

Oracle® Enterprise Manager Ops Center

Discovering and Managing a Fujitsu M10 Server

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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. You can discover assets using a discovery profile, which specifies the discovery targets, protocols, and credentials for accessing and managing them. Alternatively, assets with service tags can be discovered using the **Find Assets** wizard.

The Fujitsu M10 Server is a sun4v SPARC enterprise server powered by the SPARC64 X processor developed by Fujitsu. A SPARC64 X processor offers 16 cores x 2 threads. These servers are categorized under the M-series servers.

The following scenario is applicable to all three models of the Fujitsu M10 Server:

- M10-1, one CPU socket server with no building block capability.
- M10-4, four CPU sockets server with no building block capability.
- M10-4S, four CPU sockets server with building block capability, offering scalability of up to 16 building blocks.

A building block consists of 4 CPU sockets, several memory DIMMs, and IO devices. The M10-4S model supports up to 16 building blocks, which translate to a maximum of 64 CPU sockets.

The Fujitsu M10 Servers are discovered through an eXtended Service Control Facility (XSCF) Service Processor.

The following are the steps needed to discover a Fujitsu M10 Server:

1. [Enabling the Simple Network Management Protocol \(SNMP\) and SNMP Traps](#)
2. [Creating Credentials](#)
3. [Creating a Discovery Profile](#)
4. [Using the Discovery Profile](#)

The following section is also covered in this document as an alternative to discover a Fujitsu M10 server:

- [Discovering Fujitsu M10 Servers with Service Tags](#)

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 Fujitsu M10 Servers with configured XSCF service processors.
- XSCF SSH or Telnet credentials.
- The correct IP Address for the XSCF Service Processor. If the M10 server has redundant XSCFs, you must use the takeover IP address between the master and standby XSCFs.

Discovering a Fujitsu M10 Server

You can discover a Fujitsu M10 Server with a configured service processor 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.

Enabling the Simple Network Management Protocol (SNMP) and SNMP Traps

The default setting for SNMP Traps on XSCF is disabled. You must enable SNMP Traps before discovering a server.

The following procedures describe how to verify and change the SNMP settings on the XSCF console.

Verifying the SNMP configuration on XSCF

To verify if SNMP is disabled:

1. Log into the XSCF console with `platadm` privileges.
2. Type the `showsnmp` command on the XSCF console and check the status of the Agent and Trap Hosts. If Agent Status is Disabled and the value for Trap Hosts is None, enable SNMP on XSCF.

Enabling the SNMP Agent and SNMP Traps on XSCF

Run the following commands on the XSCF console to enable SNMP:

1. Type `setsnmp enablev1v2c public`. SNMP v1v2 is enabled with the community parameter set to public.
2. Type `setsnmp enable SP_MIB`. Agent Enabled displays on the console and the SP MIB module is enabled.
3. Type the `showsnmp` command to display the SNMP configuration. The Agent Status is now set to Enabled and the Trap Hosts value displays HostName, Port, Type, Community String, Username and Auth Protocol.

For more information about XSCF settings on the M10 server, visit:

<http://www.fujitsu.com>.

Creating Credentials

Assets are discovered using a set of credentials. 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 XSCF service processor, SSH or TELNET credentials are required.

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

Creating SSH Credentials

Use XSCF SSH credentials to discover XSCF service processors.

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. Change the SSH port number as needed. The default port number is 22.

The screenshot shows the 'Create Credentials' wizard in Oracle Enterprise Manager Ops Center. The window title is 'Oracle Enterprise Manager Ops Center - Create Credentials'. The wizard is titled 'Create Credentials' and features the Oracle logo. A legend indicates that an asterisk (*) denotes a required field. The form contains the following fields and options:

- * Protocol:** SSH (selected in a dropdown menu)
- * Name:** SSH for XSCF (M10)
- Description:** SSH credentials for XSCF (M10) discovery
- SSH Section:**
 - * Authentication Type:** Password (selected), Ops Center Key, Custom SSH Key
 - * Login User:** admin1
 - * Password:** (masked with dots)
 - * Confirm Password:** (masked with dots)
 - Privileged Role:** (empty)
 - Role Password:** (empty)
 - Confirm Password:** (empty)
 - * SSH Port:** 22

At the bottom of the wizard are 'Create' and 'Cancel' buttons.

9. Click **Create**. The user credential is created.

Creating TELNET Credentials

XSCF TELNET credentials can also be used to discover XSCF service processors.

To create TELNET 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 opens.
3. Select TELNET 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.

Oracle Enterprise Manager Ops Center - Create Credentials

Create Credentials **ORACLE**

* Indicates Required Field

* Protocol: TELNET

* Name: TELNET for XSCF (M10)

Description: TELNET credentials for XSCF (M10) discovery

TELNET

* Login User: admin2

* Password: ●●●●●●●

* Confirm Password: ●●●●●●●

Create Cancel

8. Click **Create**. The user credential is created.

Creating a Discovery Profile

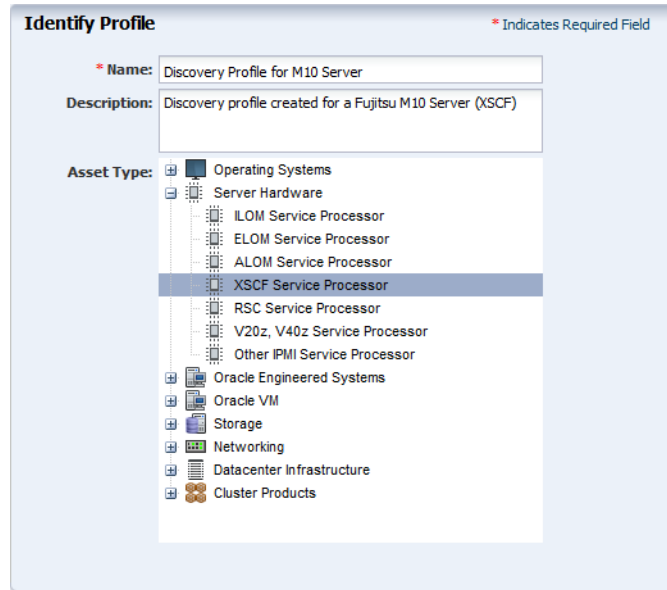
Discovery profiles simplify managing multiple sets of discovery criteria and offer persistent storage of access credentials. You can create a discovery profile and then run a discovery using the profile. You can provide discovery information such as the discovery credentials during profile creation or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

Creating a Discovery Profile for an XSCF Service Processor

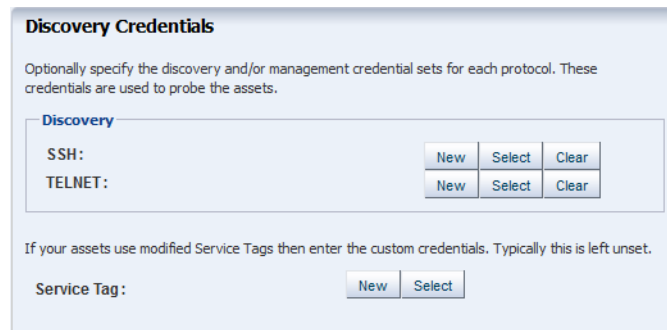
Perform the following steps to create a discovery profile for an XSCF service processor:

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 appears.
4. Enter a name and description for the discovery profile.
5. Select XSCF Service Processor in the Asset Type, under Server Hardware. Click **Next**.



6. The Tags page appears. Tags are optional in this example. Click **Next**.
7. The IP Ranges page appears. You can add the IP address for your Fujitsu M10 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 SSH or TELNET credentials that you have created. Click **Next**.



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 a Fujitsu M10 Server.

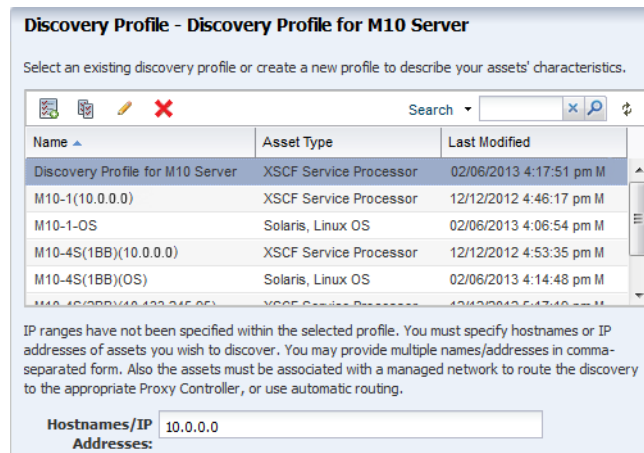
In this example, the XSCF service processor discovery profile is used.

1. Click **All Assets** in the Assets section of the Navigation pane.

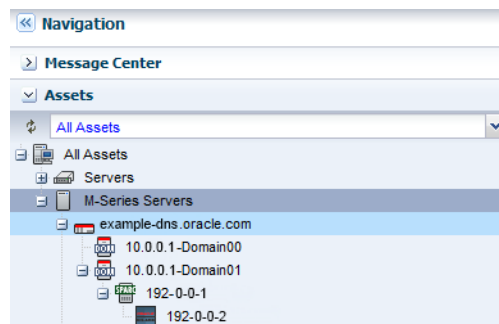
2. Click **Add Assets** in the Actions pane.
3. Select **Add and manage various types of assets via discovery probes**, then click **Next**.



4. Select the discovery profile created in the previous section (see [Creating a Discovery Profile](#)).
5. Enter the host name or IP address for the Fujitsu M10 Server XSCF, then click **Add Now** to launch the discovery job. You can also discover multiple servers with a comma separated list of either the host names or IP addresses. This might take a few minutes to complete.



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



Discovering Fujitsu M10 Servers with Service Tags

To discover one or more Fujitsu M10 servers with service tags, use the **Find Assets** wizard. Service tags are XML files containing product information that identify assets uniquely. This method lets you discover a large number of M10 servers or other assets quickly.

Note: You must update the XSCF Control Package (XCP) firmware to XCP2050 to use the service tags function.

The **Find Assets** wizard searches for service tags in known networks, then uses the credentials that you specify to manage the discovered assets.

Products without service tags cannot be discovered using this method.

To find M10 servers, perform the following steps:

1. In the Navigation pane, select **All Assets**.
2. In the Actions pane, click **Find Assets**.
3. If you want to find assets among one or many IP ranges use the IP Ranges table to create or select IP lists of ranges.

The screenshot shows the 'Find Assets' wizard. It includes a title bar 'Find Assets', a descriptive paragraph, two radio buttons for 'Find assets now.' (selected) and 'I have already discovered assets...', and a text input area for IP ranges. Below is a table titled 'IP Ranges' with columns for Selected, Name, Description, Network, and IP Ranges.

Selected	Name	Description	Network	IP Ranges
<input type="checkbox"/>	M10-1(10....	Automatic		10.0.0.0
<input type="checkbox"/>	M10-1(OS)	192.0.0.0	/...	192.0.0.0
<input type="checkbox"/>	M10-4S(1...	Automatic		10.0.0.0
<input type="checkbox"/>	M10-4S(1...	192.0.0.0	/...	192.0.0.0
<input type="checkbox"/>	M10-4S(2...	Automatic		10.0.0.0

4. Ensure that the **Find assets now** option is selected and click **Next**. A new window displays the discovery job running status. Click **Close** when the discovery job finishes running.

The screenshot shows a 'Job finished: Success' window from Oracle Enterprise Manager Ops Center. It contains a table with columns for '#', 'Message', and 'Target'.

#	Message	Target
1	Job starting	
2	INFO: Invoking the prepare method of this target. (15018)INFO: Task is posted to the Proxy Controller (192.0.0.0: 99-6159ed4d), from the Enterprise Controller. (15011)INFO: Task is received by the Proxy Controller. (15012)MESSAGE: Discovered 1050 service tags for target 192.0.0.0: 99-6159ed4d/com.abc.hss.domain.name=loc... (10068)	192.0.0.0 ...
3	INFO: Validated Sun Ops Center Containers Virtualization Controller service tag from 10.	192.0.0.0 ...

Close

- When the initial discovery is complete, select the assets in each category (hardware, operating systems, and engineered systems) that you want to manage and provide credentials for them, then click **Finish**.

Discovered Hardware

The following hardware is discovered. Select the systems to manage.

Name ▲	Description	Product Name	Version
oc-711	10.0.0.0	Sun Storage 7110 Unified S...	2011....
oc-71	10.0.0.0	Sun Storage 7110 Unified S...	2010....
oc-7110	10.0.0.0	Sun Storage 7110 Unified S...	2011....
ocdev-l	10.0.0.0	Sun ZFS Storage 7120	2010....
ocdev	10.0.0.0	Sun ZFS Storage 7120	2011....
santaclar	10.0.0.0	Sun Network 10GE Switch ...	
sc11	10.0.0.0	Sun ZFS Storage 7420	2011....
sc11g1121	10.0.0.0	Sun ZFS Storage 7420	2011....
scae04	10.0.0.0	Sun ZFS Storage 7320	2011....
scae04sn02	10.0.0.0	Sun ZFS Storage 7320	2011....
scae04sw	10.0.0.0	Sun Network QDR InfiniBan...	
scae04s	10.0.0.0	Sun Network QDR InfiniBan...	
sca	10.0.0.0	Sun ZFS Storage 7320	2011....

What's Next?

After you have added the Fujitsu M10 Server you can manage and monitor the hardware asset. You can also discover and manage the operating system on the hardware.

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 visit the *Deploy How To library* at http://docs.oracle.com/cd/E40871_01/nav/deployhowto.htm.

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