Sun Blade X6270 M2 Server Module

Getting Started Guide

This guide describes the minimum steps you must perform to power on and configure your Sun Blade X6270 M2 Server Module for the first time.

Detailed installation information can be found in the *Sun Blade X6270 M2 Server Module Installation Guide*, which is available at the Oracle documentation web site:

http://docs.sun.com/app/docs/prod/blade.x6270m2#hic

Contents

Oracle's Sun Blade X6270 M2 Server Module is shipped with safety documentation and the components that you ordered for your configuration. Optional components might be packaged and shipped separately.

Documentation and Media Kit

The Documentation and Media Kit is an orderable option for your system. It contains installation documentation, the Tools and Drivers DVD, the Oracle Hardware Installation Assistant CD, and the Oracle SunVTS CD. You can order the Documentation and Media Kit at any time, using the following marketing part number: X6270-X-MEDDOCKIT.

You also can download the documentation and software that are included in the Documentation and Media Kit from these sites.

- For documentation: http://docs.sun.com/app/docs/prod/blade.x6270m2#hic
- For software: http://www.oracle.com/goto/x6270m2

Safety and Compliance Information

Before performing an installation, refer to the following documents for safety information regarding the Sun Blade X6270 M2 Server Module:

- *Important Safety Information for Sun Hardware Systems* – Printed document included in the ship kit.
- *Sun Blade X6270 Server Module Safety and Compliance Manual* – Online at the Oracle documentation site.

▼ Install Optional Components

Before installing the server into the chassis, you must first install any optional components that you ordered with the server, and that were not factory installed. Refer to the *Sun Blade X6270 M2 Server Module Service Manual* for the instructions on installing optional components.

▼ Install Server Module and Verify STANDBY Power State

If inserted into a powered-on Sun Blade Modular System chassis, the server module, by default, receives STANDBY power from the powered-on system chassis. For information about powering on the system chassis, refer to the system chassis documentation. For more information about powering on the server module, refer to the *Sun Blade X6270 M2 Server Module Installation Guide*. The following procedure assumes the chassis is powered-on.

1. **Verify that the system chassis is powered on.**

   When the chassis is powered on, the fans are operating and the OK/Power LED illuminates a STEADY ON green light. The OK/Power LED is located on both the front and rear panels of the chassis.

2. **At the front of the chassis, locate and remove the filler panel from the slot where you will insert the server module. Pull the lever out and eject the filler panel.**

3. **Position the server module vertically so that the ejectors are on the right and extend outward.**

4. **Push the server module into the slot until the server module stops and is flush with the chassis.**

5. **To lock the server module into the chassis, rotate the top ejector down and the bottom ejector up until both ejectors snap into place.**

   The ejectors are locked and STANDBY power is applied to the server module service processor (SP).

6. **Verify STANDBY power state on the server module.**

   The server module SP can take several minutes to boot, during which the OK/Power LED on the server module front panel illuminates a SLOW blink (0.5 second on, 0.5 second off). After the server module SP boots, the OK/Power LED illuminates a STANDBY blink (0.1 second on, 2.9 seconds off). STANDBY blink state indicates that STANDY power is supplied to the server module SP, the SP is active, and you can connect to ILOM; however, the server module host is still powered off. Main power to the server module host must be applied prior to installing an operating system.

▼ Determine Your Method to Connect to ILOM

You can start, boot, and manage the server module using the Oracle Integrated Lights Out Manager (ILOM) software (formerly called Sun Integrated Lights Out Manager software) that runs on the server module's service processor (SP). You can also control the server module from ILOM running on the chassis monitoring module (CMM).

The table on the following page lists the methods you can use to connect to ILOM. This guide provides instructions for the local serial connection (method 3).

To log in to ILOM remotely over an Ethernet network (method 1 in the table), you must know the IP address of the server module SP or CMM. By default, the IP address for the server module is assigned by a DHCP server (for IPv4 configurations) or an IPv6 router (for IPv6 configurations).

In a typical configuration, you will accept the IP address assigned by the DHCP server or IPv6 router. If you are not using DHCP or an IPv6 router, or if you need to assign the server module SP a static IP address for any other reason, refer to the Oracle Integrated Lights Out Manager (ILOM) 3.0 Documentation Collection for instructions.

You can connect to ILOM using one of the methods listed in the following table.

Method	From (Connection Type)	To	Description
1	(Ethernet) CMM NET MGT port	Your network	Ensure that the chassis monitoring module (CMM) NET MGT port is connected to your network. From your network, log in to ILOM on the CMM or the server module using the IP address of the CMM or server module. If you are logged in to the CMM, use ILOM to navigate to the server module SP ILOM interface. You can use the ILOM command-line interface (as described in this guide), or use the ILOM web interface.
2	(Local Serial) CMM SER MGT port	Terminal device	Connect a terminal device to the CMM SER MGT RJ-45 port and use ILOM to navigate to the server module SP ILOM interface. This method only supports the ILOM command-line interface.
3	(Local Serial) Server module SP UCP port (dongle required)	Terminal device	(Method used in this guide.) Connect a dongle cable to the server module, and then connect a terminal device to the RJ-45 or DB-9 connector on the dongle cable. You can use the ILOM command-line interface as described in this guide.
4	(Local KVM) Server module SP UCP port (dongle required)	USB keyboard and mouse, VGA monitor	Connect a dongle cable to the server module. Access the host by connecting a keyboard and mouse to the dongle USB connectors and a monitor to the HD15-pin VGA connector. Communicate with ILOM on the server module SP through the host.

▼ Connect to ILOM Using a Local Serial Connection

1. **Verify that STANDBY power is supplied to the server module.**
2. **Insert the dongle cable into the universal port on the front panel of the server module, then attach the RJ-45 or DB-9 connector to the serial terminal. Verify that the terminal has power and is operational.**
3. **Set the terminal to 9600 baud, 8 bit, no parity, 1 stop bit. A null modem connection is needed.**
4. **Press Enter on the terminal to connect the terminal device and the server module SP.**
5. **Log in to the ILOM CLI using the `root` user account and the `root` password, `changeme`.**

```
<hostname> login: root
Password: changeme
```

The ILOM CLI prompt appears (->). You can now start, configure, and manage the server using ILOM.

▼ View or Change Network Settings Using the ILOM CLI

By default, the server module SP uses a Dynamic Host Configuration Protocol (DHCP) server for network configuration of IPv4 networks and an IPv6 router for network configuration of IPv6 networks. To view the default network settings using the ILOM CLI:

1. **Navigate to the `/network` directory for IPv4 configuration or the `/network/ipv6` directory for IPv6 configuration by typing one of the following commands.**

```
-> cd /SP/network
-> cd /SP/network/ipv6
```

2. **To view the IPv4 or IPv6 network settings assigned to the server module, type the following command.**

```
-> show
```

3. **To configure static network settings or to change the IPv4 DHCP settings or IPv6 auto-configuration options, refer to the Oracle Integrated Lights Out Manager (ILOM) 3.0 Documentation Collection.**

▼ Power On the Server Module Host

1. **Power on the server module host by typing the following command and responding to the prompt.**

```
-> start /SYS
Are you sure you want to start /SYS (y/n)? y
Starting /SYS . . .
```

The server module initializes. The server module might take several minutes to complete the power-on self-test (POST). If a boot device installed with the Oracle Solaris OS is accessible locally, the server module boots. Otherwise, the system uses the `boot net` command to seek a boot device on the network.

2. **Switch communication to the console by typing the following command and responding to the prompt.**

```
-> start /SP/console
Are you sure you want to start /SP/console (y/n)? y
Serial console started.  To stop, type #.
```

You are now connected to the server module host. The server module hardware installation is complete and the server module is ready to be configured to suit your needs.

▼ Upgrade Firmware

It is highly recommended that you use the Oracle Hardware Installation Assistant (formerly called Sun Installation Assistant) to upgrade system BIOS and Oracle Integrated Lights Out Manager (ILOM) firmware. The Hardware Installation Assistant is available in the Documentation and Media Kit, or online at:
http://www.oracle.com/goto/hia

For more information, refer to the Hardware Installation Assistant documentation at:
http://docs.sun.com/app/docs/prod/install.x64svr#hic

To upgrade system BIOS and ILOM firmware without using the Hardware Installation Assistant, refer to the ILOM documentation for the version of ILOM supported for your server at:
http://docs.sun.com/app/docs/prod/blade.x6270m2#hic

All firmware and drivers are on the Tools and Drivers DVD, which is part of the Documentation and Media Kit. You also can download the software on the Tools and Drivers DVD from the Oracle software download sites.

▼ Set Up the Platform Operating System and Driver Software

After configuring the ILOM SP with network settings, you can configure a preinstalled or supported OS.

Operating system:	Read this document:	For installation information, go to:	For tools, drivers, firmware, Hardware Installation Assistant, go to:	For patch information, go to:
Preinstalled operating system	*Sun Blade X6270 M2 Server Module Installation Guide*	http://www.oracle.com/goto/x6270m2	• http://www.oracle.com/goto/blades	• See the *Sun Blade X6270 M2 Server Module Product Notes* • http://support.oracle.com
Oracle Solaris	*Sun Blade X6270 M2 Server Module Installation Guide for Linux, Virtual Machine Software, and Oracle Solaris Operating Systems*	http://www.oracle.com/goto/x6270m2		
Oracle VM		http://www.oracle.com/virtualization/		http://www.oracle.com/virtualization/
VMware		http://www.vmware.com		http://downloads.vmware.com
Windows	• **Windows** or **Linux:** *Sun Installation Assistant 2.3 through 2.4 User's Guide for x64 Servers* • **Windows:** *Sun Blade X6270 M2 Server Module Installation Guide for Windows Operating Systems* • **Linux:** *Sun Blade X6270 M2 Server Module Installation Guide for Linux, Virtual Machine Software, and Oracle Solaris Operating Systems*	• http://www.oracle.com/goto/hia • http://www.oracle.com/goto/x6270m2	• **Windows** or **Linux:** Use the Hardware Installation Assistant for automatic firmware update and driver installation	http://update.microsoft.com/
Linux				• Redhat: https://www.redhat.com/apps/download/ • SUSE: http://download.novell.com/index.jsp

Hardware Warranty and Software Service Plan

For information on hardware warranty, see: http://www.sun.com/service/warranty/index.jsp

For information on a software service plan, see: http://www.oracle.com/support/premier/index.html

If you need service for your system, you might be asked for your hardware serial number. To find the serial number of your system, use the ILOM command `show /SYS`, or see your Installation Guide or Service Manual for information about where to find the serial number label.

Accessing Documentation

You can view and print documentation for Oracle's servers at:

http://docs.sun.com

Task	Document Type*	Part Number
Review safety information.	Safety and Compliance Manual	821-0500
	Important Safety Information for Sun Hardware	821-1590
Review known issues and workarounds.	Product Notes	821-0496
Install, power on, and configure the preinstalled OS.	Installation Guide	821-0495
Configure and manage RAID arrays.	x64 Servers Utilities Reference Manual	820-1120
Install and configure the Oracle Solaris, Linux, Windows OS, or install virtual machine software such as Oracle VM or VMware.	Linux, Virtual Machine Software, and Oracle Solaris OS Installation Guide	821-0497
	Windows OS Installation Guide	821-0498
Manage server accounts, monitor alerts, set remote access and redirection, and view component status.	Oracle ILOM 3.0 Documentation: http:docs.sun.com/app/docs/prod/int.lights.mgr30#hic	Multiple documents
Customize BIOS and RAID settings. Remove and replace components. Troubleshoot server problems.	Service Manual	821-0499

* For translated versions of some documents, go to http://www.sun.com and select your language.

Contacting Technical Support

If you have technical questions about this product that are not answered in this document, go to:

http://www.sun.com/service/contacting

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