



SPARC® Enterprise M8000/M9000 Servers Product Notes

For XCP version 1070

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Contents

Preface vii

Technical Support vii

Software Resources vii

Accessing Documentation viii

Fujitsu Welcomes Your Comments ix

General Information about XCP 1070 1

What's New in XCP 1070 1

Supported Firmware and Operating System 2

 Solaris Patch Information 2

Upgrading to XCP 1070 3

Functionality Issues and Limitations 3

 Notes for SPARC64 VII Processors 3

 General Functionality Issues and Limitations 4

Information about Hardware 6

Notes for power-on after power-off 6

Hardware Issues and Workarounds 6

Hardware Documentation Updates 7

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

7

Bottom Views of the Components 8

Information about Software 10

XCP Issues and Workarounds 10

Solaris OS Issues and Workarounds 15

Software Documentation Updates 32

Preparing to Upgrade to XCP 1050 or Later 34

Upgrading From XCP 104x to XCP 1050 or Later 34

Identifying Degraded Memory in a System 39

Identifying Different Memory Sizes in a System Board 39

 Using the `showdevices` Command 39

 Using the `prtdiag` Command to Identify Memory Size 40

Identifying Permanent Memory in a Target Board 41

Preface

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

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.

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.

Note – For latest patch information go to:

Global Site

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

Japanese Site

<https://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.

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/>

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

Solaris documentation is available at:

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

Fujitsu Welcomes Your Comments

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

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

General Information about XCP 1070

This section describes the general information about XCP 1070.

- [What's New in XCP 1070](#)
 - [Supported Firmware and Operating System](#)
 - [Upgrading to XCP 1070](#)
 - [Functionality Issues and Limitations](#)
-

What's New in XCP 1070

In XCP Version 1070, the following new features are introduced:

- SPARC64[®] VII processor is supported. For the use of the SPARC64 VII processor, see "General Functionality Issues and Limitations" on page xx and the related manuals.
- Solaris 10 5/08, which is released in April 2008, is supported for the operating system of the domains.
- The glossary at the end of the SPARC Enterprise M8000/M9000 Servers related manuals has been reorganized as a separate volume which referred to as *SPARC Enterprise M4000/M5000/M8000/M9000 servers Glossary*. This glossary covers the terms all across the high-end and the middle-range servers. See the glossary along with each manual.

Supported Firmware and Operating System

The following firmware and operating system (OS) are supported in this release.

TABLE 1 Firmware and Operating System Versions

| Firmware and Operating System | Version |
|-------------------------------|--|
| XSCF Control Package (XCP) | 1070 |
| Solaris™ Operating System | |
| SPARC64 VI processors: | 10 11/06 or later, with required patches |
| SPARC64 VII processors: | 10 5/08 |

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/>

Solaris Patch Information

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

These patches are not required for servers running Solaris 10 8/07 OS or later.

- 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

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

Upgrading to XCP 1070

If you are upgrading to XCP 1070 from a version of XCP prior to 1050, refer to [“Upgrading From XCP 104x to XCP 1050 or Later” on page 34](#) for important instructions.

If you are upgrading from a more recent version of XCP, refer to the *SPARC Enterprise M4000/M5000/M8000/M9000 Servers XSCF User’s Guide* for instructions.

Functionality Issues and Limitations

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

Notes for SPARC64 VII Processors



Caution – Upgrading a SPARC Enterprise M8000/M9000 server with SPARC 64 VII processors must be completed via cold-swap. XCP software must be upgraded to 1070 prior to inserting any SPARC 64 VII processors into the chassis. .

- The combination of SPARC64 VI and SPARC64 VII processors in a SPARC Enterprise M8000/M9000 server is not supported in this release.

General Functionality Issues and Limitations



Caution – For dynamic reconfiguration (DR) and hot-plug issues, see [TABLE 5](#).

- Domains using the ZFS file system can not use Dynamic Reconfiguration.
- The maximum number of IOUA (Base I/O Card) cards per domain is limited to six cards.
- 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 XSCF does not support the Log Archiving feature.
- 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.
- When you use the external power control interface (EPC) 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.
- For 4447A-Z/X4447A-Z, PCIe Quad-port Gigabit Ethernet Adapter UTP cards, these maximum limits apply:
 - No more than two cards in an External I/O Expansion Unit.
 - No more than eight cards in a SPARC Enterprise M8000/M9000 servers.
- To complete updating the OpenBoot PROM firmware in the target domain, be sure to power off/on the domain.
- In case that Solaris OS is a single user mode, if you switch from the domain console to the XSCF Shell, Solaris OS might be started up to multi-user mode. When you operate the single user mode for Solaris OS, don't switch from the domain console to the XSCF Shell.
- We recommend the domain to use the XSCF Unit as NTP server. In this case, needs the following attention.
 - 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 certified service engineer. For details on NTP settings, refer to the *SPARC Enterprise M4000/M5000/M8000/M9000 servers XSCF User's Guide*.

- When the XSCF unit is configured redundantly, ISN addresses must be in the same network subnet.
- 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.
- Using the XSCF Web, when you import XCP or update the firmware, Session ID error may be displayed on the web browser. And in the Autologout setting, when you specify the timeout period as over 30 minutes, Internal Server Error may 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 performing DR operation to a COD board, do not execute the `addcodlicense(8)/deletecodlicense(8)/setcod(8)` command.

Information about Hardware

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

- [Notes for power-on after power-off](#)
 - [Hardware Issues and Workarounds](#)
 - [Hardware Documentation Updates](#)
-

Notes for power-on after power-off

Please wait at least 30 seconds before turning on the system power that you turned off, by using the main line switch or the circuit breakers on the distribution panel.

Hardware Issues and Workarounds

[TABLE 2](#) lists known hardware issues and possible workarounds.

TABLE 2 Hardware Issues and Workarounds

| CR ID | Description | Workaround |
|---------|---|---|
| 6433420 | The domain console might display a Mailbox timeout or IOCB interrupt timeout error during boot. | Issue a <code>reset -all</code> command from the OpenBoot PROM (OK) prompt and reboot. |
| 6557379 | Power cables are not redundant on single power feed servers without the dual power feed option. | On servers that have single power feed, all power cables must be connected and powered on at all times. |

Hardware Documentation Updates

TABLE 3 lists known documentation updates..

TABLE 3 Documentation Updates

| Title | Page Number | Update |
|--|-------------|--|
| All SPARC Enterprise M8000/M9000 servers documentation | | <p>When there is the section "SPARC Enterprise M8000/M9000 Servers Documentation" in the Preface, the following document will be added.</p> <p><i>SPARC Enterprise/PRIMEQUEST Common Installation Planning Manual (C120-H007)</i></p> <p>All DVD references are now referred to as CD-RW/DVD-RW.</p> <p>The glossaries included in each of the documents have been removed from those documents. In their place, a separate document has been created, the <i>SPARC Enterprise M4000/M5000/M8000/M9000 Servers Glossary</i>.</p> |
| SPARC Enterprise M8000/M9000 Servers Overview Guide | 1-8 | <p>TABLE 1-1 "Main Unit Specifications"</p> <p>Main storage (memory module) describes the maximum capacity when 8GB DIMM mounted; however, 8GB DIMM can't be mounted at this time.</p> |
| | 1-21 | <p>1.3.3, "I/O Unit"</p> <p>It describes the types of LAN port as "1000BASE-T/100Base-TX/100Base-T," which should be modified as "1000Base-T/100Base-TX/10Base-T."</p> |
| | 1-26 | <p>1.5.3, "SPARC Enterprise M9000 Server (Expansion Cabinet) Option"</p> <p>It describes that the configuration can contain "up to 2B," which should be modified as "2TB."</p> <p>The memory size described here is the maximum capacity when 8GB DIMM mounted; however, 8GB DIMM can't be mounted at this time.</p> |

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*.

Bottom Views of the Components

This is to correct the description in Section 1.2.2.2, "Bottom View of the Components", FIGURE 1-18 SPARC Enterprise M8000 Server + Power Cabinet Bottom View and FIGURE 1-20 SPARC Enterprise M9000 Server (Base Cabinet) + Power Cabinet Bottom View. The correct figures are as follows:

FIGURE 1-18 SPARC Enterprise M8000 Server + Power Cabinet Bottom View

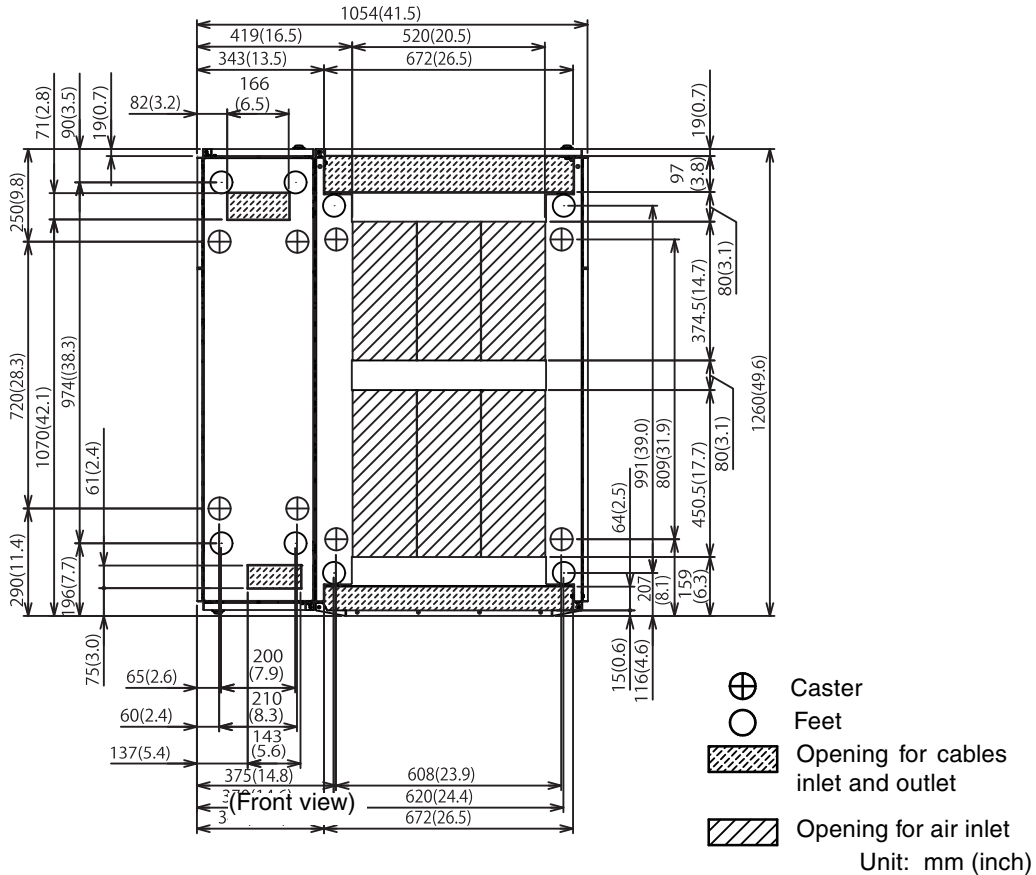
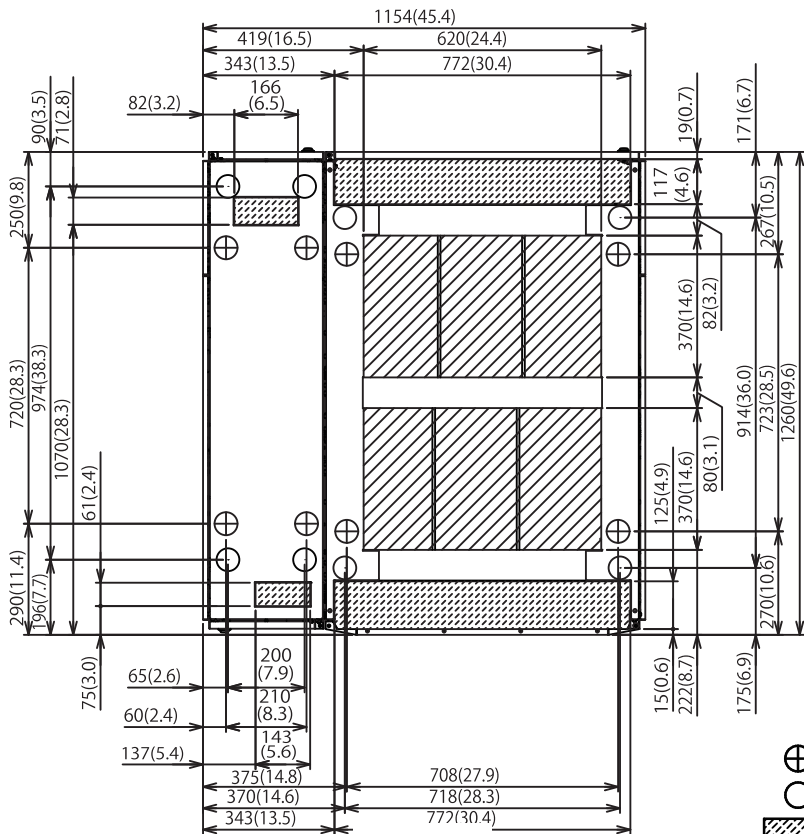


FIGURE1-18 SPARC Enterprise M9000 Server (Base Cabinet) + Power Cabinet Bottom View



(Front view)

Unit: mm (inch)

Information about Software

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](#)
 - [Preparing to Upgrade to XCP 1050 or Later](#)
 - [Upgrading From XCP 104x to XCP 1050 or Later](#)
 - [Identifying Degraded Memory in a System](#)
 - [Identifying Different Memory Sizes in a System Board](#)
 - [Identifying Permanent Memory in a Target Board](#)
-

XCP Issues and Workarounds

[TABLE 4](#) lists known XCP issues and possible workarounds.

TABLE 4 XCP Issues and Workarounds

| 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 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. |

TABLE 4 XCP Issues and Workarounds (Continued)

| ID | Description | Workaround |
|------------------|---|--|
| 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. |
| RTIF1-070823-001 | 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. |
| 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. |
| RTIF1-070824-005 | 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. |
| RTIF1-070824-011 | While using FireFox2, 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 should display "Permission denied" when it is executed in Standby XSCF. | Only the following CLIs can be executed on the Standby XSCF: <code>snapshot(8)</code> , <code>switchscf(8)</code> . Do not attempt to run any other CLI on the Standby. Such attempts will report various errors. |
| RTIF1-070904-004 | The latest communication field in <code>showarchiving(8)</code> command is not updated regularly. | Disabling and re-enabling archiving refreshes the Latest communication field in <code>showarchiving(8)</code> output. |

TABLE 4 XCP Issues and Workarounds (*Continued*)

| ID | Description | Workaround |
|------------------|---|--|
| RTIF1-070914-003 | When the XSCF switching performed, there may be "SCF: Board control error (DMA timeout)" stored in the error log. | There is no workaround. This message can be safely ignored. |
| 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. | There is no workaround. 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 | After using the <code>addfru(8)</code> , <code>deletefru(8)</code> or <code>replacefru(8)</code> command to hotplug a CMU, further DR operations might fail with a misleading message regarding the board being unavailable for DR. | When performing the <code>addfru(8)</code> , <code>deletefru(8)</code> and <code>replacefru(8)</code> commands, it is mandatory to run diagnostic tests. If you forget to run the diagnostic tests during <code>addfru(8)/deletefru(8)/replacefru(8)</code> then either run <code>testsb(8)</code> to test the CMU or remove the CMU/IOU with the <code>deletefru(8)</code> command and then use the <code>addfru(8)</code> command with the diagnostic tests. |
| RTIF1-071116-002 | XSCF failover during DR operation to the permanent mamory might cause domain panic. | 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. |
| 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. | There is no workaround. This message can be safely ignored. |
| 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 XCP Issues and Workarounds (Continued)

| ID | Description | Workaround |
|------------------|---|--|
| RTIF1-071129-003 | <p>An error log cannot be registered in XSCF when the following message is displayed on Solaris OS by the External I/O Expansion Unit error:</p> <pre>SUNW-MSG-ID: SUN4-8000-4P, TYPE: Fault</pre> | There is no 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>ntpdate[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 <code>xntpd</code> of the domain.</p> <p>Note - 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">• In case of step mode: Specify the <code>-w</code> option to execute the <code>ntpdate(1M)</code> command. Until it succeeds in synchronizing with the NTP server, the <code>ntpdate</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.• In case of slew mode: Execute the <code>ntpdate(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. |

TABLE 4 XCP Issues and Workarounds (*Continued*)

| ID | Description | Workaround |
|------------------|---|---|
| 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">• Following error message gets registered in the error log, the status becomes <code>Faulted</code>, and the standby XSCF becomes unable to start. Device error on serial interconnection between XSCFUs• 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. | <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">• Use the <code>replacefru(8)</code> command to reattach the standby XSCF unit.• 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. |
| 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> | <ul style="list-style-type: none">• This error can be ignored. An administrator can perform further diagnosis or clear the errors. |
| 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> |

Solaris OS Issues and Workarounds

TABLE 5 lists known Solaris OS issues and possible workarounds

TABLE 5 Solaris OS Issues and Workarounds

| CR ID | Description | Workaround |
|---------|--|---|
| 5076574 | A PCIe error can lead to an invalid fault diagnosis on a large M8000/M9000 domain. | This bug has been fixed in Solaris 10 5/08. [Workaround] Create a file <code>/etc/fm/fmd/fmd.conf</code> containing the following lines; <code>setprop client.buflim 40m</code> <code>setprop client.memlim 40m</code> |
| 6303418 | A SPARC Enterprise M9000 server with a single domain and 11 or more fully populated system boards might hang under heavy stress. | This bug has been fixed in Solaris 10 8/07. 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. |
| 6348554 | Using the <code>cfgadm -c disconnect</code> command on the following cards might hang the command during <code>i_mdi_pi_offline</code> : <ul style="list-style-type: none">• SG-XPCIE2FC-QF4 Sun StorageTek Enterprise Class 4Gb Dual-Port Fibre Channel PCI-E HBA• SG-XPCIE1FC-QF4 Sun StorageTek Enterprise Class 4Gb Single-Port Fibre Channel PCI-E HBA• SG-XPCI2FC-QF4 Sun StorageTek Enterprise Class 4Gb Dual-Port Fibre Channel PCI-X HBA• SG-XPCI1FC-QF4 Sun StorageTek Enterprise Class 4Gb Single-Port Fibre Channel PCI-X HBA | This bug has been fixed in Solaris 10 5/08. For Solaris 10 8/07 or earlier, this has been fixed in patch 126670-01. [Workaround] Do not perform <code>cfgadm -c disconnect</code> operation on the affected cards. |

TABLE 5 Solaris OS Issues and Workarounds (*Continued*)

| CR ID | Description | Workaround |
|---------|---|--|
| 6416224 | System performance can degrade using a single NIC card with more than 5,000 connections. | This bug has been fixed in Solaris 10 8/07. For Solaris 10 11/06, this has been fixed in patch 120011-08. [Workaround] Use multiple NIC cards to split network connections. |
| 6440061 | The domain console may display this message: ipsec_check_inbound_policy: Policy Failure for the incoming packet (not secure) | This message can be safely ignored. |
| 6441349 | The system may hang if there is an I/O error in the system. | This bug has been fixed in Solaris 10 8/07. There is no workaround. |
| 6449315 | The Solaris <code>cfgadm(1M)</code> command does not unconfigure a DVD drive from a domain on a SPARC Enterprise M8000/M9000 server. | Disable the Volume Management Daemon (<code>vold</code>) before unconfiguring a DVD drive with the <code>cfgadm(1M)</code> command. 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> . |
| 6459540 | The DAT72 internal tape drive on SPARC Enterprise M8000/M9000 may time out during tape operations. | Add the following definition to <code>/kernel/drv/st.conf</code> : <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> There are four spaces between SEAGATE DAT and DAT72-000. |
| 6466617 | Performing a hot plug operation with the PCI-Express slot too quickly interrupts a PCI leaf reset and fails, creating a <code>cfgadm: Component system is busy error</code> . | Pause a few seconds between the issue of each <code>cfgadm -c</code> command. |

TABLE 5 Solaris OS Issues and Workarounds (Continued)

| CR ID | Description | Workaround |
|---------|---|--|
| 6472153 | If you create a Solaris Flash archive on a non-SPARC Enterprise M8000/M9000 sun4u server and install it on a SPARC Enterprise M8000/M9000 sun4u server, the console's TTY flags will not be set correctly. This can cause the console to lose characters during stress. | <p>This bug has been fixed in Solaris 10 5/08.</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> |
| 6481002 | Installing the Solaris from the network using certain PCI-Express cards may cause a panic. | If you are using a Sun PCI-E Dual Gigabit Ethernet Adapter MMF card or a Sun PCI-E Dual Gigabit Ethernet Adapter UTP card, do not install the Solaris using either of these cards. Instead, use other network devices, such as the onboard Gigabit Ethernet or another network device. |
| 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. | <p>This bug has been fixed in Solaris 10 8/07. For Solaris 10 11/06, this has been fixed in patch 120011-08.</p> <p>There is no workaround.</p> |

TABLE 5 Solaris OS Issues and Workarounds (*Continued*)

| CR ID | Description | Workaround |
|---------|---|--|
| 6496337 | <p>The "cpumem-diagnosis" module may fail to load after uncorrectable error(UE) panic. Systems will function correctly but events normally automatically diagnosed by FMA using this module will require manual diagnosis.</p> <p>Example:</p> <pre>SUNW-MSG-ID: FMD-8000-2K, TYPE: Defect, VER: 1, SEVERITY: Minor EVENT-TIME: Thu Feb 15 15:46:57 JST 2007 PLATFORM: SUNW,SPARC-Enterprise, CSN: BE80601007, HOSTNAME: col2-ff-em7-d0</pre> | <p>This bug has been fixed in Solaris 10 8/07. 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"> 1. Remove the following file. <pre># rm /var/fm/fmd/ckpt/cpumem-diagnosis/cpumem-diagnosis</pre> 2. Restart fmd service. <pre># svcadm restart fmd</pre> <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>This bug has been fixed in Solaris 10 8/07. For Solaris 10 11/06, this has been fixed in patch 120011-07.</p> <p>There is no workaround.</p> |

TABLE 5 Solaris OS Issues and Workarounds (Continued)

| CR ID | Description | Workaround |
|---------|---|--|
| 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 EVENT-TIME: Fri Feb 2 18:31:07 JST 2007 PLATFORM: SPARC-Enterprise, CSN: BE80601035, HOSTNAME: FF2-35-0</p> | <p>This bug has been fixed in Solaris 10 8/07. For Solaris 10 11/06, this has been fixed in patch 125369-05.</p> <p>[Workaround] Check CPU status on XSCF.</p> |
| 6502204 | <p>Unexpected error messages may be displayed on console on booting after CPU UE panic.</p> <p>Example:</p> <p>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</p> | <p>This bug has been fixed in Solaris 10 8/07. For Solaris 10 11/06, this has been fixed in patch 125369-05.</p> <p>[Workaround] If you see unexpected messages, use the XSCF command <code>showdomainstatus(8)</code> to check system status on XSCF.</p> |
| 6502750 | <p>Notification message for inserted or removed card by PCI hot plug may not output.</p> | <p>This bug has been fixed in Solaris 10 8/07. For Solaris 10 11/06, this has been fixed in patch 120011-08.</p> <p>There is no workaround.</p> |
| 6505921 | <p>Correctable error on the system PCIe bus controller generates an invalid fault.</p> | <p>This bug has been fixed in Solaris 10 5/08. For Solaris 10 8/07 or earlier, this has been fixed in 120011-14 and 125369-05.</p> <p>[Workaround] Create a file <code>/etc/fm/fmd/fmd.conf</code> containing the following lines; <code>setprop client.buflim 40m</code> <code>setprop client.memlim 40m</code></p> |

TABLE 5 Solaris OS Issues and Workarounds (Continued)

| CR ID | Description | Workaround |
|---------|--|---|
| 6508432 | Many correctable errors (CE) may occur, and despite these are the correctable errors, domain may panic. | <p>This bug has been fixed in Solaris 10 8/07. For Solaris 10 11/06, this has been fixed in patch 120011-08.</p> <p>[Workaround] Set the following to <code>/etc/system</code> and then reboot the domain: <code>set pcie:pcie_aer_ce_mask = 0x2001</code></p> |
| 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. | <p>This bug has been fixed in Solaris 10 8/07. For Solaris 10 11/06, this has been fixed in patch 120011-08.</p> <p>[Workaround] Do not insert a different type of PCI-X card on the same PCI slot card by using PCI hot plug.</p> |
| 6509337 | s10s_u3 wanboot fails - The server returned 416: Requested Range Not Satisfiable. | <p>This bug has been fixed in Solaris 10 8/07.</p> |
| 6510861 | When Dual-Channel Ultra320 SCSI Card (SE0X7SC2F, SE0X7SC2X) is mounted, correctable errors(CE) occur and system may panic. | <p>This bug has been fixed in Solaris 10 8/07. For Solaris 10 11/06, this has been fixed in patch 120011-08.</p> <p>[Workaround] Add the following entry to the <code>/etc/system</code> file and then reboot the system: <code>set pcie:pcie_aer_ce_mask = 0x31c1</code></p> |
| 6511374 | Unexpected error messages may be displayed on console after changing the system configuration. Example: WARNING: Translation error source /LSB0/B0/0, PA 3c000000000, target /LSB0/B0/20000000 | <p>This message can be safely ignored.</p> |

TABLE 5 Solaris OS Issues and Workarounds (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.<interface></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"> 1) <code>devfsadm</code> (at Solaris prompt) 2) <code>cfgadm</code> |
| 6519290 | Large amounts of I/O on swap devices can cause the system to appear hung by overwelling the I/O system. The amount of I/O required can be generated through a number of ways, eg memory shortage, heavy use of <code>/tmp</code> etc. | <p>Set the following to <code>/etc/system</code> and then reboot the domain:</p> <pre>set maxfastscan=0x2000</pre> |
| 6520990 | Domain may cause a panic when <code>deleteboard(8)</code> command for kernel board by using Dynamic Reconfiguration (DR). | <p>This bug has been fixed in Solaris 10 8/07. For Solaris 10 11/06, this has been fixed in patch 120011-08.</p> <p>[Workaround]</p> <p>To mask this error, add the following entry to the <code>/etc/system</code> file.</p> <pre>set drmach:fmem_timeout = 30</pre> |
| 6522017 | DR and ZFS may not be used in the same domain. | <p>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> |

TABLE 5 Solaris OS Issues and Workarounds (*Continued*)

| CR ID | Description | Workaround |
|--------------|--|--|
| 6522433 | After the CPU hardware error occurred, the <code>fmddump(1M)</code> command on the domain may display an incorrect faulty component. | This bug has been fixed in Solaris 10 5/08. [<i>Workaround</i>] Check system status on XSCF. |
| 6527781 | The <code>cfgadm</code> command fails while moving the DVD/DAT drive between two domains. | This bug has been fixed in Solaris 10 8/07. For Solaris 10 11/06, this has been fixed in patch 125081-06. There is no workaround. To reconfigure DVD/Tape drive, execute <code>reboot -r</code> from the domain exhibiting the problem. |
| 6527811 | The <code>showhardconf(8)</code> 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. | This bug has been fixed in Solaris 10 5/08. For Solaris 10 8/07 or earlier, this has been fixed in patch 128346-01. There is no workaround. |
| 6529714 | Warning messages occur while trying to configure more than four X4447A-Z or X1027A-Z1 cards into one I/O Boat. | There is no workaround. |
| 6530178 | DR <code>addboard(8)</code> command can hang. Once problem is observed, further DR operations are blocked. Recovery requires reboot of the domain. | This bug has been fixed in Solaris 10 8/07. For Solaris 10 11/06, this has been fixed in patch 120011-07. There is no workaround. |
| 6530288 | <code>Ap_Id</code> format may not be shown correctly by <code>cfgadm(1M)</code> command. | This bug has been fixed in Solaris 10 8/07. For Solaris 10 11/06, this has been fixed in patch 120011-07. There is no workaround. |
| 6530753 | Some of the PCI slots in the External I/O Expansion Unit PCI slots are not displayed during a normal boot operation. | Use one of the following operations to display all of the PCI slots. <ul style="list-style-type: none"> • <code>boot -r</code> (at open boot prompt) • <code>devfsadm -C</code> (at Solaris prompt) • <code>cfgadm</code> (twice at Solaris prompt) |
| 6531036 | The error message <code>network initialization failed</code> appears repeatedly after a boot net installation. | There is no workaround. This message can be safely ignored. |
| 6531668 | System hangs when executing parallel hot plug operation with SP DR in suspend phase. | There is no workaround. |

TABLE 5 Solaris OS Issues and Workarounds (*Continued*)

| CR ID | Description | Workaround |
|---------|---|---|
| 6532215 | <p>volfs or dscp service may fail when domain is booted.</p> <pre> 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. </pre> | <p>Restart the service if the failure is observed. To avoid the problem, issue the following commands.</p> <pre> # svccfg -s dscp setprop start/timeout_seconds=count: 300 # svccfg -s volfs setprop start/timeout_seconds=count: 300 # svcadm refresh dscp # svcadm refresh volfs </pre> |
| 6533686 | <p>DR deleteboard(8) and moveboard(8) operations might fail if the target board includes permanent memory.</p> <p>Example for messages on domain:</p> <pre> drmach: WARNING: DR parellel copy timeout dcs: <xxxx> config_change_state: Hardware specific failure: unconfigure SB1: DR parellel copy timeout </pre> | <p>Try DR operations again.</p> <p>To avoid this issue, before performing DR operations using deleteboard(8) and moveboard(8) commands on a board that includes permanent memory, follow these steps:</p> <ol style="list-style-type: none"> 1. Add the following line to the System Configuration file (/etc/system): <pre>set drmach:drmach_disable_mcopy = 1</pre> 2. Reboot the domain. |
| 6534471 | <p>Domain may panic.</p> | <p>This bug has been fixed in Solaris 10 8/07. For Solaris 10 11/06, this has been fixed in patch 125100-06.</p> <p>[Workaround]</p> <p>Add the following line to /etc/system and reboot the domain.</p> <pre>set heaplp_use_stlb=0</pre> |
| 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>For Solaris domains that include SPARC64 VII processors, limit domains to a maximum of 256 threads.</p> |
| 6535564 | <p>PCI hot plug to PCI slot #0, #1 or External I/O Expansion Unit may fail on XSB added by DR.</p> | <p>This bug has been fixed in Solaris 10 8/07. For Solaris 10 11/06, this has been fixed in patch 120011-08.</p> <p>[Workaround]</p> <p>Use DR instead of PCI hot plug if need to add or remove PCI card on the XSB.</p> |

TABLE 5 Solaris OS Issues and Workarounds (*Continued*)

| CR ID | Description | Workaround |
|---------|---|--|
| 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>This bug has been fixed in Solaris 10 5/08. 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 sales representative or a certified service engineer.</p> <p>Example:</p> <pre>SUNW-MSG-ID: SUNOS-8000-1L, TYPE: Defect, VER: 1, SEVERITY: Minor EVENT-TIME: Sun May 6 18:22:24 PDT 2007 PLATFORM: SUNW,SPARC-Enterprise, CSN: BE80601007, HOSTNAME: sparc</pre> |
| 6537511 | Bluetooth partner is hung during security tests execution. | Restart application server. |
| 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. | <p>This bug has been fixed in Solaris 10 7/08.</p> <p>There is no workaround.</p> |
| 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: <ul style="list-style-type: none">• 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. |

TABLE 5 Solaris OS Issues and Workarounds (Continued)

| CR ID | Description | Workaround |
|---------|---|---|
| 6542632 | Memory leak in PCIe module if driver attach fails. | This bug has been fixed in Solaris 10 8/07. For Solaris 10 11/06, this has been fixed in patch 120011-09. There is no workaround. |
| 6545143 | When kcase daemon is expanding the kcase area, if the user stack exists in the expanded area, its area is demapped and might cause a <code>ptl_1</code> panic during the flushw handler execution. | This bug has been fixed in Solaris 10 5/08. For Solaris 10 8/07 or earlier, this has been fixed in patch 127111-08. There is no workaround. |
| 6545685 | If the following message displayed on the OS console, memory degradation or XSB deconfiguration may occur in the subsequent reboot. Example: <code>mc-op1: WARNING: mc-op1 rewrite timeout on /LSB0/B0</code> | This bug has been fixed in Solaris 10 5/08. For Solaris 10 8/07 or earlier, this has been fixed in patch 127111-08. [Workaround] Add the following to <code>/etc/system</code> and then reboot the domain: <code>set mc-op1: mc_max_rewrite_loop = 20000</code> |
| 6546188 | 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: <ul style="list-style-type: none"> • X4447A-Z, PCI-e Quad-port Gigabit Ethernet Adapter UTP • X1027A-Z1, PCI-e Dual 10 Gigabit Ethernet Fiber XFP Low profile Adapter | This bug has been fixed in Solaris 10 5/08. For Solaris 10 8/07, this has been fixed in patch 127741-01. There is no workaround. |
| 6551356 | 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: <ul style="list-style-type: none"> • X4447A-Z, PCI-e Quad-port Gigabit Ethernet Adapter UTP • X1027A-Z1, PCI-e Dual 10 Gigabit Ethernet Fiber XFP Low profile Adapter | This bug has been fixed in Solaris 10 5/08. For Solaris 10 8/07, this has been fixed in patch 127741-01. [Workaround] 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. |

TABLE 5 Solaris OS Issues and Workarounds (*Continued*)

| CR ID | Description | Workaround |
|---------|--|---|
| 6556742 | <p>The system panics when DiskSuite can not read the metadb during DR. This bug affects the following cards:</p> <ul style="list-style-type: none">• SG-XPCIE2FC-QF4, 4Gb PCI-e Dual-Port Fibre Channel HBA• SG-XPCIE1FC-QF4, 4Gb PCI-e Single-Port Fibre Channel HBA• SG-XPCI2FC-QF4, 4Gb PCI-X Dual-Port Fibre Channel HBA• SG-XPCI1FC-QF4, 4Gb PCI-X Single-Port Fibre Channel HBA | <p>This bug has been fixed in Solaris 10 5/08. For Solaris 10 8/07 or earlier, this has been fixed in patch 125166-06.</p> <p>[<i>Workaround</i>] Panic can be avoided when a duplicated copy of the metadb is accessible via another Host Bus Adaptor.</p> |
| 6559504 | <p>Messages of the form nxge: NOTICE: nxge_ipp_eccue_valid_check: rd_ptr = nnn wr_ptr = nnn will be observed on the console with the following cards:</p> <ul style="list-style-type: none">• X4447A-Z, PCI-e Quad-port Gigabit Ethernet Adapter UTP• X1027A-Z1, PCI-e Dual 10 Gigabit Ethernet Fiber XFP Low profile Adapter | <p>This bug has been fixed in Solaris 10 5/08. For Solaris 10 8/07, this has been fixed in patch 127741-01.</p> <p>[<i>Workaround</i>] These messages can be safely ignored.</p> |
| 6563785 | <p>Hot-plug operation with the following cards might fail if a card is disconnected and then immediately reconnected:</p> <ul style="list-style-type: none">• SG-XPCIE2SCSIU320Z Sun StorageTek PCI-E Dual-Port Ultra320 SCSI HBA• SGXPCI2SCSILM320-Z Sun StorageTek PCI Dual-Port Ultra320 SCSI HBA | <p>This bug has been fixed in Solaris 10 5/08. For Solaris 10 8/07 or earlier, this has been fixed in patch 127111-05.</p> <p>[<i>Workaround</i>] After disconnecting a card, wait for a few seconds before re-connecting.</p> |
| 6564332 | <p>Hot-plug operations on Sun Crypto Accelerator (SCA)6000 cards can cause SPARC Enterprise M8000/M9000 servers to panic or hang.</p> | <p>Version 1.0 of the SCA6000 driver does not support hot-plug and should not be attempted. Version 1.1 of the SCA6000 driver and firmware supports hot-plug operations after the required bootstrap firmware upgrade has been performed.</p> |
| 6564934 | <p>Performing a DR deleteboard(8) 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">• X4447A-Z, PCI-e Quad-port Gigabit Ethernet Adapter UTP• X1027A-Z1, PCI-e Dual 10 Gigabit Ethernet Fiber XFP Low profile Adapter | <p>This bug has been fixed in Solaris 10 5/08. For Solaris 10 8/07, this has been fixed in patch 127741-01.</p> <p>[<i>Workaround</i>] 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> |

TABLE 5 Solaris OS Issues and Workarounds (Continued)

| CR ID | Description | Workaround |
|---------|---|---|
| 6568417 | <p>After a successful CPU DR deleteboard(8) operation, the system panics when the following network interfaces are in use:</p> <ul style="list-style-type: none"> • X4447A-Z, PCI-e Quad-port Gigabit Ethernet Adapter UTP • X1027A-Z1, PCI-e Dual 10 Gigabit Ethernet Fiber XFP Low profile Adapter | <p>This bug has been fixed in Solaris 10 5/08. 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> |
| 6571370 | <p>Use of the following cards have been observed to cause data corruption in stress test under laboratory conditions:</p> <ul style="list-style-type: none"> • X4447A-Z, PCI-e Quad-port Gigabit Ethernet Adapter UTP • X1027A-Z1, PCI-e Dual 10 Gigabit Ethernet Fiber XFP Low profile Adapter | <p>This bug has been fixed in Solaris 10 5/08. For Solaris 10 8/07, this has been fixed in patch 127741-01.</p> <p>[Workaround]</p> <p>Add the following line in <code>/etc/system</code> and reboot the system: set</p> <pre>nxge:nxge_rx_threshold_hi=0</pre> |
| 6572827 | <p>On SPARC Enterprise M8000/M9000 servers, one of the columns in the IO Devices section of the output from <code>prtdiag -v</code> is "Type". This reports "PCIe", "PCIx", "PCI" or "UNKN" for each device.</p> <p>The algorithm used to compute this value is incorrect. It reports "PCI" for PCI-X leaf devices and "UNKN" for legacy PCI devices.</p> | <p>There is no workaround.</p> |
| 6584984 | <p>On SPARC Enterprise M8000/M9000 servers, <code>busstat(1M)</code> command may cause rebooting of domains.</p> | <p>This bug has been fixed in Solaris 10 5/08.</p> <p>There is no workaround. Do not use <code>busstat(1M)</code> command.</p> <p>Check for the availability of a patch for this defect.</p> |
| 6588650 | <p>On occasion, the system is unable to DR after an XSCF failover or XSCF reboot.</p> | <p>There is no workaround.</p> |
| 6589546 | <p><code>prtdiag(8)</code> command does not show all I/O devices of the following cards:</p> <ul style="list-style-type: none"> • SG-XPCIE2FC-EM4 Sun StorageTek Enterprise Class 4Gb Dual-Port Fibre Channel PCI-E HBA • SG-XPCIE1FC-EM4 Sun StorageTek Enterprise Class 4Gb Single-Port Fibre Channel PCI-E HBA | <p>This bug has been fixed in Solaris 10 5/08.</p> <p>[Workaround]</p> <p>Use <code>prtdiag -v</code> for full output.</p> |

TABLE 5 Solaris OS Issues and Workarounds (*Continued*)

| CR ID | Description | Workaround |
|---------|--|--|
| 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 <code>Ctrl-q</code> (the "Ctrl" key and the "q" key). |
| 6589833 | The DR <code>addboard(8)</code> command might cause a system hang if you are adding a Sun StorageTek Enterprise Class 4Gb Dual-Port Fibre Channel PCI-E HBA card (SGXPCIE2FC-QF4) at the same time that an SAP process is attempting to access storage devices attached to this card. The chance of a system hang is increased if the following cards are used for heavy network traffic: <ul style="list-style-type: none">• X4447A-Z, PCI-e Quad-port Gigabit Ethernet Adapter UTP• X1027A-Z1, PCI-e Dual 10 Gigabit Ethernet Fiber XFP Low profile Adapter | There is no workaround. |
| 6592302 | Unsuccessful DR operation leaves memory partially configured. | Try <code>deleteboard(8)</code> again. |
| 6614737 | The DR <code>deleteboard(8)</code> and <code>moveboard(8)</code> operations might hang if any of the following conditions exist: <ul style="list-style-type: none">• A DIMM has been degraded.• The domain contains system boards with different memory size. | <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 <code>showstatus(8)</code> command. For sample output, see “Identifying Degraded Memory in a System” on page 39.</p> <p>To determine whether the domain contains system boards with different memory sizes, display the list of memory sizes using the XSCF <code>showdevices(8)</code> command or the <code>prtdiag(8)</code> command on the domain. For sample of output, see “Identifying Different Memory Sizes in a System Board” on page 39</p> <p>If a DR command hangs, reboot the domain to recover.</p> |

TABLE 5 Solaris OS Issues and Workarounds (*Continued*)

| CR ID | Description | Workaround |
|---------|--|--|
| 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. | <ul style="list-style-type: none">• 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). |
| 6623226 | The Solaris command <code>lockstat(1M)</code> might cause a system panic. | Do not use the Solaris <code>lockstat(1M)</code> command. |
| 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 <code>psrset(1M)</code> man page for more information. |
| 6632549 | fmd service on domain might fail to maintenance mode after DR operations. | If fmd service fails, issue the following commands on the domain to recover: <pre># svcadm clear fmd</pre> |

TABLE 5 Solaris OS Issues and Workarounds (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: <hostname> 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 <EVENT-ID></code> to locate the module. Use <code>fmadm reset <module></code> to reset the module.</pre> | <ul style="list-style-type: none"> • Manually restart <code>fmd</code> using the command: <code>svcadm clear fmd</code> • Or, restart the <code>cpumem-diagnosis</code>: <code>fmadm restart cpumem-diagnosis</code> |

TABLE 5 Solaris OS Issues and Workarounds (*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"> • A domain contains 256 or more CPUs. • More than 256 memory errors are detected. | <ol style="list-style-type: none"> 1. Set the following parameter in the system specification file (<code>/etc/system</code>): <pre>set drmach:drmach_disable_mcopy = 1</pre> 2. Reboot the domain. |
| 6679370 | <p>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.</p> <pre>SUNW-MSG-ID: SUN4-8000-75, TYPE: Fault, VER: 1, SEVERITY: Critical ... DESC: A problem was detected in the PCI-Express subsystem. Refer to http://sun.com/msg/SUN4-8000-75 for more information. ...</pre> | <p>Add the following to <code>/etc/system</code> and then reboot the domain.</p> <pre>set pcie_expected_ce_mask = 0x2001</pre> |
| 6565553 | DR deleteboard(8) and moveboard(8) operations might fail. | There is no workaround. |
| 6674266 | <p>Example for messages on domain:</p> <pre>drmach: WARNING: Device driver failure: /pci dcs: <xxxx> config_change_state: Hardware specific failure: unconfigure SB1: Device driver failure: /pci</pre> | Try DR operations again. |

Software Documentation Updates

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

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

[TABLE 6](#) lists known documentation updates.

TABLE 6 Documentation Updates

| Title | Page Number | Update |
|--|-------------------------------------|--|
| All SPARC Enterprise M8000/M9000 servers documentation | | When there is the section "SPARC Enterprise M8000/M9000 Servers Documentation" in the Preface, the following document will be added. <i>SPARC Enterprise/PRIMEQUEST Common Installation Planning Manual (C120-H007)</i> |
| SPARC Enterprise M4000/M5000/M8000/M9000 Servers XSCF User's Guide | Page 2-30 | The maximum length of the user name is 31 characters. Table 2-4 User Accounts Administration erroneously documents a maximum user name length of 32 characters. |
| SPARC Enterprise M4000/M5000/M8000/M9000 Servers XSCF Reference Manual | | All DVD references are now referred to as CD-RW/DVD-RW. |
| | <code>adduser(8)</code> man page | The maximum length of the user name is 31 characters. The <code>adduser(8)</code> man page erroneously documents a maximum user name length of 32 characters. |
| | <code>console(8)</code> man page | The note in DESCRIPTION is changed as follows: When you return to XSCF shell console without logging out from the domain, the return causes automatically logging out from the domain. |

TABLE 6 Documentation Updates (*Continued*)

| Title | Page Number | Update |
|--|--|--|
| SPARC Enterprise M4000/M5000/M8000/ M9000 Servers XSCF Reference Manual | sendbreak(8) man page | The sendbreak(8) command will not work when the secure mode is set to on while the mode switch on the operator panel is set to locked. Refer to the setdomainmode(8) for more information. |
| | setdscp(8)/ showdscp(8) man page | The references to <i>site planning guide</i> of the caution in EXAMPLES are now referenced to as <i>administration guide</i> . |
| | viewaudit(8) man page | The viewaudit(8) man pages show incorrect output for Example 5 and Example 6. |

Preparing to Upgrade to XCP 1050 or Later

1. Delete any accounts named "admin".

Use the `showuser -lu` command to list all XSCF accounts. Any accounts named `admin` must be deleted prior to upgrading to XCP 1050 or later. This account name is reserved in XCP 1050 and higher. Use the `deleteuser(8)` command to delete the account.

Upgrading From XCP 104x to XCP 1050 or Later

The following steps describe the case of upgrading to XCP 1070.

Note – By upgrading to XCP 1050 or later, XSCFU_B#1 will start working. When your system is using RCI network, XSCFU_B#1 needs proper configuration of cabling or termination to setup RCI network, properly. For further information, please contact a certified service engineer.

Note – Do not access the XSCF units via the "Takeover IP address".

Note – LAN connections are disconnected when the XSCF resets. It is recommended to use the XSCF serial connection to simplify the XCP upgrade procedure.

1. Log in to the XSCF#0 on an account with platform administrative privileges.
2. Verify that there are no faulted or deconfigured components by using the `showstatus(8)` command.

```
XSCF> showstatus
```

The `showstatus(8)` prompt will return if there are no failures found in the System Initialization. If anything is listed, contact a certified service engineer. before proceeding.

Note – Take information with using BUI or `snapshot(8)` command. This will be help in case any problem occurred in this procedure.

3. Power off all domains.

```
XSCF> poweroff -a
```

4. Confirm that all domains are stopped:

```
XSCF> showlogs power
```

5. Move the key position on the operator panel from Locked to Service.

6. Collect an XSCF snapshot to archive system status prior to upgrade.

```
XSCF> snapshot -t user@host:directory
```

7. The BUI on XSCFU#0 can be used to upload the XCP 1070 upgrade image.

8. Update the firmware by using the `flashupdate(8)` command.



Caution – `flashupdate(8)` will update one bank, reset the XSCF and commence update of the second bank. Verify that the current and reserve banks are both updated. If both banks indicate XCP revision 1070, proceed to the next step.

```
XSCF> flashupdate -c update -m xcp -s version
```

Specify the XCP version to be updated. In this examples, it's 1070.

9. Confirm completion of the update.

```
XSCF> showlogs event
```

Confirm no abnormality happens while updating XCSF_B#0.

10. Confirm that both the current and reserve banks of XSCFU#0 display the updated XCP versions.

```
XSCF> version -c xcp

XSCF#0 (Active)
XCP0 (Reserve): 1070
XCP1 (Current): 1070
XSCF#1 (Standby)
XCP0 (Reserve): 0000
XCP1 (Current): 0000
```

If the Current and Reserve banks on XSCF#0 do not indicate XCP revision 1070, contact a certified service engineer.

11. Turn off all of the server's mainline switches for 30 seconds.
12. After 30 seconds, turn the mainline switches back on.
13. Wait until XSCF firmware reaches the ready state.

This can be confirmed when the READY LEDs of XSCF_B#0 and XSCF_B#1 remain lit.

14. Log in on to XSCFU#0 using a serial connection or LAN connection.
15. Confirm no abnormality occurred by using `showlogs error -v` and `showstatus(8)` commands.

```
XSCF> showlogs error -v
XSCF> showstatus
```

If you encounter any hardware abnormality of the XSCF contact a certified service engineer.

Note – When you execute the `showlogs(8)` command, the following two error logs regarding the standby XSCF are displayed. These error logs can be safely ignored.

```
FRU: /XSCFU_B#1
Msg: Failed to decide active XSCFU (step1 timeout)
FRU: /XSCFU_B#1
Msg: Failed to decide active XSCFU (step2 timeout)
```

16. Confirm and update the imported XCP image again.

```
XSCF> flashupdate -c update -m xcp -s version
```

Specify the XCP version to be updated. In this example, it is 1070. XSCF#1 will be updated, and then XSCF#0 updated, again.

When the firmware update for XSCF#0 is complete, XSCF#1 is active.

17. Log in to XSCFU#1 using a serial connection or LAN connection.

18. Confirm completion of the update by using the `showlogs event` command.

```
XSCF> showlogs event
```

Confirm no abnormality is found during the update.

19. Confirm that both the current and reserve banks of XSCFU#1 display the updated XCP versions.

```
XSCF> version -c xcp

XSCF#1 (Active)
XCP0 (Reserve): 1070
XCP1 (Current): 1070
XSCF#0 (Standby)
XCP0 (Reserve): 1070
XCP1 (Current): 1070
```

If the Current and Reserve banks on XSCF#1 do not indicate XCP revision 1070, contact a certified service engineer..

Note – Setup RCI network if RCI is used. To setup RCI network, please consult your service provider.

20. Confirm switching over between XSCFs works properly.

```
XSCF> switchscf -t Standby
The XSCF unit switch between the Active and Standby states.
Continue? [y|n] :y
```

- a. When the READY LED on XSCFU_B#1 and the ACTIVE LED on XSCFU_B#0 remain lit, log in to XSCFU#0 using a serial connection or LAN connection.

b. Confirm switching over between XSCFs using the following commands:

```
XSCF> showhardconf
```

Confirm XSCF#1 is now the standby, and that XSCF#0 becomes has become the active unit.

```
XSCF> showlogs error
```

Confirm new log is not recorded since you checked on [Step 16](#).

```
XSCF> showlogs event
```

Confirm a message XSCFU entered active state from standby state.

```
XSCF> showstatus
```

Confirm a message "No failures found in System Initialization".

21. In case the takeover IP address is specified, confirm the IP address.

```
XSCF> shownetwork lan#0  
XSCF> shownetwork lan#1
```

22. Power on all domains.

```
XSCF> poweron -a
```

23. Log in to XSCFU#0 and confirm all domains start up properly.

```
XSCF> showlogs power
```

24. Check that there are no new errors.

```
XSCF> showlogs error
```

In case an abnormality is encountered, take appropriate maintenance action. If no abnormality is found, proceed to [Step 25](#).

25. Move position of the key switch on the operator panel from service to lock.

Identifying Degraded Memory in a System

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

```
XSCF> showstatus
```

The following example identifies 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:
-----

```

| DID | XSB | board mem MB | perm mem MB | base address | domain mem MB | target XSB | deleted mem MB | remaining mem MB |
|-----|------|--------------|-------------|--------------------|---------------|------------|----------------|------------------|
| 01 | 00-0 | 63680 | 0 | 0x0000004000000000 | 260288 | | | |
| 01 | 03-0 | 16384 | 7384 | 0x0000034000000000 | 260288 | | | |
| 01 | 03-1 | 16384 | 0 | 0x0000030000000000 | 260288 | | | |
| 01 | 03-2 | 16384 | 0 | 0x000002c000000000 | 260288 | | | |
| 01 | 03-3 | 16384 | 0 | 0x0000028000000000 | 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 Group | Available Size | Memory Status | DIMM Size | # of DIMMs | Mirror Mode | Interleave 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]:
```

