

Sun Fire X4170 M2 and X4270 M2 Servers

Getting Started Guide

This guide describes the minimum steps you must perform to power on and boot your server for the first time. Detailed installation information can be found in the *Sun Fire X4170 M2 and X4270 M2 Servers Installation Guide*, which is available at Oracle's documentation web sites for the individual servers. Refer to the section "[Documentation for This Product](#)" at the end of this document for a list of documentation for your system.

Contents

Oracle's Sun Fire X4170 M2 and X4270 M2 Servers are shipped with safety documentation and the components that you ordered for your configuration. Optional components or rack installation equipment 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 Validation Test Suite CD. You can order the Documentation and Media Kit at any time, using the following marketing part number: X5935A.

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

- For documentation, go to:
 - For Sun Fire X4170 M2 – <http://www.oracle.com/pls/topic/lookup?ctx=E19762-01>
 - For Sun Fire X4270 M2 – <http://www.oracle.com/pls/topic/lookup?ctx=E19245-01>
- For software, go to:
 - For Sun Fire X4170 M2 – <http://www.oracle.com/goto/x4170m2>
 - For Sun Fire X4270 M2 – <http://www.oracle.com/goto/x4270m2>

Safety and Compliance Information

Before performing an installation, refer to the following documents for safety information:

- *Important Safety Information for Sun Hardware Systems* – Printed document included in the ship kit.
- *Sun Fire X4170 M2 and X4270 M2 Servers Safety and Compliance Guide* – Online at the documentation web site.

▼ Install Optional Components

Before installing the server into the rack, you must first install any optional components that you ordered with the server and that were not factory installed. Refer to the *Sun Fire X4170 M2 Server Service Manual* and the *Sun Fire X4270 M2 Server Service Manual* for the instructions on installing optional components.

▼ Mount the System in a Rack

For rackmounting instructions, refer to the documents included with the rail kit, the service label on the server, and to the *Sun Fire X4170 M2 and X4270 M2 Servers Installation Guide*.

▼ Connect the Cables and Apply Standby Power to the Server

1. **Connect a serial cable between the server’s SER MGT port (FIGURE 1) and a serial terminal device.**
- This connection provides your initial communication with the service processor (SP). The terminal device must be set up to communicate using 9600 baud, 8 bit, no parity, 1 stop bit. A null modem configuration is needed, meaning the transmit and receive signals are reversed (crossed over) for DTE to DTE communications. You can use the supplied RJ-45 crossover adapter with a standard RJ-45 cable to achieve the null modem configuration. (FIGURE 1 shows the Sun Fire X4170 M2 Server. The locations of the back panel connectors and ports are the same on the Sun Fire X4270 M2 Server.)

FIGURE 1 Back Panel of Server (Server Connections)

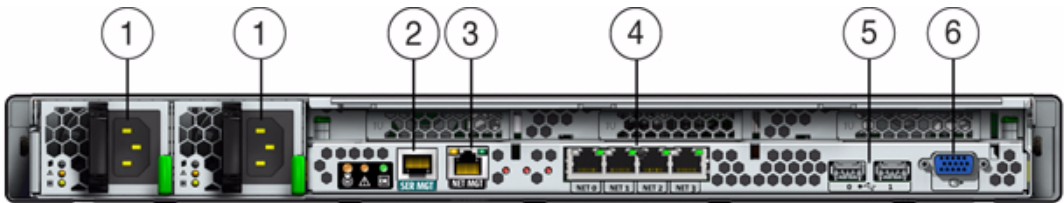


Figure Legend

1	AC power connectors	4	Gigabit Ethernet ports NET 0, 1, 2, 3 (Intel)
2	Serial management (SER MGT)/RJ-45 serial port	5	USB 2.0 ports (0, 1)
3	Service processor network management (NET MGT) port	6	HD15 video connector (analog VGA)

2. **(Optional) Connect an Ethernet cable between the server’s NET MGT port and the network to which future connections to the SP will be made.**
- After the initial configuration of the system using the SER MGT port, communication with the SP is usually performed through this Ethernet interface.
3. **Connect an Ethernet cable between one of the server’s NET ports (NET 0, 1, 2, or 3) and the network to which the server will communicate.**
4. **Connect the server power cords to AC power outlets and, to enhance redundancy, to separate power sources.**
- When standby power is applied, the SP initializes and the Power/OK LED flashes in Standby Blink pattern (0.1 seconds on, 2.9 seconds off) (see FIGURE 2 and FIGURE 3). Note that the server is not initialized or powered on yet. For more information on connectivity options, refer to the *Sun Fire X4170 M2 and X4270 M2 Servers Installation Guide*.

At this point, standby power is supplied only to the SP and power supply fans. Do not apply main power to the rest of the server until you are ready to install an operating system. In standby power mode, the Power/OK LED flashes in Standby Blink (0.1 seconds on, 2.9 seconds off). [FIGURE 2](#) shows the Sun Fire X4170 M2 Server. [FIGURE 3](#) shows the Sun Fire X4270 M2 Server with twelve 3.5-inch drives; the front panel controls on the Sun Fire X4270 M2 Server with twenty-four 2.5-inch drives (not shown) support the same functions.

FIGURE 2 Sun Fire X4170 M2 Server Front Panel Controls



Figure Legend

1	Power/OK LED	2	Power Button
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FIGURE 3 Sun Fire X4270 M2 Server Front Panel Controls

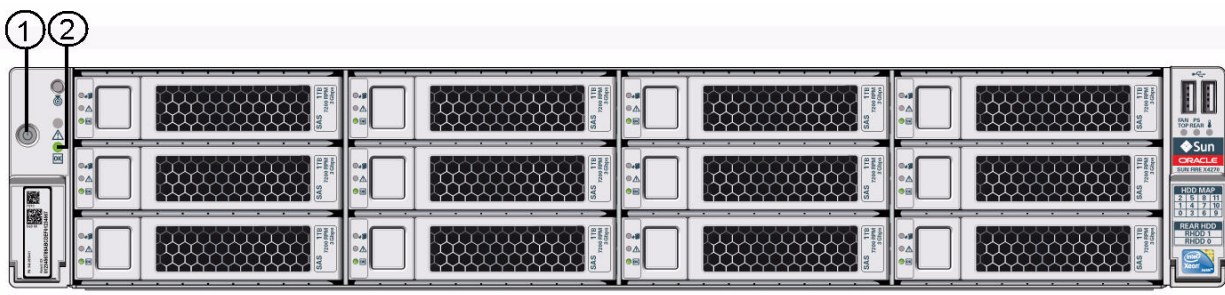


Figure Legend

1	Power Button	2	Power/OK LED
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Connecting to Oracle ILOM

You can start, boot, and manage the server using the Oracle Integrated Lights Out Manager (Oracle ILOM) software that runs on the server’s SP. There are two methods for connecting to Oracle ILOM:

- Connect to Oracle ILOM using a serial connection (SER MGT port)
See [“Connect to Oracle ILOM Using a Serial Connection”](#) for instructions.
- Connect to Oracle ILOM using an Ethernet connection (NET MGT port)
See the *Sun Fire X4170 M2 and X4270 M2 Servers Installation Guide* for instructions.

To connect via an Ethernet connection, you must know the IP address of the server SP. 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 SP a static IP address for any other reason, refer to the Oracle Integrated Lights Out Manager (ILOM) 3.0 Documentation Library for instructions.

▼ Connect to Oracle ILOM Using a Serial Connection

1. Connect a terminal device to the server.

See Step 1 in “[Connect the Cables and Apply Standby Power to the Server](#)” .

2. Press Enter on the terminal device to create a connection between the terminal device and the Oracle ILOM SP.

The Oracle ILOM login prompt appears.

3. Log in to the Oracle ILOM CLI using the `root` user account and the `root` password, `changeme`.

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

▼ Apply Main Power to the Server



Caution – Do not operate the server without all fans, component heatsinks, air baffles, and the cover installed. Severe damage to server components can occur if the server is operated without adequate cooling mechanisms.

1. Verify that the power cords have been connected ([FIGURE 1](#)) and that standby power is on.

2. Press and release the recessed Power button on the front panel ([FIGURE 2](#) and [FIGURE 3](#)).

When main power is applied to the full server, the Power/OK LED lights and blinks while BIOS initializes. The Power/OK LED lights steady green when the system is loading an OS.

3. Continue with initial software setup tasks, as described in the *Sun Fire X4170 M2 and X4270 M2 Servers Installation Guide*.

▼ Upgrade Firmware

It is highly recommended that you use the Oracle Hardware Installation Assistant to upgrade system BIOS and Oracle Integrated Lights Out Manager (Oracle ILOM) firmware. The Oracle Hardware Installation Assistant is easy to use and available in the Documentation and Media Kit, or online at:

<http://support.oracle.com>

For more information, refer to the documentation for the version of Oracle Hardware Installation Assistant supported for your server at:

<http://www.oracle.com/pls/topic/lookup?ctx=hia>

For instructions on upgrading system BIOS and Oracle ILOM firmware without using Oracle Hardware Installation Assistant, go to the Oracle ILOM 3.0 Documentation Library at:

<http://www.oracle.com/pls/topic/lookup?ctx=ilom30>

All firmware and drivers are located 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 (see links in the following table).

▼ Set Up the Platform Operating System and Driver Software

You can configure the preinstalled or supported operating system (OS) for your server.

The following table provides additional references for installing an operating system, system device drivers, firmware, and patches. At the product web site (<http://www.oracle.com/goto/x4170m2> or <http://www.oracle.com/goto/x4270m2>), use the links to navigate to the information you need.

Operating system:	Read the Sun Fire X4170 M2 and X4270 M2 document:	For installation information, go to:	For latest tools, drivers, firmware, and the Oracle Hardware Installation Assistant, go to:	For patch information, go to:
Preinstalled Oracle Solaris or Oracle VM	<i>Installation Guide</i>	<ul style="list-style-type: none"> • http://www.oracle.com/goto/x4170m2 • http://www.oracle.com/goto/x4270m2 	<ul style="list-style-type: none"> • http://support.oracle.com 	<ul style="list-style-type: none"> • See the <i>Sun Fire X4170 M2 and X4270 M2 Servers Product Notes</i> • http://support.oracle.com
Oracle Solaris	<i>Installation Guide for Linux, Virtual Machine Software, and Oracle Solaris Operating Systems</i>	<ul style="list-style-type: none"> • http://www.oracle.com/goto/x4170m2 • http://www.oracle.com/goto/x4270m2 		
Virtual Machine Software		<ul style="list-style-type: none"> • http://www.oracle.com/virtualization/ • http://www.vmware.com/ 		<ul style="list-style-type: none"> • http://www.oracle.com/virtualization/ • http://downloads.vmware.com/
Windows	<ul style="list-style-type: none"> • Windows or Linux: <i>Oracle Hardware Installation Assistant 2.5 Users Guide for x86 Servers</i> • Windows: <i>Installation Guide for Windows Operating Systems</i> • Linux: <i>Installation Guide for Linux, Virtual Machine Software, and Oracle Solaris Operating Systems</i> 	<ul style="list-style-type: none"> • http://support.oracle.com • http://www.oracle.com/goto/x4170m2 • http://www.oracle.com/goto/x4270m2 	Windows or Linux: Use the Oracle Hardware Installation Assistant for automatic firmware update and driver installation	http://update.microsoft.com/
Linux				<ul style="list-style-type: none"> • Red Hat: https://www.redhat.com/apps/download/ • SUSE: http://download.novell.com/index.jsp

▼ For Technical Support

For technical support, see <http://www.oracle.com/us/corporate/contact/index.html>

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 Oracle ILOM command `show /SYS`, or see your Installation Guide or Service Manual for information about where to find the serial number label for your system.

Documentation for This Product

The following table lists the documentation and the approximate order of tasks that you might perform when installing a system. For the most up-to-date English and translated versions of some of the documents, go to the Oracle documentation site

- For Sun Fire X4170 M2 – <http://www.oracle.com/pls/topic/lookup?ctx=E19762-01>
- For Sun Fire X4270 M2 – <http://www.oracle.com/pls/topic/lookup?ctx=E19245-01>

Task	Document
Review safety information.	<i>Sun Fire X4170 M2 and X4270 M2 Servers Safety and Compliance Guide</i> <i>Important Safety Information for Sun Hardware Systems</i>
Review known issues and workarounds.	<i>Sun Fire X4170 M2 and X4270 M2 Servers Product Notes</i>
Install rack hardware. Cable and power on server. Connect to service processor. Configure preinstalled Oracle Solaris OS.	<i>Sun Fire X4170 M2 and X4270 M2 Servers Installation Guide</i>
Install and configure the Oracle Solaris, Linux, Windows OS, or install virtual machine software such as Oracle VM or VMware.	<i>Sun Fire X4170 M2 and X4270 M2 Servers Installation Guide for Linux, Virtual Machine software, and Oracle Solaris Operating Systems</i> <i>Sun Fire X4170 M2 and X4270 M2 Servers Installation Guide for Windows Operating Systems</i> <i>Oracle Hardware Installation Assistant 2.5 Users Guide for x86 Servers</i>
Manage server accounts, monitor alerts, set remote access and redirection, and view component status and event logs.	Oracle ILOM 3.0 Documentation
Customize BIOS settings and RAID settings. Remove and replace hardware components. Troubleshoot and isolate server problems.	<ul style="list-style-type: none">• <i>Sun Fire X4170 M2 Server Service Manual</i>• <i>Sun Fire X4270 M2 Server Service Manual</i>
Diagnose system issues.	<i>Sun x64 Servers Diagnostics Guide</i>

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