Oracle® Enterprise Manager Ops Center

Add a Proxy Controller

12*c* Release 3 (12.3.2.0.0)

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This guide provides an end-to-end example for how to use Oracle Enterprise Manager Ops Center.

Introduction

As your environment grows and changes, you can add Proxy Controllers to better accommodate it.

This guide describes how to add and configure a new Proxy Controller.

Add a Proxy Controller in the following scenarios:

- You are adding additional assets and your existing Proxy Controllers are under heavy load
- You are adding assets on a network that your existing Proxy Controllers cannot access

You will complete the following tasks:

- Identify a Host System
- About Installing and Configuring a Proxy Controller
- About DHCP Configuration
- Associating Networks

See Related Articles and Resources for links to related information and articles about Proxy Controllers, DHCP, and networks.

What You Will Need

You will need the following:

- An installed Oracle Enterprise Manager Ops Center Enterprise Controller
- A host system to run the Proxy Controller software
- A user with the Ops Center Admin role

Identify a Host System



The host system for the Proxy Controller must be in a location where it can manage your assets and it must meet the Proxy Controller system requirements. If you are adding a new Proxy Controller to manage assets on a new network, the network must be accessible by the new Proxy Controller system.

The new Proxy Controller system must meet these requirements:

- The system's operating system must be supported. See *Oracle Enterprise Manager Ops Center Certified Systems Matrix* for a list of supported systems.
- To update operating systems, the Proxy Controller must not be installed on a system which uses a web proxy which requires authentication to reach the Enterprise Controller system.
- To provision Oracle Solaris 11 using the Proxy Controller, it must be installed on an Oracle Solaris 11 system.
- To provision an Oracle VM Server for SPARC using the Proxy Controller, it must be installed on an Oracle Solaris system.
- To provision operating systems using the Proxy Controller, it must be in the same subnet as the OS provisioning targets.
- No errors are reported by the OCDoctor utility when it is run using the procedure below.

Checking the Proxy Controller System

You can check the Proxy Controller system if it meets all the requirements using the OC Doctor.

This procedure describes the steps to check the Proxy Controller system.

- 1. Download the OCDoctor's compressed file, OCDoctor-LATEST.zip, from https://updates.oracle.com/OCDoctor/OCDoctor-latest.zip.
- **2.** Create the /var/tmp/OC directory on the host system if it does not already exist, then transfer the zip file to this directory.
- **3.** Extract the OC Doctor utility.
- **4.** Run the OC Doctor utility with the --proxy-prereq option.

For example:

```
# ./OCDoctor.sh --proxy-prereq
Ops Center Doctor 4.46 [OC 12.3.0.604,Linux]
======= Checking 12c Proxy Controller Requirements ... ===========
OK: 7929 MB of memory
OK: 10111 MB of swap
OK: Found enough disk space on /var/opt/sun/xvm (110G)
OK: Oracle/RedHat Linux 6.2
OK: XEN kernel is not loaded
OK: xinetd is installed.
OK: tftp-server is installed.
```

The OC Doctor displays a warning and a suggested solution for each issue.

5. Correct any issues discovered by the OC Doctor utility and re-run the utility until it completes without discovering any issues.

About Installing and Configuring a Proxy Controller

You can use the Deploy Proxy Wizard to install and configure the new Proxy Controller on the host system through the user interface.

This installation installs, or upgrades to, Java Development Kit (JDK) 7 Update 101. If the system already has a later version of JDK installed, then the later version of JDK is used.

To install a Proxy Controller through the UI, the Enterprise Controller must be able to reach the Proxy Controller system with an SSH connection using port 22. If your site does not allow this type of connection, install the Proxy Controller from the command line using the procedures in the *Installation for Oracle Solaris Operating System* or the *Installation for Linux Operating Systems*.

Deploying a Proxy Controller

You can use the Deploy Proxy Wizard to deploy and configure one or more Proxy Controllers.

This procedure describes the steps to deploy a Proxy Controller.

- **1.** Click the **Enterprise Controller** in the Administration section of the Navigation Pane.
- **2.** Click **Deploy Proxy** in the Actions pane.

The Proxy Controller Deployment page is displayed.

3. Choose the Remote Proxies deployment option, then click Next.

The Remote Proxy Controllers page is displayed.

- **4.** Enter the credentials for the host system. The Proxy Controller software is installed and configured on this system.
 - **Hostname or IP address**: The host name or IP address of the host system.
 - **SSH User name**: If root SSH access is allowed on the host system, enter the root user name and password in the SSH User and SSH Password fields.
 - **SSH Password**: The password associated with the SSH user name.
 - (Optional) Privileged Role: If root SSH access is not allowed on the host system, enter the login user name and password in the SSH User and SSH Password fields, then enter the root user name and password in the Privileged Role and Role Password fields.
 - (Optional) **Role Password**: If you entered the root user name in the Privileged Role field, enter the root password.
 - **Create Tunnel**: Check this box to create a tunnel to the Proxy Controller.
 - **Port**: If you want the Proxy Controller to use a port other than the default, enter that port number.

• **Maintenance Mode**: Check this box to start the Proxy Controller in maintenance mode.

Click Next.

The Proxy Controller Status page is displayed.

5. View the status of the configured Proxy Controllers.

The new Proxy Controller should be online.

Click Next.

The Summary page is displayed.

6. Click Finish.

About DHCP Configuration

DHCP configuration configures and enables basic DHCP services on the Proxy Controller to support OS provisioning operations for Linux and Oracle Solaris 8-10. This action is only necessary if you plan to provision these operating systems using the Proxy Controller.

The DHCP Config action configures and enables either an Oracle Solaris DHCP server, or an Internet Standards Consortium (ISC) DHCP server, on the Proxy Controller.

Use the DHCP Config action to specify the Ethernet interfaces that the Proxy Controller uses to provide DHCP services. You can establish DHCP services on all the Ethernet interfaces in the Proxy Controller. The Proxy Controller's Ethernet interface that you specify must be connected to the network where the target systems for OS provisioning are connected.

You can configure DHCP server on the Proxy Controller to listen to multiple Ethernet interfaces. For example, consider the following network configuration for the Proxy Controller:

```
e1000g0 203.0.113.2
e1000g1 192.0.2.2
e1000g2 198.51.100.2
```

If you configure the DHCP server to listen to e1000g1 and e1000g2, then the target system must have the IP address in the range of 192.0.2.0/24 or 198.51.100.0/24.

The Provision OS Wizard supplies the specific identity information that the target system requests, using the basic DHCP services that you establish on the Proxy Controller.

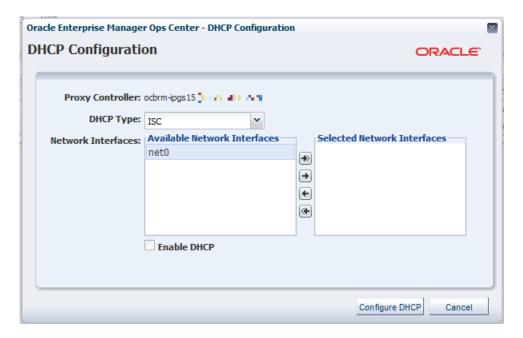
Configuring DHCP

If the Proxy Controller is used to provision the operating systems, then you must configure DHCP services.

To configure DHCP, perform the following steps:

- 1. In the Administration pane, select the Proxy Controller.
- **2.** Click **DHCP Config** in the Actions pane.

The DHCP Configuration window is displayed.



- **3.** In the DHCP Server menu, select either ISC or Oracle Solaris to implement either the Internet Standards Consortium (ISC) reference DHCP server, or the Oracle Solaris native DHCP server.
- **4.** In the interfaces list, use the arrow buttons to add the correct Proxy Controller interface or interfaces to the list of selected interfaces. DHCP services are provided on the selected interface or interfaces. DHCP configuration is possible for multiple Ethernet interfaces in the Proxy Controller.
- **5.** Click **Configure DHCP** to save the DHCP configuration that you specified.
- **6.** A warning indicates that the procedure removes existing subnets in the DHCP configuration. Because this is a new DHCP configuration, there are no existing subnets. Click **Yes** to accept that action and submit the DHCP configuration job.

When the job completes successfully, DHCP services become available.

Associating Networks

To manage assets, the Proxy Controller must have access to the networks that support the assets.

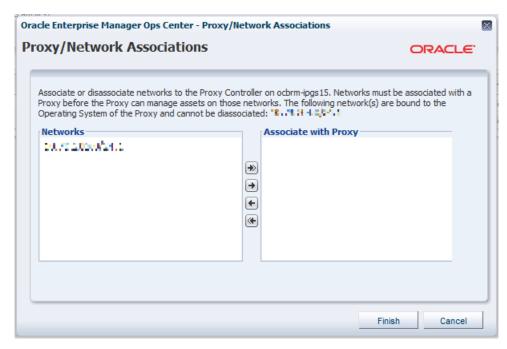
This procedure associates the Proxy Controller with one or more management networks. The list of networks includes only the management networks that are reachable by the system running the Proxy Controller.

Note:

If a Proxy Controller is connected to an asset using multiple networks, but management traffic between the Proxy Controller and agent must use a specific network, the Proxy Controller must have a NIC whitelisting file to identify the usable NICs.

- 1. In the Administration pane, select the Proxy Controller.
- **2.** Click **Associate Networks** in the Actions pane.

The Network/Proxy Controller Associations page is displayed.



The Networks list shows all of the networks that are available but not bound to the Proxy Controller's operating system or already associated with the Proxy Controller.

- 3. Use the arrow buttons to add networks to the Associate with Proxy Controller list.
- 4. Click Finish to associate the selected networks with the Proxy Controller.

When the job is completed, the Proxy Controller can manage and provision the assets that use these networks.

Related Articles and Resources

See Oracle Enterprise Manager Ops Center Installation for Oracle Solaris Operating System or Oracle Enterprise Manager Ops Center Installation for Linux Operating Systems for more information about installation.

See Oracle Enterprise Manager Ops Center Administration and Oracle Enterprise Manager Ops Center Configure Reference for more information about DHCP and networks.

These documents are available in the Oracle Enterprise Manager Ops Center Documentation Library at http://docs.oracle.com/cd/E59957_01/index.htm.

For more information on Enterprise Manager Ops Center, see the Ops Center blog at https://blogs.oracle.com/opscenter/.

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