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

Product Notes for XCP Version 1124



Manual Code: c120-0066-02EN January 2019, Revision A Copyright © 2007, 2019, Fujitsu Limited. All rights reserved.

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# **Preface**

These product notes contain important and late-breaking information about the SPARC Enterprise M3000/M4000/M5000/M8000/M9000 servers. It covers hardware, software, firmware, and documentation, covering the latest XSCF Control Package (XCP) release.

**Note** – The M3000/M4000/M5000/M8000/M9000 servers are based on high-performance and highly-reliable SPARC64 VII+ or SPARC64 VII processors.



Some references to server names and document names are abbreviated for readability. For example, if you see a reference to the M9000 server, note that the full product name is the SPARC Enterprise M9000 server. And if you see a reference to the XSCF Reference Manual, note that the full document name is the SPARC Enterprise M3000/M4000/M5000/M8000/M9000 Servers XSCF Reference Manual.

**Note** – Once an XCP version newer than the XCP version supported by this manual is released, only the manuals related to the new XCP version are subsequently updated. You must therefore check the manuals for the latest XCP version in addition to those related to the XCP version you are using.

### Global Site

http://www.fujitsu.com/global/products/computing/servers/unix/sp
arc-enterprise/downloads/manuals/

### Japanese Site

http://www.fujitsu.com/jp/products/computing/servers/unix/sparcenterprise/downloads/manual/

#### This section includes:

- "Audience" on page xii
- "How to Use This Document" on page xii
- "Related Documentation" on page xiii
- "Documentation Feedback" on page xvi

# **Audience**

This notes is written for experienced system administrators with working knowledge of computer networks and advanced knowledge of the Oracle Solaris Operating System (Oracle Solaris OS).

# How to Use This Document

This document is intended for all models of the M3000/M4000/M5000/M8000/M9000 servers. Read the appropriate related items depending on your server, as shown in the table below.

Chapter of This Document	M3000	M4000/M5000	M8000/M9000
Chapter 1 Software Requirements	О	О	О
Chapter 2 XCP 1124 and XCP 1124-related Information	O	O	O
Chapter 3 Information About Software	O	O	O
Chapter 4 Information About Hardware of M3000 Server	O		
Chapter 5 Information About Hardware of M4000/M5000 Servers		O	
Chapter 6 Information About Hardware of M8000/M9000 Servers			О

Chapter 1, Chapter 2, and Chapter 3 provide the information related to firmware and software for all servers. These chapters contain the descriptions which are specific to particular models, too. The relevant server name is clearly stated.

Chapter 4, Chapter 5, and Chapter 6 provide the information related to hardware. Each chapter describes each model. The information which is common in all models is provided in all of these chapters. As a result, the description may be overlapped when you retrieve the hardware-related information of multiple models.

# Related Documentation

All documents for your server are available online at the following locations:

Manual	Link
Sun Oracle software-related manuals (Oracle Solaris OS, and so on)	http://docs.oracle.com/en/
Fujitsu documents (Global Site)	http://www.fujitsu.com/global/products/computing/servers/unix/sparc-enterprise/downloads/manuals/
Fujitsu documents (Japanese Site)	http://www.fujitsu.com/jp/products/comp uting/servers/unix/sparc- enterprise/downloads/manual/

**Note** – Information in these product notes supersedes the information in the M3000/M4000/M5000/M8000/M9000 servers documentation set.

The following table lists titles of related documents.

Related SPARC Enterprise M3000/M4000/M5000/M8000/M9000 Servers Documents	Manual Code
SPARC Enterprise M3000 Server Site Planning Guide	C120-H030
SPARC Enterprise M4000/M5000 Servers Site Planning Guide	C120-H015
SPARC Enterprise M8000/M9000 Servers Site Planning Guide	C120-H014
SPARC Enterprise Equipment Rack Mounting Guide	C120-H016
SPARC Enterprise M3000 Server Getting Started Guide*	C120-E536
SPARC Enterprise M4000/M5000 Servers Getting Started Guide*	C120-E345
SPARC Enterprise M8000/M9000 Servers Getting Started Guide*	C120-E323
SPARC Enterprise M3000 Server Overview Guide	C120-E537

Related SPARC Enterprise M3000/M4000/M5000/M8000/M9000 Servers Documents	Manual Code
SPARC Enterprise M4000/M5000 Servers Overview Guide	C120-E346
SPARC Enterprise M8000/M9000 Servers Overview Guide	C120-E324
SPARC Enterprise M3000/M4000/M5000/M8000/M9000 Servers Important Legal and Safety Information*	C120-E633
SPARC Enterprise M3000 Server Safety and Compliance Guide	C120-E538
SPARC Enterprise M4000/M5000 Servers Safety and Compliance Guide	C120-E348
SPARC Enterprise M8000/M9000 Servers Safety and Compliance Guide	C120-E326
External I/O Expansion Unit Safety and Compliance Guide	C120-E457
SPARC Enterprise M4000 Server Unpacking Guide*	C120-E349
SPARC Enterprise M5000 Server Unpacking Guide*	C120-E350
SPARC Enterprise M8000/M9000 Servers Unpacking Guide*	C120-E327
SPARC Enterprise M3000 Server Installation Guide	C120-E539
SPARC Enterprise M4000/M5000 Servers Installation Guide	C120-E351
SPARC Enterprise M8000/M9000 Servers Installation Guide	C120-E328
SPARC Enterprise M3000 Server Service Manual	C120-E540
SPARC Enterprise M4000/M5000 Servers Service Manual	C120-E352
SPARC Enterprise M8000/M9000 Servers Service Manual	C120-E330
External I/O Expansion Unit Installation and Service Manual	C120-E329
SPARC Enterprise M3000/M4000/M5000/M8000/M9000 Servers RCI Build Procedure	C120-E361
SPARC Enterprise M3000/M4000/M5000/M8000/M9000 Servers Administration Guide	C120-E331
SPARC Enterprise M3000/M4000/M5000/M8000/M9000 Servers XSCF User's Guide	C120-E332
SPARC Enterprise M3000/M4000/M5000/M8000/M9000 Servers XSCF Reference Manual	Varies per release
SPARC Enterprise M4000/M5000/M8000/M9000 Servers Dynamic Reconfiguration (DR) User's Guide	C120-E335
SPARC Enterprise M4000/M5000/M8000/M9000 Servers Capacity on Demand (COD) User's Guide	C120-E336
SPARC Enterprise M3000/M4000/M5000/M8000/M9000 Servers RCI User's Guide	C120-E360
SPARC Enterprise M3000/M4000/M5000/M8000/M9000 Servers Product Notes <sup>†</sup>	Varies per release

Related SPARC Enterprise M3000/M4000/M5000/M8000/M9000 Servers Documents	Manual Code
SPARC Enterprise M3000 Server Product Notes	Varies per release
SPARC Enterprise M4000/M5000 Servers Product Notes	Varies per release
SPARC Enterprise M8000/M9000 Servers Product Notes	Varies per release
External I/O Expansion Unit Product Notes	C120-E456
SPARC Enterprise M3000/M4000/M5000/M8000/M9000 Servers Glossary	C120-E514
Fujitsu M10/SPARC Servers/SPARC Enterprise/PRIMEQUEST Common Installation Planning Manual	C120-H007

<sup>\*</sup> This is a printed document.

### Documentation CD

For the Documentation CD, please contact your local sales representative.

- SPARC Enterprise M3000 Server Documentation CD (C120-E541)
- SPARC Enterprise M4000/M5000 Servers Documentation CD (C120-E365)
- SPARC Enterprise M8000/M9000 Servers Documentation CD (C120-E364)

<sup>†</sup> Beginning with the XCP 1100 release.

# Information Required for Server Operation

The latest information about the support for your server are provided on the websites.

Message

#### Global Site

http://www.fujitsu.com/global/products/computing/servers/unix/
sparc-enterprise/msq/

### Japanese Site

http://www.fujitsu.com/jp/products/computing/servers/unix/spar c-enterprise/msq/

■ Firmware program

For the information on how to get the latest files of firmware, contact your sales representative.

The following files or document are provided.

- Firmware program file (XSCF Control Package (XCP) file)
- XSCF extension MIB (OPL-SP-MIB) definition file

**Note** – XSCF Control Package (XCP): XCP is a package which has the control programs of hardware that configures a computing system. The XSCF firmware and the OpenBoot PROM firmware are included in the XCP file.

Fault Management MIB (SUN-FM-MIB) definition file
 Obtain the Fault Management MIB (SUN-FM-MIB) definition file from Oracle.

### Documentation Feedback

If you have any comments or requests regarding this document, or if you find any unclear statements in the document, please state your points specifically on the form at the following website:

http://www.fujitsu.com/global/about/resources/contact/

# Software Requirements

This section contains the software requirements of SPARC Enterprise M3000/M4000/M5000/M8000/M9000 (M3000/M4000/M5000/M8000/M9000) servers.

- "XCP, Oracle Solaris OS and Required Patches" on page 1
- "Obtaining XCP and Oracle Solaris Patches" on page 4
- "Web Browser" on page 4
- "Existing XCP Firmware Versions and Support Information" on page 5

# XCP, Oracle Solaris OS and Required Patches

The supported XCP and Oracle Solaris Operating System (Oracle Solaris OS) depends on the processors being installed on the SPARC Enterprise M3000/M4000/M5000/M8000/M9000 servers.

This section lists supported XCP, and Oracle Solaris OS and mandatory patches for the M3000/M4000/M5000/M8000/M9000 servers.

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

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 TABLE 1-1
 Supported XCP, Oracle Solaris OS, and Required Patches

Server: Processors	XCP	Oracle Solaris OS	Required Patches
M4000/M5000: SPARC64 VII+ 2.66 GHz	1100 or later	Oracle Solaris 11 11/11	No patches required
M8000/M9000: SPARC64 VII+ 3.00 GHz		• Oracle Solaris 10 8/11	No patches required
		• Oracle Solaris 10 9/10	No patches required
		• Oracle Solaris 10 10/09	No patches required
		• Oracle Solaris 10 5/09	All patches contained in the PTF R10021 or later**
		• Oracle Solaris 10 10/08	All patches contained in the PTF R10021 or later**
		• Oracle Solaris 10 5/08	All patches contained in The PTF R10021 or later**
		• Oracle Solaris 10 8/07	All patches contained in The PTF R10021 or later**
M4000/M5000: SPARC64 VII 2.53 GHz	1090 or later	• Oracle Solaris 11 11/11	No patches required
M8000/M9000: SPARC64 VII 2.88 GHz		• Oracle Solaris 10 8/11	No patches required
		• Oracle Solaris 10 9/10	No patches required
		• Oracle Solaris 10 10/09	No patches required
		• Oracle Solaris 10 5/09	All patches contained in the PTF R10021 or later**
		• Oracle Solaris 10 10/08	All patches contained in the PTF R10021 or later**
		• Oracle Solaris 10 5/08	All patches contained in the PTF R10021 or later**
		• Oracle Solaris 10 8/07	All patches contained in the PTF R10021 or later**
M4000/M5000: SPARC64 VII 2.4 GHz	1070 or later*	• Oracle Solaris 11 11/11	No patches required
M8000/M9000: SPARC64 VII 2.52 GHz		• Oracle Solaris 10 8/11	No patches required
		• Oracle Solaris 10 9/10	No patches required
		• Oracle Solaris 10 10/09	No patches required
		• Oracle Solaris 10 5/09	No patches required
		• Oracle Solaris 10 10/08	No patches required
		• Oracle Solaris 10 5/08	137137-09
		• Oracle Solaris 10 8/07	119254-51 or later
			125891-01 or later
			127755-01 or later 127127-11

 TABLE 1-1
 Supported XCP, Oracle Solaris OS, and Required Patches (Continued)

Server: Processors	XCP	Oracle Solaris OS	Required Patches
M4000/M5000: SPARC64 VI 2.15 GHz	1040 or later	Oracle Solaris 11 11/11	No patches required
M8000/M9000: SPARC64 VI 2.28/2.4		• Oracle Solaris 10 8/11	No patches required
GHz		• Oracle Solaris 10 9/10	No patches required
		• Oracle Solaris 10 10/09	No patches required
		• Oracle Solaris 10 5/09	No patches required
		• Oracle Solaris 10 10/08	No patches required
		• Oracle Solaris 10 5/08	137137-09
		• Oracle Solaris 10 8/07	No patches required
		• Oracle Solaris 10 11/06	118833-36 <sup>††</sup> 125100-04 or later
			120068-03 or later
			123839-07 or later
			125424-01 or later
			125075-01 or later
			125670-02 or later
M3000: SPARC64 VII+ 2.86 GHz	1101 or later	• Oracle Solaris 11 11/11	No patches required
		• Oracle Solaris 10 8/11	No patches required
		• Oracle Solaris 10 9/10 <sup>‡</sup>	No patches required
M3000: SPARC64 VII 2.75 GHz	1091 or later	• Oracle Solaris 11 11/11	No patches required
		• Oracle Solaris 10 8/11	No patches required
		• Oracle Solaris 10 9/10	No patches required
		• Oracle Solaris 10 10/09	No patches required
		• Oracle Solaris 10 5/09	All patches contained in The PTF R10021 or later**
		• Oracle Solaris 10 10/08	All patches contained in The PTF R10021 or later**
M3000: SPARC64 VII 2.52 GHz	1080 or	• Oracle Solaris 11 11/11	No patches required
	later*†	• Oracle Solaris 10 8/11	No patches required
		• Oracle Solaris 10 9/10	No patches required
		• Oracle Solaris 10 10/09	No patches required
		• Oracle Solaris 10 5/09	No patches required
		• Oracle Solaris 10 10/08	No patches required
		• Oracle Solaris 10 5/08	119254-59, 138866-01, 137137-09, 138504-04

<sup>\*</sup> If 8GB DIMM is installed on a server, update XCP to XCP 1081 or later.

<sup>†</sup> XCP 1080 is the first XCP release for the M3000 server.

<sup>‡</sup> When you install a version earlier than Oracle Solaris 10 9/10, onboard LAN (bge driver) does not work. Be sure to use Oracle Solaris 10 9/10 or later.

<sup>\*\*</sup> For more information on the PTF, contact a sales representative or a qualified service engineer.

<sup>††</sup>Apply 118833-36 before 125100-04.

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

For additional Oracle Solaris OS information, see "Oracle Solaris OS Issues and Workarounds" on page 60.

# Obtaining XCP and Oracle Solaris Patches

For the information on how to get the latest XCP firmware or the latest patch for Oracle Solaris OS, contact your sales representative.

### Web Browser

Many web browsers support the XSCF Web. The browsers in TABLE 1-2 have demonstrated compatibility with the XSCF Web through testing. For other information about XSCF Web, see "Notes on XSCF Web" on page 11.

**TABLE 1-2** Tested Web Browser Versions

Web Browser Application	Version	
Microsoft Internet Explorer	6.0/7.0/8.0/9.0/10.0/11.0	
Mozilla Firefox (Windows)	3.6.25/8.0/9.0/ESR10.0/ESR17.0/ESR24.2/ ESR38.4/ESR45/ESR52/ESR60	
Mozilla Firefox (Oracle Solaris 10)	2.0/3.5.9/3.6.22	
Mozilla Firefox (Oracle Solaris 11)	6.0	

# Existing XCP Firmware Versions and Support Information

The following lists the XCP firmware versions that have previously been released for the SPARC Enterprise series, as well as the main support and update information for each version. For the support information for XCP 1113 or earlier, see the "What's New Information" of each version's Product Notes.

 TABLE 1-3
 Previous XCP Version Releases and Support Information

XCP Version	Main Support Information
XCP 1124	Security fixes.
XCP 1123	<ul><li>Security fixes.</li><li>Improvement of XCP firmware defects.</li></ul>
XCP 1122	Support of SHA256 Web server certificates and TLS 1.2.
XCP 1121	Improvement of XCP firmware defects.
XCP 1120	<ul><li>Improvement of XCP firmware defects.</li><li>Security fixes.</li></ul>
XCP 1119	Security fixes.
XCP 1118	Improvement of XCP firmware defects.
XCP 1117	Enhancement of the investigation information at the time of the occurrence of "XSCF process down detected"
XCP 1116	<ul> <li>Support of the -b option of the sethttps(8) command.</li> <li>Enhancement of the diagnostic function for the "FMEM checksum error" event.</li> </ul>
XCP 1115	Support of the forcerebootxscf(8) command
	Enhancement of file check and other XSCF diagnostic information
XCP 1114	<ul> <li>Enhancement of the investigation information at the time of occurrence of an XSCF watchdog timeout *</li> </ul>

<sup>\*</sup> If this fix is not applied, the cause of the occurrence of an XSCF watchdog timeout may not be identifiable.

# XCP 1124 and XCP 1124-related Information

This section describes the information about XCP 1124 and XCP 1124-related information.

- "What's New in XCP 1124" on page 7
- "Notes and Limitations" on page 8
- "XCP 1124 Issues and Workarounds" on page 15
- "Updating to XCP 1124" on page 16

# What's New in XCP 1124

This release offers the following improvement:

■ Security fixes. (RTIF1-180702-001)

### Notes and Limitations

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

# Limitations for SPARC64 VII+ and SPARC64 VII Processors

You must complete the upgrades to the XCP and to Oracle Solaris OS before installing the CPU/memory board unit which is mounted with the SPARC 64 VII+ and SPARC64 VII processors on your server.

# Notes on Secure Socket Layer (SSL) 3.0

Due to security reasons, SSL 3.0 cannot be used with XCP 1119 or later. Use Transport Layer Security (TLS) 1.0. Use Transport Layer Security (TLS) 1.0 for XCP 1121 or earlier.

Use Transport Layer Security (TLS) 1.2, 1.1, or 1.0 for XCP 1122 or later.

### Notes on SSH

Due to security reasons, XCP 1123 and later restrict the use of some algorithms at SSH connection. If the SSH connection to the XSCF fails, consider updating the SSH client and changing the settings.

# Notes on Active Directory

- While Active Directory is enabled, when you attempt to login to XSCF via the telnet, you might fail to login due to timeout of the query to secondary alternated server or later.
- If the specified timeout is too brief for the configuration, the login process or retrieval of user privilege settings could fail. In such case, specify larger value for the timeout and then execute again.

### Notes on LDAP/SSL

If the specified timeout is too brief for the configuration, the login process or retrieval of user privilege settings could fail. In such case, specify larger value for the timeout and try again.

# Notes on Power Consumption Monitoring Function (M3000 Server)

- The amount of power consumption might not be indicated correctly in the MIB information, in the showenvironment power 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 poweron 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 power consumption monitoring function represent the dissipation power from the server. The figures of peripheral devices are not included.

### 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 poweron 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

- 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 -1 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.

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 -1 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 Oracle 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.

### ■ Change the address of the XSCF's own local clock

By using the setntp -m localaddr=value command, change the address of the XSCF's own local clock. In value, specify the least significant byte of the clock address of the local clock 127.127.1.x for value. A numeric from 0 to 3 can be specified. By specifying either from 1 to 3, the address of an NTP server which is referring to the local clock does not correspond to the address of the XSCF internal local clock anymore, and a server which is referring to the local clock can also be set as the NTP server of XSCF.

### Notes on Timezones

The time zones (regions/location names) supported by the XSCF can be changed to support the latest time zone information.

For any previously set time zone that the system can no longer use, the XSCF switches from this unusable time zone to Coordinated Universal Time (UTC) and operates in UTC.

When the set time zone operates in UTC, execute the settimezone -c settz -a command, and check the settable time zones. If the time zone list does not have a set time zone, set a time zone again.

### Notes on XSCF Web

■ When you use Mozilla Firefox (Windows version) 45ESR as the Web browser with XCP 1121 or earlier, the XSCF Web menu may not appear.

- Using the XSCF Web function, when you change from a SHA1 Web server certificate to a SHA256 Web server certificate, re-create the certificate with the sethttps command.
- Under the Windows 7 with Internet Explorer 8.0, 9.0, or 10.0 environment, XSCF Web does not support the use through the built-in Administrator account.
- On Internet Explorer 8.0, when you move the on-screen horizontal frame up or down to change the frame height and use the [Monitor Msg Show/Hide] button, the screen background color may turn black. In this case, click Refresh on the View menu or press [F5] key to refresh the display, to go back to the screen right after the login.

When you moved the on-screen horizontal frame up or down to change the frame height, do not use the [Monitor Msg Show/Hide] button.

- M4000/M5000/M8000/M9000 servers: XSCF Web does not support the External I/O Expansion Unit Manager feature. The M3000 server does not support External I/O Expansion Unit.
- M3000/M4000/M5000 servers:

  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 might be displayed when you perform the firmware update. Please close the current

browser and open the new browser to reconnect to XSCF Web.

### M8000/M9000 servers:

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 under Internet Explorer 6 or 7, or Firefox 2 environment, remove the plug-in if a plug-in such as the search tool installed with the browser, or disable the pop-up blocking.
  - When you use the XSCF Web under Internet Explorer 8, 9, 10, or 11, or Firefox 3, 6, 8, 9, 10, or 17 environment, disable the pop-up blocking.
- When you use the XSCF Web under Firefox 3, 6, 8, 9, 10, or 17 environment and attempt to log in to XSCF, you may be prompted by the browser to save the login ID/password. In this case, do not save the login ID/password. If you save the login ID/password, the stored data can be displayed unexpectedly on the LDAP, SMTP and REMCS web pages.

Use one of two settings described below, to disable the browser's ID/password remember function:

Disable the entire browser ID/password remember function.
 Click on the [Tools] menu, and select [Preferences]. On the [Security] panel, see [Passwords] and uncheck the [Remember passwords for sites] checkbox.

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- Designate the XSCF Web address as an exception to the ID/password save operation.
  - Click on the [Tools] menu, and select [Preferences]. On the [Security] panel, see [Passwords] and check the [Remember passwords for sites] checkbox. Then, on the dialog for the ID/password saving which appears in the login attempt to XSCF, click the [Never for This Site] button. As a result, the XSCF Web address will be registered in the [Exceptions] list to the ID/password save operation, and the dialog to prompt the ID/password saving will no longer be displayed in the subsequent login attempts to XSCF.
- When using FireFox ESR 38.4 as the Web browser with XCP 1120 or earlier, the display of Domain ID and Status in [Menu] [Domain Operation] [Domain Power] may appear distorted. If the display is distorted, Power ON and other operations are not available from the above menu. If this problem occurs, use the XSCF shell.
- The browser layout may appear distorted in Internet Explorer 9, 10, or 11 environment. If this occurs, enable Compatibility View in Internet Explorer.

### Limitations on Audit

- The log file transfer function of the audit log set with the setaudit archive command and the setaudit disable command is not supported at present.
- If the policy for writing to an audit record is set to stop temporarily ("suspend"), degradation due to an error may occur or the XSCF may be reset. In the setaudit(8) command, specify overwriting ("count") by default for the write policy for the audit trail. For details of this issue, see "RTIF1-141209-001."

### Miscellaneous Notes and Limitations

**Note** – M4000/M5000/M8000/M9000 servers:

For dynamic reconfiguration (DR) and hot-plug issues, see "Oracle Solaris OS Issues and Workarounds" on page 60.

- The log archive feature by the setarchiving(8) and the showarchiving(8) commands, and the [Log Archives] menu of XSCF Web is not supported.
- M4000/M5000/M8000/M9000 servers: The following functions displaying the power consumption is not supported on M4000/M5000/M8000/M9000 servers.
  - power operand of the showenvironment(8) command
  - XSCF Web

**Note** – Invalid values will be displayed by executing the commands or menu. SNMP Agent Function obtains invalid values of power consumption.

#### ■ M4000/M5000 servers:

The M4000/M5000 servers are cold service machines. Hot-swapping of the CPU module (CPUM), memory board (MEMB), I/O unit (IOU), or XSCF unit is not supported.

### ■ M8000/M9000 servers:

Do not use the internal CD-RW/DVD-RW drive unit and the TAPE drive unit at the same time.

- 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)

### ■ M8000/M9000 servers:

On the M8000/M9000 servers with XCP 1050 or later, the dual XSCF Unit feature is working. Therefore, you can not downgrade 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, proxyuser, and default.
- 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.
- M4000/M5000/M8000/M9000 servers:
  While you are performing DR operation to a COD board, do not execute the addcodactivation(8)/addcodlicense(8)/deletecodactivation(8)/deletecodlicense(8)/setcod(8) command.
- At this time the -e, -1, -P options of the snapshot(8) command are not supported.
- An XSCF user account user name cannot match an LDAP user name, and an XSCF user account number (UID) cannot match an LDAP UID number.
- In case that any failure occurred on a system board and failed to read the FRU information of system board, XSCF regards the system board as a COD board. The showboards -va command displays the COD status as "y." In this case, replace the failed system board.

- An XSCF internal database failure may be detected following the occurrence of an XSCF storage failure, etc. If so, the same database failure may be detected again in the XSCF, or the XSCF may be degraded. The following describes the operation for this problem in each model and how to restore the XSCF.
  - M3000/M4000/M5000 server:

[XCP 1091 or earlier]

If an XSCF internal database failure is detected, the XSCF restarts and continues the operation. Consequently, the same database failure may be detected again. If so, the domain may stop or reboot.

<How to restore>

After shutting down all domains, replace the motherboard unit (MBU) or the XSCF unit (XSCFU).

[XCP 1092 or later]

If an XSCF internal database failure is detected, the XSCF degrades itself so that the same database failure is not detected again. In this case, the domain neither stops nor reboots but instead continues the operation.

<How to restore>

After shutting down all domains, replace the MBU or XSCFU.

■ M8000/M9000 server:

[XCP 1091 or earlier]

If an XSCF internal database failure is detected, the XSCF restarts and continues the operation. Consequently, the same database failure may be detected again. If so, the domain neither stops nor reboots but instead continues the operation.

<How to restore>

Execute the replacefru command to replace the XSCFU.

[XCP 1092 or later]

If an XSCF internal database failure is detected, the XSCF degrades itself so that the same database failure is not detected again. In this case, the domain neither stops nor reboots but instead continues the operation.

<How to restore>

Execute the replacefru command to replace the XSCFU.

### XCP 1124 Issues and Workarounds

For known XCP issues and possible workarounds in XCP 1124, see "Known Issues and Workarounds in XCP 1124" on page 21. For fixed XCP issues in XCP 1124, see "XCP Issues Fixed in XCP 1124" on page 25.

# Updating to XCP 1124

To update your XCP to XCP 1124, please pay attention to the following points depending on your current XCP version.

You can upgrade to XCP 1124 from XCP version 1050 or later. Refer to the *SPARC Enterprise M3000/M4000/M5000/M8000/M9000 Servers XSCF User's Guide* for instructions.

# Importing the XCP File

Once the XCP file is imported, update the firmware immediately. If the XCP file is merely imported, the versions of the XSCF firmware and OpenBoot PROM firmware running on the system remain the old ones. If the CPU/memory board unit or motherboard unit is replaced or the XSCF unit is replaced/switched in this status, the firmware of the unit cannot be matched with the original firmware version, and attempts to replace/switch the unit or start the domain will fail.

# Updating from a Version Earlier Than XCP 1050 (M4000/M5000/M8000/M9000 Servers)

- Updating directly to XCP 1071 or a later version is not possible. First, update your XCP to any version between XCP 1050 and XCP 1070, and then update to XCP 1071 or later. For the procedure to update to any version between XCP 1050 and XCP 1070, see the Product Notes of the respective version.
- 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 (M8000/M9000 Servers)

■ After a firmware update from XCP 1061 or earlier to XCP 1070 or XCP 1071, both the active and standby XSCFs enter the Halt state. To work around this problem, be sure to reset the XSCFs after the firmware update, by using the rebootxscf(8) command.

■ On a domain which has been in operation during the XCP update to 1124, 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 1124, regardless of whether you added or replaced the SPARC64 VII processors.

### Information About Software

This section describes the special instructions and the issues about the M3000/M4000/M5000/M8000/M9000 servers software.

- "Notes and Limitations" on page 19
- "XCP Issues and Workarounds" on page 20
- "Oracle Solaris OS Issues and Workarounds" on page 60
- "Software Documentation Updates" on page 88
- "Miscellaneous Information" on page 99

### Notes and Limitations

### Notes on RCI Function

The RCI function is supported on any of the following servers.

- The server which you purchased in Japan from Fujitsu
- The server which is bearing the Fujitsu logo on the front surface, regardless of area of purchase<sup>1</sup>

When using the RCI function such as RCI build procedure, see the SPARC Enterprise M3000/M4000/M5000/M8000/M9000 Servers RCI Build Procedure and the SPARC Enterprise M3000/M4000/M5000/M8000/M9000 Servers RCI User's Guide.

This refers to the server which has the black-colored chassis and is exclusively bearing the Fujitsu logo on the front surface.

### Notes on Remote Maintenance

This section is explained the notes on using the remote maintenance service. For details on making settings and using the remote maintenance service, see the manuals about the remote maintenance service in the *Enhanced Support Facility User's Guide for REMCS*.

### Before Setting the Remote Maintenance Service

Before using the remote maintenance service on your M3000/M4000/M50900/M8000/M9000 server, you have to complete the settings for the REMCS Agent function on XSCF Web.

Be sure to complete the necessary settings for using XSCF Web such as enabling the HTTPS, on XSCF shell. After completing, specify the settings for REMCS Agent function on XSCF Web.

For detail on the settings for XSCF Web, see the SPARC Enterprise M3000/M4000/M5000/M8000/M9000 Servers XSCF User's Guide.

### The Timezone Setting for REMCS Agent Function

The REMCS agent uses the current server timezone. So when you change the server timezone by XSCF, the "Periodical Connection Schedule" setting is required again for updating the information of the REMCS center.

### XCP Issues and Workarounds

For known XCP issues and possible workarounds in XCP 1124, see "Known Issues and Workarounds in XCP 1124" on page 21. For XCP issues that have been fixed, see "XCP Issues Fixed" for each version.

## Known Issues and Workarounds in XCP 1124

TABLE 3-1 lists known XCP issues and possible workarounds in XCP 1124.

TABLE 3-1 Known Issues and Workarounds in XCP 1124

ID	M3000	M4000 M5000	M8000 M9000	Description	Workaround
RTIF1- 070914-025			O	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- 071116-001			0	DR operations might fail (with a misleading message regarding the board being unavailable for DR) after the addfru(8) or replacefru(8) 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 addfru(8) or replacefru(8) command. In case of missing the diagnostic test in the maintenance menu of the addfru(8) or the replacefru(8) command, execute the testsb(8) command or delete the CPU/memory board unit using the deletefru(8) command and then retry the addfru(8) command.
RTIF1- 071126-002			O	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.
RTIF1- 080725-001	O	O	O	In setsnmp addv3traphost, 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 setsnmp(8) command using the correct user name.
RTIF1- 080725-002	O	O	O	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.

 TABLE 3-1
 Known Issues and Workarounds in XCP 1124 (Continued)

ID	M3000	M4000 M5000	M8000 M9000	Description	Workaround
RTIF1- 081016-002	O			When FRUs are cold-replaced (with the system off), (after poweron) the monitor process might not generate entries in the monitor message log identifying the replacement operation that has occurred.	No workaround is available.
RTIF1- 081225-001	O	O	O	In the settimezone -c adddst command, when you set eight or more letters to the abbreviation of time zone and the name of Daylight Saving Time, execution of the showlogs 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	О	O	O	Date and time of the Last Update which displayed on the XSCF Web may not be updated.	Please refresh the display.
RTIF1- 090427-005	O	O	O	When you use the setpasswordpolicy(8) command and set "999999999" (10 digits) in Different Characters, the showpasswordpolicy(8) command displays "-1."	No workaround is available. Use XSCF Web.
RTIF1- 090731-001			O	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- 100331-002	O	O	O	When you start up a domain from a disk that is connected to the 8 Gbps fibre channel card (SE0X7F21F, SE0X7F22F) and if it is unable to start the domain due to causes such as disk failure, an error log of "FRU: /UNSPECIFIED" might be registered.	No workaround is available.
RTIF1- 110222-001	Ο	O	O	If setpasswordpolicy -r is set to 0, existing XSCF users are unable to change their password and get the error message, password:  Operation failed.	Do not execute the command "setpasswordpolicy -r 0".

 TABLE 3-1
 Known Issues and Workarounds in XCP 1124 (Continued)

ID	M3000	M4000 M5000	M8000 M9000	Description	Workaround
RTIF1- 120329-001	O	O	O	After regenerating XSCF host public key with setssh -c genhostkey, other connected XSCF users may encounter a "permission denied" error when executing the XSCF command line.	XSCF reboot is required after generating the XSCF host key.
RTIF1- 120329-003	O	O		the XSCF is reset. On the other hand, the XSCF holds a history of the fault information it has received in the past from the domain, and exercises	failure occurrence time and UUID in the fmdump -V output to judge whether the failure has been resolved in the past or is a new failure.  Also, if any fault information on failures already resolved remains in the domain, execute the Oracle Solaris OS fmadm repair command during maintenance to reset the fault information.

 TABLE 3-1
 Known Issues and Workarounds in XCP 1124 (Continued)

ID	M3000	M4000 M5000	M8000 M9000	Description	Workaround
RTIF1- 141209-001	O	0	0	Suppose that the audit system is configured so that writing to audit records stops temporarily when the audit trail reaches its full capacity. An XSCF shell or XSCF Web operation at this time may lead to an XSCF reset due to the mistaken detection of one of the following errors: "Hardware access error." or "SCF panic detected."  This problem occurs even when the XSCF shell is automatically run regularly to monitor the logical domain status by using PRIMECLUSTER software.  You can check the contents of the currently set audit system by using the showaudit(8) command. In the following example, "Policy on full trail" is "suspend," indicating that writing to the audit record has been set to stop temporarily. Also, "Audit space free" is "0," indicating that the audit trail has reached its full capacity.  [Example]  XSCF> showaudit all  Auditing: enabled  Audit space used: 4194304 (bytes)  Audit space free: 0 (bytes)  Records dropped: 0  Policy on full trail: suspend omitted	

# XCP Issues Fixed in XCP 1124

TABLE 3-2 lists XCP issues fixed in XCP 1124.

TABLE 3-2 XCP Issues Fixed in XCP 1124

ID	M3000	M4000 M5000	M8000 M9000	Description	Workaround
RTIF1- 180702-001	O	O	O	Security fixes. (CVE-2017-1000254, CVE-2017-7679, CVE-2016-8743)	Update the XCP firmware to XCP 1124 or newer.
				For detail, see the Oracle website related to the following: Critical Patch Updates	

# XCP Issues Fixed in XCP 1123

TABLE 3-3 lists XCP issues fixed in XCP 1123.

 TABLE 3-3
 XCP Issues Fixed in XCP 1123

ID	M3000	M4000 M5000	M8000 M9000	Description	Workaround
RTIF1- 170605-001	Ο	O	O	When the XSCF is specified as an NTP server that Oracle Solaris refers to, no polling response can be obtained from the XSCF, and synchronization with the NTP server might fail.	XSCF of the current system as an NTP
RTIF1- 170609-001	O	0	0	Security fixes.  (CVE-2016-6304, CVE-2016-2182, CVE-2016-6304, CVE-2016-6302, CVE-2016-6306, CVE-2016-6515, CVE-2016-6306, CVE-2016-7431, CVE-2016-7429, CVE-2016-7433, CVE-2015-3144, CVE-2015-3145, CVE-2015-3153, CVE-2015-3236, CVE-2015-3237, CVE-2016-0755, CVE-2016-3739, CVE-2016-5419, CVE-2016-5420, CVE-2016-5421, CVE-2016-8616, CVE-2016-8615, CVE-2016-8618, CVE-2016-8619, CVE-2016-8620, CVE-2016-8621, CVE-2016-8624, CVE-2016-8623, CVE-2016-8624, CVE-2016-9586) For detail, see the Oracle website related to the following: Critical Patch Updates	Update the XCP firmware to XCP 1123 or newer.

#### XCP Issues Fixed in XCP 1122

TABLE 3-4 lists XCP issues fixed in XCP 1122.

**TABLE 3-4** XCP Issues Fixed in XCP 1122

ID	M3000	M4000 M5000	M8000 M9000	Description	Workaround
RTIF1- 161006-002	О	O	O	The reporting of an error or the remote reporting of a hardware setting change notification may not reach the REMCS center.	No workaround is available.

## XCP Issues Fixed in XCP 1121

TABLE 3-5 lists XCP issues fixed in XCP 1121.

**TABLE 3-5** XCP Issues Fixed in XCP 1121

ID	M3000	M4000 M5000	M8000 M9000	Description	Workaround
RTIS1- 151212-001	O	O	O	If the SNMP Agent Status setting was changed when in the enable state, SNMP Agent Status becomes disable. You can check Agent Status from the Agent Status display of the showsnmp command.	Status setting once to disable with the
RTIF1- 161006-004	O	O	Ο	Security fixes. (CVE-2015-3183, CVE-2015-2808) For detail, see the Oracle website related to the following: Critical Patch Updates	Update the XCP firmware to XCP 1121 or newer.

# XCP Issues Fixed in Releases Earlier Than XCP 1121

TABLE 3-6 lists XCP issues that have been fixed in releases earlier than XCP 1121.

 TABLE 3-6
 XCP Issues Fixed in Releases Earlier Than XCP 1121

ID	M3000	M4000 M5000	M8000 M9000	Description	Workaround
RTIF1- 070418-004		O	O	All domains must be powered off before upgrading the XCP.	Power off domains before using the flashupdate(8) command to upgrade XCP firmware.
RTIF1- 070418-005		Ο	Ο	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.
RTIF1- 070418-009	0	O	O	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 replacefru(8) 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.  M4000/M5000 servers:
					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.
					M3000 server: Check that XSCF is started. If not started, stop the domain 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 3-6
 XCP Issues Fixed in Releases Earlier Than XCP 1121 (Continued)

ID	M3000	M4000 M5000	M8000 M9000	Description	Workaround
RTIF1- 070418-010		O	O	The showdomainstatus -a command shows domain status as Powered Off, but the showboards -a command shows the domain is testing.	Use the showboards command to check the status of domain power.  The showdomainstatus command takes a longer time to show the correct status.
RTIF1- 070418-011		Ο	Ο	Some commands that update configuration data take a relatively long time to execute.	Do not cancel set* commands. They appear to hang, but eventually complete in about 30 seconds.
RTIF1- 070418-012		Ο	Ο	The fault (memory.block.ue) is encountered and reported periodically.	An uncorrectable error exists in a DIMM and the DIMM should be replaced.
RTIF1- 070418-020		O	O	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 flashupdate command might later report an internal error.  CR ID 6537996 is similar.	-d to delete the corrupted image. If necessary, reboot the XSCF Unit, then use the flashupdate command
RTIF1- 070418-021		O	O	Attempting to move a COD board using the moveboard(8) command might fail.	Use the deleteboard(8) and addboard(8) commands instead of the moveboard(8) command.
RTIF1- 070418-022		O	O	The XSCF firmware monitors itself and if it detects any abnormalities, it will force a reset.	Allow the XSCF Unit to finish resetting. It will return to normal operation within approximately 5 minutes.
RTIF1- 070418-023		O	O	Using the rebootxscf(8) 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		Ο	Ο	showaudit all shows a long list of defaults in the policy section after the database is cleared.	•
RTIF1- 070528-001		Ο	Ο	When you have updated the /etc/ttydefs file of Oracle Solaris OS to disable the console flow control, you cannot disable the console flow control on the telnet via a server.	No workaround is available.

 TABLE 3-6
 XCP Issues Fixed in Releases Earlier Than XCP 1121 (Continued)

ID	M3000	M4000 M5000	M8000 M9000	Description	Workaround
RTIF1- 070528-002	O	O	O	While XSCF is running, watchdog timeout may occur and XSCF may reboot.	M4000/M5000/M8000/M9000 servers: 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.
					M3000 server: Check that XSCF is started. If not started, stop the domain 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- 070802-001		O	О	When connected to telnet, the login or the password prompt doesn't appear.	
RTIF1- 070823-001		O	0	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- 070823-002		O	O	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 showboards(8) command to refer to the domain configuration.
RTIF1- 070823-003		O	O	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 showdevices(8) command to refer to the domain hardware configuration.

 TABLE 3-6
 XCP Issues Fixed in Releases Earlier Than XCP 1121 (Continued)

ID	M3000	M4000 M5000	M8000 M9000	Description	Workaround
RTIF1- 070824-001	O	O	O	M8000/M9000 servers: 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.	M8000/M9000 servers: After XSCF Unit is replaced, configures the RCI again and sets the remote power control mode.
				M3000/M4000/M5000 servers: When remote power control mode of interlocking mechanism for power supply to domain, is enabled, after the motherboard unit is replaced, the interlocking for power supply by RCI cannot work.	M3000/M4000/M5000 servers: After the motherboard unit is replaced, configures the RCI again and sets the remote power control mode.
RTIF1- 070824-002		O	0	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		O	O	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		O	O	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		Ο	Ο	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.

 TABLE 3-6
 XCP Issues Fixed in Releases Earlier Than XCP 1121 (Continued)

ID	M3000	M4000 M5000	M8000 M9000	Description	Workaround
RTIF1- 070824-006		O	O	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		O	O	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.
RTIF1- 070824-008		O	Ο	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- 070824-009		O		On the [System Board Configuration] screen, when you execute Detail, it is displayed as if the CPUM and the memory of MBU are all mounted on the PSB#0 side. And in the detail display of PSB#0, memory is displayed as "22 + 2."	None available at this time.
RTIF1- 070824-011		0	0	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			O	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.

 TABLE 3-6
 XCP Issues Fixed in Releases Earlier Than XCP 1121 (Continued)

ID	M3000	M4000 M5000	M8000 M9000	Description	Workaround
RTIF1- 070904-002		O	О	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		O	O	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.	
RTIF1- 070904-005		О	О	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
RTIF1- 070904-006		O	О	While executing the domain power- on, domain reset or DR, in case the XSCF reset occurred, the process may be aborted in some or all of the XSB.	XSCF.  Execute the domain reset one more time, or power off the domain and then power on again.
RTIF1- 070912-001		O	O	If an invalid SMTP server is configured, a subsequent attempt to disable e-mail service (using the setemailreport 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.  • The CLI can also be aborted by ^C. Note that the operation (disabling e-mail report) is completed, even if ^C is used.  • showemailreport can be used to confirm that the e-mail service has

 TABLE 3-6
 XCP Issues Fixed in Releases Earlier Than XCP 1121 (Continued)

ID	M3000	M4000 M5000		Description	Workaround
RTIF1- 070914-001		O	O	While executing the firmware update by using the flashupdate(8) command or BUI, when the import of XCP executed by using the getflashimage(8) command or BUI, the firmware update aborts.	Do not execute the import of XCP by using the getflashimage(8) command or BUI, while executing the firmware update.
RTIF1- 070914-002		O	О	When the XSCF switching performed, the monitor message doesn't show the number of XSCF unit which turned active.	Execute the showhardconf(8) command to refer to the state of XSCF unit.
RTIF1- 070914-003		O	O	When the XSCF switching performed, there may be "SCF: Board control error (DMA timeout)" stored in the error log.	
RTIF1- 070914-005		O	O	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		O	O	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.	*
RTIF1- 070914-007		O	O	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		O	O	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 "*".	None available at this time.
RTIF1- 070914-009		O	O	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 3-6
 XCP Issues Fixed in Releases Earlier Than XCP 1121 (Continued)

ID	M3000	M4000 M5000	M8000 M9000	Description	Workaround
RTIF1- 070914-010		0	0	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 showsnmpusm(8) command.
RTIF1- 070914-011		O	O	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		O	O	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		O	O	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.	

 TABLE 3-6
 XCP Issues Fixed in Releases Earlier Than XCP 1121 (Continued)

ID	M3000	M4000 M5000	M8000 M9000	Description	Workaround
RTIF1- 070914-014		0	O	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		O	Ο	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 adduser(8) command.
RTIF1- 070914-016		O	O	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		O	Ο	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		O	O	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.

 TABLE 3-6
 XCP Issues Fixed in Releases Earlier Than XCP 1121 (Continued)

ID	M3000		M8000 M9000	Description	Workaround
RTIF1- 070914-019		O	O	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.	
RTIF1- 070914-020		O	O	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		Ο	Ο	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		O	O	When you specify the domain ID or XSB number which are not supported on the server, there appears the parameter error message.	1 ,
RTIF1- 070914-024		O	O	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.	
RTIF1- 070914-026		O	O	The XSCFU cannot act as a reliable NTP source for domains.	All domains should be configured to use an NTP source other than the XSCFU.
RTIF1- 070915-001		O	O	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.

 TABLE 3-6
 XCP Issues Fixed in Releases Earlier Than XCP 1121 (Continued)

ID	M3000	M4000 M5000	M8000 M9000	Description	Workaround
RTIF1- 071011-001			O	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		O	O	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- 071102-002	O	O	O	The snmp daemon might quit.	To restart the snmp daemon, issue the command setsnmp enable.
RTIF1- 071116-001		0		DR operations might fail (with a misleading message regarding the board being unavailable for DR) after the addfru(8) or replacefru(8) 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 addfru(8) or replacefru(8) command. In case of missing the diagnostic test in the maintenance menu of the addfru(8) or the replacefru(8) command, execute the testsb(8) command or delete the CPU/memory board unit using the deletefru(8) command and then retry the addfru(8) command.
RTIF1- 071116-003		O	O	Using the XSCF Web, when you selected [COD], codusage details cannot be displayed correctly.	Use showcodusage(8) command to display the cod usage.
RTIF1- 071116-004		O	O	When Internet Explorer 7 browser is used, the License key deletion cannot be executed on the BUI COD page.	Use deletecodlicense(8) command to delete a license key. Or use other browsers: • Microsoft Internet Explorer 6.0 • Firefox 2.0 or later • Netscape Navigator 7.1 or later
RTIF1- 071116-005			O	While system power on, when the XSCF switching performed by switchscf(8) 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.

 TABLE 3-6
 XCP Issues Fixed in Releases Earlier Than XCP 1121 (Continued)

ID	M3000	M4000 M5000	M8000 M9000	Description	Workaround
RTIF1- 071116-006			O	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 rebootxscf(8) 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.
RTIF1- 071129-001		O	O	If the following message is displayed on XSCF console, the XSCF might not start:  dbs[xxx]: ERR: scdb_init_all(): xx, No space left on device In addition, this error log might be registered: XSCF process down detected	Replace the XSCF Unit.
RTIF1- 071129-002		O	O	When performing XSCF Shell commands remotely using SSH on the remote-control device, the following messages might be displayed: stty: standard input: Invalid argument	None available at this time.
RTIF1- 071129-003		O	O	An error log cannot be registered in XSCF when the following message is displayed on Oracle Solaris OS by the I/O error:  SUNW-MSG-ID: SUN4-8000-4P, TYPE: Fault	No workaround is available.
RTIF1- 071129-004		0	0	The following messages are displayed and you might not boot Oracle Solaris OS:  • Abnormal OpenBoot environment variable Boot process failed  • ERROR: Invalid token '' FATAL: NVRAM contents corrupt; Reinitializing NVRAM parameters.	

 TABLE 3-6
 XCP Issues Fixed in Releases Earlier Than XCP 1121 (Continued)

ID	M3000	M4000 M5000	M8000 M9000	Description	Workaround
RTIF1- 071227-001		O	O	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.	Execute the rebootxscf(8) command to restart XSCF.
				Poweron canceled due to invalid system date and time.	
RTIF1- 071227-002		O	O	When the showhardconf(8) command executed in an environment with the External I/O Expansion Unit, the showhardconf(8) command may appear as if hang up.	execute the showhardconf(8)
RTIF1- 071227-003		O	O	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."	Specify the correct device name to the Boot device path.  When the status of I/O unit became "Degraded," replace the I/O unit.

 TABLE 3-6
 XCP Issues Fixed in Releases Earlier Than XCP 1121 (Continued)

ID	M3000	M4000 M5000	M8000 M9000	Description	Workaround
RTIF1- 080313-001		0	0	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.  ntpdate[xx]: no server suitable for synchronization	workarounds depending on the mode which has been set in the xntpd of the domain.  Note - In case of step mode, the time correction induces the time step.
					• In case of slew mode: Execute the ntpdate(1M) command without specifying the - w option. In slew mode, the time variance from the NTP server will be corrected at 0.5 ms/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 3-6
 XCP Issues Fixed in Releases Earlier Than XCP 1121 (Continued)

ID	M3000	M4000 M5000	M8000 M9000	Description	Workaround
RTIF1- 080325-001		0	O	M4000/M5000 servers: When you turn on AC power, or when you execute the rebootxscf(8) command, you may become unable to log in to XSCF and your press on the POWER switch on the operator panel may fail to turn on the power.	command, please confirm that XSCF LAN has been correctly connected
				M8000/M9000 servers: When you turn on AC power, or when you execute the rebootxscf(8) or switchscf(8) command, either of the following situations may occur. • 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 • 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.	M8000/M9000 servers: Before turning on AC power, or executing the rebootxscf(8) or switchscf(8) command, please confirm that XSCF LAN has been correctly connected and linked up. In case the situation in question occurred, please take either of the following actions.  • Use the replacefru(8) 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		0	0	Following a dynamic reconfiguration operation using the XSCF commands deleteboard(8) and addboard(8), you might see I/O channel degradation, resulting in error messages and entries in the corresponding ereport. If you run into this problem, the fmdump(8) command will report the following error by mistake: ereport.chassis.SPARCEnterprise. asic.ioc.ch.leaf.fe	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 qualified service engineer and give the error code that displayed by using the showlogs error command.

 TABLE 3-6
 XCP Issues Fixed in Releases Earlier Than XCP 1121 (Continued)

ID	M3000	M4000 M5000	M8000 M9000	Description	Workaround
RTIF1- 080404-002		О	О	When you use the command setsnmpusm passwd to set a password, if you set a password of fewer than eight characters, a segmentation fault occurs.	Always set a password of at least eight characters.
RTIF1- 080512-001		O	O	When you specify "localhost" to the hostname of the sethostname(8) command and reset XSCF by using the applynetwork(8) and the rebootxscf(8) commands, a process goes down in XSCF.	Do not specify "localhost" to the <i>hostname</i> of the sethostname(8) command.
RTIF1- 080512-002			O	When the NTP setting are enabled, a message as follows may appear on the XSCF console.  Output sample: -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	
RTIF1- 080512-003		O	O	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.	
RTIF1- 080520-001			O	BUI Domain Operation page mistakes the operation demand for Domain 8 or 9, and it issues it to DID#00 wrongly.	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.
RTIF1- 080526-001		Ο	О	When the system is stressed with many faults, the fmd process on the service processor might hang. Once this happens, fma commands on the service processor can fail or hang.	Reboot the service processor using the XSCF command rebootxscf(8).

 TABLE 3-6
 XCP Issues Fixed in Releases Earlier Than XCP 1121 (Continued)

ID	M3000	M4000 M5000	M8000 M9000	Description	Workaround
RTIF1- 080620-001		О	О	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		0	0	The initial value that set with the setdomparam set-defaults 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 (ok), execute the set-defaults command to restore the OpenBoot PROM environmental variables to the initial value.
RTIF1- 080725-004	О	O	O	After set the Daylight Saving Time by	Use the showlogs(8) command of the
RTIF1- 080808-001		O	O	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:  SA_pprcir.so to test host host_name failed	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	O	Ο	O	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, reexecute the firmware update.
RTIF1- 081006-002	O	O	O	In the setemailreport(8) 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- 081006-003	O			During the domain operation, after the XSCF reset due to the XSCF unit failure, the hardware status shows Deconfigure in the status of CPU and memory.	Replace the motherboard unit only. When no failure found on the memory, you do not need to replace the memory.

 TABLE 3-6
 XCP Issues Fixed in Releases Earlier Than XCP 1121 (Continued)

ID	M3000	M4000 M5000	M8000 M9000	Description	Workaround
RTIF1- 081006-004	O	O	O	During the firmware update, there might be the following output message and an XSCF panic might occur.  kernel BUG in jffs2_do_read_inode at fs/jffs2/readinode.c:XXX!	Reset XSCF and use the flashupdate(8) command to retry the firmware update.
RTIF1- 081006-005	O	O	O	The network configuration on the XSCF Web does not support the function equivalent to the setnetwork -r command. And when you specified localhost or localdomain to the host name or the domain name, the error message "SessionID has expired" appears.	Use the setnetwork -r command on the XSCF shell.
RTIF1- 081006-006	O	O	O	The panic log on the XSCF Web might not be displayed from the top of the message.	When the output is insufficient, execute the showlogs panic command on the XSCF shell.
RTIF1- 081006-007	O	O	O	The password(8) command indicates that the <i>user</i> operand is optional but will fail if a <i>user</i> operand is not included when other options are specified.	No workaround is available. Specify the <i>user</i> operand to execute the password(8) command when you specify other options.
RTIF1- 081006-011	0	O	0	SNMP trap host configuration changes are not valid until setsnmp disable and setsnmp enable.	Modify the SNMP setting:  XSCF> setsnmp disable  XSCF> setsnmp enable
RTIF1- 081016-001	O	O	О	Power failure at the commercial AC supply connector to the UPS does not send notification/send trap.	No workaround is available.
RTIF1- 081016-003	O	0	0	In Internet Explorer 6 or 7, clicking on the [Reset] button then the [OK] button from the [Settings]-[Audit]- [Add Policy] pop-up 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 [Backspace] key to clear text in the [User] text box of the pop- up screen instead of using the [Reset] button.

 TABLE 3-6
 XCP Issues Fixed in Releases Earlier Than XCP 1121 (Continued)

ID	M3000	M4000 M5000	M8000 M9000	Description	Workaround
RTIF1- 081030-001			O	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 showdcl(8), addboard(8), deleteboard(8), moveboard(8) command on the XSCF shell.
RTIF1- 081030-002	O	O	O	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 display the date on the table with "".	Use the showlogs(8) command on the XSCF shell.
RTIF1- 081104-001	Ο	O	О	The monitor message log might not be registered when a PCI slot error detected.	No workaround is available. Use the showlogs error command or the fmdump command to check the fault information of PCI slot.
RTIF1- 090108-001	O	O	O	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.
RTIF1- 090108-002	O	O	O	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.

 TABLE 3-6
 XCP Issues Fixed in Releases Earlier Than XCP 1121 (Continued)

ID	M3000	M4000 M5000	M8000 M9000	Description	Workaround
RTIF1- 090108-004			O	When you replaced the XSCF unit by using the replacefru(8) 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 rebootxscf(8) command, execute the replacefru(8) command and extract and insert the XSCF unit which failed in replacement. If time passed after the XSCF reset, the replacefru(8) command may fail again. In such a case, re-execute the rebootxscf(8) command and the subsequent processes.
RTIF1- 090115-001	O	O	O	When you execute the settelnet -c disable command, the Telnet service will be stopped immediately. However, unless you reset XSCF by using the rebootxscf(8) command, you might fail in the subsequent restart of the Telnet service.	After you stopped the Telnet service, execute the rebootxscf(8) command to reset XSCF.
RTIF1- 090122-001	O	O	O	"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- 090220-001	Ο	Ο	Ο	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.

 TABLE 3-6
 XCP Issues Fixed in Releases Earlier Than XCP 1121 (Continued)

ID	M3000	M4000 M5000	M8000 M9000	Description	Workaround
RTIF1- 090220-002	O	O	O	M3000 server: After replaced the motherboard unit, the RCI power interlocking setting restores to its default value.	M3000 server: If you have set the power interlocking to a value other than the default, replace the motherboard unit and then use the setpwrmode(1M) command to set the power interlocking setting again.
				M4000/M5000/M8000/M9000 servers: After replaced the XSCF unit, the RCI power interlocking setting restores to its default value.	M4000/M5000/M8000/M9000 servers: If you have set the power interlocking to a value other than the default, replace the XSCF unit and then use the setpwrmode(1M) command to set the power interlocking setting again.
RTIF1- 090427-001	O	0	0	Despite the normal status of ppp network interface for the XSCF-to- Oracle Solaris OS communication, SNMP MIB notifies abnormal (down) status.	No workaround is available.
RTIF1- 090427-002	O	O	O	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.  'setldap -c < remote file>'
RTIF1- 090427-003			O	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- 090427-004	0	O	Ο	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.	

 TABLE 3-6
 XCP Issues Fixed in Releases Earlier Than XCP 1121 (Continued)

ID	M3000	M4000 M5000	M8000 M9000	Description	Workaround
RTIF1- 090430-001	O	O	O	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- 090508-001	0	O	0	In a domain mounted with the 10 Gigabit Ethernet card (SE0X7HE1F), when you set the OpenBoot PROM environmental variable diagswitch? 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 diagswitch? to false.  setenv diag-switch? false
RTIF1- 090729-001	O	O	O	When you use the sethttps(8) 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 sethttps(8) command again.
RTIF1- 090824-001	0	0	0	The XSCF might go down and require a reboot, or you might see console error messages and a core dump (ereport.chassis.software.core) when one of these conditions occurs:  • A local account has been created with a user ID explicitly assigned to a value larger than 65536 (adduser – u uid).  • An LDAP account has been used that has a UID value larger than 65536.	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 adduser(8).

 TABLE 3-6
 XCP Issues Fixed in Releases Earlier Than XCP 1121 (Continued)

ID	M3000		M8000 M9000	Description	Workaround
RTIF1- 091021-001	O	O	O	While Active Directory is enabled, if you log in to XSCF using the user name that registered in the Active Directory server, the showconsolepath(8) command displays not the log-in user name but "proxyuser."	No workaround is available.
RTIF1- 091105-001	O	Ο	O	The loadcert console operand is missing in the usage of the setad(8) command and the setldapssl(8) command.	For how to use the loadcert console operand of the setad(8) command and the setldapssl(8) command, see the man page.
RTIF1- 091109-001	O	Ο	O	Once domain detected a failure related to DIMM or PCI, the error log about this detected failure is registered every time you reset XSCF.	This error log can be safely ignored.
RTIF1- 091109-002	Ο	Ο	O	In XSCF, a host route cannot be set. When you use the setroute(8) command and set the netmask to 255.255.255.255, it returns an invalid parameter.	To set a host route, do not specify the netmask (-m option).
RTIF1- 091109-003	0	0	0	When you use the setnameserver(8) command or the DNS setting of XSCF Web to register the DNS server or the search path, you can specify two or more same IP address values or domain names.  However, when you specify two or more same IP address values or domain names to delete all the DNS servers or the search paths which are same, it returns an invalid parameter.	search paths which are same, specify

 TABLE 3-6
 XCP Issues Fixed in Releases Earlier Than XCP 1121 (Continued)

ID	M3000	M4000 M5000	M8000 M9000	Description	Workaround
RTIF1- 091109-004	0	O	O	When you start up a domain from a disk connected to the 8-Gbps fibre channel card (SE0X7F21F, SE0X7F22F), if you fail to specify the correct device path, an error log with no message might be registered.  In the same way, when you start up a domain from a disk connected to the 8-Gbps fibre channel card (SE0X7F21F, SE0X7F22F), even if the domain cannot be started due to reasons such as disk failure, the error log might not be registered.	
RTIF1- 100331-001	O	O	O	When you use the sethttps(8) command to create the self CA (Certificate Authority) or a CSR with specifying only spaces (for example, " ") in the <i>e-mail</i> operand, the HTTPS function might be disabled after XSCF reset.	When you create the self CA or a CSR, do not specify only spaces in the <i>e-mail</i> operand.
RTIF1- 100713-001	O	O	O	While the Oracle Solaris 10 OS is running, if the occurrence of RED State Exception or watchdog reset or the execution of the reset xir command lead to the domain CPU reset, the following message might be displayed on the console and the domain might hang up.  Failed to complete trap processing. mid=0xXX	No workaround is available.  When this problem occurred, turn off the domain power and then turn on.
RTIF1- 100713-002			O	Though the mainline switch is on, the showhardconf(8) command might wrongly display the PSU status as "Breaker off" or "Input fail."	No workaround is available.
RTIF1- 101019-001	O	O	O	When you start up a domain from a hard disk that is connected to the 8Gbps fibre channel card (SE0X7F21F, SE0X7F22F) and if you specified an erroneous value after "@" of the disk node, the message of "Fast Data Access MMU Miss" might be displayed on the console and an error log of the TT=0x68 trap might be registered.	No workaround is available. When this event occurred, change the environmental variable 'auto-boot?' setting to false and use the resetall command to reset the domain. Then, specify the correct value after "@" of the disk node and execute the boot command.

 TABLE 3-6
 XCP Issues Fixed in Releases Earlier Than XCP 1121 (Continued)

ID	M3000	M4000 M5000	M8000 M9000	Description	Workaround
RTIF1- 101029-001			0	When you use the setroute(8) command to set the gateway address and if you mistake the setting or the gateway has been stopped, XSCF hangs up.	To set the gateway address, confirm that the specified address is correct. Before resetting XSCF by using the rebootxscf(8) command, confirm that the gateway is operating properly.
RTIF1- 101102-001			O	When the RCI of XSCF#0 and XSCF#1 both got the communication error, the RCI asynchronous monitoring of PRIMECLUSTER does not stop normally but gets the monitoring timeout, which delays the switching of the clusters after the error detected.	
RTIF1- 101215-001	O	O	O	While XSCF is running, a process may go down. After this, XSCF may reset.	
RTIF1- 110216-001	O			When you execute the showenvironment power command on the M3000 server with SPARC64 VII+ processors, an incorrect value of "Permitted AC power consumption" will be displayed with 470 W.	No workaround is available. The correct value is 505 W for AC power supply model and is 510 W for DC power supply model.
RTIF1- 110222-002	O	0	O	XSCF sends Rst packets without AH header when dscp disconnects, resulting in false security vulnerability alarms.  The domain console may display this message:  ipsec_check_inbound_policy: PolicyFailurefortheincoming packet (not secure).	This message can be safely ignored.
RTIF1- 110523-001	O	O	O	From the OpenBoot PROM prompt (ok), when you use the nvalias command and try setting a devalias to the environmental variable nvramrc, it may fail with the message "Can't create new alias because nvramrc is full."	In case this event occurred, redo the settings of any devalias which is already defined in the environmental variable nvramrc, by using the nvalias command. Then, in order to set the failed devalias, execute the nvalias command once again.
RTIF1- 110526-001	О	О	O	Invoking 'setsnmp' without options results in segmentation fault.	To view 'setsnmp' usage options, use 'setsnmp -h'

 TABLE 3-6
 XCP Issues Fixed in Releases Earlier Than XCP 1121 (Continued)

ID	M3000	M4000 M5000	M8000 M9000	Description	Workaround
RTIF1- 111005-001		O	O	M4000/M5000 servers: When the system board is mounted with the onboard I/O device, if you use the addboard(8) or moveboard(8) command to add or move it by DR, operation may fail.	M4000/M5000 servers: No workaround is available.
				M8000/M9000 servers: When the system board is mounted with one or more PCI cards, if you use the addboard(8) or moveboard(8) command to add or move it by DR, operation may fail. However, when it is mounted with the IOUA card only, this event does not occur.	M8000/M9000 servers: No workaround is available.
				In either case, the following message appears on the destination domain console of the system board addition or move:	
				<pre>interpreter[xxxx]: ABORT: Bus Error: Fault Addr: 0xXXXXXXXX efdaemon[xxx]: Wait pid: xxxx status: xxx WARNING: IKP: Unable to probe PCI leaf (x-x-x)</pre>	
RTIF1- 111028-001	O	O	O	In the setemailreport(8), setsmtp(8) or setupplatform(8) command, any of the following characters in the e-mail address will result in an error. !#\$%&'*+/=?^`{ }~	Do not specify these characters in the e-mail address.

 TABLE 3-6
 XCP Issues Fixed in Releases Earlier Than XCP 1121 (Continued)

ID	M3000	M4000 M5000	M8000 M9000	Description	Workaround
RTIF1- 111227-001		O	O	In case of connecting an External I/O Expansion Unit, a message "watchdog timeout" might be registered in an error log under the following conditions:  • Executes the switchscf(8) command on an M8000/M9000 server.  • Executes the rebootxscf(8) command on an M4000/M5000 server.	No workaround is available.
RTIF1- 120216-001		Ο	O	Using PCI hot-plug, when you perform active addition of a PCI card or perform active maintenance or active addition of an external I/O expansion unit, operation may fail.	Stop the target domain before the addition of a PCI card or before the maintenance or addition of an external I/O expansion unit.
RTIF1- 120319-001	O	O	O	An internal module of the fmd process (case-close module) turns disable.  If you continue the operation in a situation that the case-close module is disabled, an fmd process failure occurs and resets XSCF.	No workaround is available.
RTIF1- 120322-001	O	O	O	While starting the XSCF, SSH service might be disabled and cannot perform SSH connection.	Wait for the XSCF finish starting, and then retry SSH connection. If SSH service has been disabled, reset the XSCF using the rebootxscf(8) command.
RTIF1- 120326-001	O	O	O	Executing the setldap -p command with a password that contains a colon (:) causes a problem with the LDAP configuration.	
RTIF1- 120329-004	O	O	O	When the XSCF unit is monitored by Ops Center, the service processor can sometimes reset or failover unexpectedly.	Disable Ops Center monitoring of the XSCF unit.
RTIF1- 120424-001			O	There is a low probability that FRU replacement, which is performed by the replacefru(8) command, fails during the replacement of XSCF boards in reaction to an XSCF board failure.	No workaround is available.

 TABLE 3-6
 XCP Issues Fixed in Releases Earlier Than XCP 1121 (Continued)

ID	M3000	M4000 M5000	M8000 M9000	Description	Workaround
RTIF1- 120611-001		O	O	When an External I/O Expansion Unit error occurs with the following error code, the showlogs(8) command may fail to display an error message or the component that needs to be replaced.  Code: XXXXXXXXX-00XXXXXX- 11XXXXXXXXXXXXXXXX	No workaround is available.
RTIF1- 120703-001	O	O		There is a low probability that the XSCF restart fails, when the XSCF reset occurs due to an XSCF malfunction.	No workaround is available. If the defect occurred, contact a qualified service engineer.
RTIF1- 121112-001	O	0	0	At the XSCF start, when the machine administration of Enhanced Support Facility (ESF) which operates in the domain detected an error, process failure may occur which leads to the XSCF reset.	M4000/M5000/M8000/M9000 servers: 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.  M3000 server: Check that XSCF is started. If not started, stop the domain 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- 121112-002	O			When a temporary blackout occurred on the M3000 server which is mounted with the SPARC64 VII+ processor, the "Power subsystem failure(detector=2)" error is detected erroneously and the domain may be suspended.	•

 TABLE 3-6
 XCP Issues Fixed in Releases Earlier Than XCP 1121 (Continued)

ID	M3000		M8000 M9000	Description	Workaround
RTIF1- 121112-003	Ο	О	О	After the getflashimage -v command execution, the URI of the send file and the receive file in transfer from 'A' to 'B' is displayed vice versa.	No workaround is available. Read the URI display of the send file and the receive file in reverse order.
RTIF1- 121112-004	O	Ο	Ο	After the fmdump(8) command execution, the FRU information of each event may fail to display the last one character in part, serial, and revision.	No workaround is available. When the FRU at the time of event occurrence is mounted, you can use the showhardconf(8) command to confirm the FRU information.
RTIF1- 121112-005		O	O	In the following configuration, active replacement or active addition of a PCI card may fail. On this occasion, Ap_Id format and devices may not be shown correctly by cfgadm(1M).  M4000/M5000 servers:  • Active addition of a PCI card to PCIE#1  • Active addition of a PCI card to a PCI slot on the External I/O Expansion Unit  • Active replacement or active addition of a link card on PCIE#1 which is connected with the External I/O Expansion Unit  M8000/M9000 servers:  • Active addition of a PCI card to a PCI slot on the External I/O Expansion Unit	In the relevant configuration, stop the domain and perform cold addition or cold replacement and then start the domain.  To add a PCI card to the M4000/M5000 servers, perform the active addition of a PCI card to a slot other than PCIE#1.  To restore, reboot the domain.
RTIS1- 130218-004	О	О	О	After updating the firmware, the Fault Management MIB Trap might not be reported.	
RTIF1- 120329-002			Ο	M9000 server: When using the expansion cabinet, the depleted life (lifetime) of the energy storage module (ESM) on a Sun Flash Accelerator F20 PCIe card might be inaccurately reported or cannot be displayed. A depleted ESM might not be reported.	No workaround is available.

 TABLE 3-6
 XCP Issues Fixed in Releases Earlier Than XCP 1121 (Continued)

ID	M3000	M4000 M5000	M8000 M9000	Description	Workaround
RTIF1- 130404-001	0	O	O	If the domain POR reset is executed while a domain shutdown is being executed, the domain status may be erroneously displayed as Running (Waiting for OS Shutdown) after the domain is restarted.	Once the domain shutdown processing is completed, execute the domain POR reset.  To restore, restart the domain.
RTIF1- 130404-002	O	O	0	In an environment in which RCI is used, the setrci -c state command may not correctly display the power status of the server.  If the above status occurs in a configuration with multiple servers and I/O units connected by RCI, the I/O unit power may erroneously be turned off when the power to one server is off.	If the power status display is incorrect for a server, first turn off the power to the server. If the power to the server cannot be turned off, disconnect the RCI cable of the server, together with the T-branch connector, and then turn off the power.  After turning off the power to a server that does not correctly display the power status, restore the system by first disconnecting the server and then restarting the input power (AC OFF/ON).
RTIF1- 130404-003	O	O	O	In a configuration with multiple servers and I/O units connected by RCI, connecting a powered-on I/O unit to a powered-off server with an RCI cable may erroneously turn off the I/O unit power.  Connecting with the power off in cases where the server RCI settings are initialized does not cause a problem.	To connect a powered-on I/O unit to a server with an RCI cable, either connect the I/O unit before turning on the server input power (AC ON), or connect the I/O unit to the server when the server power is on.
RTIF1- 130719-001		O	O	If a memory failure occurs after the following error is detected, POST diagnosis may hang up without isolating the faulty memory.  Msg: DIMM serious error  Msg: Unexpected Trap type (tt=0x32)	No workaround is available.
RTIF1- 130801-001	О	O	О	The following error log may be registered when the restoredefaults(8) command is executed on XCP 1115:  XSCF self diagnosis warning detection.	This error log may be ignored. This trouble can be worked around by re-setting the XSCF configuration. As a permanent solution, upgrade to XCP 1116 or newer.

 TABLE 3-6
 XCP Issues Fixed in Releases Earlier Than XCP 1121 (Continued)

ID	M3000	M4000 M5000	M8000 M9000	Description	Workaround
RTIF1- 130801-002	0	0	0	While XSCF is running, "XSCF panic detected" or "XSCF Watchdog timeout" may be detected, and XSCF may reset.	M3000/M4000/M5000 servers: Check that XSCF is started. If not started, stop all the domains and then execute a 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 M8000/M9000 servers: Check that XSCF is started. If there is an XSCF unit that has not started, execute the replacefru(8) command, and then uninstall the XSCF unit and install it again. Or stop all the domains and then execute a 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- 140131-001		0	0	In a configuration with even numbered domains, if the following operation is executed when half of the domains have become inactive ("Degraded" state) due to failures or configuration violations, either all the running domains stop or the restarting of such domains fails [Operation]  1. Remove all XSBs of the domains which have become inactive (by executing the "deleteboard -c unassign" command).  2. Execute poweron or reboot on any of the domains which has not become inactive.	Before executing the operations, explained in "Explanation", please execute any of the following procedures.  • Perform maintenance to fix the malfunctions and configuration violations.  • Stop all domains.  [How to restore]  Perform maintenance to fix the malfunctions and configuration violations. Restart the domain after that.
RTIF1- 140611-001	O	O	O	Security fixes. (CVE-2014-0224) For detail, see the Oracle website related to the following: Critical Patch Updates	Update the XCP firmware to XCP 1118 or newer.
RTIF1- 141002-001	О	О	О	Security fixes (CVE-2014-7169. See MOS Doc Id 1934739.1)	Update the XCP firmware to XCP 1118 or newer.

 TABLE 3-6
 XCP Issues Fixed in Releases Earlier Than XCP 1121 (Continued)

ID	M3000	M4000 M5000	M8000 M9000	Description	Workaround	
RTIF1- 141117-001	О	О	О	Security fixes. (CVE-2014-3566) For details, see the Oracle website related to the following: Critical Patch Updates	Update the XCP firmware to XCP 1119 or newer.	
RTIF1- 150605-001			O	When using the addfru(8) or replacefru(8) command for the maintenance of the CPU/memory board unit, executing the system board diagnostic test may cause the XSCF process to fail.	No workaround is available. Update the XCP firmware to XCP 1120 or newer.	
RTIF1- 150605-002	O	0 0	0 0	0 0 0	It may be temporarily impossible to log in to the XSCF shell.  However, at this time, it is still possible to use the ICMP response and the XSCF network functions such as XSCF Web.	No workaround is available. Wait a few hours before attempting to log in to the XSCF shell again.
				Even if it is possible to log in to the XSCF shell, executing the console command may end with an error and the following message displayed:  "console: error while loading shared libraries: libgcc_s_nof.so.1: cannot open shared object file Input/output error"		
RTIF1- 150605-003			O	If the active XSCF unit fails, and active replacement is performed for that failed XSCF, synchronous processing of logs between the active and standby XSCF units may not be performed normally, and the log data below will not be inherited by the replacement XSCF unit.  • showlogs power  • showlogs event	If this issue occurs during active replacement of the active XSCF unit, turn off the power to all domains and then turn off and on the input power (AC OFF/ON).  To turn on the input power that you turned off, wait at least 30 seconds before power-on.	

**TABLE 3-6** XCP Issues Fixed in Releases Earlier Than XCP 1121 (Continued)

ID	M3000	M4000 M5000	M8000 M9000	Description	Workaround
RTIF1- 150608-001			O	If you specify the USB device with XCP 1119 and execute the XSCF shell commands below, or execute XSCF Web menu items corresponding to the XSCF shell commands below, the system displays "Unable to mount USB device" and the process fails.	Use the remote host instead of the USB device and execute the command or operate XSCF Web. Or, after updating the firmware to another version other than XCP 1119, execute the command or operate XSCF Web.
				<ul> <li>dumpconfig</li> <li>getflashimage</li> <li>restoreconfig</li> <li>setad</li> <li>setldapssl</li> <li>showcodactivationhistory</li> <li>snapshot</li> </ul>	
RTIF1- 150707-001	O	O	O	Security fixes. (CVE-2013-5704, CVE-2014-3570, CVE-2014-3572, CVE-2014-8275, CVE-2015-0204, CVE-2015-0235) For detail, see the Oracle website related to the following: <i>Critical Patch Updates</i>	

# Oracle Solaris OS Issues and Workarounds

This section contains information about Oracle Solaris OS issues. TABLE 3-7, TABLE 3-8, TABLE 3-9, TABLE 3-10, TABLE 3-11, TABLE 3-12, TABLE 3-13, and TABLE 3-14 list issues you might encounter, depending upon which Oracle Solaris OS release you are using.

#### Oracle Solaris Issues and Workarounds for All Supported Releases

TABLE 3-7 lists Oracle Solaris OS issues that you might encounter in any supported release of Oracle Solaris OS.

 TABLE 3-7
 Oracle Solaris OS Issues and Workarounds for All Supported Releases

CR ID	M3000	M4000 M4000	M8000 M9000	Description	Workaround
4816837		Ο	Ο	System hangs when executing parallel hot plug operation with SP DR in suspend phase.	No workaround is available.
6449315			O	The Oracle Solaris OS cfgadm(1M) command does not unconfigure a DVD drive from a domain on a M8000/M9000 server.	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.
6459540		0	0	The DAT72 internal tape drive on a server may time out during tape operations. The device might also be identified by the system as a QIC drive.	Add the following definition to /kernel/drv/st.conf:  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, 0x8c,3;  There are four spaces between SEAGATE DAT and DAT72-000.
6466617		O	O	Performing a hot plug operation with the PCI-Express slot too quickly interrupts a PCI leaf reset and occurs the following error: cfgadm: Component system is busy error	Pause a few seconds between the issue of each cfgadm -c command.

 TABLE 3-7
 Oracle Solaris OS Issues and Workarounds for All Supported Releases (Continued)

CR ID	M3000	M4000 M4000		Description	Workaround
6481002	0	O	0	Installing the Oracle Solaris OS from the network using certain PCI-Express cards may cause a panic.	If you are using a Sun PCI-E Dual Gigabit Ethernet MMF Adapter or a Sun PCI-E Dual Gigabit Ethernet UTP Adapter, do not install the Oracle Solaris OS using either of these cards. Instead, use other network devices, such as the onboard Gigabit Ethernet or another network device.
6515648		O	O	"Replumb Failed" error appears when dr@0:SB1::memory fails.	Once the DR operation is complete, it can be plumbed up manually.  Example steps to re-plumb the interface manually:  # ifconfig interface plumb
					xxx.xxx.xxx.xxx netmask + broadcast + up
					${\tt\#\ ifconfig\ \it interface\ group\ \it group-name}$
					<pre># ifconfig interface addif xxx.xxx.xxx.xxx -failover deprecated up</pre>
					This workaround assumes that the /etc/hostname.interface 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 /etc/hostname. <i style="color: blue;">interface file.</i>
6516135		O	O	Ap_Id format and devices may not be shown correctly by cfgadm(1M).	display all of the PCI slots.  1) devfsadm (at Oracle Solaris OS
					prompt) 2) cfgadm
6519290	0	O	O	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 /tmp etc.	Set the following to /etc/system and then reboot the domain: set maxfastscan=0x2000

 TABLE 3-7
 Oracle Solaris OS Issues and Workarounds for All Supported Releases (Continued)

CR ID	M3000	M4000 M4000		Description	Workaround		
6522017		О	О	DR and ZFS may not be used in the same domain.	This has been fixed in Oracle Solaris 11.1 SRU3.4.		
					Reduce the amount of kernel memory that ZFS can allocate by setting the zfs_arc_max parameter in the /etc/system file. The following example sets the maximum size to 512 MB.		
					set zfs:zfs_arc_max = 0x200000000		
6529714		O	O	Warning messages occur while trying to configure more than four PCIe Quad-port Gigabit Ethernet UTP Low Profile Adapter (X4447A-Z) or PCIe Dual 10 Gigabit Ethernet Fiber XFP Low Profile Adapter (X1027A-Z) into one I/O Boat.	No workaround is available.		
6530753		О	Ο	О	O	I/O Expansion Unit PCI slots are not	Use one of the following operations to display all of the PCI slots.
				displayed during a normal boot operation.	<ul> <li>boot -r (at open boot prompt)</li> <li>devfsadm -C (at Oracle Solaris OS prompt)</li> </ul>		
					• cfgadm (twice at Oracle Solaris OS prompt)		
6531036	O	O	O	The error message network initialization failed appears repeatedly after a boot net installation.	No workaround is available. This message can be safely ignored.		
6532215	O	O	O	volfs or dscp service may fail when domain is booted.	Restart the service if the failure is observed. To avoid the problem, issue the following commands.		
				<pre>svc:/platform/sun4u/dscp:defa ult: Method "/lib/svc/method/svc-dscp start" failed with exit status 95.</pre>	<pre># svccfg -s dscp setprop start/timeout_seconds=count: 300 # svccfg -s volfs setprop</pre>		
				<pre>svc:/system/filesystem/volfs:</pre>	start/timeout_seconds=count:		
		default: Method or service exit timed out. Killing contract 59.	<pre># svcadm refresh dscp # svcadm refresh volfs</pre>				

 TABLE 3-7
 Oracle Solaris OS Issues and Workarounds for All Supported Releases (Continued)

CR ID	M3000	M4000 M4000	M8000 M9000	Description	Workaround
6565553 6611966 6674266		Ο	Ο	DR deleteboard(8) and moveboard(8) operations might fail. Example for messages on domain: drmach: WARNING: Device driver failure: /pci	No workaround is available. Try DR operations again.
				<pre>dcs: <xxxx> config_change_state: Hardware specific failure: unconfigure SB1: Device driver failure: /pci</xxxx></pre>	
6588650		O	O	On occasion, the system is unable to DR after an XSCF failover or XSCF reboot.	No workaround is available.
6589644			O	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		O	О	Unsuccessful DR operation leaves memory partially configured.	Try deleteboard(8) again.
6619344		O		The Sun Crypto Accelerator (SCA) 6000 might not work if hot-plug configured into slot 1.	To avoid the defect, do not hot-plug this card in slot 1.
6625734			O	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 3-7
 Oracle Solaris OS Issues and Workarounds for All Supported Releases (Continued)

CR ID	M3000		M8000 M9000	Description	Workaround
6660168	О	О	О	If a ubc.piowbeue-cpu error occurs on a domain, the Oracle Solaris Fault Management cpumem-diagnosis module might fail, causing an interruption in FMA service.	O .
				If this happens, you will see the following output in the console log: SUNW-MSG-ID: FMD-8000-2K, TYPE: Defect, VER: 1, SEVERITY: Minor	Then restart cpumem-diagnosis: # fmadm restart cpumem- diagnosis
				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</hostname>	
				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 fmdump -v -u <event-id> to locate the module. Use fmadm reset <module> to reset the module.</module></event-id>	
6745410	Ο	O	O	Boot program ignores the Kadb option which causes the system not to boot.	Use kmdb instead of kadb.

 TABLE 3-7
 Oracle Solaris OS Issues and Workarounds for All Supported Releases (Continued)

CR ID	M3000	M4000 M4000	M8000 M9000	Description	Workaround
6765239	0			If a SAS device containing multiple SAS targets is connected to the onboard external SAS interface, it will not work properly. The enumeration of target IDs within the device may change across reboots.	Use a FUJITSU SAS card (SE0X7SA1F/SE0X7SA1X). Alternatively, check for the availability of a patch for this defect.
7009469	O			Creating a RAID configuration using the raidctl(1M) command generates a warning message on initial process. Subsequent RAID configurations do not.	
7135497			O	On systems with the RAID-capable IOUA card and running Oracle Solaris 11, after a RAID volume is deleted using raidctl -d, the format utility does not display the disk.	Execute cfgadm(1M): cfgadm -c unconfigure <i>cn</i> where <i>cn</i> is the controller number.
18055846		O	O	When adding a PCI Expansion Unit by PCI hot plugging (PHP), Oracle Solaris may panic by producing the following message: panic [cpuX] /thread= XXXXXXXXXX: Fatal error has occurred in: PCIe fabric. (0xX) (0xXX).	There is no effective workaround.  Do not hot plug a PCI Expansion Unit. There is no problem in hot replacing in respect to the same slot.

## Oracle Solaris OS Issues Fixed in Oracle Solaris 10 8/11

TABLE 3-8 lists issues that have been fixed in Oracle Solaris 10 8/11 OS. You might encounter them in supported releases earlier than Oracle Solaris 10 8/11.

TABLE 3-8 Oracle Solaris OS Issues Fixed in Oracle Solaris 10 8/11

CR ID	M3000	M4000 M4000	M8000 M9000	Description	Workaround		
6344060	O			A lot of following ereports are outputted when both interfaces bge1 and bge2 are in use.	This has been fixed in patch 144563-02.		
				ereport.io.device.badint_limit ereport.io.service.lost This issue is caused on the M3000 server with SPARC64 VII+ processors.	No workaround is available.		
6794630			O	An attempt to use the GUI to install Oracle Solaris OS in a domain larger than 2 TB might fail.	This has been fixed in patch 124630-45.		
					[Workaround]		
					Use the Command Line interface to install Oracle Solaris OS.		
6966086	O			bge interface can not enable Jumbo Frame function.	This has been fixed in patch 144563-02.		
						This issue is caused on the M3000 server with SPARC64 VII+ processors.	[Workaround]
					No workaround is available.		
7009474 O	O	Ο	О	After applying 144563-01 or 144563-02 patch, bge interface does not display link up/down message on console			
				and syslog when plugging/unplugging.	[Workaround] Check the link status by using the "link_state" parameter from the kstat(1M) output.		

#### Oracle Solaris OS Issues Fixed in Oracle Solaris 10 9/10

TABLE 3-9 lists issues that have been fixed in Oracle Solaris 10 9/10 OS. You might encounter them in supported releases earlier than Oracle Solaris 10 9/10.

**TABLE 3-9** Oracle Solaris OS Issues Fixed in Oracle Solaris 10 9/10

CR ID	M3000	M4000 M4000	M8000 M9000	Description	Workaround
6668237	0	О	О	After DIMMs are replaced the corresponding DIMM faults are not cleared on the domain.	This has been fixed in patch 143527-01.
					[Workaround] Use the following commands: # fmadm repair fmri uuid # fmadm rotate
6872501	Ο	O	O	If 139555-08 has been applied to the domain, cores are not offlined when requested by the XSCF. This CR effects only Oracle Solaris 10 5/09, Oracle Solaris 10 10/09, and an earlier version of Oracle Solaris OS with patch 139555-08.	This has been fixed in patch 143359-02.  [Workaround]  Use fmdump(8) with its -v option on the Service Processor to identify the faulty core. Once identified, use psradm(1M) on the domain to offline the core.
6888928	0	O	O	IPMP interface fails since probe packets are not sent through that interface. Problem occurs with M3000/M4000/M5000/M8000/M9000 servers running any Oracle Solaris release running IPMP with patch 141444-09 installed.	This has been fixed in patch 142900-02.  [Workaround]  Disable probe-based failure detection.

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

TABLE 3-10 lists issues that have been fixed in Oracle Solaris 10 10/09 OS. You might encounter them in supported releases earlier than Oracle Solaris 10 10/09.

TABLE 3-10 Oracle Solaris OS Issues Fixed in Oracle Solaris 10 10/09

CR ID	M3000	M4000 M5000	M8000 M9000	Description	Workaround
6572827 O	0	О	О	The prtdiag -v command reports PCI bus types incorrectly. It reports "PCI" for PCI-X leaf devices and	This has been fixed in patch 141444-09.
				"UNKN" for legacy PCI devices.	[Workaround]
					No workaround is available.
6724307			О	Scheduler decisions systems are occasionally unbalanced.	This has been fixed in patch 141414-01.
				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.	Use processor sets to prevent uneven threads to core assignment.
				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.	
6800734		O	O	The deleteboard(8) command hang in a domain.	This has been fixed in patch 141444-09.
					[Workaround]
					No workaround is available.

 TABLE 3-10
 Oracle Solaris OS Issues Fixed in Oracle Solaris 10 10/09 (Continued)

CR ID	M3000	M4000 M5000	M8000 M9000	Description	Workaround
6816913		O	O	The XSCF showdevices(8) command displays the incorrect processor cache size (MB) for fractional processor cache sizes, such as displaying "5" when the correct display would be "5.5."	
6821108		O	O	DR and showdevices(8) command do not work after XSCF reset.	This has been fixed in patch 140589-02.
6827340	0	0	0	DR and Memory patrol might fail due	[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.  This has been fixed in patch 142344-
	J	J	J	to command error.	01.  [Workaround]  No workaround is available.

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

TABLE 3-11 lists issues that have been fixed in Oracle Solaris 10 5/09 OS. You might encounter them in supported releases earlier than Oracle Solaris 10 5/09.

TABLE 3-11 Oracle Solaris OS Issues Fixed in Oracle Solaris 10 5/09

CR ID	M3000	M4000 M5000	M8000 M9000	Description	Workaround
6588555		O	0	M8000/M9000 servers: XSCF failover during DR operation to the permanent memory might cause domain panic.  M4000/M5000 servers: XSCF reset during DR operation to the permanent memory might cause domain panic.	This has been fixed in patch 139555-08.  [Workaround]  M8000/M9000 servers:  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.
					M4000/M5000 servers: Do not start an XSCF reset while a DR operation is running. Wait for a DR operation to finish before starting the reset.
6623226	O	O	O	The Oracle Solaris OS command lockstat(1M) or the dtrace lockstat provider might cause a system panic.	This has been fixed in patch 140336-01.
					[Workaround]
					Do not use the Oracle Solaris OS lockstat(1M) command or the dtrace lockstat provider.

 TABLE 3-11
 Oracle Solaris OS Issues Fixed in Oracle Solaris 10 5/09 (Continued)

CR ID	M3000	M4000 M5000	M8000 M9000	Description	Workaround
6680733	0	O	O	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.  [Workaround]  If possible, use the card in x8 slot. Otherwise, no workaround is available.
6689757	0	O	0	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.	
6725885	O			cfgadm will display non-existent M3000 system boards (SB1 to SB15).	This has been fixed in patch 140401-01.  [Workaround]  The cfgadm output for SB1-SB15 can be ignored.

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

TABLE 3-12 lists issues that have been fixed in Oracle Solaris  $10\ 10/08$  OS. You might encounter them in supported releases earlier than Oracle Solaris  $10\ 10/08$ .

TABLE 3-12 Oracle Solaris OS Issues Fixed in Oracle Solaris 10 10/08

CR ID	M3000	M4000 M5000	M8000 M9000	Description	Workaround
6511374		O	O	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	This has been fixed in patch 137137-09.  [Workaround]  This message can be safely ignored.
6533686		0	0	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:  SCF busy  DR parallel copy timeout  This applies only to Quad-XSB configured system boards hosting multiple domains.	This has been fixed in patch 138397-01.  [Workaround]  Retry the DR operation at a later time.
6535018			O	In Oracle Solaris domains that include SPARC64 VII processors, workloads that make heavy use of the Oracle Solaris kernel might not scale as expected when you increase the thread count to a value greater than 256.	This has been fixed in patch 137111-01.  [Workaround]  For Oracle Solaris domains that include SPARC64 VII processors, limit domains to a maximum of 256 threads.
6608404		O		Hot-plug of the PCIe Quad-port Gigabit Ethernet UTP Low Profile Adapter (X4447A-Z) in slot 1 might cause other network devices to fail.	To avoid the defect, do not install this adapter in slot 1.

 TABLE 3-12
 Oracle Solaris OS Issues Fixed in Oracle Solaris 10 10/08 (Continued)

CR ID	M3000	M4000 M5000	M8000 M9000	Description	Workaround
6614737		О	О	The DR deleteboard(8) and moveboard(8) operations might hang if any of the following	For Oracle Solaris 10 5/08 or earlier, this has been in patch 137111-01.
				conditions exist:	[Workaround]
				<ul><li>A DIMM has been degraded.</li><li>The domain contains system boards with different memory size.</li></ul>	Avoid performing DR operations if
					To determine whether the system contains degraded memory, use the XSCF showstatus(8) command. For sample output, see "Identifying Degraded Memory in a System" on page 99.
					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 "Identifying Different Memory Sizes in a System Board" on page 99
					If a DR command hangs, reboot the domain to recover.
6619224			O	For Oracle Solaris domains that include SPARC 64 VII processors, a single domain of 256 threads (128	This has been fixed in patch 137111-03.
	single domain of 2 cores) or more mig extended period of unusual situations. uptime command o	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.	[Workaround] For Oracle Solaris domains that include SPARC 64 VII processors, do not exceed a domain size of 256 virtual CPUs in a single Oracle Solaris domain. This means a maximum of 32 CPU chips in a single domain configuration (maximum configuration for an M8000 server).		

 TABLE 3-12
 Oracle Solaris OS Issues Fixed in Oracle Solaris 10 10/08 (Continued)

CR ID	M3000	M4000 M5000	M8000 M9000	Description	Workaround
6632549		О	О	fmd service on domain might fail to maintenance mode after DR operations.	This has been fixed in patch 138050-01.
					[Workaround]
					If fmd service fails, issue the following commands on the domain to recover:
					# svcadm clear fmd
6660197		O	O	DR might cause the domain to hang if either of the following conditions exist:	This has been fixed in patch 138397-01.
				<ul> <li>A domain contains 256 or more CPUs.</li> <li>Memory error occurred and the DIMM has been degraded.</li> </ul>	<pre>[Workaround] 1. Set the following parameter in the    system specification file    (/etc/system): set drmach:drmach disable mcopy =</pre>
					1
					1. Reboot the domain.
6679370	O	O	O	The following message may be output on the console during the system	This has been fixed in patch 137137-09.
				booting, the External I/O Expansion Unit adding by hotplug, or the FMEMA operating by DR.	Note - Before adapting the patch, delete the following setting from /etc/system:
				SUNW-MSG-ID: SUN4-8000-75, TYPE: Fault, VER: 1,	<pre>set pcie_expected_ce_mask = 0x2001</pre>
				SEVERITY: Critical	[Workaround]
				DESC:	Add the following to /etc/system and then reboot the domain.
				A problem was detected in the PCI-Express subsystem.	
				Refer to http://sun.com/msg/SUN4-8000-	<pre>set pcie_expected_ce_mask = 0x2001</pre>
				75 for more information.	

 TABLE 3-12
 Oracle Solaris OS Issues Fixed in Oracle Solaris 10 10/08 (Continued)

CR ID	M3000	M4000 M5000	M8000 M9000	Description	Workaround
6720261	O	O	O	M4000/M5000/M8000/M9000 servers: If your domain is running one of the following versions of Oracle Solaris OS, the system might panic/trap during normal operation:  • Oracle Solaris 10 5/08 OS  • An earlier version of Oracle Solaris 10 OS with patch ID 127127-11	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.
				M3000 server: If your domain is running Oracle Solaris 10 5/08 OS, the system might panic/trap during normal operation:	

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

TABLE 3-13 lists issues that have been fixed in Oracle Solaris 10 5/08 OS. You might encounter them in supported releases earlier than Oracle Solaris 10 5/08.

**TABLE 3-13** Oracle Solaris OS Issues Fixed in Oracle Solaris 10 5/08

CR ID	M3000	M4000 M5000	M8000 M9000	Description	Workaround
5076574			O	A PCIe error can lead to an invalid fault diagnosis on a large M8000/M9000 domain.	For Oracle Solaris 10 8/07 or earlier, this has been fixed in patch 127127-11. [Workaround]  Create a file /etc/fm/fmd/fmd.conf containing the following lines; setprop client. buflim 40m setprop client. memlim 40m
6402328			O	System panic might happen due to be over the interrupt number limit when one domain has seven or more IOUA cards.	For Oracle Solaris 10 8/07 or earlier, this has been fixed in patch 127127-11.  [Workaround]  Use six or less IOUA cards on one domain.
6472153		O	O	If you create an Oracle Solaris OS Flash archive on a non-M4000/M5000/M8000/M9000 sun4u server and install it on a M4000/M5000/M8000/M9000 sun4u server, the console's TTY flags will not be set correctly. This can cause the console to lose characters during stress.	For Oracle Solaris 10 8/07 or earlier, this has been fixed in patch 137046-01.  [Workaround]  Just after installing Oracle Solaris OS from an Oracle Solaris Flash archive, telnet into the M4000/M5000/M8000/M9000 server to reset the console's TTY flags a follows:
					<pre># sttydefs -r console # sttydefs -a console -i "9600 hupcl opost onlcr crtscts" -f "9600"</pre>
					This procedure is required only once.

 TABLE 3-13
 Oracle Solaris OS Issues Fixed in Oracle Solaris 10 5/08 (Continued)

CR ID	M3000	M4000 M5000	M8000 M9000	Description	Workaround
6505921			O	Correctable error on the system PCIe bus controller generates an invalid fault.	For Oracle Solaris 10 8/07 or earlier, this has been fixed in 120011-14 and 125369-05.
					[Workaround]
					Contact a qualified service engineer.
6522433		O	О	After the CPU hardware error occurred, the fmdump(1M) command on the domain may display an	For Oracle Solaris 10 8/07 or earlier, this has been fixed in patch 127127-11.
				incorrect faulty component.	[Workaround]
					Check system status on XSCF.
6527811		O	O	The showhardconf(8) command on the XSCF cannot display PCI card information that is installed in	For Oracle Solaris 10 8/07 or earlier, this has been fixed in patch 128346-01.
				External I/O Expansion Unit, if the External I/O Expansion Unit is configured using PCI hotplug.	[Workaround]  No workaround is available.

 TABLE 3-13
 Oracle Solaris OS Issues Fixed in Oracle Solaris 10 5/08 (Continued)

CR ID	M3000		M8000 M9000	Description	Workaround
6536564		О	O	showlogs(8) and showstatus(8) command on XSCF might report wrong I/O component due to wrong	For Oracle Solaris 10 8/07 or earlier, this has been fixed in patch 125369-05.
				diagnosis by Oracle Solaris Fault	[Workaround]
				management Architecture when faults	To avoid this problem, issue the
				in I/O devices occur.	following commands on the domain.
					# cd
					/usr/platform/SUNW,SPARC- Enterprise/lib/fm/topo/plugin
					s
					<pre># mv ioboard.so ioboard.so.orig</pre>
					# svcadm restart fmd
					If the following messages are displayed on the domain, contact a service engineer.
					Example:
					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
6545143		O	O	There is a low probability that a system panic can occur during trap processing of a TLB miss for a user	For Oracle Solaris 10 8/07 or earlier, this has been fixed in patch 127111-08.
				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	[Workaround]  No workaround is available.
				following string:	
				bad kernel MMU trap at TL 2	

 TABLE 3-13
 Oracle Solaris OS Issues Fixed in Oracle Solaris 10 5/08 (Continued)

CR ID	M3000	M4000 M5000	M8000 M9000	Description	Workaround		
6545685		O	O	If the following message displayed on the OS console, memory degradation or XSB deconfiguration may occur in the subsequent reboot.	For Oracle Solaris 10 8/07 or earlier, this has been fixed in patch 127111-08.  [Workaround]		
					Add the following to /etc/system		
				Example:	and then reboot the domain:		
				mc-opl: WARNING: mc-opl rewrite timeout on /LSB0/B0	<pre>set mc-opl: mc_max_rewrite_loop = 20000</pre>		
6546188		O	O	The system panics when running hotplug (cfgadm(1M)) and DR operations (addboard(8) and	For Oracle Solaris 10 8/07, this has been fixed in patch 127741-01.		
				deleteboard(8)) on the following adapters:	No workaround is available.		
						• PCIe Quad-port Gigabit Ethernet UTP Low Profile Adapter (X4447A-Z)	
				<ul> <li>PCIe Dual 10 Gigabit Ethernet Fiber XFP Low Profile Adapter (X1027A-Z)</li> </ul>			
6551356		O	O	The system panics when running hotplug (cfgadm(1M)) to configure a previously unconfigured adapter. The	For Oracle Solaris 10 8/07, this has been fixed in patch 127741-01.		
				message "WARNING: PCI	[Workaround]		
				Expansion ROM is not accessible" will be seen on the console shortly before the system panic. The following cards are affected by this defect:  • PCIe Quad-port Gigabit Ethernet	Perform cfgadm -c disconnect to completely remove the card. After waiting at least 10 seconds, the card may be configured back into the domain using the cfgadm -c		
				UTP Low Profile Adapter (X4447A-Z)	configure command.		
				• PCIe Dual 10 Gigabit Ethernet Fiber XFP Low Profile Adapter (X1027A-Z)			

 TABLE 3-13
 Oracle Solaris OS Issues Fixed in Oracle Solaris 10 5/08 (Continued)

CR ID	M3000	M4000 M5000	M8000 M9000	Description	Workaround
6559504		О	О	Messages of the form nxge: "NOTICE: nxge_ipp_eccue_valid_check: rd_ptr =	For Oracle Solaris 10 8/07, this has been fixed in patch 127741-01.
				<ul> <li>nnn wr_ptr = nnn" will be observed on the console with the following adapters:</li> <li>PCIe Quad-port Gigabit Ethernet UTP Low Profile Adapter (X4447A-Z)</li> <li>PCIe Dual 10 Gigabit Ethernet Fiber XFP Low Profile Adapter (X1027A-Z)</li> </ul>	[Workaround] These messages can be safely ignored.
6564934		O	O	Performing a DR deleteboard(8) operation on a board which includes Permanent Memory when using the following adapters results in broken connections:  PCIe Quad-port Gigabit Ethernet UTP Low Profile Adapter (X4447A-Z)  PCIe Dual 10 Gigabit Ethernet Fiber XFP Low Profile Adapter (X1027A-Z)	For Oracle Solaris 10 8/07, this has been fixed in patch 127741-01.  [Workaround]  Re-configure the affected network interfaces after the completion of the DR operation. For basic network configuration procedures, refer to the ifconfig man page for more information.
6568417		0	O	After a successful CPU DR deleteboard(8) operation, the system panics when the following adapters are in use: • PCIe Quad-port Gigabit Ethernet UTP Low Profile Adapter (X4447A-Z) • PCIe Dual 10 Gigabit Ethernet Fiber XFP Low Profile Adapter (X1027A-Z)	For Oracle Solaris 10 8/07 or earlier, this has been fixed in patch 127111-02.  [Workaround]  Add the following line to /etc/system and reboot the system: set ip:ip_soft_rings_cnt=0
6571370		0	O	<ul> <li>Use of the following adapters have been observed to cause data corruption in stress test under laboratory conditions:</li> <li>PCIe Quad-port Gigabit Ethernet UTP Low Profile Adapter (X4447A-Z)</li> <li>PCIe Dual 10 Gigabit Ethernet Fiber XFP Low Profile Adapter (X1027A-Z)</li> </ul>	For Oracle Solaris 10 8/07, this has been fixed in patch 127741-01.  [Workaround]  Add the following line in /etc/system and reboot the system: set  nxge:nxge_rx_threshold_hi=0

TABLE 3-13 Oracle Solaris OS Issues Fixed in Oracle Solaris 10 5/08 (Continued)

CR ID	M3000	M4000 M5000	M8000 M9000	Description	Workaround
6584984			Ο	On the M8000/M9000 servers, busstat(1M) command may cause rebooting of domains.	For Oracle Solaris 10 8/07 or earlier, this has been fixed in patch 127127-11.
					No workaround is available. Do not use busstat(1M) command.
					Check for the availability of a patch for this defect.
6589546		Ο	Ο	prtdiag(8) command does not show all I/O devices of the following adapters:	For Oracle Solaris 10 8/07 or earlier, this has been fixed in patch 127127-11.
				• Sun StorageTek Enterprise Class 4Gb Dual-Port Fibre Channel PCIe HBA (XSEFC402AF)	[Workaround] Use prtdiag -v for full output.
				• Sun StorageTek Enterprise Class 4Gb Single-Port Fibre Channel PCIe HBA (XSEFC401AF)	

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

TABLE 3-14 lists issues that have been fixed in Oracle Solaris 10 8/07 OS. You might encounter them in supported releases earlier than Oracle Solaris 10 8/07.

**Note** – 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 Oracle Solaris 10 8/07.

 TABLE 3-14
 Oracle Solaris OS Issues Fixed in Oracle Solaris 10 8/07

CR ID	M3000	M4000 M5000	M8000 M9000	Description	Workaround
6303418			О	A M9000 server with a single domain and 11 or more fully populated system boards might hang under	For Oracle Solaris 10 11/06, this has been fixed in patch 120011-01.  [Workaround]
				heavy stress.	Do not exceed 170 CPU threads.
					Limit the number of CPU threads to one per CPU core by using the Oracle Solaris psradm command to disable the excess CPU threads. For example, disable all odd-numbered CPU threads.
6416224		O	O	System performance can degrade using a single NIC card with more than 5,000 connections.	For Oracle Solaris 10 11/06, this has been fixed in patch 120011-08.
					[Workaround]
					Use multiple NIC cards to split network connections.
6441349		O	O	The system may hang if there is an I/O error in the system.	For Oracle Solaris 10 11/06, this has been fixed in patch 120011-07.
					No workaround is available.
6485555		Ο	O	On-board Gigabit Ethernet NVRAM corruption could occur due to a race condition.	For Oracle Solaris 10 11/06, this has been fixed in patch 120011-08.
				The window of opportunity for this race condition is very small.	No workaround is available.

 TABLE 3-14
 Oracle Solaris OS Issues Fixed in Oracle Solaris 10 8/07 (Continued)

CR ID	M3000	M4000 M5000	M8000 M9000	Description	Workaround
6496337		О	О	The "cpumem-diagnosis" module may fail to load after uncorrectable error(UE) panic.	For Oracle Solaris 10 11/06, this has been fixed in patch 125369-05.
				Systems will function correctly but events normally automatically diagnosed by FMA using this module will require manual diagnosis.  Example:  SUNW-MSG-ID: FMD-8000-2K,  TYPE: Defect, VER: 1,  SEVERITY: Minor  EVENT-TIME: Thu Feb 15  15:46:57 JST 2007  PLATFORM: SUNW, SPARC- Enterprise, CSN: BE80601007,  HOSTNAME: col2-ff-em7-d0	<pre>[Workaround] If problem occurred, implement the following workaround: 1. Remove the following file. # rm /var/fm/fmd/ckpt/cpumem- diagnosis/cpumem-diagnosis 1. Restart fmd service. # svcadm restart fmd  To avoid this problem in advance, add "rm -f /var/fm/fmd/ckpt/cpumem- diagnosis/cpumem-diagnosis" in /lib/svc/method/svc-dumpadm file as below.  # # We haven't run savecore on a dump device yet # savedev=none  rm -f /var/fm/fmd/ckpt/cpumem- diagnosis/cpumem-diagnosis</pre>
6498283		O	Ο	Using the DR deleteboard(8) command while psradm operations are running on a domain might cause a system panic.	# For Oracle Solaris 10 11/06, this has been fixed in patch 120011-07.  [Workaround] No workaround is available.

 TABLE 3-14
 Oracle Solaris OS Issues Fixed in Oracle Solaris 10 8/07 (Continued)

CR ID	M3000	M4000 M5000	M8000 M9000	Description	Workaround
6499304		О	О	CPU isn't offlined and unexpected message is displayed on console when many correctable error(CE) occurs.	For Oracle Solaris 10 11/06, this has been fixed in patch 125369-05.
				Example:	[Workaround]
				SUNW-MSG-ID: FMD-8000-11, TYPE: Defect, VER: 1, SEVERITY: Minor EVENT-TIME: Fri Feb 2 18:31:07 JST 2007	Check CPU status on XSCF.
				PLATFORM: SPARC-Enterprise, CSN: BE80601035, HOSTNAME: FF2-35-0	
6502204		O	Ο	Unexpected error messages may be displayed on console on booting after CPU UE panic.	For Oracle Solaris 10 11/06, this has been fixed in patch 125369-05.
				Example:	[Workaround]
				SUNW-MSG-ID: FMD-8000-11, TYPE: Defect, VER: 1, SEVERITY: Minor EVENT-TIME: Tue Jan 9 20:45:08 JST 2007	If you see unexpected messages, use the XSCF command showdomainstatus(8) to check
				PLATFORM: SUNW, SPARC- Enterprise, CSN: 2030636002, HOSTNAME: P2-DC1-16-d0	system status on XSCF.
6502750		O	O	Notification message for inserted or removed card by PCI hot plug may not output.	For Oracle Solaris 10 11/06, this has been fixed in patch 120011-08.
					No workaround is available.
6508432		О	O	Many correctable errors (CE) may occur, and despite these are the correctable errors, domain may panic.	For Oracle Solaris 10 11/06, this has been fixed in patch 120011-08.
					[Workaround] Set the following to /etc/system and then reboot the domain:
					<pre>set pcie:pcie_aer_ce_mask = 0x2001</pre>
6508434		O	O	The domain may panic when an additional PCI-X card is installed or a PCI-X card is replaced by using PCI	For Oracle Solaris 10 11/06, this has been fixed in patch 120011-08.
				hot plug.	[Workaround]
					Do not insert a different type of PCI-X card on the same PCI slot by using PCI hot plug.

 TABLE 3-14
 Oracle Solaris OS Issues Fixed in Oracle Solaris 10 8/07 (Continued)

CR ID	M3000	M4000 M5000	M8000 M9000	Description	Workaround	
6509337		О	О	s10s_u3 wanboot fails - The server returned 416: Requested Range Not Satisfiable.	No workaround is available.	
6510861		О	O	When Dual-Channel Ultra320 SCSI Card (SE0X7SC2F, SE0X7SC2X) is mounted, correctable errors(CE) occur	For Oracle Solaris 10 11/06, this has been fixed in patch 120011-08.	
				and system may panic.	[Workaround]	
					Add the following entry to the /etc/system file and then reboot the system:	
					<pre>set pcie:pcie_aer_ce_mask = 0x31c1</pre>	
6520990		O	Ο	О	Domain may cause a panic when deleteboard(8) command for kernel board by using Dynamic	For Oracle Solaris 10 11/06, this has been fixed in patch 120011-08.
				Reconfiguration (DR).	[Workaround]	
					To mask this error, add the following entry to the /etc/system file.	
					<pre>set drmach:fmem_timeout = 30</pre>	
6527781			O	The cfgadm command fails while moving the DVD/Tape drive unit between two domains.	For Oracle Solaris 10 11/06, this has been fixed in patch 125081-06.	
					No workaround is available. To reconfigure DVD/Tape drive unit, execute reboot -r from the domain exhibiting the problem.	
6530178		O	O	DR addboard(8) command can hang. Once problem is observed, further DR operations are blocked. Recovery		
				requires reboot of the domain.	No workaround is available.	
6530288		O	O	Ap_Id format may not be shown correctly by cfgadm(1M) command.	For Oracle Solaris 10 11/06, this has been fixed in patch 120011-07.	
					No workaround is available.	

 TABLE 3-14
 Oracle Solaris OS Issues Fixed in Oracle Solaris 10 8/07 (Continued)

CR ID	M3000	M4000 M5000	M8000 M9000	Description	Workaround
6534471		О	О	Systems may panic/trap during normal operation.	For Oracle 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		O	O	PCI hot plug to PCI slot #0, #1 or External I/O Expansion Unit may fail on XSB added by DR.	For Oracle 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		O	O	Under Oracle Solaris 10 11/06, there is a low probability of a domain panic during reboot when the PCIe Quad- port Gigabit Ethernet UTP Low Profile Adapter (X4447A-Z) is present in a domain.	No workaround is available.
6539909		0	0	<ul> <li>Under Oracle Solaris 10 11/06, do not use the following adapters for network access when you are using the boot net install command to install the Oracle Solaris OS:</li> <li>PCIe Quad-port Gigabit Ethernet UTP Low Profile Adapter (4447A-Z/X4447A-Z)</li> <li>PCIe Dual 10 Gigabit Ethernet Fiber XFP Low Profile Adapter (1027A-</li> </ul>	Use an alternate type of adapter or onboard network device to install the Oracle Solaris OS via the network.
<=10<00				Z/ X1027A-Z)	T. O. J. O. J. A.
6542632		O	O	Memory leak in PCIe module if driver attach fails.	For Oracle 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 M3000/M4000/M5000/M8000/M9000 servers software documentation.

The corrections for the *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 3-15
 Software Documentation Updates

Title	Page Number	Update
SPARC Enterprise M3000/M4000/M5000/M 8000/M9000 Servers Administration Guide	44	The description, "The HTTPS service starts immediately after being enabled.", in step 3 of section "To Enable or Disable the Service Processor HTTPS Service" will be changed as follows: With disable, the HTTPS service stops immediately. With enable, the HTTPS service starts after the XSCF is reset by execution of the rebootxscf(8) command.
	73	The description, "If you create a second IM volume before the first IM volume completes its synchronization, the first volume's RAID status will indicate SYNC, and the second volume's RAID status will indicate OPTIMAL." in Section 5.2.1, "Creating a Hardware Mirrored Volume" will be changed as follows:
		If you create a second IM volume before the first IM volume completes its synchronization, the first volume's RAID status will indicate SYNC, and the second volume's RAID status will indicate DEGRADED
SPARC Enterprise M3000/M4000/M5000/M 8000/M9000 Servers XSCF User's Guide	2-17	The host name can include "." (period).  The description, "A label element can contain alphanumeric characters (a to z, A to Z, 0 to 9), "-" (hyphen) and "." (period). Each label element must always begin with an alphabetic character and end with an alphanumeric character. However, you cannot use a "." (period) in a host name." in "Host name/domain name" of TABLE 2-2 Network Configuration will be changed as follows:  A label element can contain alphanumeric characters (a to z, A to Z, 0 to 9), "-" (hyphen) and "." (period). Each label element must
		always begin with an alphabetic character and end with an alphanumeric character.
	2-28	"Configuring XSCF Routing" in Section 2.2.1 Network Configuration will be changed. See "Configuring XSCF Routing" on page 95 for details.

 TABLE 3-15
 Software Documentation Updates (Continued)

Title	Page Number	Update
SPARC Enterprise M3000/M4000/M5000/M 8000/M9000 Servers XSCF User's Guide	2-33	In the step 2 of "Configuring IP Packet Filtering Rules for XSCF Network", The description, <example 1=""> Permit the IP address 192.168.100.0/255.255.255.0 to go through.</example>
		XSCF> setpacketfilters -y -c add -i xscf#0-lan#0 -s 192.168.100.0/255.255.255.0 is updated as follows:
		Example 1> Permit the IP address 192.168.100.0/255.255.255.0 to go through.
		<pre>XSCF&gt; setpacketfilters -y -c add -i xscf#0-lan#0 -s 192.168.100.0/255.255.255.0 -j ACCEPT</pre>
	2-43	The description,  " <example> Specify 3 for the retry count, an eight-character password containing at least two digits, 60 days for the expiration period, and 15 days for the advance notice of expiration.</example>
		XSCF> setpasswordpolicy -y 3 -m 8 -d 2 -u 0 -l 0 -o 0 -M 60 -w 15",
		is updated as follows:
		<example> Specify 3 for the retry count, 8 for the minimum password length, 2 for the maximum credit by digits contained in a password, 60 days for the period of validity, and 15 days for the advance notice of validity expiration warning.</example>
		XSCF> setpasswordpolicy -y 3 -m 8 -d 2 -u 0 -l 0 -o 0 -M 60 -w 15
		In this case, since the maximum credit by digits contained in a password is set to 2, the number of numeric characters used in the password (2 at maximum) is subtracted from the minimum password length (8 characters); and the actual minimum password length is 6 to 8 characters.
		However, regardless of the setting of credit, the actual minimum password length will never be less than 6.
		For details, see TABLE 2-4 User Account Administration, and the setpasswordpolicy(8) man page or the XSCF Reference Manual.

 TABLE 3-15
 Software Documentation Updates (Continued)

Title	Page Number	Update
SPARC Enterprise M3000/M4000/M5000/M	2-177	You cannot set the memory mirror mode for a PSB in M8000/M9000 servers.
8000/M9000 Servers XSCF User's Guide		The PSB#02 data is included erroneously for the procedures example of M4000/M5000 servers in "Setting the Memory Mirror Mode for a PSB" of Section 2.2.14 System Board Configuration. The example will be changed as follows:
		3. Use the showfru(8) command to confirm the setting of memory mirror mode.
		XSCF> showfru -a sb
		Device Location XSB Mode Memory Mirror Mode
		sb 00 Quad Yes
		sb 01 Uni No
	3-4	The description, "When you return to XSCF Shell console without logging out from the domain, the return causes automatically logging out from the domain. At this time, a background program is forced to quit. To avoid the background program force-quit, return to XSCF Shell console with logging out from the domain." in "Domain console (RW console)" of TABLE 3-1 Types of Terminals Connected With XSCF will be changed as follows:
		If you return to the XSCF Shell from the domain console, or if you terminate the XSCF Shell, both without logging out of the domain, you will be automatically logged out from the domain. At the same time, a termination signal might be sent to any program that is running in the background on the domain console.

 TABLE 3-15
 Software Documentation Updates (Continued)

Title	Page Number	Update
SPARC Enterprise M3000/M4000/M5000/M	8-12	8.1.10 Firmware Update Procedure, "Updating XCP From the Network",
8000/M9000 Servers XSCF User's Guide		In - Command operation, step 2 and - Web browser operation, step4, the following sentence into the top of each step are added,
		- Command operation
		2. Import XCP
		Perform next step 3, "Perform the firmware update" immediately, after the XCP import ends.
		- Web browser operation
		4. Import XCP.
		Perform next step 5, "Perform the firmware update" immediately, after the XCP import ends.
		And - Web browser operation, step5 is modified as follows,
		5. If complete message is displayed, the XCP importing has ended. Perform the firmware update.
		to
		4 c) If complete message is displayed, the XCP importing has ended. Confirm the imported version.
		5. Perform the firmware update.
SPARC Enterprise	console(8)	The following description will be added:
M3000/M4000/M5000/ M8000/M9000 Servers XSCF Reference Manual	command	If you return to the XSCF shell from the domain console, or if you terminate the XSCF shell, both without logging out of the domain, you will be automatically logged out from the domain. At the same time, a termination signal might be sent to any program that is running in the background on the domain console.
	forcerebootxs cf(8) command	forcerebootxscf(8) command will be added. For detail, see "forcerebootxscf(8) Command" on page 97.

 TABLE 3-15
 Software Documentation Updates (Continued)

Title	Page Number	Update
SPARC Enterprise M3000/M4000/M5000/	password(8) command	The following limitations are added:
M8000/M9000 Servers XSCF Reference Manual		When invoked without a user operand, password operates on the current user account.
		When invoked without options, password prompts you to change the account password. The following restrictions apply:
		- Password must be six or more characters.
		- Password must be composed of five or more unique characters.
		- Passwords must not be composed of only space characters.
		- Passwords cannot be five or more consecutive characters such as "012345" or "zyxwvu".
		- Passwords cannot be specified with symmetric strings such as "qazwswzaq" or "qazwsswzaq".
		- Passwords cannot match any National Insurance number, represented as "XXzzzzzzX" (X: capital letter, z: numeric character), that is used in the United Kingdom.
	sethostname(8) command	- Passwords cannot match a word or term such as a proper name that can be found in dictionaries.
		- Passwords cannot contain the user name at the beginning or ending.
		<ul> <li>Passwords must not match the currently configured password.</li> <li>Passwords cannot be specified with only slight change, for example, changing lower case letters to upper case, or upper case letters to lower case.</li> </ul>
		The host name can include "." (period). The description, "Alphanumeric character and "-" can be used." in hostname operand will be changed as follows:
		Alphanumeric character, "-", and "." can be used.
	sethttps(8) command	You can now specify the -b option with the -c genserverkey and -c selfsign options.
		The synopsis is as follows:
		<pre>:sethttps [ [-q] -{y n}] -c genserverkey [-b bits] :sethttps [ [-q] -{y n}] -c selfsign country state   province locality organization organizationalunit common e-mail [-b bits]</pre>
		The option is as follows: -b bits
		It specifies the size (bit length) of the web server private key to be created. You can specify either 1024 or 2048 for bits. If no value is specified, a 2048-bit web server private key is created.

 TABLE 3-15
 Software Documentation Updates (Continued)

Title	Page Number	Update
	setnameserver (8) command	For the domainname operand, description is updated as follows:
		Specifies the domain name of the DNS search path to be registered or deleted. You can specify up to five domain names, each separated by a space. domainname is specified in up to 254 characters with label elements delimited by a "." (period). If a domain name exceeding 254 characters is specified, an error occurs. The label element of the domain name can contain letters (a to z, A to Z), numbers (0 to 9), and the special characters "-" (hyphens) and "." (period). The domain name must begin with a letter and end with either a letter or number. A "." (period) can be used as delimiter.
SPARC Enterprise M3000/M4000/M5000/ M8000/M9000 Servers	setntp(8), showntp(8) command	For the address operand, a part of description is updated as follows:
XSCF Reference Manual		A host name is specified in up to 64 characters with label elements delimited by a "." (period). The label element of the host name can contain letters (a to z, A to Z), numbers (0 to 9), and the special characters "-" (hyphens) and "." (period). The host name must begin with a letter and end with either a letter or number. A "." (period) can be used as delimiter. Host name, if specified, must be resolvable.
	setpasswordpo licy(8) command	The following description for the initial setting of $-m$ <i>minlen</i> will be added: The initial setting is 9.
	setupfru(8) command	The following description also applies to M4000/M5000 servers: Although a CMU with two CPUs can be configured into Quad-XSB mode on an M8000/M9000 server, the server generates a "configuration error" message for those XSBs that do not have a CPU and memory.
	showhardconf (8) command	In DESCRIPTION, "External I/O Expansion Unit information" and "PCI card information" are added with the following note:
		(displayed only while the domain power is on)

## Updates of the SPARC Enterprise M3000/M4000/M5000/M8000/M9000 Servers XSCF User's Guide

The following information supersedes the information in the SPARC Enterprise M3000/M4000/M5000/M8000/M9000 Servers XSCF User's Guide.

#### Configuring XSCF Routing

In a redundant XSCF unit configuration, the following are examples of data when routing is done in each subnet.

<Example 1> This example shows one default gateway.

```
XSCF Unit 0
                            XSCF Unit 1
xscf#0-lan#0 [192.168.11.10] xscf#1-lan#0 [192.168.11.20]
XSCF-LAN#0
                            XSCF-LAN#0
XSCF Unit 0
                            XSCF Unit 1
xscf#0-lan#1 [10.12.108.10] xscf#1-lan#1 [10.12.108.20]
XSCF-LAN#1
                            XSCF-LAN#1
                        Netmask Interface
Destination Gateway
[192.168.11.0] -
                            [255.255.255.0] xscf#0-lan#0
                           [255.255.255.0] xscf#1-lan#0
[192.168.11.0] -
[10.12.108.0] -
                           [255.255.255.0] xscf#0-lan#1
[default] [10.12.108.1] [0.0.0.0] xscf#0-lan#1
[10.12.108.0]
                            [255.255.255.0] xscf#1-lan#1
[default] [10.12.108.1] [0.0.0.0] xscf#1-lan#1
```

**Note** – The method of determining the routing for an XSCF interface depends on the network environment at the installation site. The network environment for system operation must have a suitable configuration.

**Note** – You cannot set the routing to the takeover IP address.

<Example 2> This example shows two default gateways.

```
XSCF Unit 0
                          XSCF Unit 1
xscf#0-lan#0 [192.168.11.10] xscf#1-lan#0 [192.168.11.20]
+----+
XSCF-LAN#0
                          XSCF-LAN#0
XSCF Unit 0
                         XSCF Unit 1
xscf#0-lan#1 [10.12.108.10] xscf#1-lan#1 [10.12.108.20]
+----+
XSCF-LAN#1
                          XSCF-LAN#1
Destination Gateway Netmask Interface
                         [255.255.255.0] xscf#0-lan#0
[192.168.11.0] -
[default] [192.168.11.1] [0.0.0.0] xscf#0-lan#0
                         [255.255.255.0] xscf#1-lan#0
[192.168.11.0] -
[default] [192.168.11.1] [0.0.0.0] xscf#1-lan#0
[10.12.108.0] -
                         [255.255.255.0] xscf#0-lan#1
[default] [10.12.108.1] [0.0.0.0] xscf#0-lan#1
                          [255.255.255.0] xscf#1-lan#1
[10.12.108.0]
[default] [10.12.108.1] [0.0.0.0] xscf#1-lan#1
```

**Note** – When using two default gateways, you must configure the network to recognize both gateways as default gateways. However, either one of two default gateways is selected automatically after this configuration is done.

#### ☐ Command operation

1. Use the showroute(8) command to display the routing environment.

XSCF> showrou	te -a		
Destination	Gateway	Netmask	Flags Interface
192.168.11.0	*	255.255.255.0	U xscf#0-lan#0
10.12.108.0	*	255.255.255.0	U xscf#0-lan#1
default	10.12.108.1	0.0.0.0	UG xscf#0-lan#1
Destination	Gateway	Netmask	Interface
192.168.11.0	*	255.255.255.0	xscf#1-lan#0
10.12.108.0	*	255.255.255.0	xscf#1-lan#1
default	10.12.108.1	0.0.0.0	xscf#1-lan#1

2. Use the setroute(8) command to specify the routing environment for a network interface.

<Example 1> Add routing with Destination 192.168.11.0 and Netmask 255.255.255.0 to XSCF-LAN#0 in the XSCFU#0. XSCF > setroute -c add -n 192.168.11.0 -m 255.255.255.0 xscf#0-lan#0 <Example 2> Add routing with the default Gateway 10.12.108.1 to XSCF-LAN#1 in the XSCFU#0. XSCF> setroute -c add -n 0.0.0.0 -g 10.12.108.1 xscf#0-lan#1

netmask 255.255.255.0 to XSCF-LAN#0 in the XSCFU#0.

<Example 3> Delete routing with destination 192.168.11.0 and

XSCF> setroute -c del -n 192.168.11.0 -m 255.255.255.0 xscf#0-lan#0

## Updates of the SPARC Enterprise M3000/M4000/M5000/M8000/M9000 Servers XSCF Reference Manual

The following information supersedes the information in the SPARC Enterprise M3000/M4000/M5000/M8000/M9000 Servers XSCF Reference Manual.

#### forcerebootxscf(8) Command

NAME forcerebootxscf - resets XSCF forcibly

**SYNOPSIS** forcerebootxscf

forcerebootxscf -h

DESCRIPTION The forcerebootxscf(8) command resets the XSCF forcibly.

> The command registers an error log and resets XSCF forcibly when the rebootxscf(8) command cannot respond for a firmware error after

logging in XSCF.

When the forcerebootxscf(8) command is executed in the system with the dual XSCF configuration, only the XSCF, on which the command has been executed, will be reset. When the active XSCF is reset,

the other XSCF becomes active.

You must have platadm or fieldeng privilege to run this command. **Privileges** 

Refer to setprivileges(8) for more information.

**OPTIONS** The following option is supported:

-h Displays usage statement.

### EXTENDED DESCRIPTION

- When the command is executed, a prompt to confirm execution of the command is displayed. Enter "y" to execute the command or "n" to cancel the command.
- When the command is executed, an error log indicating a firmware problem is registered.
  - Be sure to execute this command only when the rebootxscf(8) command does not respond and the system cannot be recovered from the detected firmware problem.
- The forcerebootxscf(8) command terminates all connection to XSCF, such as telnet or ssh.
- When you cancel the XSCF reset using the setdate(8) which commands reset XSCF automatically, even if you perform this command, the information that is set is not applied in XSCF.
- By using the forcerebootxscf(8) command, you can reset XSCF while the domain is in operation. However, if you set up XSCF to serve as the upper NTP server of the domain, time lag may arise between XSCF and the domain. In such a case, adjust the domain time so that XSCF and the domain will be synchronized.
- When the rebootxscf(8) command could not be executed and the forcerebootxscf(8) command is executed to reset XSCF, after setting the XSCF by executing the applynetwork(8), setaltitude(8), setdualpowerfeed(8), sethttps(8), setntp(8), setssh(8), or settelnet(8) command, there may be a case where this setting cannot be reflected properly. So be sure to execute the applynetwork(8), setaltitude(8), setdualpowerfeed(8), sethttps(8), setntp(8), setssh(8), or settelnet(8)command, then reflect the settings by executing the rebootxscf(8) command again.

#### **EXAMPLES**

EXAMPLE 1 Resets the XSCF forcibly.

XSCF> forcerebootxscf

Please take snapshot after reboot, when the XSCF is ready. [y|n]  $: \pmb{y}$ 

The XSCF will be forcibly reset. Continue? [y|n]:y

#### **EXIT STATUS**

The following exit values are returned:

- 0 Successful completion.
- >0 An error occurred.

#### **SEE ALSO**

rebootxscf(8)

## Miscellaneous Information

## 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 shows that system board 00-0 has 64 GB of memory while the others have 16 GB.

	F> <b>sh</b> ory:	owdevice	s -d 1					
		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	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.

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

XSCI	F> sho	wdevices	-d 0			
Memo	ory:					
		board	perm	base	domain	target deleted remaining
DID	XSB	mem MB	mem MB	address	mem MB	XSB mem MB mem MB
00	00-0	8192	0	$0 \times 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0$	24576	
00	00-2	8192	1674	0x000003c000000000	24576	
00	00-3	8192	0	$0 \times 0000034000000000$	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]:

# Information About Hardware of M3000 Server

This section describes the special instructions and the issues about the M3000 server hardware.

- "Notes and Limitations" on page 103
- "Hardware RAID Function" on page 107
- "Hardware Documentation Updates" on page 107

## Notes and Limitations

#### Notes on Hardware RAID

#### Notes on Using the Hardware RAID

- Make backup copies of important data and programs periodically. In some failures, rebuild of hardware RAID and the data restore from the backup media might become necessary.
- To ensure data integrity in time of power failure, it is recommended to use an uninterruptible power supply (UPS).
- If you require higher availability such as the controller or the data path redundancy, use the dedicated RAID system.

#### Notes on Building or Deleting the Hardware RAID

- The data in the disk drive is not secured during the build or the deletion of a hardware RAID. When you build a new hardware RAID while the system is running, or delete the hardware RAID, ensure to make backup copies of the data. After building a hardware RAID, you need to install data or restore data from the backup media.
- With no load, the hardware RAID build or the synchronization associated with maintenance takes about 180 minutes for a 300 GB disk drive. It takes about 360 minutes for a 600 GB disk drive.
- If there is a system restart during the hardware RAID build or synchronization, the build/synchronization must be started again from the beginning.
- When the hardware RAID applied, the volume size is smaller than the size of original disk.

#### Notes on Operating the Hardware RAID

In some cases, RAID controller cannot conclude the disk drive is completely in failure, and system slowdown might occur. To do maintenance in this status, follow the procedures below.

- 1. Delete the hardware RAID.
- 2. Replace all the member disks related to the hardware RAID.
- 3. Rebuild the hardware RAID.
- 4. Restore the data from the backup media.

#### Notes on raidctl(1M) Command

The following options of the raidct1(1M) command can not be used because the hardware specifications do not support them.

- raidctl -C -r 1E (To create a RAID 1E)
- raidctl -c -r 1E (To create a RAID 1E)
- raidctl -a (To assign hot-spare disks)
- raidctl -p (To set the cache)
- raidctl -C -z (To specify the volume capacity)

#### 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.

http://www.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

**Note** – Before using the RCI function, see "Notes on RCI Function" on page 19.

When you use the remote power control utilizing the RCI function or the automatic power control system (APCS), you can disable this remote power control or the APCS by setting the mode switch to Service mode on the operator panel.

Disabling these features ensures that you do not unintentionally switch the system power on or off during maintenance. Note that system power off with the APCS cannot be disabled with the mode switch. Therefore, be sure to turn off automatic power control via APCS before starting maintenance.

If you switch the mode while using the RCI or the automatic power control, the system power is controlled as follows.

TABLE 4-1 RCI and APCS Control with Mode Switch

Function	Mode Switch				
	Locked	Service			
RCI	Remote power-on/power-off operations are enabled.	Remote power-on/power-off operations are disabled.			
APCS	Automatic power-on/power-off operations are enabled.	Automatic power-on is disabled, but power-off remains enabled.			

To use the RCI function, see the SPARC Enterprise M3000/M4000/M5000/M8000/M9000 Servers RCI Build Procedure and the SPARC Enterprise M3000/M4000/M5000/M8000/M9000 Servers RCI User's Guide.

To use the APCS, see the Enhanced Support Facility User's Guide for Machine Administration Automatic Power Control Function (Supplement Edition).

#### Limitation for 1027A-Z/X1027A-Z

For 1027A-Z/X1027A-Z, PCIe Dual 10 Gigabit Ethernet Fiber XFP cards, this maximum limit apply:

■ No more than one card in an M3000 server.

#### Limitation for 4447A-Z/X4447A-Z

For PCIe Quad-port Gigabit Ethernet UTP Low Profile Adapter (4447A-Z/X4447A-Z), this maximum limit apply:

■ No more than four cards in an M3000 server.

## Patches for Emulex PCI Express (PCIe) Adapters

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

- Sun StorageTek Enterprise Class 4Gb Dual-Port Fibre Channel PCIe HBA (XSEFC402AF)
- Sun StorageTek Enterprise Class 4Gb Single-Port Fibre Channel PCIe HBA (XSEFC401AF)

## Hardware RAID Function

RAID technology enables the construction of a logical volume made up of several physical disks to provide data redundancy, improved performance, or both.

The on-board SAS controller of the M3000 server which consists of the SPARC64 VII+ processors supports RAID 1 (mirroring) volumes using the Oracle Solaris OS raidctl utility.

## Requirements for Hardware RAID Support

The table below shows the requirements for the hardware RAID support.

**TABLE 4-2** Requirements for Hardware RAID Support

=	
Item	Description
Required Oracle Solaris OS patches	At this time, no patches are required.
Required ESF (Enhanced Support Facility) patches	3.2 or later
XSCF firmware	XCP 1101 or later
RAID level	RAID 1 (IM: Integrated Mirror) only. Two member disks can be configured per RAID volume.
Disk drive	The member disks in a single RAID volume shall be made up of disk drives of the same capacity and of the same rotational speed.  Solid State Drive (SSD) is not supported.
Number of RAID volumes	Up to two RAID volumes on a server.

For notes on hardware RAID, see "Notes on Hardware RAID" on page 103.

## Hardware Documentation Updates

TABLE 4-3 lists known documentation updates.

 TABLE 4-3
 Hardware Documentation Updates

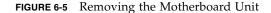
Title	Page Number	Update
SPARC Enterprise M3000 Server Service Manual	1-3	The following caution will be added in "1.2.1 Electrical Safety Precautions":
		<b>Caution -</b> Before doing the maintenance, unplug the power cords. This product uses double pole/neutral fusing which could create an electric shock hazard.
	6-8	FIGURE 6-5 "Removing the Motherboard Unit" in Section 6.2, "Removing the Motherboard Unit will be changed. For detail, see "Removing the Motherboard Unit" on page 109.
	B-2	The following footnote will be added to Table B-1 "FRU List" in Section B.1, "Server Overview":
		Do not remove or swap non-FRU components such as MEMR
		and DDCs as this interferes with the repair depot's ability to
		diagnose and repair field returns.

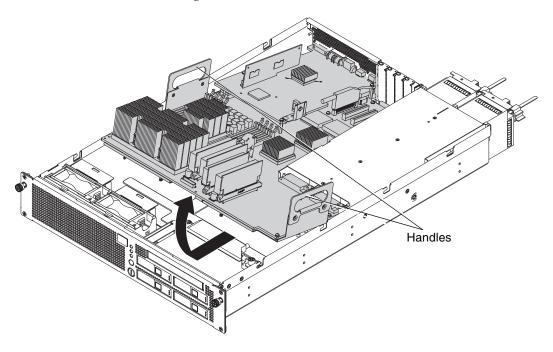
## Updates of SPARC Enterprise M3000 Server Service Manual

The following information supersedes the information in the SPARC Enterprise M3000 Server Service Manual.

#### Removing the Motherboard Unit

2. Hold the two opaque handles on both sides of the motherboard unit and lift the motherboard unit while sliding it out.





# Information About Hardware of M4000/M5000 Servers

This section describes the special instructions and the issues about the M4000/M5000 servers hardware.

- "Notes and Limitations" on page 111
- "Hardware Issues and Workarounds" on page 114
- "Hardware Documentation Updates" on page 114

## Notes and Limitations

#### Notes on Server Installation

The plug (NEMA L6-20) of the power cables supplied with the M4000/M5000 servers has the following dimensions.

Confirm in advance that the plug does not become an obstruction when plugged into the input power source at the installation site.

- Outside diameter of the connector part of the plug: 50 mm
- Maximum outside diameter of the plug cover: 57 mm
- Plug cover length from the connector end: 69.9 mm

#### 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.

http://www.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

**Note** – Before using the RCI function, see "Notes on RCI Function" on page 19.

When you use the remote power control utilizing the RCI function or the automatic power control system (APCS), you can disable this remote power control or the APCS by setting the mode switch to Service mode on the operator panel.

Disabling these features ensures that you do not unintentionally switch the system power on or off during maintenance. Note that system power off with the APCS cannot be disabled with the mode switch. Therefore, be sure to turn off automatic power control via APCS before starting maintenance.

If you switch the mode while using the RCI or the automatic power control, the system power is controlled as follows.

TABLE 5-1 RCI and APCS Control with Mode Switch

Function	Mode Switch					
	Locked	Service				
RCI	Remote power-on/power-off operations are enabled.	Remote power-on/power-off operations are disabled.				
APCS	Automatic power-on/power-off operations are enabled.	Automatic power-on is disabled, but power-off remains enabled.				

To use the RCI function, see the SPARC Enterprise M3000/M4000/M5000/M8000/M9000 Servers RCI Build Procedure and the SPARC Enterprise M3000/M4000/M5000/M8000/M9000 Servers RCI User's Guide.

To use the APCS, see the Enhanced Support Facility User's Guide for Machine Administration Automatic Power Control Function (Supplement Edition).

#### Notes on Air Filter

Fujitsu does not handle the air filter which is shown in the SPARC Enterprise M4000/M5000 Servers Service Manual as a product.

#### Limitation for 1027A-Z/X1027A-Z

For PCIe Dual 10 Gigabit Ethernet Fiber XFP Low Profile Adapter (1027A-Z/X1027A-Z), these maximum limits apply:

- No more than two cards per a domain in an M4000 server.
- No more than four cards per a domain in an M5000 server.
- Do not use these cards in an External I/O Expansion Unit.

## Limitation for 4447A-Z/X4447A-Z

For PCIe Quad-port Gigabit Ethernet UTP Low Profile Adapter (4447A-Z/X4447A-Z), these maximum limits apply:

- No more than four cards per a domain in an M4000 server.
- No more than eight cards per a domain in an M5000 server.

■ No more than four cards in an External I/O Expansion Unit (two per PCIe I/O boat).

## Patches for Emulex PCI Express (PCIe) Adapters

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

- Sun StorageTek Enterprise Class 4Gb Dual-Port Fibre Channel PCIe HBA (XSEFC402AF)
- Sun StorageTek Enterprise Class 4Gb Single-Port Fibre Channel PCIe HBA (XSEFC401AF)

## Hardware Issues and Workarounds

## Sun Crypto Accelerator 6000

If you are not using the correct version of the Sun Crypto Accelerator (SCA) 6000 driver, hot-plug operations on SCA 6000 can cause the M4000/M5000 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.

## Hardware Documentation Updates

This section contains late-breaking hardware information that became known after the documentation set was published and corrections in the M4000/M5000 servers hardware documentation.

TABLE 5-2 lists known documentation updates.

 TABLE 5-2
 Hardware Documentation Updates

Title	Page Number	Update
SPARC Enterprise M4000/M5000 Servers Installation Guide	2-8	"B-type plug" in the Note in "2.2.2 Cable Connections" should be substituted with "the plug with lock function."
SPARC Enterprise M4000/M5000 Servers Service Manual	B-2	The description for CPU Module in Table B-1 will add the following:
		At least one CPU Module (CPUM) is required on each eXtended System Board (XSB). The XSB includes the CPU, memory, and optional I/O. The XSB can be set to one of two logical configurations: uni-XSB or quad-XSB mode. In the uni-XSB mode, the M4000 server has one configurable XSB and the M5000 server has two separate configurable XSBs. For more information on the rules for system configuration, refer to the SPARC Enterprise M3000/M4000/M5000/M8000/M9000 Servers Administration Guide.

# Information About Hardware of M8000/M9000 Servers

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

- "Notes and Limitations" on page 117
- "Hardware Issues and Workarounds" on page 121
- "Hardware RAID Function" on page 122
- "Hardware Documentation Updates" on page 123
- "Miscellaneous Information" on page 129

#### Notes and Limitations

## Notes on Using a RAID-capable IOUA

When using a RAID-capable IOUA on the M8000/M9000 servers, update XSCF firmware to XCP 1110 or later.

#### Notes on Hardware RAID

#### Notes on Using the Hardware RAID

- Make backup copies of important data and programs periodically. In some failures, rebuild of hardware RAID and the data restore from the backup media might become necessary.
- To ensure data integrity in time of power failure, it is recommended to use an uninterruptible power supply (UPS).
- If you require higher availability such as the controller or the data path redundancy, use the dedicated RAID system.

#### Notes on Building or Deleting the Hardware RAID

- The data in the disk drive is not secured during the build or the deletion of a hardware RAID. When you build a new hardware RAID while the system is running, or delete the hardware RAID, ensure to make backup copies of the data. After building a hardware RAID, you need to install data or restore data from the backup media.
- With no load, the hardware RAID build or the synchronization associated with maintenance takes about 180 minutes for a 300 GB disk drive. It takes about 360 minutes for a 600 GB disk drive.
- If there is a system restart during the hardware RAID build or synchronization, the build/synchronization must be started again from the beginning.
- When the hardware RAID applied, the volume size is smaller than the size of original disk.

#### Notes on Operating the Hardware RAID

In some cases, RAID controller cannot conclude the disk drive is completely in failure, and system slowdown might occur. To do maintenance in this status, follow the procedures below.

- 1. Delete the hardware RAID.
- 2. Replace all the member disks related to the hardware RAID.
- 3. Rebuild the hardware RAID.
- 4. Restore the data from the backup media.

#### Notes on raidctl(1M) Command

The following options of the raidctl(1M) command can not be used because the hardware specifications do not support them.

- raidctl -C -r 1E (To create a RAID 1E)
- raidctl -c -r 1E (To create a RAID 1E)
- raidctl -a (To assign hot-spare disks)
- raidctl -p (To set the cache)
- raidctl -C -z (To specify the volume capacity)

#### 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.

http://www.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

**Note** – Before using the RCI function, see "Notes on RCI Function" on page 19.

When you use the remote power control utilizing the RCI function or the automatic power control system (APCS), you can disable this remote power control or the APCS by setting the mode switch to Service mode on the operator panel.

Disabling these features ensures that you do not unintentionally switch the system power on or off during maintenance. Note that system power off with the APCS cannot be disabled with the mode switch. Therefore, be sure to turn off automatic power control via APCS before starting maintenance.

If you switch the mode while using the RCI or the automatic power control, the system power is controlled as follows.

TABLE 6-1 RCI and APCS Control with Mode Switch

Function	Mode Switch					
	Locked	Service				
RCI	Remote power-on/power-off operations are enabled.	Remote power-on/power-off operations are disabled.				
APCS	Automatic power-on/power-off operations are enabled.	Automatic power-on is disabled, but power-off remains enabled.				

To use the RCI function, see the SPARC Enterprise M3000/M4000/M5000/M8000/M9000 Servers RCI Build Procedure and the SPARC Enterprise M3000/M4000/M5000/M8000/M9000 Servers RCI User's Guide.

To use the APCS, see the Enhanced Support Facility User's Guide for Machine Administration Automatic Power Control Function (Supplement Edition).

#### Limitation for 1027A-Z/X1027A-Z

For PCIe Dual 10 Gigabit Ethernet Fiber XFP Low Profile Adapter (1027A-Z/X1027A-Z), these maximum limits apply:

- No more than six cards per a domain.
- Do not use these cards in an External I/O Expansion Unit.

#### Limitation for 4447A-Z/X4447A-Z

For PCIe Quad-port Gigabit Ethernet UTP Low Profile Adapter (4447A-Z/X4447A-Z), these maximum limits apply:

- No more than eight cards per a domain.
- No more than four cards in an External I/O Expansion Unit (two per PCIe I/O boat).

## Patches for Emulex PCI Express (PCIe) Adapters

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

- Sun StorageTek Enterprise Class 4Gb Dual-Port Fibre Channel PCIe HBA (XSEFC402AF)
- Sun StorageTek Enterprise Class 4Gb Single-Port Fibre Channel PCIe HBA (XSEFC401AF)

## Hardware Issues and Workarounds

## DVD Drives and cfgadm

The Solaris cfgadm(1M) command does not always unconfigure a DVD drive from a domain on the 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

If you are not using the correct version of the Sun Crypto Accelerator (SCA) 6000 driver, hot-plug operations on SCA 6000 can cause the 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.

## Hardware RAID Function

RAID technology enables the construction of a logical volume made up of several physical disks to provide data redundancy, improved performance, or both.

The M8000/M9000 servers mounted with a RAID-capable IOUA support RAID 1 (mirroring) volumes using the Oracle Solaris OS raidctl utility.

**Note** – When the onboard device card is RAID-capable, the showhardconf(8) command displays Type 2 in the output.

```
PCI#0 Name_Property:pci; Card_Type:IOUA;
+ Serial:PP0611T826 ; Type:2;
+ FRU-Part-Number:CA21138-B84X 010AE/371-5000-05 ;
```

## Requirements for Hardware RAID Support

The table below shows the requirements for the hardware RAID support on the M8000/M9000 servers.

**TABLE 6-2** Requirements for Hardware RAID Support

Item	Description		_
Required Oracle Solaris OS/packages/patches	Oracle Solaris 10 8/07	SUNWigb*	138174-04
	Oracle Solaris 10 5/08 through Oracle Solaris 10 5/09	-	138174-04
	Oracle Solaris 10 10/09 or later	-	-
	Oracle Solaris 11 11/11	-	-

 TABLE 6-2
 Requirements for Hardware RAID Support (Continued)

Item	Description		
ESF (Enhanced Support Facility)/Supported Oracle Solaris OS/Required patches	3.0 or later	Oracle Solaris 10 914527-17	
	4.0	Oracle Solaris 11 T006481SP-01	
XSCF firmware	XCP 1110 or later		
RAID level	<ul><li>RAID 1 (IM: Integrated Mirror) only</li><li>Two member disks can be configured per RAID volume</li></ul>		
Disk drive	<ul> <li>The member disks in a single RAID volume shall be made up of disk drives of the same capacity and of the same rotational speed</li> <li>Solid State Drive (SSD) is not supported</li> </ul>		
Number of RAID volumes	Up to one RAID volume per a RAID-capable IOUA		

<sup>\*</sup> To obtain SUNWigb package, contact your sales representative.

For notes on hardware RAID, see "Notes on Hardware RAID" on page 118.

## Hardware Documentation Updates

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

TABLE 6-3 lists known documentation updates.

 TABLE 6-3
 Hardware Documentation Updates

Title	Page Number	Update
SPARC Enterprise M8000/M9000 Servers	1-6	The description about Hardware RAID function will add the following:
Overview Guide		Two hard disks which are connected to the IOU onboard device card (IOUA) can be constructed as a single logical volume. The mirrored configuration of the constructed logical volume can secure the data redundancy, as well as achieving the improvement in system fault tolerance.
		<b>Note -</b> Hardware RAID is supported only on the M8000/M9000 servers on which a RAID-capable onboard device card (IOUA) is mounted. The RAID-capable IOUA requires a minimum XSCF firmware with applicable Oracle Solaris OS patches. See the latest Product Notes for this information.
		<b>Note -</b> When the onboard device card is RAID-capable, the showhardconf(8) command displays Type 2 in the output.
		PCI#0 Name_Property:pci; Card_Type:IOUA; + Serial:PP0611T826 ; Type:2; + FRU-Part-Number:CA21138-B84X 010AE/371-5000-05 ;
SPARC Enterprise M8000/M9000 Servers Site Planning Guide	1-18	A part of values in inches on FIGURE 1-13 to FIGURE 1-16 will be corrected. For detail, see "M9000 Servers Installation Area" on page 125.
	1-35	For the order number of Vibration-proof bracket and Vibration-proof feet, see "Miscellaneous Information" on page 129.
SPARC Enterprise M8000/M9000 Servers Service Manual	7-8	The mounting location of I/O Unit (IOU) indicated on FIGURE 7-4 will be corrected. For detail, see "I/O Unit (IOU) Mounting Locations" on page 128."

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

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

### M9000 Servers Installation Area

FIGURE 1-13 M9000 Server (Base Cabinet) Installation Area

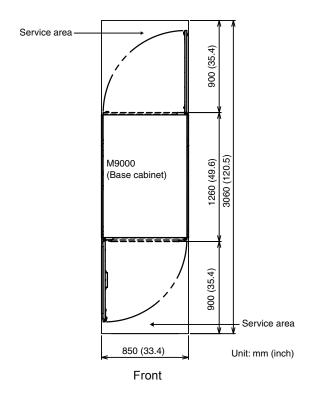


FIGURE 1-14 M9000 Server (Base Cabinet) + Power Cabinet Installation Area

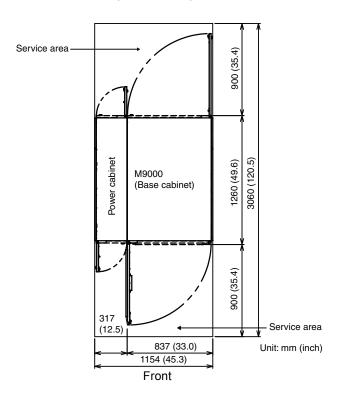


FIGURE 1-15 M9000 Server (Base Cabinet + Expansion Cabinet) Installation Area

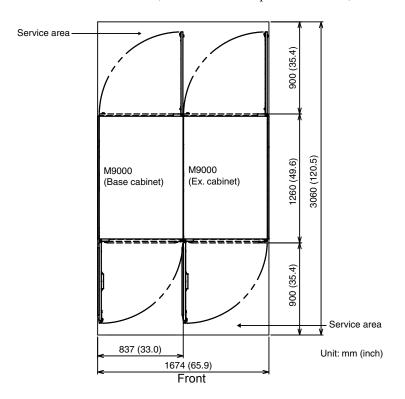
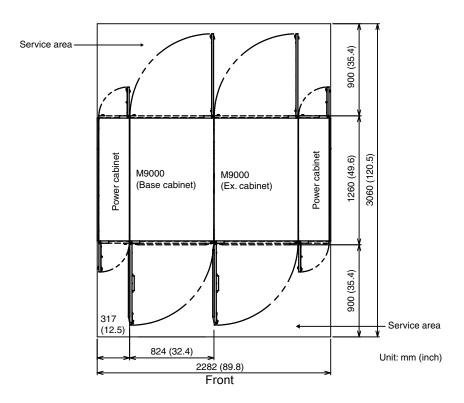


FIGURE 1-16 M9000 Server (Base Cabinet + Expansion Cabinet) + Power Cabinet Installation Are



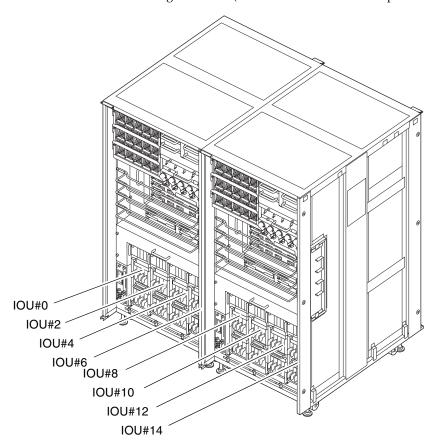
## Updates of SPARC Enterprise M8000/M9000 Servers Service Manual

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

#### I/O Unit (IOU) Mounting Locations

FIGURE 7-4 shows the mounting locations of IOUs in the M9000 server (with the expansion cabinet).

FIGURE 7-4 IOU Mounting Locations (Front of M9000 with the Expansion Cabinet)



## Miscellaneous Information

#### Cabinet Stabilization Measures

This section shows useful methods of securing an M8000/M9000 server to prevent it from shifting due to vibration.

#### Method of Securing the Cabinet to the Floor Surface

#### 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)

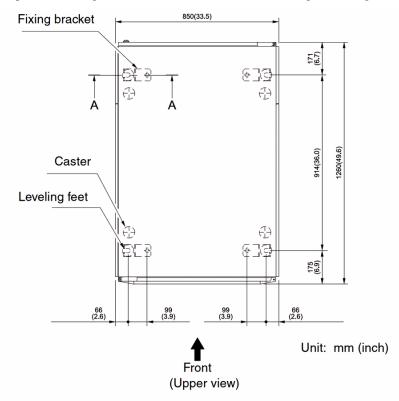
Change this board leg (height adjustment leg) to the "F6-DA6G" and tighten the bolt from under the floor.

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.

FIGURE 6-1 Example of Securing the Cabinet to the Floor Surface Using the Fixing Bracket (M9000 Server)



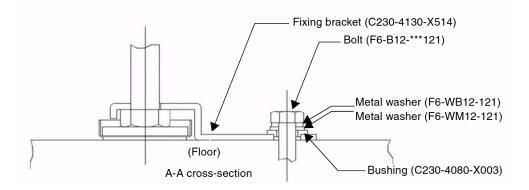


FIGURE 6-2 Example of Securing the Cabinet Through a Hole in the Floor

