# **Oracle® Enterprise Manager Ops Center**

Discovering and Managing an Oracle SPARC T5 Server

12*c* Release 2 (12.2.1.0.0)

#### E41703-02

June 2014

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. You can discover assets using a discovery profile and running an **Add Assets** job. A discovery profile specifies the discovery targets, protocols, and credentials for accessing and managing them.

By following this example scenario, you can discover a SPARC T5 server with a configured Integrated Lights Out Manager (ILOM) service processor. All SPARC T5 servers run on Simplified Data Model (SDM) enabled ILOM 3.2. SDM is available as an option on SPARC T5 servers. SDM provides the capability to present information on ILOM consistently across different types of servers.

Discovery profiles for ILOM service processors are created using both Intelligent Platform Management Interface (IPMI) and ILOM SSH protocols. The scenario described in this document can be applied to any of the SPARC T5 server models.

There are four models of SPARC T5 servers:

- T5-1B, server module with one CPU socket.
- T5-2, two CPU sockets.
- T5-4, four CPU sockets.
- T5-8, eight CPU sockets.

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:

- Access to a system running Oracle Enterprise Manager Ops Center.
- *Ops Center Admin* role to discover assets, and *Ops Center Security Admin* role to create credentials in Oracle Enterprise Manager Ops Center.
- One or more SPARC T5 Servers with configured ILOM service processors.

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 Intelligent Platform Management Interface (IPMI) and SSH credentials for the ILOM service processor.

## **Discover a SPARC T5 Server**

You can discover a SPARC T5 server with a configured service processor using a discovery profile and running an **Add Assets** job. 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 are the steps needed to discover a SPARC T5 Server:

- 1. Creating Credentials
- 2. Creating a Discovery Profile
- **3.** Using the Discovery Profile

### **Creating Credentials**

You must create a set of credentials or use existing credentials to grant Oracle Enterprise Manager Ops Center access to the ILOM service processor. Based on the choice of server type, Oracle Enterprise Manager Ops Center displays only those protocols that are relevant to the asset. To discover an ILOM service processor, IPMI and SSH protocols are required.

The following are instructions to create the required credentials:

- Creating IPMI Credentials
- Creating SSH Credentials

### **Creating IPMI Credentials**

Use IPMI credentials to discover an ILOM service processor.

To create IPMI credentials, perform the following steps:

- 1. Click **Plan Management** on the Navigation pane, then click **Credentials**.
- **2.** Click **Create Credentials** on the Actions pane. The Create Credentials wizard appears.
- **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 appear on the Credentials table.

			* Indicates Required Fie	
* Pr	rotocol:	IPMI	I I	
*	Name:	IPMI for ILOM (T5)		
Desc	ription:			
*	* Login User: * Password:		admin	
* Password: * Confirm Password:		ord: ord:	•••••	

#### **Creating SSH Credentials**

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

To create SSH credentials, perform the following steps:

- 1. Click **Plan Management** on the Navigation pane, then click **Credentials**.
- **2.** Click **Create Credentials** on the Actions pane. The Create Credentials wizard appears.
- **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.** Enter the SSH port number if the port number for your service processor is different from the default.

	* Indicates Required Fig		
* Protocol:	SSH		
* Name:	SSH for ILOM (T5)		
Description:	SSH credentials for ILOM (T5) discovery		
* Passwo	ord: ••••••		
Privileged R	ole:		
Role Passwo	ord:		
	ord:		
Confirm Passwo			

9. Click **Create**. The SSH credentials appear on the Credentials table.

### **Creating a Discovery Profile**

Discovery profiles simplify managing multiple sets of discovery criteria and offer persistent storage of access credentials. You can create a discovery profile and then run a discovery using the profile. You can provide discovery information such as the discovery credentials during profile creation or when the profile is used to run the discovery job.

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

Perform the following steps 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 Create Profile Discovery wizard appears.
- **4.** Enter a name and a description.
- **5.** Select ILOM Service Processor in the Asset Type, under Server Hardware. Click **Next**.

Identify Profile	*	Indicates Required Field
* Name:	Discovery Profile for T5 server (ILOM)	
Description:	Discovery profile created for SPARC T5 server (ILOM)	
Asset Type:	Operating Systems     Server Hardware      LOM Service Processor     ALOM Service Processor     XSCF Service Processor     XSCF Service Processor     XSCF Service Processor     V20z, V40z Service Processor     Oracle Engineerd Systems     Oracle VM     Storage     Networking     Datacenter Infrastructure     Cluster Products	

- 6. The Tags page appears. 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 your SPARC T5 server or IP ranges for multiple servers in the IP Ranges page or do it later 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 have created. Click **Next**.

dential sets for ea	ch protoco	l. These	
New	Select	Clear	
New	Select	Clear	
	lential sets for ea	Iential sets for each protoco New Select New Select	Iential sets for each protocol. These           New         Select         Clear           New         Select         Clear

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

### **Using the Discovery Profile**

After you have created the discovery profile, you can use it to discover and manage the SPARC T5 server.

- 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 discovery profile created in the previous section (see Creating a Discovery Profile).

Name 🔺	Asset Type	Last Modified	
Discovery Profile for ILOM	ILOM Service Processor	10/09/2012 4:06:18 pm M	*
Discovery Profile for T5 server (ILOM)	ILOM Service Processor	01/14/2013 4:58:47 pm M	Ξ
ILOM	ILOM Service Processor	11/28/2012 2:34:09 pm M	
MySS7K	Sun ZFS Storage Appli	10/23/2012 12:28:25 p	
Sample Solaris 10 Discovery Profile	Solaris, Linux OS	11/07/2012 1:31:12 am M	
Contrato Colonia Diagona Des Ala	0-100	40/04/0040 44-50-45 14	Ψ.
IP ranges have not been specified within addresses of assets you wish to discover separated form. Also the assets must be to the appropriate Proxy Controller, or us	the selected profile. You mu: . You may provide multiple n associated with a managed r se automatic routing.	st specify hostnames or IP ames/addresses in comma- network to route the discover	ry
Hostnames/IP 10.0.0.0			

**5.** Enter the host name or IP address for the SPARC T5 server service processor, then click **Add Now** to launch the discovery job. You can also discover multiple SPARC T5 servers using an IP range. This might take a few minutes to complete.

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After the discovery job completes successfully, the service processor is visible in the Navigation pane under the Servers tree, located in the Assets pane as shown in the following figure.

Navigation	
> Message Center	
All Assets	~
All Assets	
🖃 🛲 Servers	
i 10.0.0	

## What's Next?

Network: Automatic

After you have added the SPARC T5 server you can manage and monitor the hardware asset.

omponent Navigation	Summary 🗹		Unassigned Incidents: 🛛 😣 0 🛛 🔒 0 🖉			
System		Model: SPARC T5-8				
Memory	Serv	er Name: SPARCT5				
Power	Syste	em Type: Rack Mount				
Cooling	Part	Number: 12345678+1+1	AND THE REAL PROPERTY AND THE READ THE READ THE REAL PROPERTY AND			
- Storage	Serial	Serial Number: 12380C104 System Identifier: SPARCT5				
Networking	System In					
M: Jeinice Processor	Manage	Management IP: 10.0				
	Managem	ent MAC 00:10				
		Power: On	AND ADD			
	Local	Locator Light: Off Actual Power 3588 watts Consumption: Operational Status: Service Required Data Source: ILOM Service Processor Host HAC Address: 00:10:50				
	Actu Conse					
	Operationa					
	Data					
	Host MAC					
	Hos	Nost Status: Solaris running				
	Keyswib	ch State: Normal				
	🗵 Subsystem St	atus				
	Subsystem	Operational Status	inventory			
	Processors	ОК	Processors (Installed / Max): 8 / 8			
	Memory	Service Required	DIMMs (installed / Max): 128 / 128			
	Power	ок	PSUs (Installed / Max): 4 / 4			
	Cooling	OK	Chassis Fans (Installed / Max): 10 / 10 PSU Fans (Installed / Max): - / -			
		Not Avaiable	Internal Disks (Installed / Max); 8 / 8			
	Storage	Invi Araiave				
	Storage Networking	OK	Installed Ethernet NICs: 4			

You can also discover and manage the operating system on the hardware.

**Note:** You must use Oracle Solaris 10 update 11 operating system for provisioning Oracle VM Server for SPARC on a SPARC T5 server.

## **Related Articles and Resources**

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

- See *Asset Management* for more information about discovery and management procedures for different types of servers.
- See *Hardware* for information about managing and monitoring hardware assets.
- See *Operating System Provisioning* for information about provisioning operating systems to hardware assets.

See the *Command Line Interface Guide* for information about discovering assets using the CLI.

For more Enterprise Manager Ops Center deployment and operational guides, including more examples to discover different types of servers visit the *Deploy How To library* at http://docs.oracle.com/cd/E40871\_01/nav/deployhowto.htm

For more information about SPARC servers and ILOM configuration visit the SPARC Systems and Systems Management and Diagnostics libraries in the Servers, Systems Management, Workstations, and Related Hardware category at http://docs.oracle.com.

## **Documentation Accessibility**

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Oracle Enterprise Manager Ops Center Discovering and Managing an Oracle SPARC T5 Server, 12c Release 2 (12.2.1.0.0) E41703-02

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