



# SPARC Enterprise™ M8000/M9000 Servers Product Notes

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For XCP Version 1090

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# Preface

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These product notes contain late-breaking information about the SPARC Enterprise™ M8000/M9000 servers 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/>

**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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Sun Microsystems Software (for Solaris OS, etc.) Related Manuals

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

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For Users in Other Countries:  
SPARC Enterprise contact

[http://www.fujitsu.com/global/contact/computing/sparce\\_index.html](http://www.fujitsu.com/global/contact/computing/sparce_index.html)



# General Information About XCP 1090

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This section describes the general information about XCP 1090.

- ["What's New in XCP 1090"](#)
  - ["Supported Firmware and Software"](#)
  - ["Updating to XCP 1090"](#)
  - ["Functionality Issues and Limitations"](#)
- 

## What's New in XCP 1090

In XCP version 1090, the following new feature is introduced:

- The SPARC64™ VII processor of 2.88 GHz frequency now can be mounted on the SPARC Enterprise™ M8000/M9000 servers.
- On the SPARC Enterprise M8000/M9000 servers, the Airflow indicator has been added. For detail, see ["Airflow Indicator" on page 2](#).
- The following new XSCF command is supported:
  - `showdateoffset(8)`

For detail, see the manual pages for the command.

- The following new XSCF commands are supported:
  - `setsunmc(8)`
  - `showsunmc(8)`

For detail, see the manual pages for each command.

- The section of "CPU Upgrade," which was at the end of this Product Notes, has been moved to the *SPARC Enterprise M8000/M9000 Servers Service Manual*.

# Airflow Indicator

The Airflow indicator has been added to the SPARC Enterprise M8000/M9000 servers with XCP 1090. The Airflow indicator confirms the amount of airflow emitted while the SPARC Enterprise M8000/M9000 servers are up and running.

To display the amount of exhaust air, use the `showenvironment air` command.

```
XSCF> showenvironment air
Air Flow:5810CMH
```

**Note** – Airflow monitoring measurement value is for reference only.

For details of the `showenvironment(8)` command, refer to the man page. For installation details of the SPARC Enterprise M8000/M9000 servers, see the *SPARC Enterprise M8000/M9000 Servers Site Planning Guide* and the *SPARC Enterprise M8000/M9000 Servers Installation Guide*.

You can also obtain the exhaust air data using the SNMP agent function. To obtain the data of exhaust air using the SNMP agent function, install the latest XSCF extension MIB definition file to the SNMP manager. For details on the XSCF extension MIB definition file, see the *SPARC Enterprise M3000/M4000/M5000/M8000/M9000 Servers XSCF User's Guide*.

## Supported Firmware and Software

The following firmware and operating system (OS) are supported depending on the processors being installed on the SPARC Enterprise M8000/M9000 servers..

**TABLE 1** Supported Firmware and Operating System Versions

Installed Processors	XCP Version	Operating System Version
SPARC64 VI processors	XCP 1040 or later	Solaris 10 11/06 or later, with required patches
SPARC64 VII processors		
2.52 GHz	XCP 1070 or later	Solaris 10 8/07 or later, with required patches
2.88 GHz	XCP 1090 or later	Solaris 10 10/08 or later

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**Note** – 8GB DIMM is supported in XCP 1081 or later.

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**Note** – You cannot boot a domain mounted with the SPARC64™ VII processors using the Solaris™ 10 8/07 installation DVD. Use the Solaris 10 5/08 or later installation DVD to boot a domain mounted with the SPARC64 VII processors.

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For XCP, you can download the latest files of firmware at the following websites.

Global Site:  
<http://www.fujitsu.com/sparcenterprise/firmware/>

Japanese Site:  
<http://primeserver.fujitsu.com/sparcenterprise/download/firmware/>

Many web browsers support the XSCF Web. The browsers in [TABLE 2](#) have demonstrated compatibility with the XSCF Web through testing.

**TABLE 2**    Tested Web Browser Versions

Web Browser Application	Version
Microsoft® Internet Explorer	6.0 and 7.0
Firefox (Solaris 10)	2.0*

\* The Firefox 3 is not supported in XSCF Web.

## Solaris OS Patch Information

This section lists mandatory patches for the SPARC Enterprise M8000/M9000 servers.

For additional Solaris Operating System information, see [“Solaris OS Issues and Workarounds” on page 43](#).

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

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**Note** – Apply the patches in the following order. For the procedures of CPU upgrade including the patches, see *SPARC Enterprise M8000/M9000 Servers Service Manual*.

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Patches are not required for servers running Solaris 10 10/08 OS or later.

## Patches for Solaris 10 5/08

The following patch is required for all M8000/M9000 servers running Solaris 10 5/08 OS:

- 137137-09

## Patches for Solaris 10 8/07

The following patches are required for Solaris 10 8/07 OS only on servers containing SPARC64 VII processors:

- 119254-51 or later
- 125891-01 or later
- 127755-01 or later
- 127127-11

## Patches for Solaris 10 11/06

The following patches are required for Solaris 10 11/06 OS. Note that Solaris 10 11/06 OS does not support SPARC64 VII processors, even with these required patches:

- 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
- 125670-02 or later

## Patches for Emulex PCI Express (PCIe) Cards

The following Emulex cards require drivers supplied in patch 120222-26:

- XSEFC402AF Sun StorageTek Enterprise Class 4Gb Dual-Port Fibre Channel PCI-E HBA



- XSEFC401AF Sun StorageTek Enterprise Class 4Gb Single-Port Fibre Channel PCI-E HBA

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## Updating to XCP 1090

To update your XCP to XCP 1090, please pay attention to the following points depending on your current XCP version.

You can upgrade to XCP 1090 from XCP version 1050 or later. Refer to the *SPARC Enterprise M3000/M4000/M5000/M8000/M9000 Servers XSCF User's Guide* for instructions.

## Resetting the XSCF Firmware

After updating the XCP firmware to 1090, do not fail to reset the XSCF by using the `rebootxscf(8)` command.

## Updating from a Version Earlier Than XCP 1050

- You cannot update to XCP 1090 directly.  
If you are currently running a version earlier than XCP 1050, you must first update to an interim version of XCP between 1050 and 1070 (inclusive) before updating to XCP 1090. Refer to the product notes document for the interim version for instructions.
- Delete any accounts named "admin".  
Any accounts named admin must be deleted prior to updating to XCP 1050 or later. This account name is reserved in XCP 1050 and later. Use the `deleteuser(8)` command to delete the account.

## Updating from a Version Earlier Than XCP 1070

On a domain which has been in operation during the XCP update to 1090, when you perform Dynamic Reconfiguration (DR) to add or replace the SPARC64 VII processors, you need to update the OpenBoot™ PROM firmware. The OpenBoot PROM firmware is updated as you update the XCP and restart the domain. For this reason, it is strongly recommended to restart all the domains after you update the firmware to XCP 1090, regardless of whether you added or replaced the SPARC64 VII processors.

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# Functionality Issues and Limitations

This section describes the known issues and limitations at the time of this release.

## Limitations for SPARC64 VII Processors



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**Caution** – You must complete the upgrades to the XCP firmware and to Solaris OS before inserting the CPU/memory board unit of SPARC 64 VII processors into the chassis.

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## Notes on Airflow Indicator

- The amount of exhaust air might not be indicated correctly in the MIB information, in the `showenvironment air` command output, and on the XSCF Web in the following cases; and you should wait for one minute and check the value again.
  - During the server powering on or powering off, or for a while after the power-on or power-off complete
  - During the active replacement of power supply unit, or for a while after the active replacement complete
- The figures on the airflow indicator represent the volume of air exhausted from the server. The figures of peripheral devices are not included.

## Notes on NTP Server

- When using XSCF as the NTP server of the domain, configure it so as not to block the ICMP protocol of the DNS server and the NTP server which the XSCF refers to.
- We recommend the domain to use the XSCF Unit as NTP server. In this case, pay attention to the following points:
  - XSCF must be connected to an external NTP server
  - When you connect one or more NTP servers in addition to XSCF, connect the same NTP server as XSCF is using

For details on NTP server, contact a service engineer. For details on NTP settings, refer to the *SPARC Enterprise M3000/M4000/M5000/M8000/M9000 Servers XSCF User's Guide*.

## Notes on the NTP Server Referring to the Local Clock

When the NTP server which XSCF refers to is referring to the server's own system time (local clock), and when the address of "127.127.1.0" is set to that local clock, time synchronization in XSCF might fail.

The address of the XSCF's own local clock is fixed to "127.127.1.0." On the other hand, when the address of the local clock of the NTP server which XSCF refers to is set to "127.127.1.0," the address of the clock source (refid) has the same value as the address of the XSCF's own local clock. An NTP server like this is excluded from the target of XSCF time synchronization.

You can execute the `showntp -l` command to refer to the address of the NTP server's own clock source which is set in XSCF and the address of the XSCF's own local clock.

```
XSCF> showntp -l
remote refid st t when poll reach delay offset jitter
=====
192.168.1.2 LOCAL(0) 3 u 10 1024 377 0.000 0.000 0.000
*127.127.1.0 .LOCL. 5 l 28 64 377 0.000 0.000 0.008
```

Of the two NTP server outputs, the upper (192.168.1.2) indicates the NTP server which is set by using the `setntp(8)` command. The refid is `LOCAL(0)`, which means that the local clock which has the address of "127.127.1.0" is set to the clock source of this NTP server. On the other hand, the lower indicates the XSCF's own local clock. The address of the XSCF's own local clock is fixed to "127.127.1.0." Due to this, the NTP server (192.168.1.2) is excluded from the target of XSCF time synchronization; which results in the XSCF synchronizes with its own local clock.

With any of the following measures to avoid the trouble, time can be correctly synchronized with the NTP server which is set by using the `setntp(8)` command.

- **Change the clock source that the NTP server being set in XSCF refers to**

Use the `showntp -l` command and check the clock source of the NTP server which is set in XSCF. An NTP server which indicates the refid of `LOCAL(0)` in the output is referring to the local clock which has the address of "127.127.1.0," and you should change it to refer to another clock source.

When you change the clock source of an NTP server, make sure in advance that it has no impact on other NTP clients.

- **Change the address of the local clock of the NTP server**

Of the NTP server which XSCF refers to, change the address of the local clock to "127.127.1.1," "127.127.1.2," or "127.127.1.3." Change `/etc/inet/ntp.conf` of Solaris OS. To enable the change, restart of the NTP daemon is required.

When you change the address of the local clock of an NTP server, make sure in advance that it has no impact on other NTP clients.

- **Change the stratum value of the NTP server**

Of the NTP server which XSCF refers to, change the stratum value to "1." An NTP server which has the stratum value of "1" becomes the most significant clock source and has no refid. Therefore, there is no chance that it will have the same address as the XSCF's own local clock.

When you change the stratum value of an NTP server, make sure in advance that it has no impact on other NTP clients.

## General Functionality Issues and Limitations



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**Caution** – For dynamic reconfiguration (DR) and hot-plug issues, see [“Solaris OS Issues and Workarounds” on page 43.](#)

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- Do not use the internal CD-RW/DVD-RW drive unit and the TAPE drive unit at the same time.
- For this XCP release, the XSCF browser user interface (XSCF Web) does not support the External I/O Expansion Unit Manager feature.
- The log archive feature by the `setarchiving(8)` and the `showarchiving(8)` commands, and the Log Archives menu of XSCF Web is not supported now.
- When you use the external power control interface of the external power controller, the following notification signals are not supported:
  - The OS panic or the server hardware error signal (\*CPUN/RTNU)
  - The server hardware error signal (power fail, temperature error, and fan error) (\*ALARM)
- 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.
- No more than four 4447A-Z/X4447A-Z, PCIe Quad-port Gigabit Ethernet Adapter UTP cards in an External I/O Expansion Unit (two per PCIe I/O boat).
- On the SPARC Enterprise M8000/M9000 servers with XCP 1050 or later, the dual XSCF Unit feature is working. Therefore, you can not downgrade SPARC Enterprise M8000/M9000 servers with XCP 1050 or later to XCP 1040 or XCP 1041, which does not support dual XSCF Unit feature.
- You cannot use the following user account names, as they are reserved for system use: `root`, `bin`, `daemon`, `adm`, `operator`, `nobody`, `sshd`, `rpc`, `rpcuser`, `ldap`, `apache`, `ntp`, `admin`, and `default`.

- To use XSCF Web, disable the cache function of your browser. If you leave the browser cache function enabled, the old cached data might be displayed. To disable the cache function:
  - Internet Explorer 6 and 7
 

[Tools] -> [Internet Options...] -> [Advanced] tab and check the "Do not save encrypted pages to disk" box.
  - Netscape 7.1 or later
 

[Edit] -> [Preferences] -> [Advanced] -> [Cache] -> [Compare the page in the cache to the page on the network] setting and select the "Every time I view the page" radio button.
  - Firefox 2
 

Type "about:config" in address box, then type "cache" in filter box. Change the "browser.cache.check\_doc\_frequency" settings value to "1."
- Using the XSCF Web, when you import XCP or update the firmware, Session ID error may be displayed on the web browser. And Internal Server Error might be displayed when you perform the firmware update. Please close the current browser and open the new browser to reconnect to XSCF Web.
- When you use the XSCF Web, if a plug-in such as the search tool installed with the browser, remove the plug-in or disable the pop-up blocking.
- XSCF-LAN is compliant with auto-negotiation. When you connect XSCF-LAN and the network device which has been fixed to the full-duplex mode, according to the IEEE 802.3 rule, XSCF-LAN communicates in the half-duplex mode. Due to this, network communication speed may slow down or communication error may occur. Do not fail to set the network device which connects with XSCF-LAN to the auto-negotiation mode.
- While you are performing DR operation to a COD board, do not execute the `addcodlicense(8)/deletecodlicense(8)/setcod(8)` command.
- At this time the `restoredefaults(8)` command is not supported.
- At this time the `-e, -l, -P` options of the `snapshot(8)` command are not supported.

# Information About Hardware

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This section describes the special instructions and the issues about the SPARC Enterprise M8000/M9000 servers hardware.

- ["Antistatic Precautions"](#)
- ["Notes on DVD Drive and Discs"](#)
- ["Notes on the Use of USB Memory"](#)
- ["Power Control and Operator Panel Mode Switch"](#)
- ["Hardware Issues and Workarounds"](#)
- ["Hardware Documentation Updates"](#)

---

## Antistatic Precautions

To insert or remove a FRU which allows hot replacement or hot addition, you must use the antistatic wrist strap and properly attach the band of the wrist strap to one of your wrists to remove the static of FRU in advance.



---

**Caution** – When handling FRUs, be sure to connect an antistatic wrist strap clip to a cabinet grounding port and attach the band of the wrist strap to one of your wrists. Place the removed FRUs on an antistatic conductive mat. Failure to do so might result in serious damage.

---

This section provides information on the method of wearing the wrist strap and the band of the wrist strap to handle the following FRUs that described in the *SPARC Enterprise M8000/M9000 Servers Service Manual*.

- Chapter 6: Replacement of CPU/Memory Board Unit (CMU), CPU, and DIMM
- Chapter 7: I/O Unit (IOU) Replacement

Be sure to observe the precautions when handling the FRUs described in the above chapters. Failure to do so might result in serious damage.

Prior to replacing a CMU or IOU, connect an antistatic wrist strap clip to a cabinet grounding port and attach the band of the wrist strap to one of your wrists.

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**Note** – For the locations of the cabinet grounding port, see [FIGURE 1-2](#) to [FIGURE 1-5](#).

---

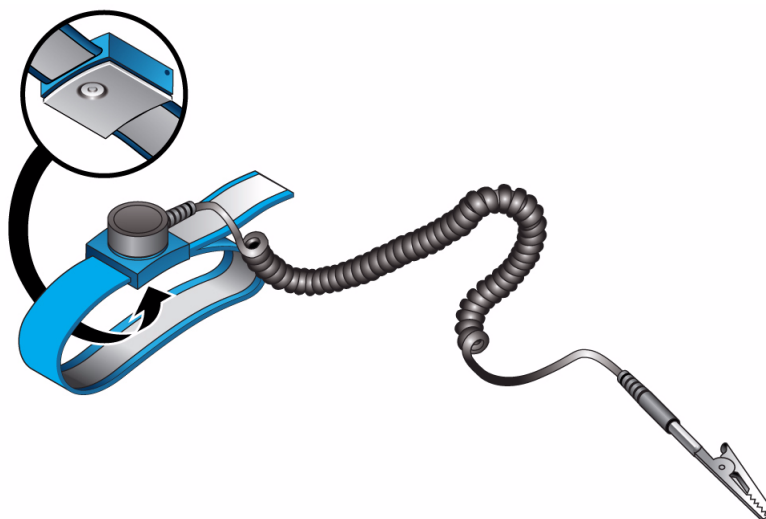


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**Caution** – Ensure that the metallic underside of the wrist strap is in direct contact with your skin. The wrist strap should be snug around the wrist so that it does not rotate.

---

**FIGURE 1-1** Antistatic Wrist Strap Showing the Metallic Underside



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**Caution** – Do not touch the CMU, IOU, or the dummy unit without wearing an antistatic wrist strap. Failure to do so might result in serious damage to operating domains.

---

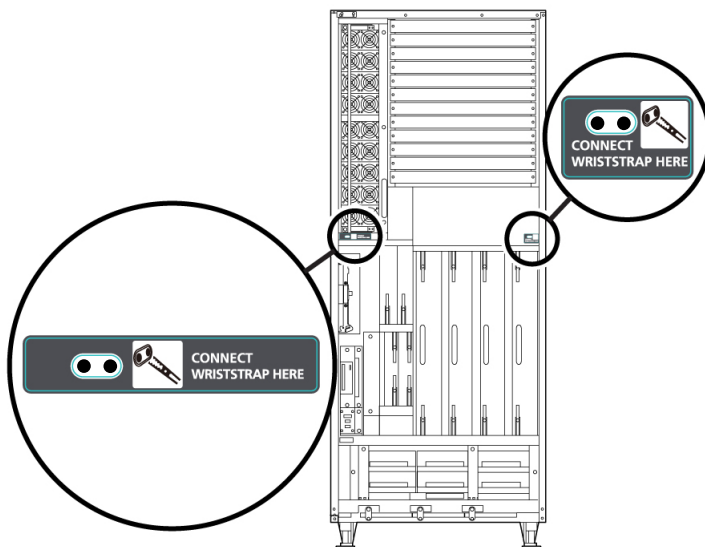


---

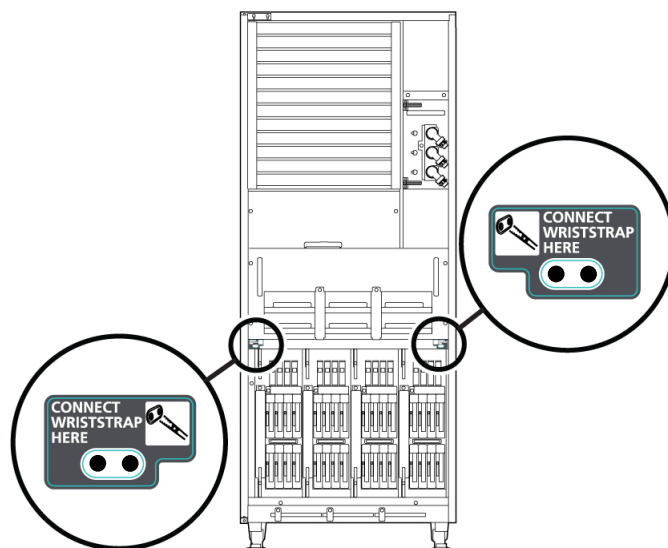
**Caution** – Before attempting to mount the new CMU or IOU in the system, you must remove static electricity from the new CMU or IOU by touching the new CMU or IOU by hand for more than 10 seconds while wearing a wrist strap.

---

**FIGURE 1-2** M8000 Grounding Port Connection Locations for the Wrist Strap Clip (Front View)

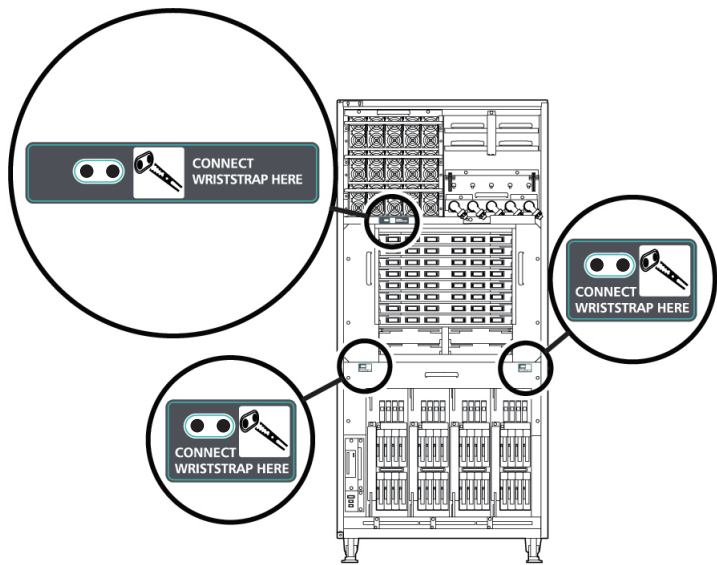


**FIGURE 1-3** M8000 Grounding Port Connection Locations for the Wrist Strap Clip (Rear View)

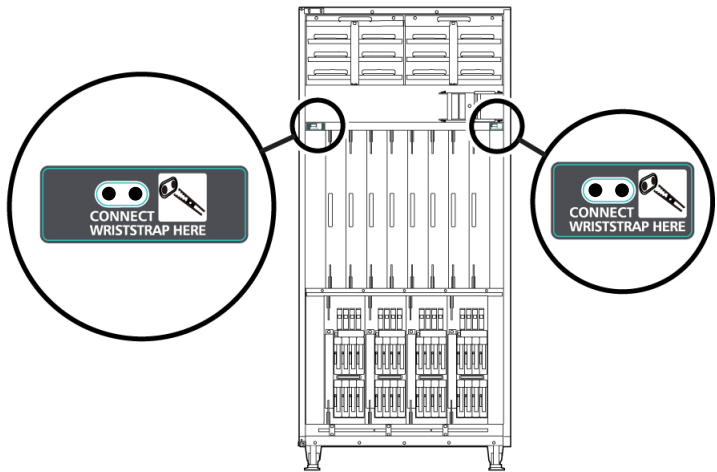




**FIGURE 1-4** M9000 Grounding Port Connection Locations for the Wrist Strap Clip (Front View)



**FIGURE 1-5** M9000 Grounding Port Connection Locations for the Wrist Strap Clip (Rear View)



---

## Notes on DVD Drive and Discs

See the "*Notes on DVD Drives and Discs in SPARC Enterprise*" on the website below before using the CD/DVD discs in the standard DVD drive mounted in this server.

URL:

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

---

## Notes on the Use of USB Memory

To execute the `dumpconfig(8)`, `restoreconfig(8)` or `snapshot(8)` command, if you specify USB memory as the destination to store data, prepare the USB memory as a medium in advance.

The data stored will include the information about the system. To use USB memory, you need to pay attention to the management of the USB memory in which the data stored, from the data security viewpoint.

We do not provide guarantees to every USB memory from any manufacturers that currently on the market against its connectivity to XSCF and proper operation. Depending on the USB memory in use, defects such as the XSCF firmware error or reset may occur. In case such defects occurred, stop the use of USB memory immediately.

To connect the USB memory to the USB port for XSCF, connect the USB memory directly to the USB port. If connected via USB hub or USB extension cables, it may cause errors.

---

## Power Control and Operator Panel Mode Switch

You can use the mode switch on the operator panel to switch between system power-on/off when you use the remote power control utilizing the RCI function or the automatic power control system (APCS).

For details, see the "Limitations and Cautions" in "Preface" of the *SPARC Enterprise M8000/M9000 Servers Service Manual*.

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# Hardware Issues and Workarounds

## DVD Drives and `cfgadm`

The Solaris `cfgadm(1M)` command does not always unconfigure a DVD drive from a domain on SPARC Enterprise M8000/M9000 servers.

Disable the Volume Management Daemon (`vold`) before unconfiguring a DVD drive with the `cfgadm(1M)` command. To disable `vold`, stop the daemon by issuing the command `/etc/init.d/volmgt stop`. After the device has been removed or inserted, restart the daemon by issuing the command `/etc/init.d/volmgt start`.

## Sun Crypto Accelerator 6000 Cards

If you are not using the correct version of the Sun Crypto Accelerator (SCA) 6000 card driver, hot-plug operations on SCA 6000 cards can cause SPARC Enterprise M8000/M9000 servers to panic or hang. Version 1.1 of the SCA6000 driver and firmware supports hot-plug operations after the required bootstrap firmware upgrade has been performed. Version 1.0 of the SCA6000 driver does not support hot-plug and should not be used.

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# Hardware Documentation Updates

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

[TABLE 3](#) lists known documentation updates.

**TABLE 3** Hardware Documentation Updates

Title	Page Number	Update
SPARC Enterprise M8000/M9000 Servers Site Planning Guide	1-35	For the order number of Vibration-proof bracket and Vibration-proof feet, see <a href="#">“Cabinet Stabilization Measures”</a> on page 24.

**TABLE 3** Hardware Documentation Updates (*Continued*)

Title	Page Number	Update
SPARC Enterprise M8000/M9000 Servers Site Planning Guide	3-6	"Cooling (Air-Conditioning) Requirements" in Section 3.2.1 will be corrected. See <a href="#">"Cooling (Air-Conditioning) Requirements" on page 17</a> for detail.
	3-10	The values of power consumption and apparent power in TABLE 3-5 "Specifications (Single-Phase Power Requirements)," TABLE 3-7 "Specifications (Three-Phase Delta Power Requirements)," and TABLE 3-8 "Specifications (Three-Phase Star Power Requirements)" in Section 3.3, will be corrected. See <a href="#">"Electrical Specifications" on page 18</a> for detail.
	3-15	
	3-18	
	3-26	"CPU Types and Server Maximum Power Consumption" in Section 3.3.6 will be corrected. See <a href="#">"CPU Types and Server Maximum Power Consumption" on page 19</a> for detail.
SPARC Enterprise M8000/M9000 Servers Overview Guide	1-11	TABLE 1-3 "Power consumption Examples," in Section 1.2.2, "Power Specifications" will be corrected. See <a href="#">"Electrical Specifications" on page 21</a> for detail.
SPARC Enterprise M8000/M9000 Servers Installation Guide (-06)	2-3	TABLE 2-1 "Ambient Environmental Requirements," in Section 2.2.1, "Checking Environmental Requirements" will be corrected. See <a href="#">"Ambient Environmental Requirements" on page 22</a> for detail.
	2-4	TABLE 2-3 "Power Supply Connection Specifications" The following note will be added. <b>Note</b> - For the servers that have the B-type plug, confirm that a 30A overcurrent protection device is available outside the server. If one is not available, prepare an external 30A overcurrent protection that can be achieved by means of no-fuse breakers (NFBs) or fuses. The B-type plug refers to plugs other than grounding-type ones with two parallel blades, such as the NEMA L6-30, L6-20, L6-15, and L5-15.
	3-36	3.4.3 "Connecting Cables Between XB Units"
	3-42	The following caution will be added. <b>Note</b> - If you are unable to obtain a torque screwdriver, finger tighten the clock cable connectors. Do not secure them with a regular screwdriver. Do not secure them with a regular screwdriver.
	3-51	3.6.2 "Initializing the XSCF" will be changed. See <a href="#">"Initializing the XSCF" on page 22</a> for detail.
SPARC Enterprise M8000/M9000 Servers Service Manual		To insert or remove a FRU which allows hot replacement or hot addition, you must use the antistatic wrist strap and properly attach the band of the wrist strap to one of your wrists to remove the static of FRU in advance. See <a href="#">"Antistatic Precautions" on page 10</a> for detail.

# 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

TABLE 3-4 lists the cooling and air-conditioning requirements for each system component.

**TABLE 3-4** Specifications (Cooling and Air-Conditioning Requirements)

Name	Heat dissipation [kJ/h]	Exhaust airflow [cmh(m 3/h)]	Cooling method	Air-conditioning type	Noise level [dBA]
SPARC Enterprise M8000 server	13968-37764 *	94	Overfloor/underfloor	Forced air cooling	67
SPARC Enterprise M9000 server (base cabinet)	22320-71532 *	102	Overfloor/underfloor	Forced air cooling	68
SPARC Enterprise M9000 server (base cabinet + expansion cabinet)	42912-142956 *	205	Underfloor ‡	Forced air cooling	69
Rack-mountable Dual Power Feed	- †	- †	Overfloor/underfloor	Forced air cooling	- †
Power Cabinet (SPARC Enterprise M8000 server)	- †	- †	Overfloor/underfloor	Forced air cooling	- †
Power Cabinet (for SPARC Enterprise M9000 server base cabinet)	- †	- †	Overfloor/underfloor	Forced air cooling	- †
Power Cabinet (for SPARC Enterprise M9000 server base cabinet + expansion cabinet)	- †	- †	Underfloor ‡	Forced air cooling	- †

\* Heat dissipation varies by power consumption. Determine the power consumption based on the actual system configuration and then confirm the right value.

† 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.

‡ At an installation altitude ranging from 0 to less than 400 m (1312 feet) above sea level, you can select overfloor cooling as the cooling method of the server.

# Electrical Specifications

**TABLE 3-5** Specifications (Single-Phase Power Requirements)

NAME	Power consumption [kW]	Apparent power [kVA]
SPARC Enterprise M8000 server	3.88-10.49 *	4.11-11.12 *
SPARC Enterprise M9000 server (base cabinet)	6.20-19.87 *	6.58-21.07 *
SPARC Enterprise M9000 server (base cabinet + expansion cabinet)	11.92-39.72 *	12.64-42.13 *

\* Maximum power consumption and apparent power vary by the type of CPU mounted. To plan the installation of a server equipped with different types of CPU, use the CPU of larger power consumption as a basis. For the types of CPU, see Section 3.3.6, "CPU Types and Server Maximum Power Consumption" on page 3-23.

**TABLE 3-7** Specifications (Three-Phase Delta Power Requirements)

NAME	Power consumption [kW]	Apparent power [kVA]
SPARC Enterprise M8000 server + Power Cabinet	3.88-10.49 *	4.11-11.12 *
SPARC Enterprise M9000 server (base cabinet) + Power Cabinet	6.20-19.87 *	6.58-21.07 *
SPARC Enterprise M9000 server (base cabinet + expansion cabinet) + Power Cabinet	11.92-39.72 *	12.64-42.13 *

\* Maximum power consumption and apparent power vary by the type of CPU mounted. To plan the installation of a server equipped with different types of CPU, use the CPU of larger power consumption as a basis. For the types of CPU, see Section 3.3.6, "CPU Types and Server Maximum Power Consumption" on page 3-23.

**TABLE 3-8** Specifications (Three-Phase Star Power Requirements)

NAME	Power consumption [kW]	Apparent power [kVA]
SPARC Enterprise M8000 server + Power Cabinet	3.88-10.49 *	4.11-11.12 *
SPARC Enterprise M9000 server (base cabinet) + Power Cabinet	6.20-19.87 *	6.58-21.07 *
SPARC Enterprise M9000 server (base cabinet + expansion cabinet) + Power Cabinet	11.92-39.72 *	12.64-42.13 *

\* Maximum power consumption and apparent power vary by the type of CPU mounted. To plan the installation of a server equipped with different types of CPU, use the CPU of larger power consumption as a basis. For the types of CPU, see Section 3.3.6, "CPU Types and Server Maximum Power Consumption" on page 3-23.

# CPU Types and Server Maximum Power Consumption

This section describes the CPU types and the maximum power consumption of the server. There are four types of CPU. The power specifications of the SPARC Enterprise M8000/M9000 servers vary depending on the CPU type and the system configurations.

TABLE 3-10 through TABLE 3-12 list the specifications of maximum power consumption, apparent power, and heat dissipation by the type of CPU. The figures represent the system configuration described below the table, in which every CPU/Memory Board Unit (CMU) is mounted with the same CPU.

**TABLE 3-10** CPU Types and Power Specifications on the M8000 Server \*

CPU	Frequency (GHz)	Number	Power Consumption (KW)	Apparent Power (KVA)	Heat dissipation (KJ/h)
SPARC64 VI processor	2.28	16	9.42	9.99	33912
	2.4	16	9.52	10.09	34272
SPARC64 VII processor	2.52	16	10.07	10.68	36252
	2.88	16	10.49	11.12	37764

\* The M8000 system configuration: CMU x 4, 4GB DIMM x 128, IOU x 4, HDD x 16, PCI-E x 32, DAT x1.

**TABLE 3-11** CPU Types and Power Specifications on the M9000 Server (Base Cabinet) \*

CPU	Frequency (GHz)	Number	Power Consumption (KW)	Apparent Power (KVA)	Heat dissipation (KJ/h)
SPARC64 VI processor	2.28	32	18.06	19.16	65016
	2.4	32	18.26	19.37	65736
SPARC64 VII processor	2.52	32	19.36	20.54	69696
	2.88	32	19.87	21.07	71532

\* The M9000 (base cabinet) system configuration: CMU x 4, 4GB DIMM x 128, IOU x 4, HDD x 16, PCI-E x 32, DAT x1.

**TABLE 3-12** CPU Types and Power Specifications on the M9000 Server (Base Cabinet + Expansion Cabinet) \*

CPU	Frequency (GHz)	Number	Power Consumption (KW)	Apparent Power (KVA)	Heat dissipation (KJ/h)
SPARC64 VI processor	2.28	64	36.11	38.30	129996
	2.4	64	36.51	38.73	131436
SPARC64 VII processor	2.52	64	38.71	41.06	139356
	2.88	64	39.72	42.13	142992

\* The M9000 (base cabinet + expansion cabinet) system configuration: CMU x 16, 4GB DIMM x 512, IOU x 16, HDD x 64, PCI-E x 128, DAT x2.



# Updates of the SPARC Enterprise M8000/M9000 Servers Overview Guide

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

## Electrical Specifications

**TABLE 3-1** Power consumption Examples

Item	M8000	M9000	
		Base cabinet only	Base cabinet + expansion cabinet
Ambient temperature	25 °C	25 °C	25 °C
Configuration* CMU : 2.52GHz CPU x 4, 4GB DIMM x 32	4	8	16
	IOU : 73GB HDD x 4, PCIe card x 8	8	16
Power consumption†	7.48 kW	14.64 kW	29.96 kW

\* 10Watt PCIe cards are installed.

† These power consumptions are just samples. You can see higher power consumption values depending on characteristics of your workload.

# Updates of the SPARC Enterprise M8000/M9000 Servers Installation Guide (-06)

The following information supersedes the information in the *SPARC Enterprise M8000/M9000 Servers Installation Guide (-06)*.

## Ambient Environmental Requirements

The table here corrects TABLE 2-1, "Ambient Environmental Requirements," in Section 2.2.1, "Checking Environmental Requirements" on page 2-3.

**TABLE 2-14** Ambient Environmental Requirement

	Operating Range	Non-Operating Range	Optimum
Ambient temperature	5 °C to 32 °C (41°F to 89.6 °F)	Unpacked: 0 °C to 50 °C (32 °F to 122 °F) Packed: -20 °C to 60 °C (-4 °F to 140 °F)	21°C to 23 °C (70 °F to 74 °F)
Relative humidity *	20 % RH to 80 % RH	to 93% RH	45 % RH to 50 % RH
Altitude restriction †	3,000 m (10,000 ft)	12,000 m (40, 000 ft)	
Temperature conditions	5 °C to 32 °C (41 °F to 89.6 °F) at an installation altitude ranging from 0 to less than 1500 m (4921 ft) above sea level 5 °C to 30 °C (41 °F to 86 °F) at an installation altitude ranging from 1500 m (4921 ft) to less than 2000 m (6562 ft) above sea level 5 °C to 28 °C (41 °F to 82.4 °F) at an installation altitude ranging from 2000 m (6562 ft) to less than 2500 m (8202 ft) above sea level 5 °C to 26 °C (41 °F to 78.8 °F) at an installation altitude ranging from 2500 m (8202 ft) to 3000 m (9843 ft) above sea level		

\* There is no condensation regardless of the temperature and humidity.

† All altitudes are above sea level.

## Initializing the XSCF

This is to correct 3.6.2 "Initializing the XSCF" on page 3-51. The section number will be changed to 3.6.3.

Before each XSCF function is used, configurations and checks must be performed. This section explains the settings and checks concerning the items listed below. For detailed procedures for these settings and checks, see the "Setup For Using XSCF"

section in the *SPARC Enterprise M4000/M5000/M8000/M9000 Servers XSCF User's Guide* and the *SPARC Enterprise M4000/M5000/M8000/M9000 Servers XSCF Reference Manual*.

- Registration of user accounts, passwords, and user privileges (adduser, password, and setprivileges)(Note 1)
- Time setting (setdate, settimezone)
- SSH/telnet setting (setssh, settelnet)
- Confirmation of the XSCF host public key (showssh)
- Network interface, routing, and DNS-related settings (setnetwork, setroute, setnameserver, and so on) (Note 2, Note 3)
- Domain to Service Processor Communications Protocol (DSCP)configuration (setdscp) (Note 3)
- Altitude setting (setaltitude) (Note 4)
- CD-RW/DVD-RW drive unit/Tape drive unit setting (cfgdevice)

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**Note –** (Note 1) In preparation for maintenance work, also prepare a user account for a field engineer (FE).

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**Note –** (Note 2) To apply the settings, the XSCF unit must be reset with the applynetwork and rebootxscf commands.

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**Note –** (Note 3) The same procedures are used to make network interface (XSCF-LAN, Domain to Service Processor Communications Protocol (DSCP), and so on), routing, and DNS-related settings after logging into the XSCFU#1 through a serial connection.

---

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**Note –** (Note 4) To apply the specified configuration, execute the rebootxscf command and reset XSCF.

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# Cabinet Stabilization Measures

## Vibration-proof bracket

order number: CA06620-H901

By specifying the above, you can issue an order to get the following four kinds of parts. (You should order the bolt separately.)

- Fixing bracket: C230-4130-X514 (x4)
- Bushing: C230-4080-X003 (x4)
- Metal washer: F6-WB12-121 (x4)
- Metal washer: F6-WM12-121 (x4)

Bolt: F6-B12-\*\*\*121 (Bolt diameter: M12)

\*\*\*= Bolt length (mm)

The bolt length must be specified here.

---

**Note** – Consult with the company that constructed the building because the length depends on the structure of the building.

---

## Vibration-proof feet

order number: CA06620-H902

By specifying the above, you can issue an order to get the following parts. (You should order the bolt separately.)

- F6-DA6G (x4)

Change this board leg (height adjustment leg) to the "F6-DA6G" and tighten the bolt from under the floor.

Bolt diameter: M20

Bolt length: 15 mm + floor thickness

---

**Note** – Consult with the company that constructed the building because the length depends on the structure of the building.

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# Information About Software

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This section describes the special instructions and the issues about the SPARC Enterprise M8000/M9000 servers software.

- ["XCP Issues and Workarounds"](#)
- ["Solaris OS Issues and Workarounds"](#)
- ["Software Documentation Updates"](#)
- ["Identifying Degraded Memory in a System"](#)
- ["Identifying Different Memory Sizes in a System Board"](#)
- ["Identifying Permanent Memory in a Target Board"](#)

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## XCP Issues and Workarounds

This section contains information about XCP issues. [TABLE 4](#), [TABLE 5](#), and [TABLE 6](#) list issues you might encounter, depending upon which XCP release you are using.

# Known Issues and Workarounds in XCP 1090

TABLE 4 lists known XCP issues and possible workarounds in XCP 1090.

**TABLE 4** Known Issues and Workarounds in XCP 1090

ID	Description	Workaround
RTIF1-070418-009	While XSCF is running, a process may go down, a watchdog timeout may occur, or a hang-up may occur. After this, XSCF may reset.	Check that XSCF is started. If there is XSCF unit which is not started, execute the <code>replacefru(8)</code> command, and then uninstall the XSCF unit and install it again. Or stop all the domains and then execute the system power off/on (AC OFF/ON). To turn on the system power that you turned off, wait at least 30 seconds before power-on.
RTIF1-070528-002	While XSCF is running, watchdog timeout may occur and XSCF may reboot.	Check that XSCF is started. If not started, stop all the domains and then execute the system power off/on (AC OFF/ON). To turn on the system power that you turned off, wait at least 30 seconds before power-on.
RTIF1-070914-025	When you execute XCP Sync on the Firmware Update page, after 15 minutes, the error message "Another flashupdate is now processing" or "The page cannot be displayed" may appear.	No workaround is available. However, the XCP Sync process has been continuously executed. Check the XSCF update completion message on the monitoring message to confirm the completion of Sync process.
RTIF1-071102-002	The snmp daemon might quit.	To restart the snmp daemon, issue the command <code>setsnmp enable</code> .
RTIF1-071116-001	DR operations might fail (with a misleading message regarding the board being unavailable for DR) after the <code>addfru(8)</code> or <code>replceafu(8)</code> command have been used for active replacement. This happens when the active replacement is done without the diagnostic test in the maintenance menu.	Do not fail to execute the diagnosis in the maintenance menu of the <code>addfru(8)</code> or <code>replacefru(8)</code> command. In case of missing the diagnostic test in the maintenance menu of the <code>addfru(8)</code> or the <code>replacefru(8)</code> command, execute the <code>testsb(8)</code> command or delete the CPU/memory board unit using the <code>deletefru(8)</code> command and then retry the <code>addfru(8)</code> command.
RTIF1-071126-002	When the server is being installed, and the mainline switch is turned on for the first time, these error messages might be displayed: PSU shortage XSCF watchdog timeout XSCFU hang-up is detected XSCF process down detected	Turn off the system AC power, then turn it on again. When the error log is displayed again, turn off the system AC power, then turn it on again. To turn on the system power that you turned off, wait at least 30 seconds before power-on.

**TABLE 4** Known Issues and Workarounds in XCP 1090 (*Continued*)

ID	Description	Workaround
RTIF1-080725-001	In <code>setsnmp addv3traphost</code> , when the authentication failed due to the reasons such as the trap host not working, or the wrong user name or password, the subsequent SNMP traps will not be notified.	No workaround is available. Confirm that the SNMP trap host is working and re-execute the <code>setsnmp(8)</code> command using the correct user name.
RTIF1-080725-002	When the SNMPv3 trap has been set, after the watchdog timeout occurred in XSCF and XSCF reset, the subsequent SNMP traps will not be notified.	Reset the XSCF.
RTIF1-081006-011	SNMP trap host configuration changes are not valid until <code>setsnmp disable</code> and <code>setsnmp enable</code> .	Modify the SNMP setting: XSCF> <code>setsnmp disable</code> XSCF> <code>setsnmp enable</code>
RTIF1-081225-001	In the <code>settimezone -c adddst</code> command, when you set eight or more letters to the abbreviation of time zone and the name of Daylight Saving Time, execution of the <code>showlogs</code> command induces a segmentation fault and results in an error.	Specify the abbreviation of time zone and the name of Daylight Saving Time in seven letters or less.
RTIF1-090108-003	Date and time of the Last Update which displayed on the XSCF Web may not be updated.	Please refresh the display.
RTIF1-090427-002	After the XSCF reset or switching, you cannot login to XSCF using the LDAP server.	No workaround is available. Log in to active XSCF with initial account and execute the following command to re-import the certificate chain. <code>'setldap -c &lt;remote file&gt;'</code>
RTIF1-090427-004	In the setting of the LDAP server, the number of characters which can be specified differs between XSCF Web and XSCF Shell. On XSCF Web, you can enter up to 128 characters.	To set 129 characters or more, use XSCF Shell.
RTIF1-090427-005	When you use the <code>setpasswordpolicy(8)</code> command and set "999999999" (10 digits) in Different Characters, the <code>showpasswordpolicy(8)</code> command displays "-1."	No workaround is available. Use XSCF Web.
RTIF1-090729-001	When you use the <code>sethttps(8)</code> command to create a self-signed web server certificate, if the number of characters specified in a parameter exceeds 100, it might result in an internal error and you might fail to create the certificate.	Specify up to 100 characters in the parameter and execute the <code>sethttps(8)</code> command again.



**TABLE 4** Known Issues and Workarounds in XCP 1090 (*Continued*)

ID	Description	Workaround
RTIF1-090731-001	While a DIMM correctable error (CE) has been occurred, when XSCF failover is started, a message "XSCFU hang-up is detected" might appear in the error log.	This error log can be safely ignored.
RTIF1-090824-001	<p>You might see console error messages and a core dump (<code>ereport.chassis.software.core</code>) when one of these conditions occurs:</p> <ul style="list-style-type: none"> <li>• A local account has been created with a user ID explicitly assigned to a value larger than 65536 (<code>adduser -u uid</code>).</li> <li>• An LDAP account has been used that has a UID value larger than 65536.</li> </ul>	Use only user accounts with a user ID (UID) value between 100 and 60000. This is the range of auto-assigned UIDs for the XSCF command <code>adduser(8)</code> .

## XCP Issues Fixed in XCP 1090

[TABLE 5](#) lists XCP issues fixed in XCP 1090.

**TABLE 5** XCP Issues Fixed in XCP 1090

ID	Description	Workaround
RTIF1-081006-005	The network configuration on the XSCF Web does not support the function equivalent to the <code>setnetwork -r</code> comand. And when you specified localhost or localdomain to the host name or the domain name, the error message "SessionID has expired" appears.	Use the <code>setnetwork -r</code> command on the XSCF shell.
RTIF1-090108-001 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.
RTIF1-090430-001	After you set https (using the self certificate authority) by XSCF and created a web server certificate, https is not enabled.	To set the self certificate authority, do not specify a blank character.
RTIF1-090427-001	Despite the normal status of ppp network interface for the XSCF-to-Solaris OS communication, SNMP MIB notifies abnormal (down) status.	No workaround is available.

**TABLE 5** XCP Issues Fixed in XCP 1090 (Continued)

ID	Description	Workaround
RTIF1-090427-003	After changed the SNMP configuration, when the XSCF switching occurred, the SNMP function may be disabled.	No workaround is available. In case this event occurred, the following command may restore the function.  setsnmp disable setsnmp disable (run "setsnmp disable" twice) setsnmp enable
RTIF1-090122-001	"Power recovery" message is output before a PSU has recovered.	After the "Power recovery" message is output, wait 60 seconds before removing power from another PSU.
RTIF1-090508-001	In a domain mounted with the 10 Gigabit Ethernet card (SE0X7HE1F), when you set the OpenBoot PROM environmental variable diag-switch? to true, the following warning message appears on the console; and at the same time, "Msg: Device error (FCode informed error)" is recorded in the error log.  WARNING: /pci@7,700000: FCODE map-in doesn't match decoded register type;  And when you execute the showstatus(8) command, "Degraded" might be indicated to the FRU which has installed the relevant card.	The entire output can be safely ignored. To avoid these outputs, execute the following command at the ok prompt and set the OpenBoot PROM environmental variable diag-switch? to false. setenv diag-switch? false

# XCP Issues Fixed in Releases Earlier Than XCP 1090

TABLE 6 lists XCP issues that have been fixed in releases earlier than XCP 1090.

**TABLE 6** XCP Issues Fixed in Releases Earlier Than XCP 1090

ID	Description	Workaround
RTIF1-070418-004	All domains must be powered off before upgrading the XCP firmware.	Power off domains before using the flashupdate(8) command to upgrade XCP firmware.
RTIF1-070418-005	If you log in to the XSCF while it is still booting, you may get a bash\$ prompt instead of the XSCF> prompt, and be unable to perform most operations.	Log out of the bash\$ prompt and wait for the XSCF to finish booting.

**TABLE 6** XCP Issues Fixed in Releases Earlier Than XCP 1090 (*Continued*)

ID	Description	Workaround
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 ( <code>memory.block.ue</code> ) 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 (for example, if the browser window is closed during import), the <code>flashupdate</code> command might later report an internal error. CR ID 6537996 is similar.	Use the command <code>getflashimage -d</code> to delete the corrupted image. If necessary, reboot the XSCF Unit, then use the <code>flashupdate</code> command again to clear the internal error.
RTIF1-070418-021	Attempting to move a COD board using the <code>moveboard(8)</code> command might fail.	Use the <code>deleteboard(8)</code> and <code>addboard(8)</code> commands instead of the <code>moveboard(8)</code> command.
RTIF1-070418-022	The XSCF firmware monitors itself and if it detects any anomalies, it will force a reboot.	Allow the XSCF Unit to finish rebooting. It will return to normal operation within approximately 5 minutes.
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.	No workaround is available.
RTIF1-070802-001	When connected to telnet, the login or the password prompt doesn't appear.	Disconnect the telnet session and try again.
RTIF1-070823-001	Using the XSCF Web, when you selected SSH on the snapshot screen, the maximum number of character input for Host, Directory, ID, and Password doesn't correspond to the maximum number of character input on the XSCF Shell.	To specify the value which exceeds the maximum number of character input for the XSCF Web, use XSCF Shell.

**TABLE 6** XCP Issues Fixed in Releases Earlier Than XCP 1090 (*Continued*)

ID	Description	Workaround
RTIF1-070823-002	When you display the Logical tree on the XSCF Web, there may be multiple displays of the same domain, depending on the domain configuration.	On the Menu, select System Board Configuration and refer to the domain configuration from XSB Status (All). Or use the <code>showboards(8)</code> command to refer to the domain configuration.
RTIF1-070823-003	When you display the Logical tree on the XSCF Web, the hardware configuration of CPU or memory which assigned to the domain appears differently from the actual domain configuration.	On the Menu, select Device Status to refer to the domain hardware configuration. Or use the <code>showdevices(8)</code> command to refer to the domain hardware configuration.
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.
RTIF1-070824-002	On the XSCF Web, when you select Domain Mode Configuration to perform various settings, the pop-up screen may not appear but "Undefined" may be displayed on the screen.	Select Domain Mode Configuration one more time and perform the settings. Or once terminate the XSCF Web and then perform the settings.
RTIF1-070824-003	On the XSCF Web, while the XCP import is in process from the Firmware Update screen, when you execute the REFRESH button, the pop-up of "Uploading Now!" disappears and the XCP import terminates abnormally.	None available at this time.
RTIF1-070824-004	On the XSCF Web, on the Domain Status screen, when you select an XSB displayed on the Domain Component List, and in case the selected XSB is not yet mounted or is Uni-XSB, the pop-up screen displays no data.	None available at this time.
RTIF1-070824-005	On the XSCF Web, when you changed the Refresh Interval value of the Monitor Message Frame, the invalid pop-up "Confirmation Domain mode" may appear.	Ignore the pop-up and close the screen.
RTIF1-070824-006	On the tab browser, to the same host, when you perform multiple log-in with the user accounts of different user privileges, the user privilege of the last log-in user account will be applied to those pages which you've already logged in.	When you use the tab browser, do not perform multiple log-in to the same host.
RTIF1-070824-007	When you change configuration on the XSCF Web, if you select cancel on the confirmation dialog or perform forced close, the original configuration page may be unavailable.	From the Menu, select the original configuration page again.

**TABLE 6** XCP Issues Fixed in Releases Earlier Than XCP 1090 (*Continued*)

ID	Description	Workaround
RTIF1-070824-008	On the Domain Configuration screen, when you select an undefined Domain ID, the Configuration Policy remains as the content which previously displayed.	None available at this time.
RTIF1-070824-011	While using Firefox 2, in the Configuration policy setting on the Domain Configuration screen, when you specify a domain which is in operation, an error display pop-up appears. When you click on the Back button on this error display pop-up and click on the Cancel button on the inquiry screen to re-display the data, the system remains in the error message screen.	From the Menu, select the Domain Configuration page again.
RTIF1-070904-001	CLIs executed in Standby XSCF should display "Permission denied".	Only the following CLIs can be executed on the Standby XSCF: snapshot(8), switchscf(8). Do not attempt to run any other CLI on the Standby XSCF. Such attempts will report various errors.
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 sendbreak(8) to domain is issued, showdomainstatus(8) continues to show the state as "Running" when the domain is actually at "ok" prompt.	No workaround is available. This is expected behavior of the sendbreak(8) operation.
RTIF1-070904-005	Time can't be synchronized with the NTP server.	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. When the stratum value has been set correctly and the time can't be synchronized, use the showntp(8) command to check the jitter value to be displayed. If this value is large, please reboot the XSCF.
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.

**TABLE 6** XCP Issues Fixed in Releases Earlier Than XCP 1090 (*Continued*)

ID	Description	Workaround
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.	Wait for the CLI to complete. The rest of the system will function normally during this time. <ul style="list-style-type: none"> <li>The CLI can also be aborted by ^C. Note that the operation (disabling emailreport) is completed, even if ^C is used.</li> <li><code>showemailreport</code> can be used to confirm that the service has been disabled.</li> </ul>
RTIF1-070914-001	While executing the firmware update by using the <code>flushupdate(8)</code> command or BUI, when the import of XCP executed by using the <code>getflushimage(8)</code> command or BUI, the firmware update aborts.	Do not execute the import of XCP by using the <code>getflushimage(8)</code> command or BUI, while executing the firmware update.
RTIF1-070914-002	When the XSCF switching performed, the monitor message doesn't show the number of XSCFU which turned Active.	Execute the <code>showhardconf(8)</code> command to refer to the state of XSCFU.
RTIF1-070914-003	When the XSCF switching performed, there may be "SCF: Board control error (DMA timeout)" stored in the error log.	No workaround is available. This message can be safely ignored.
RTIF1-070914-005	On the XSCF Web, when using Internet Explorer 7, on the User Accounts screen, User Local Accounts doesn't show the Status of each user.	None available at this time.
RTIF1-070914-006	When you set the XSCF user account name to the maximum 32 characters, you can log in, but then, when you execute the XSCF Shell or operate the XSCF Web, "Permission denied" occurs.	Use up to 31 characters to set the XSCF user account name.
RTIF1-070914-007	On the XSCF Web, when you use Internet Explorer and select Log Archives, the Status of Log Archiving screen doesn't show the status information.	None available at this time.
RTIF1-070914-008	On the XSCF Web, when you select POP or SMTP-auth on the SMTP screen to enter Password, the input value doesn't appear as "x".	None available at this time.
RTIF1-070914-009	On the XSCF Web, when selected POP or SMTP-auth on the SMTP screen, the setting can be done while the input field remains blank. And despite the setting done, the past setting data appears.	None available at this time.

**TABLE 6** XCP Issues Fixed in Releases Earlier Than XCP 1090 (*Continued*)

ID	Description	Workaround
RTIF1-070914-010	On the XSCF Web, on the SNMPv3 Security Settings screen, when you select Add User or Copy User of the SNMP User-Based Security Model (USM), the Create or Copy User screen appears as a pop-up. On this screen, when you set the SNMP User with 16 digits or more, it will be registered correctly but the web browser screen displays up to 15 digits.	When you set the SNMP User with 16 digits or more, use the <code>showsnmpusm(8)</code> command.
RTIF1-070914-011	On the XSCF Web, on the SNMPv3 Security Settings screen, when you select Change Password of the SNMP User-Based Security Model (USM), the Change Password screen appears as a pop-up. On this screen, despite the "Confirm Password" is a field which must be entered, it is not displayed with the note "Indicates require field."	Do not fail to set Confirm Password which is a field must be entered.
RTIF1-070914-012	On the XSCF Web, on the SNMP-Properties screen, when you don't select Trap Host and execute the Remove button, the invalid message "The trap host will be removed" appears as a pop-up. And when you select OK on the pop-up screen, the invalid message "Remove trap host failed. setsnmp: invalid trap type" appears.	None available at this time.
RTIF1-070914-013	On the XSCF Web, on the Audit-Properties screen, when you execute the Add Policy button, the Set User Policy appears as a pop-up. On this screen, when you specified a user name which is not registered in XSCF and an input error resulted, the value entered won't be cleared though you execute the Reset button to clear the specified user name.	Set the correct user name or execute the Cancel button to close the pop-up screen.
RTIF1-070914-014	On the XSCF Web, when you use a user account without an appropriate privilege to select Snapshot, set the parameters of Start time or End time and execute the Download button, it doesn't result in a privilege error but the parameter error will be displayed.	None available at this time.
RTIF1-070914-015	On the XSCF Web, when you select User Manager to add the user account, the user name to be specified is limited up to 20 characters.	To specify a user name of 20 characters or more, use the <code>adduser(8)</code> command.

**TABLE 6** XCP Issues Fixed in Releases Earlier Than XCP 1090 (*Continued*)

ID	Description	Workaround
RTIF1-070914-016	On the XSCF Web, when you select LDAP to perform the LDAP configuration, if you execute Save while the LDAP Search Timeout remains as its default value "0," it results in "LDAP Configuration Update Failed. Save LDAP Configuration Data failed," and the setting can't be stored.	Since "0" is an invalid value in the LDAP Search Timeout, do not fail to set a value other than 0.
RTIF1-070914-017	On the XSCF Web, when you select LDAP and input the LDAP Search Timeout with a value which exceeds the maximum 2147483647 seconds, it doesn't result in parameter error.	None available at this time. The maximum 2147483647 seconds will be set to the LDAP Search Timeout.
RTIF1-070914-018	On the XSCF Web, when you use a user account without an appropriate privilege to select LDAP and execute the Delete button, it results in a privilege error but the configuration information which has been displayed will be cleared and seems as if deleted.	The configuration is not deleted. To show the configuration information again, select LDAP from the Menu.
RTIF1-070914-019	The CLI 'showldap -c' (which displays current LDAP certificates) will show proper data only when used with the same user account that had originally provided certificate information using 'setldap -c'. Any other user account will generate "Permission denied" error. Similarly, the XSCF Web's LDAP Configuration pop-up screen will display no data, when a different user account is used.	Use the same user account for all LDAP display or configuration operations, for both CLI and XSCF Web.
RTIF1-070914-020	On the User Account setting page on the User Manager screen, after the password change resulted in "Change Password Error," when you click on the REFRESH button, there appears the error message "No user. The request is aborted."	To change the password, select User Manager on the Menu again.
RTIF1-070914-021	During the OpenBoot PROM process, when you power off the domain, the error log of Domain hang-up detected (level3) may be registered.	This error log can be safely ignored.
RTIF1-070914-023	When you specify the domain ID or XSB number which are not supported on the machine, there appears the parameter error message.	To specify the available domain ID or XSB number on the machine.



**TABLE 6** XCP Issues Fixed in Releases Earlier Than XCP 1090 (*Continued*)

ID	Description	Workaround
RTIF1-070914-024	When you display the physical tree on the XSCF Web, the warning mark is displayed on the link card for External I/O expansion unit.	None available at this time.
RTIF1-070914-026	The XSCFU cannot act as a reliable NTP source for domains.	All domains should be configured to use a NTP source other than the XSCFU.
RTIF1-070915-001	On the Domain Configuration screen, when you newly define the Domain Component List, the parameter error may be displayed.	When you define the Domain Component List, use CLI.
RTIF1-071011-001	When the server is being installed, and the mainline switch is turned on for the first time, these error messages might be displayed: XSCFU hang-up is detected XSCF process down detected DB synchronization timeout	Turn off the system AC power, then turn it on again.
RTIF1-071102-001	The XSCF firmware monitors itself and if it detects any inconsistencies, it forces an XSCF reboot.	No workaround is available. Allow the XSCF Unit to finish rebooting. It returns to normal operation within approximately 5 minutes.
RTIF1-071116-003	Using the XSCF Web, when you selected COD, codusage details cannot be displayed correctly.	Use <code>showcodusage(8)</code> command to display the codusage.
RTIF1-071116-004	When Internet Explorer 7 browser is used, the License key deletion cannot be executed on the BUI COD page.	Use <code>deletecodlicense(8)</code> command to delete a license key. Or use other browsers: <ul style="list-style-type: none"> <li>• Microsoft Internet Explorer 6.0</li> <li>• Firefox 2.0 or later</li> <li>• Netscape Navigator 7.1 or later</li> </ul>
RTIF1-071116-005	While system power on, when the XSCF switching performed by <code>switchscf(8)</code> command, PANIC might be generated in XSCF before it switches, and "SHUTDOWN timeout" may be stored in the error log.	No workaround is available. This message can be safely ignored.
RTIF1-071116-006	While XSCF is running, error message of "hang-up is detected" might be displayed to XSCF console, 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). To turn on the system power that you turned off, wait at least 30 seconds before power-on.

**TABLE 6** XCP Issues Fixed in Releases Earlier Than XCP 1090 (*Continued*)

ID	Description	Workaround
RTIF1-071129-001	<p>If the following message is displayed on XSCF console, the XSCF might not start:</p> <pre>dbs[xxx]: ERR: scdb_init_all(): xx, No space left on device</pre> <p>In addition, this error log might be registered:</p> <pre>XSCF process down detected</pre>	Replace the XSCF Unit.
RTIF1-071129-002	<p>When performing XSCF Shell commands remotely using SSH on the remote-control device, the following messages might be displayed:</p> <pre>stty: standard input: Invalid argument</pre>	None available at this time.
RTIF1-071129-003	<p>An error log cannot be registered in XSCF when the following message is displayed on Solaris OS by the I/O error:</p> <pre>SUNW-MSG-ID: SUN4-8000-4P, TYPE: Fault</pre>	No workaround is available.
RTIF1-071129-004	<p>The following messages are displayed and you might not boot Solaris OS:</p> <ul style="list-style-type: none"> <li>Abnormal OpenBoot environment variable Boot process failed</li> <li>ERROR: Invalid token ' ' FATAL: NVRAM contents corrupt; Reinitializing NVRAM parameters.</li> </ul>	Confirm the OpenBoot PROM environment variable. If the variable has errors, set the variable again.
RTIF1-071227-001	<p>In XSCF, write of date and time may become an error. When the domain powered on, the following message may appear and the domain may fail to be powered on.</p> <pre>Poweron canceled due to invalid system date and time.</pre>	Execute the <code>rebootxscf(8)</code> command to restart XSCF.
RTIF1-071227-002	When the <code>showhardconf(8)</code> command executed in an environment with the External I/O Expansion Unit, the <code>showhardconf(8)</code> command may appear as if hang up.	Press Ctrl-C to terminate the <code>showhardconf(8)</code> command and execute the <code>showhardconf(8)</code> command again.
RTIF1-071227-003	When a non-existent device name specified to the Boot device path and resulted in the OS Boot error, the status of I/O unit may become "Degraded."	<p>Specify the correct device name to the Boot device path.</p> <p>When the status of I/O unit became "Degraded," replace the I/O unit.</p>

**TABLE 6** XCP Issues Fixed in Releases Earlier Than XCP 1090 (*Continued*)

ID	Description	Workaround
RTIF1-080313-001	<p>When you set XSCF as the NTP server of the domain, following message may appear on the domain console at the domain start and you may fail to perform time synchronization.</p> <pre>ntpddate[xx]: no server suitable for synchronization</pre>	<p>Perform either one of the following workarounds depending on the mode which has been set in the xntpd of the domain.</p> <p><b>Note</b> - In case of step mode, the time correction induces the time step. When the time step occurred, it may affect the applications running on the domain.</p> <ul style="list-style-type: none"> <li>• In case of step mode: Specify the <code>-w</code> option to execute the <code>ntpddate(1M)</code> command. Until it succeeds in synchronizing with the NTP server, the <code>ntpddate</code> command retry continues at regular intervals. In the retries, the message which indicates that it failed to synchronize with the NTP server can be safely ignored. When the synchronization completed, the time will be corrected to the time of the NTP server.</li> <li>• In case of slew mode: Execute the <code>ntpddate(1M)</code> command without specifying the <code>-w</code> option. In slew mode, the time variance from the NTP server will be corrected at 0.5ms/second intervals. The message which indicates that it failed to synchronize with the NTP server can be safely ignored. Before the time completely corrected, there remains a time variance between the NTP server and the domain.</li> </ul>
RTIF1-080325-001	<p>When you turn on AC power, or when you execute the <code>rebootxscf(8)</code> or <code>switchscf(8)</code> command, either of the following situations may occur.</p> <ul style="list-style-type: none"> <li>• Following error message gets registered in the error log, the status becomes Faulted, and the standby XSCF becomes unable to start. Device error on serial interconnection between XSCFUs</li> <li>• You become unable to log in to XSCF and your press on the POWER switch on the operator panel can't turn on the power.</li> </ul>	<p>Before turning on AC power, or executing the <code>rebootxscf(8)</code> or <code>switchscf(8)</code> command, please confirm that XSCF LAN has been correctly connected and linked up.</p> <p>In case the situation in question occurred, please take either of the following actions.</p> <ul style="list-style-type: none"> <li>• Use the <code>replacefru(8)</code> command to reattach the standby XSCF unit.</li> <li>• Turn off the power of all domains and then execute the system power off/on. To turn on the power that you turned off, wait at least 30 seconds before power-on.</li> </ul>

**TABLE 6** XCP Issues Fixed in Releases Earlier Than XCP 1090 (*Continued*)

ID	Description	Workaround
RTIF1-080404-001	<p>Following a dynamic reconfiguration operation using the XSCF commands <code>deleteboard(8)</code> and <code>addboard(8)</code>, you might see I/O channel degradation, resulting in error messages and entries in the corresponding ereport.</p> <p>If you run into this problem, the <code>fmdump(8)</code> command will report the following error by mistake:</p> <pre>ereport.chassis.SPARCEnterprise. asic.ioc.ch.leaf.fe</pre>	<p>The MSG-ID assigned to the error displayed and the actual behavior may not be consistent, and reset or degradation may not occur. Contact a certified service engineer and give the error code that displayed by using the <code>showlogs</code> error command.</p>
RTIF1-080404-002	<p>When you use the command <code>setsnmpusm passwd</code> to set a password, if you set a password of fewer than eight characters, a segmentation fault occurs.</p>	<p>Always set a password of at least eight characters.</p>
RTIF1-080512-001	<p>When you specify "localhost" to the <code>hostname</code> of the <code>sethostname(8)</code> command and reset XSCF by using the <code>applynetwork(8)</code> and the <code>rebootxscf(8)</code> commands, a process goes down in XSCF.</p>	<p>Do not specify "localhost" to the <code>hostname</code> of the <code>sethostname(8)</code> command.</p>
RTIF1-080512-002	<p>When the NTP setting are enabled, a message as follows may appear on the XSCF console.</p> <p>Output sample:</p> <pre>-xx.xxx.xxx.xxx mode 4 code 1 auth 0 clock_filter: n 8 off -0.000310 del 0.001300 dsp 0.001158 jit 0.000172, age 0 clock_update: at 637535 assoc 2 local_clock: assocID 54190 offset -0.000309657 freq -9.765 state 4 ...</pre>	<p>This message can be safely ignored. No workaround is available.</p>
RTIF1-080512-003	<p>To a domain which is in Quad-XSB configuration, when you perform active addition of PCI cards and then restart the domain, active addition of PCI cards may become unavailable afterwards.</p>	<p>Do not perform active addition of PCI cards. When you failed in active addition of PCI cards, stop the domain to add on the cards.</p>
RTIF1-080520-001	<p>BUI Domain Operation page mistakes the operation demand for Domain 8 or 9, and it issues it to DID#00 wrongly.</p>	<p>Do not perform active addition of PCI cards. When you failed in active addition of PCI cards, stop the domain to add on the cards.</p>
RTIF1-080526-001	<p>When the system is stressed with many faults, the <code>fmd</code> process on the service processor might hang. Once this happens, <code>fma</code> commands on the service processor can fail or hang.</p>	<p>Reboot the service processor using the XSCF command <code>rebootxscf(8)</code>.</p>

**TABLE 6** XCP Issues Fixed in Releases Earlier Than XCP 1090 (*Continued*)

ID	Description	Workaround
RTIF1-080620-001	The SNMP-trap not notified in the event that the power cable of the server got unplugged accidentally.	No workaround is available.
RTIF1-080725-003	The initial value that set with the <code>setdomparam set-defaults</code> option differs from the initial value of OpenBoot PROM. parameters    current value    expected value diag-level    none(0x00)    min(0x20) auto-boot?    false(0x00)    true(0xff)	In the OpenBoot PROM prompt ( <code>ok&gt;</code> ), execute the <code>set-defaults</code> command to restore the OpenBootPROM environmental variables to the initial value.
RTIF1-080725-004	After set the Daylight Saving Time by using the XSCF shell, XSCF Web does not show the correct time in the Logs menu.	No workaround is available. Use the <code>showlogs(8)</code> command of the XSCF shell.
RTIF1-080808-001	On the cluster system using the PRIMECLUSTER software, when there are 10 or more RCI units, the RCI busy status may be temporarily unreleased and output the following syslog message: <code>SA_pprcir.so to test host host_name failed</code>	Refer to the manual of the PRIMECLUSTER software to check the cluster status. If no problem found on the status, this message can be safely ignored. If any problem, follow the instructions on the manual to solve the problem.
RTIF1-081006-001	The error log "XSCF FMEM write error" recorded and the firmware update might fail.	Power off (AC OFF) the system, and power on (AC ON) again. Then, re-execute the firmware update.
RTIF1-081006-002	In the <code>setemailreport(8)</code> command, when you specified over 255 characters in the SMTP address, an error results.	Do not specify over 255 characters in the SMTP address.
RTIF1-081006-004	During the firmware update, there might be the following output message and a XSCF panic might occur. <code>kernel BUG in jffs2_do_read_inode at fs/jffs2/readinode.c:XXX!</code>	Reset XSCF and use the <code>flashupdate(8)</code> command to retry the firmware update.
RTIF1-081006-006	The panic log on the XSCF Web might not be displayed from the top of the message.	When the output is insufficient, execute the <code>showlogs panic</code> command on the XSCF shell.
RTIF1-081006-007	The <code>password(8)</code> command indicates that the <code>[user]</code> operand is optional but will fail if a <code>[user]</code> operand is not included when other options are specified.	No workaround is available. Specify the <code>user</code> operand to execute the <code>password(8)</code> command when you specify other options.
RTIF1-081016-001	Power failure at the commercial AC supply connector to the UPS does not send notification/send trap.	No workaround is available.

**TABLE 6** XCP Issues Fixed in Releases Earlier Than XCP 1090 (*Continued*)

ID	Description	Workaround
RTIF1-081016-003	In Internet Explorer 6 or 7, clicking on the [Reset] button then the [OK] button from the Settings->Audit->Add Policy popup screen will log the user out with message: Error Session Error Session ID has been expired	Log back into the browser interface and use the <code>backspace</code> key to clear text in the 'User' text box of the popup screen instead of using the Reset button.
RTIF1-081030-001	The information related to the defined LSB cannot be displayed on XSCF Web "Domain Configuration" page with an account which has single domain privilege larger than DID15. In addition, the operation for such LSB by "XSB Config..." button cannot be performed.	Use the <code>showdcl(8)</code> , <code>addboard(8)</code> , <code>deleteboard(8)</code> , <code>moveboard(8)</code> command on the XSCF shell.
RTIF1-081030-002	When the timezone other than three characters has been set, the error logs cannot be displayed on XSCF Web "Error Log" page. In addition, XSCF Web "Panic Log" and "IPL Message Log" pages displays the date on the table with "---".	Use the <code>showlogs(8)</code> command on the XSCF shell.
RTIF1-081104-001	The monitor message log might not be registered when a PCI slot error detected.	No workaround is available. Use the <code>showlogs error</code> command or the <code>fmdump</code> command to check the fault information of PCI slot.
RTIF1-090108-002	In the dual power feed system, when the power failure and the power recovery occurred repeatedly on one line, all domains will be forcibly powered off. And in the power recovery from the forced power-off, a PSU illegal configuration might be registered in the error log and the power recovery might not be started.	You need to remove and insert the power cable.
RTIF1-090108-004	When you replaced the XSCF unit by using the <code>replacefru(8)</code> command, there may be the DB synchronization timeout error log and the replacement may fail.	Turn off all mainline switches and then turn on again. Or, just after the XSCF reset using the <code>rebootxscf(8)</code> command, execute the <code>replacefru(8)</code> command and extract and insert the XSCF unit which failed in replacement. If time passed after the XSCF reset, the <code>replacefru(8)</code> command may fail again. In such a case, re-execute the <code>rebootxscf(8)</code> command and the subsequent processes.

**TABLE 6** XCP Issues Fixed in Releases Earlier Than XCP 1090 (*Continued*)

ID	Description	Workaround
RTIF1-090115-001	When you execute the <code>settnetnet -c disable</code> command, the Telnet service will be stopped immediately. However, unless you reset XSCF by using the <code>rebootxscf(8)</code> command, you might fail in the subsequent restart of the Telnet service.	After you stopped the Telnet service, execute the <code>rebootxscf(8)</code> command to reset XSCF.
RTIF1-090220-001	In a system connecting multiple hosts and one or more I/O units with RCI, the power-on operation to one of those RCI hosts may not power on any of the RCI I/O units.	All the RCI hosts shall be powered on.
RTIF1-090220-002	After replaced the XSCF unit, the RCI power interlocking setting restores to its default value.	If you have set the power interlocking to a value other than the default, replace the XSCF unit and then use the <code>setpwrmode(1M)</code> command to set the power interlocking setting again.

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## Solaris OS Issues and Workarounds

This section contains information about Solaris OS issues. [TABLE 7](#), [TABLE 8](#), [TABLE 9](#), [TABLE 10](#), [TABLE 11](#), and [TABLE 12](#) list issues you might encounter, depending upon which Solaris OS release you are using.

# Solaris Issues and Workarounds for All Supported Releases

**TABLE 7** lists Solaris OS issues that you might encounter in any supported release of Solaris OS.

**TABLE 7** Solaris OS Issues and Workarounds for All Supported Releases

CR ID	Description	Workaround
6449315	The Solaris OS <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 DAT72-000.</p>
6466617	Performing a hot plug operation with the PCI-Express slot too quickly interrupts a PCI leaf reset and occurs the following error: <code>cfgadm: Component system is busy error</code>	<p>Pause a few seconds between the issue of each <code>cfgadm -c</code> command.</p>
6481002	Installing the Solaris OS from the network using certain PCI-Express cards may cause a panic.	<p>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.</p>



**TABLE 7** Solaris OS Issues and Workarounds for All Supported Releases (*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 overwhelming 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>
6522017	DR and ZFS may not be used in the same domain.	<p>Reduce the amount of kernel memory that ZFS can allocate by setting the <code>zfs_arc_max</code> parameter in the <code>/etc/system</code> file. The following example sets the maximum size to 512 Mbytes.</p> <pre>set zfs_arc_max = 0x20000000</pre>
6529714	Warning messages occur while trying to configure more than four X4447A-Z or X1027A-Z1 cards into one I/O Boat.	No workaround is available.
6530753	Some of the PCI slots in the External I/O Expansion Unit PCI slots are not displayed during a normal boot operation.	<p>Use one of the following operations to display all of the PCI slots.</p> <ul style="list-style-type: none"> <li>• <code>boot -r</code> (at open boot prompt)</li> <li>• <code>devfsadm -C</code> (at Solaris prompt)</li> <li>• <code>cfgadm</code> (twice at Solaris prompt)</li> </ul>

**TABLE 7** Solaris OS Issues and Workarounds for All Supported Releases (*Continued*)

CR ID	Description	Workaround
6531036	The error message network initialization failed appears repeatedly after a boot net installation.	No workaround is available. This message can be safely ignored.
6531668	System hangs when executing parallel hot plug operation with SP DR in suspend phase.	No workaround is available.
6532215	volfs or dscp service may fail when domain is booted.  svc:/platform/sun4u/dscp:default: Method "/lib/svc/method/svc-dscp start" failed with exit status 95.  svc:/system/filesystem/volfs:default: Method or service exit timed out. Killing contract 59.	Restart the service if the failure is observed. To avoid the problem, issue the following commands.  # svccfg -s dscp setprop start/timeout_seconds=count: 300 # svccfg -s volfs setprop start/timeout_seconds=count: 300 # svcadm refresh dscp # svcadm refresh volfs
6537511	Bluetooth partner is hung during security tests execution.	Restart application server.
6565553 6674266	DR deleteboard(8) and moveboard(8) operations might fail. Example for messages on domain: drmach: WARNING: Device driver failure: /pci dcs: <xxxx> config_change_state: Hardware specific failure: unconfigure SB1: Device driver failure: /pci	No workaround is available. Try DR operations again.
6588650	On occasion, the system is unable to DR after an XSCF failover or XSCF reboot.	No workaround is available.
6589644	After added the system board by DR, when the switching occurred on the redundant XSCF Units, the domain console may hang up.	The console can be recovered by pressing Ctrl-q (the "Ctrl" key and the "q" key).
6592302	Unsuccessful DR operation leaves memory partially configured.	Try deleteboard(8) again.
6625734	Systems with large number of processors in a single domain environment may have suboptimal performance with certain workloads.	Use processor sets to bind application processes or LWPs to groups of processors. Refer to the psrset(1M) man page for more information.

**TABLE 7** Solaris OS Issues and Workarounds for All Supported Releases (*Continued*)

CR ID	Description	Workaround
6660168	<p>If a <code>ubc.piowbeue-cpu</code> error occurs on a domain, the Solaris Fault Management <code>cpumem-diagnosis</code> module might fail, causing an interruption in FMA service.</p> <p>If this happens, you will see the following output in the console log:</p> <pre>SUNW-MSG-ID: FMD-8000-2K, TYPE: Defect, VER: 1, SEVERITY: Minor EVENT-TIME: Fri Apr 4 21:41:57 PDT 2008 PLATFORM: SUNW,SPARC-Enterprise, CSN: 2020642002, HOSTNAME: &lt;hostname&gt; SOURCE: fmd-self-diagnosis, REV: 1.0 EVENT-ID: 6b2e15d7-aa65-6bcc-bcb1- cb03a7dd77e3 DESC: A Solaris Fault Manager component has experienced an error that required the module to be disabled. Refer to http://sun.com/msg/FMD-8000-2K for more information. AUTO-RESPONSE: The module has been disabled. Events destined for the module will be saved for manual diagnosis. IMPACT: Automated diagnosis and response for subsequent events associated with this module will not occur. REC-ACTION: Use <code>fmdump -v -u &lt;EVENT-ID&gt;</code> to locate the module. Use <code>fmadm reset &lt;module&gt;</code> to reset the module.</pre>	<p>If FMA service fails, issue the following command on the domain to recover:</p> <pre># svcadm clear fmd</pre> <p>Then restart <code>cpumem-diagnosis</code>:</p> <pre># fmadm restart cpumem-diagnosis</pre>
6668237	After DIMMs are replaced the corresponding DIMM faults are not cleared on the domain.	<p>Use the following commands:</p> <pre># fmadm repair <i>fnri</i> <i>uuid</i> # fmadm rotate</pre>
6745410	Boot program ignoresthe Kadb option which causes the system not to boot.	Use <code>kmdb</code> instead of <code>kadb</code> .
6794630	An attempt to use the GUI to install Solaris in a domain larger than 2TB might fail.	Use the Command Line interface to install Solaris.

**TABLE 7** Solaris OS Issues and Workarounds for All Supported Releases (*Continued*)

CR ID	Description	Workaround
6872501	If 139555-08 has been applied to the domain, cores are not offlined when requested by the XSCF.	Use <code>fmdump(8)</code> with its <code>-v</code> option on the Service Processor to identify the faulty core. Once identified, use <code>psradm(1M)</code> on the domain to offline the core.

## Solaris OS Issues Fixed in Solaris 10 10/09

[TABLE 8](#) lists issues that have been fixed in Solaris 10 10/09 OS. You might encounter them in supported releases earlier than Solaris 10 10/09.

**TABLE 8** Solaris OS Issues Fixed in Solaris 10 10/09

CR ID	Description	Workaround
6572827	The <code>prtdiag -v</code> command reports PCI bus types incorrectly. It reports "PCI" for PCI-X leaf devices and "UNKN" for legacy PCI devices.	This has been fixed in patch 141444-09.  [Workaround] No workaround is available.
6724307	Scheduler decisions systems are occasionally unbalanced.  Sometimes two threads will be on one core (causing both to run at about half speed) while another core is idle. For many OpenMP and similar parallel applications, the application performance is limited by the speed of the slowest thread.  Uneven scheduling is not common, perhaps 1 in 50 or 1 in 100 decisions. But if there are 128 threads running, then the application might have at least one uneven schedule event.	This has been fixed in patch 141414-01.  [Workaround] Use processor sets to prevent uneven threads to core assignment.
6800734	The <code>deleteboard(8)</code> command hang in a domain.	No workaround is available.
6821108	DR and <code>showdevices(8)</code> command do not work after XSCF reset.	This has been fixed in patch 140589-02.  [Workaround] Reset the XSCF service processor twice. Half the SAs (Security Associations) are deleted the first time, half are deleted the second time, so the second addition succeeds and IPsec communication is reestablished.

**TABLE 8** Solaris OS Issues Fixed in Solaris 10 10/09 (*Continued*)

CR ID	Description	Workaround
6827340	DR and Memory patrol might fail due to command error.	This has been fixed in patch 142283-01.
		No workaround is available.

## Solaris OS Issues Fixed in Solaris 10 5/09

[TABLE 9](#) lists issues that have been fixed in Solaris 10 5/09 OS. You might encounter them in supported releases earlier than Solaris 10 5/09.

**TABLE 9** Solaris OS Issues Fixed in Solaris 10 5/09

CR ID	Description	Workaround
6588555	XSCF failover during DR operation to the permanent memory might cause domain panic.	This has been fixed in patch 139555-08.  [Workaround] Do not start an XSCF failover while a DR operation is running. Wait for a DR operation to finish before starting the failover. If you start the failover first, wait for the failover to finish before starting the DR operation.
6623226	The Solaris command <code>lockstat(1M)</code> or the <code>dtrace lockstat</code> provider might cause a system panic.	This has been fixed in patch 140336-01.  [Workaround] Do not use the Solaris <code>lockstat(1M)</code> command or the <code>dtrace lockstat</code> provider.
6680733	Sun Quad-port Gigabit Ethernet Adapter UTP (QGC) & Sun Dual 10 GigE Fiber XFP Low Profile Adapter (XGF) NICs might panic under high load conditions.	This has been fixed in patch 139570-01.
6689757	Sun Dual 10 GigE Fiber XFP Low Profile Adapter (XGF) with a single or improperly installed XFP optical transceivers might cause the following error to show on the console:  The XFP optical transceiver is broken or missing.	This has been fixed in patch 139570-01.  [Workaround] Check and make sure that both XFP optical transceivers are firmly seated in the housing. Do not mix INTEL and Sun XFP optical transceivers in the same Adapter. Do NOT plumb a port with the <code>ifconfig</code> command if the port does not contain an XFP optical transceiver or it contains one but the transceiver is not in use.

# Solaris OS Issues Fixed in Solaris 10 10/08

TABLE 10 lists issues that have been fixed in Solaris 10 10/08 OS. You might encounter them in supported releases earlier than Solaris 10 10/08.

**TABLE 10** Solaris OS Issues Fixed in Solaris 10 10/08

CR ID	Description	Workaround
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 3c0000000000, target /LSB0/B0/20000000</pre>	<p>This has been fixed in patch 137137-09.</p> <p>This message can be safely ignored.</p>
6533686	<p>When XSCF is low on system resources, DR operations involving relocating permanent memory, such as deleteboard(8) or moveboard(8), might fail with one or more of these errors:</p> <pre>SCF busy DR parellel copy timeout</pre> <p>This applies only to Quad-XSB configured system boards hosting multiple domains.</p>	<p>This has been fixed in patch 138397-01.</p> <p>[Workaround] Retry the DR operation at a later time.</p>
6535018	<p>In Solaris domains that include SPARC64 VII processors, workloads that make heavy use of the Solaris kernel might not scale as expected when you increase the thread count to a value greater than 256.</p>	<p>This has been fixed in patch 137111-01.</p> <p>[Workaround] For Solaris domains that include SPARC64 VII processors, limit domains to a maximum of 256 threads.</p>

**TABLE 10** Solaris OS Issues Fixed in Solaris 10 10/08 (*Continued*)

CR ID	Description	Workaround
6614737	<p>The DR deleteboard(8) and moveboard(8) operations might hang if any of the following conditions exist:</p> <ul style="list-style-type: none"> <li>• A DIMM has been degraded.</li> <li>• The domain contains system boards with different memory size.</li> </ul>	<p>For Solaris 10 5/08 or earlier, this has been in patch 137111-01.</p> <p>[Workaround]</p> <p>Avoid performing DR operations if any of the listed conditions exist.</p> <p>To determine whether the system contains degraded memory, use the XSCF showstatus(8) command. For sample output, see <a href="#">“Identifying Degraded Memory in a System” on page 63</a>.</p> <p>To determine whether the domain contains system boards with different memory sizes, display the list of memory sizes using the XSCF showdevices(8) command or the prtdiag(8) command on the domain. For sample of output, see <a href="#">“Identifying Different Memory Sizes in a System Board” on page 63</a></p> <p>If a DR command hangs, reboot the domain to recover.</p>
6619224	For Solaris domains that include SPARC 64 VII processors, a single domain of 256 threads (128 cores) or more might hang for an extended period of time under certain unusual situations. Upon recovery, the uptime command will show extremely high load averages.	<p>This has been fixed in patch 137111-03.</p> <p>[Workaround]</p> <p>For Solaris domains that include SPARC 64 VII processors, do not exceed a domain size of 256 virtual CPUs in a single Solaris domain. This means a maximum of 32 CPU chips in a single domain configuration (maximum configuration for an M8000 server).</p>
6632549	fmd service on domain might fail to maintenance mode after DR operations.	<p>This has been fixed in patch 138050-01.</p> <p>[Workaround]</p> <p>If fmd service fails, issue the following commands on the domain to recover:</p> <pre># svcadm clear fmd</pre>

**TABLE 10** Solaris OS Issues Fixed in Solaris 10 10/08 (Continued)

CR ID	Description	Workaround
6660197	DR might cause the domain to hang if either of the following conditions exist: <ul style="list-style-type: none"><li>• A domain contains 256 or more CPUs.</li><li>• Memory error occurred and the DIMM has been degraded.</li></ul>	This has been fixed in patch 138397-01.  [Workaround] 1. Set the following parameter in the system specification file (/etc/system): set drmach:drmach_disable_mcopy = 1 2. Reboot the domain.
6679370	The following message may be output on the console during the system booting, the External I/O Expansion Unit adding by hotplug, or the FMEMA operating by DR.  SUNW-MSG-ID: SUN4-8000-75, TYPE: Fault, VER: 1, SEVERITY: Critical ... DESC: A problem was detected in the PCI-Express subsystem. Refer to <a href="http://sun.com/msg/SUN4-8000-75">http://sun.com/msg/SUN4-8000-75</a> for more information. ...	This has been fixed in patch 137137-09. <b>Note</b> - Before adapting the patch, delete the following setting from /etc/system: set pcie_expected_ce_mask = 0x2001  [Workaround] Add the following to /etc/system and then reboot the domain.  set pcie_expected_ce_mask = 0x2001
6720261	If your domain is running one of the following versions of Solaris OS, the system might panic/trap during normal operation: <ul style="list-style-type: none"><li>• Solaris 10 5/08 OS</li><li>• An earlier version of Solaris 10 OS with patch ID 127127-11</li></ul>	This has been fixed in patch 137137-09.  [Workaround] Set the following parameter in the system specification file (/etc/system): set heaplp_use_stlb=0 Then reboot the domain.

## Solaris OS Issues Fixed in Solaris 10 5/08

**TABLE 11** lists issues that have been fixed in Solaris 10 5/08 OS. You might encounter them in supported releases earlier than Solaris 10 5/08.

**TABLE 11** Solaris OS Issues Fixed in Solaris 10 5/08

CR ID	Description	Workaround
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**TABLE 11** Solaris OS Issues Fixed in Solaris 10 5/08 (*Continued*)

5076574	A PCIe error can lead to an invalid fault diagnosis on a large M8000/M9000 domain.	<p>For Solaris 10 8/07 or earlier, this has been fixed in patch 127127-11.</p> <p>[Workaround]</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>
6402328	System panic might happen due to be over the interrupt number limit when one domain has seven or more IOUA cards.	<p>For Solaris 10 8/07 or earlier, this has been fixed in patch 127127-11.</p> <p>[Workaround]</p> <p>Use six or less IOUA cards on one domain.</p>
6472153	If you create a Solaris OS 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>For Solaris 10 8/07 or earlier, this has been fixed in patch 137046-01.</p> <p>[Workaround]</p> <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>
6505921	Correctable error on the system PCIe bus controller generates an invalid fault.	<p>For Solaris 10 8/07 or earlier, this has been fixed in 120011-14 and 125369-05.</p> <p>[Workaround]</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>
6522433	After the CPU hardware error occurred, the <code>fmdump(1M)</code> command on the domain may display an incorrect faulty component.	<p>For Solaris 10 8/07 or earlier, this has been fixed in patch 127127-11.</p> <p>[Workaround]</p> <p>Check system status on XSCF.</p>

**TABLE 11** Solaris OS Issues Fixed in Solaris 10 5/08 (*Continued*)

6527811	The showhardconf(8) command on the XSCF cannot 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.	<p>For Solaris 10 8/07 or earlier, this has been fixed in patch 128346-01.</p> <p>No workaround is available.</p>
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.	<p>For Solaris 10 8/07 or earlier, this has been fixed in patch 125369-05.</p> <p>[Workaround]</p> <p>To avoid this problem, issue the following commands on the domain.</p> <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 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>
6545143	There is a low probability that a system panic can occur during trap processing of a TLB miss for a user stack address. The problem can occur if the user stack is unmapped concurrently with the user process executing a flush windows trap (ta 3). The panic message will contain the following string: bad kernel MMU trap at TL 2	<p>For Solaris 10 8/07 or earlier, this has been fixed in patch 127111-08.</p> <p>No workaround is available.</p>
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	<p>For Solaris 10 8/07 or earlier, this has been fixed in patch 127111-08.</p> <p>[Workaround]</p> <p>Add the following to /etc/system and then reboot the domain:</p> <pre>set mc-opl: mc_max_rewrite_loop = 20000</pre>

**TABLE 11** Solaris OS Issues Fixed in Solaris 10 5/08 (*Continued*)

6546188	<p>The system panics when running hotplug (<code>cfgadm(1M)</code>) and DR operations (<code>addboard(8)</code> and <code>deleteboard(8)</code>) on 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>	<p>For Solaris 10 8/07, this has been fixed in patch 127741-01.</p> <p>No workaround is available.</p>
6551356	<p>The system panics when running hotplug (<code>cfgadm(1M)</code>) 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:</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>For Solaris 10 8/07, this has been fixed in patch 127741-01.</p> <p>[Workaround]</p> <p>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.</p>
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>	<p>For Solaris 10 8/07, this has been fixed in patch 127741-01.</p> <p>[Workaround]</p> <p>These messages can be safely ignored.</p>
6564934	<p>Performing a DR <code>deleteboard(8)</code> operation on a board which includes Permanent Memory when using the following network cards results 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>	<p>For Solaris 10 8/07, this has been fixed in patch 127741-01.</p> <p>[Workaround]</p> <p>Re-configure the affected network interfaces after the completion of the DR operation. For basic network configuration procedures, refer to the <code>ifconfig</code> man page for more information.</p>
6568417	<p>After a successful CPU DR <code>deleteboard(8)</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>For Solaris 10 8/07 or earlier, this has been fixed in patch 127111-02.</p> <p>[Workaround]</p> <p>Add the following line to <code>/etc/system</code> and reboot the system:</p> <pre>set ip:ip_soft_rings_cnt=0</pre>

**TABLE 11** Solaris OS Issues Fixed in Solaris 10 5/08 (Continued)

6571370	Use of the following cards have been observed to cause data corruption in stress test under laboratory conditions: <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>	For Solaris 10 8/07, this has been fixed in patch 127741-01.  [Workaround] Add the following line in <code>/etc/system</code> and reboot the system: <code>set nxge:nxge_rx_threshold_hi=0</code>
6584984	On SPARC Enterprise M8000/M9000 servers, <code>busstat(1M)</code> command may cause rebooting of domains.	For Solaris 10 8/07 or earlier, this has been fixed in patch 127127-11.  No workaround is available. Do not use <code>busstat(1M)</code> command. Check for the availability of a patch for this defect.
6589546	<code>prtdiag(8)</code> command does not show all I/O devices of the following cards: <ul style="list-style-type: none"><li>• XSEFC402AF Sun StorageTek Enterprise Class 4Gb Dual-Port Fibre Channel PCI-E HBA</li><li>• XSEFC401AF Sun StorageTek Enterprise Class 4Gb Single-Port Fibre Channel PCI-E HBA</li></ul>	For Solaris 10 8/07 or earlier, this has been fixed in patch 127127-11.  [Workaround] Use <code>prtdiag -v</code> for full output.

## Solaris OS Issues Fixed in Solaris 10 8/07

TABLE 12 lists issues that have been fixed in Solaris 10 8/07 OS. You might encounter them in supported releases earlier than Solaris 10 8/07.



**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 and Solaris 10 8/07.

**TABLE 12** Solaris OS Issues Fixed in Solaris 10 8/07

CR ID	Description	Workaround
6303418	A SPARC Enterprise M9000 server with a single domain and 11 or more fully populated system boards might hang under heavy stress.	For Solaris 10 11/06, this has been fixed in patch 120011-01.  [Workaround] 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.
6416224	System performance can degrade using a single NIC card with more than 5,000 connections.	For Solaris 10 11/06, this has been fixed in patch 120011-08.  [Workaround] Use multiple NIC cards to split network connections.
6441349	The system may hang if there is an I/O error in the system.	For Solaris 10 11/06, this has been fixed in patch 120011-07.  No workaround is available.
6485555	On-board Gigabit Ethernet NVRAM corruption could occur due to a race condition. The window of opportunity for this race condition is very small.	For Solaris 10 11/06, this has been fixed in patch 120011-08.  No workaround is available.

**TABLE 12** Solaris OS Issues Fixed in Solaris 10 8/07 (*Continued*)

CR ID	Description	Workaround
6496337	<p>The "cpumem-diagnosis" module may fail to load after uncorrectable error(UE) panic.</p> <p>Systems will function correctly but events normally automatically diagnosed by FMA using this module will require manual diagnosis.</p> <p>Example:</p> <p>SUNW-MSG-ID: FMD-8000-2K, TYPE: Defect, VER: 1, SEVERITY: Minor</p> <p>EVENT-TIME: Thu Feb 15 15:46:57 JST 2007</p> <p>PLATFORM: SUNW,SPARC-Enterprise, CSN: BE80601007, HOSTNAME: col2-ff-em7-d0</p>	<p>For Solaris 10 11/06, this has been fixed in patch 125369-05.</p> <p>[Workaround]</p> <p>If problem occurred, implement the following workaround:</p> <ol style="list-style-type: none"> <li>1. Remove the following file. # rm /var/fm/fmd/ckpt/cpumem-diagnosis/cpumem-diagnosis</li> <li>2. Restart fmd service. # svcadm restart fmd</li> </ol> <p>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.</p> <pre># # We haven't run savecore on a # dump device yet # savedev=none  rm -f /var/fm/fmd/ckpt/cpumem-diagnosis/cpumem-diagnosis  #</pre>
6498283	<p>Using the DR deleteboard(8) command while psradm operations are running on a domain might cause a system panic.</p>	<p>For Solaris 10 11/06, this has been fixed in patch 120011-07.</p> <p>No workaround is available.</p>
6499304	<p>CPU isn't offlined and unexpected message is displayed on console when many correctable error(CE) occurs.</p> <p>Example:</p> <p>SUNW-MSG-ID: FMD-8000-11, TYPE: Defect, VER: 1, SEVERITY: Minor</p> <p>EVENT-TIME: Fri Feb 2 18:31:07 JST 2007</p> <p>PLATFORM: SPARC-Enterprise, CSN: BE80601035, HOSTNAME: FF2-35-0</p>	<p>For Solaris 10 11/06, this has been fixed in patch 125369-05.</p> <p>[Workaround]</p> <p>Check CPU status on XSCF.</p>

**TABLE 12** Solaris OS Issues Fixed in Solaris 10 8/07 (*Continued*)

CR ID	Description	Workaround
6502204	Unexpected error messages may be displayed on console on booting after CPU UE panic. Example: 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	For Solaris 10 11/06, this has been fixed in patch 125369-05.  [Workaround] If you see unexpected messages, use the XSCF command showdomainstatus(8) to check system status on XSCF.
6502750	Notification message for inserted or removed card by PCI hot plug may not output.	For Solaris 10 11/06, this has been fixed in patch 120011-08.  No workaround is available.
6508432	Many correctable errors (CE) may occur, and despite these are the correctable errors, domain may panic.	For Solaris 10 11/06, this has been fixed in patch 120011-08.  [Workaround] Set the following to /etc/system and then reboot the domain: set pcie:pcie_aer_ce_mask = 0x2001
6508434	The domain may panic when an additional PCI-X card is installed or a PCI-X card is replaced by using PCI hot plug.	For Solaris 10 11/06, this has been fixed in patch 120011-08.  [Workaround] Do not insert a different type of PCI-X card on the same PCI slot by using PCI hot plug.
6509337	s10s_u3 wanboot fails - The server returned 416: Requested Range Not Satisfiable.	No workaround is available.
6510861	When Dual-Channel Ultra320 SCSI Card (SE0X7SC2F, SE0X7SC2X) is mounted, correctable errors(CE) occur and system may panic.	For Solaris 10 11/06, this has been fixed in patch 120011-08.  [Workaround] Add the following entry to the /etc/system file and then reboot the system: set pcie:pcie_aer_ce_mask = 0x31c1

**TABLE 12** Solaris OS Issues Fixed in Solaris 10 8/07 (*Continued*)

CR ID	Description	Workaround
6520990	Domain may cause a panic when deleteboard(8) command for kernel board by using Dynamic Reconfiguration (DR).	For Solaris 10 11/06, this has been fixed in patch 120011-08.  [Workaround] To mask this error, add the following entry to the /etc/system file. set drmach:fmem_timeout = 30
6527781	The cfgadm command fails while moving the DVD/DAT drive between two domains.	For Solaris 10 11/06, this has been fixed in patch 125081-06.  No workaround is available. To reconfigure DVD/Tape drive, execute reboot -r from the domain exhibiting the problem.
6530178	DR addboard(8) command can hang. Once problem is observed, further DR operations are blocked. Recovery requires reboot of the domain.	For Solaris 10 11/06, this has been fixed in patch 120011-07.  No workaround is available.
6530288	Ap_Id format may not be shown correctly by cfgadm(1M) command.	For Solaris 10 11/06, this has been fixed in patch 120011-07.  No workaround is available.
6534471	Systems may panic/trap during normal operation.	For Solaris 10 11/06, this has been fixed in patch 125100-06.  If a patch is not available, disable the kernel large page sTLB programming. In the file /etc/system, change the variable heaplp_use_stlb to 0: set heaplp_use_stlb=0
6535564	PCI hot plug to PCI slot #0, #1 or External I/O Expansion Unit may fail on XSB added by DR.	For Solaris 10 11/06, this has been fixed in patch 120011-08.  [Workaround] Use DR instead of PCI hot plug if need to add or remove PCI card on the XSB.
6539084	Under Solaris 10 11/06, there is a low probability of a domain panic during reboot when the Sun Quad GbE UTP x8 PCIe (X4447A-Z) card is present in a domain.	No workaround is available.



**TABLE 12** Solaris OS Issues Fixed in Solaris 10 8/07 (*Continued*)

CR ID	Description	Workaround
6539909	Under Solaris 10 11/06, do not use the following I/O cards for network access when you are using the <code>boot net install</code> command to install the Solaris OS: X4447A-Z/X4447A-Z, PCIe Quad-port Gigabit Ethernet Adapter UTP X1027A-Z/X1027A-Z, PCIe Dual 10 Gigabit Ethernet Fiber XFP	Use an alternate type of network card or onboard network device to install the Solaris OS via the network.
6542632	Memory leak in PCIe module if driver attach fails.	For Solaris 10 11/06, this has been fixed in patch 120011-09.
		No workaround is available.

# 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 M3000/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 13 lists known documentation updates.

**TABLE 13** Software Documentation Updates

Title	Page Number	Update
SPARC Enterprise M3000/M4000/M5000/M8000/M9000 Servers XSCF Reference Manual and XSCF man pages	setupfru(8) command	The following description will be added in EXTENDED DESCRIPTION: Although a CMU with two CPUMs can be configured into Quad-XSB mode on an M8000/M9000 server, the server generates a "configuration error" message for these XSBs that do not have a CPUM and memory.
	setdualpowerfeed(8) command	The following description will be added in DESCRIPTION: The dual power feed mode cannot be used with 100V power on the M4000/M5000 servers.
	showenvironment(8) command	Following information will be added. "Airflow volume information is not supported on the M4000/M5000 servers."
		"The power consumption information is displayed on the M3000/M4000/M5000 servers." will be replaced by "The power consumption information is displayed on the M3000 server."

---

# Identifying Degraded Memory in a System

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

```
XSCF> showstatus
```

The following example identifies that DIMM number 00A on CMU#3 has degraded memory..

```
XSCF> showstatus  
      CMU#3 Status:Normal;  
*      MEM#00A Status:Degraded;
```

---

# Identifying Different Memory Sizes in a System Board

To identify if the domain contains system boards with different memory sizes, you can use either of the following commands to display the list of memory sizes:

- `showdevices(8)` command on the XSCF
- `prtdiag(1M)` command on the domain

## Using the `showdevices` Command

1. Log in to XSCF.

## 2. Type the following command:

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

The following example displays 00-0 has 64GB of memory while the other system boards have 16GB.

```
XSCF> showdevices -d 1
Memory:
-----
      board      perm      base      domain      target      deleted      remaining
DID XSB  mem MB    mem MB    address      mem MB    XSB      mem MB    mem MB
01  00-0  63680      0  0x0000004000000000  260288
01  03-0  16384     7384 0x0000003400000000  260288
01  03-1  16384      0  0x0000003000000000  260288
01  03-2  16384      0  0x0000002c00000000  260288
01  03-3  16384      0  0x0000002800000000  260288
```

## Using the prtdiag Command to Identify Memory Size

- On the domain, execute the prtdiag command.

```
# prtdiag
```

The following example displays different memory sizes.

```
# prtdiag
===== Memory Configuration =====
LSB      Memory  Available      Memory  DIMM      # of  Mirror  Interleave
Group    Size          Status      Size      DIMMs  Mode    Factor
---      -
00      A          32768MB      okay      2048MB    16 no    8-way
00      B          32768MB      okay      2048MB    16 no    8-way
03      A          8192MB       okay      2048MB     4 no    2-way
03      B          8192MB       okay      2048MB     4 no    2-way
04      A          8192MB       okay      2048MB     4 no    2-way
04      B          8192MB       okay      2048MB     4 no    2-way
05      A          8192MB       okay      2048MB     4 no    2-way
05      B          8192MB       okay      2048MB     4 no    2-way
06      A          8192MB       okay      2048MB     4 no    2-way
```

# 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:
-----

```

DID	XSB	board mem MB	perm mem MB	base address	domain mem MB	target XSB	deleted mem MB	remaining 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(8)` command or the `moveboard(8)` command, the following notice appears:

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

