

# Sun SPARC Enterprise M3000/M4000/M5000/ M8000/M9000 Servers

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Glossary



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# Preface

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This document defines terms used in Oracle’s Sun SPARC Enterprise M3000/M4000/M5000/M8000/M9000 Servers documents. It covers entry-level (M3000), midrange (M4000 and M5000) and high-end (M8000 and M9000) servers.

Some references to server names are abbreviated for readability. For example, if you see a reference to the SPARC Enterprise M9000 server or simply the M9000 server, note that the full product name is the Sun SPARC Enterprise M9000 server.

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## Related Documentation

Related documents are listed in the following table. All are available online. See [“Where to View Related Documentation” on page viii](#).

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**Note** – All glossaries in the following documents have been moved to the separate glossary document listed in the table.

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Application	Title
Latest information	<i>Sun SPARC Enterprise M3000 Server Product Notes</i>
	<i>Sun SPARC Enterprise M4000/M5000 Servers Product Notes</i>
	<i>Sun SPARC Enterprise M8000/M9000 Servers Product Notes</i>
Overview	<i>Sun SPARC Enterprise M3000 Server Overview Guide</i>
	<i>Sun SPARC Enterprise M4000/M5000 Servers Overview Guide</i>
	<i>Sun SPARC Enterprise M8000/M9000 Servers Overview Guide</i>
Planning	<i>Sun SPARC Enterprise M3000 Server Site Planning Guide</i>
	<i>Sun SPARC Enterprise M4000/M5000 Servers Site Planning Guide</i>
	<i>Sun SPARC Enterprise M8000/M9000 Servers Site Planning Guide</i>

<b>Application</b>	<b>Title</b>
Safety/Compliance	<i>Sun SPARC Enterprise M3000 Server Safety and Compliance Guide</i> <i>Sun SPARC Enterprise M4000/M5000 Servers Safety and Compliance Guide</i> <i>Sun SPARC Enterprise M8000/M9000 Servers Safety and Compliance Guide</i>
Getting started	<i>Sun SPARC Enterprise M3000 Server Getting Started Guide</i> <i>Sun SPARC Enterprise M4000/M5000 Servers Getting Started Guide</i> <i>Sun SPARC Enterprise M8000/M9000 Servers Getting Started Guide</i> – Also provided in the shipping kit.
Planning/Installation	<i>Sun SPARC Enterprise Equipment Rack Mounting Guide (Sun Rack 1000, 900 and Sun Rack II)</i>
Installation	<i>Sun SPARC Enterprise M3000 Server Installation Guide</i> <i>Sun SPARC Enterprise M4000/M5000 Servers Installation Guide</i> <i>Sun SPARC Enterprise M8000/M9000 Servers Installation Guide</i> – Also provided in the shipping kit.
Service	<i>Sun SPARC Enterprise M3000 Server Service Manual</i> <i>Sun SPARC Enterprise M4000/M5000 Servers Service Manual</i> <i>Sun SPARC Enterprise M8000/M9000 Servers Service Manual</i>
Software administration	<i>Sun SPARC Enterprise M3000/M4000/M5000/M8000/M9000 Servers Administration Guide</i>
Software administration	<i>Sun SPARC Enterprise M3000/M4000/M5000/M8000/M9000 Servers XSCF User's Guide</i>
Software administration	<i>Sun SPARC Enterprise M3000/M4000/M5000/M8000/M9000 Servers XSCF Reference Manual</i>
Software administration	<i>Sun SPARC Enterprise M4000/M5000/M8000/M9000 Servers Dynamic Reconfiguration (DR) User's Guide</i>
Software administration	<i>Sun Management Center (Sun MC) Software Supplement</i>
Capacity on Demand administration	<i>Sun SPARC Enterprise M4000/M5000/M8000/M9000 Servers Capacity on Demand (COD) User's Guide</i>

## Where to View Related Documentation

Hardware documents:

<http://docs.sun.com/app/docs/prod/sparc.m3k~m3000-hw?l=en#hic>  
<http://docs.sun.com/app/docs/prod/sparc.m4k~m4000-hw?l=en#hic>  
<http://docs.sun.com/app/docs/prod/sparc.m5k~m5000-hw?l=en#hic>  
<http://docs.sun.com/app/docs/prod/sparc.m8k~m8000-hw?l=en#hic>  
<http://docs.sun.com/app/docs/prod/sparc.m9k~m9000-hw?l=en#hic>



Software documents:

<http://docs.sun.com/app/docs/prod/sparc.m9k~m9000-sw?l=en#hic>

Oracle Solaris Operating System documents:

<http://docs.sun.com>

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## Documentation, Support, and Training

Sun Function	URL
Documentation	<a href="http://docs.sun.com/">http://docs.sun.com/</a>
Support	<a href="http://www.sun.com/support/">http://www.sun.com/support/</a>
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*Sun SPARC Enterprise M3000/M4000/M5000/M8000/M9000 Servers Glossary*, part number 820-4499-12.



# Glossary

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## A

<b>AC Section (ACS)</b>	A power supply unit consisting of a power input terminal board, main line switch, etc.
<b>ACS</b>	See <a href="#">AC Section (ACS)</a> .
<b>active addition</b>	To add a FRU while the domain or server continues running.
<b>Active Directory</b>	A distributed directory service that provides both authentication of user credentials and authorization of user access level to networked resources. Both Active Directory and LDAP/SSL use authentication to verify the identity of users before they can access system resources, and to grant specific access privileges to users in order to control their rights to access networked resources.
<b>active replacement</b>	To replace a FRU while the domain or server continues running. Active replacement requires that the FRU be inactivated or powered down using either an XSCF command or a Oracle Solaris OS command.
<b>active XSCF</b>	The XSCF that controls the system in a dual-XSCF unit configuration. Also called an active XSCF unit.
<b>add</b>	A term used in Dynamic Reconfiguration to assign or integrate a system board to or into a domain.
<b>assign</b>	A term used in Dynamic Reconfiguration to assign a system board to a domain.
<b>audit</b>	To collect data related to the use of system resources. An audit records security-related system events.

<b>audit class</b>	A grouping of audit events. Audit classes provide a way to select a group of security-related system events to audit.
<b>audit event</b>	A security-related system action that is audited. Events are grouped into classes.
<b>audit file</b>	A log where audit records are stored.
<b>audit policy</b>	A set of audit options that can be enabled or disabled by the administrator. These options include the option for specifying events to be recorded and the option for specifying whether to record specific types of audit data. They also include the option for specifying whether to stop audit processing when the audit tray is full.
<b>audit record</b>	Audit data stored in the audit file. One audit record has one audit event. Each audit record consists of audit tokens.
<b>audit token</b>	One field in an audit record. An audit token contains an audit event attribute, such as <i>user</i> or <i>privilege</i> .
<b>audit trail</b>	A set of audit logs that have been recorded by the server. The audit trail can be analyzed with the use of audit tools.

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## B

<b>Backplane (BP)</b>	A circuit board containing a set of sockets to which other circuit boards can be connected. Pins on the backplane sockets are interconnected by printed wire traces. These traces allow components on the connected circuit boards to distribute signals to components on other connected boards.
<b>Backplane Unit (BPU)</b>	A unit containing sockets used to connect multiple units. In the SPARC Enterprise M4000 server, the BPU consists of a power supply backplane and I/O backplane. In the SPARC Enterprise M5000 server, the BPU consists of a power supply backplane, I/O backplane, and bus bar.
<b>BP</b>	See <a href="#">Backplane (BP)</a> .
<b>BPU</b>	See <a href="#">Backplane Unit (BPU)</a> .
<b>Browser User Interface (BUI)</b>	Like a Graphical User Interface (GUI), but accessed through a browser.
<b>BUI</b>	See <a href="#">Browser User Interface (BUI)</a> .

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## C

<b>Capacity On Demand (COD)</b>	<p>The COD feature allows you to configure spare processing resources on your M4000/M5000/M8000/M9000 server in the form of one or more COD CPUs which can be activated at a later date when additional processing power is needed. The M3000 server does not support COD.</p> <p>To access each COD CPU, you must purchase a COD hardware activation permit. Under certain conditions, you can use COD resources before purchasing COD permits for them. See the <i>SPARC Enterprise M4000/M5000/M8000/M9000 Servers Capacity on Demand (COD) User's Guide</i>.</p>
<b>carrier</b>	<p>A component used to mount PCI cards or link cards in the PCI box. The carrier with link cards is also called the <i>link carrier</i>, and the one with PCI cards is also called the <i>PCI carrier</i>. The function is similar to that of the PCI cassette, but is not compatible.</p>
<b>CB</b>	<p>See <a href="#">Circuit Breaker (CB)</a>.</p>
<b>CE</b>	<p>See <a href="#">Correctable Error (CE)</a>.</p>
<b>Chassis Serial Number (CSN)</b>	<p>A serial number used to identify a server. The chassis serial number is printed on the label affixed to the front side and right side of the system cabinet. This number is used for the service provider to associate hardware error events and maintenance actions with the relevant server.</p>
<b>Circuit Breaker (CB)</b>	<p>Used for the SPARC Enterprise M4000/M5000 servers. An external circuit breaker (such as a power distribution board or power distribution box) connecting to an AC cable. The CB is also called a site circuit breaker.</p>
<b>CLKU</b>	<p>See <a href="#">Clock Control Unit (CLKU)</a>.</p>
<b>Clock Control Unit (CLKU)</b>	<p>The unit for supplying clock signals to the CPU/memory board unit and crossbar unit. The CLKU is mounted only on the SPARC Enterprise M9000 server.</p>
<b>CMU</b>	<p>See <a href="#">CPU/Memory Board Unit (CMU)</a>.</p>
<b>CMU Channel (CMU-CH)</b>	<p>The bridge that connects system control devices to the system bus. The CMU channel is mounted on the CMU. SPARC Enterprise M8000/M9000 servers implement the functions for slave operation only, such as SCF interface boot PROM, TTY, and I/O Interrupt.</p>
<b>CMU-CH</b>	<p>See <a href="#">CMU Channel (CMU-CH)</a>.</p>
<b>COD</b>	<p>See <a href="#">Capacity On Demand (COD)</a>.</p>

<b>cold addition</b>	To add a FRU while the server is powered off. During cold addition, all types of FRUs can be added.
<b>cold replacement</b>	To replace a FRU while the server is powered off. During cold replacement, all types of FRUs can be replaced.
<b>configure</b>	A term used in <i>Dynamic Reconfiguration (DR)</i> to integrate a system board which has been assigned to the domain's OS, and put it into a usable state.
<b>connect</b>	A term used in <i>Dynamic Reconfiguration (DR)</i> to electrically connect an already-mounted system board. Connecting a system board may enable the monitoring of that board.
<b>core</b>	See <i>CPU core</i> .
<b>Correctable Error (CE)</b>	A CPU, memory or I/O error that is correctable, usually by simply attempting again the operation (such as a rewrite to memory) that previously failed.
<b>CPU chip</b>	A physical processor. An LSI chip on which a central processing unit (CPU) is mounted
<b>CPU core</b>	A segmented processing unit of the CPU chip. A virtual processor.
<b>CPU Module (CPUM)</b>	A module containing one or two CPU chip(s).
<b>CPU/Memory Board Unit (CMU)</b>	A unit consisting of a CPU memory board, memory, and CPU module, used in the SPARC Enterprise M8000/M9000 server.
<b>CPUM</b>	See <i>CPU Module (CPUM)</i> .
<b>Crossbar (XB)</b>	The switch ASIC controlling data transfer between the system controller and I/O unit.
<b>Crossbar Unit (XBU)</b>	The unit used to logically switch between the CPU/memory board unit and I/O unit. The XBU is mounted only on the SPARC Enterprise M9000 server.

## D

<b>DAT</b>	digital audio tape.
<b>DC-to-DC converter (DDC)</b>	The component that converts DC input into another voltage level.
<b>DCL</b>	See <i>Domain Component List (DCL)</i> .
<b>DDC</b>	See <i>DC-to-DC converter (DDC)</i> .

<b>degraded</b>	The state of a FRU, group of FRUs, or part of a FRU, that has been isolated because a fault was detected. The isolation is usually done to prevent possibly faulty components from affecting other system components. The part that is isolated is not always the faulty part alone; a normal part may be degraded to isolate the faulty part. If a function required for the operation of the system is degraded, a system failure may result.
<b>delete</b>	A term used in Dynamic Reconfiguration to isolate or unassign a system board from a domain.
<b>device serial number</b>	The serial number assigned to each shipped component, stored in the FRUID PROM.
<b>disconnect</b>	A term used in Dynamic Reconfiguration to describe electrical disconnection of a system board. Disconnecting a board disables the monitoring of that board.
<b>domain</b>	<p>A set of one or more system boards that function as an independent system. While the server is shared, an operating system can be installed in each domain to enable each domain to operate as an independent system.</p> <p>Each domain consists of a logical system board assigned to it. Each domain is electrically insulated by each hardware partition. Therefore, if one domain fails, it does not affect the other domains in the server.</p>
<b>Domain - SP Communication Protocol (DSCP)</b>	The protocol that implements TCP/IP socket type communication (normally performed between user levels) between the service processor and the domain. This communication is performed for the mailbox type communication performed by other software components.
<b>Domain Component List (DCL)</b>	A list of system boards used to construct each domain
<b>Domain ID (DID)</b>	Domain identifier.
<b>downlink card</b>	A link card mounted in the I/O unit. Although this link card is physically the same as the one mounted on the I/O board in the External I/O Expansion Unit, the one mounted in the I/O unit is sometimes called a <i>downlink card</i> . See also <i>link card</i> and <i>uplink card</i> .
<b>DR</b>	See <i>Dynamic Reconfiguration (DR)</i> .
<b>DSCP</b>	See <i>Domain - SP Communication Protocol (DSCP)</i> .
<b>dual power feed</b>	A type of power feed for high-reliability systems that contain dual power supply lines. If one line stops, the other line enables the system to continue operation.
<b>dummy panel/board</b>	A panel or board inserted into an unused slot or space. Attaching this panel or board can prevent cooling air in the system from leaking.
<b>DVDBP</b>	See <i>DVD Backplane (DVDBP)</i> .

**DVD Backplane  
(DVDBP)**

A backplane for a DVD drive. See also [Backplane \(BP\)](#).

**Dynamic Host  
Configuration Protocol  
(DHCP)**

Software that automatically assigns IP addresses to clients on a Transmission Control Protocol/Internet Protocol (TCP/IP) network.

**Dynamic Reconfiguration  
(DR)**

Software that enables logical attachment and detachment of system boards to and from a domain without having to first power off that domain. DR allows the logical (and, therefore, physical) installation and removal of system boards while the domain's Oracle Solaris OS continues running.

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## E

**Entry-level server**

A SPARC Enterprise M3000 server.

**equipment rack**

A rack for mounting a SPARC Enterprise M3000/M4000/M5000 server or an External Expansion I/O Unit.

**eXtended System Board  
(XSB)**

The XSB is made of physical parts. In the XSB, the [PSB](#) can be either one complete unit (undivided status) or divided into four subunits. The XSB is a unit used for domain construction and identification, and also can be used as a logical unit.

**eXtended System Control  
Facility (XSCF)**

Firmware running in a service processor. The XSCF is equipped with the control and monitoring functions of the system platform.

**external I/O expansion  
unit**

A rack-mount type device used to add PCI slots to the SPARC Enterprise M3000/M4000/M5000/M8000/M9000 servers. The External I/O Expansion Unit is connected to the I/O unit of the server via the PCI Express bus. It can accommodate up to 12 PCI-X cards or PCI Express cards in units of six cards.

**Externally Initiated Reset  
(XIR)**

To send a reset signal via software to the CPU on the domain. Upon receipt of the reset signal, the domain shifts to the OpenBoot PROM environment and performs processing according to the value set in OpenBoot PROM environment variable *error-reset-recovery*.



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## F

<b>failover</b>	A process in which the active service processor passes control to the standby service processor or the standby service processor takes over control from the active service processor. In either process, the current standby service processor takes the place of the active service processor and the active service processor takes the place of the standby service processor.
<b>Fan Backplane (FANBP)</b>	The active backplane for the fan. See also <a href="#">Backplane (BP)</a> .
<b>FANBP</b>	See <a href="#">Fan Backplane (FANBP)</a> .
<b>Fault Management Architecture (FMA)</b>	Generates fault indictments from the Service Processor. FMA provides three system activities: error handling, fault diagnosis, and response.
<b>Field Replaceable Unit (FRU)</b>	A part that can be replaced by field engineers when servicing the server.
<b>firmware</b>	Software that controls the server. The SPARC Enterprise M3000/M4000/M5000/M8000/M9000 server has the following types of firmware: <a href="#">OpenBoot PROM</a> , <a href="#">Power-On Self-Test (POST)</a> , and <a href="#">eXtended System Control Facility (XSCF)</a> . Firmware is provided as a package called <a href="#">XSCF Control Package (XCP)</a> .
<b>FRU</b>	See <a href="#">Field Replaceable Unit (FRU)</a> .

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## H

<b>Hard Disk Drive Backplane (HDDBP)</b>	The backplane for the disk drive. See also <a href="#">Backplane (BP)</a> .
<b>HDD</b>	A hard disk drive.
<b>HDDBP</b>	See <a href="#">Hard Disk Drive Backplane (HDDBP)</a> .
<b>head room or headroom</b>	The capability to use up to four COD CPUs per server without a sufficient number of COD permits to cover their use. Use of headroom, which is synonymous with <i>instant access CPU</i> , is available under certain conditions. See the <i>SPARC Enterprise M4000/M5000/M8000/M9000 Servers Capacity on Demand (COD) User's Guide</i> .
<b>high-end server</b>	A SPARC Enterprise M8000/M9000 server.
<b>hot addition</b>	To add a FRU while the domain is powered off.
<b>hot replacement</b>	To replace a FRU while the domain is powered off.

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# I

<b>I/O Backplane (IOBP)</b>	The backplane for the I/O device. See also <i>Backplane (BP)</i> .
<b>I/O boat</b>	A component used to provide an <i>external I/O expansion unit</i> with PCI slots. Two types of I/O boards, a <i>PCI Express (PCIe)</i> I/O board and <i>PCI-X</i> I/O board, are used. One I/O board can add up to six PCI slots. Up to two I/O boards can be mounted in the <i>external I/O expansion unit</i> .
<b>I/O Controller (IOC)</b>	<p>A bridge between the system bus and I/O bus (<i>PCI Express (PCIe)</i>)</p> <p>The I/O Controller is connected to the <i>Crossbar (XB)</i> on the SPARC Enterprise M9000 server or to the <i>System Controller (SC)</i> on the SPARC Enterprise M8000 server.</p>
<b>I/O Unit (IOU)</b>	<p>On SPARC Enterprise M8000/M9000 servers, a unit that can accommodate eight <i>PCIe slots</i> and up to four <i>HDDs</i>. A <i>PCI Express (PCIe)</i> card, internal drive connection card (IOUA), and link card can be inserted into <i>PCIe slots</i> via a <i>PCI cassette</i>.</p> <p>On SPARC Enterprise M4000/M5000 servers, an <i>I/O Unit (IOU)</i> that can accommodate <i>PCI Express (PCIe)</i> and <i>PCI-X</i> cards. PCI cards are first inserted into a <i>PCI cassette</i> and then the PCI cassette is mounted in the I/O Unit. One I/O Unit can accommodate five PCI cassettes, four <i>PCI Express (PCIe)</i> cassettes (upper four slots), and one <i>PCI-X</i> cassette (bottom slot). The mechanism for connecting an internal drive is already mounted, but a link card can be inserted.</p>
<b>install</b>	A term used in Dynamic Reconfiguration which represents the process of incorporating a system board into a domain.
<b>instant access CPU</b>	Synonymous with <i>head room or headroom</i> .
<b>Inter SCF Network (ISN)</b>	A network that communicates between active <i>XSCF</i> and standby <i>XSCF</i> . It is used when <i>XSCF</i> units are in redundant configuration.
<b>IOBox</b>	Synonymous with an <i>external I/O expansion unit</i> . A PCI box may be represented as an <i>external I/O expansion unit</i> in programs and manuals.
<b>IOBP</b>	See <i>I/O Backplane (IOBP)</i> .
<b>IOC</b>	See <i>I/O Controller (IOC)</i> .
<b>IOU</b>	See <i>I/O Unit (IOU)</i> .
<b>IOUA</b>	See <i>IOU Onboard Device Card (IOUA)</i> .
<b>IOU Onboard Device Card (IOUA)</b>	An option for mounting CD-RW/DVD-RW drive units or tape drive units in SPARC Enterprise M4000/M5000/M8000/M9000 server cabinets.

ISN See [Inter SCF Network \(ISN\)](#).

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## L

LDAP See [Lightweight Directory Access Protocol \(LDAP\)](#).

LDAP/SSL Offers enhanced security to LDAP users by way of Secure Socket Layer (SSL) technology, using the LDAP directory service to authenticate users. Both Active Directory and LDAP/SSL use authentication to verify the identity of users before they can access system resources, and to grant specific access privileges to users in order to control their rights to access networked resources.

**Lightweight Directory Access Protocol (LDAP)** Protocol for accessing information directories. LDAP is based on the standards contained within the X.500 standard, but is significantly simpler.

**link cable** An interfacing cable for connecting the link card on the host server to the link card in the [external I/O expansion unit](#).

**link card** An interface card used to connect an [I/O Unit \(IOU\)](#) and the I/O board in the [external I/O expansion unit](#). The link card mounted in the I/O board is also called an *uplink card*, and the one mounted in the I/O Unit is also called a *downlink card*.

**Logical System Board (LSB)** A system board assigned a logical number (LSB number) that can be recognized from the domain during domain construction. One domain consists of up to 16 logical system boards. Logical system board numbers are used for the domain to identify the system board.

**low profile** One of the PCI card standards. A low profile card is a compact PCI card which is provided for a host server that has limited space for card slots.

LSB See [Logical System Board \(LSB\)](#).

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## M

MAC See [Memory Access Controller \(MAC\)](#).

MAC address See [Media Access Control address \(MAC address\)](#).

<b>main line switch</b>	A power switch provided in the SPARC Enterprise M8000/M9000 server cabinet. Turning on or off all main line switches means the same thing as turning on or off an external circuit breaker, such as a distribution panel or power distribution box.
<b>Management Information Base (MIB)</b>	Management information database for the <a href="#">SNMP</a> agent function. MIB information is returned in response to a request from the SNMP Manager.
<b>MBU</b>	See <a href="#">Motherboard Unit (MBU)</a> .
<b>Media Access Control address (MAC address)</b>	The worldwide unique serial number assigned to a network interface. IEEE manages distribution of MAC addresses.
<b>MEMB</b>	See <a href="#">Memory Board (MEMB)</a> .
<b>Memory Access Controller (MAC)</b>	An ASIC that provides the memory access control function. It performs memory access under the direction of the System Controller ASIC.
<b>Memory Board (MEMB)</b>	A board in the SPARC Enterprise M4000/M5000 server on which memory modules are mounted.
<b>MIB</b>	See <a href="#">Management Information Base (MIB)</a> .
<b>midrange server</b>	The SPARC Enterprise M4000/M5000 server.
<b>mode switch</b>	A physical key switch on the server that controls system modes: locked and service.
<b>Motherboard Unit (MBU)</b>	The main board assembly to which other boards and components are connected in SPARC Enterprise M3000/M4000/M5000 servers. SPARC Enterprise M8000/M9000 servers have system boards instead of motherboard assemblies.
<b>move</b>	A term used in Dynamic Reconfiguration, a move is a series of operations that unconfigure a system board from one domain and integrate it into another domain.

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## N

<b>Network Time Protocol (NTP)</b>	NTP supports synchronization of Oracle Solaris OS time with the time service provided by a remote host.
<b>NTP</b>	See <a href="#">Network Time Protocol (NTP)</a> .

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## O

<b>OpenBoot PROM</b>	A layer of software that takes control of the configured server from Power-On Self-Test (POST), builds some data structures in memory, and boots the operating system. OpenBoot PROM is compliant with IEEE 1275.
<b>Operator Panel (OPNL)</b>	A panel containing the LEDs that indicate the condition of the server and the settings of the POWER and mode switches.

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## P

<b>password policy</b>	A set of rules for the creation and maintenance of passwords.
<b>PCI carrier</b>	A component used to mount PCI cards in the <i>external I/O expansion unit</i> . The PCI carrier has a similar function to the <i>PCI cassette</i> used for the SPARC Enterprise M4000/M5000/M8000/M9000 servers. The PCI carrier, however, is not compatible with the PCI cassette. See also <i>carrier</i> .
<b>PCI cassette</b>	A component used to mount <i>PCI Express (PCIe)</i> cards in an <i>I/O Unit (IOU)</i> of a SPARC Enterprise M4000/M5000/M8000/M9000 server.
<b>PCI Express (PCIe)</b>	A high-speed serial transfer interface. The minimum configuration of the PCIe transmission line is called a <i>lane</i> . The ports of SPARC Enterprise M4000/M5000/M8000/M9000 servers consist of eight lanes (x8). PCIe supports hot plugging.
<b>PCI Hot Plug (PHP)</b>	Active addition or removal of a PCI card executed during Oracle Solaris OS operation.
<b>PCIe</b>	See <i>PCI Express (PCIe)</i> .
<b>PCIe slot</b>	A high-speed serial point-to-point interconnect. The minimum configuration of the PCIe transmission line is called a <i>lane</i> . A PCIe slot of the SPARC Enterprise M3000 server consists of eight lanes (x8) of PCI Express bus. Compared with PCI-X, the PCIe data transfer rates are doubled.
<b>PCI-X</b>	A faster version of the parallel bus PCI standard. The PCI-X bus has improved protocols and a faster clock rate.
<b>PHP</b>	See <i>PCI Hot Plug (PHP)</i> .

<b>Physical System Board (PSB)</b>	A board consisting of physical parts, such as one <a href="#">CMU</a> and one <a href="#">I/O Unit (IOU)</a> , or one <a href="#">CMU</a> . In the SPARC Enterprise M4000/M5000 server, a CMU is mounted on an <a href="#">MBU</a> . The <a href="#">PSB</a> may be used to indicate physical units for hardware addition, removal, or replacement. The PSB is used as one unit (not divided) or four divided units.
<b>POST</b>	See <a href="#">Power-On Self-Test (POST)</a> .
<b>Power Supply Unit (PSU)</b>	A unit that inputs AC power and outputs several types of voltage.
<b>Power-On Self-Test (POST)</b>	A diagnostic test that is automatically executed when the server is powered on. POST checks memory, disks, and other hardware components for errors and then passes control to OpenBoot PROM.
<b>PSB</b>	See <a href="#">Physical System Board (PSB)</a> .
<b>PSB division type</b>	The setting for <a href="#">system board</a> segmentation, either <a href="#">Uni-XSB</a> or <a href="#">Quad-XSB</a> .
<b>PSU</b>	See <a href="#">Power Supply Unit (PSU)</a> .
<b>PSU Backplane (PSUBP)</b>	The backplane for the power supply unit. See also <a href="#">Backplane (BP)</a> .
<b>PSUBP</b>	See <a href="#">PSU Backplane (PSUBP)</a> .

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## Q

<b>Quad-XSB</b>	One of the PSB division types. A PSB that is logically divided into four is called Quad-XSB. Quad-XSB is used to explain the PSB division type or status.
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## R

<b>register</b>	A term used in Dynamic Reconfiguration to register system boards in the Domain Component List (DCL)
<b>release</b>	A term used in Dynamic Reconfiguration to release the registration of a system board from the Domain Component List (DCL).
<b>remove</b>	A term used in Dynamic Reconfiguration to remove a system board.
<b>replace</b>	A term used in Dynamic Reconfiguration to remove and replace a system board.
<b>reserve</b>	A term used in Dynamic Reconfiguration to reserve a system board such that it will be added or deleted the next time the domain is powered on.

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## S

<b>SC</b>	See <i>System Controller (SC)</i> .
<b>Secure Shell (SSH)</b>	A software program that allows the user to log into another server over a network, to execute commands on a remote machine, and to move files from one machine to another. It provides strong authentication and secure communications over insecure channels.
<b>service processor</b>	A processor that is specifically provided for system controlling and monitoring. <i>XSCF</i> firmware is installed on the service processor.
<b>Simple Mail Transfer Protocol (SMTP)</b>	A protocol for sending electronic mail through the Internet or an intranet. SMTP is used when email is sent between mail servers or when the client sends email to a mail server.
<b>Simple Network Management Protocol (SNMP)</b>	A query, command, and response protocol to examine and change configuration parameters of LAN-connected and WAN-connected repeaters, bridges, routers, switches, and other devices connected to a network.
<b>SMTP</b>	See <i>Simple Mail Transfer Protocol (SMTP)</i> .
<b>SNMP</b>	See <i>Simple Network Management Protocol (SNMP)</i> .
<b>Solaris OS</b>	The Oracle Solaris operating system, which controls and manages the domains.
<b>SSH</b>	See <i>Secure Shell (SSH)</i> .
<b>Standby XSCF</b>	The <i>XSCF Unit (XSCFU)</i> operating as the backup of the active XSCF Unit in a dual-XSCF Unit configuration. Also called the <i>Standby XSCF</i> Unit.
<b>standby-power</b>	The power that sustains the power supply even after server power-off. Used to enable the power control system to work. Usually, the <i>eXtended System Control Facility (XSCF)</i> and the power supply control device operate on a standby power supply.
<b>system board</b>	In the SPARC Enterprise M8000/M9000 server, a system board consists of a CPU and memory on the <i>CPU/Memory Board Unit (CMU)</i> and I/O devices in the <i>I/O Unit (IOU)</i> . In the SPARC Enterprise M4000/M5000 server, a system board consists of a CPU module and memory board on the <i>Motherboard Unit (MBU)</i> and I/O devices in the <i>I/O Unit (IOU)</i> . The system board is classified into two types, <i>PSB</i> and <i>XSB</i> , depending on the configuration. In the SPARC Enterprise 3000 server, a system board consists of a CPU and memory on the <i>Motherboard Unit (MBU)</i> and <i>PCIe</i> cards on the <i>PCIe slot</i> .
<b>system control network</b>	A network that connects the <i>XSCF Unit (XSCFU)</i> to the administration console for the system administrator's use.

**System Controller (SC)** A bridge ASIC that connects the CPU, memory, and I/O. It also controls cache coherency.

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## T

**Tape Drive Backplane (TAPEBP)** The backplane for a *tape drive unit*. See also *Backplane (BP)*.

**tape drive unit** A tape device used to read data stored on magnetic tape, or write data to it.

**thread** The minimum unit of hardware in the *CPU core* or multi-threading *CPU chip* that can be recognized by the software,

**TTY-bus** The serial bus to bridge the console path data between the *CMU* and *XSCF*.

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## U

**UE** See *Uncorrectable Error (UE)*.

**unassign** A term used in Dynamic Reconfiguration to release a system board that is assigned to a domain.

**unconfigure** A term used in Dynamic Reconfiguration to isolate a system board that has previously been integrated into the OS of a domain and putting the system board in the assigned or unassigned state.

**Uncorrectable Error (UE)** An uncorrectable memory error, such as a DIMM multi-bit error.

**Uni-XSB** One of the *PSB division types*. A *PSB* that logically consists of only one unit (undivided state) is called a Uni-XSB. Uni-XSB is the initial value before division types are defined for a PSB. Uni-XSB is used to explain the PSB division type or status.

**Uninterruptible Power Supply (UPS)** A unit that ensures a stable supply of power to the system in the event of a power failure or an extensive power interruption.

**UPS cable** A cable that connects the *UPS Controller (UPC) port* and the *UPC interface on UPS*.

**UPS Controller (UPC)** A device that controls the *Uninterruptible Power Supply (UPS)*.

**UPS Controller (UPC) port** A receiving port on the server to connect an *Uninterruptible Power Supply (UPS)*.



<b>UPC interface on UPS</b>	An interface of the <i>Uninterruptible Power Supply (UPS)</i> to connect to the server
<b>uplink card</b>	A link card mounted on the I/O board in an <i>external I/O expansion unit</i> . Although the uplink card is physically the same card as the link card mounted in an I/O unit, the one mounted on the I/O board is sometimes called an <i>uplink card</i> . See also <i>link card</i> and <i>downlink card</i> .
<b>user accounts</b>	This term refers to the relationship established between a user and a server, network or information service. User accounts include the information a user needs to log in and use a server.
<b>user network</b>	A network through which the user can access the system via either the LAN card or the IOU Onboard Device Card_A (IOUA) mounted in the <i>I/O Unit (IOU)</i> .
<b>user privileges</b>	Access privileges granted to users. Depending on the granted privilege, there are restrictions on operations that can be executed for the entire system or domain. User privileges are: useradm, platadm, platop, domainadm, domainmgr, domainop, auditadm, auditop, fieldeng, and none. For more information, see the <i>SPARC Enterprise M3000/M4000/M5000/M8000/M9000 Servers XSCF User's Guide</i> .

## X

<b>way</b>	The unit of measurement that indicates the number of CPUs. For example, 4-way or 16-way.
<b>XB</b>	See <i>Crossbar (XB)</i> .
<b>XBU</b>	See <i>Crossbar Unit (XBU)</i> .
<b>XCP</b>	See <i>XSCF Control Package (XCP)</i> .
<b>XSCF Control Package (XCP)</b>	The firmware that runs on the <i>service processor</i> and includes <i>XSCF</i> , <i>POST</i> , and <i>OpenBoot PROM</i> firmware.
<b>XIR</b>	See <i>Externally Initiated Reset (XIR)</i> .
<b>XSB</b>	See <i>eXtended System Board (XSB)</i> .
<b>XSCF</b>	See <i>eXtended System Control Facility (XSCF)</i> .
<b>XSCF shell</b>	The <i>Command Line Interface (CLI)</i> function of XSCF. By entering commands on the shell terminal with which you log in to XSCF, you can execute a variety of settings and displays of this system.

<b>XSCF Unit (XSCFU)</b>	A unit that runs with an independent processor. The <i>eXtended System Control Facility (XSCF)</i> , which is firmware that has the system management function of the server, is installed in the processor.
<b>XSCF Web</b>	The <i>Browser User Interface (BUI)</i> function of XSCF. By selecting items of the Web browser with which you log in to XSCF, you can execute a variety of settings and displays of this system.
<b>XSCFU</b>	See <i>XSCF Unit (XSCFU)</i> .