Sun Blade™ X6275
Server Module Installation Guide

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Contents

Preface

The *Sun Blade X6275 Server Module Installation Guide* contains procedures for installing the server module in a chassis and connecting to the service processor administrator account.

Related Documents

To see a list of the Sun Blade™ X6275 server module documentation, refer to the *Getting Started Guide* that is packed with your system and also posted at the product's documentation site.

Translated versions of some of these documents are available at the web product documentation page in Simplified Chinese, French, and Japanese. English documentation is revised more frequently and might be more up-to-date than the translated documentation. See TABLE P-1 for more information.

Sun Online

TABLE P-1   Sun Blade X6275 Server Module Online Pages

Sun Function	URL	Description
Sun Documentation	http://docs.sun.com	You can navigate to the Sun Blade X6275 server module document page and then download PDF and view HTML documents.
Support	http://www.sun.com/support/	Obtain technical support and download patches.
Training	http://www.sun.com/training/	Learn about Sun courses.
Warranty	http://www.sun.com/service/support/warranty/index.html	Obtain specific details regarding your warranty.
Feedback	http://www.sun.com/hwdocs/feedback/	Submit your comments. Please include the title and part number of your document with your feedback: *Sun Blade X6275 Server Module Installation Guide*, part number 820-6977-11
Product Updates	http://www.sun.com/download/	Find the Hardware Drivers section and click x64 Servers & Workstations. The Sun Blade X6275 server module site contains updates for firmware, drivers, and DVD/CD-ROM ISO images.

Preparing to Install the Sun Blade X6275 Server Module

This chapter contains the following topics:

Server Module Installation Summary

TABLE 1-1 summarizes how to install a Sun Blade X6275 server module into a Sun Blade 6048 or Sun Blade 6000 modular system chassis.

TABLE 1-1   Installation Task Summary

Step	Task	See:
1	Unpack the server module and any optional components ordered for the server from the shipping containers.	• "Opening the Box" on page 4 • *Sun Blade X6275 Server Module Getting Started Guide*
2	Register the server module. Locate the serial number on the label on top of the server module.	Go to this web site: http://www.sun.com/service/warranty/index.xml#reg
3	If applicable, install the optional server module components before you install the server module into the chassis.	• *Sun Blade X6275 Server Module Service Manual* • Optional component documentation
4	Install the server module into a powered on chassis.	"Installing the Server Module Into a Chassis" on page 9.
5	Obtain and configure the SP IP address.	"Setting Up ILOM" on page 15
6	Install an operating system.	• "About Installing a Supported OS" on page 27 • *Sun Blade X6275 Server Module Linux OS Installation Guide* • *Sun Blade X6275 Server Module Windows OS Installation Guide*

Before You Begin

Ensure that the following tasks are complete before you install the Sun Blade X6275 server module into the Sun Blade modular system.

1. **Review the required installation tasks for properly installing and setting up the Sun Blade X6275 server module in a Sun Blade 6048 or Sun Blade 6000 modular system. See** TABLE 1-1 "Installation Task Summary" on page 2**.**

2. **Review the safety documents:**

   ▪ *Important Safety Information for Sun Hardware Systems* (Printed)

- *Sun Blade X6275 Server Module Safety and Compliance Guide* (Available online at the Sun documentation web site.)

3. **Ensure that the following chassis components have been installed and powered on in a Sun Blade 6048 or Sun Blade 6000 modular system.**

   - Chassis Monitoring Module (CMM)

   - All required power and data cables to the chassis are attached.

   - Choose the correct Sun Blade X6275 server module model for the chassis. Refer to the *Sun Blade X6275 Server Module Product Notes*.

   - Choose a supported NEM for the choice of Sun Blade X6275 server module. Refer to the *Sun Blade X6275 Server Module Product Notes*.

Note – For CMM ILOM 2.0.3.13 systems, a Sun Blade X6275 server module must be inserted into the chassis before you power on. If the blade is not inside the chassis before you power on, ILOM does not recognize node 1. For ILOM 3.0 systems, this requirement does not apply.

   For information about installing chassis components, attaching cables, and powering on the chassis, refer to the Sun Blade 6048 or Sun Blade 6000 modular system chassis documentation at:
   http://docs.sun.com/app/docs/prod/blade.srvr#hic

   For information about Q-NEMs on the chassis, go to
   http://docs.sun.com/app/docs/prod/blade.6048mod~blade6048#hic

4. **Assemble all tools and equipment needed.**

   To install the system, you must have the following tools:

   Electrostatic discharge (ESD) mat and antistatic grounding strap (required if you install optional components)

   In addition, you must provide a system console device, such as one of the following:

   - Notebook PC

   - ASCII terminal

   - Sun workstation

   - Terminal server

5. **See** **.**

Opening the Box

1. **Carefully open the shipping box.**

2. **Unpack all server components from the packing carton. See** FIGURE 1-1 **and** FIGURE 1-2**.**

FIGURE 1-1 Shipping Box Contents (Multiple Blades)

Figure Legend

1	Documentation
2	Server module
3	Shipping box
4	Shipping label
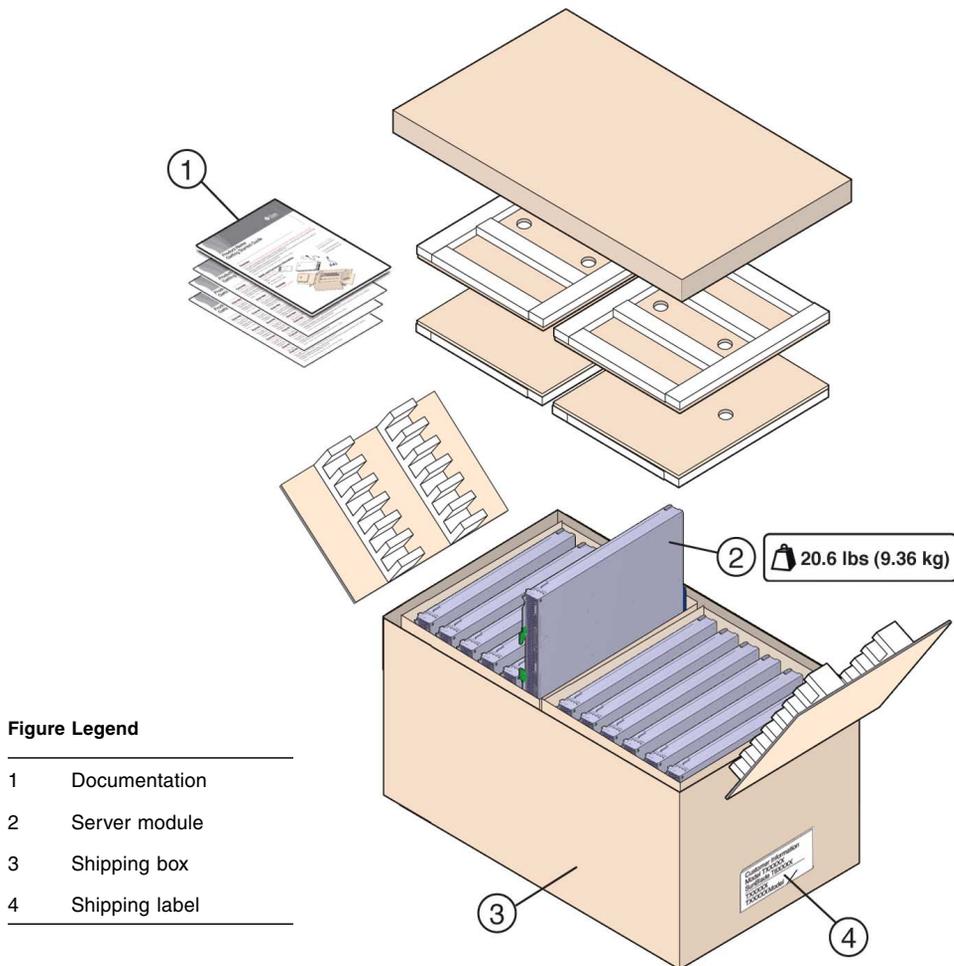
FIGURE 1-2   Shipping Box Contents (Single Blade)

20.6 lbs (9.36 kg)

Figure Legend

1	Documentation
2	Server module
3	Shipping box
4	Shipping label
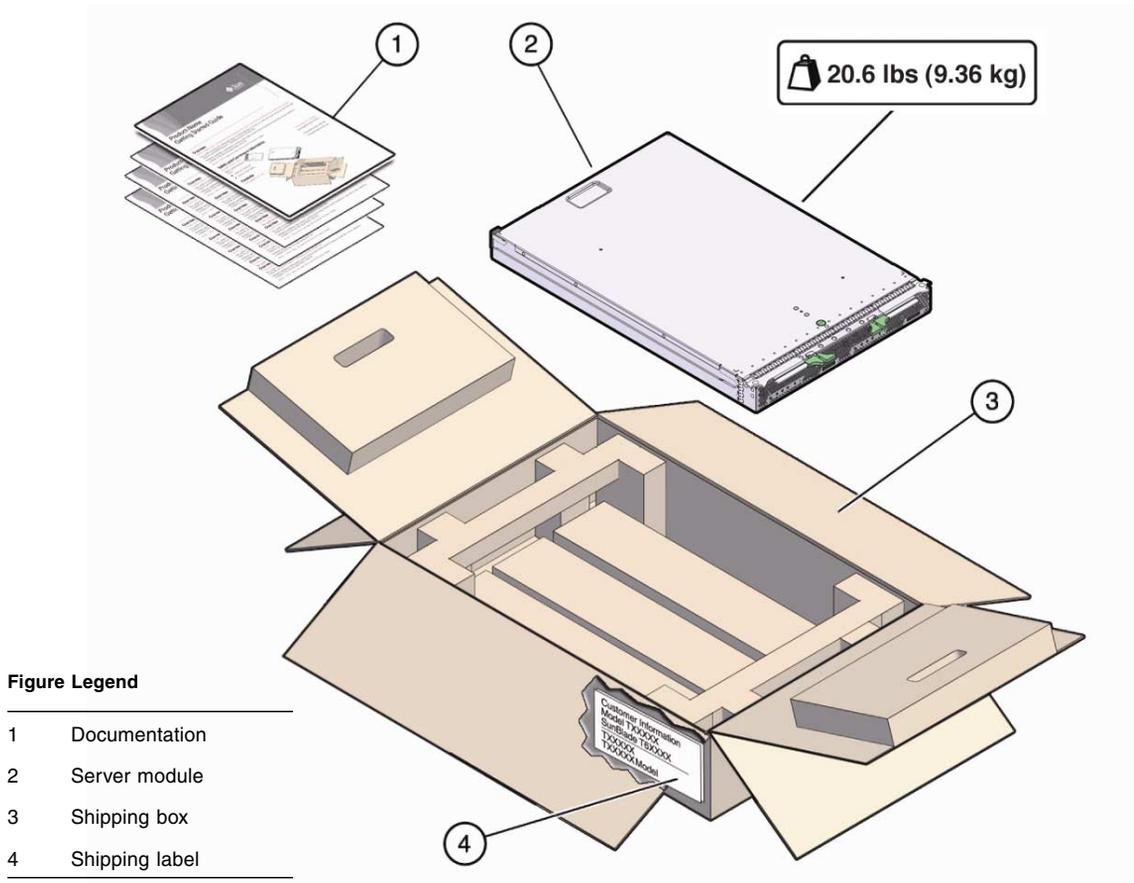
3. **If applicable, install optional server module components prior to installing the server module into the system chassis. Example: DIMMs, FMods, USB flash disks.**

   For optional components available for the Sun Blade X6275 server module, see "Additional Options and Replaceable Components" on page 6. Also see "About Your Server Module Shipment" on page 6. Refer to the *Sun Blade X6275 Server Module Service Manual* for installation procedures of optional components.

4. **Register the server module.**

   Locate the serial number on the label on top of the server module. To register, go to this web site: `http://www.sun.com/service/warranty/index.xml#reg`

5. **Proceed to** "Installing and Powering On the Sun Blade X6275 Server Module" on page 9.

About Your Server Module Shipment

Configurations for the Sun Blade X6275 server module are assembled at the factory and shipped ready for installation in a Sun Blade modular system.

Optional server module components that you purchase independent of the standard configuration are shipped separately and, in most cases, should be installed before you install the server module into the chassis. For optional components available for the Sun Blade X6275 server module, see "Additional Options and Replaceable Components" on page 6.

If you ordered any options that are field replaceable units (FRUs) or Customer Replaceable Units (CRUs), refer to the *Sun Blade X6275 Service Label* on the top cover or the *Sun Blade X6275 Server Module Service Manual* for installation instructions.

If you ordered any options that are not factory-installed, refer to the documentation provided with the option for installation instructions.

On a Sun Blade 6048 Modular System, the *Sun Blade X6275 Service Card* (with a center tab) is located in a slot on the front right side of the system chassis rack, along with the *Sun Blade 6048 Modular System Chassis Service Card*. A service label on the blade cover will replace the Service Card.

Note – These servers are fully compliant with the Reduction of Hazardous Substances (RoHS) Directive.

Additional Options and Replaceable Components

Optional components are shipped separately for customer installation.

Supported components and their part numbers are subject to change over time and without notice. For the most up-to-date list, go to:
http://sunsolve.sun.com/handbook_pub/Systems/

Click the name and model of your server. On the product page that opens for the server, click on `Full Components List` for a list of components.

The following optional server module components may be ordered and purchased separately:

- CPU Assembly Options
- DDR3 Memory Kits
- Flash Modules (FMods)
- Dongle Cable

- Operating System Software
- Printed Documentation
- Software Discs

Commonly Used Terms

The following table identifies some terms commonly used in this guide to describe the installation of a Sun Blade X6275 server module into a Sun Blade modular system chassis.

TABLE 1-2   Commonly Used Terms

Term	Definition
Server Module	Sun Blade X6275 server module hardware. The X6275 Blade Server Module, which is the physical blade that plugs into a Sun modular system chassis. The Sun Blade X6275 server module contains two independent nodes.
Node	Either of the two independent x64 computers resident on the server blade.
Chassis	Sun Blade 6048 modular system or Sun Blade 6000 modular system hardware. For additional information about the Sun Blade 6048 modular system, go to http://docs.sun.com/app/docs/coll/blade6048. For additional information about the Sun Blade 6000 modular system, go to http://docs.sun.com/app/docs/coll/blade6000.
ILOM	Integrated Lights Out Manager (ILOM) is the embedded management software that runs on the server module SP and CMM SP that enables you to manage your system. For additional information about ILOM, refer to the *Integrated Lights Out Manager* documentation.
SP	Embedded service processor (SP) on the server module and Chassis Monitoring Module (CMM). The SP is a "baseboard management controller" (BMC). Each of the two servers on the server blade has its own dedicated SP.
CMM	Chassis Monitoring Module. A baseboard management controller (BMC) for the entire Sun modular system chassis.
FMod	Flash Module
EM	Express Module
IB	InfiniBand
IB NEM	InfiniBand Network Express Module

Installing and Powering On the Sun Blade X6275 Server Module

This chapter contains the following topic.

■ "Installing the Server Module Into a Chassis" on page 9

Installing the Server Module Into a Chassis

To install the Sun Blade X6275 server module into a Sun Blade 6048 or Sun Blade 6000 modular system chassis:

1. **Perform all steps and fufill all requirements in** "Preparing to Install the Sun Blade X6275 Server Module" on page 1**.**

2. **Attach a grounded antistatic wrist strap, foot strap, or equivalent safety equipment to prevent electrostatic discharge (ESD) when you install the Sun Blade server module into the system chassis.**

Caution – To protect electronic components from electrostatic damage, which can permanently disable the system or require repair by Sun service technicians, place components on an antistatic surface, such as an antistatic discharge mat, an antistatic bag, or a disposable antistatic mat. Wear an antistatic grounding strap connected to a metal surface on the chassis when you work on system components.

3. **Locate and remove the relevant server module filler panel.**

   Pull the lever out to the open position and eject the filler panel.

   Keep the filler panel for later use.

Caution – If you are not installing a server module into a slot, do not remove the server module filler panel from the slot. The server module filler panel is required to meet FCC standards for electromagnetic interference (EMI). Do not operate the chassis with empty slots for more than 60 seconds. Always insert a filler panel into an empty slot to reduce the possibility of module shutdown.

4. **Verify a** STEADY ON **green light on the** Chassis OK **power LED. The light indicates that the system chassis is powered on.**

   If the **Chassis OK** green light is steady on, then the Sun Blade 6048 or Sun Blade 6000 modular system chassis has power and is operational. If the chassis has not been powered on, refer to the system chassis documentation to power on the system chassis.

Note – For CMM ILOM 2.0.3.13 systems, a Sun Blade X6275 server module must be inserted into the chassis before you power on the chassis. If the blade is not inside the chassis before you power on, ILOM does not recognize node 1. For ILOM 3.0 systems, this requirement does not apply.

5. **Check the rear of the system chassis to ensure that all power cords have been installed and connected to the mains.**

6. **Check that full power is available.**

   Verify that the system chassis Power Supply AC OK and DC OK LEDs illuminate steady green.

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

   FIGURE 2-1 shows the server module being inserted into the Sun Blade 6048 or Sun Blade 6000 modular system. Your chassis might differ.

8. **Push the server module into the slot until the server module stops and is flush with the chassis. See** FIGURE 2-1 **[1].**

FIGURE 2-1 Inserting the Server Module Into the Chassis (Sun Blade 6048 Modular System shown)
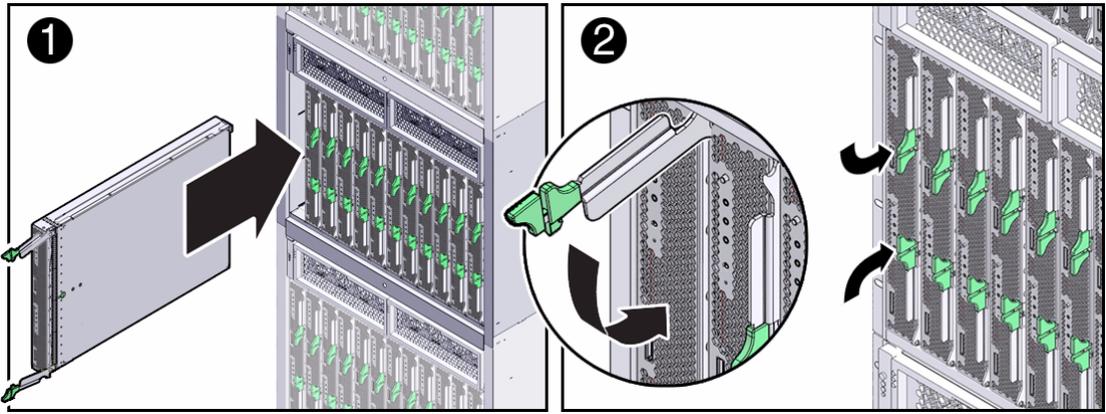
9. **Lock the server module into the chassis. Rotate the top ejector down while rotating the bottom ejector up until they both latch into place.**

   See FIGURE 2-1 [2]. The server module is now locked in the chassis.

10. **Verify that the server module's LEDs illuminate as follows. See** FIGURE 2-2.

    a. After you plug in the blade, all four server module LEDs (on each Node) blink three times. When the front panel lights on the server module blink three times after the blade is inserted, then the blade has been powered on, and the SP boot process starts.

    b. The server module green **OK** LEDs on Node 0 and Node 1 illuminate a FAST BLINK. FAST BLINK indicates that the server module SP is booting (0.125 seconds on, 0.125 seconds off).

    c. The server module green **OK** LEDs on Node 0 and Node 1 illuminate a SLOW BLINK. SLOW BLINK indicates that a server module node is booting (0.5 seconds on, 0.5 seconds off).

    d. A STEADY ON green light on the Node 0 and Node 1 server module green **OK** LEDs indicates that the boot cycle is complete and the server module nodes are ready.

Note – For SP ILOM 2.0.3.17 systems: The server module green **OK** LEDs on Node 0 and Node 1 illuminate a SLOW BLINK. SLOW BLINK indicates that the server module SP is booting (0.5 second on, 0.5 seconds off).

Note – If the blade is in standby power mode, the two server module green OK LEDs blink briefly once every 3 seconds. Refer to the *Sun Blade X6275 Server Module Diagnostics Guide*.

Tip – For additional LED information, server module removal, power procedures, and front panel cable connection information, refer to the *Sun Blade X6275 Server Module Service Manual.*

**FIGURE 2-2** Sun Blade X6275 Server Module Front Panel LEDs
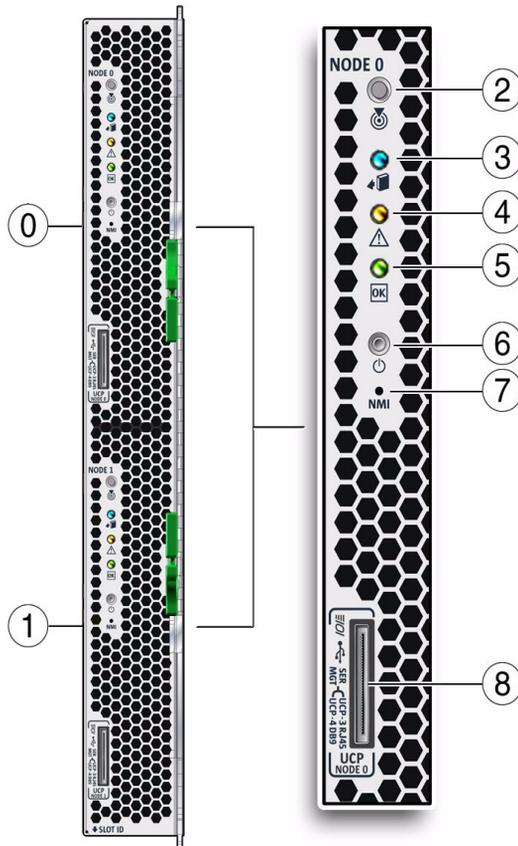
Figure Legend Node 0 and Node 1 Server Module LEDs

0	Node 0
1	Node 1
2	Server Module Locate LED White. Press button to identify server.
3	Ready to Remove Server Module LED Blue (main power removed)
4	Server Module Service Action Required LED Amber
5	Server Module OK LED Green

Note - Full power- steady on;
Updating- slow blink 0.5 second on, 0.5 second off;
SP booting- fast blink 0.125 second on, 0.125 second off;
Node booting- slow blink 0.5 second on, 0.5 second off;
Standby power- blink: 0.1 second on, 2.9 seconds off.

6	Server Module Power Button Momentary press to toggle server between standby and full power.

Caution - Pressing Power Button for more than 4 seconds when in full power initiates immediate shutdown to standby power. May cause data loss.

7	Non-Maskable Interrupt (NMI) button

Caution - Service use only. Do not press unless instructed by Sun personnel.

8	Universal Connector Port (UCP) Used for dongle cable.

The physical installation is complete.

11. Set up the ILOM SP on each node, 0 and 1. See **.**

Setting Up ILOM

This chapter describes how to access the Sun™ Integrated Lights Out Manager (ILOM) software and how to configure an IP address for the Sun Blade X6275 server module Service Processor (SP).

This chapter contains the following topics:

Preparing to Access and Configure ILOM

The ILOM (Integrated Lights Out Manager) allows you to manage the system chassis using the CMM ILOM, and manage the Sun Blade X6275 server module nodes using the SP ILOM.

This section contains the following topics:

ILOM software provides a command-line interface (CLI) and a web browser user interface. For detailed ILOM information, refer to the Integrated Lights Out Manager documentation.

About CMM ILOM

Each system chassis has its own service processor, called a Chassis Monitoring Module Integrated Lights Out Manager (CMM ILOM). CMM ILOM provides an Ethernet connection to the server module's service processor, and allows you to view and configure the Sun Blade X6275 server module's network information. See FIGURE 3-1.

Supported CMM ILOM versions are:

■ CMM ILOM 2.0.3.13 only for ILOM 2.0 (blades)

■ CMM ILOM 3.0.6.11 or later for ILOM 3.0

Refer to the system chassis documentation for more information. Go to http://docs.sun.com/app/docs/prod/blade.srvr#hic.

FIGURE 3-1 CMM ILOM Web Interface Page

About SP ILOM

The Sun Blade X6275 server module includes two service processor (SP) ILOMs that reside on a separate board. Each node has a dedicated SP.

You can use the ILOM built-in system management software to monitor and manage the components installed in your system chassis and server modules. See FIGURE 3-2.

ILOM enables you to:

- Configure network information
- View and edit hardware configurations for the SP
- Monitor vital system information
- Manage user accounts

Note – For CMM ILOM 2.0.3.13 systems, a Sun Blade X6275 server module must be inserted into the system chassis before you power on the chassis. If the blade is not inside the chassis before you power on, ILOM does not recognize node 1. For ILOM 3.0 systems, this requirement does not apply.

For detailed ILOM information, refer to the Integrated Lights Out Manager documentation.

FIGURE 3-2   SP ILOM Web Interface Page (via CMM ILOM 3.0 system)

ILOM Setup Task Summary

TABLE 3-1 summarizes how to set up ILOM and configure an IP address on the server module SP.

TABLE 3-1 ILOM Configuration Summary

Step	Task	Description
1	Install the server module in chassis.	Install the server module in the system chassis as described in Chapter 1 and Chapter 2 of this guide. **Note -** For CMM ILOM 2.0.3.13 systems, a Sun Blade X6275 server module must be inserted into the system chassis before you power on the chassis. If the blade is not inside the chassis before you power on, ILOM does not recognize node 1. For ILOM 3.0 systems, this requirement does not apply.
2	Check the chassis.	Ensure that: • The system chassis is powered up. • The CMM ILOM is connected to the network and is working correctly. • The installer has Ethernet access to the same subnet as the CMM ILOM.
2	Check the power.	Ensure that the Sun Blade X6275 server module has standby power.
3	Obtain the CMM SP ILOM IP address.	If you are using ILOM CLI commands and you do not know the ILOM's IP address, see "Displaying the Service Processor's (ILOM) IP Address" on page 19 to find the CMM SP ILOM's IP address using the CMM ILOM.
3	Obtain the server module SP ILOM IP address.	If you are using ILOM CLI commands and you do not know the ILOM's IP address, see "Displaying the Service Processor's (ILOM) IP Address" on page 19 to find the Sun Blade X6275 server module SP ILOM's IP address using the CMM ILOM.
4	Establish a console connection to the SP ILOM.	Choose one of the following methods to establish a connection with the Sun Blade X6275 server module SP ILOM. • **Remote console (CLI)**. Access the CMM CLI user interface to access the SP ILOM CLI user interface. **Note - Recommended**. The remote connection chassis Ethernet ports provide both the CLI and the web browser user interface method to connect to ILOM. • **Remote console (GUI)**: Access the CMM ILOM web browser user interface. • **Local serial console (blade serial console):** Use a dongle cable to connect a serial console to a UCP port on the front of the server module. There are two UCP ports, one for each node's SP connection. For more information, refer to the *Sun Blade X6275 Server Module Service Manual*. • **Local serial console (CMM serial console):** Connect a serial console to the serial port on the CMM. **Note -** For more information about how to attach a CMM management network cable, and attaching other cables or devices to a CMM, refer to the system chassis documentation.

TABLE 3-1 ILOM Configuration Summary

Step	Task	Description
5	Access an administrator user account.	To configure an IP address in SP ILOM, you must log in to ILOM with an administrative account, for Node 0 or Node 1. A preconfigured administrator account is shipped on each node on the server module. This administrative account includes built-in administrative privileges (read and write access) to all SP features and commands.
		The user name is **root** and the password is **changeme**.
		Tip - It is highly recommended that you change the password after initial setup, for security reasons. For more information about ILOM's user accounts, refer to the Integrated Lights Out Manager documentation.
6	Log in to ILOM.	Choose one of the following procedures to log in to ILOM:
		• "Log In to SP ILOM Using the CLI" on page 22
		• "Log In to SP ILOM Using the Web Browser User Interface" on page 23
		• "Log In to SP ILOM From a Serial Connection" on page 24
7	Configure an IP address.	Choose one of the following procedures (optional):
		• "Configure a DHCP IP Address" on page 25
		• "Configure a Static IP Address" on page 26
8	Obtain additional ILOM information.	You might need to obtain additional information about ILOM, if applicable. For more information about configuring or modifying an IP address in ILOM, refer to the Integrated Lights Out Manager documentation.

Displaying the Service Processor's (ILOM) IP Address

Use the following CLI procedure to display the ILOM's network configuration, including the IP address of the ILOM SP, using the CMM ILOM.

Note – You can also obtain node SP IP addresses from Web interface of the CMM.

This procedure also verifies that the ILOM is working correctly and that you can access it through the CMM ILOM.

1. **Access the CMM ILOM.**

2. **Log in to the CMM ILOM CLI.**

3. **Type one of the following commands, depending on the CMM ILOM revision:**

- *CMM ILOM 3.0:*

  show /CH/BL0/NODE1/SP/network

  where **BL0** represents blade 0 and **NODE1** is node 1.
  To view the target blade and node, you must specify the number of the blade
  in which the server module is installed, and the node number.

The CMM ILOM displays information about the server module, including its IP
address and MAC address. The following example shows Blade 0, Node 1, server
module information:

```
-> show /CH/BL0/NODE1/SP/network
/CH/BL0/NODE1/SP/network
    Targets:
    Properties:
        type = Network Configuration
        commitpending = (Cannot show property)
        ipaddress = IPaddress
        ipdiscovery = dhcp
        ipgateway = IPgateway
        ipnetmask = 255.255.255.0
        macaddress = Macaddress
        pendingipaddress = IPaddress
        pendingipdiscovery = dhcp
        pendingipgateway = IPgateway
        pendingipnetmask = 255.255.255.0
    Commands:
        cd
        set
        show
->
```

- *CMM ILOM 2.0.3.13:*

  show /CH/BL14/SP/network

  where **BL14** represents node 1 installed in slot 3.
  To specify the target CMM or blade, you must specify the number of the slot in which the module is installed.

  Each Sun Blade 6048 chassis shelf has 24 nodes maximum. Blade nodes are numbered from 0 to 23. CMM Nodes 0 to 11 are blade node 0 and named BL0-BL11. CMM nodes 12 to 23 are blade node 1 and named BL12-BL23. For a Sun Blade 6048 chassis, the nodes display as:

Node	Nodes (Two per Blade)											
0	BL0	BL1	BL2	BL3	BL4	BL5	BL6	BL7	BL8	BL9	BL10	BL11
1	BL12	BL13	BL14	BL15	BL16	BL17	BL18	BL19	BL20	BL21	BL22	BL23

The CMM ILOM displays information about the server module, including its IP address and MAC address. For example:

```
-> show /CH/BL0/SP/network
/CH/BL0/SP/network
   Targets:
   Properties:
       type = Network Configuration
       commitpending = (Cannot show property)
       ipaddress = IPaddress
       ipdiscovery = dhcp
       ipgateway = IPgateway
       ipnetmask = 255.255.255.0
       macaddress = Macaddress
       pendingipaddress = IPaddress
       pendingipdiscovery = dhcp
       pendingipgateway = IPgateway
       pendingipnetmask = 255.255.255.0
       state = enabled
   Commands:
       cd
       set
       show
->
```

4. **Proceed to** "Accessing SP ILOM" on page 22.

Accessing SP ILOM

Choose one of the following procedures to log in to the SP ILOM:

▼ Log In to SP ILOM Using the CLI

To log in to the SP ILOM from an Ethernet connection using the CLI command line interface:

1. **Obtain the ILOM IP address.**

   If you do not know the ILOM's IP address, see "Displaying the Service Processor's (ILOM) IP Address" on page 19 to find the ILOM's IP address, using the CMM ILOM.

2. **Open a new terminal window, as required.**

3. **Log in to SP ILOM using secure shell (SSH) session.**

   Type the administrator account user name (**root**), the password (**changeme**), and the server module SP IP address.

   For example: ssh *root*@192.168.25.25

   ```
   $ ssh root@192.168.25.25
   password: changeme
   ...
   ->
   ```

   Tip – The default ILOM administrator account user name is **root** and the password is **changeme**. If this default administrator account, which was shipped with each server module SP and CMM, has been changed, contact your system administrator for an ILOM user account with administrator privileges.

   You are now logged in to the SP ILOM.

   Refer to the ILOM documentation for more information on how to use the CLI interface to configure the ILOM.

▼ Log In to SP ILOM Using the Web Browser User Interface

> **Note –** To improve response times, disable the browser proxy server (if used).

To log in to the SP ILOM from an Ethernet connection using the web browser user interface:

1. **Obtain the SP ILOM IP address for the node.**

   If you do not know the node's ILOM IP address, see "Displaying the Service Processor's (ILOM) IP Address" on page 19 to find the ILOM's IP address using the CMM ILOM.

2. **To log in to the web interface, type the IP address of ILOM into your web browser.**

   The web interface Login page appears.
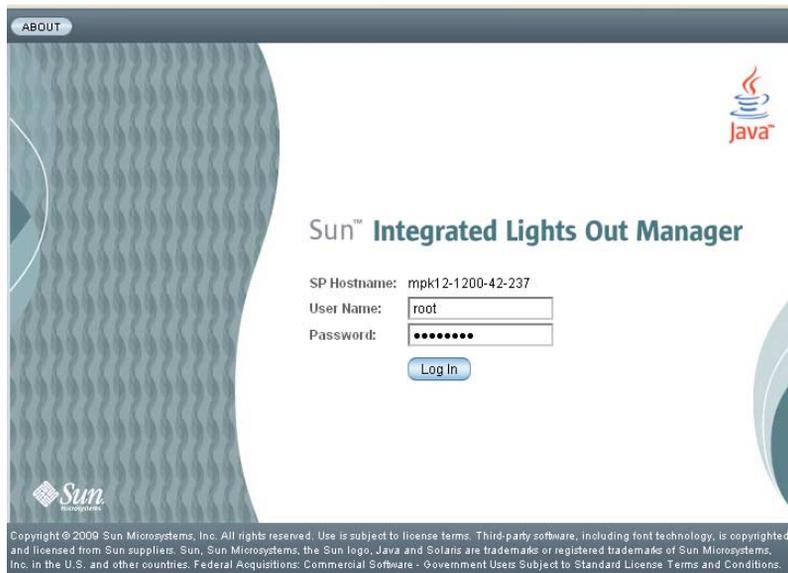
3. **Type your user name and password.**

> **Tip –** The default ILOM administrator account user name is **root** and the password is **changeme**. If this default administrator account, which was shipped with each server module SP and CMM, has been changed, contact your system administrator for an ILOM user account with administrator privileges.

4. Click Log In.

The web interface Versions page appears.

You are now logged in to the SP ILOM.

Refer to the ILOM documentation for more information on how to use the web interface to configure the ILOM.

▼ Log In to SP ILOM From a Serial Connection

You will need a dongle cable. The dongle cable might be shipped with the Sun Blade chassis.

To log in to the ILOM from a serial console connection:

1. Use a dongle cable to connect a serial console to a UCP port on the front of the server module. There are two UCP ports, one for each node SP connection.

For more information, refer to the *Sun Blade X6275 Server Module Service Manual.*

2. Verify that your serial console connection to the Sun Blade X6275 server module is secure and operational.

3. Ensure that the following serial communication settings are configured.

- 8N1: eight data bits, no parity, one stop bit
- 9600 baud (default- do not change)
- Disable hardware flow control (CTS/RTS)

4. **Press** Enter **to establish a connection between your serial console and ILOM.**

    A login prompt to ILOM appears.

5. **Log in to the ILOM CLI using an administrator account. Type a user name and password for the administrator account.**

Tip – The default ILOM administrator account user name is **root** and the password is **changeme**. If this default administrator account, which was shipped with each server module SP and CMM, has been changed, contact your system administrator for an ILOM user account with administrator privileges.

You are now logged in to the SP ILOM.

Refer to the ILOM documentation for more information on how to use the CLI interface to configure the ILOM.

Configuring an IP Address for SP Network Configuration

You can configure a static or a dynamic IP address for SP Network Configuration.

Choose one of the following procedures:

▼ Configure a DHCP IP Address

DHCP is enabled in the factory-default configuration. By default, the SP uses a Dynamic Host Configuration Protocol (DHCP) server for network configuration.

To configure SP networks with a DHCP server:

1. **Verify that an Ethernet cable is connected to the Ethernet port (NET MGT) port on the CMM.**

2. **Obtain the CMM ILOM IP address.**

    If you do not know the ILOM's IP address, see "Displaying the Service Processor's (ILOM) IP Address" on page 19 to find the ILOM's IP address using the CMM ILOM.

3. **Log in to CMM ILOM. Choose one of the following procedures:**

   -
   -

4. **Obtain the DHCP IP address assigned to the server module SP.**

   Choose one of the following procedures, to view the dynamic server module IP address that was assigned:

   - **ILOM 3.0 system - CMM.**

     Type: `show /CH/BL0/NODE1/SP/network`

     where BL0 represents the blade slot 0, node 1.

   - **ILOM 2.0.3.13 system - CMM.**

     Type: `show /CH/BL0/SP/network`

     where BL0 represents node 0 installed in slot BL0.
     To specify the target CMM or blade, you must specify the number of the slot in which the module is installed. Blade nodes range from 0 to 23. Each shelf has 24 nodes, numbered BL0 to BL23. Slots BL0 to BL11 are node 0. Slots BL12 to BL23 are node 1.

5. **To configure the SP to use DHCP, type:**
   ```
   -> cd  /CH/BL4/NODE1/SP/network
   -> set pendingipdiscovery=dhcp
   -> set commitpending=true
   ```

6. **To log out of ILOM, type exit.**

Refer to the ILOM documentation for more information on how to use the ILOM CLI interface.

You can now load the operating system. See .

▼ Configure a Static IP Address

If you plan to assign static IP addresses to a server SP, do the following procedure for each node:

1. **Verify that an Ethernet cable is connected to the Ethernet port (NET MGT) port on the CMM.**

2. **Obtain the CMM ILOM IP address.**

   If you do not know the ILOM's IP address, see to find the ILOM's IP address using the CMM ILOM.

3. **Log in to CMM ILOM. Choose one of the following procedures:**

   -

   -

4. **Configure a static Ethernet configuration.**

   Use your own addresses in place of the examples below:

   ```
   -> cd  /CH/BL4/NODE1/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
   ```

5. **To log out of ILOM, type `exit`.**

Refer to the ILOM documentation for more information on how to use the ILOM CLI interface.

You can now load the operating system. See .

About Installing a Supported OS

Choose one of the following methods to install a supported Operating System (OS) on a Sun Blade X6275 server module:

- **Install the OS on a Flash Module.** Flash Modules can support some operating systems. See .

- **Install the OS on USB Flash Disk.** See .

- **Configure diskless network boot to load the OS to the server module from a boot image on another server.** Refer to your operating system vendor's documentation for specific information.

Refer to the *Sun Blade X6275 Server Module Linux OS Installation Guide* or *Sun Blade X6275 Server Module Windows OS Installation Guide* for more detailed instructions and supported OSes for operating system installation.

Flash Modules

The Sun Blade X6275 server module supports one flash module (FMod) per node that can install and boot a supported operating system. You can use flash modules to install an operating system locally.

To install flash modules, refer to the *Sun Blade X6275 Server Module Service Manual*.

Caution – Do not remove or insert the flash module until the green LED goes out. Damage to the flash module can occur if the FMod is removed while the green LED next to the FMod slot is lit. Wait for twenty seconds for the LED to go out. Do not remove or apply AC power while removing or inserting a flash module.

USB Flash Disk

The Sun Blade X6275 server module has one internal USB port per node on the back of the motherboard. You must remove the blade from the chassis to access the USB ports.

When a USB flash disk is present, it appears as a disk device, and you can install a supported operating system on it.

To install a USB flash disk, refer to the *Sun Blade X6275 Server Module Service Manual*.

USB flash disks with standard USB 2.0 interfaces can be obtained from third-party sources. Each Sun Blade X6275 server module can use two USB flash disks, one per node. The USB flash disks must be no larger than 2.7 mm wide and 32.0 mm long. See FIGURE 3-3.

FIGURE 3-3   USB Flash Disk Dimensions