



shaping tomorrow with you

# SPARC/Solaris GUI Management Guide

October 2014

Revision 1.0

Fujitsu Limited

## ■ Conditions of Use

- Copyright

This document and its content are protected under applicable copyrights, trademarks, registered trademarks and other proprietary rights. This document may only be printed out or downloaded for personal use. Permission must be sought from the rights holder for use in other cases, such as republication on a website or uploading to a third party server).

- Disclaimer

The content and information herein are provided "as-is". Fujitsu does not guarantee its accuracy, merchantability, or its compatibility with the purpose of use. Fujitsu shall accept no liability for damages caused by its use and reserves the right to changed and delete content without prior notice.

## ■ Trade Marks

- UNIX is an open group registered trademark in the U.S. and other countries.
- SPARC Enterprise, SPARC64, SPARC64 logo and all other SPARC trademarks are used under the license of U.S. SPARC International and are the trademark or registered trademark of the same company in the U.S. and other countries.
- Oracle and Java is a registered trademark of Oracle Corporation, its subsidiaries, and related companies in the U.S. and other countries.
- All other trademarks and trade names are properties of their respective owners. All rights reserved.

## Introduction

### About This Guide

- This Guide describes the step-by-step procedures for server management of the XSCF Web Console and Oracle Enterprise Manager Ops Center (hereinafter, Ops Center).
- For details of XSCF, please refer to the related manuals via the link below.  
<http://www.fujitsu.com/global/products/computing/servers/unix/sparc/downloads/manuals/m10-1/>
  - Fujitsu M10/SPARC M10 System Operation and Administration Guide
  - Product Notes Archive
- For information relating to the Ops Center, please refer to the related manual via the link below.  
[http://docs.oracle.com/cd/E40871\\_01/index.htm](http://docs.oracle.com/cd/E40871_01/index.htm)

### Notice

- Oracle Solaris may be referred to as Solaris.
- Oracle Solaris Zone may be referred to as Zone, or non-global zone.
- Oracle VM Server for SPARC may be referred to as Oracle VM.
- Enterprise Controller may be referred to as EC, Proxy Controller as PC, and Agent Controller as AC.

## Contents

<b>1. Overview</b> .....	<b>1</b>
1-1. Requirements .....	1
1-2. Important Notice .....	1
1-3. The User Interface .....	2
1-3-1. The XSCF Web Console User Interface .....	2
1-3-2. The Ops Center Interface .....	2
1-4. How to Log In .....	3
1-4-1. How to Log In to the XSCF Web Console (Via Designated URL) .....	3
1-4-2. How to Log In to the Ops Center .....	3
1-4-3. Accessing the XSCF Web Console from the Ops Center .....	4
<b>2. Virtual Environment Configuration</b> .....	<b>5</b>
2-1. Oracle VM Server for SPARC .....	5
2-1-1. Guest Domain Configuration .....	5
2-1-1. OS Installation .....	7
2-2. Oracle Solaris Zone .....	11
2-2-1. Oracle Solaris Zone Configuration .....	11
<b>3. Hardware Settings and Operational Procedures</b> .....	<b>13</b>
3-1. Power On and Off .....	13
3-1-1. Power Controls for the Physical Partitions (All Partitions) .....	13
3-1-2. Power Controls for Specific Physical Partition (1 Partition) .....	14
3-1-3. Power Schedule Settings .....	15
3-2. CPU Core Activation Key Registration and Deletion .....	17
3-2-1. Registering the CPU Activation Key .....	17
3-2-2. Configuring the CPU Core Resource for Physical Partitions .....	18
3-2-3. Deleting the CPU Core Activation Key .....	19
3-3. Firmware Updates .....	20
3-3-1. Execution of Firmware Updates .....	20
<b>4. OS Settings and Controls</b> .....	<b>21</b>

4-1. OS Restart.....	21
4-1-1. OS Restart .....	21
4-2. Network Settings .....	22
4-2-1. Adding a New Interface.....	22
4-2-2. Changing Network Settings .....	24
4-2-3. IPMP Settings .....	26
4-2-4. Link Aggregation Configuration .....	28
4-2-5. Bandwidth Setup .....	29
4-3. Resource Allotment Settings .....	30
4-3-1. Control Domain Resource Settings for Oracle VM Server for SPARC .....	30
4-3-2. Oracle VM Server for SPARC Guest Domain Resource Settings.....	31
4-3-3. Oracle Solaris Zone Configuration.....	32
4-4. Monitoring.....	33
4-4-1. Monitoring Messages .....	33
4-4-2. Resource Monitoring .....	34
4-4-3. Monitoring Processes .....	35
4-4-4. Monitoring Services.....	36
4-4-5. Setting Thresholds .....	37
4-4-6. Checking the Operating Status.....	41
4-4-7. Displaying Resource Performance Status .....	43
4-4-8. Log Monitoring (XSCF) .....	44
<b>Appendix.....</b>	<b>45</b>
Appendix-1. Installing the Agent Controller .....	45
Appendix-2. Deleting the Agent Controller .....	46
Appendix-3. Setting the Operating Schedule for the Physical Partition.....	47
Appendix-4. Adding a New Subnet .....	48
Appendix-5. Adding Users on Ops Center .....	49
Revision History.....	50

## 1. Overview

This document explains the server management operations and procedures that are available using a web browser, focusing on the functional range of the XSCF Web Console and Ops Center.

### 1 - 1 .Requirements

- Prior to using the XSCF Web Console, you must:
  - 1) Register for an XSCF user account.
  - 2) Enable the HTTPS service.
  - 3) Register the web server certificate in the HTTPS service settings.

For further details please see the link below.

<http://www.fujitsu.com/global/products/computing/servers/unix/sparc/downloads/manuals/m10-1/>

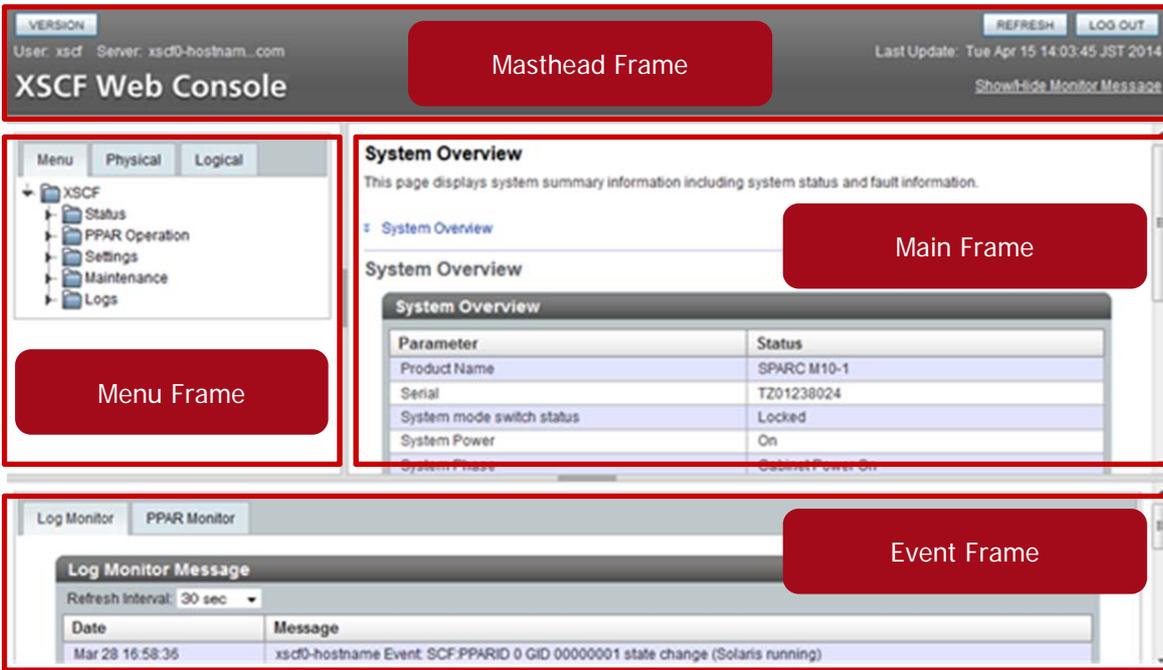
- Fujitsu M10/SPARC M10 System Operation and Administration Guide

### 1 - 2 .Important Notice

- This guide details procedures that may be implemented on the following products:
  - EC/PC: Oracle Solaris 11.1(SRU13121(11.1.14.5.0), ESF5.0)
  - AC(M10-1): Oracle Solaris 11.1(SRU13121(11.1.14.5.0), ESF5.1), XCP2092
  - AC(T4-4): Oracle Solaris 11.1(SRU13121(11.1.14.5.0), ESF5.0)
- SRU14041(11.1.18.5.0) or later is recommended. If a prior version to the SRU14031 (11.1.17.5.0) is used, the EC or PC may not function properly.
- Please use the correct numerical setting according to your system environment. The numerical settings written in this document are examples.
- The OS and XSCF commands provide examples of how to perform the same operations on the CLI.

### 1 - 3 .The User Interface

#### 1 - 3 - 1 .The XSCF Web Console User Interface



#### 1 - 3 - 2 .The Ops Center Interface



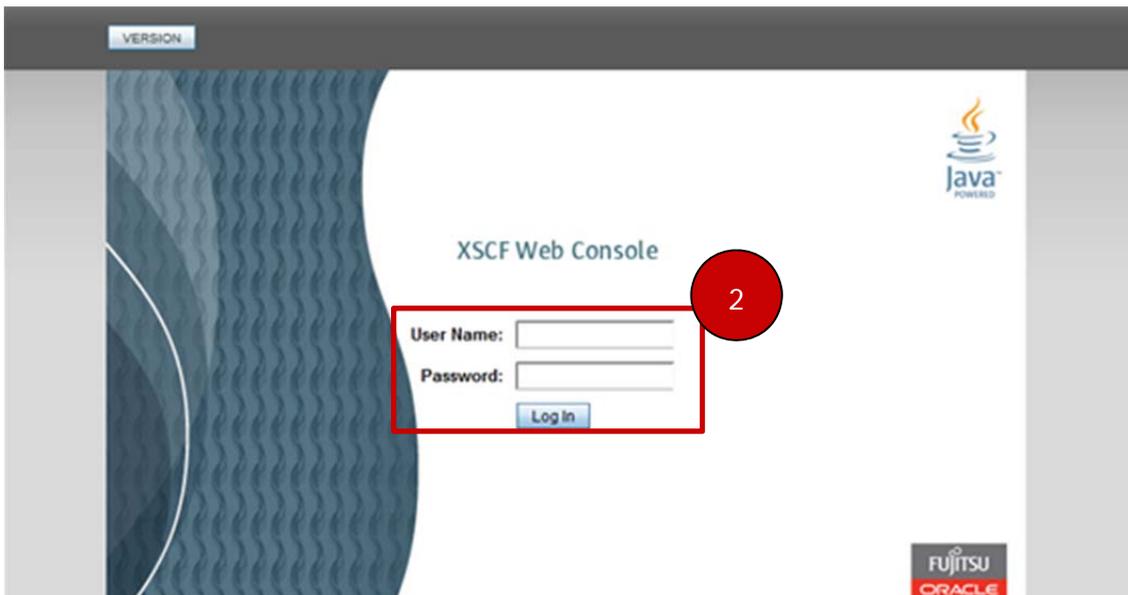
## 1 - 4 .How to Log In

### 1 - 4 - 1 .How to Log In to the XSCF Web Console(Via Designated URL)

- 1) Open the browser and type in the following address to display the page.

**https://IP address/**

- The IP Address should be for the corresponding XSCF.
- 2) Enter the User Name and Password and press the **Log In** button.
    - If login is successful, the default XSCF console screen will be displayed.



### 1 - 4 - 2 .How to Log In to the Ops Center

- 1) Open the browser, and enter the address below. If successful, the login screen will be displayed.

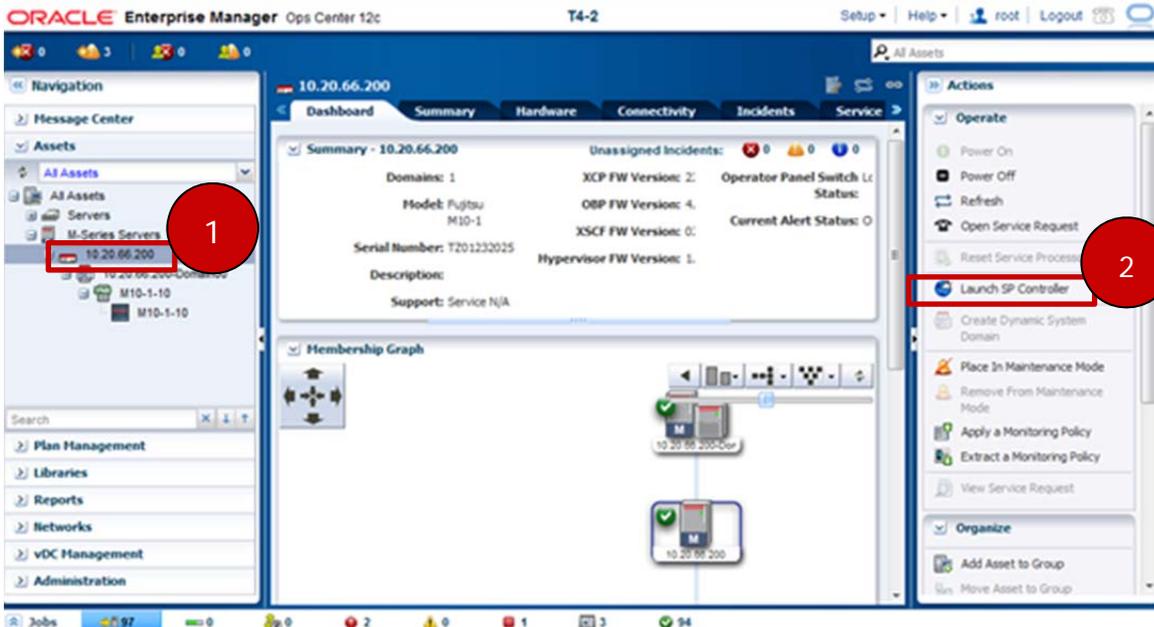
**http://IP address/**

- The address of the server on which Ops Center has been installed.
- 2) Enter the user name and password and press the **Log in** button.
    - If login is successful, the Ops Center page will be displayed.

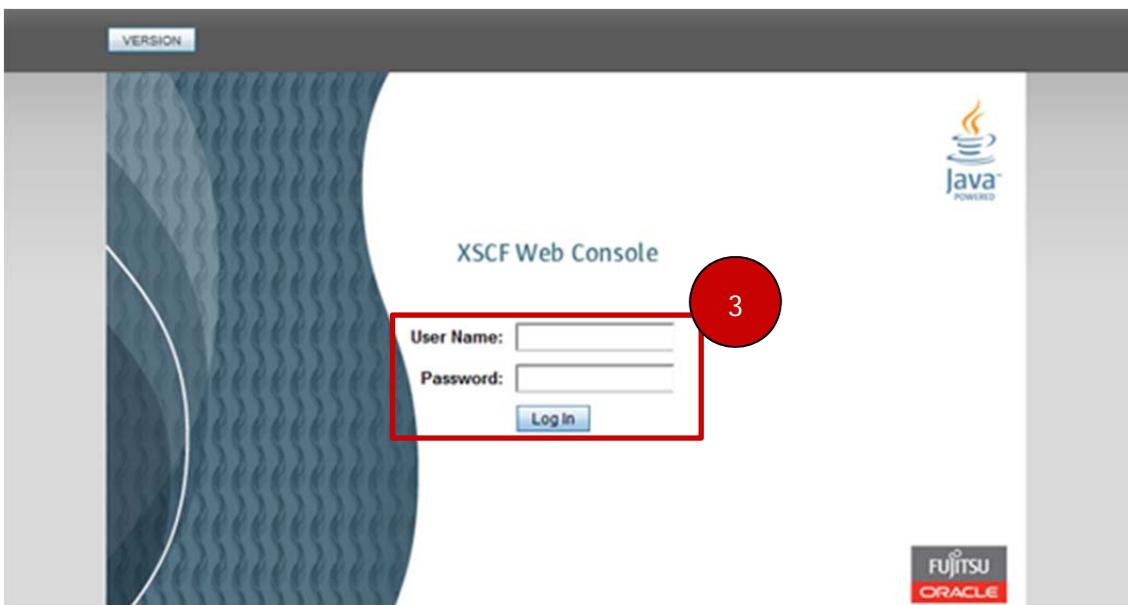


### 1 - 4 - 3 .Accessing the XSCF Web Console from the Ops Center

- 1) In the Navigation Pane, go to Assets and select the relevant server.
- 2) In the Actions Pane, go to Operate and select **Launch SP Controller**.



- 3) Enter the user name and password and press the **Log In** button.
  - If login was successful, the XSCF Web Console screen will be displayed.



## 2. Virtual Environment Configuration

### 2-1 .Oracle VM Server for SPARC

#### 2-1-1 .Guest Domain Configuration

Configure an Oracle VM guest domain.

(Refer to the "Ops Center 12c Release 2 System Configuration Guide for further details.)

Application: [Ops Center](#)

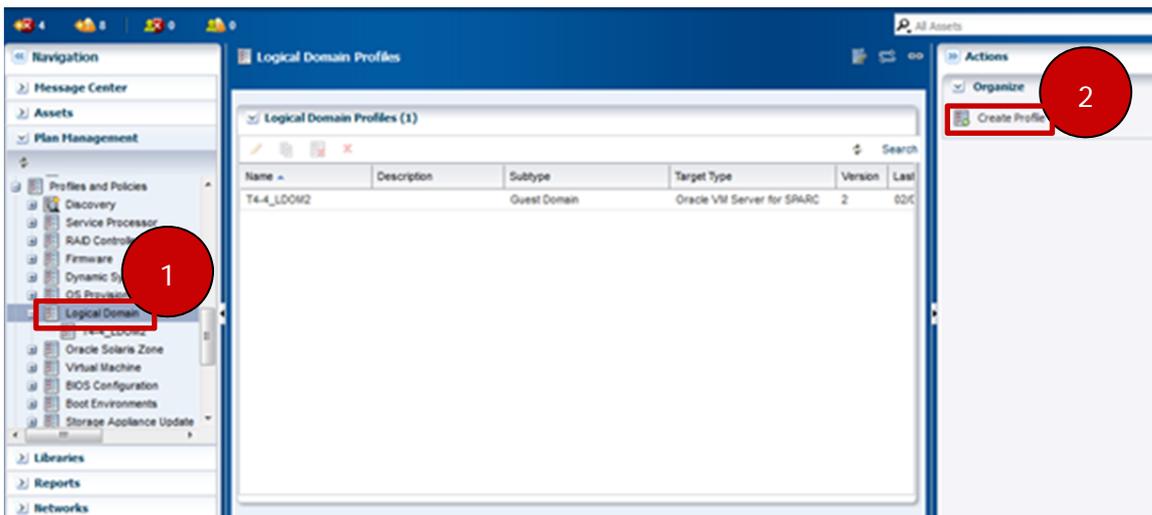
Relevant OS Command: [ldm\(1M\)](#)

### Operation Procedure

Preliminary Operation: to configure the control domain of the server, the Oracle VM Agent Controller must be installed.

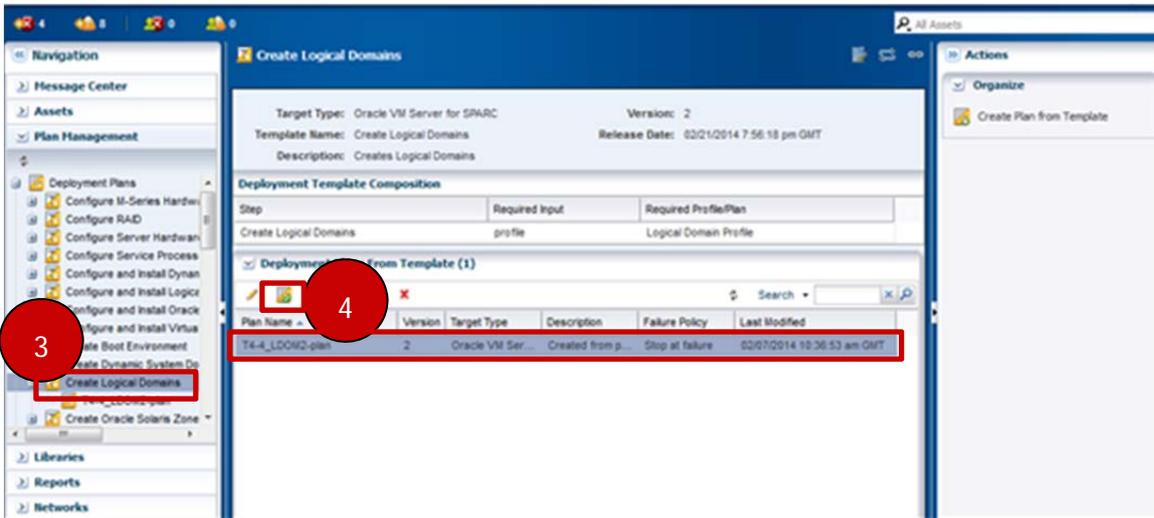
(See: Installing the Agent Controller in Appendix-1.)

- 1) In the Navigation Pane, go to Plan Management. Under Profiles and Policies, select **Logical Domain**.
- 2) In the Actions Pane, go to Organize. Select **Create Profile**, and create a profile following the instructions in the Create Logical Domain Profile Wizard.



3) In the Navigation Pane, go to Plan Management. From Deployment Plans, select **Create Logical Domains**.

4) Select the Oracle VM profile that you created, click **Apply Deployment Plan** and create the guest domain following the instructions in the Create guest domain Wizard.



Verification: Check that the registered guest domain is displayed under Assets in the Navigation Pane.

## 2 - 1 - 1 .OS Installation

Installing the OS onto a guest domain.

(Refer to the "Ops Center 12c Release 2 System Configuration Guide" for further details)

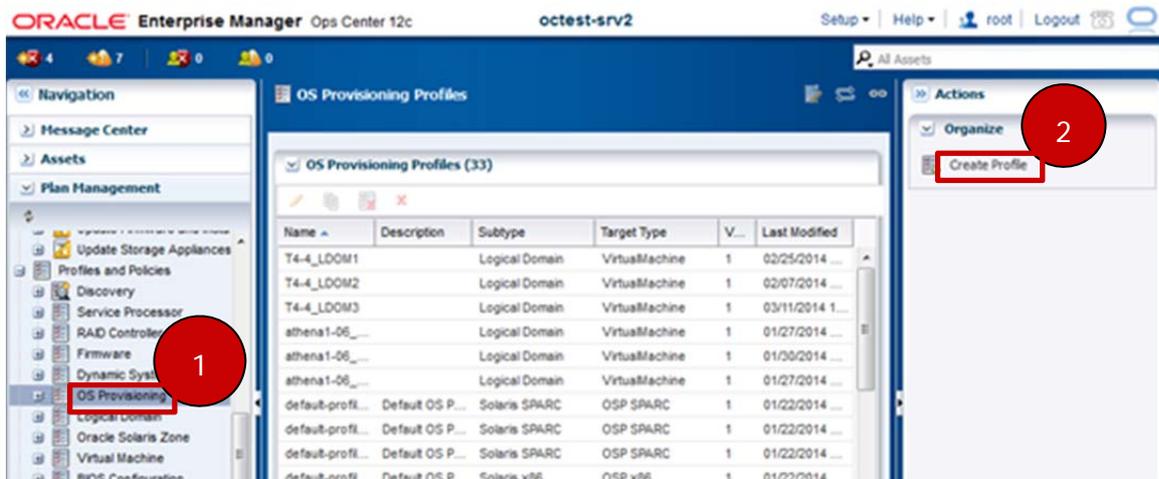
Application: [Ops Center](#)

Relevant OS Command: [installadm\(1M\)](#)

### Operation Procedure

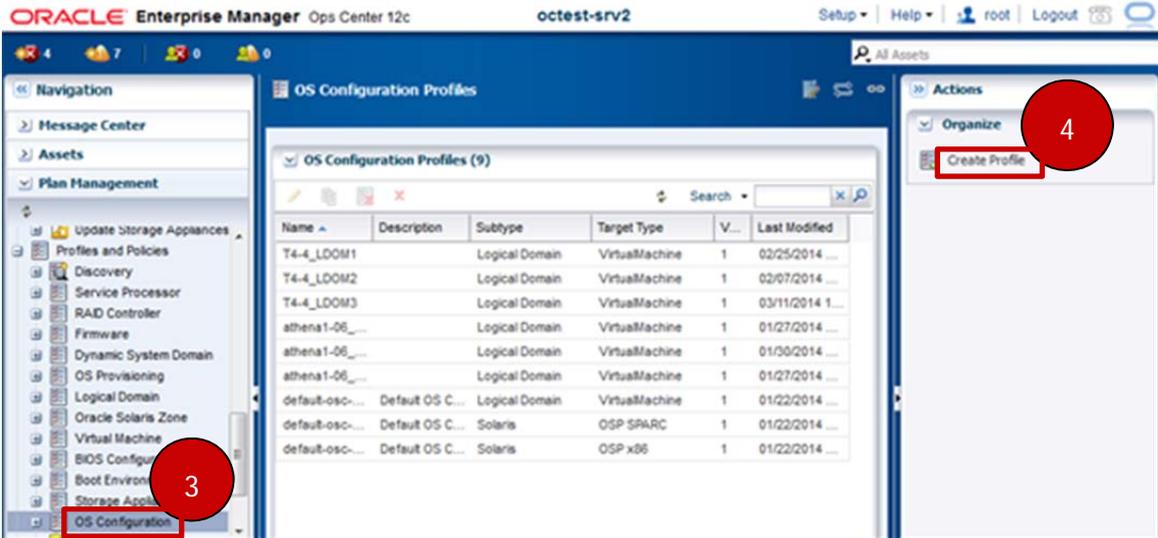
Preliminary Operation: Execute "2-1-1. Guest Domain Construction"

- 1) In the Navigation Pane, go to Plan Management. From Profiles and Policies, select **OS Provisioning**.
- 2) In the Actions Pane, go to Organize, select **Create Profile**, and create a profile following instructions in the OS Provisioning Wizard.
  - Select the "Create a deployment plan for this profile" option. This is the default option. If this option is not selected, the plan will not be automatically created.



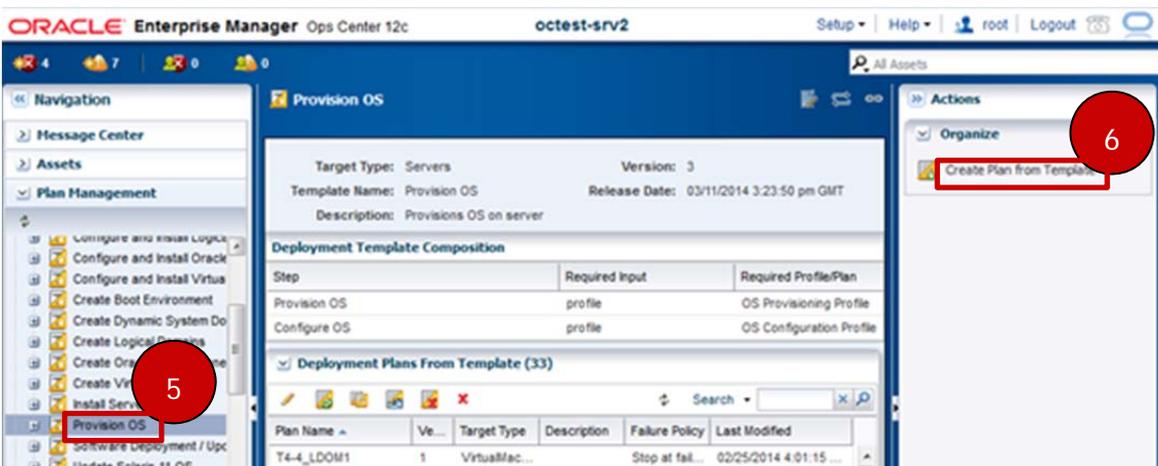
3) In the Navigation Pane, go to Plan Management. From Profiles and Policies, select **OS Configuration**.

4) In the Actions Pane, go to Organize, select **Create Profile**, and create a profile following the instructions in the Wizard.



5) In the Navigation Pane, go to Plan Management. From Deployment Plans, select **Provision OS**.

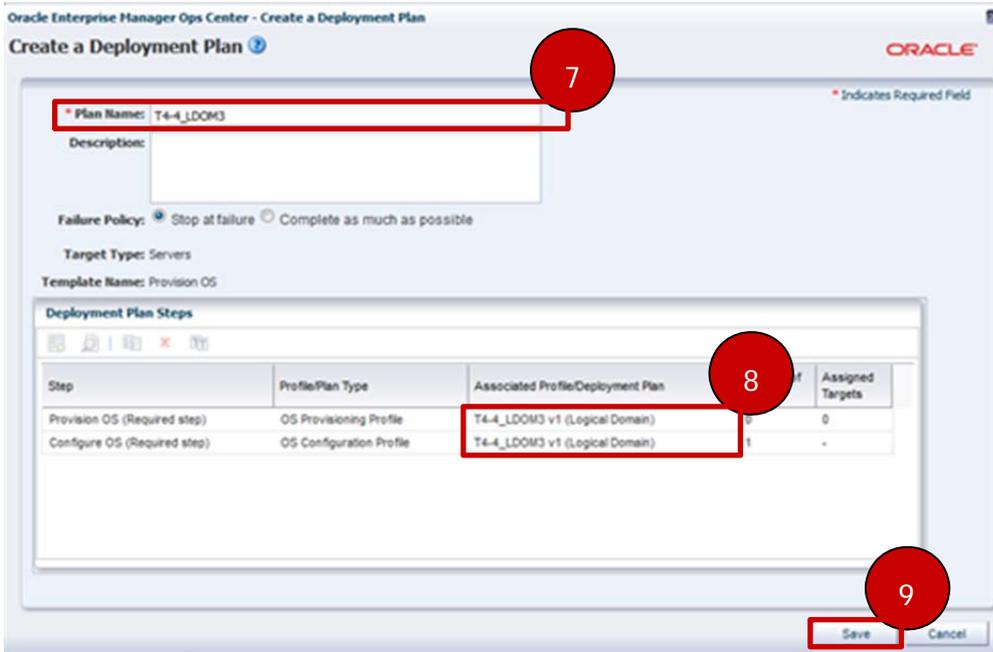
6) In the Actions Pane, go to Organize and select **Create Plan from Template**.



7) Enter the **Plan Name**.

8) In the Deployment Plan Steps window, select the profile created in steps 2) and 4) under **Associated Profile/Deployment Plan**.

9) Click **Save**.



Oracle Enterprise Manager Ops Center - Create a Deployment Plan

Create a Deployment Plan

\* Plan Name: T4-4\_LDOM3

Description:

Failure Policy:  Stop at failure  Complete as much as possible

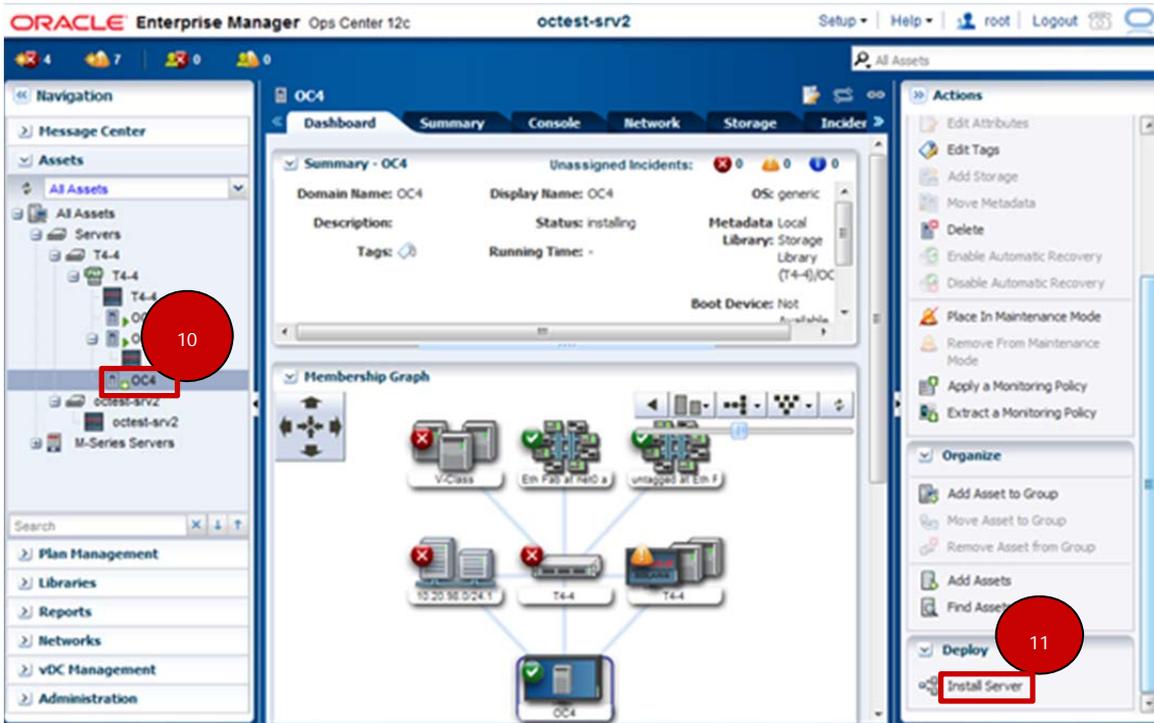
Target Type: Servers

Template Name: Provision OS

Step	Profile/Plan Type	Associated Profile/Deployment Plan	Assigned Targets
Provision OS (Required step)	OS Provisioning Profile	T4-4_LDOM3 v1 (Logical Domain)	0
Configure OS (Required step)	OS Configuration Profile	T4-4_LDOM3 v1 (Logical Domain)	1

Save Cancel

- 1 0) In the Navigation Pane, go to Assets and select the designated guest domain.
- 1 1) In the Actions Pane, go to Deploy and select **Install Server**.



- 1 2) Select the plan that you created in steps 7) through 9).
- 1 3) Select **Apply with minimal interaction**.
- 1 4) Click **Apply Plan** and install the plan following the instructions in the Install Server Wizard.
  - Installation in step 14) may take up to 30 minutes to complete.



Verification: Check that the registered guest domain's OS is displayed in Navigation Pane.

## 2 - 2 .Oracle Solaris Zone

### 2 - 2 - 1 .Oracle Solaris Zone Configuration

Configuring the Oracle Solaris Zone.

(For further information see the: Ops Center 12c Release 2 System Configuration Guide)

Application: [Ops Center](#)

Relevant OS Command: [zoneadm\(1M\)](#), [zonecfg\(1M\)](#)

### Operation Procedure

Preliminary Operation: An Agent Controller must be installed on the server that the Zone (guest domain or control domain) will be installed on.

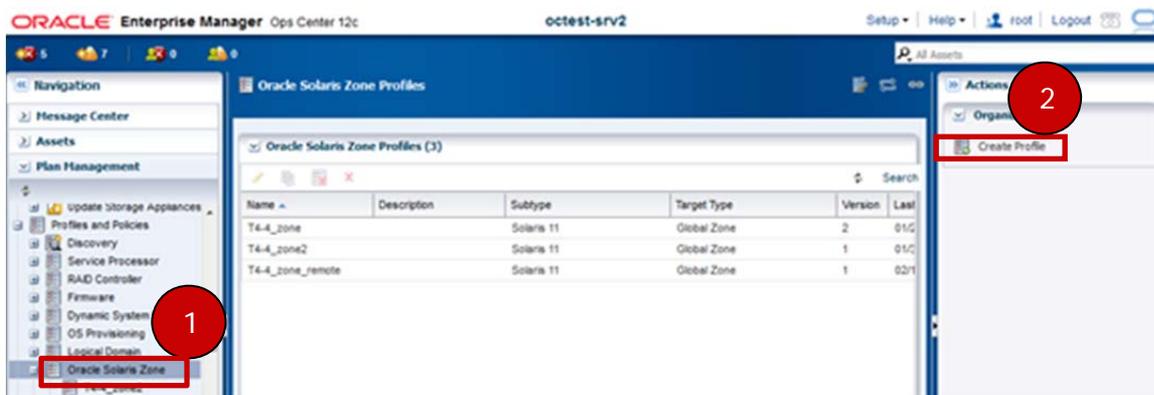
(Please refer to: Installing an Agent Controller in Appendix-1)

1 ) In the Navigation Pane, go to Plan Management. From Profiles and Policies, select **Oracle Solaris Zone**.

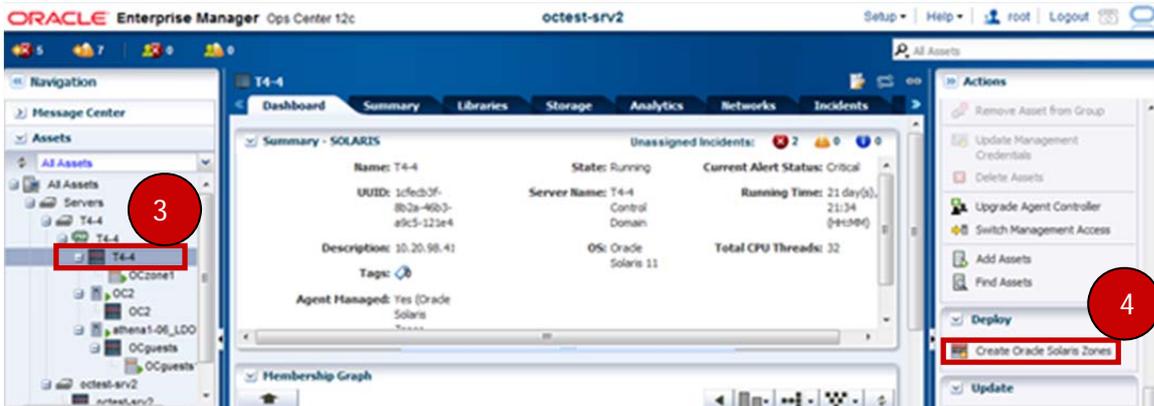
- Oracle Solaris Zone is sometimes displayed as 「TEST」. This is a recognized bug. If this is the case, please read "test" as "Oracle Solaris Zone".

2 ) In the Actions Pane go to Organize, select **Create Profile**, and create a profile following the instructions in the Create Profile Wizard.

- Please select the "Create a deployment plan for this profile" option. This option is selected by default. If it is not selected, the plan will not be automatically created.



- 3) In the Navigation Pane, go to Assets and select the relevant server.
- 4) In the Actions Pane, go to Deploy and select **Create Oracle Solaris Zones**.



- 5) After selecting the Zone plan you created, press the **Apply Plan** button.
- 6) Create the Zone following the instructions from the Wizard.



Verification: Check that the register Zone is displayed in the Assets section of the Navigation Pane.

### 3. Hardware Settings and Operational Procedures

Chapter 3 explains the operation of the XSCF Web Console.

You can check the power status and get information about the firmware using the Ops Center, but when the power or firmware is controlled using the XSCF Web Console, the data in the Ops Center will not be updated in a timely fashion. Because of this, when checking information using the Ops Center, the data must be manually updated using the Ops Center's refresh function.

#### 3-1 .Power On and Off

##### 3-1-1 .Power Controls for the Physical Partitions (All Partitions)

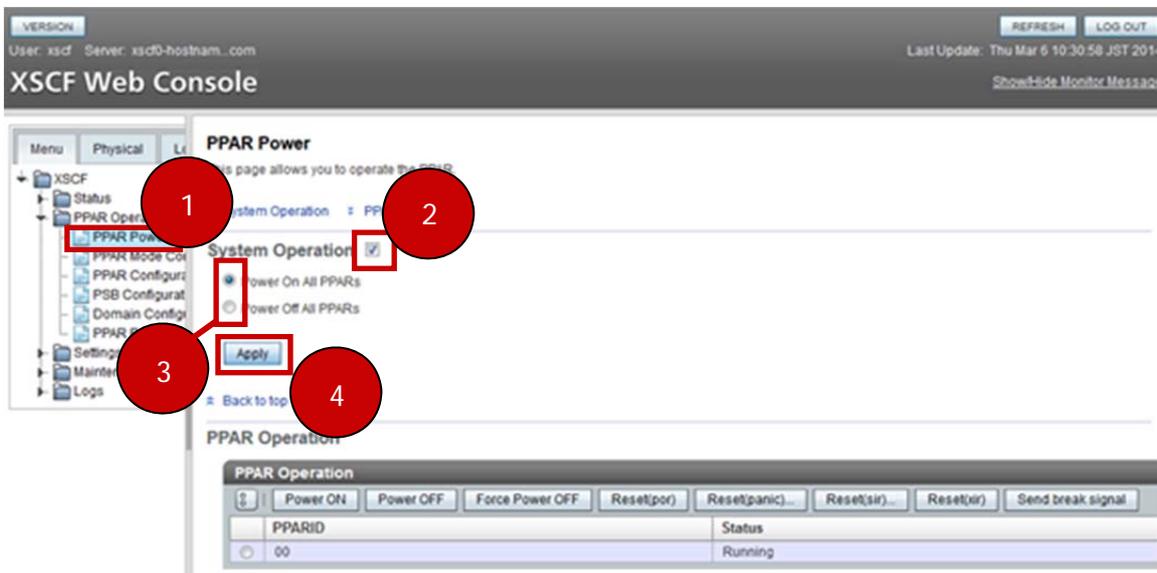
Execute the power on and off for all physical partitions.

Application: [XSCF Web Console](#)

Relevant XSCF Command: [poweron\(8\)](#), [poweroff\(8\)](#)

#### Operation Procedure

- 1) Under the Menu tab of the Menu Frame, go to XSCF-PPAR Operation and select **PPAR Power**.
- 2) Put a check next to **System Operation** in the main frame.
- 3) Select **Power On All PPARs** or **Power Off All PPARs**.
- 4) Click **Apply**.



Verification: You can check the status under PPAR Operation on the same page.

### 3 - 1 - 2 .Power Controls for Specific Physical Partition (1 Partition)

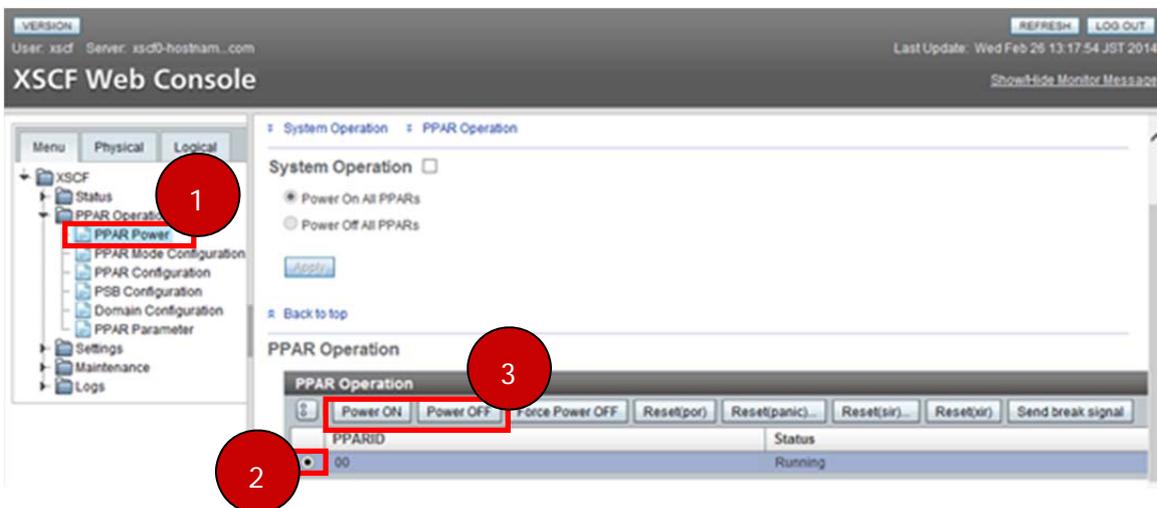
Switch the power on or off for a specific partition.

Application: [XSCF Web Console](#) (May be executed with Ops Center)

Relevant XSCF Command: [poweron\(8\)](#), [poweroff\(8\)](#)

#### Operation Procedure

- 1) Under Menu in the Menu Frame, go to XSCF-PPAR Operation and select **PPAR Power**.
- 2) In PPAR Operation in the Main frame, select the PPAR to start up or shut down.
- 3) Click **Power ON** or **Power OFF**.
- 4) On the confirmation page, press OK.



Verification: You can check the status by looking in the PPAR operation section of the main frame.

### 3 - 1 - 3 .Power Schedule Settings

Turn the system power on or off at a designated time.

Application: [XSCF Web Console](#)

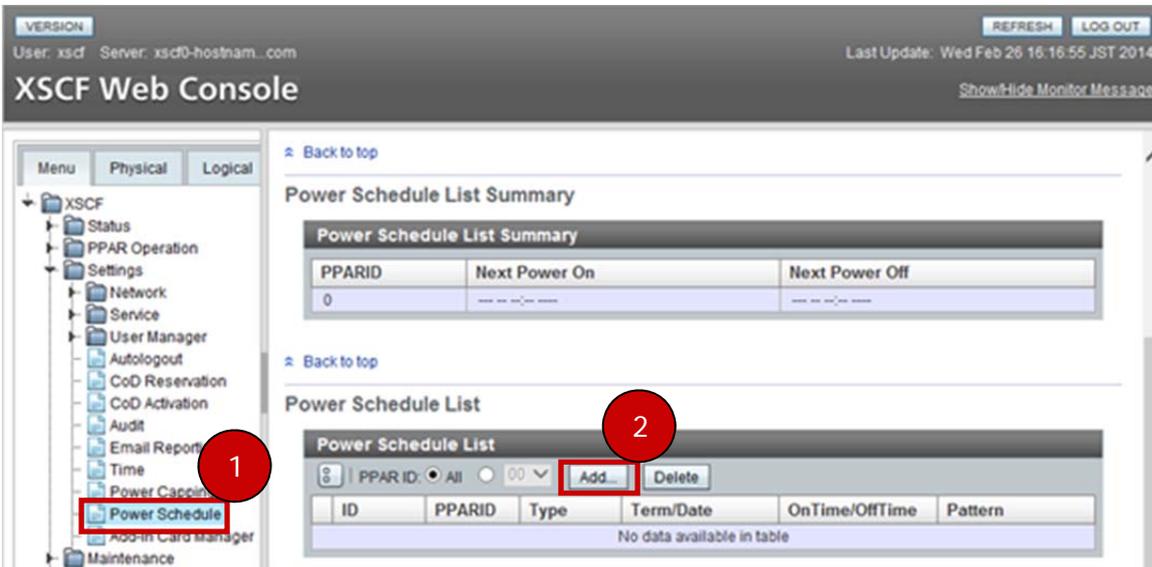
Relevant XSCF Command: [addpowerschedule\(8\)](#)

#### Operation Procedure

Preliminary Operation: Activate the PPAR running schedule

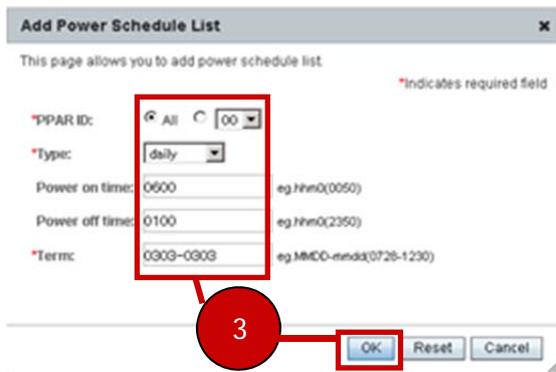
(Please refer to Configuring Scheduled Activation for Physical Partitions in Appendix-3.)

- 1 ) In the Menu tab of the Menu Frame, go to XSCF settings and select **Power Schedule**.
- 2 ) In the Power Schedule List section of the Main Frame, press **Add...** .



- 3 ) Enter the required information and click **OK**.

- Regarding the PPAR ID, if All is checked, it is possible to setup all PPARs all at once. Select specific PPARs to set them up individually.
- Under Type you can select the options: daily, weekly, monthly, special, or holiday.



- The above example shows the settings for turning the power off at 1 o'clock and turning it on at 6 o'clock on March 3<sup>rd</sup>.

Verification: Check that the schedule that you set up is registered in the Power Schedule List.

### 3 - 2 .CPU Core Activation Key Registration and Deletion

#### 3 - 2 - 1 .Registering the CPU Activation Key

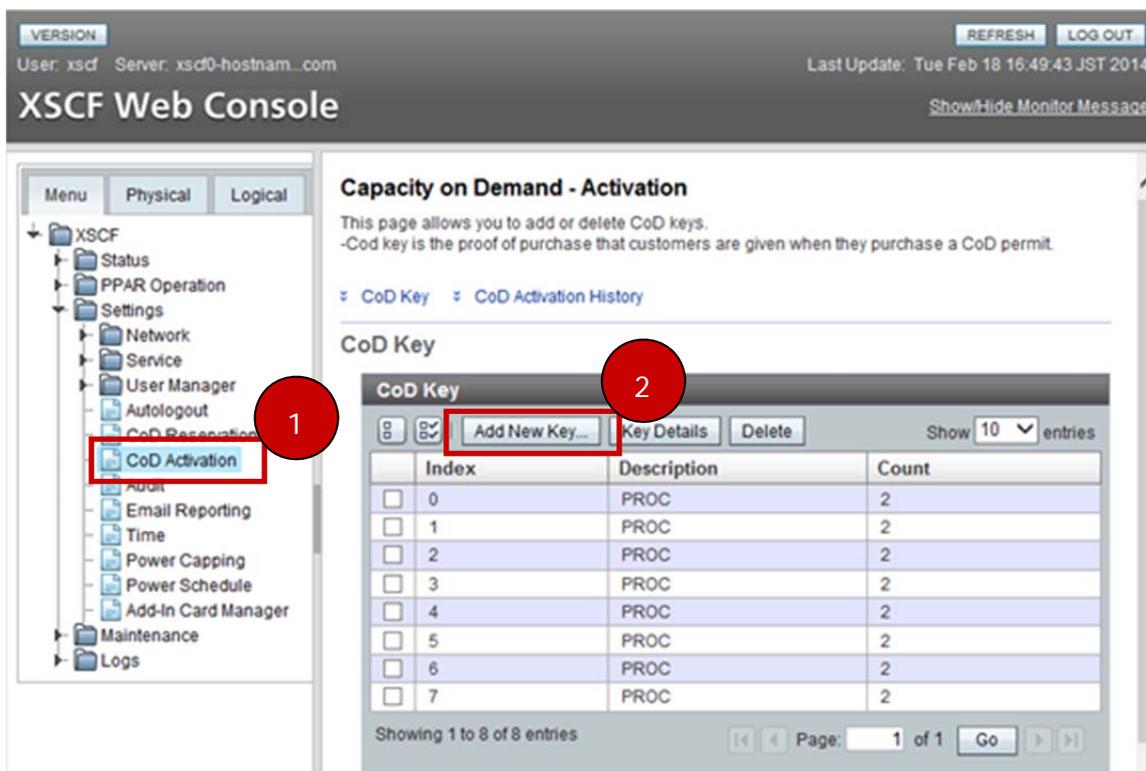
Register the CPU Core Activation key. By registering the activation key, you can activate the CPU Core.

Application: [XSCF Web Console](#)

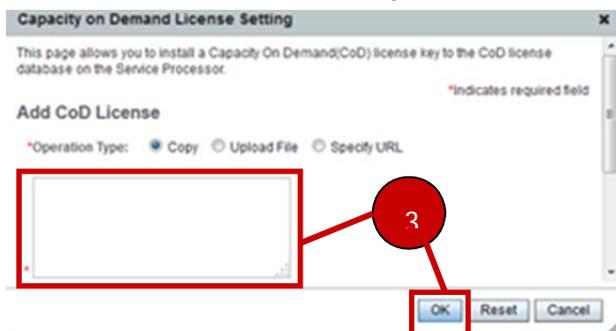
Relevant XSCF Command: [addcodactivation\(8\)](#)

#### Operation Procedure

- 1) In the Menu tab of the Menu Frame, go to XSCF. From Settings, select **CoD Activation**.
- 2) In the CoD Key section of the Main Frame, click **Add New Key**.



- 3) Enter the activation key information, and click **OK**.



Verification: Check that new key is added in the CoD Key list.

### 3 - 2 - 2 .Configuring the CPU Core Resource for Physical Partitions

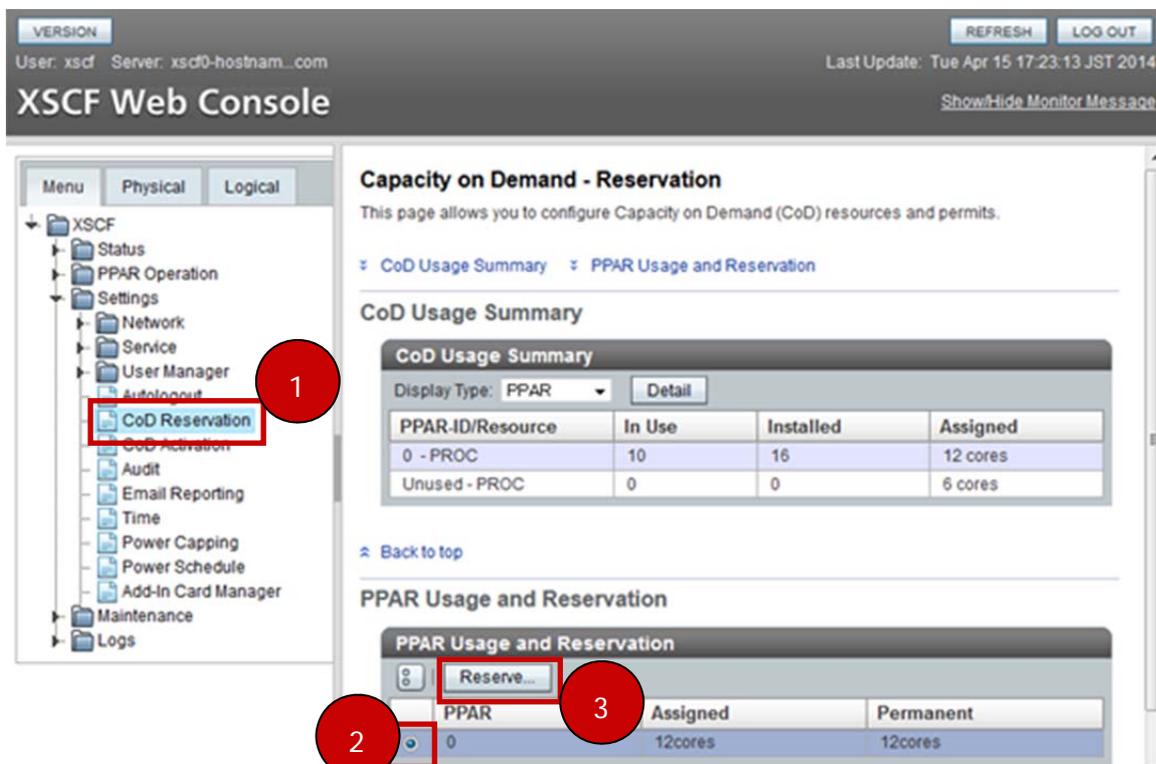
The CPU core activated by the activation key will be registered in the Physical Partition (PPAR). You can delete a CPU core that has been registered in PPAR.

Application: [XSCF Web Console](#)

Relevant XSCF Command: [setcod\(8\)](#)

#### Operation Procedure

- 1) In the Menu Tab of the Menu Frame, go to XSCF setting and select **CoD Reservation**.
- 2) In the PPAR Usage and Reservation section of the main frame, select the relevant PPAR.
- 3) Click **Reserve...**



- 4) Next to Permanent, enter the number of cores to be set to the OS, and click the OK button.



Verification: In the PPAR Usage and Reservation list, check that the number of cores is equal to the number you entered for that PPAR.

### 3 - 2 - 3 .Deleteing the CPU Core Activation Key

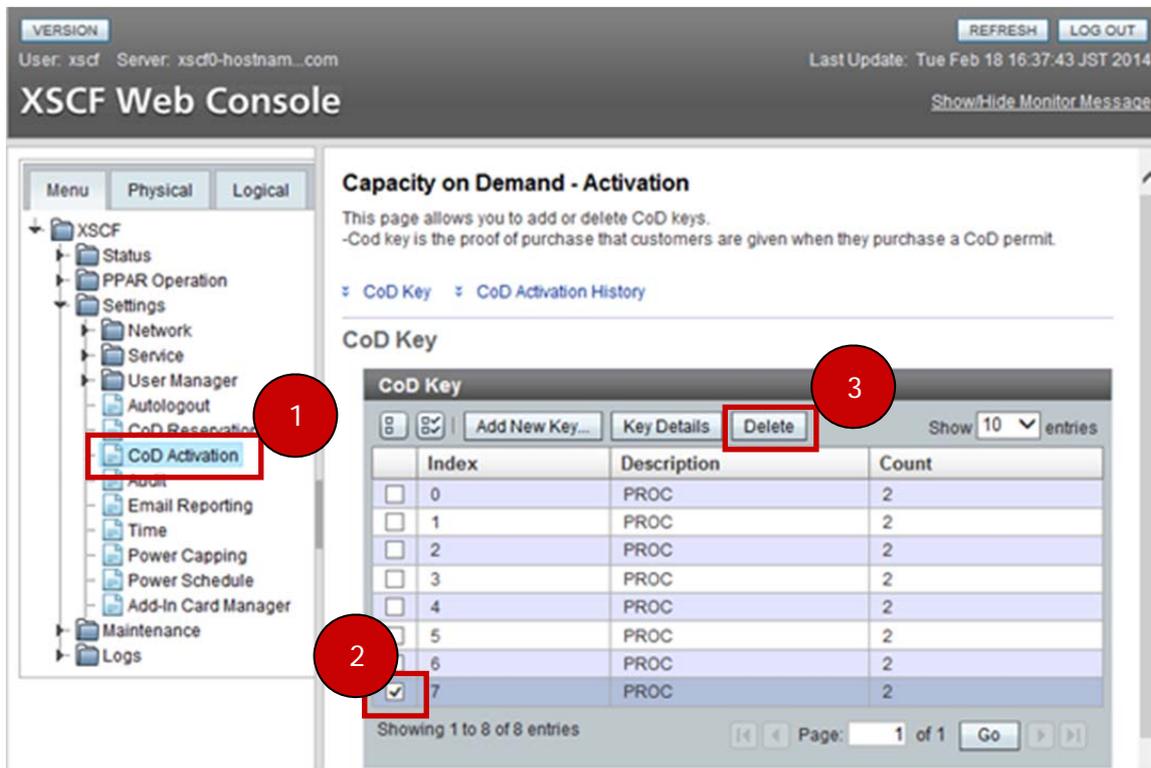
Delete a CPU Core Activation key. The deleted activation key can be used on other servers. However, this is possible only if used on the same model.

Application: [XSCF Web Console](#)

Relevant XSCF Command: [deletecodactivation\(8\)](#)

#### Operation Procedure

- 1 ) In the Menu Tab of the Menu Frame, go to XSCF settings and select **CoD Activation**.
- 2 ) Select the relevant activation key in the CoD Key section of the Main Frame.
- 3 ) Click the **Delete** button.
- 4 ) Click **OK** on the confirmation screen.



Verification: Check that the key you selected is deleted from the CoD Key list.

### 3 - 3 .Firmware Updates

#### 3 - 3 - 1 .Execution of Firmware Updates

Update the Firmware.

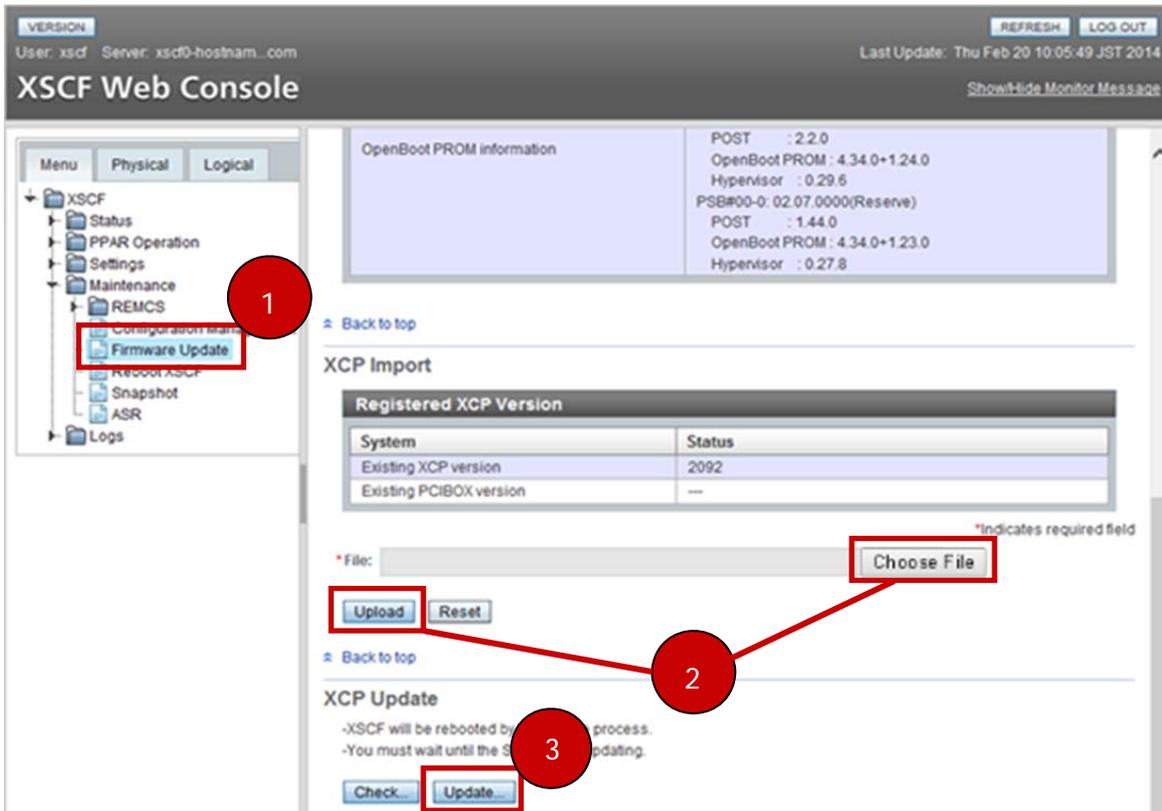
Application: [XSCF Web Console](#) (May also be carried out using Ops Center)

Relevant XSCF Command: [getflashimage\(8\)](#), [flashupdate\(8\)](#)

#### Operation Procedure

- 1) In the Menu Tab of the Menu Frame, go to XSCF-Maintenance and select **Firmware Update**.
- 2) In the XCP import section of the Main Frame, press the button marked **Choose File**, select the Firmware Update file, and click the **Upload** button.
- 3) Click **Update...** in the XCP Update section.
- 4) In the Update Firmware dialogue box, type in the version of the update, then select **Target** and click **OK**.

Note: After executing the update, XSCF will be automatically reset. Accordingly, it will be necessary to log back into the XSCF Web Console.



The screenshot shows the XSCF Web Console interface. The left sidebar contains a menu tree with 'XSCF' expanded, and 'Firmware Update' highlighted under 'Maintenance'. The main content area shows 'OpenBoot PROM information' with details like POST version and OpenBoot PROM version. Below that is the 'XCP Import' section, which includes a table for 'Registered XCP Version' and a 'File' input field with a 'Choose File' button. The 'XCP Update' section contains an 'Upload' button, a 'Reset' button, and an 'Update...' button. Red circles and lines are overlaid on the image to indicate the steps: circle 1 points to 'Firmware Update' in the menu; circle 2 points to the 'Choose File' button and the 'Upload' button; circle 3 points to the 'Update...' button.

Verification: In the Display Firmware Version section of the same page, check the XCP Version and confirm that it has been updated to the latest version.

## 4. OS Settings and Controls

### 4-1 .OS Restart

#### 4-1-1 .OS Restart

Restart the OS.

- OS start up/shut down must be executed using the command line.
- Physical partitions may be started up and shut down. (For information about how to do this, refer to "Startup and Shut down")

Application: [Ops Center](#)

Relevant OS Command: [reboot\(1M\)](#), [shutdown\(1M\)](#), [init\(1M\)](#)

### Operation Procedure

- 1) In the Navigation Pane, go to Assets and select the server concerned.
- 2) In the Actions Pane, go to Operate and select **Reboot**.



## 4 - 2 .Network Settings

### 4 - 2 - 1 .Adding a New Interface

Add a new interface. The procedure differs depending on whether you are using the Agent Controller for Oracle VM or the Zone.

Application: [Ops Center](#)

Relevant OS Command: [ipadm\(1M\)](#)

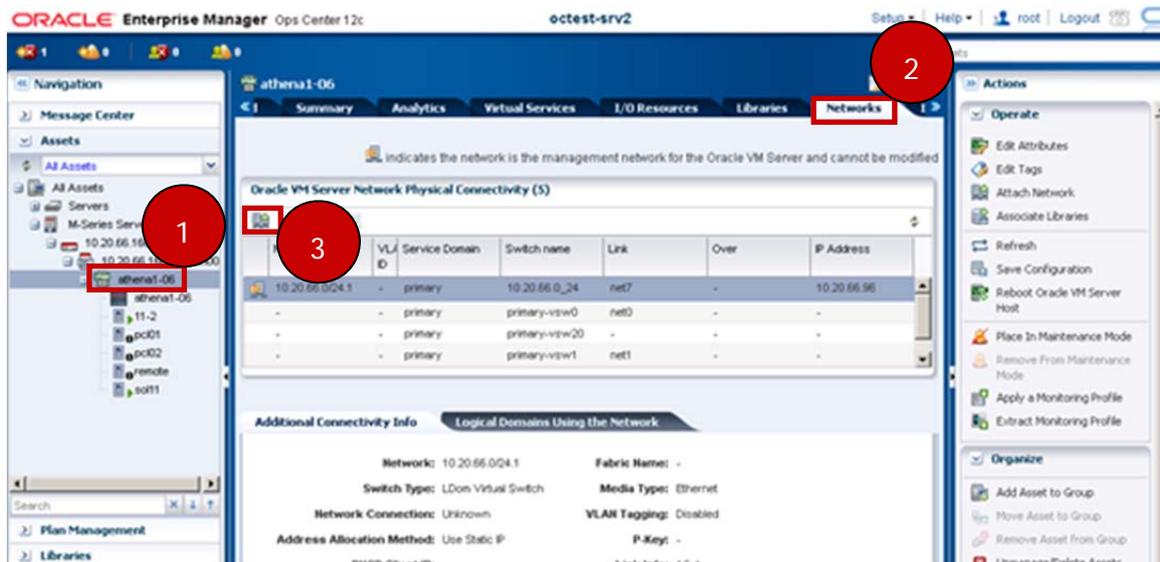
### Operation Procedure

Preliminary Operation: You must create a subnet before you create a new interface to go on it.

(Refer to: Adding a New Subnet Appendix-4.)

- When using Agent Controller for Oracle VM

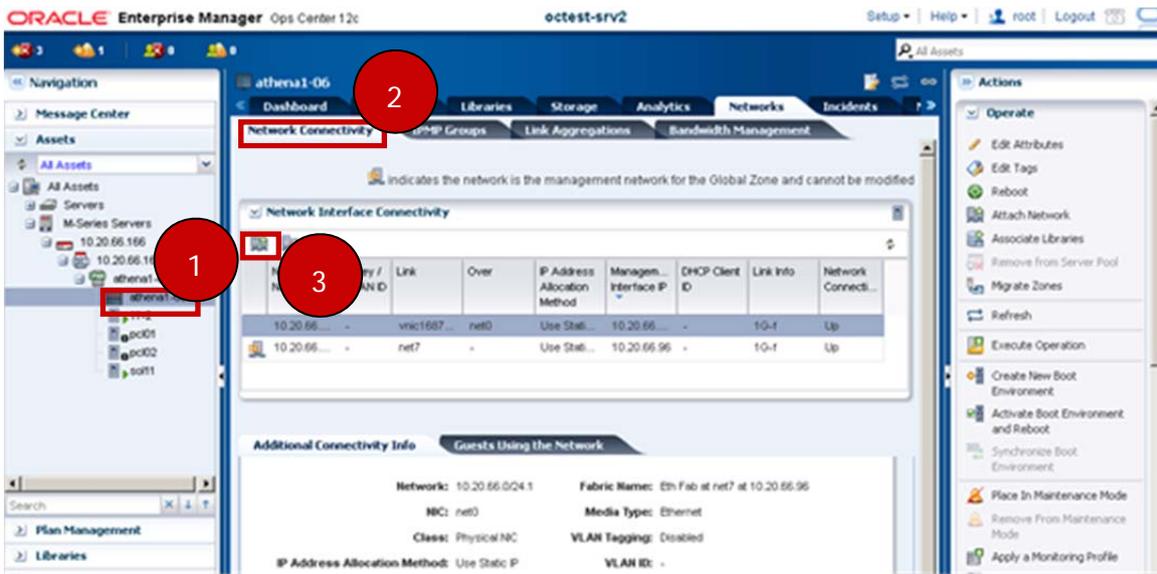
- 1 ) In the Navigation Pane, go to Assets and select the relevant server.
- 2 ) Select the **Networks** tab.
- 3 ) Press **Attach Network**.
- 4 ) Enter the required parameters (e.g. the IP address) following the instructions in the Wizard and press **Finish**.



Verification: Check that the new interface is displayed in the Oracle VM Server Network Physical Connectivity list.

- For the Zone Agent Controller:

- 1) In the Navigation Pane, go to Assets and select the target.
- 2) Under the Networks tab, select **Network Connectivity**.
- 3) Click **Attach Network**.
- 4) Enter the required parameters (e.g. the IP address) following the instructions in the Wizard and press **Finish**.



Verification: Check that the added interface is displayed in the Network Interface Connectivity list.

### 4 - 2 - 2 .Changing Network Settings

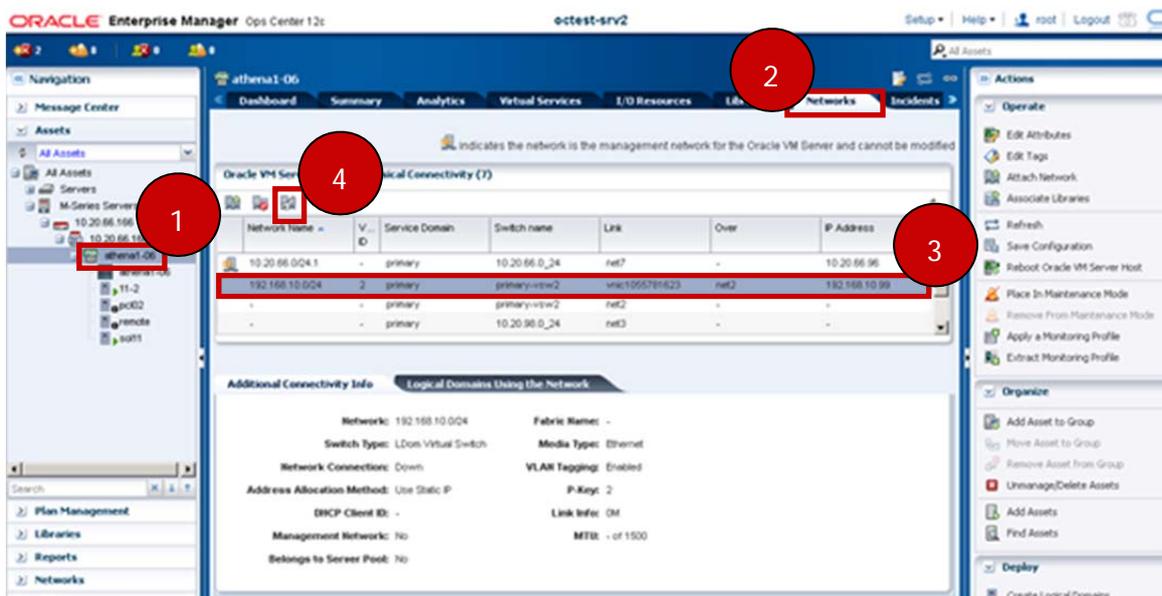
This section describes how to change network settings such as IP addresses. Procedures differ depending on whether the Agent Controller is for the Oracle VM or for the Zone.

Application: [Ops Center](#)

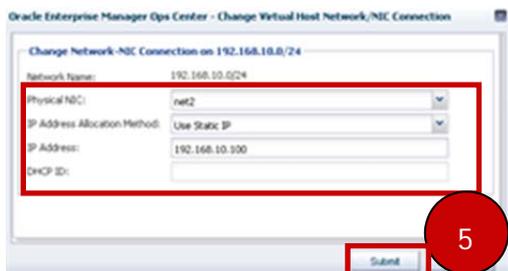
Relevant OS Command: [ipadm\(1M\)](#)

#### Operation Procedure

- For Oracle VM Agent Controller
  - 1 ) In the Navigation Pane, go to Assets and select the relevant server.
  - 2 ) Select the **Networks** tab.
  - 3 ) Select the interface to be changed.
    - You cannot change the managing interface.
  - 4 ) Press **Modify Physical Connectivity**.

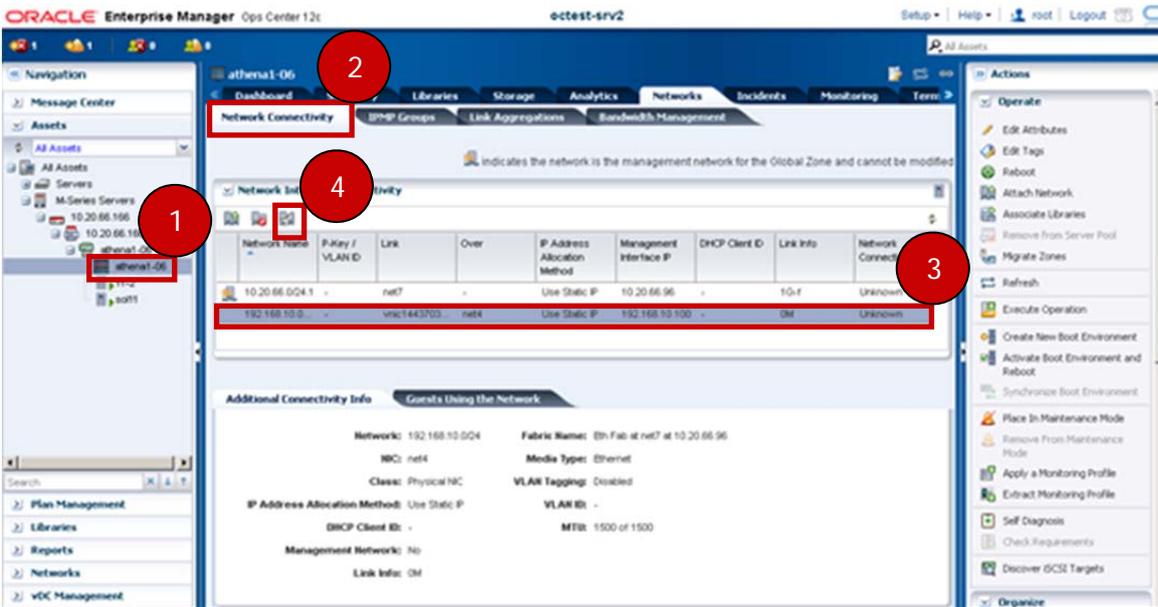


- 5 ) Enter the new setting parameters and press **Submit**.

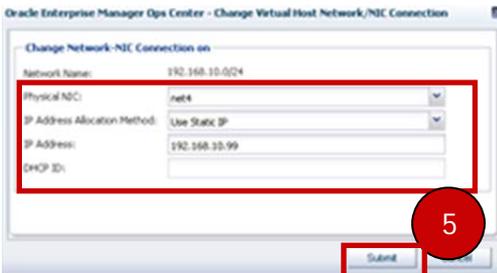


Verification: Check that the parameters of the designated interface have been replaced with the new ones.

- For the Zone Agent Controller:
  - 6) In Navigation Pane, go to Assets and select the relevant server.
  - 7) Select **Network Connectivity** in the Networks tab.
  - 8) Select the interface your want to change.
    - You cannot change the management interface.
  - 9) Press **Modify Physical Connectivity**.



10) Enter new parameters and press **Submit**.



Verification: Check that the parameters of the designated interface have been replaced with the new ones.

### 4 - 2 - 3 .IPMP Settings

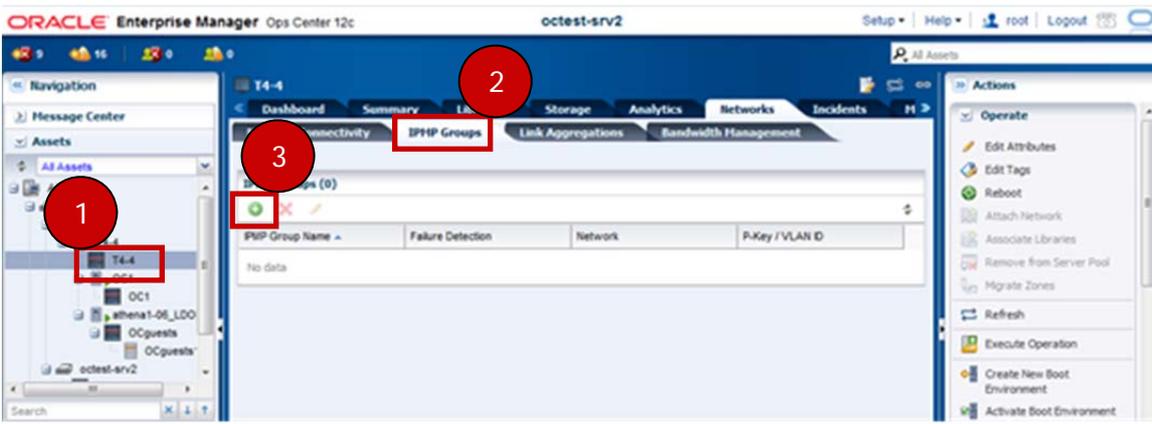
Setup the IPMP, and configure network redundancy.

Application: [Ops Center](#)

Relevant OS Command: [ipadm\(1M\)](#), [ipmpstat\(1M\)](#)

#### Operation Procedure

- 1) In the Navigation Pane, go to Assets and select the relevant server.
- 2) Select IPMP Groups under the Networks tab.
- 3) Click **Create IPMP Group**.



- 4) Enter the **IPMP Group Name**, **Network**, and **IPMP Group Members**.
- 5) Click **Next**.



6) Configure the Specify NIC Settings and Specify Data Addresses, if necessary, then go to Summary and press **Finish**.

- To specify redundancy for the control domain Management LAN, put a check in Create vnic, under Specify NIC Settings and make the vnic redundant.



Verification: Check that the settings you added are displayed.

### 4 - 2 - 4 .Link Aggregation Configuration

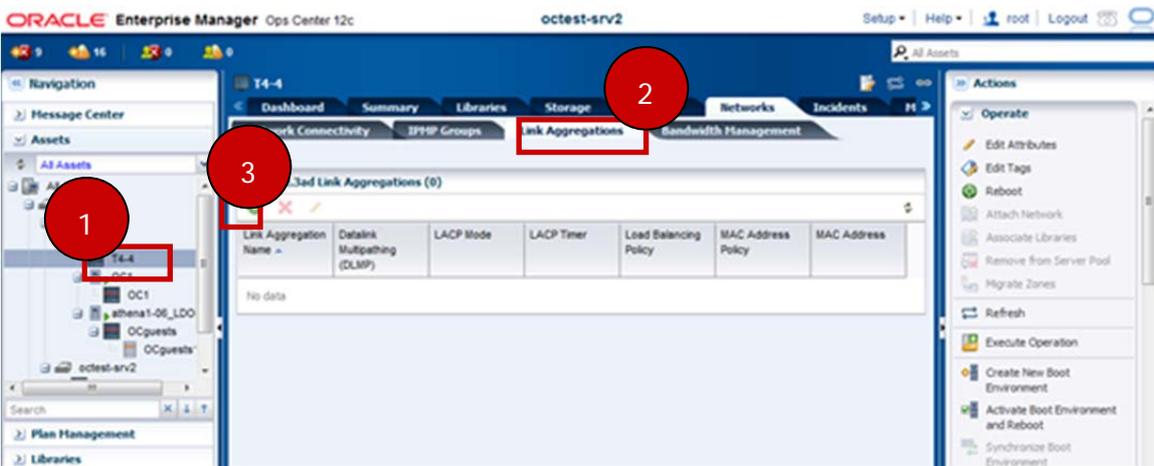
Set up Link Aggregation and expand the network bandwidth.

Application: [Ops Center](#)

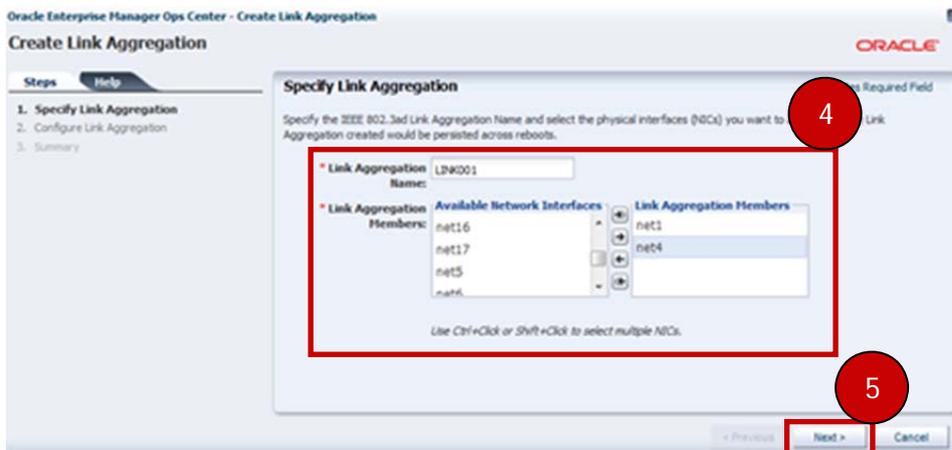
Relevant OS Command: [dladm\(1M\)](#)

#### Operation Procedure

- 1) In the Navigation Pane, go to Assets and select the relevant server.
- 2) In the Network tab, select **Link Aggregations**.
- 3) Click the **Create Link Aggregation** button.



- 4) Enter the **Link Aggregation Name** and the **Link Aggregation Members**.
- 5) Click **Next**.
- 6) Set specify Link Aggregation, if necessary, and then press **Finish** in the summary.
  - To add an IP address after creating a Link Aggregation, refer to section 4-2-1. Adding a New Interface.



Verification: Check that the settings you configured are displayed.

### 4 - 2 - 5 .Bandwidth Setup

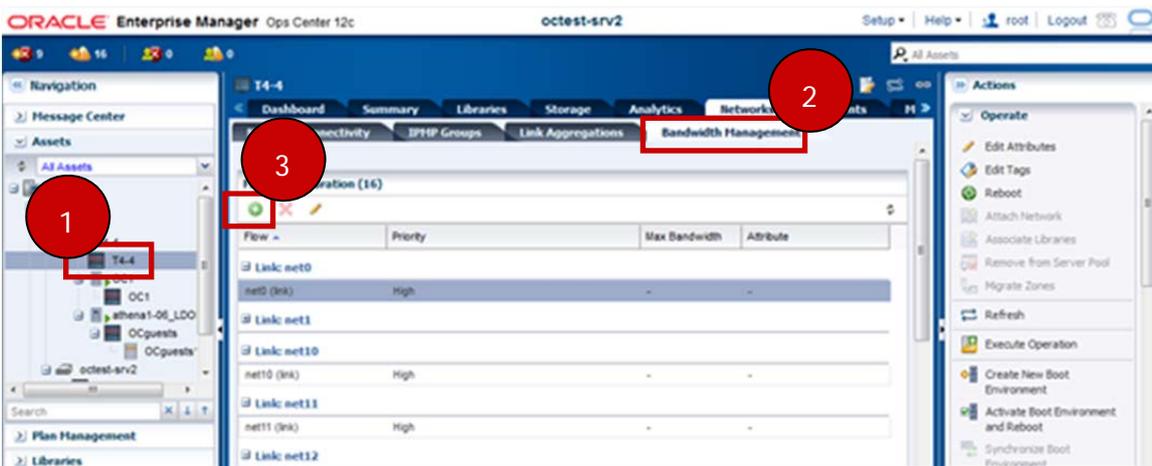
Set up the network bandwidth. This setup can only be used on the Solaris 11 server.

Application: [Ops Center](#)

Relevant OS Command: [flowadm\(1M\)](#)

#### Operation Procedure

- 1) In the Navigation Pane, go to Assets and select the relevant server.
- 2) In the Networks tab, select **Bandwidth Management**.
- 3) Click **Create Bandwidth Flow**.



- 4) Enter the **Flow Name**, **Link**, **Properties**, and **Attributes Setting**.
- 5) Press **Create**.



Verification: Check that the settings that you configured are displayed on the page.

### 4 - 3 .Resource Allotment Settings

#### 4 - 3 - 1 .Control Domain Resource Settings for Oracle VM Server for SPARC

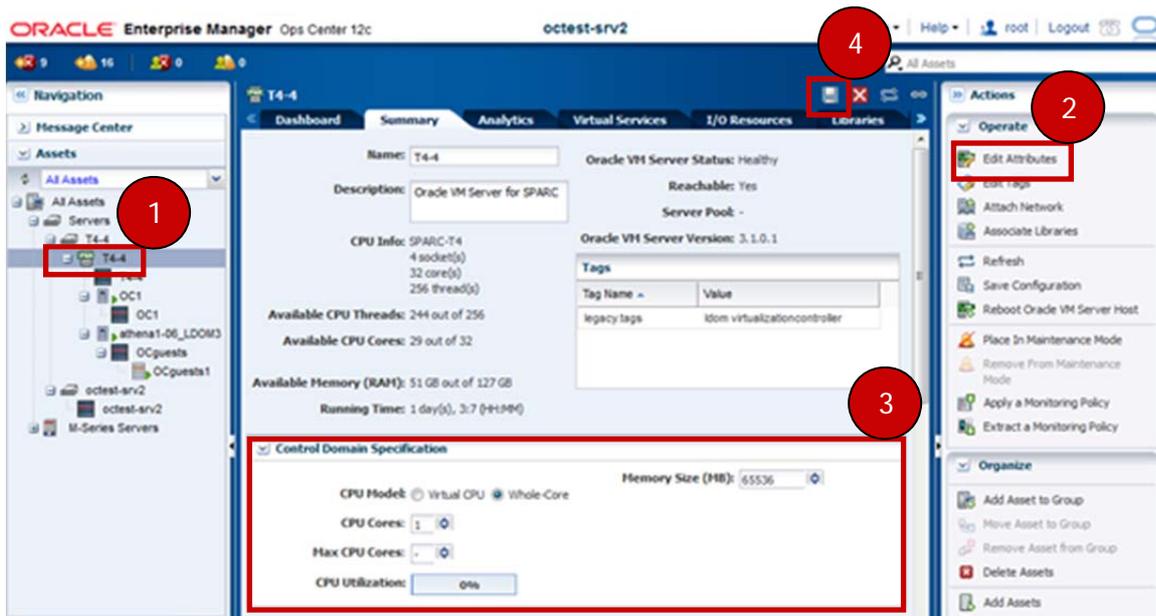
Set up the CPU control domain and memory.

Application: [Ops Center](#)

Relevant OS Command: [ldm\(1M\)](#)

#### Operation Procedure

- 1) In the Navigation Pane, go to Assets and select the relevant domain.
- 2) In the Actions Pane, go to Operate and select **Edit Attributes**.
- 3) In the Summary tab, go to control domain Specification, and change the values for the CPU and Memory.
  - If the memory value is not a multiple of 256, it will automatically be reduced down to the nearest multiple of 256.
- 4) Press **Save**.



### 4 - 3 - 2 .Oracle VM Server for SPARC Guest Domain Resource Settings

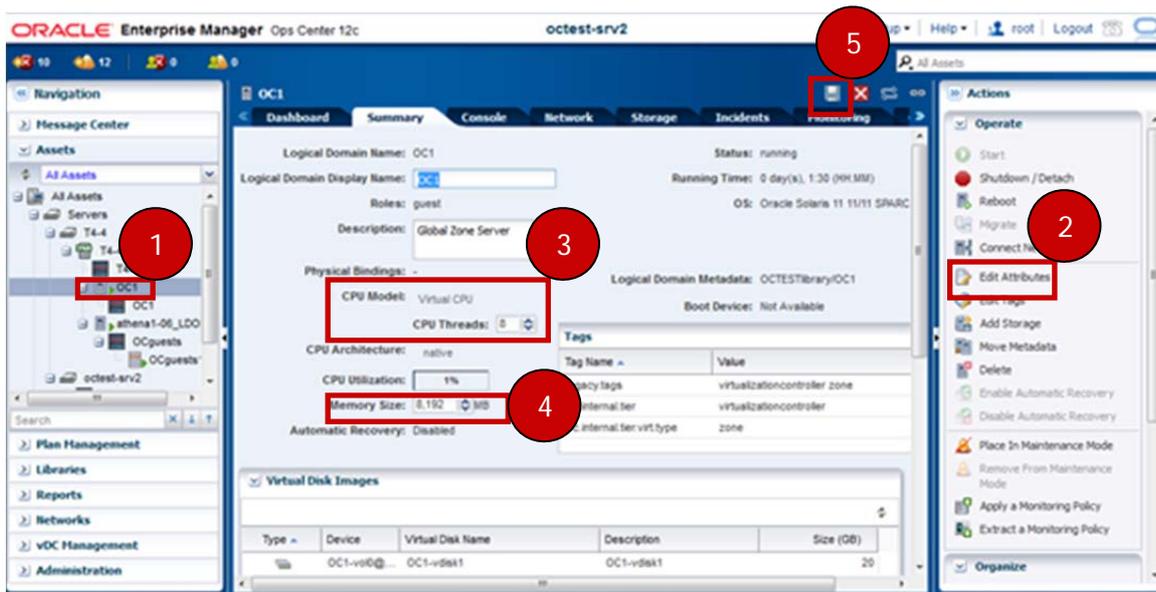
Set up the CPU and memory of the guest domain.

Application: [Ops Center](#)

Relevant OS Command: [ldm\(1M\)](#)

#### Operation Procedure

- 1) In the Navigation Pane, go to Assets and select the relevant domain.
- 2) In the Actions Pane, go to Operate and select **Edit Attributes**.
- 3) In the Summary tab, go to **CPU Mode** and change the value of **CPU Threads**.
  - When creating the guest domain, if “Whole-Core” is selected, it will be “CPU cores”.
- 4) Change the **Memory Size** value.
  - If the memory value is not a multiple of 256, it will automatically be reduced down to the nearest multiple of 256.
- 5) Click **Save**.



### 4 - 3 - 3 .Oracle Solaris Zone Configuration

Configure the Zone resource settings.

Application: [Ops Center](#)

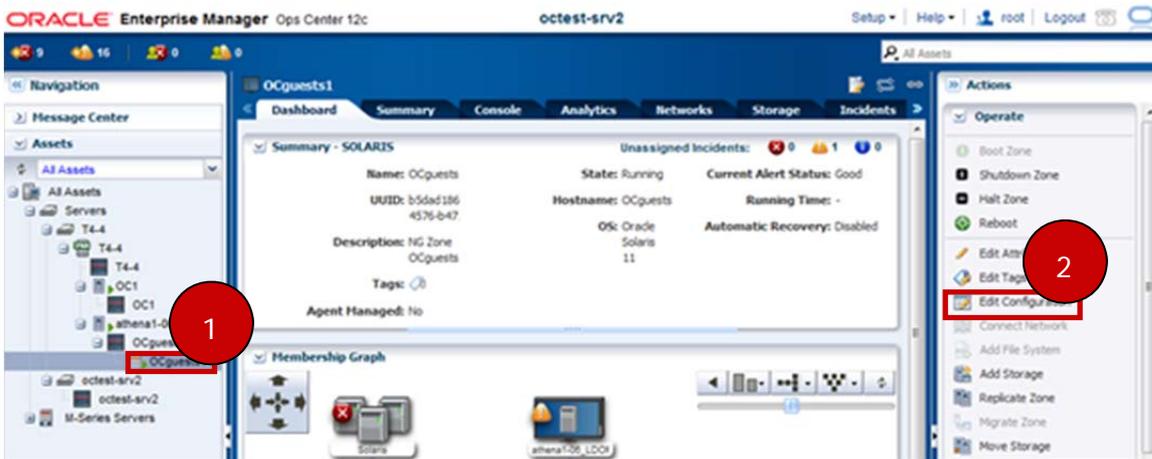
Relevant OS Command: [prctl\(1\)](#), [zonecfg\(1M\)](#), [poolcfg\(1M\)](#), [pooladm\(1M\)](#)

#### Operation Procedure

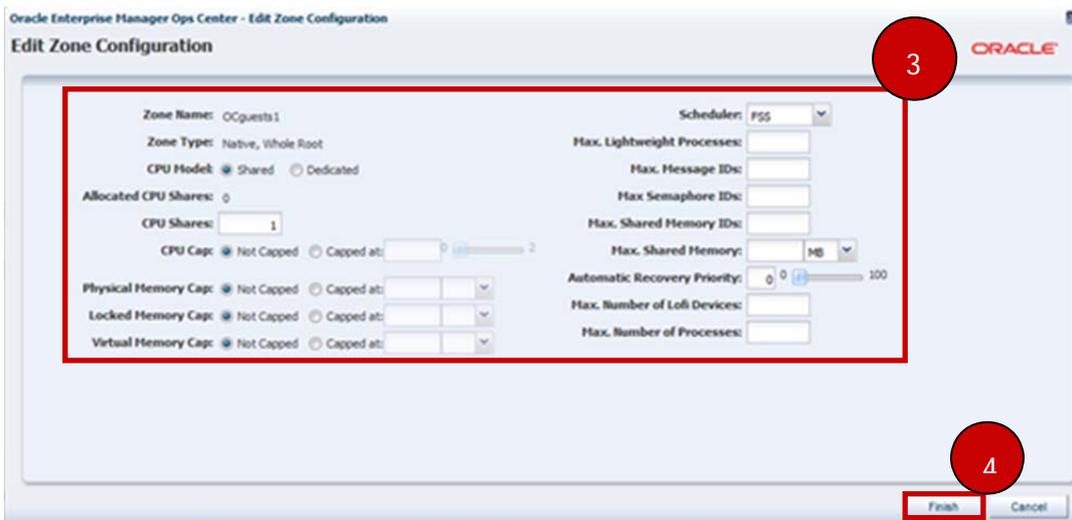
Preliminary Operation: On the relevant server, install a Zone Agent Controller.

(Refer to: Appendix-1: Installing the Agent Controller)

- 1) In the Navigation Pane, go to Assets and select the relevant Zone.
- 2) In the Actions Pane, go to Operate and click **Edit Configuration**.



- 3) In Edit Zone Configuration, change the values to be configured.
- 4) Click **Finish**.



## 4 - 4 .Monitoring

### 4 - 4 - 1 .Monitoring Messages

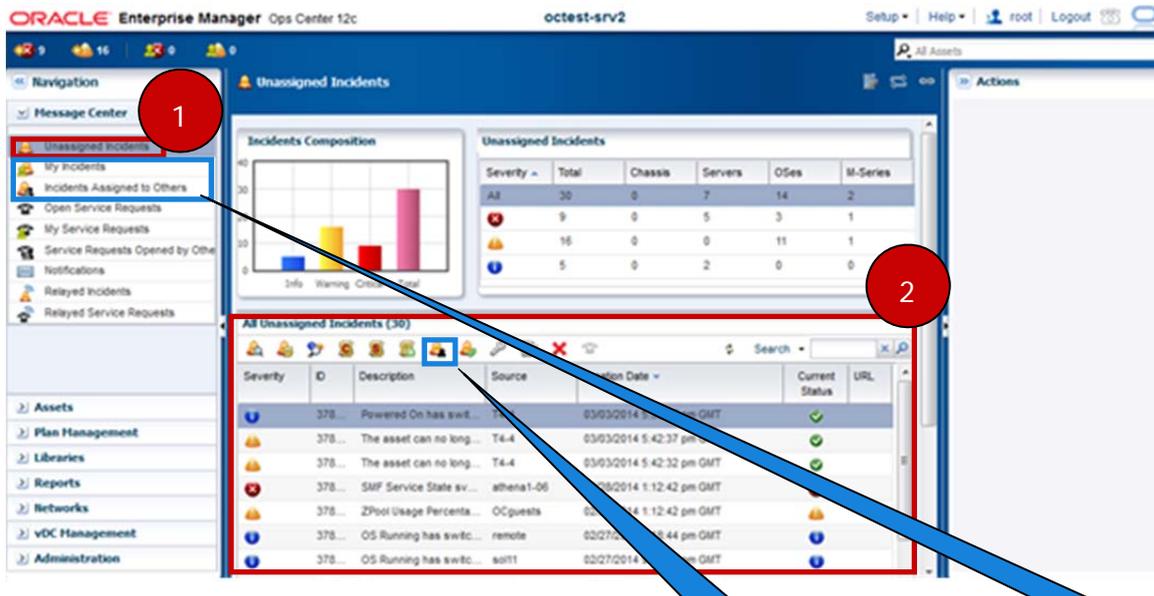
This explains how to monitor messages. Messages can be used to accumulate know-how about the system by monitoring the situations that arise and how they are dealt with.

Application: [Ops Center](#)

Relevant OS Command: [none](#)

### Operation Procedure

- 1 ) In the Navigation Pane, go to Message Center and select **Unassigned Incidents**.
- 2 ) In the **All Unassigned Incidents** panel, the currently active messages are displayed.
  - By default, all messages are aggregated to Unassigned Incidents.



(For Reference)

If multiple users are created on the Ops Center (EC/PC), it is possible to allot incidents to each user. The procedure is described below. (For the procedure to create an user, please refer to Appendix 5. Adding Users to the Ops Center)

- 1) Select the incident concerned, and press **Assign Incident(s)**.
- 2) In the wizard, select the user and press **Assign Incidents**.

When the setup is complete, a specific incident will be exported to the My Incidents of the assigned user. (User that is logged in to the EC/PC)

Incidents assigned to other users will be exported to Incidents Assigned to Others.

- Low level messages from Incidents will be displayed in Notifications. In addition, if you want to use other Message Center features, you must register your account information (account, password, etc.) with My Oracle Support.

### 4 - 4 - 2 .Resource Monitoring

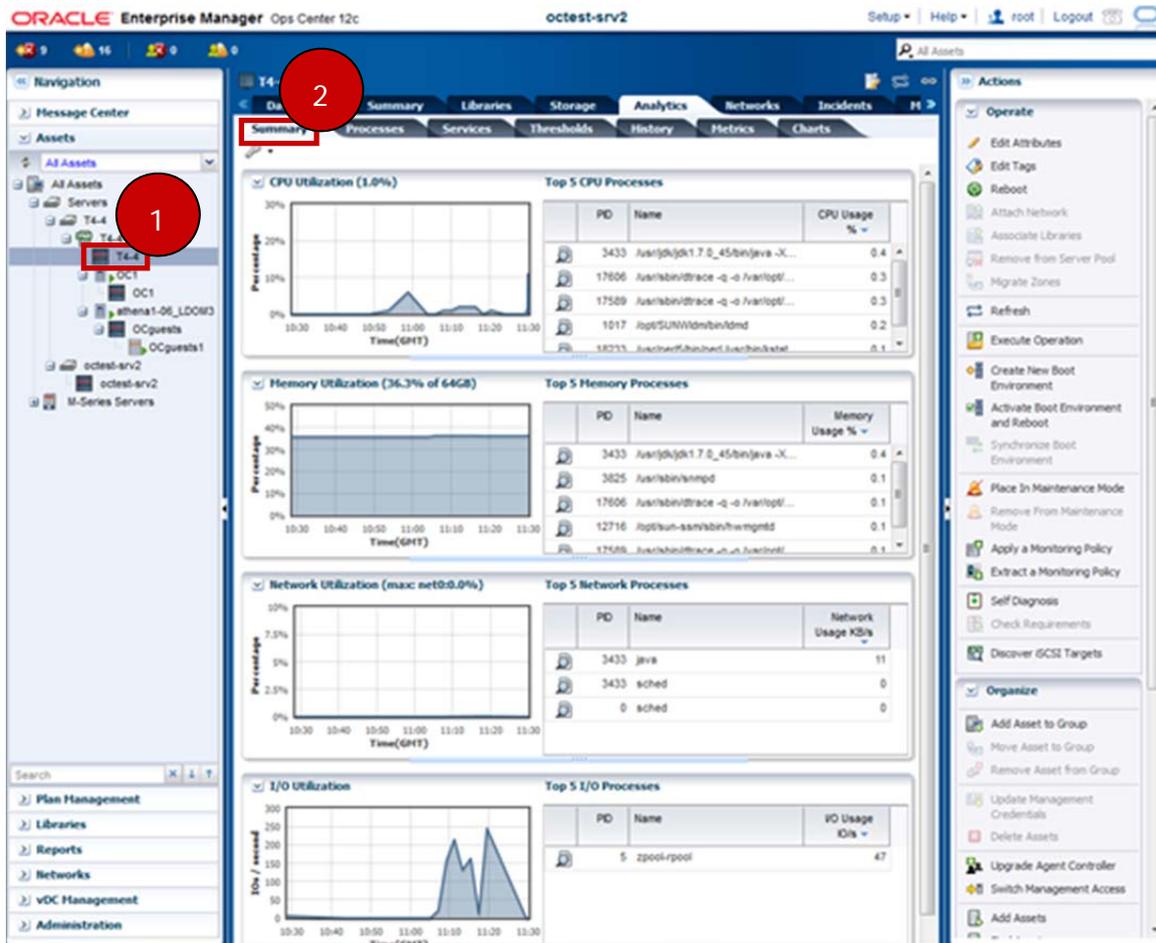
Procedures for monitoring the use and status of resources. You can check the level of CPU, Network, and I/O use.

Application: [Ops Center](#)

Relevant OS Command: [sar\(1\)](#), [dlstat\(1M\)](#), [iostat\(1M\)](#)

#### Operation Procedure

- 1) In the Navigation Pane, go to Assets and select the relevant server.
- 2) Under the Analytics tab, select **Summary**.



### 4 - 4 - 3 .Monitoring Processes

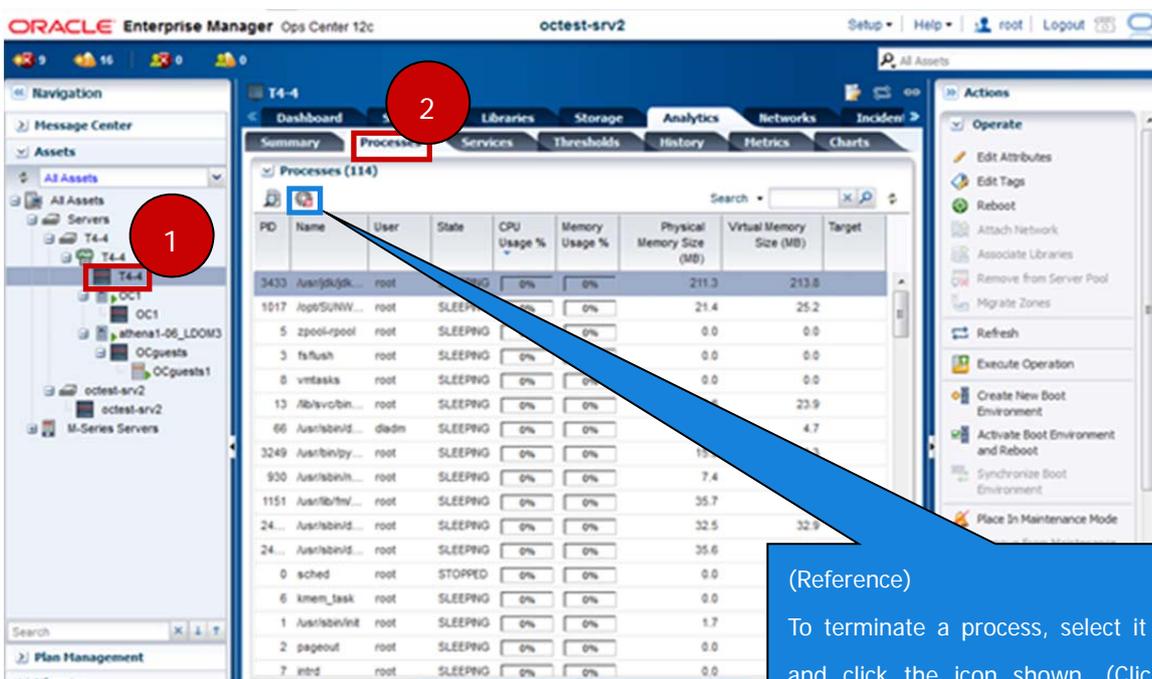
How to monitor running processes. You can check the status of each process and its CPU and memory use.

Application: [Ops Center](#)

Relevant OS Command: [prstat\(1M\)](#), [kill\(1\)](#)

#### Operation Procedure

- 1) In the Navigation Pane, go to Assets and select the relevant server.
- 2) In the Analytics tab, select **Processes**.



(Reference)  
 To terminate a process, select it from the list and click the icon shown. (Click to kill the selected process or processes)

### 4 - 4 - 4 .Monitoring Services

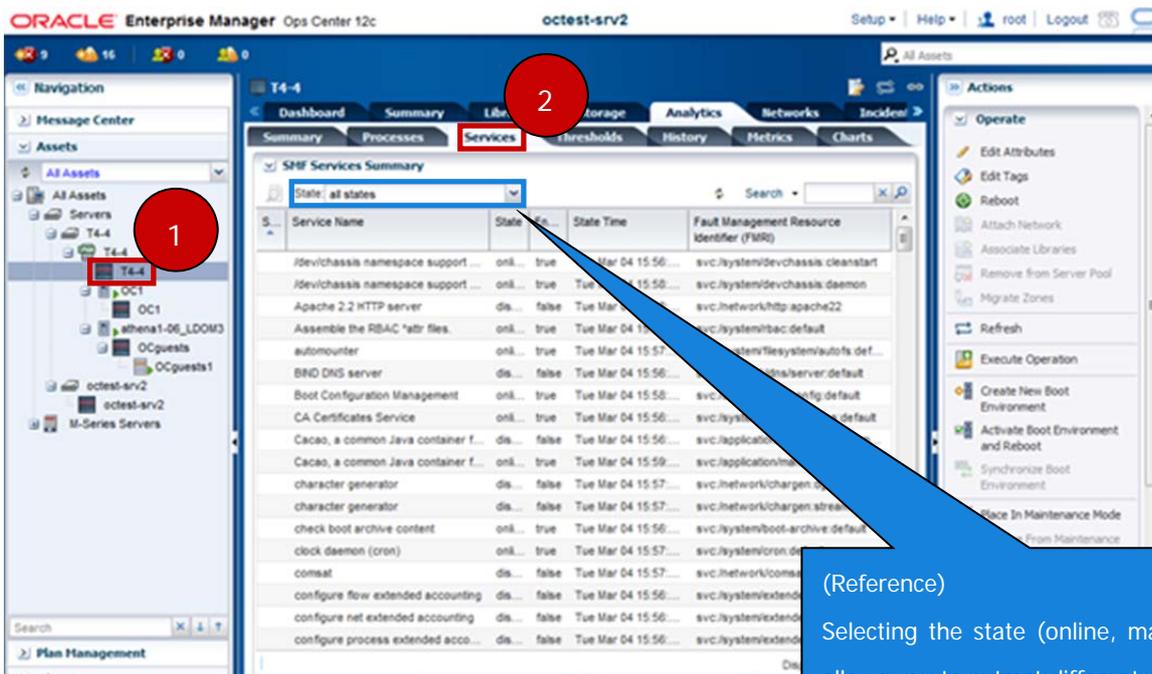
Monitor and verify the status of the SMF service.

Application: [Ops Center](#)

Relevant OS Command: [svcs\(1\)](#)

#### Operation Procedure

- 1) In the Navigation Pane, go to Assets and select the relevant server.
- 2) In the Analytics tab, select **Services**.



### 4 - 4 - 5 .Setting Thresholds

By configuring and monitoring thresholds, it is possible to generate alerts based on set resource status conditions.

Application: [Ops Center](#)

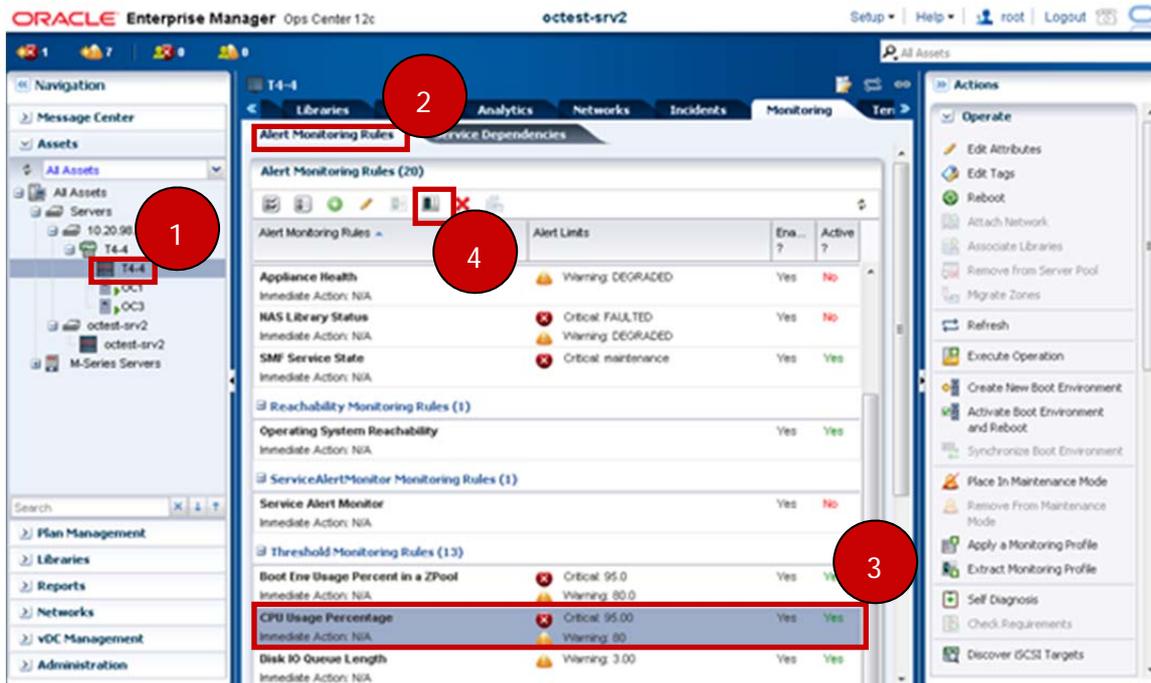
Relevant OS Command: [None](#)

#### Operation Procedure

- Termination of Threshold Monitoring

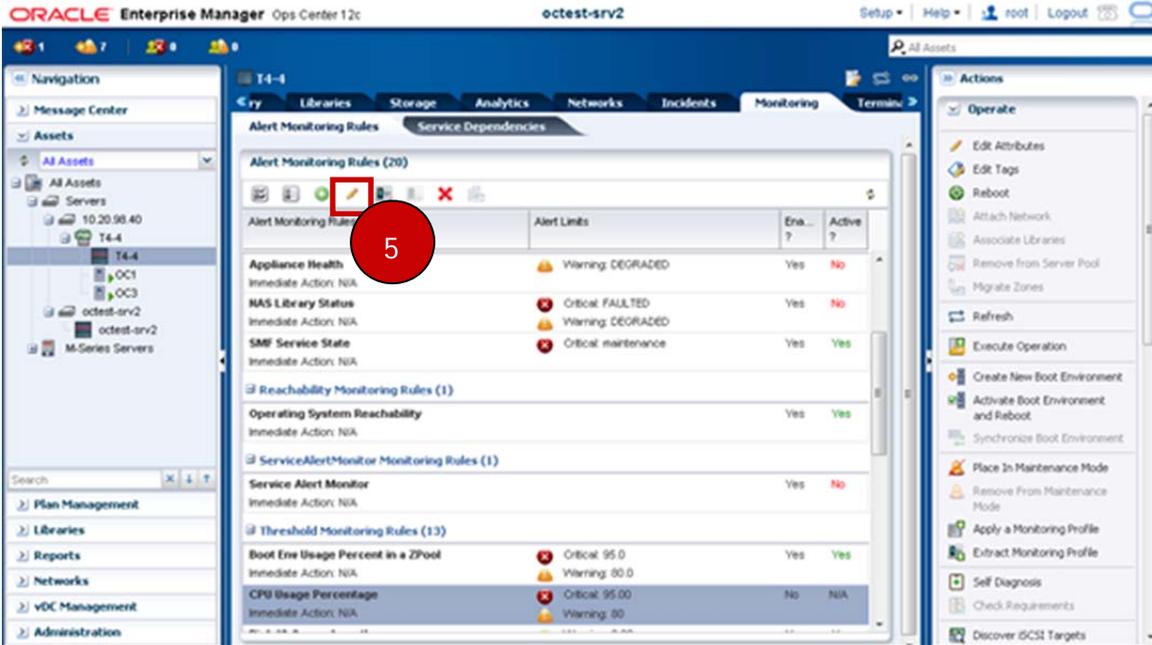
- 1) In the Navigation Pane, go to Assets and select the target server.
- 2) In the Monitoring tab, select **Alert Monitoring Rules**.
- 3) From the Threshold Monitoring Rules, select the target resource.
- 4) Click **Disable Alert Monitoring Rule(s)**. After the Wizard starts, click **OK**.

- This procedure is not necessary if in the Enabled? column No is shown next to the target resource.



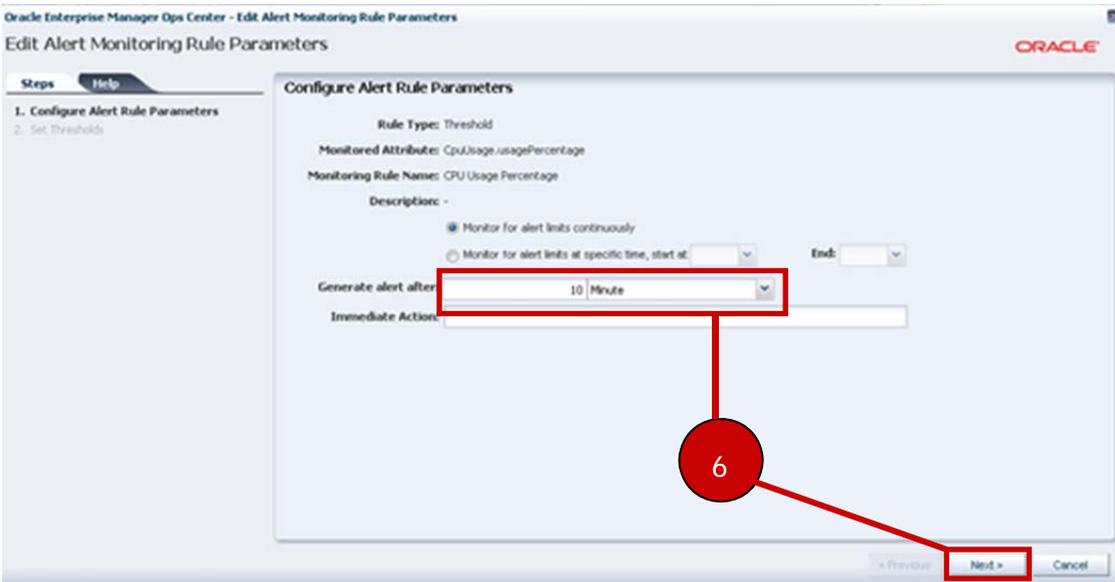
- Setting the Threshold

5) Select **Edit Alert Monitoring Rule Parameters**. The Wizard appears.

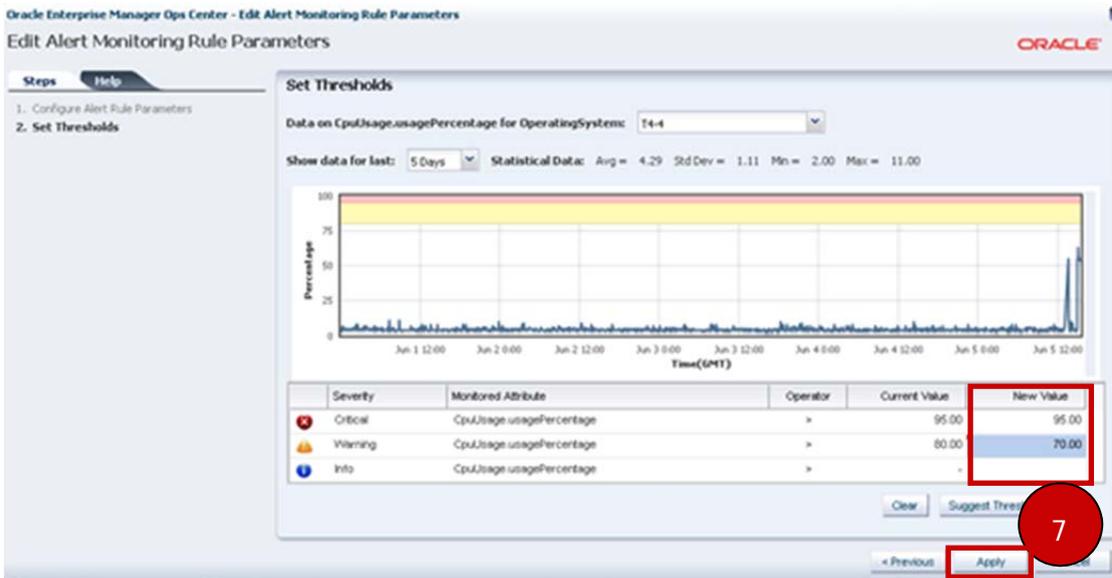


6) Set the **Generate alert after** value and click **Next**.

- This sets the time period between detection and generation of an alert.

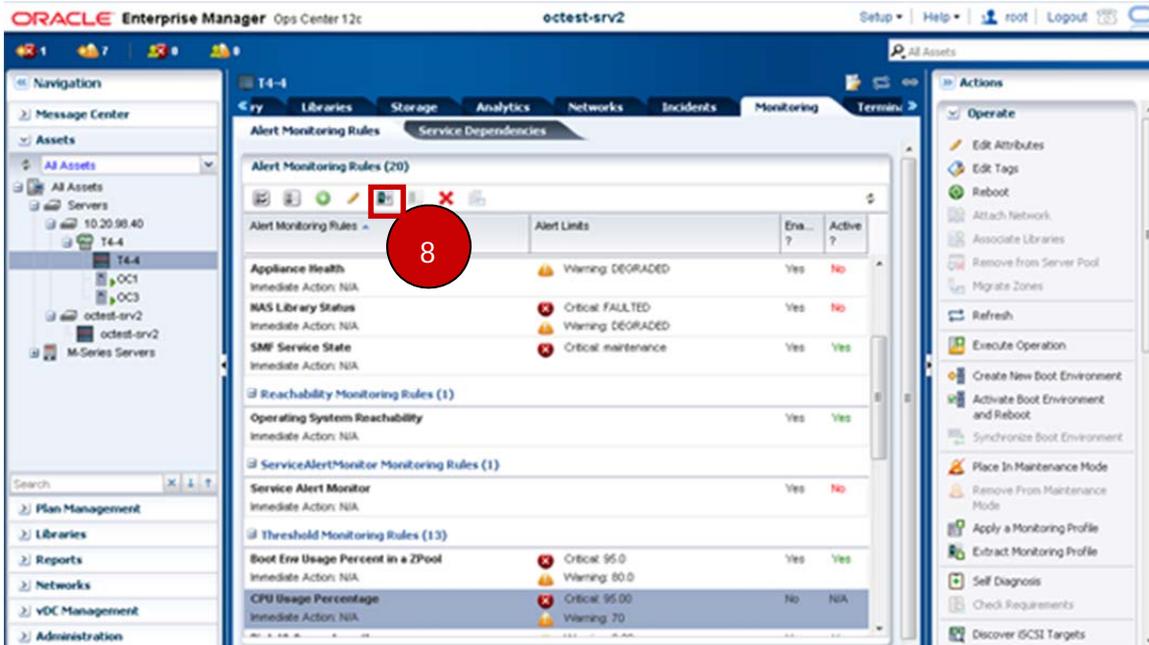


7) Enter the threshold's New Value, and click **Apply**.



- Initiating Threshold Monitoring

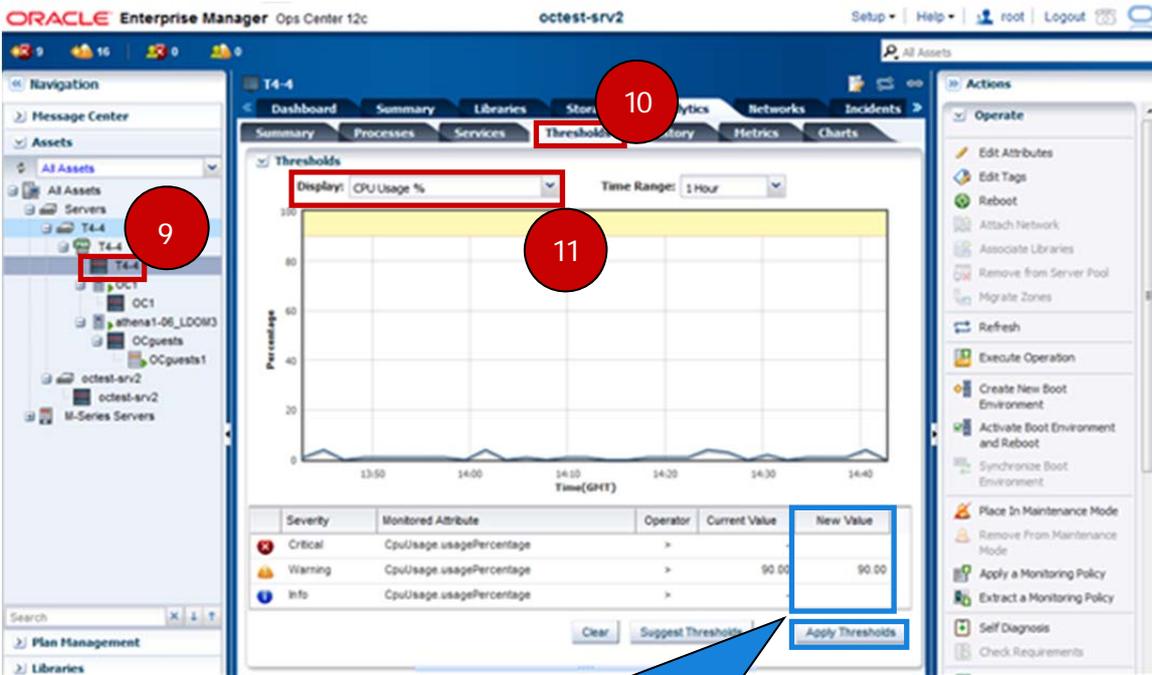
8) Press **Enable Alert Monitoring Rule(s)**. After the Wizard starts, click **OK**.



Verification: The threshold of the target resource will be changed and Yes will be shown the Enabled? and Active? columns.

- Monitoring Thresholds

- 9) In the Navigation Pane, go to Assets and select the relevant server.
- 10) Under the Analytics tab, select **Thresholds**.
- 11) Select the target resource to be shown in from **Display**.



(Reference)  
 Enter a new threshold under New Value, and press Apply Thresholds to change the threshold. In this case, follow steps 4) and 8).

### 4 - 4 - 6 .Checking the Operating Status

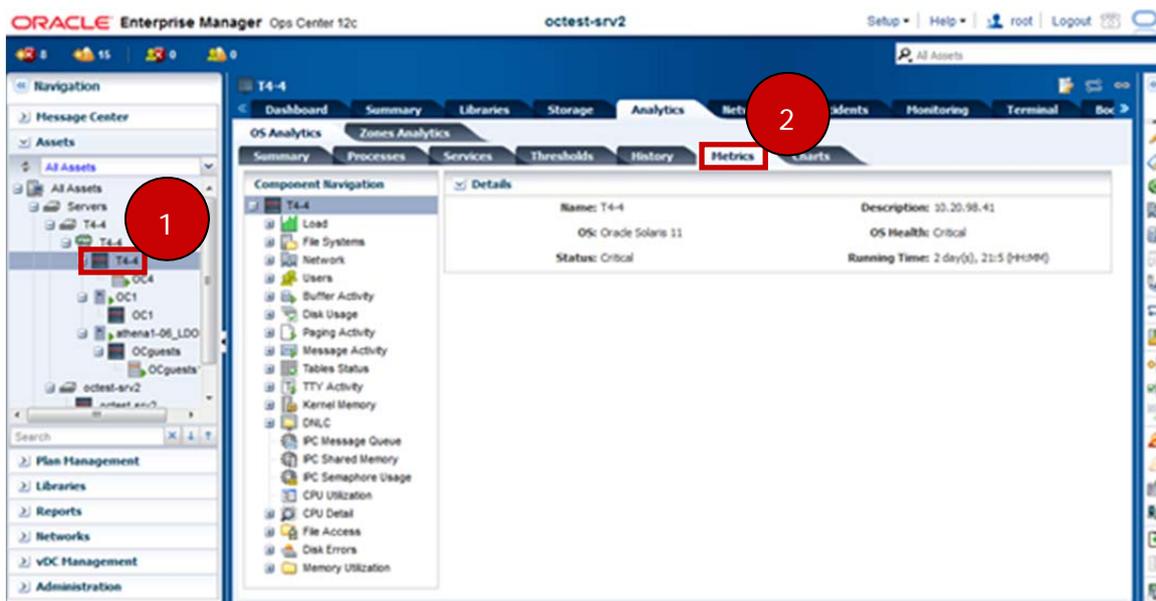
How to display metrics (quality rating) for individual resources. This provides statistics for a range of functions as numerical data and graphs.

Application: [Ops Center](#)

Relevant OS Command: [sar\(1\)](#), [dlstat\(1M\)](#), [iostat\(1M\)](#)

#### Operation Procedure

- 1) In the Navigation Pane, go to Assets and select the target server.
- 2) In the Analytics tab, select **Metrics**.



Below is a summary of the information that is available.

Resource	Statistics Available
Load	CPU and memory use, number of times User logged in, etc.
File System	Remaining space in file system etc.
Network	Input and output errors. etc.
Users	Number of logons.
Buffer Activity	Buffer operation conditions.
Disk Usage	Disk operation conditions.
Paging Activity	Paging operation conditions.
Message Activity	Message operation conditions.
Tables Status	Table related information.
TTY Activity	Percentage of Modem Intrusion etc.
Kernel Memory	Kernel memory operation conditions.

DNLC	Directory name search information.
IPC Message Queue	Message queue information.
IPC Shared Memory	Shared memory information.
IPC Semaphore Usage	Semaphore usage.
CPU Utilization	CPU usage.
CPU Detail	Detailed CPU information.
File Access	File access information.
Disk Errors	Disk error information.
Memory Utilization	Memory usage.

### 4 - 4 - 7 .Displaying Resource Performance Status

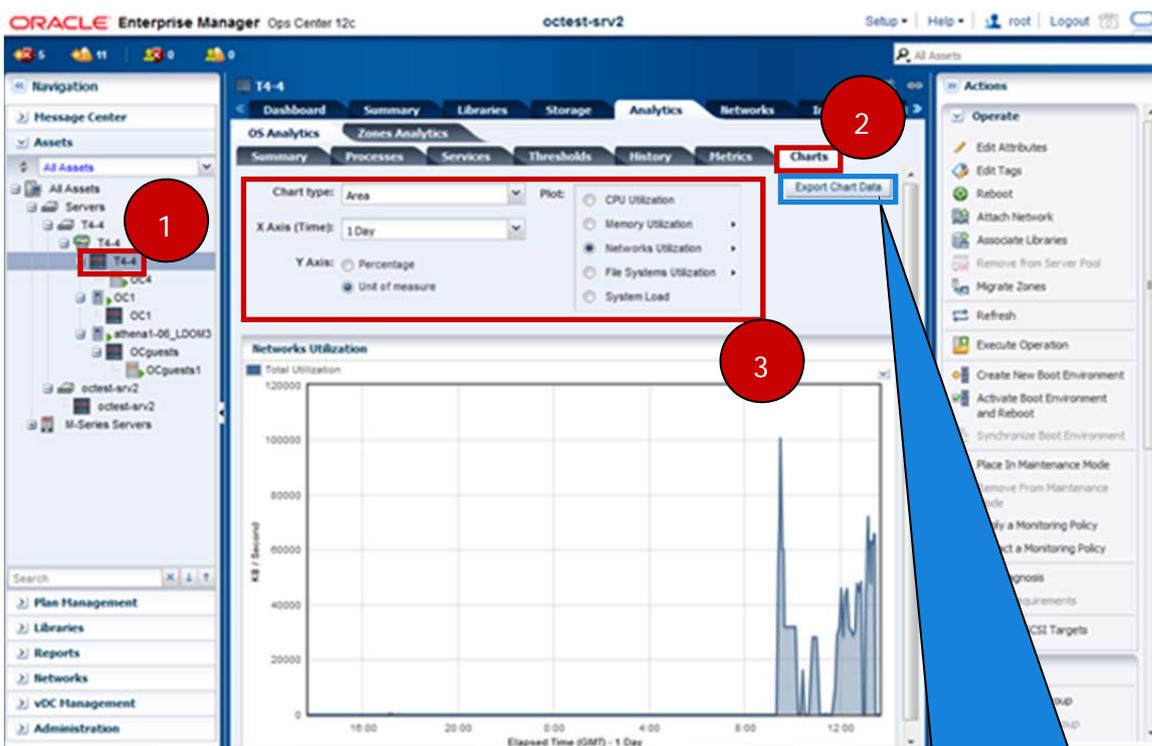
How to generate graphs showing resource performance statistics.

Application: [Ops Center](#)

Relevant OS Command: [sar\(1\)](#), [dlstat\(1M\)](#), [df\(1M\)](#)

#### Operation Procedure

- 1) In the Navigation Pane, go to Assets and click on the target server.
- 2) In the Analytics tab, select **Charts**.
- 3) Select the data you want to view.



(Reference)

Press Export Chart Data to export the data.

### 4 - 4 - 8 .Log Monitoring (XSCF)

How to monitor Logs within XSCF.

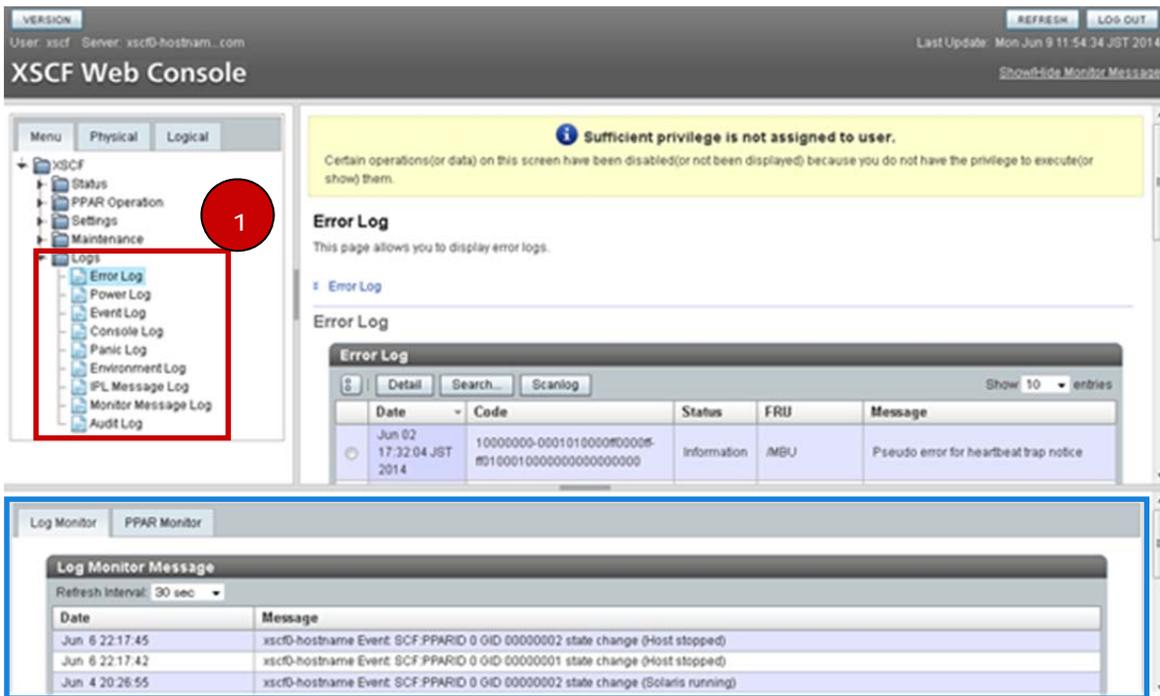
- OS logs cannot be checked from the GUI.

Application: [XSCF Web Console](#)

Relevant XSCF Command: [showlogs\(8\)](#)

#### Operation Procedure

- 1) In the Menu tab in the Menu Frame, go to XSCF-Logs and select the log.



The logs that can be monitored are listed below.

Log	Log Name
Error Log	Error Log
Power Log	Power Log
Event Log	Event Log
Console Log	Console Log
Panic Log	Panic Log
Environment Log	Temperature history Log
IPL Message Log	IPL Message Log
Monitor Message Log	Monitor Message Log
Audit Log	Audit Log

(Reference)

In the Event frame, overall system events are displayed in Monitor message format.

## Appendix

### Appendix-1. Installing the Agent Controller

The procedure for installing an Agent Controller.

Application: [Ops Center](#)

Relevant OS Command: [none](#)

#### Operation Procedure

- 1) In the Navigation Pane, go to Assets and select the target server.
- 2) In the Actions Pane, go to Organize and click **Switch Management Access**.



- 3) In SSH, click **Select** and select the credentials of the target environment. Then press **OK**.
  - If there is no SSH connection setting for the target environment's Credential, click New and create a new one.
- 4) If necessary, put a check next to Enable Oracle VM for SPARC management.
  - If checked, it becomes an Agent Controller for Oracle VM control domain. If left unchecked, it will become an Agent Controller for the Zone.
  - If executed for a guest domain, only the Zone can be created, and no check will be displayed.
- 5) Click **Finish**.



Verification: Check there is a Yes next to the Agent Managed in the Dashboard tab.

## Appendix-2. Deleting the Agent Controller

Delete the Agent Controller.

- Some functions will become unusable if the Agent Controller is deleted. Because of this, it is recommended that in normal circumstances the Agent Controller is left installed.

Application: [Ops Center](#)

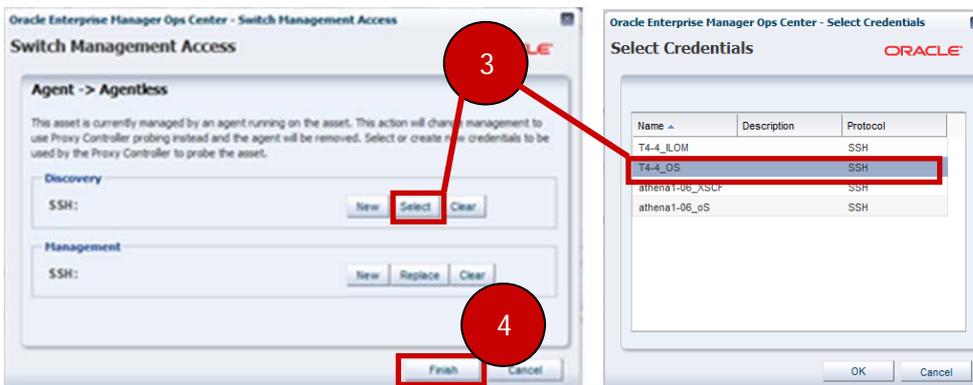
Relevant OS Command: [none](#)

### Operation Procedure

- 1) In the Navigation Pane, go to Assets and select the target server.
- 2) In the Actions Pane, go to Organize and click **Switch Management Access**.



- 3) In SSH under Discovery, click **Select**. Click the target environment from the list and press **OK**.
- 4) Click **Finish**.



Verification: Check that there is a No next to Agent Managed in the Dashboard tab.

### Appendix-3. Setting the Operating Schedule for the Physical Partition

Set the scheduled running of the physical partition (PPAR) active.

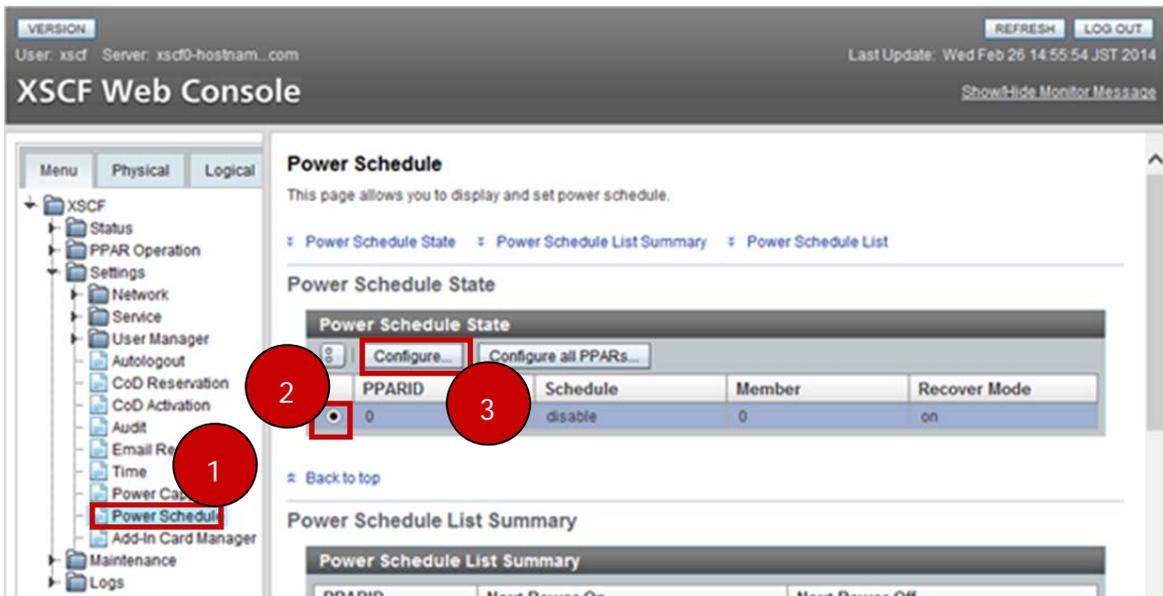
Application: [XSCF Web Console](#)

Relevant XSCF Command: [setpowerschedule\(8\)](#)

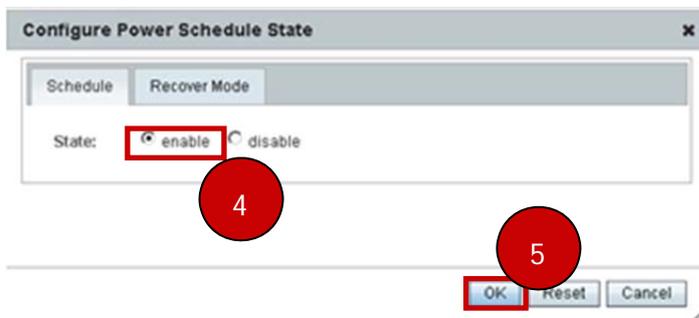
#### Operation Procedure

Preliminary Operation: Make sure that the mode switch on the front side of the target server is on "Locked".

- 1) Under Menu in the Menu frame, go to XSCF, Settings and select **Power Schedule**.
- 2) In Main frame, go to Power Schedule State and put a check next to the PPAR that you want to schedule.
- 3) Click **Configure...**



- 4) Select Enable in the Schedule tab.
- 5) Click **OK**.



Verification: Check that the Schedule of Power Schedule State is enabled.

## Appendix-4. Adding a New Subnet

Add a new subnet to Ops Center. To add a new interface in the Oracle Solaris' Management Target, a subnet for the new interface to be added must be created in the Ops Center.

Application: [Ops Center](#)

Relevant OS Command: [none](#)

### Operation Procedure

- 1) In the Navigation Pane, go to Networks and select **default**.
- 2) In the Action Pane, go to Operate and click on **Define Network**.
- 3) Enter the parameters as instructed by the Wizard, and click **Finish**.
  - Select the Create New Untagged Fabric option (It is not selected by default).



### Appendix-5. Adding Users on Ops Center

Add local users on Ops Center. Please note that, because the User on the Ops Center is linked to the user on the EC's OS, the user to be added must already exist on the OS.

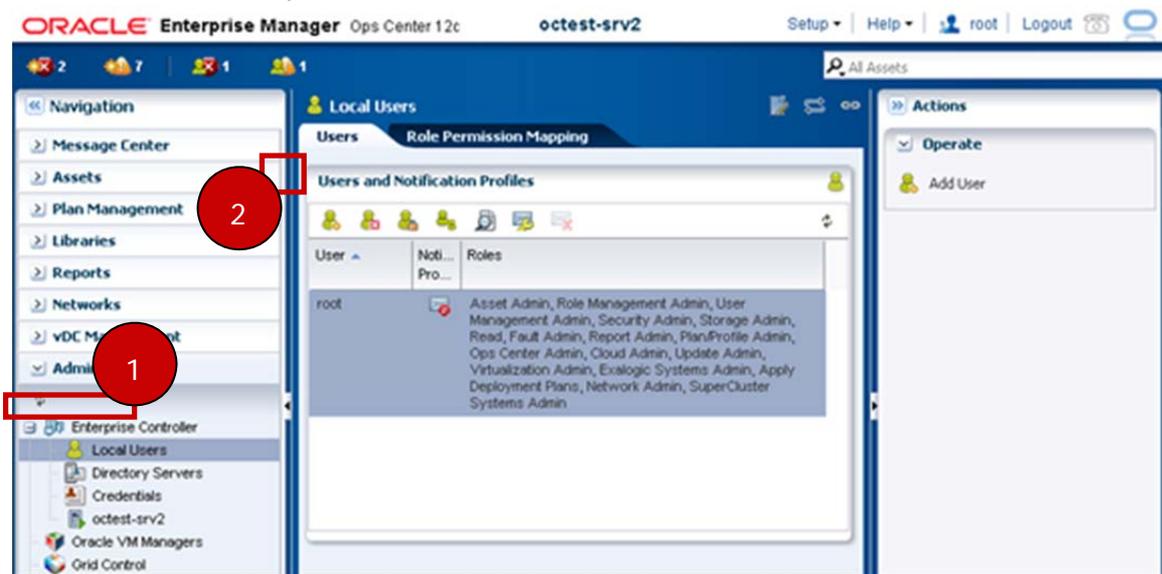
Application: [Ops Center](#)

Relevant OS Command: [none](#)

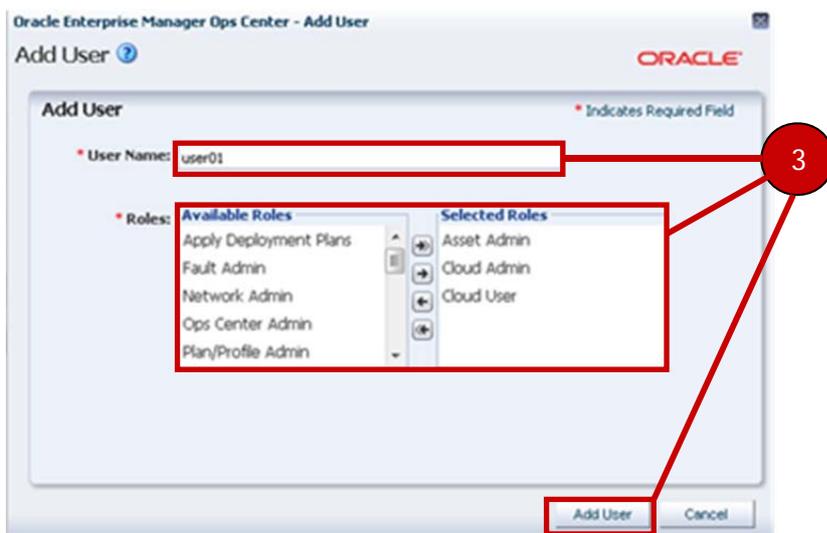
#### Operation Procedure

Preliminary Operation: Create the user on the EC Server's OS

- 1) In the Navigation Pane, go to Administration - Enterprise Controller - Select **Local Users**.
- 2) In the Users tab, press **Add User**.



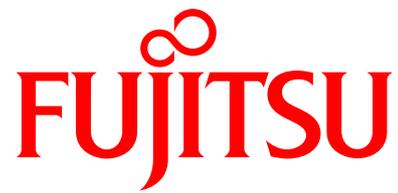
- 3) Enter the User Name, select Roles, and click **Add User**.



Verification: Check that the user has been added in the Users and Notification Profiles.

**Revision History**

Revision date	Revision No.	Revision contents
2014.10.14	1.0	New Guide Created



shaping tomorrow with you