



# SPARC® Enterprise M8000/M9000 Servers Product Notes

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For XCP version 1041

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# Preface

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These product notes contain late-breaking information about the SPARC® Enterprise M8000/M9000 server hardware, software, or documentation that became known after the documentation set was published.

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## Technical Support

If you have technical questions or issues that are not addressed in the SPARC Enterprise M8000/M9000 servers documentation, contact a sales representative or a certified service engineer.

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## Software Resources

The Solaris™ Operating System and Sun Java™ Enterprise System software are preinstalled on your SPARC Enterprise M8000/M9000 servers.

Contact a sales representative or a certified service engineer for software resources for your SPARC Enterprise M8000/M9000 servers.

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**Note** – For latest patch information go to:

**Global Site**

<http://www.fujitsu.com/global/support/software/security/products-s/patch-info/>

**Japanese Site**

<http://software.fujitsu.com/jp/security/products-others/unix/index.html>

**North American Site**

<https://download.computers.us.fujitsu.com/>

Installation information and README files are included in the patch download.

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## Accessing Documentation

Instructions for installing, administering, and using your SPARC Enterprise M8000/M9000 servers are provided in the SPARC Enterprise M8000/M9000 servers documentation set.

The documentation set is available for download from the following website:

**Global Site**

<http://www.fujitsu.com/sparcenterprise/manual/>

**Japanese Site**

<http://primeserver.fujitsu.com/sparcenterprise/manual/>

**North American Site**

<https://download.computers.us.fujitsu.com/>

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**Note** – Information in these product notes supersedes the information in the SPARC Enterprise M8000/M9000 servers documentation set.

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Solaris documentation is available at:

<http://www.sun.com/documentation>



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# Fujitsu Welcomes Your Comments

If you have any comments or requests regarding this manual, or if you find any unclear statements in the manual, please state your points specifically, and forward it to a sales representative or a certified service engineer.

Please include the title and part number of your document with your feedback.

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## Revision History

<b>Edition</b>	<b>Revised Section</b>	<b>Details</b>
02	Supported Versions of Firmware and Software	Modification of description about the support of Capacity on Demand function.
	Specific Issues and Workarounds	Modification and addition of issues and workarounds which found after the 01 version release.
	Documentation Updates	Addition of articles about the documentation updates.
03	Specific Issues and Workarounds	Modification and addition of issues and workarounds which found after the 02 version release.
	Documentation Updates	Modification of "Cooling Specifications" and "Circuit Breaker Capacity" described in the SPARC Enterprise M8000/M9000 Servers Site Planning Guide. Addition of articles about the documentation updates.
04	Specific Issues and Workarounds	Modification and addition of issues and workarounds which found after the 03 version release.
	Documentation Updates	Addition of articles about the documentation updates.

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# SPARC Enterprise M8000/M9000 Servers Product Notes

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These product notes contain late-breaking information about the SPARC® Enterprise M8000/M9000 server hardware, software, or documentation that became known after the documentation set was published.

- [Supported Versions of Firmware and Software](#)
- [Patch Information](#)
- [Known Issues](#)
- [Notes for Dual eXtended System Control Facility \(XSCF\) Unit](#)
- [Hardware Installation and Service Issues](#)
- [Hardware Documentation Updates](#)
- [Software Issues](#)
- [Software Documentation Updates](#)

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## Supported Versions of Firmware and Software

The following firmware and software versions are supported in this release:

- XSCF Control Package (XCP) 1041 or later

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**Note** – When the XCP version preinstalled in your server is under XCP 1041, you must upgrade to XSCF Control Package(XCP) 1041 or later. Use the web browser interface, also known as the browser user interface (BUI), to import XCP firmware and then execute the `flashupdate` command to upgrade the XCP firmware with the XSCF Shell.

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**Caution** – CR ID #6534471: Improper handling of large page in kernel memory may cause random panics. Implement the workaround for CR ID #6534471 or check for the availability of a patch and install it immediately. This bug has been fixed by 125100-06.

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- The first version of the Solaris™ Operating System (OS) to support these servers is the Solaris 10 11/06 OS.
  - XCP 1041 supports the External I/O Expansion Unit.
  - This XCP release does not support the Capacity-On-Demand (COD) feature.
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**Note** – It is required that all SPARC Enterprise M8000/M9000 servers be upgraded to XCP 1050 in order to support adding future COD Right To Use (RTU) licenses. Contact your local Service Representative for assistance.

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## Patch Information

### Solaris Patch Information

The following patches are mandatory for SPARC Enterprise M8000/M9000 servers running Solaris 10 11/06 OS.

- 118833-36 (Install 118833-36 before 125100-04.)
- 125100-04 or later
- 120068-03 or later
- 123839-07 or later
- 125424-01 or later

- 125075-01 or later

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**Note** – See [“Software Resources” on page vii](#) for information on how to find the latest patches. Installation information and README files are included in the patch download.

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# Known Issues

This section describes known issues in this release.

## General Functionality Issues and Limitations

- Because the term, `admin`, will be reserved for the system use in next version of XCP, please avoid using it to user account name. If you use the term, `admin`, to user account name, you have to delete it before upgrading the XCP.
- Dynamic Reconfiguration (DR) is not recommended in cases below, due to the following restrictions on the `DR addboard(8)`, `deleteboard(8)`, and `moveboard(8)` commands. Please contact your Sales representative or Technical Support for additional information and software support.
  - The target board (SB/XSB) with optional I/O cards because of some restrictions on specific cards.



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**Caution** – Use of DR in an unsupported configuration might result in a domain panic or might hang the system.

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- Domains using the ZFS file system can not use Reconfiguration.
- PCI Hotplug feature is not available for this release. Please contact your sales representative or technical support for additional information and software support.
- The maximum number of IOUA (Base I/O Card) cards per domain is limited to six cards.
- On the SPARC Enterprise M8000/M9000 servers, the dual eXtended System Control Facility (XSCF) unit (Service Processor) is not supported.
- Do not use the internal CD-RW/DVD-RW drive unit and the TAPE drive unit at the same time.
- While Solaris is running, do not use the `cfgadm(1M)` command to add/remove the CD-RW/DVD-RW drive unit and the TAPE drive unit to/from a domain. To use the CD-RW/DVD-RW drive unit or the TAPE drive unit, use the `cfgdevice(8)` command to attach/remove it to/from the domain before booting the OS.
- The XSCF web browser interface, also known as the browser user interface (BUI), has limited availability in this release. It can be used for importing the XSCF firmware and supports the `snapshot(8)` command Full log set collection function. Use the command-line interface (CLI) instead on the Service Processor and the domains for other activities.
- Power off all domains before upgrading the XCP firmware.

- In this release, to conduct the maintenance work of COD board, it is necessary to power off the system.
- For 1027A-Z/X1027A-Z, PCIe Dual 10 Gigabit Ethernet Fiber XFP cards, these limits apply:
  - Do not use more than two cards per domain.
  - Do not use these cards in an External I/O Expansion Unit.
- For 4447A-Z/X4447A-Z, PCIe Quad-port Gigabit Ethernet Adapter UTP cards, these maximum limits apply:
  - No more than two cards per I/O boat
  - No more than eight cards in a SPARC Enterprise M8000/M9000 servers

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# Notes for Dual eXtended System Control Facility (XSCF) Unit

Because the dual eXtended System Control Facility (XSCF) unit is a functionality which will be supported in the future, you will find several points which are different from what is written in the documentations of SPARC Enterprise M8000 and M9000 servers.

- READY LEDs on the XSCF unit#1 for base cabinet (XSCFU\_B#1) and the XSCF unit#1 for expansion cabinet (XSCFU\_C#1) will keep blinking.
- You cannot sign on to XSCFU\_B#1 via serial cable nor LAN.
- The XSCF command `showhardconf(8)` shows as follows:  
XSCFU\_B#1 Status:Normal,Offline; Ver:0000h; Serial;;  
+ FRU-Part-Number;;  
XSCFU\_C#1 Status:Normal,Offline; Ver:0000h; Serial;;  
+ FRU-Part-Number;;
- The XSCF command `switchscf(8)` always fails with displaying the following message:  
XSCF cannot be switched because the other XSCF is not available.
- The XSCF command `applynetwork(8)` will display the following message, which can be safely ignored:  
The other XSCF could not apply the network settings
- The XSCF command `showhostname(8)`, `setssh(8)`, `settelnet(8)`, `setntp(8)` and `sethttps(8)` will display the following message, which can be safely ignored:  
Cannot communicate with the other XSCF. Check the other XSCF's state.
- Don't connect LAN cable to XSCFU\_B#1.  
To connect the expansion cabinet on the SPARC Enterprise M9000 server, connect XSCFU\_B#1 and XSCFU\_C#1 by using the data cable (Note).

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**Note** – Data cable is the cable connected to each connector which connects the XSCF unit for base cabinet and the XSCF unit for expansion cabinet.

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- The Remote Cabinet Interface (RCI) functionality for the XSCFU\_B#1 is not supported.  
Do not connect and do not set the RCI device to the XSCFU\_B#1.



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# Hardware Installation and Service Issues

This section describes hardware specific issues and workarounds.

## Specific Issues and Workarounds

[TABLE 1](#) lists known hardware issues and possible workarounds.

**TABLE 1** Hardware Issues and Workarounds

CR ID	Description	Workaround
6433420	The domain console might display a Mailbox timeout or IOCB interrupt timeout error during boot.	Issue a <code>reset-all</code> command from the OBP (OK) prompt and reboot.
6488846	During boot, the domain console might display a checksum error for the SG(X)PCI2SCSIU320-Z SCSI controller I/O card.	Check for the availability of the latest controller card firmware.
6557379	Power cables are not redundant on single power feed servers without the dual power feed option.	On servers that have single power feed, all power cables must be connected and powered on at all times.

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# Hardware Documentation Updates

TABLE 2 lists known documentation updates.



TABLE 2 Documentation Updates

Title	Page Number	Update
All SPARC Enterprise M8000/M9000 servers documentation		All DVD references are now referred to as CD-RW/DVD-RW.  Updated glossary terms: <b>External I/O Expansion Unit</b> - A rack mountable device to add-on PCI slots. It is connected to the system's I/O unit through the PCIe connection and contains one or two I/O boats. <b>I/O boat</b> - An I/O unit in the External I/O Expansion Unit. The I/O boat connects to a PCI-Express (PCIe) slot through a PCIe switch or a PCI-X bridge on the I/O boat and offers either six PCI-X slots or six PCIe slots.
SPARC Enterprise M8000/M9000 Servers Overview Guide	1-8	In Table 1-1, "Main Unit Specification" The following information will be added. Architecture: SPARCV9 architecture Platform groups: sun4u Platform names: SunW, SPARC-Enterprise
SPARC Enterprise M8000/M9000 Servers Overview Guide	1-8	TABLE 1-1 "Main Unit Specifications" Main storage (memory module) describes the maximum capacity when 8GB DIMM mounted; however, 8GB DIMM can't be mounted at this time.
SPARC Enterprise M8000/M9000 Servers Overview Guide	1-21	1.3.3, "I/O Unit" It describes the types of LAN port as "1000BASE-T/100Base-TX/100Base-T," which should be modified as "1000Base-T/100Base-TX/10Base-T."
SPARC Enterprise M8000/M9000 Servers Overview Guide	1-26	1.5.3, "SPARC Enterprise M9000 Server (Expansion Cabinet) Option" It describes that the configuration can contain "up to 2B," which should be modified as "2TB."  The memory size described here is the maximum capacity when 8GB DIMM mounted; however, 8GB DIMM can't be mounted at this time.
SPARC Enterprise M8000/M9000 Servers Service Manual	2-28	TABLE 2-11 "Status Display of LEDs Defined Individually for Each FRU" Description of HDD will be added, after the description of XSCFU and IOU (display part for LAN). See " <a href="#">LED Error Display</a> " on page 15 for the addition.

**TABLE 2** Documentation Updates (*Continued*)

Title	Page Number	Update
SPARC Enterprise M8000/M9000 Servers Service Manual	4-3	4.2.1.2, "Disconnecting a PCI card" The following caution will be added.
		<div style="display: flex; align-items: center;">  <div> <p><b>Caution</b> – In the PCI cassette part, when removing cables such as LAN cable, if your finger can't reach the latch lock of the connector, press the latch with a flathead screwdriver to remove the cable. Forcing your finger into the clearance can cause damage to the PCI card.</p> </div> </div>
SPARC Enterprise M8000/M9000 Servers Service Manual	4-23	4.7, "Power-On and Power-Off Procedures for the Cabinet with the Dual Power Feed Option and the M9000 Expansion Cabinet" See <a href="#">"Power-On/Off Procedures of the Server with Expansion Cabinet"</a> on page 14 for the changes.
SPARC Enterprise M8000/M9000 Servers Service Manual	10-1 11-1	CHAPTER 10, "Operator Panel Replacement" CHAPTER 11, "XSCF Unit Replacement" The following important message will be added.
		<p><b>Note</b> – If you replace the XSCF unit and the operator panel simultaneously, system will not operate normally. Execute the <code>showhardconf</code> command or the <code>showstatus</code> command to confirm that the component replaced earlier is operating normally, before replacing the subsequent FRU.</p>
SPARC Enterprise M8000/M9000 Servers Service Manual	12-3	12.2, "Active Replacement" Step 2 The following sentence will be added at the end. "READY LED (green) of HDD turns off."
SPARC Enterprise M8000/M9000 Servers Service Manual	12-5	12.2, "Active Replacement" Step 9 The following sentence will be added at the end. "READY LED (green) of HDD turns on."

**TABLE 2** Documentation Updates (*Continued*)

Title	Page Number	Update
SPARC Enterprise M8000/M9000 Servers Service Manual	13-3	13.2, "Hot Replacement" Step 7 The following caution will be added.
		
		<hr/> <b>Caution</b> – When removing cables such as LAN cable, if your finger can't reach the latch lock of the connector, press the latch with a flathead screwdriver to remove the cable. Forcing your finger into the clearance can cause damage to the PCI card. <hr/>
SPARC Enterprise M8000/M9000 Servers Service Manual	13-13	13.3, "Cold Replacement" Step 7 The following caution will be added.
		
		<hr/> <b>Caution</b> – When removing cables such as LAN cable, if your finger can't reach the latch lock of the connector, press the latch with a flathead screwdriver to remove the cable. Forcing your finger into the clearance can cause damage to the PCI card. <hr/>
SPARC Enterprise M8000/M9000 Servers Service Manual	25-3	25.1.2, "Cold Addition"
	25-5	25.2.2, "Cold Deletion"
		As Step 6, the following sentence will be added. "Confirm that the XSCF Standby LED (green) on the operator panel remains lit. If it is blinking, wait until it remains lit."

**TABLE 2** Documentation Updates (*Continued*)

Title	Page Number	Update
SPARC Enterprise M8000/M9000 Servers Site Planning Guide	1-12	In section 1.2.2 (System Installation, Space), the following information has been added: "The minimum ceiling height for the SPARC Enterprise M8000/M9000 Server is 2.3m (7.5 feet), measured from the true floor or a raised floor, whichever is higher. The space above the server and its surroundings must not restrict the movement of cooling air between the air conditioner and the server."
SPARC Enterprise M8000/M9000 Servers Site Planning Guide	2-4	In section 2.2 (Electrical Specification), the following information has been added: "SPARC Enterprise M8000/M9000 Servers can use two types of power supply: single-phase power and three-phase power. Redundant power cables are supported only on servers that have the dual power feed option. The dual power feed option is included by default on servers that are configured for three-phase power."  "Note: Power cables are not redundant on single power feed servers without the dual power feed option. On servers that have single power feed, all power cables must be connected and powered on at all times."
SPARC Enterprise M8000/M9000 Servers Installation Guide	2-4	In section 2.2.2 (Facility Power Requirements), the following information has been added: "SPARC Enterprise M8000/M9000 Servers can use two types of power supply: single-phase power and three-phase power. Redundant power cables are supported only on servers that have the dual power feed option. The dual power feed option is included by default on servers that are configured for three-phase power."  "Note: Power cables are not redundant on single power feed servers without the dual power feed option. On servers that have single power feed, all power cables must be connected and powered on at all times."

# Errata of the SPARC Enterprise M8000/M9000 Servers Service Manual

TABLE 3 lists the errata of the *SPARC Enterprise M8000/M9000 Servers Service Manual*.

**TABLE 3** Errata of the SPARC Enterprise M8000/M9000 Servers Service Manual

Page Number	Description	Update
2-13	2.2, "Operator Panel" The operating state of the server is checked by observing the LEDs, and the power supply is operated with the switch.	The operating state of the server is checked by observing the LEDs, and the power supply is operated with the POWER switch.
5-3	TABLE 5-1 Relationship Between Doors and Components That Can Be Accessed IDPFC	RDPF
Chapter 6-24	"Cold Replacement" Shutdown processing is executed for all the domains, and the power is turned off.	The OS shutdown processing is executed for all the domains, and then the power-off processing is executed.
Chapter 6-23	"Cold Replacement" Confirm that shutdown processing is completed by confirming that the Power LED (green) on the operator panel is off.	Confirm that the power-off processing is completed by confirming that the Power LED (green) on the operator panel is off.
8-9	8.2, "Hot Replacement" Step 2 c. Check the states of LEDs (Check LED: blinking) on the FAN Unit to be replaced, and begin the actual replacement work when a message instructing the user to replace the target FAN Unit is displayed.	Check the states of LEDs (Power LED: off, Check LED: blinking) on the FAN Unit to be replaced, and begin the actual replacement work when a message instructing the user to replace the target FAN Unit is displayed.
12-3	12.2, "Active Replacement" Step 3 Blink the FAIL LED of the target HDD.	Blink the CHECK LED of the target HDD.
12-5	12.3, "Cold Replacement" Step 4 Confirm that shutdown processing is completed by confirming that the Power LED (green) on the HDD is off.	Confirm that shutdown processing is completed by confirming that the READY LED (green) on the HDD is off.
20-12	20.2.1, "SPARC Enterprise M8000/M9000 Servers BPs" P.20-12 Caution For tightening the power bar, use a torque of 8.24 N.m (84 kgf.cm) for M8 bolts and 3.73 N.m (38 kgf.cm) for M6 bolts.	For tightening the power bar, choose a torque depending on the bolt size. <ul style="list-style-type: none"> <li>• For M8 bolts, use a torque of 8.24 N.m (84 kgf.cm).</li> <li>• For M6 bolts, use a torque of 3.73 N.m (38 kgf.cm).</li> </ul>

**TABLE 3** Errata of the SPARC Enterprise M8000/M9000 Servers Service Manual (Continued)

Page Number	Description	Update
21-1	21.1, "Overview of the SNSU" FIGURE 21-1, FIGURE 21-2, and FIGURE 21-3 show the mounting locations of the SNSUs of SPARC Enterprise M8000 Server, SPARC Enterprise M9000 Server (base cabinet), and SPARC Enterprise M9000 Server (with the expansion cabinet), respectively.	FIGURE 21-1, FIGURE 21-2, and FIGURE 21-3 show the mounting locations of the SNSUs of SPARC Enterprise M8000 Server, SPARC Enterprise M9000 Server (base cabinet), and the base cabinet of SPARC Enterprise M9000 Server with the expansion cabinet respectively.
B-2	B.1, "SPARC Enterprise M8000 Server" TABLE B-1 Fan: 12 (3+1, 7+1) (N+1 redundant configuration)	FAN Unit: 12 (N+1 fans redundant configuration)
B-4	B.2, "SPARC Enterprise M9000 Server (Base Cabinet)" TABLE B-2 Fan: 10 to 16 (N+1 redundant configuration) (Even if the number of CMUs or IOUs mounted is small, the server is shipped with full installation of fans.)	FAN Unit: 10 to 16 (N+1 fans redundant configuration) (Even if the number of CMUs or IOUs mounted is small, the server is shipped with full installation of fan units.)
B-6	B.3, "SPARC Enterprise M9000 Server with Expansion Cabinet" TABLE B-3 Fan: 26 to 32 (10 to 16 per base cabinet, 16 per expansion cabinet) (N+1 redundant configuration) (Even if the number of CMUs or IOUs mounted is small, the server is shipped with full installation of fans.)	FAN Unit: 26 to 32 (10 to 16 per base cabinet, 16 per expansion cabinet) (N+1 fans redundant configuration) (Even if the number of CMUs or IOUs mounted is small, the server is shipped with full installation of fan units.)
C-3	TABLE C-1, "FRU Components of High-end Server Models" Note - *2 The PHP function is used. This is available only when multi-path has been set up.	Note - *2 It uses the PHP function. Depending on the PCI card usage, it requires the multi-path setting.
C-15	C.12, "XSCF Unit" - It communicates with each domain by using the command interface.	- It communicates with each domain by using the command line interface.
C-17	C.13, "DVD Drive Unit" - The DVD Drive Unit supports slim type DVD.	- DVD Drive Unit is mounted with the slim type CD-RW/DVD-RW Unit by default.
C-17	C.13, "DVD Drive Unit" - By changing the switch setting on the DVD Drive Unit, it can be used by each domain.	- XSCF command can switch the domain which can use the DVD Drive Unit.

# Updates of the SPARC Enterprise M8000/M9000 Servers Service Manual

The following information supersedes the information in the *SPARC Enterprise M8000/M9000 Servers Service Manual*.

## Power-On/Off Procedures of the Server with Expansion Cabinet

This is to correct the description in the *SPARC Enterprise M8000/M9000 Servers Service Manual*, Section 4.7, "Power-On and Power-Off Procedures for the Cabinet with the Dual Power Feed Option and the M9000 Expansion Cabinet."

On the server with expansion cabinet, when you turn on or turn off the mainline switch, do not fail to follow the order described below.

### *Power-On:*

**1. Turn on all the mainline switches of the expansion cabinet.**

In case that the power cabinet connected for the dual power feed option, also turn on all the mainline switches of the power cabinet.

**2. Turn on all the mainline switches of the base cabinet.**

In case that the power cabinet connected for the dual power feed option, also turn on all the mainline switches of the power cabinet.

### *Power-Off:*

**1. Turn off all the mainline switches of the base cabinet.**

In case that the power cabinet connected for the dual power feed option, also turn off all the mainline switches of the power cabinet.

**2. Turn off all the mainline switches of the expansion cabinet.**



In case that the power cabinet connected for the dual power feed option, also turn off all the mainline switches of the power cabinet.



## LED Error Display

The following content will be added to the *SPARC Enterprise M8000/M9000 Servers Service Manual*, Section 2.6, "LED Error Display," TABLE 2-11 Status Display of LEDs Defined Individually for Each FRU.

**TABLE 4** Status Display of LEDs Defined Individually for Each FRU

FRU	LED		Meaning	
	Type	Display		
HDD	READY	Lit (green)	Indicates that the HDD is in operation. In this state, the HDD cannot be removed (cannot be replaced).	
		 Blinking (green)	Indicates that the HDD is being accessed. In this state, the HDD cannot be removed (cannot be replaced).	
		Off	Indicates that the HDD can be replaced.	
	CHECK		Lit (amber)	Indicates that an error was detected in the HDD. However, this LED remains on for a few minutes immediately after power-on (until the start of initialization). It does not indicate an error during that time.
			Blinking (amber)	Indicates that the HDD is a replacement target.
			Off	Indicates that the HDD is in the normal state.

## Updates of the SPARC Enterprise M8000/M9000 Servers Site Planning Guide

The following information supersedes the information in the *SPARC Enterprise M8000/M9000 Servers Site Planning Guide*.

### Cooling (Air-Conditioning) Requirements

This is to correct the description in the *SPARC Enterprise M8000/M9000 Servers Site Planning Guide*, Section 2.3.1, "Cooling (Air-Conditioning) Requirements."

TABLE 2-7 lists the cooling and air-conditioning requirements for each system component.

TABLE 2-7 Specifications (Cooling and Air-Conditioning Requirements)

Name	Heat dissipation [kJ/h]	Exhaust airflow [m <sup>3</sup> /min.]	Cooling method	Air-conditioning type	Noise level [dBA]
SPARC Enterprise M8000 Server	37800 <sup>1</sup>	94	Overfloor/ underfloor	Forced air cooling	67
SPARC Enterprise M9000 Server (base cabinet)	76680 <sup>2</sup>	102	Overfloor/ underfloor	Forced air cooling	68
SPARC Enterprise M9000 Server (base cabinet + expansion cabinet)	153360 <sup>3</sup>	205	Underfloor	Forced air cooling	68
Rack-mountable Dual Power Feed	- <sup>4</sup>	- <sup>4</sup>	Overfloor/ underfloor	Forced air cooling	- <sup>4</sup>
Power Cabinet (SPARC Enterprise M8000 Server)	- <sup>4</sup>	- <sup>4</sup>	Overfloor/ underfloor	Forced air cooling	- <sup>4</sup>
Power Cabinet (for SPARC Enterprise M9000 Server base cabinet)	- <sup>4</sup>	- <sup>4</sup>	Overfloor/ underfloor	Forced air cooling	- <sup>4</sup>
Power Cabinet (for SPARC Enterprise M9000 Server base cabinet + expansion cabinet)	- <sup>4</sup>	- <sup>4</sup>	Underfloor	Forced air cooling	- <sup>4</sup>

1 This value represents the heat dissipation after 4CMU/4IOU installation.

2 This value represents the heat dissipation after 8CMU/8IOU installation

3 This value represents the heat dissipation after 16CMU/16IOU installation

4 The heat dissipation, exhaust airflow and acoustic noise value of the Power Cabinet is included in the value for the SPARC Enterprise M8000 Server or SPARC Enterprise M9000 Server.

## Circuit Breaker Capacity of Customer Panel Board

This is to correct the description in the *SPARC Enterprise M8000/M9000 Servers Site Planning Guide*, Section 2.4.2.1, "Circuit Breaker Capacity of Customer Panel Board."

TABLE 2-9 Circuit Breaker Capacity of Customer Panel Board

Power supply input	Name of device	Circuit breaker capacity of customer panel board (Japan/North America/Oversea in general)	Capacity of customer panel board (Europe)
<b>Single phase (AC200-240V)</b>	SPARC Enterprise M8000 Server	30A	32A
	SPARC Enterprise M9000 Server	30A	32A
<b>3 phase delta (AC200-240)</b>	SPARC Enterprise M8000 Server	50A	50A
	SPARC Enterprise M9000 Server	80A	80A
<b>3 phase star (AC380-415V)</b>	SPARC Enterprise M8000 Server	30A	30A
	SPARC Enterprise M9000 Server	50A	50A

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# Software Issues

This section describes software specific issues and workarounds.

## XCP Issues and Workarounds

TABLE 5 lists known XCP issues and possible workarounds.

**TABLE 5** XCP Issues and Workarounds

ID	Description	Workaround
RTIF1-070418-004	All domains must be powered off before upgrading the XCP firmware.	Power off domains before using the <code>flashupdate(8)</code> command to upgrade XCP firmware.
RTIF1-070418-005	If you log in to the XSCF while it is still booting, you may get a <code>bash\$</code> prompt instead of the <code>XSCF&gt;</code> prompt, and be unable to perform most operations.	Log out of the <code>bash\$</code> prompt and wait for the XSCF to finish booting.
RTIF1-070418-009	While XSCF is running, error message of "OOM kill" might be displayed to XSCF console, and process may go down and/or watchdog timeout may occur and XSCF may reboot.	Check that XSCF is started. If not started, use the <code>rebootxscf(8)</code> command to restart XSCF, or stop all the domains and then execute the system power off/on (AC OFF/ON).
RTIF1-070418-010	The <code>showdomainstatus -a</code> command shows domain status as Powered Off, but the <code>showboards -a</code> command shows the domain is testing.	Use the <code>showboards</code> command to check the status of domain power. The <code>showdomainstatus</code> command takes a longer time to show the correct status.
RTIF1-070418-011	Some commands that update configuration data take a relatively long time to execute.	Do not cancel <code>set*</code> commands. They appear to hang, but eventually complete in about 30 seconds.
RTIF1-070418-012	The fault (memory.block.ue) is encountered and reported periodically.	An uncorrectable error exists in a DIMM and the DIMM should be replaced.
RTIF1-070418-020	When using the XSCF Web to import a firmware image, if the image is corrupted, the <code>flashupdate</code> command might later report an internal error.	Import again a firmware image. Reboot the XSCF Unit, then use the <code>flashupdate</code> command again to clear the internal error.

**TABLE 5** XCP Issues and Workarounds (Continued)

ID	Description	Workaround
RTIF1-070418-023	Using the <code>rebootxscf(8)</code> command may result in a process down error, and possibly an FMA event with MSG ID SCF-8005-NE.	Ignore this event.
RTIF1-070418-025	<code>showaudit all</code> shows a long list of defaults in the policy section after the database is cleared.	Update the database with the following: <code>setaudit -a opl=enable</code> <code>setaudit -a opl=default</code>
RTIF1-070528-001	When you have updated the <code>/etc/ttydefs</code> file of Solaris to disable the console flow control, you cannot disable the console flow control on the telnet via a server.	None available at this time.
RTIF1-070528-002	While XSCF is running, watchdog timeout may occur and XSCF may reboot.	Check that XSCF is started. If not started, use the <code>rebootxscf(8)</code> command to restart XSCF, or stop all the domains and then execute the system power off/on (AC OFF/ON).
RTIF1-070802-001	When connected to telnet, the login or the password prompt doesn't appear.	Disconnect the telnet session and try again.
RTIF1-070824-001	When remote power control mode of interlocking mechanism for power supply to domain, is enabled, after XSCF Unit is replaced, the interlocking for power supply by RCI cannot work.	After XSCF Unit is replaced, configures the RCI again and sets the remote power control mode.
RTIF1-070904-002	When the snapshot CLI attempts to write to a USB stick that has write protect set results in an I/O error.	Do not attempt to use write-protected USB devices for collecting snapshot.
RTIF1-070904-003	An incorrect domain state is reported. After the command <code>sendbreak</code> to domain is issued, <code>showdomainstatus</code> continues to show the state as "Running" when the domain is actually at "ok" prompt.	There is no workaround. This is expected behavior of the <code>sendbreak</code> operation.
RTIF1-070904-004	The latest communication field in <code>showarchiving</code> is not updated regularly.	Disabling and re-enabling archiving refreshes the Latest communication field in <code>showarchiving</code> output.

**TABLE 5** XCP Issues and Workarounds (*Continued*)

ID	Description	Workaround
RTIF1-070904-005	Time can't be synchronized with the NTP server.	<p>Check the stratum value of the NTP server. The stratum value of XSCF is "5." The NTP server which the XSCF refers to must be a server on which the stratum value is smaller than 5. When you changed the NTP server to refer to, reboot the XSCF.</p> <p>When the stratum value has been set correctly and the time can't be synchronized, use the <code>showntp(8)</code> command to check the jitter value to be displayed.</p> <p>If this value is large, please reboot the XSCF.</p>
RTIF1-070904-006	While executing the domain power-on, domain reset or DR, in case the XSCF reboot occurred, the process may be aborted in some or all of the XSB.	Execute the domain reset one more time, or power off the domain and then power on again.
RTIF1-070912-001	If an invalid SMTP server is configured, a subsequent attempt to disable email service (using the <code>setemailreport</code> CLI) may block for up to 30 minutes.	<p>Wait for the CLI to complete. The rest of the system will function normally during this time.</p> <ul style="list-style-type: none"><li>• The CLI can also be aborted by <code>^C</code>. Note that the operation (disabling <code>emailreport</code>) is completed, even if <code>^C</code> is used.</li><li>• <code>showemailreport</code> can be used to confirm that the service has been disabled.</li></ul>

# Solaris Issues and Workarounds

TABLE 6 lists known issues and possible workarounds.

**TABLE 6** Specific Issues and Workarounds Concerning Solaris

CR ID	Description	Workaround
5076574	A PCIe error can lead to an invalid fault diagnosis on a large M9000/M8000 domain.	Create a file <code>/etc/fm/fmd/fmd.conf</code> containing the following lines; <code>setprop client.buflim 40m</code> <code>setprop client.memlim 40m</code>
6303418	A SPARC Enterprise M9000 server with a single domain and 11 or more fully populated system boards may hang under heavy stress.	Do not exceed 170 CPU threads. Limit the number of CPU threads to one per CPU core by using the Solaris <code>psradm</code> command to disable the excess CPU threads. For example, disable all odd-numbered CPU threads.
6348554	Using the <code>cfgadm -c disconnect</code> command on the following cards might hang the command during <code>i_mdi_pi_offline</code> : <ul style="list-style-type: none"><li>• SG-XPCIE2FC-QF4 Sun StorageTek Enterprise Class 4Gb Dual-Port Fibre Channel PCI-E HBA</li><li>• SG-XPCIE1FC-QF4 Sun StorageTek Enterprise Class 4Gb Single-Port Fibre Channel PCI-E HBA</li><li>• SG-XPCI2FC-QF4 Sun StorageTek Enterprise Class 4Gb Dual-Port Fibre Channel PCI-X HBA</li><li>• SG-XPCI1FC-QF4 Sun StorageTek Enterprise Class 4Gb Single-Port Fibre Channel PCI-X HBA</li></ul>	There is no workaround. Check for the availability of a patch for this defect.
6416224	System performance can degrade using a single NIC card with more than 5,000 connections.	Use multiple NIC cards to split network connections.
6440061	The domain console may display this message: <code>ipsec_check_inbound_policy: Policy Failure for the incoming packet (not secure)</code>	This message can be safely ignored.
6441349	The system may hang if there is an I/O error in the system.	None available at this time.

**TABLE 6** Specific Issues and Workarounds Concerning Solaris (*Continued*)

CR ID	Description	Workaround
6449315	The Solaris <code>cfgadm(1M)</code> command does not unconfigure a DVD drive from a domain on a SPARC Enterprise M8000/M9000 server.	<p>Disable the Volume Management Daemon (<code>vold</code>) before unconfiguring a DVD drive with the <code>cfgadm(1M)</code> command.</p> <p>To disable <code>vold</code>, stop the daemon by issuing the command <code>/etc/init.d/volmgt stop</code>. After the device has been removed or inserted, restart the daemon by issuing the command <code>/etc/init.d/volmgt start</code>.</p>
6459540	The DAT72 internal tape drive on SPARC Enterprise M8000/M9000 may time out during tape operations.	<p>Add the following definition to <code>/kernel/drv/st.conf</code>:</p> <pre>tape-config-list= "SEAGATE DAT DAT72-000", "SEAGATE_DAT DAT72-000", "SEAGATE_DAT DAT72-000"; SEAGATE_DAT DAT72-000= 1, 0x34, 0, 0x9639, 4, 0x00, 0x8c, 0x8c, 0x8c, 3;</pre> <p>There are four spaces between SEAGATE DAT and DAT72-00.</p>
6466617	Performing a hot plug operation with the PCI-Express slot too quickly interrupts a PCI leaf reset and fails, creating a <code>cfgadm: Component system is busy</code> error.	Pause a few seconds between the issue of each <code>cfgadm -c</code> command.
6472153	If you create a Solaris Flash archive on a non-SPARC Enterprise M8000/M9000 sun4u server and install it on a SPARC Enterprise M8000/M9000 sun4u server, the console's TTY flags will not be set correctly. This can cause the console to lose characters during stress.	<p>Just after installing Solaris OS from a Solaris Flash archive, telnet into the SPARC Enterprise M8000/M9000 server to reset the console's TTY flags a follows:</p> <pre># sttydefs -r console # sttydefs -a console -i "9600 hupcl opost onlcr crtscts" -f "9600"</pre> <p>This procedure is required only once.</p>
6481002	Installing the Solaris from the network using certain PCI-Express cards may cause a panic.	If you are using a Sun PCI-E Dual Gigabit Ethernet Adapter MMF card or a Sun PCI-E Dual Gigabit Ethernet Adapter UTP card, do not install the Solaris using either of these cards. Instead, use other network devices, such as the onboard Gigabit Ethernet or another network device.



**TABLE 6** Specific Issues and Workarounds Concerning Solaris (Continued)

CR ID	Description	Workaround
6485555	On the SPARC Enterprise M8000/M9000 servers, On-board Gigabit Ethernet NVRAM corruption could occur due to a race condition. The window of opportunity for this race condition is very small.	None available at this time.
6496337	The "cpumem-diagnosis" module may fail to load after uncorrectable error(UE) panic. Systems will function correctly but events normally automatically diagnosed by FMA using this module will require manual diagnosis. Example: SUNW-MSG-ID: FMD-8000-2K, TYPE: Defect, VER: 1, SEVERITY: Minor EVENT-TIME: Thu Feb 15 15:46:57 JST 2007 PLATFORM: SUNW,SPARC-Enterprise, CSN: BE80601007, HOSTNAME: col2-ff-em7-d0	If problem occurred, implement the following workaround: 1. Remove the following file. # rm /var/fm/fmd/ckpt/cpumem-diagnosis/cpumem-diagnosis 2. Restart fmd service. # svcadm restart fmd  To avoid this problem in advance, add "rm -f /var/fm/fmd/ckpt/cpumem-diagnosis/cpumem-diagnosis" in /lib/svc/method/svc-dumpadm file as below.  # # We haven't run savecore on a dump device yet # savedev=none  rm -f /var/fm/fmd/ckpt/cpumem-diagnosis/cpumem-diagnosis  #
6498283	Using the DR deleteboard(8) command while psradm operations are running on a domain might cause a system panic.	There is no workaround. Check for the availability of a patch for this defect.
6499304	CPU isn't offlined and unexpected message is displayed on console when many correctable error(CE) occurs. Example: SUNW-MSG-ID: FMD-8000-11, TYPE: Defect, VER: 1, SEVERITY: Minor EVENT-TIME: Fri Feb 2 18:31:07 JST 2007 PLATFORM: SPARC-Enterprise, CSN: BE80601035, HOSTNAME: FF2-35-0	Check CPU status on XSCF.

**TABLE 6** Specific Issues and Workarounds Concerning Solaris (Continued)

CR ID	Description	Workaround
6502204	<p>Unexpected error messages may be displayed on console on booting after CPU UE panic.</p> <p>Example:</p> <pre>SUNW-MSG-ID: FMD-8000-11, TYPE: Defect, VER: 1, SEVERITY: Minor EVENT-TIME: Tue Jan 9 20:45:08 JST 2007  PLATFORM: SUNW,SPARC-Enterprise, CSN: 2030636002, HOSTNAME: P2-DC1- 16-d0</pre>	<p>If you see unexpected messages, use the XSCF command <code>showdomainstatus(8)</code> to check system status on XSCF.</p>
6502750	<p>Notification message for inserted or removed card by PCI hot plug may not output.</p>	<p>None available at this time.</p>
6505921	<p>Correctable error on the system PCIe bus controller generates an invalid fault.</p>	<p>Create a file <code>/etc/fm/fmd/fmd.conf</code> containing the following lines;</p> <pre>setprop client.buflim 40m setprop client.memlim 40m</pre>
6508432	<p>Many correctable errors (CE) may occur, and despite these are the correctable errors, domain may panic.</p>	<p>Set the following to <code>/etc/system</code> and then reboot the domain:</p> <pre>set pcie:pcie_aer_ce_mask = 0x2001</pre>
6508434	<p>The domain may panic when an additional PCI-X card is installed or a PCI-X card is replaced by using PCI hot plug.</p>	<p>Do not insert a different type of PCI-X card on the same PCI slot card by using PCI hot plug.</p>
6509337	<p>s10s_u3 wanboot fails - The server returned 416: Requested Range Not Satisfiable.</p>	<p>None available at this time.</p>
6510779	<p>On a large single domain configuration, the system may incorrectly report very high load average at times.</p>	<p>There is no workaround. Check for the availability of a patch for this defect.</p>
6510861	<p>When Dual-Channel Ultra320 SCSI Card (SE0X75C2F, SE0X75C2X) is mounted, correctable errors(CE) occur and system may panic.</p>	<p>To mask these errors with Dual-Channel Ultra320 SCSI Card (SE0X75C2F, SE0X75C2X), add the following entry to the <code>/etc/system</code> file and then reboot the system:</p> <pre>set pcie:pcie_aer_ce_mask = 0x31c1</pre>
6511374	<p>Unexpected error messages may be displayed on console after changing the system configuration.</p> <p>Example:</p> <pre>WARNING: Translation error source /LSB0/B0/0, PA 3c000000000, target /LSB0/B0/20000000</pre>	<p>This message can be safely ignored.</p>

**TABLE 6** Specific Issues and Workarounds Concerning Solaris (Continued)

CR ID	Description	Workaround
6515648	"Replumb Failed" error appears when <code>dr@0:SB1::memory</code> fails.	<p>Once the DR operation is complete, it can be plumbed up manually.</p> <p>Example steps to re-plumb the interface manually:</p> <pre># ifconfig interface plumb xxx.xxx.xxx.xxx netmask + broadcast + up # ifconfig interface group group-name # ifconfig interface addif xxx.xxx.xxx.xxx -failover deprecated up</pre> <p>This workaround assumes that the <code>/etc/hostname.interface</code> file is correctly configured for the IPMP group and does not need any modification. The IP addresses used in the example above should match what was previously used and what matches the <code>/etc/hostname.&lt;interface&gt;</code> file.</p>
6516135	Ap_Id format and devices may not be shown correctly by <code>cfgadm(1M)</code> .	<p>Use the following operations to display all of the PCI slots.</p> <ol style="list-style-type: none"> <li>1) <code>devfsadm</code> (at Solaris prompt)</li> <li>2) <code>cfgadm</code></li> </ol>
6519290	Large amounts of I/O on swap devices can cause the system to appear hung by overwelling the I/O system. The amount of I/O required can be generated through a number of ways, eg memory shortage, heavy use of <code>/tmp</code> etc.	<p>Set the following to <code>/etc/system</code> and then reboot the domain:</p> <pre>set maxfastscan=0x2000</pre>
6520990	Domain may cause a panic when <code>deleteboard(8)</code> command for kernel board by using Dynamic Reconfiguration (DR).	<p>To mask this error, add the following entry to the <code>/etc/system</code> file.</p> <pre>set drmach:fmem_timeout = 30</pre>
6522017	DR and ZFS may not be used in the same domain.	<p>Set the maximum size of the ZFS ARC lower. For detailed assistance please contact Sun Service.</p>
6522433	After the CPU hardware error occurred, the <code>fmddump(1M)</code> command on the domain may display an incorrect faulty component.	<p>Check system status on XSCF.</p>
6525010	PCIe correctable errors can be recorded in the FMA error log.	<p>Add the following entry to <code>/etc/system</code> to prevent the problem:</p> <pre>set pcie:pcie_aer_ce_mask = 0x2001</pre>
6527781	The <code>cfgadm</code> command fails while moving the DVD/DAT drive between two domains.	<p>There is no workaround. To reconfigure DVD/Tape drive, execute <code>reboot -r</code> from the domain exhibiting the problem.</p>

**TABLE 6** Specific Issues and Workarounds Concerning Solaris (Continued)

CR ID	Description	Workaround
6527811	showhardconf(8) on XSCF can not display PCI card information that is installed in External I/O Expansion Unit, if the External I/O Expansion Unit is configured using PCI hotplug.	No workaround is available at this time. In case of each PCI card in the External I/O Expansion Unit is configured using PCI hotplug, the PCI card information is displayed correctly.
6529479	ereport.io.ddi.fm-capability error messages may be logged in ereport during system reboot.	None available at this time. Ignore the messages.
6529714	Warning messages occur while trying to configure more than four X4447A-Z or X1027A-Z1 cards into one I/O Boat.	No workaround available at this time.
6530178	DR addboard(8) command can hang. Once problem is observed, further DR operations are blocked. Recovery requires reboot of the domain.	There is no workaround. Check availability of a patch for this bug.
6530288	Ap_Id format may not be shown correctly by cfgadm(1M) command.	None available at this time.
6530753	Some of the PCI slots in the External I/O Expansion Unit PCI slots are not displayed during a normal boot operation.	Use one of the following operations to display all of the PCI slots. <ul style="list-style-type: none"> <li>• boot -r (at open boot prompt)</li> <li>• devfsadm -C (at Solaris prompt)</li> <li>• cfgadm (twice at Solaris prompt)</li> </ul>
6531036	The error message network initialization failed appears repeatedly after a boot net installation.	There is no workaround.
6531668	System hangs when executing parallel hot plug operation with SP DR in suspend phase.	No workaround available at this time.
6532215	volfs or dscp service may fail when domain is booted.	Restart the service if the failure is observed. To avoid the problem, issue the following commands.
	<pre> svc:/platform/sun4u/dscp:default: Method "/lib/svc/method/svc-dscp start" failed with exit status 95. </pre>	<pre> # svccfg -s dscp setprop start/timeout_seconds=count: 300 # svccfg -s volfs setprop start/timeout_seconds=count: 300 </pre>
	<pre> svc:/system/filesystem/volfs:default: Method or service exit timed out. Killing contract 59. </pre>	<pre> # svcadm refresh dscp # svcadm refresh volfs </pre>

**TABLE 6** Specific Issues and Workarounds Concerning Solaris (Continued)

CR ID	Description	Workaround
6534471	Domain may panic.	Add the following line to /etc/system and reboot the domain. <pre>set heaplp_use_stlb=0</pre> This bug has been fixed in 125100-06.
6535564	PCI hot plug to PCI slot #0, #1 or External I/O Expansion Unit may fail on XSB added by DR.	There is no workaround. Use DR instead of PCI hot plug if need to add or remove PCI card on the XSB.
6536564	showlogs(8) and showstatus(8) command on XSCF might report wrong I/O component due to wrong diagnosis by Solaris Fault management Architecture when faults in I/O devices occur.	To avoid this problem, issue the following commands on the domain. <pre># cd /usr/platform/SUNW,SPARC-Enterprise/lib/fm/topo/plugins # mv ioboard.so ioboard.so.orig # svcadm restart fmd</pre> <p>If the following messages are displayed on the domain, contact a sales representative or a certified service engineer.</p> <p>Example:</p> <pre>SUNW-MSG-ID: SUNOS-8000-1L, TYPE: Defect, VER: 1, SEVERITY: Minor EVENT-TIME: Sun May 6 18:22:24 PDT 2007 PLATFORM: SUNW,SPARC-Enterprise, CSN: BE80601007, HOSTNAME: sparc</pre> This bug has been fixed in 125369-05.
6537511	Bluetooth partner is hung during security tests execution	Restart application server
6539084	Sun PCIe Quad-port Gigabit Ethernet Adapter UTP card(X4447A-Z) might panic during a reboot.	There is no workaround. Check for the availability of a patch for this defect. This bug has been fixed in 125670-01.
6539909	Do not use the following I/O cards for network access when you are using the boot net install command to install the Solaris OS: <ul style="list-style-type: none"> <li>• X4447A-Z/X4447A-Z, PCIe Quad-port Gigabit Ethernet Adapter UTP</li> <li>• X1027A-Z/X1027A-Z, PCIe Dual 10 Gigabit Ethernet Fiber XFP</li> </ul>	When running Solaris 10 11/06, use an alternate type of network card or onboard network device to install the Solaris OS via the network.  This defect does not exist in Solaris 10 8/07.

**TABLE 6** Specific Issues and Workarounds Concerning Solaris (Continued)

CR ID	Description	Workaround
6542632	Memory leak in PCIe module if driver attach fails.	There is no workaround. Check for the availability of a patch for this defect.
6545685	If the following message displayed on the OS console, memory degradation or XSB deconfiguration may occur in the subsequent reboot.  Example: mc-opl: WARNING: mc-opl rewrite timeout on /LSB0/B0	Add the following to /etc/system and then reboot the domain: <pre>set mc-opl: mc_max_rewrite_loop = 10000</pre>
6546188	The system panics when running hotplug (cfgadm) and DR operations (addboard and deleteboard) on the following cards: <ul style="list-style-type: none"> <li>• X4447A-Z, PCI-e Quad-port Gigabit Ethernet Adapter UTP</li> <li>• X1027A-Z1, PCI-e Dual 10 Gigabit Ethernet Fiber XFP Low profile Adapter</li> </ul>	There is no workaround. Check for the availability of a patch for this defect.
6551356	The system panics when running hotplug (cfgadm) to configure a previously unconfigured card. The message "WARNING: PCI Expansion ROM is not accessible" will be seen on the console shortly before the system panic. The following cards are affected by this defect: <ul style="list-style-type: none"> <li>• X4447A-Z, PCI-e Quad-port Gigabit Ethernet Adapter UTP</li> <li>• X1027A-Z1, PCI-e Dual 10 Gigabit Ethernet Fiber XFP Low profile Adapter</li> </ul>	Perform <code>cfgadm -c disconnect</code> to completely remove the card. After waiting at least 10 seconds, the card may be configured back into the domain using the <code>cfgadm -c configure</code> command.
6556742	The system panics when DiskSuite can not read the metadb during DR. This bug affects the following cards: <ul style="list-style-type: none"> <li>• SG-XPCIE2FC-QF4, 4Gb PCI-e Dual-Port Fibre Channel HBA</li> <li>• SG-XPCIE1FC-QF4, 4Gb PCI-e Single-Port Fibre Channel HBA</li> <li>• SG-XPCI2FC-QF4, 4Gb PCI-X Dual-Port Fibre Channel HBA</li> <li>• SG-XPCI1FC-QF4, 4Gb PCI-X Single-Port Fibre Channel HBA</li> </ul>	Panic can be avoided when a duplicated copy of the metadb is accessible via another Host Bus Adaptor. Or you can apply patch 125166-06.

**TABLE 6** Specific Issues and Workarounds Concerning Solaris (Continued)

CR ID	Description	Workaround
6559504	<p>Messages of the form <code>nxge: NOTICE: nxge_ipp_eccue_valid_check: rd_ptr = nnn wr_ptr = nnn</code> will be observed on the console with the following cards:</p> <ul style="list-style-type: none"> <li>• X4447A-Z, PCI-e Quad-port Gigabit Ethernet Adapter UTP</li> <li>• X1027A-Z1, PCI-e Dual 10 Gigabit Ethernet Fiber XFP Low profile Adapter</li> </ul>	These messages can be safely ignored.
6563785	<p>Hot-plug operation with the following cards might fail if a card is disconnected and then immediately reconnected:</p> <ul style="list-style-type: none"> <li>• SG-XPCIE2SCSIU320Z Sun StorageTek PCI-E Dual-Port Ultra320 SCSI HBA</li> <li>• SGXPCI2SCSILM320-Z Sun StorageTek PCI Dual-Port Ultra320 SCSI HBA</li> </ul>	After disconnecting a card, wait for a few seconds before re-connecting.
6564332	Hot-plug operations on Sun Crypto Accelerator (SCA)6000 cards can cause SPARC Enterprise M8000/M9000 servers to panic or hang.	Version1.0 of the SCA6000 driver does not support hot-plug and should not be attempted. Version1.1 of the SCA6000 driver and firmware will support hot-plug operations after the required bootstrap firmware upgrade has been performed.
6564934	<p>Performing a DR <code>deleteboard</code> operation on a board which includes Permanent Memory when using the following network cards will result in broken connections:</p> <ul style="list-style-type: none"> <li>• X4447A-Z, PCI-e Quad-port Gigabit Ethernet Adapter UTP</li> <li>• X1027A-Z1, PCI-e Dual 10 Gigabit Ethernet Fiber XFP Low profile Adapter</li> </ul>	Re-configure the affected network interfaces after the completion of the DR operation. For basic network configuration procedures, refer to the <code>if manpage</code> for more information.
6568417	<p>After a successful CPU DR <code>deleteboard</code> operation, the system panics when the following network interfaces are in use:</p> <ul style="list-style-type: none"> <li>• X4447A-Z, PCI-e Quad-port Gigabit Ethernet Adapter UTP</li> <li>• X1027A-Z1, PCI-e Dual 10 Gigabit Ethernet Fiber XFP Low profile Adapter</li> </ul>	<p>Add the following line to <code>/etc/system</code> and reboot the system:</p> <pre>set ip:ip_soft_rings_cnt=0</pre>
6571370	<p>Use of the following cards have been observed to cause data corruption in stress test under laboratory conditions:</p> <ul style="list-style-type: none"> <li>• X4447A-Z, PCI-e Quad-port Gigabit Ethernet Adapter UTP</li> <li>• X1027A-Z1, PCI-e Dual 10 Gigabit Ethernet Fiber XFP Low profile Adapter</li> </ul>	<p>Add the following line in <code>/etc/system</code> and reboot:</p> <pre>set nxge:nxge_rx_threshold_hi=0</pre>

**TABLE 6** Specific Issues and Workarounds Concerning Solaris (Continued)

CR ID	Description	Workaround
6572593	fmdump(1M) may show wrong faulty component when IOU hardware error occurs.	Check system status on XSCF.
6584984	On SPARC Enterprise M8000/M9000 servers, busstat(1M) command may cause rebooting of domains.	None available at this time. Do not use busstat(1M) command. Check for the availability of a patch for this defect.
6588650	On occasion, the system is unable to DR after an XSCF failover or XSCF reboot.	There is no workaround. Check for the availability of a patch for this defect.
6589833	The DR addboard command might cause a system hang if you are adding a Sun StorageTek Enterprise Class 4Gb Dual-Port Fibre Channel PCI-E HBA card (SGXPCIE2FC-QF4) at the same time that an SAP process is attempting to access storage devices attached to this card. The chance of a system hang is increased if the following cards are used for heavy network traffic: <ul style="list-style-type: none"><li>• X4447A-Z, PCI-e Quad-port Gigabit Ethernet Adapter UTP</li><li>• X1027A-Z1, PCI-e Dual 10 Gigabit Ethernet Fiber XFP Low profile Adapter</li></ul>	There is no workaround. Check for the availability of a patch for this defect.
6592302	Unsuccessful DR operation leaves memory partially configured.	To recover, add the board back to the domain with the addboard command, then retry the deleteboard command.



# Identifying Permanent Memory in a Target Board

1. Log in to XSCF.
2. Execute the following command:

```
XSCF> showdevices -d domain_id
```

The following example shows a display of the `showdevices -d` command where 0 is the `domain_id`.

```
XSCF> showdevices -d 0

...

Memory:
-----

  board      perm      base          domain  target deleted remaining
DID XSB  mem MB  mem MB  address  mem MB  XSB  mem MB  mem MB
00 00-0   8192     0 0x0000000000000000  24576
00 00-2   8192   1674 0x000003c000000000  24576
00 00-3   8192     0 0x0000034000000000  24576

...
```

The entry for column 4 perm mem MB indicates the presence of permanent memory if the value is non-zero.

The example shows permanent memory on 00-2, with 1674 MB.

If the board includes permanent memory, when you execute the `deleteboard` command or the `moveboard` command, the following notice appears:

```
System may be temporarily suspended, proceed? [y|n]:
```

# Software Documentation Updates

This section contains late-breaking software information that became known after the documentation set was published and corrections in the SPARC Enterprise M8000/M9000 Servers Software documentation.

The corrections for SPARC Enterprise M4000/M5000/M8000/M9000 Servers XSCF Reference Manual, if not otherwise specified, also apply to the man pages which XSCF provides. And they supersede the information on the man pages.

[TABLE 7](#) lists known documentation updates.

**TABLE 7** Documentation Updates

Title	Page Number	Update
All SPARC Enterprise M8000/M9000 servers documentation		All DVD references are now referred to as CD-RW/DVD-RW.
ioxadm(8) man page		The required privileges for the <code>ioxadm(8)</code> command are as follows: Required Privileges    Commands platop                    env, list platadm                  env, list, locator, poweroff, poweron fieldend                 env, list, locator, poweroff, poweron, reset, settled
showldap(8) man page showlookup(8) man page showemailreport(8) man page		The man pages for <code>showldap(8)</code> , <code>showlookup(8)</code> and <code>showemailreport(8)</code> do not state that these commands are available with the <code>fieldeng</code> privilege.
setaudit(8) man page showaudit(8) man page		The <code>setaudit(8)</code> and <code>showaudit(8)</code> man pages are incorrect with respect to audit class information. The following are the audit classes and their values: ACS_SYSTEM              1 ACS_WRITE                2 ACS_READ                 4 ACS_LOGIN                8 ACS_AUDIT                16 ACS_DOMAIN               32 ACS_USER                 64 ACS_PLATFORM            128 ACS_MODES                256

**TABLE 7** Documentation Updates (*Continued*)

Title	Page Number	Update
SPARC Enterprise M4000/M5000/M8000/ M9000 Servers Dynamic Reconfiguration (DR) User's Guide	2-27	<p data-bbox="648 239 943 262">2.5 "Operation Management"</p> <p data-bbox="648 270 1033 293">The following sections will be added:</p> <p data-bbox="648 302 872 324">2.5.6, "XSCF Failover"</p> <p data-bbox="648 333 1300 418">An XSCF failover might prevent a DR operation from completing. To check, log in to the active XSCF, check the status of the system board and, if necessary, repeat the DR operation.</p> <p data-bbox="648 461 1048 484">2.5.7, "Kernel Memory Board Deletion"</p> <p data-bbox="648 493 1282 578">If an XSCF failure or failover occurs during the Copy-rename phase of a <code>deleteboard(8)</code> or <code>moveboard(8)</code> operation, the Solaris OS may panic and display the following message:</p> <div data-bbox="676 614 1322 652" style="border: 1px solid black; padding: 5px;"><pre data-bbox="684 621 1129 638">Irrecoverable FMEM error <i>error_code</i></pre></div> <p data-bbox="648 687 1300 795">If you see this message, log in to the XSCF again to check status. You may have to reboot the Solaris OS and, on the XSCF, check system board status, specify the kernel memory board, and repeat the DR operation.</p> <p data-bbox="648 838 1082 861">2.5.8, "Deletion of Board with DVD Drive"</p> <p data-bbox="648 869 1290 921">To delete the system board to which the server's DVD drive is connected, execute the following steps:</p> <ol data-bbox="648 930 1262 953" style="list-style-type: none"><li data-bbox="648 930 1262 953">1. Stop the <code>vold(1M)</code> daemon by disabling the <code>volfs</code> service.</li></ol> <div data-bbox="676 991 1322 1029" style="border: 1px solid black; padding: 5px;"><pre data-bbox="684 998 1112 1015"># /usr/sbin/svcadm disable volfs</pre></div> <ol data-bbox="648 1067 1282 1124" style="list-style-type: none"><li data-bbox="648 1067 939 1090">2. Execute the DR operation.</li><li data-bbox="648 1098 1282 1121">3. Restart the <code>vold(1M)</code> daemon by enabling the <code>volfs</code> service.</li></ol> <div data-bbox="676 1159 1322 1197" style="border: 1px solid black; padding: 5px;"><pre data-bbox="684 1166 1100 1183"># /usr/sbin/svcadm enable volfs</pre></div> <p data-bbox="648 1234 1129 1256">For details, see the <code>vold(1M)</code> Solaris man page.</p>

