

Sun Fire™ X2250 Server Getting Started Guide

This document contains basic information on setting up the Sun Fire™ X2250 server hardware, tasks for setting up the server's service processor and Integrated Lights Out Manager software, and a documentation flowchart that describes the documents you might need when installing the Sun Fire X2250 server. Detailed installation information can be found in the *Sun Fire X2250 Server Installation Guide* (820-4591), which is available online at the Sun documentation web site:

<http://docs.sun.com/app/docs/prod/sf.x2250>

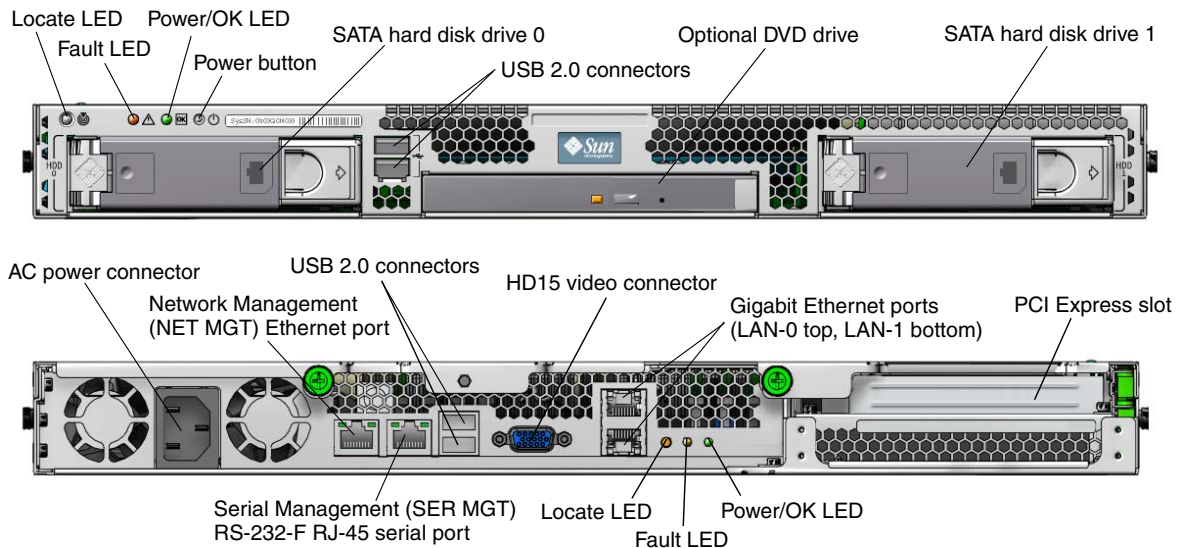
Safety and Compliance Information

Before performing an installation, refer to the following documents for safety information regarding the Sun Fire X2250 server:

- *Important Safety Information for Sun Hardware Systems* (816-7190): printed document included in the ship kit.
- *Sun Fire X2250 Server Safety and Compliance Manual* (820-4595): available online at the Sun documentation web site.

System Overview

The following illustration shows the front panel and back panel of the Sun Fire X2250 server.



Unpacking the Sun Fire X2250 Server

Carefully unpack all server components from the packing cartons:

- Sun Fire X2250 server
- Optional Sun Fire X2250 server accessory kit, including the following:
 - *Sun Fire X2250 Server Installation Guide* (820-4591)
 - Additional license, safety, and registration documentation
 - Sun Fire X2250 Server Tools & Drivers CD (includes drivers and additional software)
- Optional rackmount kit containing rack rails and installation instructions

Mounting the Server in a Rack

The service label on the top cover of the Sun Fire X2250 server contains instructions for installing your server into a four-post rack using the orderable slide-rail and cable management arm options. Detailed instructions can also be found online in the *Sun Fire X2250 Server Service Manual* (820-4593) at the following URL:

<http://docs.sun.com>

Connecting the Cables

See “[System Overview](#)” for the locations of the connectors.

Connect the server and external devices as follows:

1. **Connect a serial null modem cable to the serial port.**
2. **Connect Ethernet cables to the RJ-45 LAN Gigabit Ethernet connectors as needed.**

Note the following guidelines regarding the Ethernet (LAN) ports.

- The Network Management (NET MGT) Ethernet port or the Serial Management (SER MGT) RJ-45 serial port can be used for server management and network access. See the *Sun Fire X2250 Server Installation Guide* (820-4591) for detailed information about setting up the service processor for remote system management.
- The two Gigabit Ethernet ports (LAN-0 and LAN-1) are the primary network interface controllers (NICs) and should be used for network installation of the operating system and drivers.

Powering On and Off the Server

You only need to apply standby power to the server at this point so that you can perform initial configuration of the service processor. Procedures for powering on to main power mode and for shutting down from main power mode are also included in this section, for your reference.

▼ To Apply Standby Power for Initial Service Processor Configuration

Use this procedure to apply standby power to the service processor (SP) before initial configuration.



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 operated without adequate cooling mechanisms.

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1. **Connect a grounded AC power cord to the AC power connector on the back panel of the server and to a grounded AC power outlet.**

At this point, standby power is supplied only to the service processor and power supply fans. Do not apply main power to the rest of the server until you are ready to install a platform operating system.

2. **Continue with initial software setup tasks, as described in “Setting Up the Sun Fire X2250 Server Software”.**

▼ To Power On Main Power Mode

1. **Verify that the power cord has been connected and that standby power is on.**

In standby power mode, the Power/OK LED on the front panel flashes.

2. **Use a non-metallic stylus to press and release the recessed Power button on the server front panel.**

When main power is applied to the full server, the Power/OK LED next to the Power button lights and remains lit.

Note – The first time the server powers on, the power-on self-test (POST) can take up to a minute to complete.

▼ To Power Off the Main Power Mode

To power off the server from main power mode, use one of the following two methods:

- **Graceful shutdown:** Use a non-metallic stylus to press and release the Power button on the front panel. This causes Advanced Configuration and Power Interface (ACPI) enabled operating systems to perform an orderly shutdown of the operating system.
- **Emergency shutdown:** Press and hold the Power button for four seconds to force main power off and enter standby power mode. When the main power is off, the Power/OK LED on the front panel will begin flashing, indicating that the server is in standby power mode.



Caution – To completely power off the server, you must disconnect the AC power cords from the back panel of the server.

Setting Up the Sun Fire X2250 Server Software

This section describes the tasks for initial setup of the server’s service processor and Integrated Lights Out Manager (ILOM) software. Refer to the *Sun Fire X2250 Server Installation Guide* (820-4591) and the *Sun Integrated Lights Out Manager 2.0 User’s Guide* (820-1188) for detailed instructions on using ILOM to configure and manage the Sun Fire X2250 server.

Connecting to the ILOM Service Processor

There are three methods for connecting to the ILOM SP to perform initial setup and configuration. Use the procedure that you prefer:

- [“Connect to ILOM Using a Serial Connection”](#)
- [“Connect to ILOM Using an Ethernet Connection \(DHCP\)”](#)
- [“Connect to ILOM Using an Ethernet Connection \(Static IP Address\)”](#)

Connect to ILOM Using a Serial Connection

Follow these instructions to establish a serial connection to the ILOM SP so that you can perform initial configuration of ILOM.

Note – This procedure assumes that you have already completed the hardware setup and have applied standby power to your server, as described in [“Powering On and Off the Server”](#).

▼ To Connect to ILOM Using a Serial Connection

1. Verify that your terminal, laptop, or terminal server is operational.
2. Configure the terminal device or the terminal emulation software running on a laptop or PC to the following settings:
 - 8N1: eight data bits, no parity, one stop bit
 - 9600 baud
 - Disable hardware flow control (CTS/RTS)
 - Disable software flow control (XON/XOFF)
3. Connect a serial cable from the RJ-45 SER MGT port on the server’s back panel to a terminal device.
4. Press Enter on the terminal device to establish a connection between the terminal device and the ILOM SP.
5. Log in to ILOM.

The default user name is **root**; the default password is **changeme**.
6. Configure your network settings using CLI.

For instructions, see [“Connect to ILOM Using an Ethernet Connection \(Static IP Address\)”](#).
7. After configuring the server, continue with [“Setting Up Platform Operating System and Driver Software”](#).

Connect to ILOM Using an Ethernet Connection (DHCP)

Follow these instructions to establish an Ethernet connection to the ILOM SP so that you can perform initial configuration of ILOM.

Note – This procedure assumes that you have already completed the hardware setup and have applied standby power to your server, as described in [“Powering On and Off the Server”](#).

▼ To Connect to ILOM Using an Ethernet Connection (DHCP)

1. Verify that your DHCP server is configured to accept new media access control (MAC) addresses by checking with your system administrator.
2. Connect an Ethernet cable to the server’s RJ-45 NET MGT Ethernet port.
3. Obtain the ILOM SP IP address from one of the following locations. Record the IP address for future reference.

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- **CLI commands.** The SP has a serial port to which you can attach a terminal device. If you log in to the SP and type the CLI command **show /SP/network**, the SP displays the current IP address.
 - **Customer Information Sheet.** This document is shipped with your server.
 - **System BIOS Setup screen.** Press **F2** during power-on, then choose **Advanced** → **IPMI 2.0 Configuration** → **LAN Configuration** → **IP address**.
4. **Open a session to the ILOM SP using the IP address that you obtained in Step 3.**

You can use the CLI or the web interface.

 - To establish an SSH connection, type the DHCP-assigned IP address in the SSH application. For example:

```
# ssh -l root 129.144.82.20
```

The default user name is **root**, which was included in the `ssh` command. The default password for the SP is **changeme**.
 - To establish a connection to the ILOM SP web interface, type the IP address of the ILOM SP in the browser locator box and press Enter. When prompted, type the default user name and password.
 5. **After you have entered the user name and password in either the CLI or web interface, you can use the interface to configure your ILOM SP.**
 6. **After configuring the server, continue with [“Setting Up Platform Operating System and Driver Software”](#).**

Connect to ILOM Using an Ethernet Connection (Static IP Address)

As an alternative to having your DHCP server assign an IP address to your ILOM SP, you can also assign a static IP address to it. You can do this by using the CLI over the network or serial port, by using the web interface, or by using the server’s BIOS Setup utility. Use the procedure you prefer.

▼ To Configure a Static IP Address Using the CLI

1. **Log in to the CLI using SSH or by connecting to the serial port.**

To establish an SSH connection to the ILOM CLI, type the DHCP-assigned IP address in the SSH application. For example:

```
# ssh -l root 129.144.82.20
```

The default user name is **root**, which was included in the `ssh` command. The default password for the SP is **changeme**.

2. **Type the following commands, using your own addresses in place of the examples below:**

```
cd /SP/network
set pendingipaddress=129.144.82.26
set pendingipnetmask=255.255.255.0
set pendingipgateway=129.144.82.254
set pendingipdiscovery=static
set commitpending=true
```

▼ To Configure a Static IP Address Using the Web Interface

1. Determine the current IP address of the ILOM SP from one of the following locations:
 - **CLI commands.** The SP has a serial port to which you can attach a terminal device. If you log in to the SP and type the CLI command `show /SP/network`, the SP displays the current IP address.
 - **System BIOS Setup screen.** Press F2 during power-on, then choose Advanced → IPMI 2.0 Configuration → LAN Configuration → IP Address.
2. Connect to the ILOM SP through a web browser running on a remote system.

To establish a connection to the ILOM SP, type the IP address in the browser locator box. The ILOM web interface Login screen appears.
3. Log in to the web interface using the default user name, **root**, and the default password, **changeme**.
4. Choose the Configuration tab and its Network tab to display information about the current network configuration of your ILOM SP.
5. Select the Use the Following IP Address option and type your static IP address information.

▼ To Configure a Static IP Address Using the BIOS Setup Utility

1. Enter the BIOS Setup utility by pressing the F2 key while the system is powering on and performing the power-on self-test (POST).
2. When the BIOS Main menu screen is displayed, select Advanced → IPMI 2.0 Configuration → LAN Configuration → IP Address.
3. On the IP Address Mode screen, select `Static`.
4. Type the static IP address in the `IP Address` field.

Click `ESC` to go back and enter the subnet mask and default gateway settings in their respective fields.
5. Select `Commit` and press `Enter` to commit the changes.
6. Select `Refresh` and press `Enter` to see your new static IP settings displayed in the `Current IP address in BMC` field.
7. Press and release the right arrow key until the Exit menu screen is displayed.
8. Follow the instructions on the Exit menu screen to save your changes and exit the BIOS Setup utility.

Setting Up Platform Operating System and Driver Software

After configuring the ILOM SP with network settings, you can configure a preinstalled operating system or install a supported Solaris, Linux, or Windows platform operating system and drivers. For more information and instructions, see the following documents.

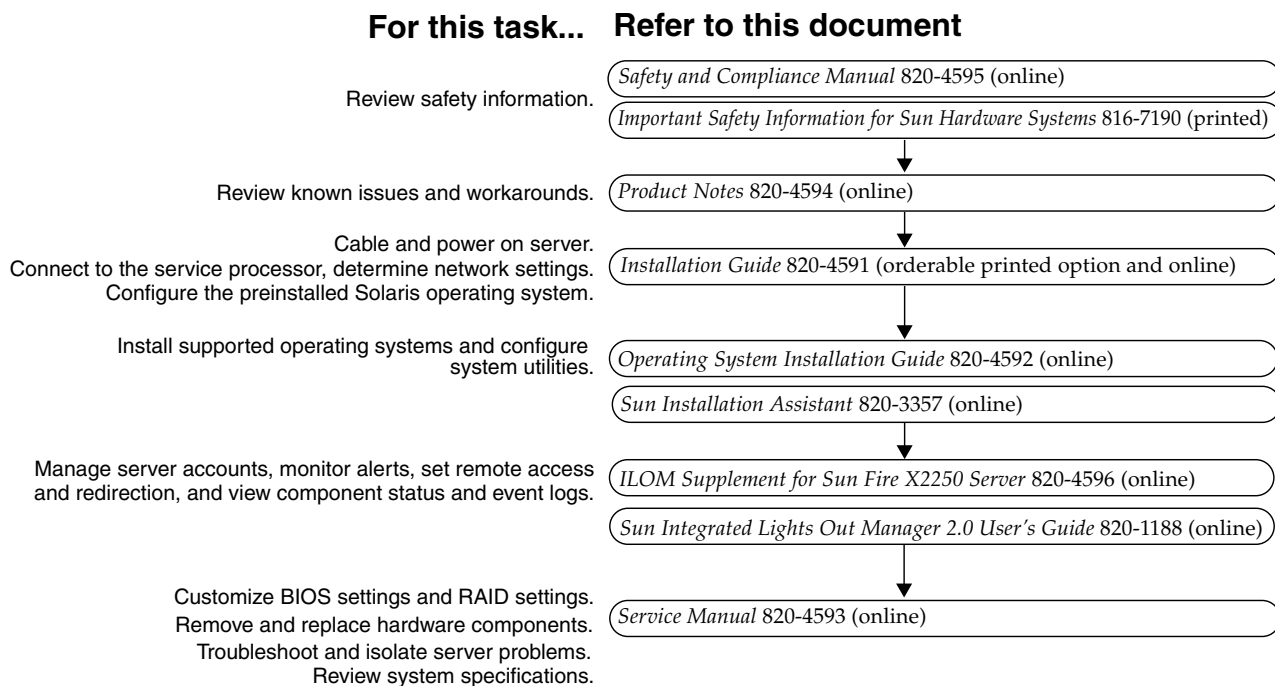
- If your server contains the preinstalled Solaris 10 Operating System, refer to the *Sun Fire X2250 Server Installation Guide* (820-4591) for instructions on configuring the Solaris OS on your server.
- For details about installing a supported Solaris, Windows, or Linux OS and the required drivers, refer to the *Sun Fire X2250 Server Operating System Installation Guide* (820-4592), or the *Sun Installation Assistant for Windows and Linux User's Guide* (820-3357).

Accessing Sun Fire X2250 Server Documentation

The flowchart below lists the documentation in the approximate order of the tasks that you might perform when installing a new system. Review the tasks on the left, then refer to the corresponding documents on the right. You can find the most up-to-date versions of all the documents at the Sun documentation web site:

<http://docs.sun.com/app/docs/prod/sf.x2250>

Note – Documents that are designated as orderable printed options are not automatically included with the system. These documents must be specified as options when ordering the system. This documentation is also available on the product documentation web site.



Sun Online

Viewing Current Documentation

To see the most current version of a document, search for the Sun Fire X2250 server on the Sun documentation web site:

<http://docs.sun.com/>

The product documentation web site contains the most recent information. For critical updates to product information, see the product notes or release notes. To verify whether a document is more recent than the document that you have, refer to the final two digits of the part number for that document. (For example, XXX-XXXX-12 is newer than XXX-XXXX-10.)

Translated versions of some documents are available at: <http://docs.sun.com>

Select a language from the drop-down list and navigate to the Sun Fire X2250 server document collection. Available translations for the Sun Fire X2250 server documentation include Simplified Chinese, Traditional Chinese, French, Japanese, and Korean. English documentation is revised more frequently and might be more up-to-date than the translated documentation.

Downloading Sun Fire X2250 Server Product Updates

For product updates, go to the following URL and navigate to the page for this product:

<http://www.sun.com/servers/index.jsp>

Contacting Sun 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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Please include the title and part number of your document with your feedback:

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