Oracle® Enterprise Manager Ops Center

Discovering and Managing Operating Systems

12*c* Release 3 (12.3.1.0.0)

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

Introduction

Oracle Enterprise Manager Ops Center provides comprehensive lifecycle management for Oracle Solaris, Oracle Linux, SUSE Linux, Red Hat Linux, and Microsoft Windows operating systems in your data center.

The discovery feature makes adding operating systems and other assets quick and easy. You can discover operating systems using a discovery profile, which specifies the discovery targets and the protocols and credentials for accessing and managing them. You can also run a discovery to find all assets equipped with Service Tags, and then supply credentials to manage them. Operating systems and virtualization software can be managed using an Agent Controller installed on the system or using agentless management using a set of credentials.

Two management modes are available, agent-managed and agentlessly-managed. An agent managed operating system has an Agent Controller installed to gather information for the Enterprise Controller and is required for some OS-specific features such as software patching or update and virtualization management. When you do not want an Agent Controller installed, you can agentlessly manage your operating systems. To gather information on an agentlessly-managed operating system, the Proxy Controller uses SSH to perform certain tasks and periodically check on the operating system.

When you discover a system with Oracle Solaris 11 OS, the zone features are identified in the system. When you discover a global zone, all of its local zones are discovered as well.

In this document, you learn how an Oracle Solaris 11 OS is discovered using a discovery profile and managed with an Agent Controller. The Enterprise Controller must be on Oracle Solaris 11 in order to perform management functions.

See Related Articles and Resources for links to related information and articles about discovering and managing other assets.

What You Will Need

You will need the following:

- A configured Enterprise Controller.

- An Oracle Solaris 11 Operating System and the credentials needed to access it.
- Access to Oracle Enterprise Manager Ops Center using Ops Center Admin role (to create assets) and Ops Center Security Admin role (to create credentials).
- Host name or IP address of the Oracle Solaris 11 Operating System.

Discover the Operating System Using a Discovery Profile

A discovery profile is a combination of an asset type, a set of host names or IP addresses, and a set of credentials. You can use discovery profiles to locate specific systems and to specify how the discovered assets should be managed – with or without an Agent Controller.

The tasks that are covered in this section are as follows:

- Create Credentials
- Create a Discovery Profile
- Add the Operating System Using the Discovery Profile

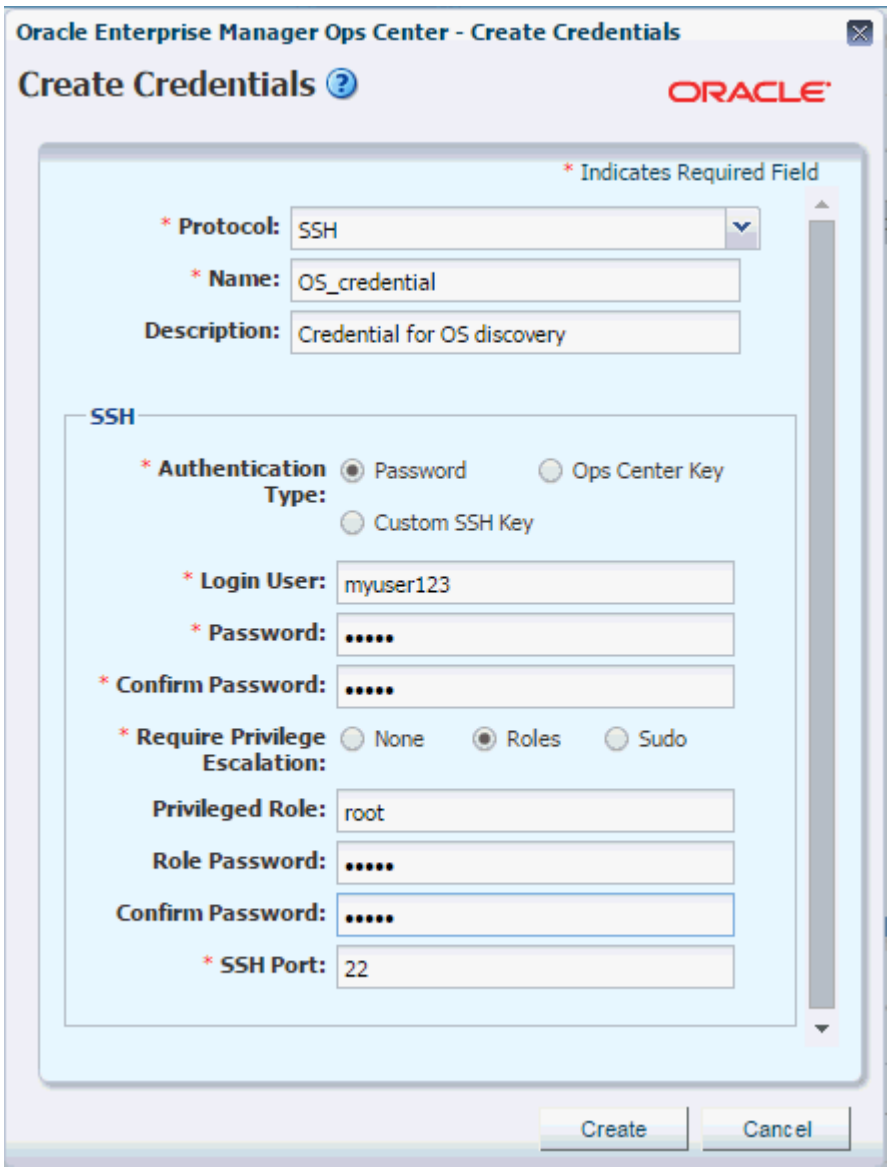
Create Credentials

Assets are managed using a set of credentials. You can create or use existing credentials to discover and connect with assets.

When creating a credential, if your target OS supports root login, enter a root user (or other privileged user) and leave the Privileged Role field blank. If the target OS does not support root login, then enter a non-root user that can login to the OS and also specify a root/privileged user in the Privileged Role field.

To create credentials, perform the following steps:

1. In the Navigation pane, click **Plan Management**, then click **Credentials**.
2. In the Actions pane, click **Create Credentials**.



3. In the Protocol field, select **SSH** from the drop-down list.
4. In the Name field, enter a name for the credential.
5. (Optional) In the Description field, enter a description.
6. Select **Password** as the Authentication Type.

    - Custom SSH Key: If you prefer not to use password-based SSH credentials, you can create an SSH key to access to the operating system.
    - Ops Center Key: A new SSH key pair is generated. During discovery, Oracle Enterprise Manager Ops Center configures key-based authentication by installing the generated public key in the login account. Note that different credentials must be used to discover the Operating System before the new public key has been installed.

7. In the Login User field, enter a user name to login.
8. In the Password field, type a password. Retype the same password in the Confirm Password field.

Note:

After the non-privileged user logs in, Oracle Enterprise Manager Ops Center runs the “su" command to elevate the user to a root/privileged user.

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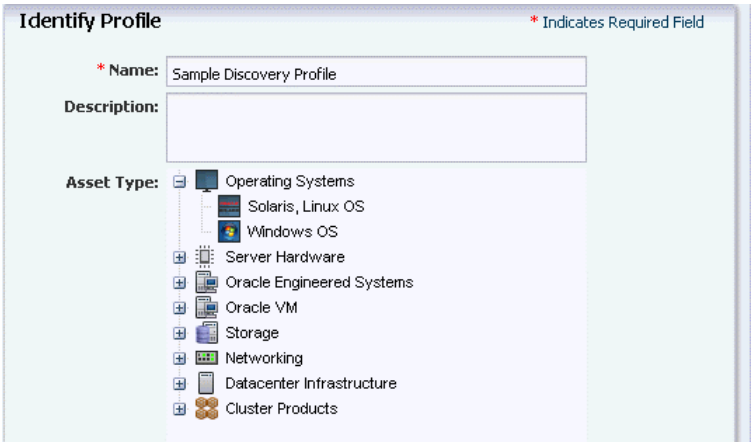
9. In the Require Privilege Escalation field, select **Roles**.
    - Select Roles to use a privileged user.
    - Select Sudo to use a sudo user.
10. Enter a name and password for the Privileged Role. Also, confirm the role password.
11. Enter the SSH port number. The SSH port number is populated by default.
12. Click **Create**. The user credential is created.

Create a Discovery Profile

You can create a discovery profile and then run a discovery using the profile. You can provide some discovery information, such as the targeted IP addresses and the discovery credentials during profile creation or when the profile is run.

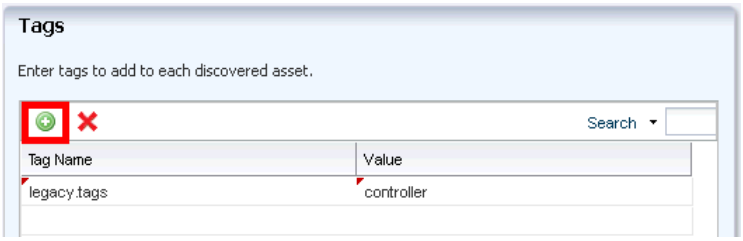
A Tag is a set of information attached to an asset. Each tag consists of a tag name, which is drawn from a list of values appropriate for each asset, and a tag value, which can be any text string. You can also create your own tag name. For example, an asset could have a tag with a tag name of oracle.cloud.resource.creation.time and a value of 12 June. Tags can be used to associate information with assets, and to group assets based on tags or tag values. You can add tags to assets during or after discovery.

1. In the Navigation pane, click **Plan Management**.
2. Under Profiles and Policies, click **Discovery**.
3. In the Actions pane, click **Create Profile**.
4. Enter a name and description for the discovery profile.

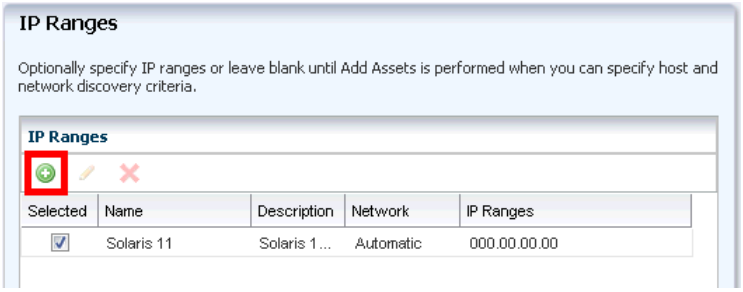


5. In the Asset Type, under Operating Systems, select **Solaris, Linux OS**. Click **Next**.

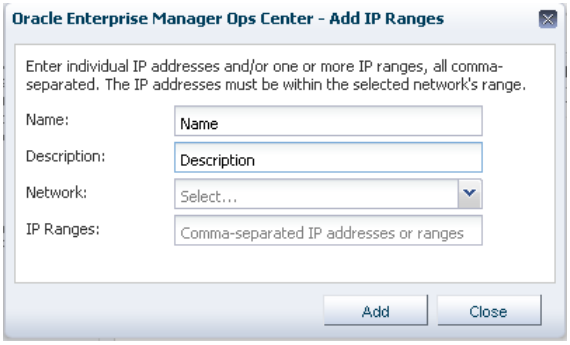
6. Click the plus icon (highlighted in red in the following figure) to add tags to the discovered operating system. Select a tag name and enter a value for the tag. Click **Next**.



7. Enter the IP Ranges. Click the plus icon (highlighted in red in the following figure) to add IP Ranges.

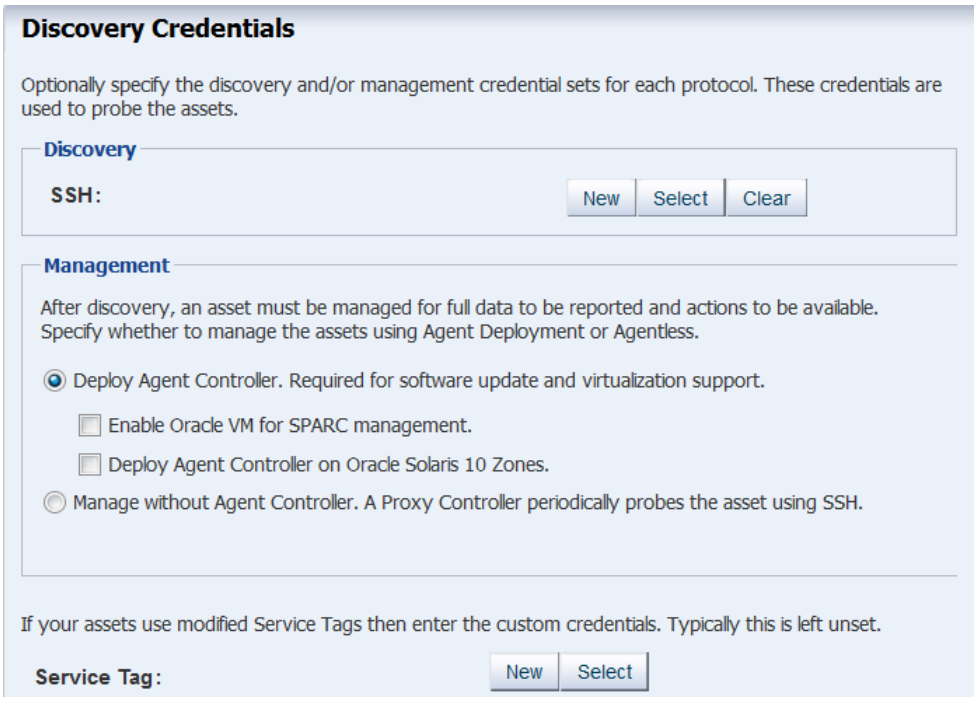


8. Enter values in the respective fields and click **Add**, then click **Next**.



- Name - A name for the IP range.
- Description - A description for the IP range, so that it can be identified and reused.
- Network - The managed network with which the host names or IP addresses are associated. This is used to route the discovery to the correct Proxy Controller. When a Proxy Controller cannot reach the assets' network, the discovery will fail. Select Automatic to route the job to the most appropriate Proxy Controller.
- IP Ranges - The IP range to be targeted.

9. In the Discovery section, click **Select** to choose an existing set of credentials for the initial contact.



10. In the Management selection, accept the default option, **Deploy Agent Controller** option. The discovery process will install the Agent Controller on the asset, lightweight software that can only respond to inquiries and commands from the Proxy Controller and makes this operating system an agent-managed asset. The

alternative, an agentless operating system, limits Oracle Enterprise Manager Ops Center's ability to update the operating system. The sub-options under Deploy Agent Controller refer to the discovery of virtual assets so accept the default of cleared checkboxes. Click **Next**.

11. Review the summary information, then click **Finish** to create a Discovery Profile.

Add the Operating System Using the Discovery Profile

After you have created a discovery profile, you can run it to discover and manage assets.

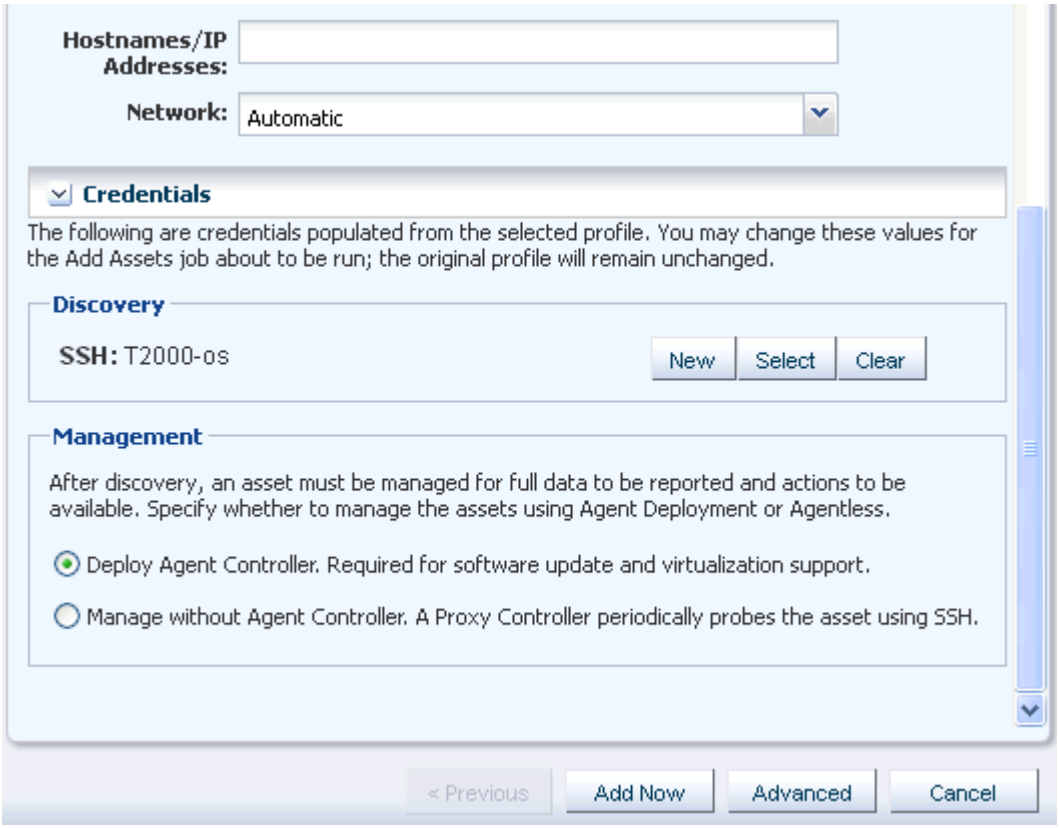
This procedure assumes that you have already created a discovery profile with an IP range, a specified network, and discovery and management information.

1. Click **All Assets** in the Assets section of the Navigation pane.
2. Click **Add Assets** in the Actions pane.
3. Select **Add and Manage Various Types of Assets via Discovery Probes**, then click **Next**.

4. Select the newly-created discovery profile.

5. An IP address or host name is required to discover the asset. To route the discovery to the appropriate Proxy Controller, associate the targets with a managed network or use automatic routing.

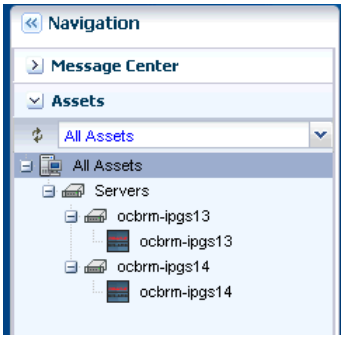
   - Discovery - Click Select to select the existing set of credentials.
   - Management - Select Deploy Agent Controller to automatically install Agent Controllers on the discovered operating system.



6. Click **Add Now** to launch the discovery. The discovery job is launched.

What Next?

When the discovery job completes successfully, your OS is visible in the All Assets section of the user interface as shown in the following figure. You can begin using the monitoring, analytics, OS provisioning, and update features to gather information and perform tasks.



Related Articles and Resources

See **Managing Assets** in Oracle Enterprise Manager Ops Center Configuration Reference and **Operating System Management** in Oracle Enterprise Manager Ops Center Operations Reference for more information.

For end-to-end examples, see the workflows and how to documentation in the library. For deployment tasks, go to `http://docs.oracle.com/cd/E59957_01/nav/deploy.htm` and for operate tasks go to `http://docs.oracle.com/cd/E59957_01/nav/operate.htm`.

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