

# Oracle® Enterprise Manager Ops Center

Discover and Manage SPARC M5-32, SPARC M6-32, and SPARC M7 Series Servers

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

## Introduction

You can use Oracle Enterprise Manager Ops Center to manage and monitor a variety of data center assets, including server hardware, chassis, racks, network equipment, operating systems, virtualization software, and clustering software. Discovering and managing your assets is a prerequisite for almost every action in the software. The discovery feature makes adding assets quick and easy by using a discovery profile and running an **Add Assets** job. The discovery profile specifies the type of targets to discover and the credentials and protocols to access them and to manage them. You can discover one server or many servers in the same operation efficiently and consistently.

The SPARC M5-32 servers, SPARC M6-32 servers, SPARC M7-8 servers, and the SPARC M7-16 servers are the Enterprise class of SPARC servers that have multiple physical domains (PDOM). These servers differ from the previous M series servers in that their service processors use the ILOM 3.2 interface instead of the XSCF interface. The ILOM service processor uses the Simplified Data Model (SDM) to present information consistently across different types of servers. The SPARC M7-8 server has another difference: it is also available as a single-host server, providing a single physical domain.

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**Note:** The example scenario demonstrates the discovery of a SPARC M5-32 server and its physical domain. You can use the same procedure to discover a SPARC M6-32 server or a server in the SPARC M7 series of servers.

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## What You Will Need

You will need the following:

- Access to a system running Oracle Enterprise Manager Ops Center.
- Ops Center Admin role to discover assets and the Ops Center Security Admin role to create credentials.
- One or more SPARC M5-32, SPARC M6-32, or SPARC M7 series servers with configured ILOM service processors.
- Intelligent Platform Management Interface (IPMI) and SSH credentials for the ILOM service processor.

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**Note:** A SPARC M series server is significantly larger than a typical server so discovery and refreshes of data can exceed the default expiration of 30 minutes. If the discovery job fails, increase the number of seconds for operations on the ILOM service processor by editing the `/var/opt/sun/xvm/hal.properties` file to change the following property's value:

```
ilom.sdm.maximum.command.execution.time=1800
```

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## Discover a SPARC M5-32, SPARC M6-32, or SPARC M7 Series Server

To discover the server, use a discovery profile with the **Add Assets** action. A discovery profile is a combination of an asset type, a set of host names or IP addresses, and a set of credentials. The following steps discover and manage one or many servers:

1. [Creating Credentials](#)
2. [Creating a Discovery Profile](#)
3. [Using the Discovery Profile](#)

### Creating Credentials

You must provide a set of new or existing credentials to grant Oracle Enterprise Manager Ops Center access to the ILOM service processor. For a server with an ILOM service processor, use SSH and, optionally, IPMI credentials. This example creates both types of credentials.

- [Creating IPMI Credentials](#)
- [Creating SSH Credentials](#)

### Creating IPMI Credentials

Use this procedure to create credentials using the IPMI protocol.

1. Click **Plan Management** on the Navigation pane, then click **Credentials**.
2. Click **Create Credentials** in the Actions pane. The **Create Credentials** wizard opens.
3. Select IPMI from the drop-down list in the **Protocol** field.
4. Enter a name for the discovery credentials in the **Name** field.
5. Enter a description for your credentials in the **Description** field.
6. Enter the user name of the service processor login credentials in the **Login User** field.
7. Enter the password of the service processor login credentials in the **Password** field. Retype the same password in the **Confirm Password** field.
8. Click **Create**. The IPMI credentials are displayed in the Credentials table.

Oracle Enterprise Manager Ops Center - Create Credentials

Create Credentials ? ORACLE

\* Indicates Required Field

\* Protocol: IPMI

\* Name: IPMI for ILOM (M5)

Description: IPMI credentials for ILOM (M5) discovery

IPMI

\* Login User: admin

\* Password: ●●●●●●●●

\* Confirm Password: ●●●●●●●●

Create Cancel

### Creating SSH Credentials

Use SSH credentials to discover ILOM service processors. They can also be used to discover operating systems.

1. Click **Plan Management** on the Navigation pane, then click **Credentials**.
2. Click **Create Credentials** on the Actions pane. The Create Credentials wizard opens.
3. Select SSH from the drop-down list in the **Protocol** field.
4. Enter a name for the discovery credentials in the **Name** field.
5. Enter a description for your credentials in the **Description** field.
6. Enter the user name of the service processor credentials in the **Login User** field.
7. Enter the password of the service processor credentials in the **Password** field. Retype the same password in the **Confirm Password** field.
8. Accept the default SSH port number or change it to the port used by the service processor.

Oracle Enterprise Manager Ops Center - Create Credentials

Create Credentials ? ORACLE

\* Indicates Required Field

\* Protocol: SSH

\* Name: SSH for ILOM (M5)

Description: SSH credentials for ILOM (M5) discovery

SSH

\* Authentication Type:  Password  Ops Center Key  Custom SSH Key

\* Login User: admin1

\* Password: ●●●●●●●●

\* Confirm Password: ●●●●●●●●

Privileged Role:

Role Password:

Confirm Password:

\* SSH Port: 22

Create Cancel

9. Click **Create**. The SSH credentials are displayed in the Credentials table.

## Creating a Discovery Profile

Discovery profiles simplify managing multiple sets of criteria and provide persistent storage of access credentials. You create a discovery profile and then use it to discover assets that match the criteria. This example includes the credentials and network information in the discovery profile, but you can provide this information at the time you run the discovery job.

### Creating a Discovery Profile for an ILOM Service Processor

Use this procedure to create a discovery profile for an ILOM service processor:

1. Click **Plan Management** in the Navigation pane.
2. Click **Discovery** under Profiles and Policies.
3. Click **Create Profile** in the Actions pane. The Identity Profile wizard opens.
4. Enter a name and description.
5. Select ILOM Service Processor in the **Asset Type**, under Server Hardware. Click **Next**.

**Identify Profile** \* Indicates Required Field

\* **Name:** Discovery Profile for M5 Server (ILOM)

**Description:** Discovery profile created for an M5 Server (ILOM)

**Asset Type:**

- Operating Systems
- Server Hardware
  - ILOM Service Processor
  - ELOM Service Processor
  - ALOM Service Processor
  - XSCF Service Processor
  - RSC Service Processor
  - V20z, V40z Service Processor
  - Other IPMI Service Processor

6. The Tags page is displayed. Tags are optional and are not used in this example. Click **Next**.
7. The IP Ranges page appears. You can add the IP address for one server or add an IP range for multiple servers. You also have the option to add no IP information and provide the information when you run the Add Assets job. Click **Next**.
8. Click **Select** in the Discovery Credentials dialog and choose the IPMI and SSH credentials that you created. Click **Next**.

**Discovery Credentials**

Optionally specify the discovery and/or management credential sets for each protocol. These credentials are used to probe the assets.

**Discovery**

Use system's default credentials

SSH: New Select Clear

IPMI: New Select Clear

9. Review the summary information, then click **Finish** to create the discovery profile.

## Using the Discovery Profile

Use this procedure to apply the new discovery profile.

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**.

**Oracle Enterprise Manager Ops Center - Add Assets**

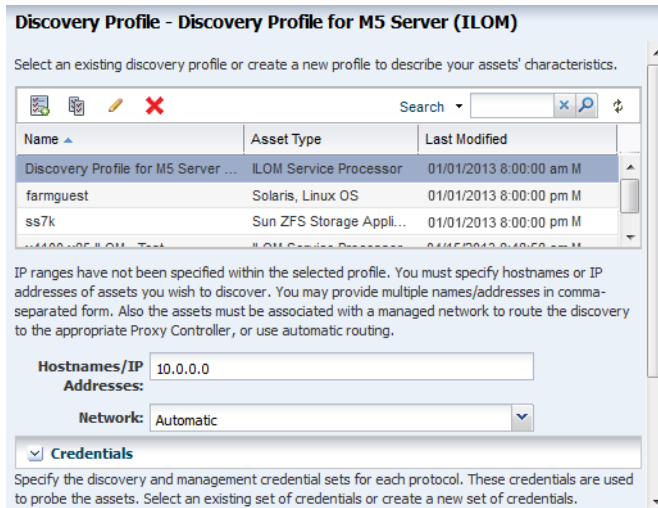
**Add Assets** ORACLE

Select the type of asset declaration to be performed:

- Add and manage various types of assets via discovery probes.
- Manually declare a server to be a target of OS provisioning.
- Declare an unconfigured hardware asset. This asset can then be a target of the Configure Service Processor deployment plan.

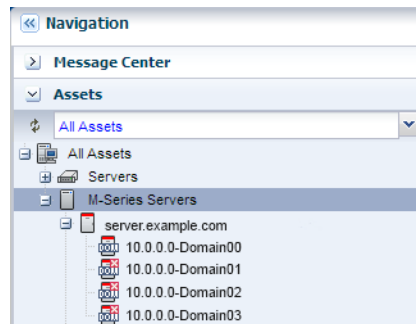
Next Cancel

4. Select the discovery profile you created.



5. Enter the host name or IP address for the server's service processor, then click **Add Now** to launch the discovery job. You can also discover multiple servers using an IP range. This might take a few minutes to complete.

After the discovery job completes successfully, the service processor and each physical domain is displayed in the Navigation pane in the Servers section of the Assets hierarchy as shown in the following figure.



## What's Next?

After you have added the server, you can manage and monitor it as a datacenter asset.

The screenshot displays the Oracle Enterprise Manager Ops Center interface. The top navigation bar includes tabs for Dashboard, Summary, Hardware, Connectivity, Incidents, Service Requests, Monitoring, Jobs, and Config. The main content area is divided into a Component Navigation pane on the left and a Summary pane on the right. The Summary pane shows details for a SPARC M5-32 server, including its model, system type, part number, serial number, system identifier, management IP, and management MAC address. It also indicates the power status (On), locator light status (Off), and operational status (Service Required). A subsystem status table is located below the summary, showing the status of various components like DCU, Processors, Memory, Power, and Cooling. A server image is shown on the right side of the summary pane.

Subsystem	Operational Status	Inventory
DCU	Service Required	DCUs (Installed / Max): 4 / 4
Processors	OK	Processors (Installed / Max): 28 / 32
Memory	OK	DIMMs (Installed / Max): 304 / 1024
Power	OK	PSUs (Installed / Max): 0 / 12
Cooling	OK	Chassis Fans (Installed / Max): 64 / 72 PSU Fans (Installed / Max): 0 / 36

You can also discover and manage the server's operating system. See the *Deploy Operating Systems Workflow* in the *Deploy How To* library at [http://docs.oracle.com/cd/E59957\\_01/nav/deploy.htm](http://docs.oracle.com/cd/E59957_01/nav/deploy.htm).

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**Note:** SPARC M5, SPARC M6, and SPARC M7 series servers are supported, but some features have limitations. See the *Target Servers* section of the *Certified Systems Matrix* document in the Oracle Enterprise Manager Ops Center document library.

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## Related Articles and Resources

See the following for more information:

- [Manage Assets](#) of the *Oracle Enterprise Manager Configure Reference* for information about discovery procedures for different types of servers.
- [Hardware](#) of the *Oracle Enterprise Manager Operate Reference Guide* for information about managing and monitoring hardware assets.
- [Operating Systems Provisioning](#) of the *Oracle Enterprise Manager Operate Reference* for information about provisioning operating systems on hardware servers.

For more information about SPARC M-Series servers and ILOM configuration, see the SPARC Systems library and the Systems Management and Diagnostics library in the Servers, Systems Management, Workstations, and Related Hardware section of <http://docs.oracle.com>.

## Documentation Accessibility

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