

# Oracle® Enterprise Manager Ops Center

Discovering and Managing I/O Domains in Oracle SuperCluster Software v2.0

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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.

Starting with Oracle SuperCluster Software v2.0, you can create new I/O domains outside of Oracle Enterprise Manager Ops Center. The logical domain is displayed in the Navigation pane; however the operating system will not appear automatically. To monitor or manage the new I/O domain operating system, you must discover it manually.

In this document, you learn how to manually discover and manage I/O domains in Oracle SuperCluster Software v2.0.

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:

- An Oracle SuperCluster Software v2.0 system discovered by Oracle Enterprise Manager Ops Center.
- Hostname or IP address of the I/O domain operating system.
- Credentials of the I/O domain operating system. (If the I/O domain OS credentials are not changed manually, they share the default credentials.)
- Access to Oracle Enterprise Manager Ops Center using Ops Center Admin role to create credentials and discover operating systems.

## Discover the I/O Domain 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 an OS Discovery Profile](#)
- [Add the I/O Domain Operating System Using the Discovery Profile](#)

## Create Credentials

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

When creating credentials, 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**.

The screenshot shows the 'Create Credentials' dialog in Oracle Enterprise Manager Ops Center. The 'Protocol' is set to 'SSH'. The 'Name' is 'IO\_Domain\_Credential' and the 'Description' is 'SSH Credential for new IO Domain'. Under the 'SSH' section, 'Authentication Type' is 'Password', 'Login User' is 'root', and 'SSH Port' is '22'. There are 'Create' and 'Cancel' buttons at the bottom.

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 a 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.

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**Note:** If a 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. (Optional) Enter a name and password for the Privileged Role. Also, confirm the role password. The privileged role password is created with the same default root password; however, the privileged role password is required if you change the login credentials manually.
10. Enter the SSH port number. The SSH port number is populated by default. Default value is 22.
11. Click **Create**. The user credential is created.

## Create an OS Discovery Profile

You can create an OS 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 I/O domain discovery profile.

5. In the Asset Type, under Operating Systems, select **Solaris, Linux OS**. Click **Next**.
6. (Optional) Click the plus icon (highlighted in red in the following figure) to add tags to the I/O domain. Select a tag name and enter a value for the tag. Click **Next**.

**Tags**

Enter tags to add to each discovered asset.

  Search

Tag Name	Value
legacy.tags	controller

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

**IP Ranges**

Optionally specify IP ranges or leave blank until Add Assets is performed when you can specify host and network discovery criteria.

**IP Ranges**

  

Selected	Name	Description	Network	IP Ranges
<input checked="" type="checkbox"/>	Solaris 11	Solaris 1...	Automatic	000.00.00.00

- a. 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.
8. In the Discovery Credentials wizard, click **Select** to choose a SSH protocol. Under Management, select **Deploy Agent Controller** option, then click **Next**.

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**Note:** If the new I/O domain shares the same password with some other OS, you can select the existing credentials.

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**Note:** Do not check the **Enable Oracle VM for SPARC management** option.

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

The screenshot shows the Oracle Enterprise Manager Ops Center interface for creating a Discovery Profile. The window title is "Oracle Enterprise Manager Ops Center - Create Profile - Discovery". The main heading is "Create Profile - Discovery" with the Oracle logo in the top right. On the left, a "Steps" pane lists five steps: 1. Identify Profile, 2. Tags, 3. IP Ranges, 4. Discovery Credentials, and 5. Summary (which is currently selected). A "Help" button is also visible. The main content area is titled "Summary" and contains the following information:

Review the properties of the profile, then click Finish.

**Name:** IO Domain Discovery Profile  
**Description:** Newly created IO Domain discovery with agent

**Discovery Credentials:**

Name	Protocol Type
IO_Domain_Credential	SSH

**Management Mode:** Agent

At the bottom right of the window, there are three buttons: "< Previous", "Finish", and "Cancel".

## Add the I/O Domain Operating System Using the Discovery Profile

After you have created a discovery profile, you can run it to discover and manage the I/O domain operating system.

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

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**Note:** You can discover multiple I/O domains if they share the same login information.

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**Note:** The I/O domain OS can be discovered only after the I/O domain has started.

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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 I/O domain discovery profile.

5. In the Hostnames/IP Addresses field, enter the IP address or host name of the server.
6. Click **Add Now** to launch the discovery. The discovery job is launched and might take around 60 minutes to complete.

## What's Next?

After the discovery job completes successfully, verify if the OS of the I/O domain is present.

1. In the Navigation pane, under Assets, expand Oracle Engineered Systems.

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**Note:** If the newly created I/O domain is not visible, refresh the control domain that manages the new I/O domain.

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2. Select the Operating System of the I/O domain. Click on the Dashboard tab and verify the OS and Agent Managed fields.

- If it is managed by an Agent, the Libraries and Storage tabs are present in the center pane. Click the Summary tab to check the version number of the Agent. Ideally, the Agent version must be same as that of the Ops Center version.
- If the OS is not managed by an Agent, use the OS to create non global zones.

## Related Articles and Resources

The following chapters in the *Oracle Enterprise Manager Ops Center Feature Reference Guide* contain more information:

- *Asset Management*
- *Operating Systems Management*

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