Oracle® Enterprise Manager Ops Center

Administer Your Environment Using Oracle Enterprise Manager Ops Center

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

Introduction to Administration

This guide explains how to make full use of Oracle Enterprise Manager Ops Center in your environment after you have completed your installation. The procedures described here enable additional features and access, and provide additional options in case of error or system failure.

Some of the tasks in this document are optional steps in the Enterprise Controller configuration. If you have already completed these steps, you do not need to repeat them.

As part of administering your environment, you will complete the following tasks:

- **Configure DHCP –** Configuring DHCP lets you perform OS provisioning for many operating systems, including Oracle Solaris 10.

- **Configure Networks –** Configuring networks lets you associate networks with Proxy Controllers, letting you discover, manage, and monitor assets on those networks.

- **Add an HTTP proxy –** Providing HTTP Proxy information lets your Enterprise Controller download update content, product updates, and Knowledge Base data from Oracle and from third parties.

- **Add Users and Configure Roles –** Adding users and roles to Oracle Enterprise Manager Ops Center lets you give your existing users access to the UI, and lets you precisely control what assets and features they can use.

- **Enable ASR –** By enabling the Auto Service Request (ASR) feature, you can automate the process of creating service requests when an incident occurs on a managed asset.

- **Back Up the Enterprise Controller –** You can create a backup of the Enterprise Controller system using the `ecadm` command. If the Enterprise Controller system fails, you can restore the Enterprise Controller using this backup file.

- **Perform Troubleshooting –** If you encounter problems with Oracle Enterprise Manager Ops Center, you can troubleshoot these issues by viewing log files through the UI and using the OC Doctor utility to identify and fix many common issues.

See Related Articles and Resources for links to related information and articles about ASR and service requests.

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What You Will Need

You will need the following:

- A configured Enterprise Controller in Connected Mode

- Access to the Enterprise Controller system

- A user with the Ops Center Admin role

- A local user on the Enterprise Controller system

- An HTTP Proxy

- One or more local users

- A valid My Oracle Support (MOS) account, associated with a Customer Service Identifier (CSI)

About DHCP Configuration

To perform OS provisioning of some operating systems, such as Oracle Solaris 10, you must configure DHCP on the Proxy Controller that will be used for the OS provisioning job. This procedure configures DHCP directly on a Proxy Controller. The Proxy Controller must be in the same subnet as the target hosts for OS provisioning to work.

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 that you select.

The DHCP Config action requires that you specify the Ethernet interface through which the Proxy Controller provides DHCP services, for example bge0. 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. In the same way, the Ethernet interface that you select in the Boot Network Device field of the Provision OS Wizard must be connected to the network where the Proxy Controller is providing DHCP services.

Configuring DHCP

To configure DHCP, perform the following steps:

1. Select **Administration** in the Navigation pane.

2. Select the Proxy Controller where you want to configure DHCP services.

3. Click **DHCP Config** in the Actions pane. The DHCP Configuration window is displayed.

4. In the DHCP Configuration window, provide the following information:

   - **DHCP Server**: Select either ISC or Oracle Solaris to implement either the Internet Standards Consortium (ISC) reference DHCP server, or the Oracle Solaris native DHCP server. The ISC server is generally preferred.

   - **Network Interfaces**: Select one or more Proxy Controller interfaces, then use the right arrow icon to add them 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.

- **Enable DHCP**: Select this option to enable the DHCP server that you selected.

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. Click **Yes** to accept that action and continue.

7. A message indicates that the DHCP configuration job has been submitted. Click **OK** to dismiss the message. When the job is complete, DHCP services become available.

About Network Configuration

Proxy Controllers must have access to networks to manage the assets on those networks. You can associate Proxy Controllers with specific networks and enable or disable those networks.

You can associate networks with a Proxy Controller. A Proxy Controller can manage assets on any network that has been associated with it. You can only associate a network with a Proxy Controller if the network is reachable from the Proxy Controller.

Configuring Networks

To configure networks, perform the following steps:

1. Select **Administration** in the Navigation pane.

2. Select the Proxy Controller where you want to associate networks.

3. Click **Associate Networks** in the Actions pane. The Network/Proxy Controller Associations window is displayed.

4. Select a network, then click the right arrow icon to move the network to the Associate with Proxy Controller list.

5. Click **Finish** to associate the selected network with the Proxy Controller.

Adding an HTTP Proxy

If your Enterprise Controller accesses the Internet through an HTTP proxy, you can add the HTTP proxy information. This lets your Enterprise Controller operate in connected mode and download updates, patches, and other content.

1. Click the **Enterprise Controller** in the Administration section of the Navigation pane.

2. Click **Change HTTP Proxy** in the Actions pane.

   The Change HTTP Proxy Wizard is displayed.

3. Enter the HTTP Proxy information, including:

   - **Server**: Enter the HTTP Proxy server address

   - **Port Number**: Enter the port number to access on the HTTP Proxy.

   - **User Name**: Required if the HTTP Proxy requires authentication

   - **Password**: Required if the HTTP Proxy requires authentication

4. Click **Update**. The HTTP proxy information is updated.

About Adding Users and Configuring Roles

You can add other users to Oracle Enterprise Manager Ops Center. New user information, such as the passwords for new users, are drawn from the local authentication subsystem.

When you add users, you assign them one or more roles. Each role allows the user to view relevant sections of the UI and take specific actions. For example, the Asset Admin role lets the user view and manage existing assets. In this procedure, you assign the Asset Management role to a user, but you can add other roles as necessary.

Adding Users and Configuring Roles

To add users and configuring roles, perform the following steps:

1. Select **Administration** in the Navigation pane.

2. Click **Local Users**.

   The Users page is displayed.

3. Click the **Add User** icon.

   The Add User window is displayed.

4. Enter the user name of a user from the local filesystem.

5. Select the Asset Admin role, then click the right arrow icon to move it to the list of selected roles.

6. Click **Add User**.

   The new user is created.

Auto Service Request

The Auto Service Request (ASR) feature files service requests automatically based on qualified incidents in Oracle Enterprise Manager Ops Center. You can provide contact information for your environment and enable ASR.

Providing Contact Information

Default contact information is used for assets without asset-specific contact information. This contact information is used to create the ASR with the location of the asset. It must be provided before ASR can be enabled.

If an asset has one set of contact information in the My Oracle Support interface and a separate set in Oracle Enterprise Manager Ops Center, the MOS set is used in the ASR. If MOS has no contact information for the asset, the contact information provided in Oracle Enterprise Manager Ops Center is used.

1. Click the **Enterprise Controller** in the Administration section of the Navigation pane.

2. Click **Edit ASR Default Contact** in the Actions pane.

   The Default ASR Contact Information page is displayed.

3. Enter the contact information:

- First name

- Last name

- Phone

- Email

- Country

- Address: Two address fields are provided, but only the first is required.

- City

- State or Province

- (Optional) Zip or Postal Code

- Time Zone

4. Click **Save**.

Enabling ASR

When ASR is enabled, service requests are automatically generated for your assets when a qualified incident occurs.

1. Click the **Enterprise Controller** in the Administration section of the Navigation pane.

2. Click **Enable ASR**.

   A confirmation window is displayed.

3. Click **OK**.

   Auto Service Requests are enabled.

About Backing Up an Enterprise Controller

You can create a backup for the Enterprise Controller using the `ecadm` command with the `backup` subcommand.

> **Note:** The `ecadm backup` command does not back up the `/var/opt/sun/xvm/images/os` directory. This is because the size of some of the OS image files in this directory can be prohibitively large.
>
> In addition to running the `ecadm backup` command, back up the `/var/opt/sun/xvm/images/os` directory and manually archive the files to another server, file-share facility, or a location outside of the `/var/opt/sun` directory.

By default, the backup file is saved in a backup file in the `/var/tmp` directory with a file name that includes a date and time stamp.

If you are using an embedded database, the backup file includes the product schema from the embedded database. If you are using a customer-managed database, you can back up the database schema using the `--remotedb` option, or you can use the existing backup and recover processes implemented by your database administrator.

Backing Up and Enterprise Controller

To backup an Enterprise Controller, perform the following steps:

1. From the command line, log in to the Enterprise Controller system.

2. Use the `ecadm` command with the `backup` subcommand to back up the Enterprise Controller. This command is in the `/opt/SUNWxvmoc/bin` directory on Oracle Solaris systems and in the `/opt/sun/xvmoc/bin` directory on Linux systems.

   If your environment has a remote database, use the `--remotedb` option to export the database schema to a file in the `/var/tmp/ocdumpdir` directory on the database server. This does not perform a full database backup, which the database administrator should perform separately.

   For example:

   ```
   # ecadm backup
   ecadm: using logFile = /var/opt/sun/xvm/logs/sat-backup-2013-08-12-16:21:12.log
   ecadm: *** PreBackup Phase
   ecadm: *** Backup Phase
   ecadm: *** PostBackup Phase
   ecadm: *** Backup complete
   ecadm: *** Output in /var/tmp/sat-backup-2013-11-12-16:21:12.tar
   ecadm: *** Log in /var/opt/sun/xvm/logs/sat-backup-2013-11-12-16:21:12.log
   ```

3. Copy the backup file to a separate system.

4. Save the contents of the most recent upgrade installation directory. This directory is a child of the `/var/opt/sun/xvm/update-saved-state/` directory, and is named according to the version number.

Performing Troubleshooting

Oracle Enterprise Manager Ops Center provides several tools for troubleshooting. If you are having problems with the product, you can view the log files through the product UI, and use the OC Doctor utility to identify and fix many known issues.

Viewing Logs

You can view logs to diagnose problems or examine Oracle Enterprise Manager Ops Center activities.

1. Click the **Enterprise Controller** in the Administration section of the Navigation pane.

2. Click the **Logs** tab.

3. Select a log from the drop-down list.

   - Cacao log
   - UI log
   - DB transaction log
   - DB report log
   - Proxy log
   - Update error log
   - Update channel download log

- Update channel error log

The current log file contents are displayed.

The location and name of each log file is also displayed. To provide service for a problem, save the file showing the error.

Using the OC Doctor

The OCDoctor can help you troubleshoot issues and can automatically fix some issues.

1. As root, log on to the Enterprise Controller system.

2. Change to the `/var/opt/sun/xvm/OCDoctor` directory.

3. Run the `OCDoctor.sh` script with the `--troubleshoot` and `--fix` options.

   For example:

```
# ./OCDoctor.sh --troubleshoot --fix
Ops Center Doctor 4.24  [OC 12.3.0.604,SunOS11] [Fix mode] [28-Aug-2013 14:38PM
MDT]
======================= Checking Enterprise Controller...
==============================
OK: Total number of agents (without Solaris 11 ones): 1
OK: Number of agents with inventories: 1
OK: Enterprise Controller requirements are met
OK: Files in /var/opt/sun/xvm/images/agent/ have the right permissions
OK: Files in /var/opt/sun/xvm/osp/web/pub/pkgs/ have the right permissions
OK: Found only 47 OCDB*.aud files in oracle/admin/OCDB/adump folder
OK: Found no ocdb*.aud files in oracle/admin/OCDB/adump folder
OK: auth.cgi returns XML
OK: User 'oracleoc' home folder points to the right location
OK: User 'allstart' home folder points to the right location
OK: Apache logs are smaller than 2 GB
OK: n1gc folder has the right permissions
OK: All agent packages are installed properly
<output omitted>
```

Related Articles and Resources

See the following chapters in the *Oracle Enterprise Manager Ops Center Administration* for information about other administrative tasks:

- Infrastructure contains information about registering the Enterprise Controller, configuring an external DHCP server, managing subnets, and managing authentications.

- Database Management contains information about managing the product database.

- OC Doctor contains information about using the OC Doctor utility to troubleshoot.

- Auto Service Requests contains information about enabling and using the Auto Service Request feature.

- User and Role Management contains information about adding, modifying and removing local users and remote user directories, and information about the roles that can be assigned to users.

- Backup and Recovery contains information about backing up and restoring the Enterprise Controller.

See *Oracle Enterprise Manager Ops Center Operate Reference* for information about viewing service requests.

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/*.

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc.

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