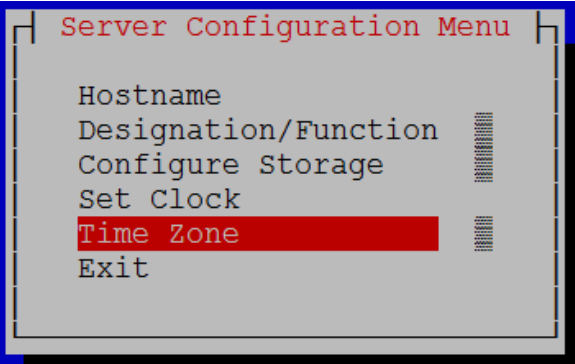
Appendix L.3: Configure TVOE Server Network for Topology 7

Step	Procedure	Result
11.	TVOE server: Add Bridge and TVOE IP on management network	<pre># netAdm add --name=management --type=Bridge \ --bridgeInterface=bond1.<management_vlan> \ --bootproto=none --onboot=yes \ --address=<tvoe_managemnt_IP> \ --netmask=<management_netmask></pre>
12.	TVOE Server: Add the default route to management network	<pre># netAdm add --route=default --gateway=<management_default_route_ip> \ --device=management</pre>
13.	Execute steps 14- 15 if lab deployment hosts TVOE and PMAC on the XMI network/bridge.	
14.	TVOE server: Add Bridge and TVOE IP on XMI network	<pre># netAdm add --name=xmi --type=Bridge \ --bridgeInterface=bond1.<xmi_vlan> \ --bootproto=none --onboot=yes \ --address=<tvoe_xmi_IP> \ --netmask=<tvoe_xmi_netmask></pre>
15.	TVOE Server: Add the default route to xmi network	<pre># netAdm add --route=default --gateway=<xmi_default_route_ip> \ --device=xmi</pre>
16.	<input type="checkbox"/> TVOE server: Signaling Network 1 Configuration Bond interfaces eth13 and eth03	<p>a. If rms1-ms1 NIC3 is connected Customer Switch 2/Signaling Network 1 (optional)</p> <ul style="list-style-type: none"> i. Add Bond for XSI1 network <pre># netAdm add --device=bond2 --onboot=yes --bootproto=none</pre> ii. Bond interfaces eth13 and eth03 for XSI1 network <pre># netAdm set --device=bond2 --bondInterfaces=<nic7>,<nic3></pre> iii. Add VLAN for XSI1 <pre># netAdm add --device=bond2.<xsi1_vlan></pre> iv. Add Bridge for XSI1 network <pre># netAdm add --name=xsi1 --type=Bridge --bridgeInterface=bond2.<xsi1_vlan></pre> <p>b. If rms1-ms1 NIC3 is not connected Customer Switch 2/Signaling Network 1 (optional)</p> <ul style="list-style-type: none"> i. Add Bridge for XSI1 network <pre># netAdm add --name=xsi1 --type=Bridge --bridgeInterface=<nic7></pre>
17.	<input type="checkbox"/> TVOE server: Signaling Network2 Configuration Bond interfaces eth14 and eth04	<p>a. If rms1-ms1 NIC4 is connected Customer Switch 2/Signaling Network 2 (optional)</p> <ul style="list-style-type: none"> v. Add Bond for XSI2 network <pre># netAdm add --device=bond3 --onboot=yes --bootproto=none</pre> vi. Bond interfaces eth14 and eth04 for XSI2 network <pre># netAdm set --device=bond3 --bondInterfaces=<nic8>,<nic4></pre> vii. Add VLAN for XSI2 <pre># netAdm add --device=bond3.<xsi2_vlan></pre> viii. Add Bridge for XSI1 network <pre># netAdm add --name=xsi2 --type=Bridge --bridgeInterface=bond3.<xsi2_vlan></pre> <p>b. If rms1-ms1 NIC4 is not connected Customer Switch 2/Signaling Network 2 (optional)</p> <ul style="list-style-type: none"> ii. Add Bridge for XSI2 network <pre># netAdm add --name=xsi2 --type=Bridge --bridgeInterface=<nic8></pre>

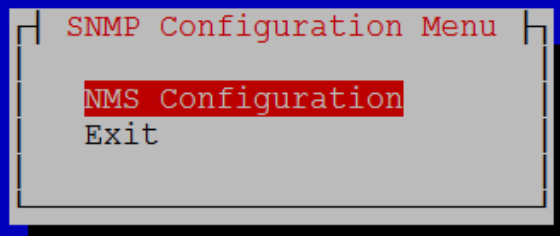
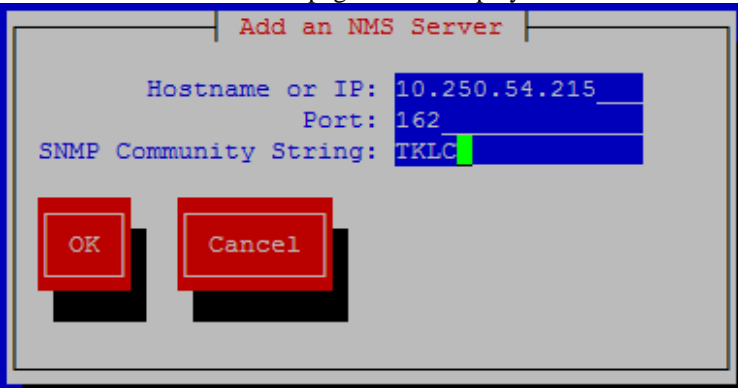
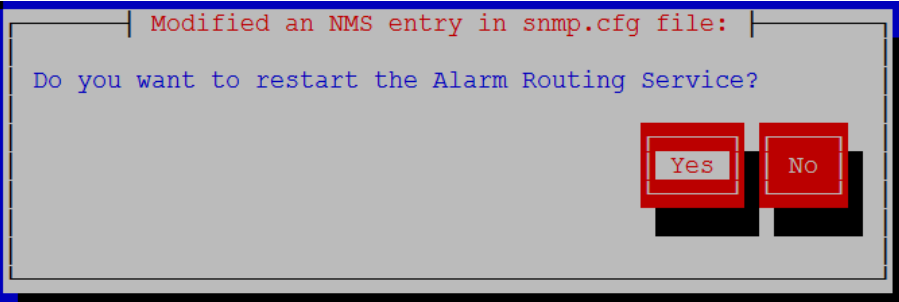
Appendix L.3: Configure TVOE Server Network for Topology 7

Step	Procedure	Result
<p>18.</p> <input type="checkbox"/>	<p>TVOE Server:</p> <p>Restart the network on the server</p> <p>Note: Output similar to that shown on the right may be observed</p>	<p>Restart the network interfaces:</p> <pre># service network restart</pre> <pre>Shutting down interface control: [OK] Shutting down interface imi: [OK] Shutting down interface xmi: [OK] Shutting down interface xs1: [OK] Shutting down interface xs1: [OK] Shutting down interface bond0.15: [OK] Shutting down interface bond0.16: [OK] Shutting down interface bond1.17: [OK] Shutting down interface bond0: [OK] Shutting down interface bond1: [OK] Shutting down loopback interface: [OK] Bringing up loopback interface: [OK] Bringing up interface bond0: [OK] Bringing up interface bond1: [OK] Bringing up interface bond0.15: [OK] Bringing up interface bond0.16: [OK] Bringing up interface bond1.17: [OK] Bringing up interface control: Determining IP information for control... done. [OK] Bringing up interface imi: [OK] Bringing up interface xmi: Determining if ip address 10.240.162.10 is already in use for device xmi... [OK] Bringing up interface xs1: [OK] Bringing up interface xsi2: [OK]</pre> <p>Note: If the output returns any errors like FAILED, please stop and contact My Oracle Support (MOS) before continuing.</p>

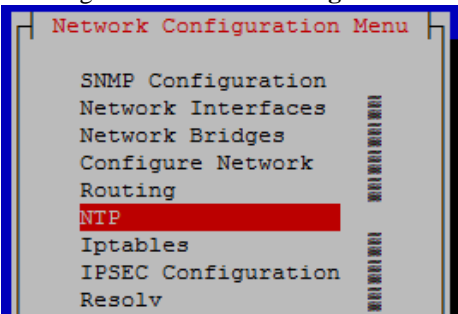
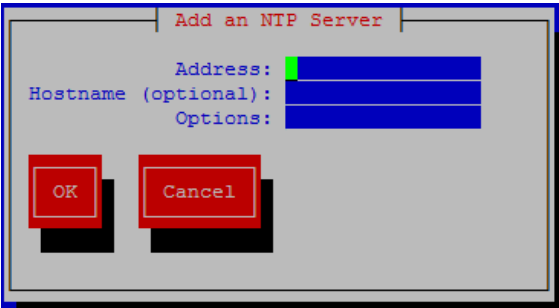
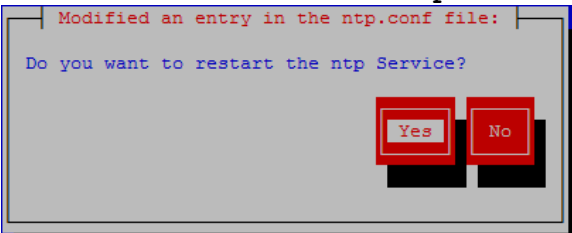
Appendix L.3: Configure TVOE Server Network for Topology 7

Step	Procedure	Result
<p>19.</p> <input type="checkbox"/>	<p>TVOE Server: Set Hostname</p>	<p>Set the server hostname by running the following:</p> <pre># su - platcfg</pre> <ol style="list-style-type: none"> 1. Navigate to Server Configuration > Hostname  <ol style="list-style-type: none"> 2. Select Edit 3. Set TVOE Management Server hostname 4. Press OK. 5. Navigate out of Hostname
<p>20.</p> <input type="checkbox"/>	<p>TVOE Server: Set Time Zone and/or Hardware Clock</p>	<p>Set the time zone and/or hardware clock</p> <ol style="list-style-type: none"> 1. Navigate to Server Configuration > Time Zone  <ol style="list-style-type: none"> 2. Select Edit. 3. Set the time zone and/or hardware clock. 4. Press OK. 5. Navigate out of Server Configuration

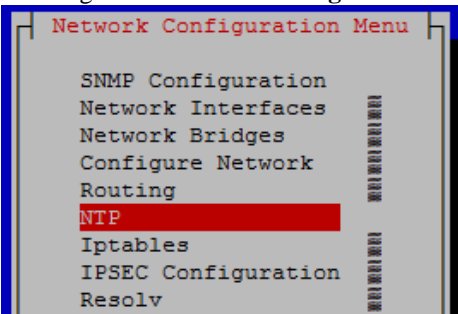
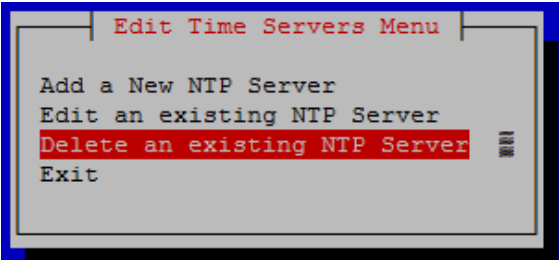
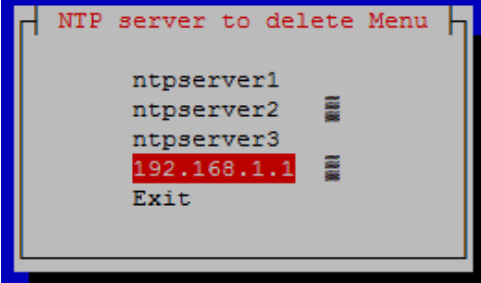
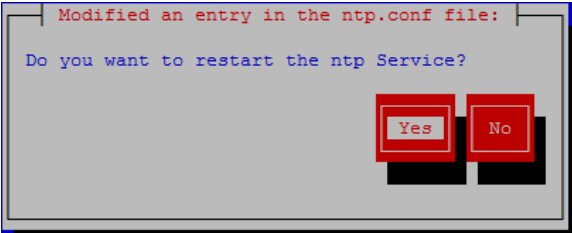
Appendix L.3: Configure TVOE Server Network for Topology 7

Step	Procedure	Result
<p>21.</p> <p><input type="checkbox"/></p>	<p>TVOE Server:</p> <p>Configure SNMP trap destination</p>	<p>Configure SNMP trap destination.</p> <ol style="list-style-type: none"> 1. Navigate to Network Configuration > SNMP Configuration > NMS Configuration.  <p>The screenshot shows a terminal window titled "SNMP Configuration Menu" with the following text: "NMS Configuration" and "Exit".</p> <ol style="list-style-type: none"> 2. Select Edit and then choose 'Add a New NMS Server'. 3. The 'Add an NMS Server' page will be displayed.  <p>The screenshot shows a dialog box titled "Add an NMS Server" with the following text: "Hostname or IP: 10.250.54.215", "Port: 162", and "SNMP Community String: TKLC". There are "OK" and "Cancel" buttons at the bottom.</p> <ol style="list-style-type: none"> 4. Complete the form by entering in all information about the SNMP trap destination. 5. Select OK to finalize the configuration. 6. The 'NMS Server Action Menu' will now be displayed. 7. Select Exit. The following dialogue will then be presented:  <p>The screenshot shows a dialog box titled "Modified an NMS entry in snmp.cfg file:" with the text: "Do you want to restart the Alarm Routing Service?". There are "Yes" and "No" buttons at the bottom.</p> <ol style="list-style-type: none"> 8. Select Yes and then wait a few seconds while the Alarm Routing Service is restarted. 9. At that time the SNMP Configuration Menu will be presented. <p><i>Note: All alarm information will then be sent to the NMS located at the destination.</i></p>

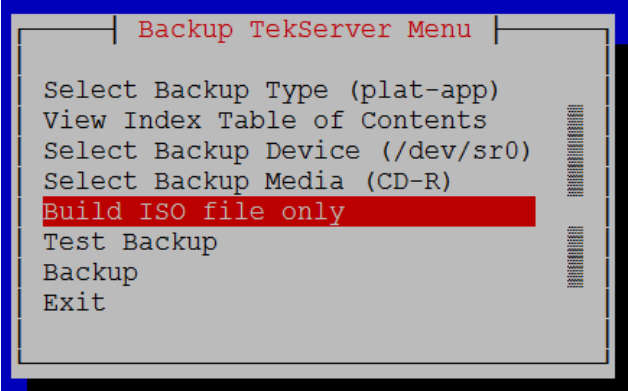
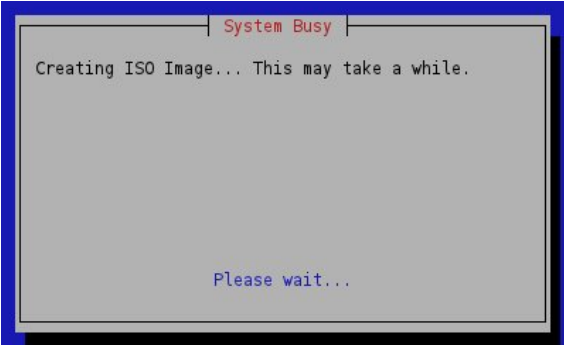
Appendix L.3: Configure TVOE Server Network for Topology 7

Step	Procedure	Result
<p>22.</p> <p><input type="checkbox"/></p>	<p>TVOE Server:</p> <p>Configure NTP</p>	<ol style="list-style-type: none"> Navigate to Network Configuration > NTP.  <ol style="list-style-type: none"> Select Edit, then “Add a New NTP Server.” Enter the IP Address of a Customer provided NTP server.  <ol style="list-style-type: none"> Select OK. Select Exit. Select Yes to restart ntp Service.  <ol style="list-style-type: none"> Select Exit twice to leave platcfg.

Appendix L.3: Configure TVOE Server Network for Topology 7

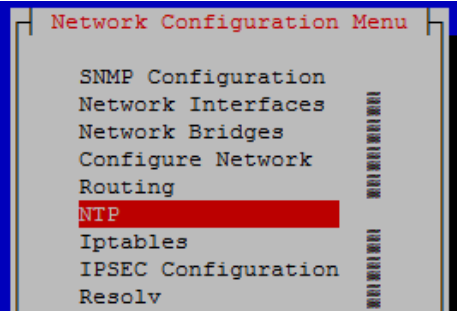
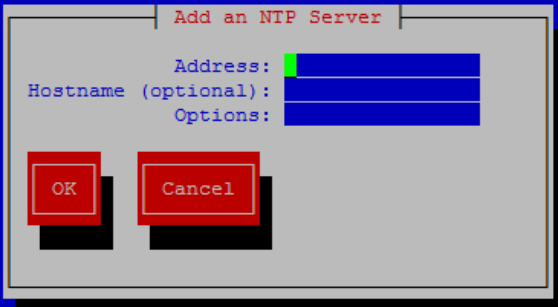
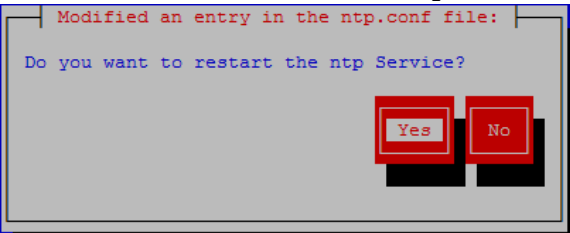
Step	Procedure	Result
<p>23.</p> <p><input type="checkbox"/></p>	<p>TVOE Server:</p> <p>Delete default NTP server.</p>	<ol style="list-style-type: none"> Navigate to Network Configuration > NTP.  <ol style="list-style-type: none"> Select Edit, then “Delete an existing NTP Server.”  <ol style="list-style-type: none"> Select the Customer supplied NTP address.  <ol style="list-style-type: none"> Select OK. Select Exit. Select Yes to restart ntp Service.  <ol style="list-style-type: none"> Select Exit twice to leave platcfg.
<p>24.</p> <p><input type="checkbox"/></p>	<p>TVOE Server:</p> <p>Reboot the server</p>	<p>Reboot the server:</p> <pre># init 6</pre> <p>Wait until the reboot completes and re-login with TVOE root credentials.</p>

Appendix L.3: Configure TVOE Server Network for Topology 7

Step	Procedure	Result
<p>25.</p> <input type="checkbox"/>	<p>TVOE Server: Verify server health</p>	<p>Verify server health: # <code>alarmMgr -alarmStatus</code></p> <p><i>Note: This command should return no output on a healthy system. If any alarms are reported, please stop and contact My Oracle Support (MOS) before continuing.</i></p>
<p>26.</p> <input type="checkbox"/>	<p>TVOE Server: Perform a TVOE backup</p>	<p>Login as platcfg user. The platcfg main menu will be shown</p> <p># <code>su - platcfg</code></p> <ol style="list-style-type: none"> 1. Navigate to Maintenance > Backup and Restore > Backup Platform (CD/DVD) 2. The 'Backup TekServer Menu' page will now be shown.  <ol style="list-style-type: none"> 3. Select Build ISO file only. <p><i>Note: Creating the ISO image may happen so quickly that this screen may only appear for an instant.</i></p>  <ol style="list-style-type: none"> 4. After the ISO is created, platcfg will return to the Backup TekServer Menu as shown in step 2. 5. The ISO has been created and is located in the <code>/var/TKLC/bkp/</code> directory. An example filename of a backup file that was created is: <code>"hostname1307466752-plat-app-201104171705.iso"</code> 6. Exit platcfg.

L.4 Configure Additional NTP Server

Appendix L.4: Configure Additional NTP Server

Step	Procedure	Result
<p>1.</p> <input type="checkbox"/>	<p>Access the server's console.</p>	<p>Connect to the server's console using one of the access methods described in Section 2.1.2.</p>
<p>2.</p> <input type="checkbox"/>	<p>TVOE Server:</p> <p>Add additional NTP server.</p>	<p>Set the server hostname by running the following:</p> <pre># su - platcfg</pre> <p>1. Navigate to Network Configuration > NTP.</p>  <p>2. Select Edit, then “Add a New NTP Server.”</p> <p>3. Enter the XMI IP Address of the additional NTP server. . (Customer-provided for Low Capacity Systems)</p>  <p>4. Select OK.</p> <p>5. Jump back to Step 2 if more NTP servers need to be added.</p> <p>5. Select Exit.</p> <p>6. Select Yes to restart ntp Service.</p>  <p>7. Select Exit twice to leave platcfg.</p>

Appendix L.4: Configure Additional NTP Server

Step	Procedure	Result
<p>3.</p> <input type="checkbox"/>	<p>Desired Server:</p> <p>Use the “ntpq” command to verify that the server has connectivity to the assigned NTP servers.</p>	<pre># ntpq -np remote refid st t when poll reach delay offset jitter ===== *10.250.32.10 192.5.41.209 2 u 651 1024 377 0.339 0.583 0.048 +10.250.32.51 192.5.41.209 2 u 656 1024 377 0.416 0.641 0.086 3. #</pre>
<p>THIS PROCEDURE HAS BEEN COMPLETED</p>		

Appendix M. Removing Disk Array Configuration

This procedure contains steps to remove a prior disk array configuration. This is useful towards re-installing OCUDR on hardware with disk arrays that have hosted prior OCUDR instances. The steps here are only to be run after TPD is installed and before OCUDR application is installed.

M.1 Removing RMS Disk Array Configuration

Appendix M.1: Removing RMS Disk Array Configuration

Step	Procedure	Result
1. <input type="checkbox"/>	Access the server's console.	Connect to the RMS server's console using one of the access methods described in Section 2.1.2.
2. <input type="checkbox"/>	Change to root user home directory	# <code>cd</code>
3. <input type="checkbox"/>	Shutdown all the VM Guests	<p>** Execute For Low Capacity RMS Configuration only</p> <p>Shutdown all the VM Guests on TVOE</p> <p># <code>virsh shutdown <vm_guest_name></code></p> <p>Verify that all the Guests have been shut down with command:</p> <p># <code>virsh list</code></p> <p>No VMs should be listed in the output of the above command.</p>

Appendix M.1: Removing RMS Disk Array Configuration

Step	Procedure	Result
<p>4.</p> <input type="checkbox"/>	<p><i>Remove volume group or storage pool</i></p>	<p>** Execute For Low Capacity RMS Configuration only</p> <pre># lvs LV VG Attr LSize Pool Origin Data% Move Log Cpy%Sync Convert rundb stripe_vg -wa-ao---- 385.01g</pre> <p>If stripe_vg is present then remove it</p> <pre># vgremove stripe_vg Do you really want to remove volume group "stripe_vg" containing 1 logical volumes? [y/n]: y Do you really want to remove active logical volume rundb? [y/n]: y Volume group "stripe_vg" successfully removed</pre> <pre># virsh pool-list Name State Autostart ----- stripePool_vg active yes vgguests active yes</pre> <p>If stripePool_vg is present then remove it with below steps</p> <pre># virsh pool-destroy stripePool_vg Pool stripePool_vg destroyed # virsh pool-undefine stripePool_vg Pool stripePool_vg has been undefined # vgremove stripePool_vg Do you really want to remove volume group "stripePool_vg" containing 1 logical volumes? [y/n]: y Volume group "stripePool_vg" successfully removed</pre>
<p>5.</p> <input type="checkbox"/>	<p><i>Remove all three physical volumes sdb, sdc, & sdd</i></p>	<pre># pvremove /dev/sdb Labels on physical volume "/dev/sdb" successfully wiped # pvremove /dev/sdc Labels on physical volume "/dev/sdc" successfully wiped # pvremove /dev/sdd Labels on physical volume "/dev/sdd" successfully wiped</pre>
<p>6.</p> <input type="checkbox"/>	<p><i>Delete logical drive slot 2 ld 1</i></p>	<p>Execute For Normal Capacity RMS Configuration only:</p> <pre># hpacucli ctrl all show config</pre> <p>Execute For Low Capacity RMS Configuration only:</p> <pre># hpssacli ctrl all show config</pre>

Appendix M.1: Removing RMS Disk Array Configuration

Step	Procedure	Result
<p>7.</p> <div style="border: 1px solid black; width: 20px; height: 20px; margin-left: 5px;"></div>	<p>Verify output matches expected values</p>	<p>IMPORTANT: If output from <code>show config</code> differs from the example here, you must adjust the <code>slot</code> and <code>ld</code> parameters in the commands to follow. There should be two slots (numbered 2 and 0), each with two logical drives (1 and 2). Slot 0 should contain a <code>logicaldrive</code> of two physical disks: <i>it is important not to delete this logical drive.</i></p> <pre> Smart Array P420 in Slot 2 (sn: PDKRH0ARH3X0HB) array A (SAS, Unused Space: 0 MB) logicaldrive 1 (273.4 GB, RAID 1+0, OK) physicaldrive 1I:1:1 (port 1I:box 1:bay 1, SAS, 146 GB, OK) physicaldrive 1I:1:2 (port 1I:box 1:bay 2, SAS, 146 GB, OK) physicaldrive 1I:1:3 (port 1I:box 1:bay 3, SAS, 146 GB, OK) physicaldrive 1I:1:4 (port 1I:box 1:bay 4, SAS, 146 GB, OK) array B (SAS, Unused Space: 0 MB) logicaldrive 2 (273.4 GB, RAID 1+0, OK) physicaldrive 2I:1:5 (port 2I:box 1:bay 5, SAS, 146 GB, OK) physicaldrive 2I:1:6 (port 2I:box 1:bay 6, SAS, 146 GB, OK) physicaldrive 2I:1:7 (port 2I:box 1:bay 7, SAS, 146 GB, OK) physicaldrive 2I:1:8 (port 2I:box 1:bay 8, SAS, 146 GB, OK) SEP (Vendor ID PMCSIERA, Model SRCv8x6G) 380 (WWID: 500143802518449F) Smart Array P420i in Slot 0 (Embedded) (sn: 5001438025A465B0) array A (SAS, Unused Space: 0 MB) logicaldrive 1 (838.3 GB, RAID 1, OK) physicaldrive 1I:2:1 (port 1I:box 2:bay 1, SAS, 900.1 GB, OK) physicaldrive 1I:2:2 (port 1I:box 2:bay 2, SAS, 900.1 GB, OK) array B (SAS, Unused Space: 0 MB) logicaldrive 2 (273.4 GB, RAID 1+0, OK) physicaldrive 1I:2:3 (port 1I:box 2:bay 3, SAS, 146 GB, OK) physicaldrive 1I:2:4 (port 1I:box 2:bay 4, SAS, 146 GB, OK) physicaldrive 2I:2:5 (port 2I:box 2:bay 5, SAS, 146 GB, OK) physicaldrive 2I:2:6 (port 2I:box 2:bay 6, SAS, 146 GB, OK) SEP (Vendor ID PMCSIERA, Model SRCv8x6G) 380 (WWID: 5001438025A465BF) </pre>

Appendix M.1: Removing RMS Disk Array Configuration

Step	Procedure	Result
8. <input type="checkbox"/>	Delete logical drive slot 2 ld 1	Execute For Normal Capacity RMS Configuration only: # <code>hpacucli ctrl slot=2 ld 1 delete</code> Execute For Low Capacity RMS Configuration only: # <code>hpssacli ctrl slot=2 ld 1 delete</code> Warning: Deleting the specified device(s) will result in data being lost. Continue? (y/n) y
9. <input type="checkbox"/>	Delete logical drive slot 2 ld 2	Execute For Normal Capacity RMS Configuration only: # <code>hpacucli ctrl slot=2 ld 2 delete</code> Execute For Low Capacity RMS Configuration only: # <code>hpssacli ctrl slot=2 ld 2 delete</code> Warning: Deleting the specified device(s) will result in data being lost. Continue? (y/n) y
10. <input type="checkbox"/>	Delete logical drive slot 0 ld 1	Execute For Normal Capacity RMS Configuration only: # <code>hpacucli ctrl slot=0 ld 2 delete</code> Execute For Low Capacity RMS Configuration only: # <code>hpssacli ctrl slot=0 ld 2 delete</code> Warning: Deleting the specified device(s) will result in data being lost. Continue? (y/n) y
THIS PROCEDURE HAS BEEN COMPLETED		

M.2 Removing Blade Disk Array Configuration (Sidecar)

Appendix M.2: Removing Blade Disk Array Configuration (Sidecar)

Step	Procedure	Result
1. <input type="checkbox"/>	Access the server's console.	Connect to the blade server's console using one of the access methods described in Section 2.1.2.
2. <input type="checkbox"/>	Change to root user home directory	# <code>cd</code>

Appendix M.2: Removing Blade Disk Array Configuration (Sidecar)

Step	Procedure	Result									
<p>3.</p> <input type="checkbox"/>	<p><i>Shutdown all the VM Guests</i></p>	<p>** Execute For Low Capacity C-Class Configuration only</p> <p>Shutdown all the VM Guests on TVOE</p> <pre># virsh shutdown <vm_guest_name></pre> <p>Verify that all the Guests have been shut down with command:</p> <pre># virsh list</pre> <p>No VMs should be listed in the output of the above command.</p>									
<p>4.</p>	<p><i>Remove volume group or storage pool</i></p>	<p>** Execute For Low Capacity C-Class Configuration only</p> <pre># lvs LV VG Attr LSize Pool Origin Data% Move Log Cpy%Sync Convert rundb stripe_vg -wa-ao---- 385.01g</pre> <p>If stripe_vg is present then remove it</p> <pre># vgremove stripe_vg</pre> <p>Do you really want to remove volume group "stripe_vg" containing 1 logical volumes? [y/n]: y</p> <p>Do you really want to remove active logical volume rundb? [y/n]: y</p> <p>Volume group "stripe_vg" successfully removed</p> <pre># virsh pool-list</pre> <table border="1"> <thead> <tr> <th>Name</th> <th>State</th> <th>Autostart</th> </tr> </thead> <tbody> <tr> <td>stripePool_vg</td> <td>active</td> <td>yes</td> </tr> <tr> <td>vghosts</td> <td>active</td> <td>yes</td> </tr> </tbody> </table> <p>If stripePool_vg is present then remove it with below steps</p> <pre># virsh pool-destroy stripePool_vg</pre> <p>Pool stripePool_vg destroyed</p> <pre># virsh pool-undefine stripePool_vg</pre> <p>Pool stripePool_vg has been undefined</p> <pre># vgremove stripePool_vg</pre> <p>Do you really want to remove volume group "stripePool_vg" containing 1 logical volumes? [y/n]: y</p> <p>Volume group "stripePool_vg" successfully removed</p>	Name	State	Autostart	stripePool_vg	active	yes	vghosts	active	yes
Name	State	Autostart									
stripePool_vg	active	yes									
vghosts	active	yes									

Appendix M.2: Removing Blade Disk Array Configuration (Sidecar)

Step	Procedure	Result
<p>5.</p> <input type="checkbox"/>	<p>Remove volume group</p>	<p>** Don't execute for Low Capacity C-Class</p> <pre># vgrename stripe_vg Do you really want to remove volume group "stripe_vg" containing 1 logical volumes? [y/n]: y Do you really want to remove active logical volume rundb? [y/n]: y</pre>
<p>6.</p> <input type="checkbox"/>	<p>Remove physical volume sdb</p>	<pre># pvremove /dev/sdb Labels on physical volume "/dev/sdb" successfully wiped</pre>
<p>7.</p> <input type="checkbox"/>	<p>Display the Configuration</p>	<p>Execute For Normal Capacity Blade Configuration only:</p> <pre># hpacucli ctrl all show config</pre> <p>Execute For Low Capacity Blade Configuration only:</p> <pre># hpssacli ctrl all show config</pre>
<p>8.</p> <input type="checkbox"/>	<p>Verify output matches expected values</p>	<p>IMPORTANT: If output from <code>show config</code> differs from the example here, you must adjust the <code>slot</code> and <code>ld</code> parameters in the commands to follow. There should be two slots (numbered 0 and 3). Slot 0 should contain a <code>logicaldrive</code> of two physical disks: <i>it is important not to delete this logical drive.</i></p> <pre>Smart Array P220i in Slot 0 (Embedded) (sn: PCQVU0CRH5V2JU) array A (SAS, Unused Space: 0 MB) logicaldrive 1 (838.3 GB, RAID 1, OK) physicaldrive 1I:1:1 (port 1I:box 1:bay 1, SAS, 900.1 GB, OK) physicaldrive 1I:1:2 (port 1I:box 1:bay 2, SAS, 900.1 GB, OK) SEP (Vendor ID PMCSIERA, Model SRCv4x6G) 380 (WWID: 5001438028DDB56F) Smart Array P410i in Slot 3 (sn: 5001438025905EB0) array A (SAS, Unused Space: 0 MB) logicaldrive 1 (820.2 GB, RAID 1+0, OK) physicaldrive 1I:1:1 (port 1I:box 1:bay 1, SAS, 146 GB, OK) physicaldrive 1I:1:2 (port 1I:box 1:bay 2, SAS, 146 GB, OK) physicaldrive 1I:1:3 (port 1I:box 1:bay 3, SAS, 146 GB, OK) physicaldrive 1I:1:4 (port 1I:box 1:bay 4, SAS, 146 GB, OK) physicaldrive 1I:1:5 (port 1I:box 1:bay 5, SAS, 146 GB, OK) physicaldrive 1I:1:6 (port 1I:box 1:bay 6, SAS, 146 GB, OK) physicaldrive 1I:1:7 (port 1I:box 1:bay 7, SAS, 146 GB, OK) physicaldrive 1I:1:8 (port 1I:box 1:bay 8, SAS, 146 GB, OK) physicaldrive 1I:1:9 (port 1I:box 1:bay 9, SAS, 146 GB, OK) physicaldrive 1I:1:10 (port 1I:box 1:bay 10, SAS, 146 GB, OK) physicaldrive 1I:1:11 (port 1I:box 1:bay 11, SAS, 146 GB, OK) physicaldrive 1I:1:12 (port 1I:box 1:bay 12, SAS, 146 GB, OK) Expander 250 (WWID: 50014380251F83E6, Port: 1I, Box: 1)</pre>

Appendix M.2: Removing Blade Disk Array Configuration (Sidecar)

Step	Procedure	Result
<p>9.</p> <input type="checkbox"/>	<p><i>Delete logical drive slot 3 ld 1</i></p>	<p>Execute For Normal Capacity Blade Configuration only: # <code>hpacucli ctrl slot=3 ld 1 delete</code></p> <p>Execute For Low Capacity Blade Configuration only: # <code>hpssacli ctrl slot=3 ld 1 delete</code></p> <p>Warning: Deleting the specified device(s) will result in data being lost. Continue? (y/n) <code>y</code></p>
<p>THIS PROCEDURE HAS BEEN COMPLETED</p>		

Appendix N. Creating an XML file for Installing OCUDR Network Elements

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

Below is an example of the SDM_NOAMP_NE.xml file. The highlighted values are values that the user must update.

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

Table 10 – OCUDR XML NOAMP Network Element Configuration File

XML File Text	Description
<networkelement>	
<name> NOAMP_NE </name>	Unique identifier used to label a Network Element. [Range = 1-32 character string. Valid characters are alphanumeric and underscore. Must contain at least one alpha and must not start with a digit.]
<ntpserver> 10.250.32.10 </ntpserver>	IP Address of the first NTP server. There must be at least one NTP server IP address defined.
<ntpserver> 10.250.32.51 </ntpserver>	IP Address of second NTP server, if it exists; otherwise, this line must be deleted.
</ntpserver>	
<network>	
<name>XMI</name>	Name of customer external network. Note: Do NOT change this name.
<vlanId> 3 </vlanId>	The VLAN ID to use for this VLAN. [Range = 2-4094.]
<ip> 10.250.39.16 </ip>	The network address of this VLAN [Range = A valid IP address]
<mask> 255.255.255.240 </mask>	Subnetting to apply to servers within this VLAN
<gateway> 10.250.39.17 </gateway>	The gateway router interface address associated with this network [Range = A valid IP address]
<isDefault>true</isDefault>	Indicates whether this is the network with a default gateway. [Range = true/false]
</network>	
<network>	
<name>IMI</name>	Name of customer internal network. Note: Do NOT change this name.
<vlanId> 4 </vlanId>	The VLAN ID to use for this VLAN. [Range = 2-4094.]
<ip> 169.254.2.0 </ip>	The network address of this VLAN [Range = A valid IP address]
<mask> 255.255.255.0 </mask>	Subnetting to apply to servers within this VLAN
<gateway> 169.254.2.1 </gateway>	The gateway router interface address associated with this network [Range = A valid IP address]
<isDefault>>false</isDefault>	Indicates whether this is the network with a default gateway. [Range = true/false]
</network>	
</networks>	
</networkelement>	

Appendix O. Application NetBackup Client Installation Procedures

NetBackup is a utility that allows for management of backups and recovery of remote systems. The NetBackup suite is for the purpose of supporting Disaster Recovery at the customer site. The following procedures provides instructions for installing and configuring the NetBackup client software on an application server in two different ways, first using platcfg and second using nbAutoInstall (push Configuration)

Please note that at the writing of this document, the supported versions of Netbackup in OCUDR 10.0.1 are 7.1 and 7.5.

O.1 NetBackup Client Installation using Platcfg

NOTE: Execute the following procedure to switch/migrate to having netBackup installed via platcfg instead of using NBAutoInstall (Push Configuration)

Prerequisites:

- Application server platform installation has been completed.
- Site survey has been performed to determine the network requirements for the application server, and interfaces have been configured.
- NetBackup server is available to copy, sftp, the appropriate NetBackup Client software to the application server.

Note: If a procedural STEP fails to execute successfully, STOP and contact the Customer Care Center.

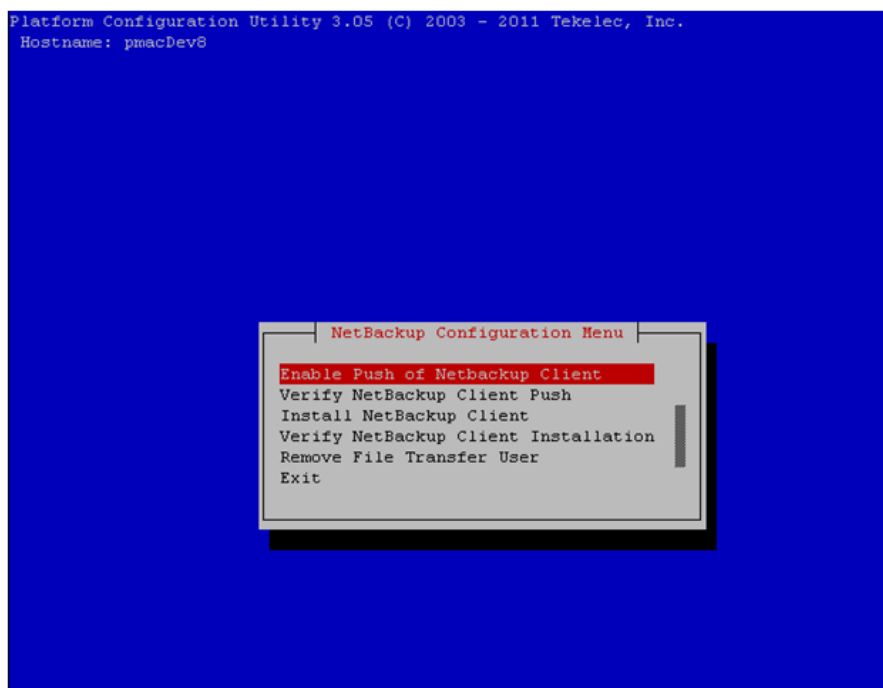
1. Application server iLO: Login and launch the integrated remote console

- SSH to the application Server (PM&C or NOAMP) as root using the management network for the PM&C or XMI network for the NOAMP.

2. Application server iLO: Configure NetBackup Client on application server

```
# su - platcfg
```

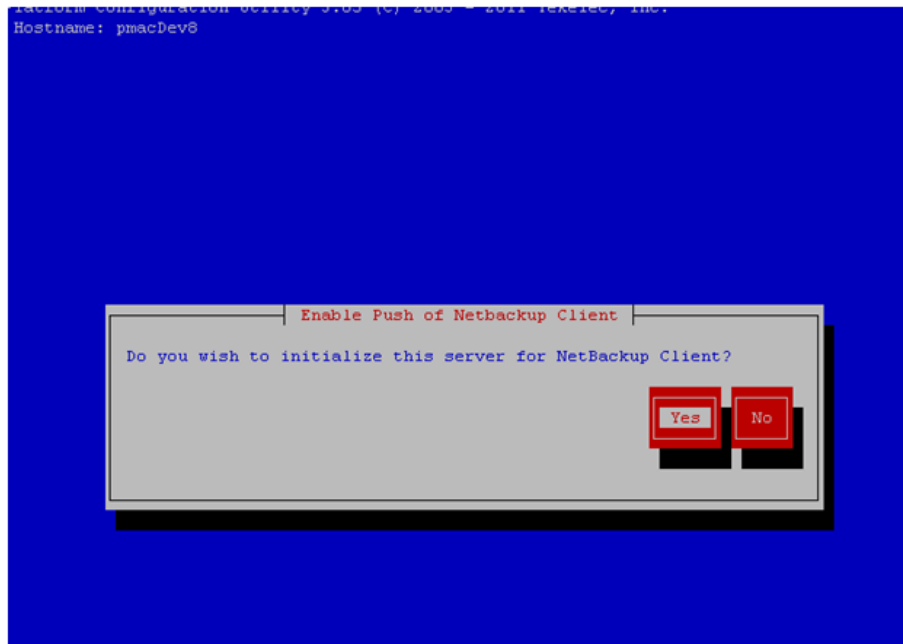
- Navigate to **NetBackup Configuration**



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3. Application server iLO: Enable Push of NetBackup Client

- Navigate to **NetBackup Configuration > Enable Push of NetBackup Client**



- Select **Yes** to initialize the server and enable the NetBackup client software push.

4. Application server iLO: Verify NetBackup Client software push is enabled.

- Navigate to **NetBackup Configuration > Verify NetBackup Client Push**



- Verify list entries indicate "OK" for NetBackup client software environment.
- Select "Exit" to return to NetBackup Configuration menu.

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5. NetBackup server: Push appropriate NetBackup Client software to application server

Note: The NetBackup server is not an application asset. Access to the NetBackup server, and location path of the NetBackup Client software is under the control of the customer. Below are the steps that are required on the NetBackup server to push the NetBackup Client software to the application server. These example steps assume the NetBackup server is executing in a Linux environment.

Note: The backup server is supported by the customer, and the backup utility software provider. If this procedural STEP, executed at the backup utility server, fails to execute successfully, STOP and contact the Customer Care Center of the backup and restore utility software provider that is being used at this site.

- Log in to the NetBackup server using password provided by customer:
- Navigate to the appropriate NetBackup Client software path:
Note: The input below is only used as an example. (7.5 in the path below refers to the NetBackup version. If installed a different version (e.g. 7.1), replace 7.5 with 7.1)

```
# cd /usr/opensv/netbackup/client/Linux/7.5
```

- Execute the sftp_to client NetBackup utility using the application IP address and application netbackup user;

```
# ./sftp_to_client <application IP> netbackup
```

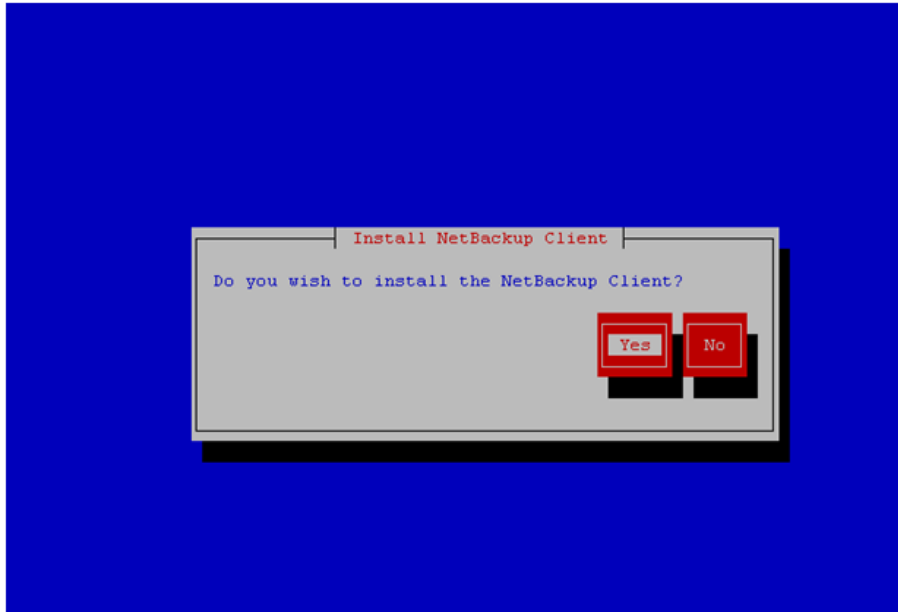
Connecting to 192.168.176.31
netbackup@192.168.176.31's password:
- Enter application server netbackup user password; the following NetBackup software output is expected, observe the sftp completed successfully:

```
File "/usr/opensv/netbackup/client/Linux/6.5/.sizes" not found.  
Couldn't rename file "/tmp/bp.6211/sizes" to "/tmp/bp.6211/.sizes": No such file or directory  
File "/usr/opensv/NB-Java.tar.Z" not found.  
./sftp_to_client: line 793: [: : integer expression expected  
./sftp_to_client: line 793: [: : integer expression expected  
./sftp_to_client: line 793: [: : integer expression expected  
./sftp_to_client: line 793: [: : integer expression expected  
./sftp_to_client: line 793: [: : integer expression expected  
./sftp_to_client: line 793: [: : integer expression expected  
./sftp_to_client: line 793: [: : integer expression expected  
./sftp_to_client: line 793: [: : integer expression expected  
./sftp_to_client: line 793: [: : integer expression expected  
./sftp_to_client: line 793: [: : integer expression expected  
./sftp_to_client: line 793: [: : integer expression expected  
./sftp_to_client: line 793: [: : integer expression expected  
./sftp_to_client: line 793: [: : integer expression expected  
./sftp_to_client: line 793: [: : integer expression expected  
sftp completed successfully.  
The root user on 192.168.176.31 must now execute the command "sh /tmp/bp.6211/client_config [-L]". The optional  
argument, "-L",  
is used to avoid modification of the client's current bp.conf file.  
#
```

Note: Although the command executed above instructs you to execute the `client_config` command, **DO NOT** execute that command, as it shall be executed by `platcfg` in the next step.

6. Application server iLO: Install NetBackup Client software on application server.

- Navigate to **NetBackup Configuration > Install NetBackup Client**



- Verify list entries indicate "OK" for NetBackup client software installation
- Select "Exit" to return to NetBackup Configuration menu

7. Application server iLO: Verify NetBackup Client software installation on the application server.

- Navigate to **NetBackup Configuration > Verify NetBackup Client Installation.**



- Verify list entries indicate "OK" for NetBackup Client software installation.
- Select "Exit" to return to NetBackup Configuration menu.

8. Application server iLO: Disable NetBackup Client software transfer to the application server.

- Navigate to **NetBackup Configuration > Remove File Transfer User**



- Select "Yes" to remove the NetBackup file transfer user from the application server

9. Application server iLO: Exit platform configuration utility (platcfg)

10. Application server iLO: Use platform configuration utility (platcfg) to modify hosts file with NetBackup server alias.

Note: After the successful transfer and installation of the NetBackup client software the NetBackup servers hostname can be found in the NetBackup "/usr/openv/netbackup/bp.conf" file, identified by the "SERVER" configuration parameter. The NetBackup server hostname and IP address must be added to the application server's hosts file.

- List NetBackup servers hostname:

```
# cat /usr/openv/netbackup/bp.conf
```

```
SERVER = nb70server
```

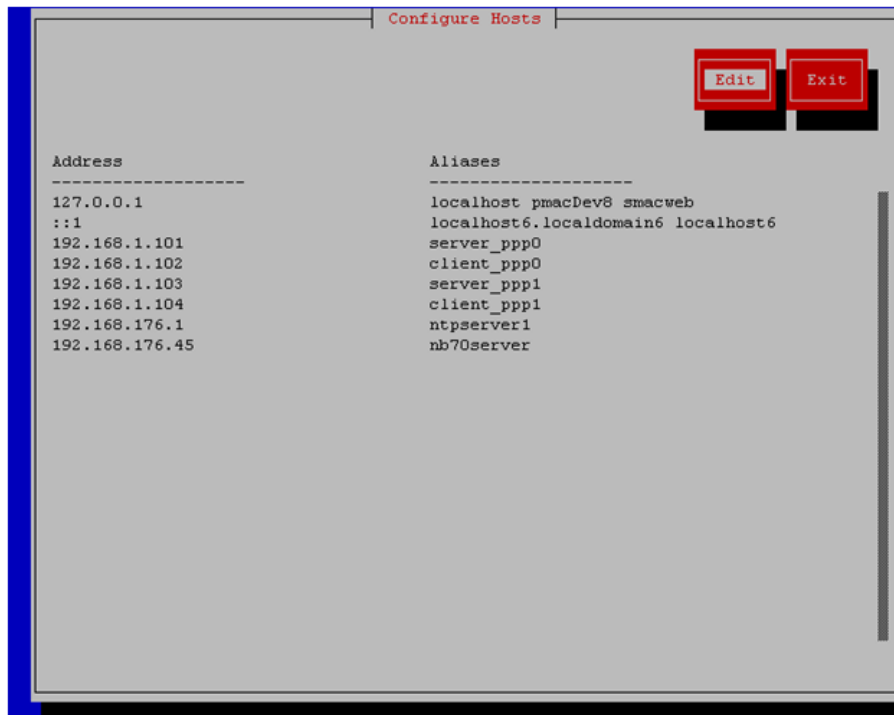
```
CLIENT_NAME = pmacDev8
```

- Use platform configuration utility (platcfg) to update application hosts file with NetBackup Server alias.

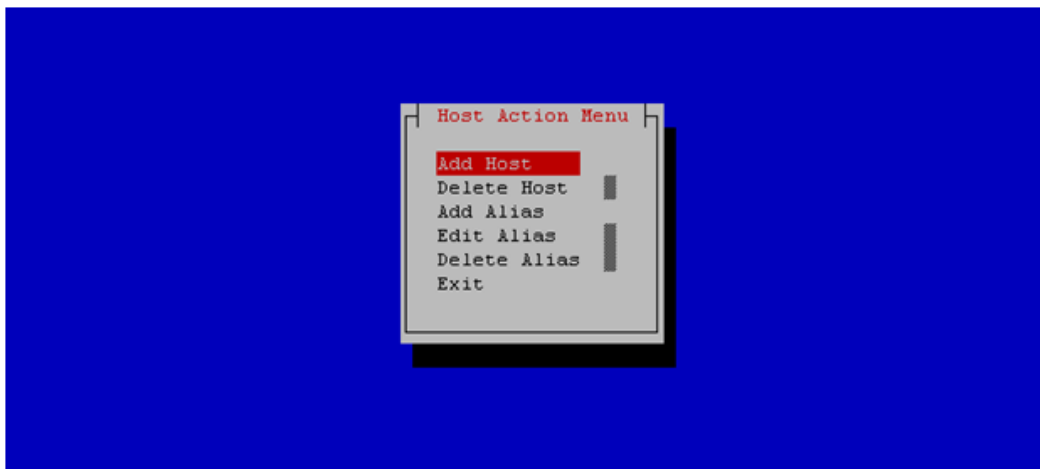
```
# su - platcfg
```

- Navigate to **Network Configuration > Modify Hosts File**

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- Select **Edit**, the Host Action Menu will be displayed.



- Select "**Add Host**", and enter the appropriate data

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- Select "OK", confirm the host alias add, and exit Platform Configuration Utility

11. Application server iLO: Create links to NetBackup client notify scripts on application server where NetBackup expects to find them.

Note: Copy notify scripts from appropriate path on application server for given application.

```
# ln -s <path>/bpstart_notify /usr/opensv/netbackup/bin/bpstart_notify
# ln -s <path>/bpend_notify /usr/opensv/netbackup/bin/bpend_notify
```

An example of <path> is /usr/TKLC/plat/sbin

12. Application server iLO: NetBackup Client software installation complete.

O.2 NetBackup Client Installation & Upgrade with AutoInstall

NOTE: Execute the following procedure to switch/migrate to having netBackup installed via NBAutoInstall (Push Configuration) instead of manual installation using platcfg.

Executing this procedure will enable TPD to automatically detect when a Netbackup Client is installed and then complete TPD related tasks that are needed for effective Netbackup Client operation. With this procedure, the Netbackup Client install (pushing the client and performing the install) is the responsibility of the customer and is not covered in this procedure.

Note: If the customer does not have a way to push and install Netbackup Client, then use *Netbackup Client Install/Upgrade with platcfg*.

Note: It is required that this procedure is executed before the customer does the Netbackup Client install.

Prerequisites:

- Application server platform installation has been completed.
- Site survey has been performed to determine the network requirements for the application server, and interfaces have been configured.
- NetBackup server is available to copy, sftp, the appropriate NetBackup Client software to the application server.

1. Application server iLO: Login and launch the integrated remote console

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- SSH to the application Server (PM&C or NOAMP) as root using the management network for the PM&C or XMI network for the NOAMP.

2. Application server iLO: Enable nbAutoInstall

```
# /usr/TKLC/plat/bin/nbAutoInstall --enable
```

3. Application server iLO: Create links to NetBackup client notify scripts on application server where NetBackup expects to find them.

```
# mkdir -p /usr/openv/netbackup/bin/  
# ln -s <path>/bpstart_notify /usr/openv/netbackup/bin/bpstart_notify  
# ln -s <path>/bpend_notify /usr/openv/netbackup/bin/bpend_notify
```

An example of <path> is /usr/TKLC/plat/sbin

4. Application server iLO: Verify NetBackup configuration file

- Open /usr/openv/netbackup/bp.conf and make sure it points to the NetBackup Server using the following command:

```
# vi /usr/openv/netbackup/bp.conf
```

Verify that the highlighted Server name matches the NetBackup Server, and verify that the CLIENT_NAME matches the hostname or IP of the local client machine, if they do not, update them as necessary.

```
SERVER = nb75server  
CLIENT_NAME = 10.240.10.185  
CONNECT_OPTIONS = localhost 1 0 2
```

- Edit /etc/hosts using the following command and add the NetBackup server

```
# vi /etc/hosts
```

```
e.g.: 192.168.176.45 nb75server
```

The server will now periodically check to see if a new version of Netbackup Client has been installed and will perform necessary TPD configuration accordingly.

At any time, the customer may now push and install a new version of Netbackup Client.

Appendix P. 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 PM&C server console and view the text file: [/usr/share/zoneinfo/zone.tab](#)

Table 11 - List of Selected Time Zone Values

Time Zone Value	Description	Universal Time Code (UTC) Offset
<i>Etc/UTC</i>	GMT	0
<i>America/New_York</i>	Eastern Time	UTC-05
<i>America/Chicago</i>	Central Time	UTC-06
<i>America/Denver</i>	Mountain Time	UTC-07
<i>America/Phoenix</i>	Mountain Standard Time - Arizona	UTC-07
<i>America/Los_Angeles</i>	Pacific Time	UTC-08
<i>America/Anchorage</i>	Alaska Time	UTC-09
<i>Pacific/Honolulu</i>	Hawaii	UTC-10
<i>Africa/Johannesburg</i>		UTC+02
<i>America/Mexico_City</i>	Central Time - most locations	UTC-06
<i>Africa/Monrovia</i>		UTC+00
<i>Asia/Tokyo</i>		UTC+09
<i>America/Jamaica</i>		UTC-05
<i>Europe/Rome</i>		UTC+01

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

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

Appendix Q. Contacting 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 2 for Non-technical issue

You will be connected to a live agent who can assist you with MOS registration and provide Support Identifiers. Simply mention you are a Tekelec Customer new to MOS.

MOS is available 24 hours a day, 7 days a week, 365 days a year.