Fujitsu M10/SPARC M10 Systems

Product Notes for XCP Version 2340

FUJITSU

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Contents

Preface

This document describes the latest information about XSCF Control Package (XCP) and the important and latest information regarding hardware, firmware, software, and documents of SPARC M10 Systems.

Note - If a newer version of XCP than the version supported in this document is released, only the document supporting the latest version of XCP is updated. In addition to reading this document, visit the following websites to see the document supporting the latest version of XCP. Check the contents and usage to confirm whether there are any corrections in the documents related to XCP version that you use.

- Global site
http://www.fujitsu.com/global/products/computing/servers/unix/sparc/downloads/manuals/
- Japanese site
http://www.fujitsu.com/jp/products/computing/servers/unix/sparc/downloads/manual/

Fujitsu M10 is sold as SPARC M10 Systems by Fujitsu in Japan.
Fujitsu M10 and SPARC M10 Systems are identical products.

Audience

This document is designed for system administrators with advanced knowledge of a computer network and Oracle Solaris.

Information on Firmware

This is information for customers of Fujitsu.

Obtain the firmware for your server from the following sources.
- Global site
  Please contact your local support provider to obtain the files required for firmware update.
- Japanese site

Customers who subscribed to SupportDesk can obtain the firmware from the SupportDesk-Web.

The following files are provided.
- Firmware program file (XSCF Control Package (XCP) file)
- XSCF extended MIB (XSCF-SP-MIB) definition file

Note - XSCF Control Package (XCP): XCP is a packaged control program of the hardware that configures SPARC M10 Systems. An XCP file includes the XSCF firmware, OpenBoot PROM firmware, Power-On Self Test firmware, and Hypervisor firmware.

How to Use This Document

This document supports all models of SPARC M10 Systems. Depending on the server you use, read the related items listed in the following table.

Chapter Titles in This Document		SPARC M10-1	SPARC M10-4	SPARC M10-4S
Chapter 1	Software Requirements	x	x	x
Chapter 2	XCP 2340-Related Information	x	x	x
Chapter 3	Information on Software	x	x	x
Chapter 4	Information on SPARC M10-1 Hardware	x		
Chapter 5	Information on SPARC M10-4 Hardware		x	
Chapter 6	Information on SPARC M10-4S Hardware			x
Chapter 7	Information on the PCI Expansion Unit	x (when introduced)	x (when introduced)	x (when introduced)
Chapter 8	Information on SPARC M10 Manuals	x	x	x

The information about firmware and software, which are described in Chapter 1, Chapter 2, and Chapter 3, is common to all models. Some of the information are only related to a specific model. In such case, the applicable model name is indicated.

The information about hardware devices is provided in Chapter 4, Chapter 5, and Chapter 6 separately for each model. The contents common to all models are described in all chapters describing hardware. Therefore, when you check the hardware information about multiple models, you will find that some contents are duplicated in some chapters.

Check the information on the PCI expansion unit (Chapter 7) when the PCI expansion unit is introduced.

Contents of revision of documents (Chapter 8) are provided in each document. Check whether the contents of your document have been revised.

Related Documentation

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

- Sun Oracle software-related documents (Oracle Solaris, etc.)
  http://docs.oracle.com/en/

- Fujitsu documents
  Global site

  http://www.fujitsu.com/global/products/computing/servers/unix/sparc/downloads/manuals/

  Japanese site

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

The following table lists documents related to SPARC M10 Systems.

Documentation Related to the SPARC M10

Manual Names (*1)
Fujitsu M10/SPARC M10 Systems Product Notes
Fujitsu M10/SPARC M10 Systems Getting Started Guide (*2)
Fujitsu M10/SPARC M10 Systems Quick Guide
Fujitsu SPARC M12 and Fujitsu M10/SPARC M10 Important Legal and Safety Information (*2)
Fujitsu SPARC M12 and Fujitsu M10/SPARC M10 Safety and Compliance Guide
Fujitsu SPARC M12 and Fujitsu M10/SPARC M10 Security Guide
Software License Conditions for Fujitsu SPARC M12 and Fujitsu M10/SPARC M10
Fujitsu SPARC Servers/SPARC Enterprise/PRIMEQUEST Common Installation Planning Manual
Fujitsu M10-1/SPARC M10-1 Installation Guide
Fujitsu M10-4/SPARC M10-4 Installation Guide
Fujitsu M10-4S/SPARC M10-4S Installation Guide
Fujitsu SPARC M12 and Fujitsu M10/SPARC M10 System Operation and Administration Guide
Fujitsu SPARC M12 and Fujitsu M10/SPARC M10 Domain Configuration Guide
Fujitsu M10-1/SPARC M10-1 Service Manual
Fujitsu M10-4/Fujitsu M10-4S/SPARC M10-4/SPARC M10-4S Service Manual
Crossbar Box for Fujitsu SPARC M12 and Fujitsu M10/SPARC M10 Service Manual
PCI Expansion Unit for Fujitsu SPARC M12 and Fujitsu M10/SPARC M10 Service Manual
Fujitsu M10/SPARC M10 Systems PCI Card Installation Guide
Fujitsu SPARC M12 and Fujitsu M10/SPARC M10 XSCF Reference Manual
Fujitsu SPARC M12 and Fujitsu M10/SPARC M10 RCIL User Guide (*3)

Documentation Related to the SPARC M10 *(continued)*

Manual Names (*1)
Fujitsu SPARC M12 and Fujitsu M10/SPARC M10 XSCF MIB and Trap Lists
Fujitsu SPARC M12 and Fujitsu M10/SPARC M10 Glossary
External USB-DVD Drive user guide

*1 The listed manuals are subject to change without notice.
*2 Printed manuals are provided with the product.
*3 This document applies specifically to the SPARC M12/M10 and FUJITSU ETERNUS disk storage system.

Notes on Safety

Read the following documents thoroughly before using or handling any SPARC M10 Systems.

- *Fujitsu SPARC M12 and Fujitsu M10/SPARC M10 Important Legal and Safety Information*
- *Fujitsu SPARC M12 and Fujitsu M10/SPARC M10 Safety and Compliance Guide*

Text Conventions

This manual uses the following fonts and symbols to express specific types of information.

Font/Symbol	Meaning	Example
AaBbCc123	What you type, when contrasted with on-screen computer output. This font is used to indicate an example of command input.	XSCF> **adduser jsmith**
AaBbCc123	The names of commands, files, and directories; on-screen computer output. This font is used to indicate an example of command output in the frame.	XSCF> **showuser -P** User Name: jsmith Privileges: useradm auditadm
Italic	Indicates the name of a reference manual.	See the *Fujitsu M10-1/SPARC M10-1 Installation Guide*.
" "	Indicates the names of chapters, sections, items, buttons, or menus.	See "Chapter 2 Network Connection."

Command Syntax in the Text

While the XSCF commands have a section number of (8) or (1), it is omitted from the text.
For details on the commands, see the *Fujitsu SPARC M12 and Fujitsu M10/SPARC M10 XSCF Reference Manual*.

Syntax of the Command-Line Interface (CLI)

The command syntax is as follows:

- A variable that requires the input of a value is in Italics.

- An optional element is enclosed in [].

- A group of options for an optional keyword is enclosed in [] and delimited by |.

Document Feedback

If you have any comments or requests regarding this document, please take a moment to share it with us by indicating the manual code, manual title, and page, and stating your points specifically through the following websites:

- Global site
  http://www.fujitsu.com/global/contact/

- Japanese site
  http://www.fujitsu.com/jp/products/computing/servers/unix/sparc/contact/

Chapter 1

Software Requirements

This chapter describes the software requirements for using SPARC M10 Systems.

- XCP/Oracle Solaris and Required SRU/Patch
- How to Obtain XCP and Oracle Solaris SRU/Patch/Oracle VM Server for SPARC
- Web Browser
- Software Supporting Remote Storage
- Existing XCP Firmware Versions and Support Information

XCP/Oracle Solaris and Required SRU/Patch

The following lists XCP, Oracle Solaris, and required SRU/patch supported on SPARC M10 Systems.

Table 1-1   XCP and Oracle Solaris Supported by the SPARC M10 System

Server		XCP	Oracle Solaris
SPARC M10-1			
	SPARC64 X+ 3.7 GHz	2250 or later	See "Table 1-2 Oracle Solaris and Required SRUs/Patches Supported by the SPARC M10 System."
	SPARC64 X+ 3.2 GHz	2210 or later	
	SPARC64 X+ 2.8 GHz	2290 or later	
	SPARC64 X 2.8 GHz	2012 or later	
SPARC M10-4			
	SPARC64 X+ 3.7 GHz	2250 or later	See "Table 1-2 Oracle Solaris and Required SRUs/Patches Supported by the SPARC M10 System."
	SPARC64 X+ 3.4 GHz	2210 or later	
	SPARC64 X 2.8 GHz	2012 or later	
SPARC M10-4S (Direct inter-chassis connection)			
	SPARC64 X+ 3.7 GHz	2210 or later	See "Table 1-2 Oracle Solaris and Required SRUs/Patches Supported by the SPARC M10 System."
	SPARC64 X 3.0 GHz	2031 or later	
SPARC M10-4S (Connection through crossbar box)			
	SPARC64 X+ 3.7 GHz	2210 or later	See "Table 1-2 Oracle Solaris and Required SRUs/Patches Supported by the SPARC M10 System."
	SPARC64 X 3.0 GHz	2043 or later	

Table 1-2   Oracle Solaris and Required SRUs/Patches Supported by the SPARC M10 System

Oracle Solaris	Required Package (*4) Required Product (*5)	Required SRU (*4) Required Patch (*5)	Supported Configuration
Oracle Solaris 11.2 or later	system/ldoms(*1) system/ldoms/ldomsmanager(*2)	None	Control domain, guest domain, and nonvirtualized configurations
Oracle Solaris 11.1	system/ldoms(*1) system/ldoms/ldomsmanager(*2)	SRU1.4 or later(*3)	Control domain, guest domain, and nonvirtualized configurations
Oracle Solaris 10 1/13 (*6)(*7)	Oracle VM Server for SPARC 3.0 or later (*3)(*8)(*9)	150310-03 or later	Control domain, guest domain, and nonvirtualized configurations

Oracle Solaris	Required Package (*4) Required Product (*5)	Required SRU (*4) Required Patch (*5)	Supported Configuration
Oracle Solaris 10 8/11 (*7)	-	Oracle Solaris 10 1/13 SPARC Bundle 150310-03 or later	Guest domain (*10)(*11)
Oracle Solaris 10 9/10 (*7)	-	Oracle Solaris 10 1/13 SPARC Bundle 150310-03 or later	Guest domain (*10)(*11)

*1 Required for all domains. It is included in group/system/solaris-large-server and group/system/solaris-small-server.

*2 Required for the control domain and the nonvirtualized configurations. It is included in group/system/solaris-large-server and group/system/solaris-small-server.

*3 Required for the control domain and the nonvirtualized configurations.

*4 For Oracle Solaris 11.

*5 For Oracle Solaris 10.

*6 If Oracle Solaris 10 1/13 is to be run in the control domain, the CPUs that can be assigned to the control domain are those CPUs that are mounted on logical system boards with LSB numbers 0 to 7.

*7 There are no LSB number limits on the CPUs that can be assigned to a guest domain. The maximum number of CPUs (vcpus) in an Oracle Solaris 10 guest domain must not be greater than 1024.

*8 When using the SPARC M10-4S, see "Notes When Using a Version Older Than Oracle VM Server for SPARC 3.1.0.1."

*9 When using the SPARC M10-4S, see "Notes on Using Oracle Solaris 10."

*10 An additional procedure must be executed before installation of Oracle Solaris 10 9/10 or Oracle Solaris 10 8/11 on a guest domain. For details, see the procedure in "Notes on Installing Oracle Solaris 10 on a Guest Domain."

*11 Only virtual I/O devices are supported.

Notes on Installing Oracle Solaris 10 on a Guest Domain

You may encounter Bug 7167998 ("inter-cpu-latency" MD property causes Solaris guest-domain panic) when installing Oracle Solaris 10 9/10 or Oracle Solaris 10 8/11 on a SPARC M10 guest domain. To avoid the bug, use network installation and the following procedure to install Oracle Solaris 10 9/10 or Oracle Solaris 10 8/11.

Note - Before applying the Oracle Solaris 10 1/13 SPARC Patch Bundle, do not change the configuration or OpenBoot PROM environment variables of the guest domain.

1. **Mount boot_archive of Oracle Solaris 10 9/10 or Oracle Solaris 10 8/11.**

```
# chmod -t
  install-server-path/install-dir-path/Solaris_10/Tools/Boot/
platform/sun4v/boot_archive

# lofiadm -a
install-server-path/install-dir-path/Solaris_10/Tools/Boot/platform/
sun4v/boot_archive

Device name will be output. For example:
/dev/lofi/1
```

```
# mount /dev/lofi/1 /mnt
```

2. **Edit and add the following line to the /mnt/etc/system file.**

```
set xc_tick_limit = 0x1
```

3. **Unmount boot_archive.**

```
# umount /mnt

# lofiadm -d /dev/lofi/1

# chmod +t
install-server-path/install-dir-path/Solaris_10/Tools/Boot/platform/sun4v/boot_archive
```

4. **Install Oracle Solaris 10 9/10 or Oracle Solaris 10 8/11 through network installation.**
5. **Apply the Oracle Solaris 10 1/13 SPARC Patch Bundle, and then install patch 150310-03 or later.**

Notes on Using Oracle Solaris 10

■ [SPARC M10-4S]
When the control domain is running on Oracle Solaris 10 with Oracle VM Server for SPARC version 3.1.0.1 or older, if the physical partition dynamic reconfiguration (PPAR DR) feature is enabled, the ldoms/ldmd service fails to start and Oracle VM for SPARC does not work.

The PPAR DR feature is enabled at the time of shipment. Therefore, either disable the PPAR DR feature before setting up logical domains, or, update Oracle VM Server for SPARC to version 3.1.0.1 or later.

Configuration of the PPAR DR feature is performed with the setpparmode(8) command of XSCF firmware. For details on the setpparmode(8) command, see the *Fujitsu SPARC M12 and Fujitsu M10/SPARC M10 XSCF Reference Manual*.

To update Oracle VM Server for SPARC version to 3.1.0.1, apply patch no. 150817-01 after installing Oracle VM Server for SPARC 3.1.

■ [SPARC M10-4S]
When Oracle Solaris 10 is running on the control domain, in order to perform dynamic reconfiguration of physical partitions (PPAR DR) with the deleteboard(8), addboard(8) commands, update to Oracle VM Server for SPARC 3.1.1 or newer. When updating to 3.1.1, apply patch 150817-02 after installing Oracle VM Server for SPARC 3.1.

Notes When Using a Version Older Than Oracle VM Server for SPARC 3.1.0.1

[SPARC M10-4S]
When the physical partition dynamic reconfiguration (PPAR DR) feature is enabled on an Oracle VM Server for SPARC version that is older than 3.1.0.1, the ldoms/ldmd service fails to start and thus Oracle VM Server for SPARC does not function.
If using an Oracle VM Server for SPARC version that is older than 3.1.0.1, disable the PPAR DR feature before setting up logical domains.
Configuration of the PPAR DR feature is performed with the setpparmode(8) command of XSCF firmware. For details on the setpparmode(8) command, see the *Fujitsu SPARC M12 and Fujitsu M10/SPARC M10 XSCF Reference Manual*.
Meanwhile, in case of Oracle Solaris 11, Oracle VM Server for SPARC 3.1.0.1 is included in SRU11.1.14.5.0.

Required XCP/Oracle Solaris and Required SRU/Patch to Enable Dynamic Reconfiguration of Physical Partitions

The following lists XCP, Oracle Solaris, and required SRU/patch to enable dynamic reconfiguration of physical partition.

Table 1-3   XCP, Oracle Solaris, and SRUs/Patches Needed for Physical Partition Dynamic Reconfiguration

Server	XCP	Oracle Solaris	Required Package Required Product	Required SRU Required Patch	Supported Configuration
SPARC M10-4S	2220 or later	Oracle Solaris 11.2 or later	system/ldoms (*1) system/ldoms/ ldomsmanager (*2)	None	Control domain, guest domain, and nonvirtualized configurations
		Oracle Solaris 11.1	system/ldoms (*1) system/ldoms/ ldomsmanager (*2)	SRU11.1.14.5.0 or later(*3)	Control domain, guest domain, and nonvirtualized configurations
		Oracle Solaris 10 1/13	Oracle VM Server for SPARC 3.1(*4)	150817-02 or later (*4)(*5)	Control domain, guest domain, and nonvirtualized configurations
		Oracle Solaris 10 9/10	-	Oracle Solaris 10 1/13 SPARC Bundle 150310-03 or later	Guest domain (*6)(*7)

Server	XCP	Oracle Solaris	Required Package Required Product	Required SRU Required Patch	Supported Configuration
		Oracle Solaris 10 8/11	-	Oracle Solaris 10 1/13 SPARC Bundle 150310-03 or later	Guest domain (*6)(*7)

*1 Required for the control domain and the guest domain. It is included in group/system/solaris-large-server and group/system/solaris-small-server.

*2 Required only for the control domain. It is included in group/system/solaris-large-server and group/system/solaris-small-server.

*3 Required for the control domain and the guest domain. Though SRU11.1.14.5.0 includes Oracle VM Server for SPARC 3.1.0.1, the modification for Solaris 11.1 to fix BugID#17709858 is required to ensure stable DR functionality. This issue has been resolved in SRU11.1.15.4.0 and later.

*4 Required only for the control domain.

*5 Do not apply patch 150400-01 to 150400-06.

*6 An additional procedure must be executed before installation of Oracle Solaris 10 9/10 or Oracle Solaris 10 8/11 on a guest domain. For details, see the procedure in "Notes on Installing Oracle Solaris 10 on a Guest Domain."

*7 Only virtual I/O devices are supported.

Required XCP/Oracle Solaris and Required SRU/Patch to Enable Dynamic Reconfiguration of PCIe Endpoint Devices

The following lists XCP, Oracle Solaris, and required SRU/patch to enable dynamic reconfiguration of PCIe endpoint device.

Table 1-4   XCP, Oracle Solaris, and SRUs/Patches Needed for Dynamic Reconfiguration of PCIe Endpoint Devices

Server	XCP	Oracle Solaris	Required Package Required Product	Required SRU Required Patch
SPARC M10-1 SPARC M10-4 SPARC M10-4S	2230 or later	Oracle Solaris 11.3	system/ldoms(*1) system/ldoms/ldomsmanager(*2)	None
		Oracle Solaris 11.2	system/ldoms(*1) system/ldoms/ldomsmanager(*2)	SRU11.2.2.5.0 or later
		Oracle Solaris 11.1(*4)	system/ldoms(*1)	SRU11.1.17.5.0 or later(*3)
		Oracle Solaris 10 1/13	Oracle VM for SPARC 3.1(*5)(*6)	150817-03 or later(*5)

*1 Required for the control domain and other domains. It is included in group/system/solaris-large-server and group/system/solaris-small-server.

*2 Required only for the control domain. It is included in group/system/solaris-large-server and group/system/solaris-small-server.

*3 Required for the control domain and other domains.

*4 Can be used only in domains other than the control domain.

*5 Required only for the control domain.

*6 There are patches required other than the Oracle VM Server for SPARC patch. For details, see "Required Oracle Solaris OS Versions for Oracle VM Server for SPARC 3.1.1.1" in the *Oracle VM Server for SPARC 3.1.1.1, 3.1.1, and 3.1 Release Notes*.

Software Supporting Software on Chip

The Software on Chip on the SPARC64 X+/SPARC64 X processor can be used with the software below.

When used with Oracle Database

Table 1-5   Software Supporting Software on Chip (When Used With Oracle Database)

Function	Operating Environment
The decimal floating-point arithmetic processing (Oracle Number)	Oracle Database 12c or later Oracle Solaris 11.1 or later
SIMD (In-memory processing)	Oracle Database 12c Enterprise Edition Oracle Database In Memory Oracle Solaris 11.1 or later
Cryptographic processing	Oracle Database 12c Enterprise Edition Oracle Advanced Security Oracle Solaris 11.1 or later

When used with user application

Table 1-6   Software Supporting Software on Chip (When Used With User Application)

Function	Operating Environment
The decimal floating-point arithmetic processing (IEEE754)	Oracle Solaris Studio 12.4 or later Oracle Solaris 11.2 SRU11.2.4.6.0 or later
SIMD	Oracle Solaris Studio 12.4 or later Oracle Solaris 11.2 SRU11.2.4.6.0 or later

How to Obtain XCP and Oracle Solaris SRU/Patch/Oracle VM Server for SPARC

Obtain the latest XCP firmware and Oracle Solaris SRU/patch/Oracle VM Server for SPARC from the following sources:

- Global site
  Please contact your local support provider to obtain the files required for the

update.

- Japanese site
  Customers who subscribed to SupportDesk can obtain the files from the SupportDesk-Web.

Web Browser

Table 1-7 lists web browsers for which compatibility with XSCF Web operation has been confirmed. For other information about XSCF Web, see "Notes and Restrictions on XSCF Web."

Table 1-7   Versions of Web Browsers in Which Operation Has Been Confirmed

Web Browser	Version
Microsoft Internet Explorer	8.0, 9.0, 10.0, and 11.0
Mozilla Firefox, 32-bit version	10.0 to ESR 52

Software Supporting Remote Storage

Table 1-8 lists XCP, Oracle Solaris, and required SRU/patch to use remote storage.

Table 1-8   XCP, Oracle Solaris, and Required SRUs/Patches That Enable Remote Storage

XCP	Oracle Solaris	Required SRU(*1) Required Patch(*2)
2260 or later	Oracle Solaris 11.2 or later	None
	Oracle Solaris 11.1	SRU2.5 or later(*3)
	Oracle Solaris 10 1/13	None

*1 For Oracle Solaris 11.
*2 For Oracle Solaris 10.
*3 To assign remote storage as a virtual disk to a guest domain, this SRU must be applied to the service domain.

Table 1-9 lists the Windows OS operating environments on terminals that support remote storage.

Table 1-9   Operating Environments on Terminals

Type	Operating Environment
Windows OS	Windows Vista, Windows 7, Windows 8, Windows 8.1 Windows 10

Also, a Java Runtime Environment must be installed on the terminal according to the browser used with XSCF Web. Table 1-10 lists combinations of browsers and Java Runtime Environments.

Table 1-10   Combinations of Browsers Used With XSCF Web and Java Runtime Environments

Browser	Java Runtime Environment
Microsoft Internet Explorer 8 and 9, 32-bit version	Java Runtime Environment 8, 32-bit version
Microsoft Internet Explorer 8 and 9, 64-bit version	Java Runtime Environment 8, 64-bit version
Microsoft Internet Explorer 10 and 11	Java Runtime Environment 8, 32-bit version
Mozilla Firefox 10.0 to ESR 52, 32-bit version	Java Runtime Environment 8, 32-bit version

Existing XCP Firmware Versions and Support Information

The following lists the XCP firmware versions that have been released for the SPARC M10 System, as well as the main support and update information for each version.

Table 1-11   Existing XCP Firmware Versions and Support Information

XCP Version	Main Support Information	CMU Version
XCP 2340	Improvement when the OpenBoot PROM security mode is enabled	02.34.0000
XCP 2332	Improvement of XCP firmware defects	02.33.0000
XCP 2330	Support for CPU Activation Interim Permit in the SPARC M10-4S	02.33.0000
XCP 2322	Improvement of XCP firmware defects	02.32.0002
XCP 2321	Improvement of XCP firmware defects	02.32.0001
XCP 2320	- Support for CPU Activation Interim Permit - Support for the verified boot for the network boot - Improvement of logs when a file system error occurs	02.32.0000
XCP 2290	- Support for the SPARC64 X+ processor (2.8 GHz) in the SPARC M10-1 - Support for enabling/disabling the IPMI service when using the remote power management function - Support for the deferred dump function	02.29.0000
XCP 2280	- Support for live migration of Oracle Solaris kernel zones	02.28.0000

XCP Version	Main Support Information	CMU Version
	- Support for the verified boot of the guest domain	
XCP 2271	Support for Virtual SCSI Host Bus Adapter (vHBA) function	02.27.0001
XCP 2260	- Support for remote storage - Support for addition/deletion specification when configuring CPU Activation - Support for the function to reduce fan noise - Support for performance register access control feature provided by Oracle VM Server for SPARC 3.2	02.26.0000
XCP 2250	- Support for SPARC64 X+ processor (3.7 GHz) in SPARC M10-1/M10-4 - Support for the verified boot	02.25.0000
XCP 2240	- Support for the DNS round-robin for the host name of the NTP server - Support for 1984 LDC endpoints per guest domain - Support for Dynamic PCIe bus assignment provided with Oracle VM Server for SPARC 3.2	02.24.0000
XCP 2232	Security fixes	02.23.0000
XCP 2231	Security fixes	02.23.0000
XCP 2230	- Support for Internet Explorer 10 and 11 in XSCF Web - Support for Extensible Firmware Interface GUID Partition Table (EFI GPT) labels - Support for recovery mode provided by Oracle VM Server for SPARC 3.1 - Support for the function for dynamically reconfiguring PCIe endpoint devices through combination with Oracle VM Server for SPARC - Support for Oracle Solaris kernel zones	02.23.0000
XCP 2221	Improvement of XCP firmware defects	02.22.0000
XCP 2220	- Support of the dynamic reconfiguration (DR) function of the system board in a physical partition (PPAR) - Support for XSCF startup mode function (SPARC M10-1)	02.22.0000
XCP 2210	- Support for SPARC64 X+ processors - Support for CPU operational mode which specifies how a CPU should operate - Enable the factory default configuration for the dynamic reconfiguration of physical partitions feature. - The LDAP, Active Directory, LDAP over SSL features have been supported for the XSCF user account - The SR-IOV feature in combination with Oracle VM Server for SPARC, has been supported - The "no-io" feature when configuring physical partition has been supported	02.21.0000
XCP 2092	Improvement of XCP firmware defects	02.09.0000
XCP 2091	Improvement of XCP firmware defects	02.09.0000

Table 1-11	Existing XCP Firmware Versions and Support Information *(continued)*	
XCP Version	**Main Support Information**	**CMU Version**
XCP 2090	- Support of 64 GB memory - Support of multiple specifications of the port and community string for the Trap host of the SNMP agent function - Support for automatic XCP firmware version synchronization between chassis when maintenance is done in off state of the input power supply	02.09.0000
XCP 2080	Support of the Auto Service Request (ASR) function	02.08.0000
XCP 2070	Improvement of XCP firmware defects	02.07.0000
XCP 2052	- Support of the AES algorithm encryption function for the SNMP agent function - Support of different memories in the chassis	02.05.0002
XCP 2051	Improvement of XCP firmware defects	02.05.0001
XCP 2050	Support of the direct I/O function for the PCI expansion unit (SPARC M10-4S)	02.05.0000
XCP 2044	Support of the direct I/O function for the PCI expansion unit (SPARC M10-1/M10-4)	02.04.0004
XCP 2042	Support of the crossbar box (configuration of up to 16 BB)	02.04.0001
XCP 2041	Support of the PCI expansion unit	02.04.0001
XCP 2032	Improvements related to the Oracle VM Server for SPARC software	02.03.0001
XCP 2031	Support of SPARC M10-4S (configuration of up to 4 BB)	02.03.0001
XCP 2013	Improvement of XCP firmware defects	02.01.0003
XCP 2012	Support of SPARC M10-1/M10-4	02.01.0002

Note - The XSCF firmware and CMU firmware versions in XCP can be checked with the version -c xcp -v command.
When the CMU firmware version is updated, turn off the power to the physical partition and then turn it on again to complete the CMU firmware update. For details on the firmware update, see "Chapter 16   Updating the XCP Firmware" in the *Fujitsu SPARC M12 and Fujitsu M10/SPARC M10 System Operation and Administration Guide*.

Note - The CMU firmware version may differ with the XCP version.
For example, in XCP 2042, the XSCF version is 02.04.0002, whereas the CMU version is 02.04.0001.

Chapter 2

XCP 2340-Related Information

This chapter provides XCP 2340-related information.

- Latest Information on XCP 2340
- Notes and Restrictions
- XCP 2340 Problems and Workarounds

Latest Information on XCP 2340

This section describes major changes in XCP 2340.
This XCP version modifies XSCF firmware and CMU firmware.

Note - After the firmware update completes, power-off/power-on of the physical partition may be required.
For details on the firmware update, see "Chapter 16   Updating the XCP Firmware" in the *Fujitsu SPARC M12 and Fujitsu M10/SPARC M10 System Operation and Administration Guide.*

For this version, when the OpenBoot PROM security mode is enabled and if you disconnect and then reconnect to the domain console while the OpenBoot PROM is active, you need to enter a password to execute commands. Previously, you could execute any command under such a circumstance.
For details, see "Notes on OpenBoot PROM."

Notes and Restrictions

This section describes notes and restrictions that are known as of this release.

Notes on Secure Socket Layer (SSL) 3.0

For security reasons, you cannot use SSL 3.0 with XCP 2240 or later.
Use Transport Layer Security (TLS) 1.2, 1.1, or 1.0.

Notes on Time Zones

In a system that implements daylight saving time, suppose that the current time in the daylight saving time period is changed by the setdate -s command to a time that is within one hour of the ending of daylight saving time. Then, the set time will be outside of daylight saving time (that is, in winter time).
In the following example, an attempt is made to set the local time to 1:40 AM October 31 (JDT) during daylight saving time, and daylight saving time ends 2:00 AM October 31. The result is that the time is set to the winter time of 1:47 AM October 31 (JST).

```
XSCF> showdate
Fri Oct 31 01:20:00 JDT 2014
XSCF> setdate -y -s 103101402014.00
Fri Oct 31 01:40:00 JST 2014
The XSCF will be reset. Continue? [y|n] :y
 Thu Oct 30 16:40:00 UTC 2014
:
Omitted (XSCF automatically rebooted)

XSCF> showdate
Fri Oct 31 01:47:16 JST 2014
```

To set a time within the period immediately before or after daylight saving time switches, execute the setdate -u command, and set the time in UTC.

Restrictions 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 on this problem, see "RTIF2-141208-001." From

XCP 2250 onwards, specifying "suspend" invokes the same behavior as when "count" is specified.

Notes on Dynamic Reconfiguration of Physical Partitions

- Suppose that you are going to add or delete a system board (PSB) using dynamic reconfiguration of physical partitions. Before executing the addboard(8) or deleteboard(8) command, execute the showhardconf(8) command to confirm that [Status] of every crossbar box and the SPARC M10-4S is "Normal."

- Suppose that you execute dynamic reconfiguration of physical partitions in an environment where SR-IOV is used. If you assign a physical function (PF) to one of the domains in a physical partition and then assign a virtual function (VF) created from the assigned physical function (PF) to the same domain, the deleteboard(8) command may fail.

- In case of dynamic reconfiguration of physical partitions, when adding an I/O device, it is necessary to either stop the domain or use the delayed reconfiguration feature to integrate the I/O device into the logical domain, after executing the addboard(8) command. Moreover, when removing an I/O device, after removing the I/O device by stopping the domain or using the delayed reconfiguration feature, execute the deleteboard(8) command in order to disconnect the system board. For details on each procedure, refer to the *Fujitsu SPARC M12 and Fujitsu M10/SPARC M10 Domain Configuration Guide*.
  Note that you can add and delete I/O devices without stopping the logical domains and without delayed reconfiguration on Oracle Solaris 11.2 SRU11.2.8. 4.0 or later.

- If you execute dynamic reconfiguration of physical partitions on Oracle Solaris 11.2 SRU11.2.8.4.0 or earlier, the execution result of the prtdiag command executed from the control domain may differ from the actual physical configuration. You can update it to the latest information by executing svcadm restart picl.

- While adding or removing system boards with the addboard(8) or deleteboard(8) command of the DR feature, do not reboot all the XSCFs with either the rebootxscf -a command or from the XSCF Web interface. If such an operation is performed, not only the DR processing will terminate abnormally, Oracle Solaris on a running physical partition may hang, hardware failure may occur, physical partitions may stop abnormally and replacement of parts may become necessary.

- If even one logical domain in the OpenBoot PROM state is situated in the physical partition, dynamically reconfiguring the physical partition causes it to end with an error. Execute dynamic reconfiguration of the physical partition after changing the logical domain to any of the following states: state where Oracle Solaris is running, bound state, or inactive state.

- Do not specify either "unbind=resource" or "unbind=shutdown" at the -m option of the deleteboard(8) command when executing dynamic reconfiguration of physical partitions when the version of Oracle VM Server for SPARC is earlier than 3.2. It is possible that the logical domain will hang or the deleteboard(8) command will fail.

- Memory module (DIMM) of different capacities cannot be mounted on a chassis, which is the target of the dynamic reconfiguration of physical partitions. Make sure that the mounted memory modules (DIMMs) on chassis whose physical partition is the target of dynamic reconfiguration, are all of the same capacity. Meanwhile, there is no problem if the number of DIMMs differs from chassis to chassis.

- Do not apply patch 150400-01 to 150400-06 on Oracle Solaris 10. In such a case, dynamic reconfiguration of the physical partitions may cause a system panic (CR 17510986).

Notes on Mixing SPARC64 X+ Processors With SPARC64 X Processors

To mix SPARC64 X+ processors with SPARC64 X processors, configure each type in a unit of the SPARC M10 system chassis, which is the system board configuration unit. SPARC64 X+ processors cannot be mixed with SPARC64 X processors and mounted together inside each chassis in the SPARC M10 system. In the SPARC M10-4/M10-4S, there are systems configured with the CPU memory unit lower (CMUL) and CPU memory unit upper (CMUU). These units must have the same processor.

Notes and Restrictions on the SR-IOV Functions

Notes

- If the maintenance of PCI Express (PCIe) cards that use the SR-IOV function is performed either with dynamic reconfiguration (DR) of physical partitions or with PCI hot plugging (PHP), execute the following procedure beforehand:
  1. **Remove all virtual functions (VF) from the I/O domains by executing the ldm remove-io command.**

  2. **Destroy all virtual functions (VF) by executing the ldm destroy-vf command.**

  For the maintenance procedure using DR or PHP, see the *Fujitsu M10-4/Fujitsu M10-4S/SPARC M10-4/SPARC M10-4S Service Manual* or the *PCI Expansion Unit for Fujitsu SPARC M12 and Fujitsu M10/SPARC M10 Service Manual*.

  Regarding details on the ldm command, refer to the *Oracle VM Server for SPARC Administration Guide* of the version you are using.

  After performing maintenance with DR or PHP, execute the following procedure, if necessary.

  3. **Create virtual functions (VF) by executing the ldm create-vf command.**

  4. **Assign the virtual functions (VF) to the I/O domains by using the ldm add-io command.**

- The on-board LAN interfaces of SPARC M10 systems support the SR-IOV feature.

- The static SR-IOV feature is supported from Oracle VM Server for SPARC 3.0

onwards.

- The dynamic SR-IOV feature is supported from Oracle VM Server for SPARC 3.0 onwards.

- For details on the SR-IOV feature, refer to the *Oracle VM Server for SPARC Administration Guide* of the version you are using. For the necessary fixes when using the SR-IOV feature, refer to the *Oracle VM Server for SPARC Release Notes* of the version you are using.

- For a list of PCI cards that support the SR-IOV feature, refer to the *Fujitsu M10/SPARC M10 Systems PCI Card Installation Guide*.

Notes on OpenBoot PROM

- When the security-mode of OpenBoot PROM environment variables is set to command or full, and at least 1 and no more 8 viewable character strings are set to security-password, the OpenBoot PROM security mode is enabled and a password is required for executing commands or performing operations.
For details, see "H.4   Behavior With the Security Mode Enabled" in the *Fujitsu SPARC M12 and Fujitsu M10/SPARC M10 System Operation and Administration Guide*.

- When the XCP firmware is updated to XCP 2260 or later, information for CD-ROM and remote storage is added to OpenBoot PROM device aliases. To use added device aliases when the system operates with a logical domain configuration other than factory-default, perform the following procedure in the control domain after updating the XCP firmware to XCP 2260 or later.
    1. **Confirm the logical domain configuration information saved to the XSCF.**

        The following example shows that two sets of configuration information (i.e., logical domain configuration information ldm-set1, which is currently in use, and factory-default) are stored.

```
# ldm list-spconfig
ldm-set1 [current]
factory-default
```

    2. **Execute the following commands on all of the logical domains, including the control domain.**

        Specify the name of the logical domain for <ldom>.

```
# ldm set-variable fix_foo=true <ldom>
# ldm remove-variable fix_foo <ldom>
```

    3. **Store the updated configuration information for the logical domain again.**

        Delete the stored ldm-set1 and then store the information again.

```
# ldm rm-spconfig ldm-set1
# ldm add-spconfig ldm-set1
```

4. **Restart all logical domains.**

- If you execute the sendbreak(8) command after the OpenBoot PROM banner appears but before OpenBoot PROM startup is completed, the following error message is output. In this case, the boot command becomes unable to be executed. FATAL: OpenBoot initialization sequence prematurely terminated.

  In this case, set the OpenBoot PROM environment variable auto-boot? to false at the ok prompt, and then execute the reset-all command. When OpenBoot PROM is restarted, set auto-boot? to true, and execute the boot command.

- When you use the XSCF firmware setpparparam(8) command to set an OpenBoot PROM environment variable, such as nvramrc, the maximum number of characters that can be set is 254.
  If you want to set a string of 255 or more characters in an OpenBoot PROM environment variable, such as nvramrc, do so in the OpenBoot PROM or Oracle Solaris environment. Note that, however, the maximum number of characters is 1024.

- The OpenBoot PROM device aliases disk and net are not created for Oracle VM Server for SPARC disks and logical domains to which no network is assigned. To execute disk boot or network boot by specifying the device alias disk or net, set the device aliases disk and net by using the OpenBoot PROM nvalias command.

- From XCP 2210 onwards, at the time of starting up OpenBoot PROM, the following message is output before the OpenBoot PROM banner is displayed.

```
NOTICE: Entering OpenBoot.
NOTICE: Fetching Guest MD from HV.
NOTICE: Starting additional cpus.
NOTICE: Initializing LDC services.
NOTICE: Probing PCI devices.
NOTICE: Finished PCI probing.
```

- Suppose the following: The environment variable multipath-boot? of OpenBoot PROM is true; the boot -L command is executed to display boot environments (BEs) that, existing in the root pool, allow booting; and the number of a boot environment is selected from the displayed interactive menu. The system does not return to the ok prompt, but restarts OpenBoot PROM.
  The number of restarts depends on the environment variable boot-device of OpenBoot PROM. OpenBoot PROM restarts as many times as the number of configured devices, after which the message "ERROR: All device paths in boot-device have failed." is displayed and the ok prompt reappears.

  To avoid this problem, set the environment variable multipath-boot? of OpenBoot PROM to false before executing the boot -L command or execute the boot *device_path* -L command.

- Suppose you execute the boot command with arguments omitted while "multipath-boot?" of the OpenBoot PROM environment variable is set to "false"

and all the booting from devices specified in "boot-device" of the OpenBoot PROM environment variable fails. The message output to the domain console in such a case is changed from XCP 2250, as follows.

- Message prior to XCP 2250

```
{0} ok boot
Boot device: disk  File and args:

Can't open boot device

ERROR: boot-read fail

{0} ok
```

Or

```
{0} ok boot
Boot device: disk  File and args:

Can't locate boot device

ERROR: boot-read fail

{0} ok
```

- Message XCP 2250 or later

```
{0} ok boot
No viable default device found in boot-device variable.

{0} ok
```

Notes on Maintenance for the CPU Memory Units, Motherboard Unit, XSCF Unit, PSU Backplane, or Crossbar Backplane Unit

- Note on correcting the time (1)
  After the replacement of the FRU and the micro SD card, and after the system has been running for a long time, an XSCF reboot followed by PPAR startup may cause the Oracle Solaris time to deviate.

  This problem occurs when all of the following conditions are true:

  - Both the FRU (CPU memory units, motherboard unit, XSCF unit, PSU backplane, or crossbar backplane unit) and the micro SD card are replaced.

  - System: SPARC M10-1, SPARC M10-4, or SPARC M10-4S (single-chassis configuration)

- The setting specifying the XSCF as an NTP client is enabled.
- XCP 2240 or later

To avoid this problem, be sure to perform the following procedure after replacing the FRU and the micro SD card.

[Workaround]

1. **Execute the showlogs event command to check whether the XSCF time and NTP server time are successfully synchronized.**
   If multiple event logs are registered, see the latest event log.

```
XSCF> showlogs event -rM
Date                     Message
Mar 25 11:45:31 JST 2017   NTP service found NTP server to synchronize.
```

When "NTP service found NTP server to synchronize." appears, the time is correctly synchronized. Then, the following steps are not necessary.

2. **Execute the setntp command to temporarily disable the XSCF NTP client function.**

```
XSCF> setntp -s client -c disable
```

3. **Reboot the XSCF.**

```
XSCF> rebootxscf -a
```

4. **Execute the setdate command to set the XSCF time to the current time.**
   In the following example, the time is set to 2017/3/25 12:00:00.

```
XSCF> setdate -s 032512002017.00
```

The XSCF automatically reboots when the time is set.

5. **Execute the setntp command to re-enable the XSCF NTP client function.**

```
XSCF> setntp -s client -c enable
```

6. **Reboot the XSCF.**

```
XSCF> rebootxscf -a
```

Note - Even if the XSCF time and NTP server time fail to synchronize and the following message appears, this workaround has been completed.

XSCF> **showlogs event -rM**

Date	Message
Mar 25 12:15:31 JST 2017	NTP service failed to reach appropriate NTP server.

- Note on correcting the time (2)

  Due to the problem reported in RTIF2-140711-001 and RTIF2-141204-001, the Oracle Solaris time may deviate at PPAR startup.

  To avoid this problem, be sure to perform the following procedure after maintenance.

Note - Before performing the procedure in "Note on correcting the time (2)," check whether the conditions in "Note on correcting the time (1)" are met. If they are met, first perform the procedure in "Note on correcting the time (1)."

[Workaround]

1. **Specify false for the OpenBoot PROM environment variable auto-boot?, and execute the setpparparam(8) command to disable the autoboot function of the control domain. Also execute the setpparmode(8) command to disable startup of guest domains.**

   Example: Physical partition is PPAR#0

```
XSCF> setpparparam -p 0 -s bootscript "setenv auto-boot? false" -y
XSCF> setpparmode -p 0 -m guestboot=off
```

2. **Execute the poweron(8) command to power on the target physical partition.**

```
XSCF> poweron -p 0 -y
```

3. **Execute showdomainstatus -p 0 -g primary, and confirm that "OpenBoot Running" appears under Status.**

4. **Execute the console(8) command to switch to the control domain console.**

```
XSCF> console -p 0 -y
:
Omitted
{0} ok
```

5. **Execute the boot -s command to start Oracle Solaris in single user mode.**

```
{0} ok boot -s
```

6. **Execute the date command of Oracle Solaris to set the control domain time.**

   Example: Setting for 12:20:00 on March 25, 2017

```
primary# date 0325122017.00
```

> **Note -** Execute the showdate(8) command to display the XSCF time, and confirm that the control domain time of the target physical partition is the same as the XSCF time.

7. **Switch to multi-user mode.**

```
primary# exit
```

8. **For a logical domain configuration, set the correct time for guest domains.**
   For details on how to check for a logical domain configuration, see "Checking between a logical domain configuration and the factory-default configuration." Perform the following procedure on every guest domain to set the time.

   a. Check the CONS value of the guest domain.

```
primary# ldm list-domain
NAME            STATE       FLAGS   CONS  VCPU  MEMORY  UTIL  NORM  UPTIME
primary         active      -n-cv-  SP    8     3968M   0.2%  0.1%  18h 37m
guest           bound       ------  5000  8     2G
```

   b. Disable the autoboot function of the guest domain.

```
primary# ldm set-variable auto-boot?=false guest
```

   c. Start the guest domain.

```
primary# ldm start-domain guest
```

   d. Open the guest domain console.

```
primary# telnet localhost 5000
:
{0} ok
```

   e. Execute the boot -s command to start Oracle Solaris in single user mode.

```
{0} ok boot -s
```

   f. Execute the date command of Oracle Solaris to set the guest domain time.
      Example: Setting for 12:30:00 on March 25, 2017

```
guest# date 0325123017.00
```

   g. Switch to multi-user mode.

```
guest# exit
```

   h. If the guest domain is an NTP client, execute the ntpq -np command, and confirm synchronization with the NTP server.

The asterisk ("*") at the beginning of a line indicates that the NTP server in the "remote" column is synchronized with the guest domain.

```
guest# while [ 1 ]; do ntpq -np; sleep 60; done
    remote           refid      st t when poll reach   delay   offset  jitter
==============================================================================
*203.0.113.156   203.0.113.70     4 u   46   64     3   0.458    0.754   7.243
    remote           refid      st t when poll reach   delay   offset  jitter
==============================================================================
*203.0.113.156   203.0.113.70     4 u   39   64     7   0.478    1.487   5.664
    remote           refid      st t when poll reach   delay   offset  jitter
==============================================================================
*203.0.113.156   203.0.113.70     4 u   35   64    17   0.450    2.164   5.077
^C
guest#
```

    i. If necessary, re-enable the autoboot function of the guest domain.

```
primary# ldm set-variable auto-boot?=true guest
```

9. **If necessary, re-enable the functions that were disabled in step 1.**
   For the autoboot function of the control domain, specify true for the OpenBoot PROM environment variable auto-boot?, and execute the setpparparam(8) command to enable the function. For startup of guest domains, execute the setpparmode(8) command to re-enable it.
   Example: Physical partition is PPAR#0

```
XSCF> setpparparam -p 0 -s bootscript "setenv auto-boot? true" -y
XSCF> setpparmode -p 0 -m guestboot=on
```

10. **For a logical domain configuration, save logical domain configuration information.**
    For details on how to check for a logical domain configuration, see "Checking between a logical domain configuration and the factory-default configuration."
    Example: Saving logical domain configuration information under the name of "config_A"

```
primary# ldm list-domain -l
Omitted
primary# ldm list-spconfig
Omitted
primary# ldm remove-spconfig config_A
primary# ldm add-spconfig config_A
```

Checking between a logical domain configuration and the factory-default configuration

You can check whether the configuration is a logical domain configuration by using the showdomainconfig command.

(1) Logical domain configuration

If a value other than factory-default is set at the parts indicated by "^", it is a logical domain configuration.

```
XSCF> showdomainconfig -p 0
PPAR-ID      :0
Booting config
 (Current)   :config_A
              ^^^^^^^^
 (Next)      :config_A
              ^^^^^^^^
--------------------------------------------------------------------------------
Index        :1
config_name :factory-default
domains      :1
date_created:-
--------------------------------------------------------------------------------
Index        :2
config_name :config_A
domains      :1
date_created:'2014-03-05 17:33:17'
```

(2) factory-default configuration

If factory-default is set at the parts indicated by "^", it is not a logical domain configuration but in the factory-default configuration.

```
XSCF> showdomainconfig -p 0
PPAR-ID      :0
Booting config
 (Current)   :factory-default
              ^^^^^^^^^^^^^^^
 (Next)      :factory-default
              ^^^^^^^^^^^^^^^
--------------------------------------------------------------------------------
Index        :1
config_name :factory-default
domains      :1
date_created:-
```

- [SPARC M10-1/SPARC M10-4/SPARC M10-4S]
  The setting information of the CPU Activation and the CPU Activation key may be deleted when the CPU memory unit lower (CMUL) or the motherboard unit (MBU) is replaced. To restore the setting information of CPU Activation and the CPU Activation key, it is necessary to save the setting information of the CPU Activation and CPU Activation key beforehand, using the dumpconfig(8) command and restore them with the restoreconfig(8) command.

- [SPARC M10-4S]
  To replace the CPU memory unit lower (CMUL) or to install the SPARC M10-4S, execute the replacefru(8) or addfru(8) command and follow the maintenance menu.

  Suppose that the system contains a crossbar box or consists of multiple SPARCM10-4S units and that the firmware is XCP 2044 or later. If the CPU

memory unit lower (CMUL) is replaced or if the SPARC M10-4S is installed without using the maintenance menu, the XSCF of the replaced/installed device may not start.

Should this occur, turn off the input power to the replaced/installed SPARC M10-4S. Subsequently, using the maintenance menu, replace the CPU memory unit lower (CMUL) or install the SPARC M10-4S again.

- ▪ [SPARC M10-4S]
  From XCP 2090 onwards, automatic synchronization of firmware versions between chassis, when replacement of CPU Memory Unit lower (CMUL) or XSCF unit, expansion of SPARC M10-4S or crossbar box is performed in off state of the input power supply, without using the maintenance menu, has been enabled.

  After replacement or expansion of components, if the "XSCF firmware update now in progress. BB#xx, please wait for XSCF firmware update complete." message is output after logging in to the master XSCF, the XCP firmware is in the process of being updated automatically.

  Automatic synchronization of the XCP firmware versions can be confirmed by referring to the "XCP firmware version synchronization completed" message, which is output by the showlogs monitor, showlogs event, or showmonitorlog command.

  Do not execute the following until the firmware update is complete.

  - Turn off the input power supply

  - Execute the poweron(8) command

  - Execute the testsb(8) command

  - Execute the diagxbu(8) command

  - Execute the getflashimage(8) or the flashupdate(8) command

- ▪ If cold replacement of CPU memory unit lower (CMUL) or a motherboard unit (MBU) is done in the following procedure, the physical partitions (PPAR) may not start.
  1. Execute the "restoredefaults -c factory" command.

  2. After XSCF has stopped, turn off the input power of the system (AC OFF).

  3. Replace the CMUL or MBU without replacing the microSD card.

  4. Turn on the input power of the system.

  [Workaround]

  Replace CMUL or MBU in the following procedure.

  1. Execute the "restoredefaults -c factory" command.

  2. To stop XSCF as in procedure 1, turn off/on the input power of the system (AC OFF/ON) and then confirm that XSCF has started.

  3. Replace the targeted CMUL or MBU.

  [How to restore]

  Restore with the following procedure:

  1. Turn off the input power of the system (AC OFF).

  2. Temporarily mount the microSD card that was mounted on the CMUL or MBU,

when the "restoredefaults -c factory" command was executed, to the new unit.

3. Confirm that XSCF has started after turning on the input power (AC ON).

4. Turn off the input power of the system (AC OFF).

5. Extract the microSD card that was temporarily mounted and mount the original microSD card.

6. Turn on the input power of the system (AC ON).Perform the following procedure.

Notes on CPU Activation

- If the XSCF setting information is initialized by executing the restoredefaults(8) command in XCP 2032 or earlier, the information of the CPU Activation key is also initialized.
  When executing the restoredefaults(8) command, save the CPU Activation key in advance before restoring it or register the key again.

  In addition, when you replace a CPU memory unit or motherboard, the CPU Activation key may be erased. For details, see "Notes on Maintenance for the CPU Memory Units, Motherboard Unit, XSCF Unit, PSU Backplane, or Crossbar Backplane Unit."

- If you execute the restoredefaults -c xscf command on XCP 2041 or later, the information of the CPU Activation key is deleted not only from the XSCF unit but also from the backup information in the XSCF. On the other hand, even if you execute the restoredefaults -c factory command, the information of the CPU Activation key is not deleted.
  To initialize all settings to factory defaults including the information of the CPU Activation key, use the -c factory -r activation option.

- XSCF setting information saved by the dumpconfig(8) command contains CPU Activation information and CPU Activation keys.
  You can use the restoreconfig(8) command to restore the CPU Activation information and CPU Activation keys that were saved with the dumpconfig(8) command.

  Therefore, if you configure CPU Activation or install a CPU Activation key when configuring settings for the XSCF, such as when configuring an XSCF network or physical partition (PPAR), we recommend that you first save the CPU Activation information and CPU Activation key by using the dumpconfig(8) command. To save and restore only CPU Activation keys, execute the dumpcodactivation(8) and restorecodactivation(8) commands, respectively. Note, however, that CPU Activation information cannot be saved and restored. Use the showcod(8) and setcod(8) commands to reconfigure CPU Activation.

Notes and Restrictions on XSCF Web

Notes

(1) **Common to browsers**
- When you import XCP or update the firmware by using XSCF Web, "Session is invalid" may appear on the web browser.
- If the timeout of the XSCF shell is short when you import XCP by using XSCF Web, XCP importing fails. Set the timeout of the XSCF shell to 30 minutes or longer.
  Select the [menu] tab and select [XSCF] - [Settings] - [Autologout] menu. Then, enter a value of 30 minutes or longer for [Time-out value].
- Suppose you select [XSCF] - [Setting] - [CoD Reservation] menus on the XSCF Web and change the setting value by pressing the [Reserve CoD Resources] button on the [PPAR Usage and Reservation] table. If you specify a value smaller than the current setting value, the following warning message dialog appears to confirm that you have entered the correct value.

```
PROC Permits assigned is less than current setting. Continue?
```

Click the [OK] button to continue the setting, and click the [Cancel] button to cancel the setting.

(2) **Internet Explorer**
If you use XSCF Web of version XCP 2221 or earlier while also using Internet Explorer 10 or 11, you may see distorted screen layouts, such as disordered tables or superposed characters. If you see a distorted XSCF Web screen layout in the above environment, use Firefox.
However, this problem does not affect system operation.

(3) **Firefox**
If you use XSCF Web in a Firefox environment, the browser may prompt you to save the login ID and password when you log in to the XSCF. In this case, do not save the login ID and password. If you save the login ID and password, the saved data may be displayed on LDAP, SMTP, and REMCS web pages.

Note - Remote Customer Support System (REMCS) is supported only for SPARC M10 systems sold within Japan by Fujitsu.

Configure either of the following settings to disable the login ID/password save function of the browser:

- Disable the login ID/password save function throughout the browser. Select [Tools] - [Options] - [Security] tab, and uncheck [Remember passwords for sites] in [Passwords].

- Specify the site as an exception to login ID and password saving. Select [Tools] - [Options] - [Security] tab, and check [Remember passwords for sites] in

[Passwords]. Then, click the [Never Remember Password for This Site] button in the dialog box that appears for ID and password saving when you log in to the XSCF. This registers the address of the XSCF in the [Exceptions] list for ID and password saving, and the dialog box for ID and password saving does not appear at subsequent logins to the XSCF.

Restrictions

(1) **Common to browsers**
There are currently no known restrictions.

(2) **Internet Explorer**
If you use Internet Explorer 8 in a Windows 7 environment, built-in Administrator accounts cannot be used.

(3) **Firefox**
There are currently no known restrictions.

Notes on Firmware Update

- [SPARC M10-4S]
  If you update the firmware by executing the flashupdate(8) command or using XSCF Web, the time for the processing depends on the number of SPARC M10-4S chassis or crossbar boxes that configure the system.

- The relationship of the master XSCF and the standby XSCF after the update of the XSCF firmware depends on the version of the updated XCP.
  The following table shows the relationship between the master XSCF and the standby XSCF as well as the operation of firmware update, for each XCP version.

Table 2-1   Difference Between Firmware Update in XCP 2050 or Later and in XCP 2044 or Earlier

XCP Version	Relationship Between Master XSCF and Standby XSCF	Operation During Firmware Update
XCP 2050 or later	The master XSCF and the standby XSCF that have been switched over during update will return to the status before the switchover.	**1. Execute the flashupdate(8) command from the master XSCF of BB#00.** -> The XSCF of BB#00 that has executed the flashupdate(8) command is in the standby status immediately after XSCF reset. -> XSCF automatic switchover is performed after the update has been completed. -> When XSCF automatic switchover has completed, the XSCF of BB#00 that has executed the flashupdate(8) command is restored to the status of the original master. **2. Confirm that the update has been completed by referring to the log message "XCP update has been completed." from the master XSCF of BB#00.**
XCP 2044 or earlier	The master XSCF and the standby XSCF that have been switched over during update will stay switched over.	**1. Execute the flashupdate(8) command from the master XSCF of BB#00.** -> The XSCF of BB#00 that has executed the flashupdate(8) command is in the standby status immediately after XSCF reset. -> XSCF automatic switchover is not performed after the update has been completed. For this reason, the XSCF of BB#00 that has executed the flashupdate(8) command will remain in the standby status. **2. Confirm that the update has been completed by referring to the log message "XCP update has been completed." from the master XSCF of BB#01.** **3. To restore the status of the master and standby XSCFs to the status before the update, execute the switchscf(8) command from the master XSCF of BB#01 to restore the XSCF of BB#00 to the master.**

- When updating the firmware, errors described in "Problems With XCP and Workarounds" may occur. In such a case, take the actions described in workarounds, then update again.

Notes When a PCI Expansion Unit is Connected

- Even with the platadm privilege, you can use -c check and -c update in the ioxadm(8) command in XCP 2260 or later. For details, see the man page for the ioxadm(8) command or the *Fujitsu SPARC M12 and Fujitsu M10/SPARC M10 XSCF Reference Manual*.

- [SPARC M10-1]
  If one of the following operations is performed, the logical domain configuration of the physical partition will return to the factory-default state at the next control domain start time. Also, the OpenBoot PROM environment variables of the control domain may be initialized.

  - Updating the firmware from XCP 2043 or earlier to XCP 2044 or later in a system connected to a PCI expansion unit

  - Installing/removing a PCI expansion unit in a system to which the firmware XCP 2044 or later is applied

  Before the operation, save the logical domain configuration information from Oracle Solaris to an XML file. Also, write down the setting information for the OpenBoot PROM environment variables of the control domain in advance to set it again.

  Table 2-2 indicates the information that may need to be saved/restored when updating the firmware from XCP 2043 or earlier to XCP 2044 or later in a system connected to a PCI expansion unit.

Table 2-2   Required Operations When Updating the Firmware From XCP 2043 or Earlier to XCP 2044 or Later

PCI Expansion Unit Connected	Current Domain Configuration	Rebuilding Oracle VM Server for SPARC Configuration	Setting OpenBoot PROM Environment Variable Again
No	factory-default (Control domain only)	Not required	Not required
No	With logical domains other than control domain	Not required	Not required
Yes	factory-default (Control domain only)	Not required	Not required
Yes	With logical domains other than control domain	Required (XML file)	Required

Table 2-3 indicates the information that may need to be saved/restored when installing/removing a PCI expansion unit in a system to which the firmware XCP 2044 or later is applied.

Table 2-3 Required Operations When Installing/Removing a PCI Expansion Unit in a System to Which the Firmware XCP 2044 or Later is Applied

PCI Expansion Unit Connected	Current Domain Configuration	Rebuilding Oracle VM Server for SPARC Configuration	Setting OpenBoot PROM Environment Variable Again
No (installing)	factory-default (Control domain only)	Not required	Not required
No (installing)	With logical domains other than control domain	Required (XML file)	Required (*1)
Yes (installing/removing)	factory-default (Control domain only)	Not required	Not required
Yes (installing/removing)	With logical domains other than control domain	Required (XML file)	Required (*1)

*1 Not required for XCP 2230 or later.

Note - Execute the ldm list-constraints -x command to save to an XML file, and then execute the ldm init-system -i command to restore from an XML file. To display the OpenBoot PROM environment variables, execute the printenv command from the ok prompt. For details on this procedure, see "1.7.3   How to Save/Restore the Logical Domain Configuration Information and the OpenBoot PROM Environment Variable" in the *PCI Expansion Unit for Fujitsu SPARC M12 and Fujitsu M10/SPARC M10 Service Manual*.

■ [SPARC M10-4/M10-4S]
Suppose that one of the following operations is performed with the setpciboxdio (8) command using the following firmware: XCP 2044 or later on the SPARC M10-4, or XCP 2050 or later on the SPARC M10-4S. Then, the logical domain configuration of the physical partition will return to the factory-default state at the next control domain start time. Also, the OpenBoot PROM environment variables of the control domain may be initialized.

- Changing the enable/disable setting of the direct I/O function for the PCI expansion unit
- Installing/removing/replacing a PCI expansion unit in a PCI slot of a SPARC M10 system chassis where the direct I/O function for the PCI expansion unit is enabled

You can execute the setpciboxdio(8) command regardless of whether there is a PCI expansion unit. Before doing so, save the logical domain configuration information from Oracle Solaris to an XML file. Also, write down the setting information for the OpenBoot PROM environment variables of the control domain to set it again.

The information may need to be saved/restored when changing the enable/disable setting of the direct I/O function for the PCI expansion unit by executing the setpciboxdio(8) command. See Table 2-4 to check required operations.

Table 2-4   Required Operations When Toggling the Enable/Disable Setting of the Direct
             I/O Function

PCI Expansion Unit Connected	Current Domain Configuration	Rebuilding Oracle VM Server for SPARC Configuration	Setting OpenBoot PROM Environment Variable Again
No	factory-default (Control domain only)	Not required	Not required
No	With logical domains other than control domain	Required (XML file)	Required (*1)
Yes	factory-default (Control domain only)	Not required	Not required
Yes	With logical domains other than control domain	Required (XML file)	Required (*1)

*1 Not required for XCP 2230 or later.

Table 2-5 indicates the information that may need to be saved/restored when installing/removing/replacing a PCI expansion unit in a PCI slot of a SPARC M10 system chassis where the direct I/O function for the PCI expansion unit is enabled. Here, the setpciboxdio(8) command has been executed to enable the function.

Note - For PCI expansion unit maintenance using the PCI hot plug (PHP) function, the direct I/O function is disabled, so the above information does not need to be saved/restored.

Table 2-5   Required Operations for the Installation/Removal/Replacement of a PCI
            Expansion Unit in a PCI Slot of a SPARC M10 System Chassis Where the Direct
            I/O Function is Enabled

Maintenance Environment	Current Domain Configuration	Rebuilding Oracle VM Server for SPARC Configuration	Setting OpenBoot PROM Environment Variable Again
Installation/removal with PPAR stopped	factory-default (Control domain only)	Not required	Not required
	With logical domains other than control domain	Required (XML file)	Required (*2)
Replacement of faulty PCI expansion unit (*1) with PPAR stopped	factory-default (Control domain only)	Not required	Not required
	With logical domains other than control domain	Required (XML file)	Required (*2)
Replacement of normal PCI expansion unit (*1) with PPAR stopped	factory-default (Control domain only)	Not required	Not required
	With logical domains other than control domain	Not required	Not required

*1 This also includes the replacement of a link card, link cable, management cable, and link board.
*2 Not required for XCP 2230 or later.

Note - Execute the ldm list-constraints -x command to save to an XML file, and then execute
the ldm init-system -i command to restore from an XML file. To display the OpenBoot PROM
environment variables, execute the printenv command from the ok prompt. For details on
this procedure, see "1.7.3   How to Save/Restore the Logical Domain Configuration
Information and the OpenBoot PROM Environment Variable" in the *PCI Expansion Unit for
Fujitsu SPARC M12 and Fujitsu M10/SPARC M10 Service Manual.*

Notes on Dual Power Feed Setting

The power supply unit of the SPARC M10 system is redundantly configured.
Enabling or disabling the dual power feed function with the setdualpowerfeed(8)
command does not affect the behavior of a redundantly configured system.
Therefore, when the display results of the showdualpowerfeed(8) and showhardconf
(8) commands, which are dependent on the setting of the setdualpowerfeed(8)
command, also fall under any of the following conditions, the behavior of the
redundantly configured system is not affected.

- The showhardconf(8) command displays "Power_Supply_System: Dual;" when
  the showdualpowerfeed(8) command displays "Dual power feed is enabled."

- The showhardconf(8) command displays "Power_Supply_System: Single;" when the showdualpowerfeed(8) command displays "Dual power feed is disabled."

The system administrator can use this setting function as a memo for determining whether the power supply unit has a dual power feed configuration.

Notes on Active Directory

- If Active Directory is enabled and you try login via telnet, inquiry to the second and subsequent alternative servers may time out, causing the login to fail.

- If the value set by the timeout operand of the setad(8) command is small, and you log in to the XSCF, the user privilege may not be assigned to you. In this case, increase the timeout setting value and try again.

Notes on LDAP over SSL

If the value set by the timeout operand of the setldapssl(8) command is small, and you log in to the XSCF, the user privilege may not be assigned to you. In this case, increase the timeout setting value and try again.

Notes on the Logical Domain Time

- Notes on the logical domain time (1)
  After the firmware update from XCP 2232 or earlier to XCP 2240 or later, and after the system has been running for a long time, an XSCF reboot followed by PPAR startup may cause the Oracle Solaris time to deviate.

  To avoid this problem, be sure to perform the following procedure.

  [Workaround]

  - If the setting specifying the XSCF as an NTP client is disabled (default)
    Execute the setdate command to set the XSCF time to the current time.
    In the following example, the time is set to 2017/3/25 12:00:00.

```
XSCF> setdate -s 032512002017.00
```

  The XSCF automatically reboots when the time is set.

  - If the setting specifying the XSCF as an NTP client is enabled

    1. **Execute the showlogs event command to check whether the XSCF time and NTP server time are successfully synchronized.**
       If multiple event logs are registered, see the latest event log.

```
XSCF> showlogs event -rM
Date                    Message
Mar 25 11:45:31 JST 2017   NTP service found NTP server to synchronize.
```

When "NTP service found NTP server to synchronize." appears, the time is correctly synchronized. Then, the following steps are not necessary.

2. **Execute the setntp command to temporarily disable the XSCF NTP client function.**

```
XSCF> setntp -s client -c disable
```

3. **Reboot the XSCF.**

```
XSCF> rebootxscf -a
```

4. **Execute the setdate command to set the XSCF time to the current time.**
   In the following example, the time is set to 2017/3/25 12:00:00.

```
XSCF> setdate -s 032512002017.00
```

The XSCF automatically reboots when the time is set.

5. **Execute the setntp command to re-enable the XSCF NTP client function.**

```
XSCF> setntp -s client -c enable
```

6. **Reboot the XSCF.**

```
XSCF> rebootxscf -a
```

Note - Even if the XSCF time and NTP server time fail to synchronize and the following message appears, this workaround has been completed.

```
XSCF> showlogs event -rM
Date                    Message
Mar 25 12:15:31 JST 2017   NTP service failed to reach appropriate NTP server.
```

■ Notes on the logical domain time (2)

Note - If the firmware is updated from XCP 2232 or earlier to XCP 2240 or later, perform "-Notes on the logical domain time (1)" first.

Due to the problem reported in RTIF2-140711-001 and RTIF2-141204-001, the Oracle Solaris time may deviate at PPAR startup.
To avoid this problem, be sure to perform one of the following procedures.

> **Note -** An XCP with version number XCP 2240 or later fixes the problem reported in RTIF2-140711-001. However, if the firmware update is from XCP 2232 or earlier to XCP 2240 or later, it is necessary to resolve the time deviation problem that has been caused in XCP 2232 or earlier. Perform [Workaround] for "- XCP 2232 or earlier."

- XCP 2240 or later

[Workaround]
Save logical domain configuration information before stopping or restarting the PPAR.
Example: Saving logical domain configuration information under the name of "config_A"

```
primary# ldm list-domain -l
Omitted
primary# ldm list-spconfig
Omitted
primary# ldm remove-spconfig config_A
primary# ldm add-spconfig config_A
```

- XCP 2232 or later

[Workaround]
1. **Specify false for the OpenBoot PROM environment variable auto-boot?, and execute the setpparparam(8) command to disable the autoboot function of the control domain. Also execute the setpparmode(8) command to disable startup of guest domains.**
   Example: Physical partition is PPAR#0

```
XSCF> setpparparam -p 0 -s bootscript "setenv auto-boot? false" -y
XSCF> setpparmode -p 0 -m guestboot=off
```

2. **Execute the poweron(8) command to power on the target physical partition.**

```
XSCF> poweron -p 0 -y
```

3. **Execute showdomainstatus -p 0 -g primary, and confirm that "OpenBoot Running" appears under Status.**
4. **Execute the console(8) command to switch to the control domain console.**

```
XSCF> console -p 0 -y
:
Omitted
{0} ok
```

5. **Execute the boot -s command to start Oracle Solaris in single user mode.**

```
{0} ok boot -s
```

6. **Execute the date command of Oracle Solaris to set the control domain time.**
   Example: Setting for 12:20:00 on March 25, 2017

```
primary# date 0325122017.00
```

Note - Execute the showdate(8) command to display the XSCF time, and confirm that the control domain time of the target physical partition is the same as the XSCF time.

7. **Switch to multi-user mode.**

```
primary# exit
```

8. **For a logical domain configuration, set the correct time for guest domains.**
   For details on how to check for a logical domain configuration, see "Checking between a logical domain configuration and the factory-default configuration." Perform the following procedure on every guest domain to set the time.

   a. Check the CONS value of the guest domain.

```
primary# ldm list-domain
NAME            STATE      FLAGS   CONS  VCPU  MEMORY   UTIL   NORM   UPTIME
primary         active     -n-cv-  SP    8     3968M    0.2%   0.1%   18h 37m
guest           bound      ------  5000  8     2G
```

   b. Disable the autoboot function of the guest domain.

```
primary# ldm set-variable auto-boot?=false guest
```

   c. Start the guest domain.

```
primary# ldm start-domain guest
```

   d. Open the guest domain console.

```
primary# telnet localhost 5000
:
{0} ok
```

   e. Execute the boot -s command to start Oracle Solaris in single user mode.

```
{0} ok boot -s
```

   f. Execute the date command of Oracle Solaris to set the guest domain time.
      Example: Setting for 12:30:00 on March 25, 2017

```
guest# date 0325123017.00
```

g. Switch to multi-user mode.

```
guest# exit
```

h. If the guest domain is an NTP client, execute the ntpq -np command, and confirm synchronization with the NTP server.
The asterisk ("*") at the beginning of a line indicates that the NTP server in the "remote" column is synchronized with the guest domain.

```
guest# while [ 1 ]; do ntpq -np; sleep 60; done
     remote           refid      st t when poll reach   delay   offset  jitter
==============================================================================
*203.0.113.156   203.0.113.70      4 u   46   64     3   0.458    0.754   7.243
     remote           refid      st t when poll reach   delay   offset  jitter
==============================================================================
*203.0.113.156   203.0.113.70      4 u   39   64     7   0.478    1.487   5.664
     remote           refid      st t when poll reach   delay   offset  jitter
==============================================================================
*203.0.113.156   203.0.113.70      4 u   35   64    17   0.450    2.164   5.077
^C
guest#
```

i. If necessary, re-enable the autoboot function of the guest domain.

```
primary# ldm set-variable auto-boot?=true guest
```

9. **If necessary, re-enable the functions that were disabled in step 1.**
For the autoboot function of the control domain, specify true for the OpenBoot PROM environment variable auto-boot?, and execute the setpparparam(8) command to re-enable the function. For startup of guest domains, execute the setpparmode(8) command to re-enable it.
Example: Physical partition is PPAR#0

```
XSCF> setpparparam -p 0 -s bootscript "setenv auto-boot? true" -y
XSCF> setpparmode -p 0 -m guestboot=on
```

10. **For a logical domain configuration, save logical domain configuration information.**
For details on how to check for a logical domain configuration, see "Checking between a logical domain configuration and the factory-default configuration."
Example: Saving logical domain configuration information under the name of "config_A"

```
primary# ldm ls -l
Omitted
primary# ldm ls-config
Omitted
primary# ldm remove-spconfig config_A
primary# ldm add-spconfig config_A
```

Checking between a logical domain configuration and the factory-default configuration

You can check whether the configuration is a logical domain configuration by using the showdomainconfig command.

(1) Logical domain configuration
    If a value other than factory-default is set at the parts indicated by "^", it is a logical domain configuration.

```
XSCF> showdomainconfig -p 0
PPAR-ID      :0
Booting config
 (Current)   :config_A
             ^^^^^^^^
 (Next)      :config_A
             ^^^^^^^^
--------------------------------------------------------------------------------
Index      :1
config_name :factory-default
domains      :1
date_created:-
--------------------------------------------------------------------------------
Index      :2
config_name :config_A
domains      :1
date_created:'2014-03-05 17:33:17'
```

(2) factory-default configuration

If factory-default is set at the parts indicated by "^", it is not a logical domain configuration but in the factory-default configuration.

```
XSCF> showdomainconfig -p 0
PPAR-ID      :0
Booting config
 (Current)   :factory-default
             ^^^^^^^^^^^^^^^
 (Next)      :factory-default
             ^^^^^^^^^^^^^^^
--------------------------------------------------------------------------------
Index      :1
config_name :factory-default
domains      :1
date_created:-
```

Notes on Time Zones

The time zones (regions/place names) supported by the XSCF can be changed to support the latest time zone information.
For any previously set time zone that the system cannot use anymore, 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 the Remote Power Management Function (RCIL)

- To use the remote power management function on XCP 2290 onwards, execute the setpacketfilters -c ipmi_port command to set the IPMI service.
  The SPARC M10 IPMI service is used only with the remote power management function.

  From XCP 2290 onwards, the IPMI service is disabled by default. To use the remote power management function, enable the IPMI service.

  For XCP 2280 or earlier, the IPMI service cannot be disabled. It is always enabled. If the firmware is updated from XCP 2280 or earlier to XCP 2290 or later, the IPMI service will remain enabled. Therefore, if the remote power management function is not used, disable the IPMI service. If the remote power management has been used, the function will still be available.

  The IPMI service can be set by executing the setpacketfilters -c ipmi_port command. For details on the setpacketfilters(8) command, see the *Fujitsu SPARC M12 and Fujitsu M10/SPARC M10 XSCF Reference Manual*.

- Do not register the same node with multiple remote power management groups. If remote power management is performed by registering a single node with multiple remote power management groups, the operation may not be as intended. With the setremotepwrmgmt(8) command, you cannot confirm whether a single node is registered with multiple remote power management groups. When creating or modifying management information files of remote power management groups, take care not to cause overlaps.

- Do not register an I/O node with multiple power control groups. If the same I/O node is set with multiple remote power management groups, and both of the conditions below are satisfied, the I/O node is turned on and off alternately.
  - setremotepwrmgmt -c enable is executed, and the remote power management function is enabled.

  - There is a power control group in which one or more host nodes are on, and there is a power control group in which all the host nodes are off.

  If you accidentally register an I/O node with multiple power control groups, use setremotepwrmgmt -c disable to disable remote power management first and then

use clearremotepwrmgmt to delete the power control group setting. After deletion, create a management information file of a remote power management group so that the I/O node is not registered with multiple groups, and then use setremotepwrmgmt -c config to register it again.

- If XCP 2080 or earlier is used together with a single SPARC M10 system that is connected to an external I/O device, do not use the remote power management function. The external I/O device may be erroneously powered off when the XSCF is reset.

- For a management file to set the remote power management function, use CR and LF, or LF as linefeed code.

- For a management file to set the remote power management function, you need to specify the MAC address regardless of the node type. Otherwise, the following error occurs when you execute the setremotepwrmgmt(8) command.
  [Example]

```
XSCF> setremotepwrmgmt -c config -u guest ftp://xx.xx.xx.xx/rpmgroup.csv
Password:
Download successful: 213Byte at 2103.000KB/s
Checking file...
The definition of [MACAddress] in [ftp://xx.xx.xx.xx/rpmgroup.csv] is invalid.
XSCF>
```

You need to set the MAC address regardless of the node type of the I/O node, master host node, host node, or remote power supply control unit. This is required even though the MAC addresses of some nodes are not set and left "blank" as described in "Chapter 3   Examples of Remote Power Management Configuration" in the *Fujitsu SPARC M12 and Fujitsu M10/SPARC M10 RCIL User Guide*.

Notes on Remote Storage

- These notes apply when Java Runtime Environment 8 Update 45 is used and, as described below, an automatic proxy configuration script (PAC file) is used in the Java network settings or by the browser being used. In this case, "The application cannot be run.", "Failed to validate certificate. The application will not be executed.", or another message appears, and the XSCF Remote Storage Server may fail to start.
  - When [Use browser settings] is selected in the Java network settings.
    - For Internet Explorer

      The [Use automatic configuration script] check box is selected in [Tools] - [Internet Options] - [Connections] - [LAN settings].
    - For Firefox

      [Automatic proxy configuration URL] is selected in [Tools] - [Options] - [Advanced] - [Network] - [Settings].
  - [Use automatic proxy configuration script] is selected in the Java network settings.

  To work around this problem, go to the [Java Control Panel] screen, select

[General] - [Network Settings] - [Use proxy server], and change the Java network settings.

- The remote storage cannot be connected even where a terminal has more than one network connection.
  In this case, a terminal can be connected to the remote storage if you disable network devices on the terminal that are not used for XSCF-LAN connection.

- If remote storage is connected through a VPN or other network that performs address translation, the error message "iscsiadm: no records found!" is output and the connection is disabled.
  Do not connect remote storage through a VPN or other network that performs address translation.

Notes on Resetting the XSCF

- The following warning message may be output to the control domain console.

```
PICL snmpplugin: cannot fetch object value (err=5, OID=<1.3.6.1.2.1.47.1.4.1>,
 row=0)
```

- If the cluster software is in use at the time, the following warning message is output to the logical domain console.

```
SA SA_xscf*''.so to test host *** failed
7240 Connection to the XSCF is refused. (node:*** ipadress:*** detail:***)
```

- If the rebootxscf(8) command is executed while remote storage is connected, access to the media encounters an error.

```
FRU: /BB#0/REMOTE_STORAGE
Msg: I/O device error detected

FRU: /BB#0/REMOTE_STORAGE
Msg: Boot process failed

FRU: /REMOTE_STORAGE
Msg: FCode informed error

FRU: /BB#1/REMOTE_STORAGE
Msg: A:sd1:sd:SCSI transport failed (DRIVE vendor=Fujitsu, product=Remote
Storage)
(compdev=c8t0d0)

FRU: /REMOTE_STORAGE
Msg: A:sd0:sd:Device Error(Media Error) (DRIVE vendor=Fujitsu, product=Remote
Storage)
(compdev=c5t0d0)
```

```
FRU: /BB#0/REMOTE_STORAGE
Msg: The Machine Administration detected a other hard disk failure.
```

Notes and Restrictions on iSCSI Booting of FUJITSU Storage ETERNUS Disk Storage Systems as the iSCSI Targets

Notes

These notes apply to firmware version V10L50 on FUJITSU Storage ETERNUS Disk Storage Systems. This setting is unnecessary for V10L60 and later.
To perform iSCSI boot on FUJITSU Storage ETERNUS Disk Storage Systems as the iSCSI targets, apply XCP 2280 or later for the XCP firmware, and perform the following procedure in advance.

1. **Perform the following steps to change OpenBoot PROM environment variable nvramrc.**
    a. Execute nvedit, and write nvramrc as shown below.

```
{0} ok nvedit
   0: set-random-tcp#
```

    b. Press the [Ctrl] + [C] keys to exit nvedit and return to the ok prompt.

    c. Execute nvstore to save the edited contents.

```
{0} ok nvstore
```

    d. Check whether nvramrc was written correctly.

```
{0} ok printenv nvramrc
nvramrc = set-random-tcp#
{0} ok
```

2. **Set the OpenBoot environment variable use-nvramrc? to true.**

```
{0} ok setenv use-nvramrc? true
use-nvramrc? = true
```

3. **Execute the reset-all command to restart OpenBoot PROM.**

```
{0} ok reset-all
```

To return the above setting to its original state, perform the following steps.

4. **Delete the set contents from the OpenBoot PROM environment variable nvramrc.**
   a. Execute nvedit, and delete "set-random-tcp#" from nvramrc.

```
{0} ok nvedit
0:
```

   b. Press the [Ctrl] + [C] keys to exit nvedit and return to the ok prompt.
   c. Execute nvstore to save the edited contents.

```
{0} ok nvstore
```

   d. Check whether the nvramrc setting was deleted correctly.

```
{0} ok printenv nvramrc
nvramrc =
{0} ok
```

5. **Set the OpenBoot environment variable use-nvramrc? to false.**
   If it has been set to true before the above step 2 was performed, this step is unnecessary.

```
{0} ok setenv use-nvramrc? false
use-nvramrc? = false
{0} ok
```

6. **Execute the reset-all command to restart OpenBoot PROM.**

```
{0} ok reset-all
```

Restrictions on Deferred Dump

If the memory fails, the following warning message is output, and the panic may persist, preventing deferred dump from being performed.

```
WARNING: Retained memory segment overlapped with degraded
memory.
```

[How to restore]
If this phenomenon persists, perform the following procedure.
- For the control domain
  1. **Execute the sendbreak command to stop the panic.**

```
XSCF> sendbreak -y -p [ppar_id]
```

2. **After stopping at the ok prompt, execute the clear-retained-memory command.**

```
{0} ok clear-retained-memory
```

3. **Execute the reset-all command to restart OpenBoot PROM.**

```
{0} ok reset-all
```

- For the guest domain

After stopping the guest domain with the ldm stop-domain command for Oracle VM Server for SPARC, execute the ldm start-domain command to start the guest domain.

Other Notes and Restrictions

Notes

- It may take a while for the service domain to start the virtual disk server (vds) or virtual switch (vsw). For this reason, at the time of guest domain boot, the wait time from the virtual disk/virtual network to vds or vsw is set as follows.
  - XCP 2221 or earlier: Maximum of 5 minutes
  - XCP 2230 or later: Maximum of 15 minutes

  If this wait time is exceeded, boot from the virtual disk/virtual network may fail.

  For example, suppose the system is with XCP 2230 or later and multiple disks are configured for the OpenBoot PROM environment variable boot-device. Under this condition, it may take up to 15 minutes to switch the boot path from the virtual disk to the next disk, or boot may fail if it takes more than 15 minutes.

- When the mode switch on the operation panel is set to Service mode, the power cannot be turned on by using the power switch on the operation panel. To turn on the power using the power switch on the operation panel, set the mode switch on the operation panel to the Locked mode position.

- To add the 64 GB memory, apply XCP 2090 or later.

- The maximum number of users who can concurrently connect to the XSCF via Telnet and SSH is as follows:
  - SPARC M10-1: 20 users
  - SPARC M10-4: 40 users
  - SPARC M10-4S (without crossbar box): 40 users
  - SPARC M10-4S (with crossbar box): 70 users

  If the maximum allowable number of users is exceeded, access is denied.

- XSCF-LAN is compliant with auto-negotiation. If you connect XSCF-LAN to a network device that is fixed to full-duplex mode, the XSCF-LAN communicates in

half-duplex mode according to the IEEE 802.3 protocol. This may slow down the speed of network communication or cause communication error. Be sure to set auto-negotiation for network devices to which you connect XSCF-LAN.

- Configuring a memory mirror setting by using the setupfru(8) command should be done when the physical partition (PPAR) to which the target system board (PSB) belongs is powered off.

- To display a man page, set TERM=vt100 for the terminal software.

- When configuring a physical partition (PPAR), do not set a BB-ID that does not exist in the system as the PPAR-ID.
  For example, if BB-IDs 00 and 01 exist in the system, you can set 00 or 01 as the PPAR-ID. If you set 02 as the PPAR-ID, the PPAR with PPAR-ID 02 will not be able to start.

- Among the information displayed by executing the showhardconf(8) command, the PCI Express (PCIe) card information of the guest domain will be reflected after Oracle Solaris of the corresponding guest domain has started.

- As of XCP 2032, the default value for the power save operation set by the setpparmode(8) command is changed from "enabled" to "disabled."

- When you execute the testsb(8) or diagxbu(8) command, a PPAR-ID of "PPAR#30" that does not exist may appear in an error log suspected area. This indicates that an error was detected on the system board (PSB) while diagnosing. The output PPAR-ID does not have any meaning.

- We recommend to connect the control domain console via the XSCF-LAN port. When a large amount of data is output by connecting to the control domain console via a serial port, the data may not be displayed properly.

- [SPARC M10-4S]
  The time taken for processing a command that displays the system configuration or status (such as showhardconf(8) command, showboards(8) command, and showpparstatus(8) command) depends on the number of SPARC M10-4S chassis or crossbar boxes that configure the system.

- [SPARC M10-4S]
  For a system configured with multiple chassis, chassis BB#01 or XBBOX#81 may become the master XSCF first.

- [SPARC M10-4S]
  It may take more time to restart the physical partition when hardware fails depending on system configuration.

- If you add a SPARC M10-4S to the SPARC M10-4S on which XCP 2032 is installed, update to the latest firmware in advance.

- When you execute the setsnmpvacm(8) command specifying createview as the operand, you cannot set an access restriction using the OID mask of MIB. When you execute the setsnmpvacm(8) command specifying createview as the operand, do not use the OID mask of MIB.

- If a takeover IP address has been set, the UDP packet sender IP address and Agent Address for the SNMP Trap of SNMPv1 are different. The IP address assigned to each XSCF-LAN (physical IP address) is stored as the UDP packet sender IP address, while the takeover IP address (virtual IP address) is stored as the Agent

Address.

- The device path of the I/O device that has been used changes if a CPU memory unit upper (CMUU) is added to add two CPUs when the I/O bus reconfiguration is enabled in SPARC M10-4 or SPARC M10-4S with two CPUs installed.
As for the ioreconfigure that can be specified by -m function of the setpparmode (8) command, leave it as the default, false, and disable the I/O bus reconfiguration function.

  If you enable the I/O bus reconfiguration function by specifying true to the ioreconfigure, it may be necessary to reinstall Oracle Solaris.

- With a logical domain running Oracle Solaris 11, updating to XCP 2050 or later allows you to have an increased maximum number of PCIe cards on one root complex (RC).
To install a PCIe card after updating to XCP 2050 or later, perform the steps below in the control domain.

  This example assumes that two sets of configuration information currently in use, ldm-set1 and factory-default, are stored.

  1. **Confirm the logical domain configuration information saved to the XSCF.**

  ```
  primary# ldm list-spconfig
  ldm-set1  [current]
  factory-default
  ```

  2. **Execute the following commands on all of the logical domains, including the control domain.**

     Specify the name of the logical domain for ldom.

  ```
  primary# ldm set-variable fix_atu=true ldom
  primary# ldm remove-variable fix_atu ldom
  ```

  3. **Store the updated configuration information for the logical domain again.**

     Delete the stored ldm-set1 and then store the information again.

  ```
  primary# ldm rm-spconfig ldm-set1
  primary# ldm add-spconfig ldm-set1
  ```

  4. **Restart all logical domains.**

- An XSCF user account name cannot be the same as an LDAP user name. In addition, an XSCF user account UID cannot be the same as an LDAP UID.

- When starting OpenBoot PROM, even if an error is detected with the GFX 550e graphics card (TechSource, PCIExpress Graphics Board), nothing may be output to the console.
The problem can be confirmed from the following error log output with the showlogs error command, which registers the faulty component (suspect component) as "UNSPECIFIED".

```
XSCF> showlogs error
Date: MMM DD hh:mm:ss JST 2014
 Code: 80000000-00ffff0000ff0000ff-030000010000000000000000
 Status: Alarm Occurred: MMM DD hh:mm:ss.sss JST 2014
 FRU: /UNSPECIFIED
 Msg: I/O device error detected
```

- [SPARC M10-4S]
  If cold replacement is performed on a system with several SPARC M10-4S and crossbar boxes, the XSCF may not start. Perform the following procedure depending on the target components for cold replacement.

  - When replacing crossbar boxes (XBBOX)

    Perform the following procedure.

    1. **Turn off the input power (AC OFF) of the target XBBOX.**

    2. **Replace the XSCF unit (XSCFU).**

       When performing this procedure, swap the microSD card in the old XSCF unit to the new XSCF unit, before replacing the XSCF unit itself.

    3. **Turn on the input power (AC ON) of the XBBOX.**

  - Perform the following procedure when replacing the following components that are mounted on the crossbar box (XBBOX):

    In the following cases, replacement of the microSD card is unnecessary. For details on maintenance, see the *Fujitsu M10-4/Fujitsu M10-4S/SPARC M10-4/SPARC M10-4S Service Manual*.

  - XSCF unit (XSCFU), crossbar unit (XBU), XSCF interface unit (XSCFIFU), crossbar backplane unit (XBBP), fan backplane unit (FANBP), operation panel (OPNL), power supply unit (PSU), fan (FAN)

  - Perform the following procedure when replacing SPARC M10-4S or CPU memory unit lower (CMUL):

    Execute the replacefru(8) command and then follow the maintenance menu to perform the replacement.

- [SPARC M10-4S]
  When maintenance is performed by either the replacefru(8) or the addfru(8) command, terminate the command using the "c" option. If the flashupdate(8) command is executed before terminating the above commands, in case of systems comprising of a number of SPARC M10-4S, automatic switchover to master XSCF may not be executed after firmware update is complete.

  [How to restore]

  After maintenance is completed using either the replacefru(8) or the addfru(8) command, use the "c" option to terminate the command. If switchover to the master XSCF is not performed after the completion of firmware update, execute the switchscf(8) command on the master XSCF command to switchover to the master XSCF.

- If XSCF reset or switchover is performed while you are performing an operation on the setting by using an XSCF shell or the XSCF Web, the setting may not be saved in XSCF. Use the XSCF shell or the XSCF Web to confirm that the setting is

saved after the XSCF reset or switchover has completed. If the setting is not saved, perform the setting again.

Restrictions

- At this point, no-mem, to be set with the -s option of the setpcl(8) command, is not supported.

- Alive monitoring between the XSCF and a Hypervisor is not supported. Alive monitoring between the XSCF and a Hypervisor cannot be enabled/disabled even by using the setpparmode(8) command.

- [SPARC M10-4S]
  Suppose that the XSCF was switched while connecting to the control domain console in the SPARC M10-4S that is composed of more than two chassis. In that case, connection to the control domain console may not be established until all the SPARC M10-4S chassis have been restarted if an attempt has been made to reconnect the control domain console to the switched master XSCF.

  If all XSCFs have not been rebooted due to an error in the XSCF, establish a connection to the control domain console again. Replace a failed XSCF or CPU memory unit lower (CMUL) if a connection cannot be established to the control domain console.

- [SPARC M10-4S]
  The poweroff(8) and reset(8) commands may not be executed normally if all XSCF have not been rebooted due to an error in a XSCF in the SPARC M10-4S that is composed of more than two chassis.

  To disconnect the power of a physical partition (PPAR), login to the control domain of the PPAR and execute the shutdown command on Oracle Solaris. Then, disconnect the power of the PPAR using the poweroff -f command on the XSCF firmware. The reset(8) command cannot be used in this state.

- Replacement of a crossbar box using the replacefru(8) command is not supported at present. For details on how to replace a crossbar box, see "Restrictions on Replacing a Crossbar Box" in "Chapter 6 Information on SPARC M10-4S Hardware."

- Addition of a crossbar box using the addfru(8) command is not supported at present. For details on how to add a crossbar box, see "Restrictions on Adding Expansion Rack 2" in "Chapter 6 Information on SPARC M10-4S Hardware."

- [SPARC M10-4S]
  If you power on all physical partitions (PPAR) in a system that has more than one PPARs with the poweron(8) command, the startup time taken when specifying power-on of PPAR is longer than the time taken for batch power-on by specifying -a.

- [SPARC M10-4S]
  If showhardconf -M is executed, it may not be possible to display one screen at a time if both of the conditions below are met. Do not execute showhardconf -M.

  - System configured with 2BB or more

  - One or more SPARC M10-4S units are subject to an XSCF reset by the rebootxscf(8) command, so they cannot communicate.

- [SPARC M10-1]

If firmware update to the version of XCP 2070 or earlier is executed when the physical partition (PPAR) is powered on, the logical domains may stop.

Be sure to execute firmware update when the physical partition (PPAR) is powered off. For details on this problem, see "RTIF2-131004-001" in "Problems Resolved in XCP 2070."

- If the version being used is XCP 2271 or earlier, the XSCF user account's user privilege, managed by the LDAP server which is specified by either by the setldap(8) command, or by specifying [XSCF] - [Settings] - [User Manager] - [LDAP] on the XSCF Web, cannot be set up with [XSCF] - [Settings] - [User Manager] - [Account] on the XSCF Web.
  Set up user privilege with the setprivileges(8) command on XSCF shell prompt.

- Neither the deleteuser(8) command nor the [Settings] - [User Manager] - [Account] menu on the XSCF Web can delete the user account of a user who is logged into the XSCF via SSH, Telnet, or XSCF Web. Any attempt to do so will result in an error. To delete the target user account, use the who(8) command or the [Settings] - [User Manager] - [Account] menu on the XSCF Web to confirm that the user account is not logged in to the XSCF, and then delete it.
  Likewise, neither the deleteuser(8) command nor the [Settings] - [User Manager] - [Account] menu on the XSCF Web can delete a user account for which the SNMP setting has been made with the setsnmp(8), setsnmpusm(8), or setsnmpvacm(8) command or the [SNMP] or [SNMP Security] menu of the XSCF Web. Any attempt to do so will result in an error. Before deleting the user account, execute the rebootxscf -a command to reset all the XSCFs.

XCP 2340 Problems and Workarounds

See "Problems That Might Occur With XCP 2340 and Workarounds" for information on problems that can occur with XCP 2340. See "Problems Resolved in XCP 2340" for information on problems resolved in XCP 2340.

Chapter 3

Information on Software

This chapter describes special instructions and problems concerning the SPARC M10 Systems software.

- Notes and Restrictions
- Problems With XCP and Workarounds
- Problems With Oracle Solaris and Workarounds

Notes and Restrictions

Notes on Internal SAS Disk Drives and Oracle Solaris MPxIO Settings

We recommend using an internal SAS disk of SPARC M10 systems with the Oracle Solaris MPxIO setting enabled.

Cause

It enhances redundancy because disk access continues even when the communication path between an internal SAS controller and an internal SAS disk is degraded due to a failure, etc.
Note that you can set MPxIO to enable by using the bundled tool from Enhanced Support Facility 5.0 or later.

Note - Only SPARC M10 systems sold by Fujitsu in Japan support Enhanced Support Facility (ESF).

Target drives

Whether you need to perform the Oracle Solaris MPxIO setting depends on the product name of the internal SAS disk or the SSD mounted in the SPARC M10 system, and the Oracle Solaris version, as shown in Table 3-1.

Table 3-1   Necessity of MPxIO Setting for an Internal SAS Disk or SSD

Product Name	Vendor Name	Necessity of MPxIO Setting		
Fujitsu/Oracle Model Name	Product Name	Oracle Solaris 10 1/13	Oracle Solaris 11.1	Oracle Solaris 11.2 or later
600GB SAS disk drive	TOSHIBA	Required	Required	Not required(*1)
SPME3A11*/ 7105508, 7106318 (*3) 7105571, 7106322 (*4)	MBF2600RC (*5) AL13SEB600 (*5) AL13SEB600AL14SE			
900GB SAS disk drive	TOSHIBA	Required	Required	Required
SPME3B11*/ 7111257, 7111260 (*3) 7111261, 7111262 (*4)	AL13SEB900 (*5) AL13SEB900AL14SE			
100GB SAS SSD	TOSHIBA	Required	Required	Not required(*1)
SPME3Y11*/ 7105509, 7106319 (*3) 7105572, 7106323 (*4)	MK1001GRZB (*5)			
200GB SAS SSD	TOSHIBA	Required	Required	Not required(*1)
SPME3Y21*/ 7105510, 7106320 (*3) 7105573, 7106324 (*4)	MK2001GRZB (*5)			
200GB SAS SSD	TOSHIBA	Required	Required	Required
SPME3Y22*/ 7107810, 7107814 (*3) 7107811, 7107815 (*4)	PX02SMF020 (*5)			
400GB SAS SSD	TOSHIBA	Required	Required	Required
SPME3Y31*/ 7107812, 7107816 (*3) 7107813, 7107817 (*4)	PX02SMF040 (*5)			
400GB SAS SSD	TOSHIBA	Required	Required	Required

Table 3-1   Necessity of MPxIO Setting for an Internal SAS Disk or SSD *(continued)*

Product Name	Vendor Name	Necessity of MPxIO Setting		
Fujitsu/Oracle Model Name	Product Name	Oracle Solaris 10 1/13	Oracle Solaris 11.1	Oracle Solaris 11.2 or later
SPME3Y32*/ 7115093, 7115094 (*3) 7115095, 7115096 (*4)	PX04SMB04FUJ400G (*5)			
When the internal hardware RAID is specified		Not required(*2)	Not required(*2)	Not required(*2)

*1 MPxIO is enabled by default of Oracle Solaris. So, you need not to perform the setting.
*2 Since the internal hardware RAID is not subject to the MPxIO setting, it does not require the setting.
*3 These are factory default drives.
*4 These are used for installation in the field.
*5 This is a product name set to the scsi_vhci.conf. Both of these 600 GB SAS disk drives need to be set.

Confirming the product name, the vendor name, and MPxIO state of the internal SAS disk or the SSD

Confirm the product name, the vendor name, and the device path name of the internal SAS disk or the SSD of the SPARC M10 system, and see Table 3-1 to determine whether you need to perform the MPxIO setting.
If MPxIO is already enabled, the character string "scsi_vhci" appears in the device path name of the internal SAS disk or the SSD.

- **When the MPxIO setting is enabled**
  In the following example, "scsi_vhci" appears in the device path name. So, the MPxIO setting is enabled.

```
# format
Searching for disks...done
AVAILABLE DISK SELECTIONS:
0. c0t50000394281b5310d0 <TOSHIBA-MBF2600RC-3706 cyl 64986 alt 2 hd 27 sec 668>
   Logical device path name  Vendor name  Product name
  /scsi_vhci/disk@g50000394281b5310
  Physical device path name
  /dev/chassis/FUJITSU-BBEXP. 500000e0e06d31bf/03N0_HDD00/disk
.....
```

- **When the MPxIO setting is disabled**
  In the following example, "scsi_vhci" does not appear in the device path name. So, the MPxIO setting is disabled.

```
# format
Searching for disks...done
AVAILABLE DISK SELECTIONS:
0. c2t50000394281B5312d0 <TOSHIBA-MBF2600RC-3706 cyl 64986 alt 2 hd 27 sec 668>
   Logical device path name  Vendor name  Product name
  /pci@8800/pci@4/pci@0/pci@0/scsi@0/iport@f/disk@w50000394281b5312,0
  Physical device path name
.....
```

Procedure for enabling MPxIO

Log in as a user with administrator privileges to make this setting.

1. **Add the information (the vendor name and product name) of a disabled internal SAS disk or SSD.**
   - **For Oracle Solaris 11 and later**

   Add the information (the vendor name and the product name) for the disabled internal SAS disk or SSD to the scsi_vhci.conf file in the /etc/driver/drv folder.

   If the /etc/driver/drv folder does not have the scsi_vhci.conf file, copy and use /kernel/drv/scsi_vhci.conf.

   For details on how to set the scsi_vhci.conf file, see the online manual.

   ```
   scsi-vhci-failover-override ="TOSHIBA MBF2600RC", "f_sym",
                                 Vendor name Product name
                                 "TOSHIBA AL13SEB600", "f_sym";
                                 Vendor name Product name
   ```

   - **For Oracle Solaris 10**

   Add the information (the vendor name and product name) of the disabled internal SAS disk or SSD to the /kernel/drv/scsi_vhci.conf file.

   ```
   device-type-scsi-options-list ="TOSHIBA MBF2600RC", "sym-opt",
                                   Vendor name Product name
                                   "TOSHIBA AL13SEB600", "sym-opt";
                                   Vendor name Product name

   sym-opt = 0x1000000;
   ```

2. **Enable MPxIO with the stmsboot command.**
   For details on the stmsboot command, see the online manual.

   ```
   # stmsboot -D mpt_sas -e
   ```

   If a message as shown below is output as the execution result of the command, continue by executing the stmsboot -u command.

```
# stmsboot -D mpt_sas -e
STMS is already enabled. No changes or reboots needed
# stmsboot -u
```

Executing the stmsboot command restarts the system of the domain, and enables MPxIO of the internal SAS disk or the SSD. After the restart, the target device path name is changed.

You need to change the device path name in application programs, etc., if they specify the name directly.

3. **Confirm that MPxIO is enabled.**
   If MPxIO is enabled, the character string "scsi_vhci" appears in the device path name.

```
# format
Searching for disks...done
AVAILABLE DISK SELECTIONS:
0. c0t50000394281b5310d0 <TOSHIBA-MBF2600RC-...>
   Logical device path name  Vendor name   Product name
  /scsi_vhci/disk@g50000394281b5310
  Physical device path name
```

If the ZFS system volume is installed in an internal SAS disk or SSD of a multipath type (MPxIO), confirm that the volume status is normal.

```
# /usr/sbin/zpool status
...
```

Notes on Updating a SPARC M10 System to Oracle Solaris 11.2

Notes on enabling MPxIO

The device path name of an internal SAS disk or an SSD may be changed when Oracle Solaris 11.1 is updated to Oracle Solaris 11.2 or later. You can boot Oracle Solaris even when the device path name is changed. However, if any application or backup software specifies the device path name of the internal SAS disk or the SSD directly, the device path may not be available for reference.

Cause

The cause of this is that updating from Oracle Solaris 11.1 to Oracle Solaris 11.2 changes the default MPxIO setting of the internal SAS disk or the SSD from disabled to enabled. For the target disks, see Table 3-2. For an example of a device path change, see Table 3-3.

Table 3-2   Default MPxIO Setting on an Internal SAS Disk and SSD

Product Name	Vendor Name	Default MPxIO Setting		
Fujitsu/Oracle Model Name	Product Name	Oracle Solaris 10 1/13	Oracle Solaris 11.1	Oracle Solaris 11.2 or Later
600GB SAS disk drive	TOSHIBA	Disabled	Disabled	Enabled
SPME3A11*/ 7105508, 7106318 (*2) 7105571, 7106322 (*3)	MBF2600RC AL13SEB600 AL13SEB600AL14SE			
900GB SAS disk drive	TOSHIBA	Disabled	Disabled	Disabled
SPME3B11*/ 7111257, 7111260 (*2) 7111261, 7111262 (*3)	AL13SEB90 AL13SEB900AL14SE			
100GB SAS SSD	TOSHIBA	Disabled	Disabled	Enabled
SPME3Y11*/ 7105509, 7106319 (*2) 7105572, 7106323 (*3)	MK1001GRZB			
200GB SAS SSD	TOSHIBA	Disabled	Disabled	Enabled
SPME3Y21*/ 7105510, 7106320 (*2) 7105573, 7106324 (*3)	MK2001GRZB			
200GB SAS SSD	TOSHIBA	Disabled	Disabled	Disabled
SPME3Y22*/ 7107810, 7107814 (*2) 7107811, 7107815 (*3)	PX02SMF020			
400GB SAS SSD	TOSHIBA	Disabled	Disabled	Disabled
SPME3Y31*/ 7107812, 7107816 (*2) 7107813, 7107817 (*3)	PX02SMF040			
400GB SAS SSD	TOSHIBA	Disabled	Disabled	Disabled
SPME3Y32*/ 7115093, 7115094 (*2) 7115095, 7115096 (*3)	PX04SMB04FUJ400G			

*1 Since the internal hardware RAID is not subject to the MPxIO setting, it does not require the setting.
*2 These are factory default drives.
*3 These are used for installation in the field.

Table 3-3   Examples of the Device Path Change Before and After MPxIO Enabling

	Device Path Name Before MPxIO is Enabled	Device Path Name After MPxIO is Enabled
Physical device path name	/pci@8800/pci@4/pci@0/pci@0/scsi@0/iport@ f/disk@w50000394281b5312,0	/scsi_vhci/disk@g50000394281b5310

Table 3-3   Examples of the Device Path Change Before and After MPxIO Enabling *(continued)*

	Device Path Name Before MPxIO is Enabled	Device Path Name After MPxIO is Enabled
Logical device path name	/dev/rdsk/c2t50000394281B5312d0	/dev/rdsk/c0t50000394281b5310d0

Note that a device path name is not changed if MPxIO of an internal SAS disk or an SSD of the SPARC M10 system is enabled manually before updating to Oracle Solaris 11.2.

Corrective action

Take the following actions after updating to Oracle Solaris 11.2.
- **When the physical device path name can be changed**
  Confirm the physical device path name by using the procedure shown in "Procedure for confirming the device path". Change the device path of the internal SAS disk or SSD directly specified in backup software or application programs to the confirmed device path name.
- **When the physical device path name cannot be changed**
  Execute the following command and forcibly disable the MPxIO setting of the internal SAS disk and SSD.

```
# stmsboot -D mpt_sas -d
```

"Procedure for confirming the device path"

You can confirm the following items by using the procedure below: the device path name, the vendor name, the product name, and the enabling/disabling state of MPxIO of an internal SAS disk or SSD on SPARC M10 systems. If MPxIO is already enabled, the character string "scsi_vhci" appears in the physical device path name of the internal SAS disk or SSD.

- **Display example when MPxIO for an internal disk is enabled**
  The physical device path name includes the character string "scsi_vhci". So, MPxIO is enabled.
  The format command omits a part of the logical device path name to display. The actual name of the logical device path is the path name with "/dev/rdsk" added.

```
# format
Searching for disks...done
AVAILABLE DISK SELECTIONS:
0. c0t50000394281b5310d0 <TOSHIBA-MBF2600RC- 3706 cyl 64986 alt 2 hd 27 sec 668>
   Logical device path name  Vendor name  Product name
/scsi_vhci/disk@g50000394281b5310
Physical device path name
/dev/chassis/FUJITSU-BBEXP. 500000e0e06d31bf/03N0_HDD00/disk
```

- **Display example when MPxIO for an internal disk is not enabled**
  The physical device path name does not include the character string "scsi_vhci". So, MPxIO is disabled.
  The format command omits a part of the logical device path name to display. The

actual name of the logical device path is the path name with "/dev/rdsk" added.

```
# format
Searching for disks...done
AVAILABLE DISK SELECTIONS:
0. c2t50000394281B5312d0 <TOSHIBA-MBF2600RC-3706 cyl 64986 alt 2 hd 27 sec 668>
   Logical device path name  Vendor name  Product name
/pci@8800/pci@4/pci@0/pci@0/scsi@0/iport@f/disk@w50000394281b5312,0
Physical device path name
/dev/chassis/FUJITSU-BBEXP. 500000e0e06d31bf/03N0_HDD00/disk
```

Notes on boot switching by beadm

Boot environment switching with the beadm command or with the pkg command may fail with the output of an error message where Oracle Solaris 11.1 or later is installed in the internal SAS disk or the SSD.

- **Message example 1**

```
# beadm activate S11U1SRU20B04-z_stress-2.10-1
Error while accessing "/dev/rdsk/c2t500003942823F352d0s0":
No such file or directory
Unable to activate S11U1SRU20B04-z_stress-2.10-1.
Error installing boot files.
```

- **Message example 2**

```
# beadm activate S11U1SRU20B04-z_stress-2.10-1
....
Error while accessing "/dev/rdsk/c2t500003942823F352d0s0":
No such file or directory
Unable to activate S11U1SRU20B04-z_stress-2.10-1.
Error installing boot files.
....
```

Cause

This occurred because the MPxIO device path is not properly inherited by beadm or pkg when the internal SAS disk or SSD is made into a multipath type (MPxIO).

Corrective action

Execute the following command, and then execute the boot environment switching command again.

```
# /usr/sbin/zpool status
```

Notes on Support for Disks With an EFI (GPT) Label

- The default disk label that is effective when Oracle Solaris is installed has changed from VTOC (SMI) to EFI (GPT). If you need a disk with a VTOC (SMI) label, execute the format -e command of Oracle Solaris to apply the VTOC (SMI) label and then install Oracle Solaris. For details on the format command, see the Oracle Solaris Reference Manual.
  In addition, be sure to select [Use a slice on the disk] for the [Solaris slice] screen on the Oracle Solaris installation menu to ensure that the disk is VTOC (SMI) labeled.

```
--------------------------------------------------------------------------
                  Solaris Slices: 6.0GB unknown Boot

Oracle Solaris can be installed on the whole disk or a slice on the disk.

The following slices were found on the disk.

Slice        #   Size (GB) Slice        #   Size (GB)
----------------------- -----------------------
Unused       0       0.1 Unused       5       0.0
Unused       1       0.1 rpool        6       5.7
Unused       3       0.0 Unused       7       0.0
Unused       4       0.0 backup       2       6.0

                  Use the whole disk
                Use a slice on the disk

Esc-2_Continue Esc-3_Back Esc-6_Help Esc-9_Quit
--------------------------------------------------------------------------
```

- If an EFI (GPT) labeled disk is used, Oracle Solaris booting from a disk more than 2 TiB that is treated as a virtual disk is not supported.
- If an EFI (GPT) labeled disk is used in versions prior to XCP 2330, any second GPT header is not supported on a virtual disk.

Notes on Oracle VM Server for SPARC

- If logical domains are reconfigured by Oracle VM Server for SPARC or if the guest domain is reset with the XSCF firmware's reset(8) command after executing the ldm unbind-domain/ldm bind-domain command and before executing the ldm add-spconfig command, a guest domain other than what had been specified may be reset. Or, the specified guest domain is not reset. Save a configuration of the logical domain with the ldm add-spconfig command. If you reset the guest domain before saving it, execute the ldm stop-domain command from the control

domain, not from XSCF.

- If you specify a logical domain configuration for next time you start, use the ldm set-config command in place of ldm add-spconfig -r.
  If you use the ldm add-spconfig -r command to specify a logical domain configuration for next time you start, and operate a guest domain with the reset(8) command of the XSCF firmware, another guest domain may be reset.

- Be sure to start the ldmd service (svc:/ldoms/ldmd:default) of the control domain.

- A boot disk with an EFI GPT disk label is supported by the following systems: SPARC M10 systems to which XCP 2230 or later is applied and SPARC T-series or M-series systems to which SysFW 8.4 or SysFW 9.1 or later is applied. However, SPARC M10 systems to which XCP 2221 or earlier is applied do not support a boot disk with an EFI GPT disk label. Therefore, do not migrate to a SPARC M10 system to which XCP 2221 or earlier is applied from a SPARC M10 system to which XCP 2230 or later is applied or a SPARC T-series or M-series to which SysFW 8.4 or SysFW 9.1 or later is applied.
  You can determine whether the boot disk is EFI GPT labeled by executing the devinfo command of Oracle Solaris on the raw device of the boot disk.

  - With an EFI GPT disk label

```
# devinfo -i /dev/rdsk/c2d0s0
/dev/rdsk/c2d0s0          0        0       73728    512      2
```

  - Without an EFI GPT disk label

```
# devinfo -i /dev/rdsk/c1d0s0
devinfo: /dev/rdsk/c1d0s0: This operation is not supported on EFI labeled
devices
```

- The ldm list-rsrc-group, remove-core -g, and ldm remove-memory -g commands of Oracle VM Server for SPARC 3.2 are not supported. For details, see the *Oracle VM Server for SPARC 3.2 Administration Guide.*

- From Oracle VM Server for SPARC 3.2 onwards, you can allocate memory to a logical domain in units of 256 MB if the dynamic reconfiguration of the physical partitions (PPAR DR) feature is enabled by the XSCF firmware. On the other hand, if the PPAR DR feature is disabled, you can allocate memory in units of 4 MB.

- Suppose that a system disk in a physical partition (PPAR)(PPAR #A) is switched to a system disk that has been used for another PPAR (PPAR #B), in a system with Oracle VM Server for SPARC 3.1 or later and XCP 2230 or later. The PPAR #A domain configuration information saved in the XSCF may be overwritten on the PPAR #B domain configuration information.
  To switch the system disk to the system disk that was used with the other PPAR and boot from the new system disk, uninstall Oracle VM Server for SPARC from the system disk prior to this switching. After the switching is completed, reinstall Oracle VM Server for SPARC on the system disk.

  The same procedure is needed when using the system disk connected to another unit or when the saved domain configuration information in the XSCF is restored using the restoreconfig(8) command.

- Suppose that you deleted a system board by executing dynamic reconfiguration of physical partitions (PPAR DR), in a system with Oracle VM Server for SPARC 3.3 or later. Then, a CPU socket constraint in the degraded state may be added to each logical domain. This is not a problem but an operation for saving the use status of the CPU sockets before PPAR DR execution.
  If the CPU socket constraint in the degraded state appears for a logical domain for which the CPU socket constraint is not set, ignore this constraint.

  For a logical domain that uses the CPU socket constraint, the execution of PPAR DR places the CPU socket constraint in the degraded state. Also, resources not specified with the CPU socket constraint may be assigned to the domain.

  When replacing or otherwise working on a system board in response to a fault, first add the system board. Then, you can execute the ldm set-socket --restore degraded command to restore the CPU socket constraint. If you are only deleting the system board, execute the ldm set-socket command as required to set the CPU socket constraint again.

  For details on the CPU socket constraint, see "8.14   Managing Logical Domain Resources Associated with CPU Sockets" in the *Fujitsu SPARC M12 and Fujitsu M10/SPARC M10 System Operation and Administration Guide*.

  - Before system board deletion

```
# ldm list-socket
CONSTRAINTS
SOCKET
    TENANT  VCPUS CORES SOCKET_ID GROUP
    primary 8     4     4         /BB1
      :
```

  - After system board deletion

```
# ldm list-socket
------------------------------------------------------------------------------
Notice: the system is running a degraded configuration because some
required resources were removed by Physical DR.
------------------------------------------------------------------------------
CONSTRAINTS
    DOMAIN              SOCKET_ID       STATE
    primary* (degraded) 4              active
    dom00* (degraded)   0, 3, 4, 5, 6  active
SOCKET
    TENANT  VCPUS CORES SOCKET_ID GROUP
    primary 8     4     4         /BB1
      :
------------------------------------------------------------------------------
```

- In Oracle VM Server for SPARC 3.3 or later, when the logical domain configuration has been restored by the ldm init-system command, resource binding may fail even if the CPU socket constraint is not set. Then, the following message is output. [Example]

```
# ldm bind-domain XXXX
Not enough free memory in specified FJ sockets to meet the request.
Domain XXXX has FJ socket resource constraints for recovery.
Use 'ldm set-socket socket_id= XXXX' to clear.
```

If the above message has been output, clear the CPU socket constraint with the ldm set-socket command as instructed in the message. Then, try again to bind the resources.

[Example]

```
# ldm set-socket socket_id= XXXX
# ldm bind-domain XXXX
```

- When using the vHBA (Virtual SCSI Host Bus Adapters) function assigned to a guest domain, set the guest domain auto-boot invalidity, and then save the updated logical domain configuration information.
  [How to set]

```
primary# ldm set-variable auto-boot\?=false domain-name
primary# ldm add-spconfig config-name
```

Notes on Live Migration of Oracle VM Server for SPARC

- If you execute the ldm migrate-domain command with Oracle VM Server for SPARC for live migration, the following problems occur with the XSCF.
  - If you execute the showdomainstatus(8) command, "Unknown" is the status displayed for the migrated guest domain.
    If you execute the ldm add-spconfig command from the migrated control domain to save configuration information, the status will be displayed normally by the showdomainstatus(8) command.

  - After live migration is executed, if showdomainstatus(8) is then executed at the migration source, "Host stopped" is the status displayed for the migrated and non-existent guest domain.

  - When a physical partition (PPAR) is powered off by the poweroff(8) command, not all of the guest domains may be shut down correctly.

  - When a guest domain is reset by the reset(8) command, a guest domain other than the specified one may be reset. If you reset the guest domain, execute from the guest domain, and not from XSCF.

  - If SNMP is set, the name of the guest domain in trap notification may be incorrect.

- The migration with the ldm migrate-domain command is not supported if the logical domain at the migration source is in the OpenBoot PROM state.
  Perform migration with the ldm migrate-domain command after changing the

logical domain at the migration source to either of the following states (CR 15858731):

- Stopped state (bound state)

- State where Oracle Solaris is running

■ Before executing live migration, check the physical partition containing the logical domains targeted by the live migration. Check whether Oracle Solaris 11.3 or later is installed on any logical domains (except the control domain) and Oracle Solaris kernel zones in the physical partition.
For every logical domain and Oracle Solaris kernel zone that has Oracle Solaris 11.3 or later installed, perform the following steps before executing live migration.

1. **Add the following line to the /etc/system file.**

```
set uhrt_enable = 0x0
```

2. **Reboot the logical domain or Oracle Solaris kernel zone.**

■ The "sparc64-class1" value of the cpu-arch property is being supported from Oracle VM Server for SPARC 3.1.1 onwards. For details on the cpu-arch property and its values, see the *Oracle VM Server for SPARC Reference Manual* for the version used.

■ The value of the cpu-arch property which supports live migration, differs according to the category of the operation mode of the CPUs on the physical partition and the version of Oracle VM Server for SPARC. Refer to the following table. For details on CPU operational modes of physical partitions, see "7.2.1 CPU Mounted on a Physical Partition and CPU Operational Mode" in the *Fujitsu SPARC M12 and Fujitsu M10/SPARC M10 System Operation and Administration Guide*.

Table 3-4   cpu-arch Property Values That Support Live Migration (on Oracle VM Server for SPARC 3.1.1 or Later)

Migrate From	Migrate To Run on SPARC64 X+	Run on SPARC64 X Compatible Run on SPARC64 X
Run on SPARC64 X+	generic, native, sparc64-class1	generic, sparc64-class1
Run on SPARC64 X compatible Run on SPARC64 X	generic, sparc64-class1	generic, native, sparc64-class1

Table 3-5   cpu-arch Property Values That Support Live Migration (on Oracle VM Server for SPARC 3.1 or 3.1.0.1)

Migrate From	Migrate To Run on SPARC64 X+	Run on SPARC64 X Compatible Run on SPARC64 X
Run on SPARC64 X+	generic, native	generic
Run on SPARC64 X compatible Run on SPARC64 X	generic	generic, native

Table 3-6   cpu-arch Property Values That Support Live Migration (on Oracle VM Server for SPARC 3.0)

Migrate From \ Migrate To	Run on SPARC64 X+	Run on SPARC64 X Compatible Run on SPARC64 X
Run on SPARC64 X+	native	none
Run on SPARC64 X compatible Run on SPARC64 X	none	generic, native

- For the cpu-arch property values that enable live migration between SPARC M12 and SPARC M10 systems, see Table 3-7.

Table 3-7   cpu-arch Property Values That Enable Live Migration Between SPARC M12 and SPARC M10 Systems

Migrate From \ Migrate To	SPARC M12	SPARC M10
SPARC M12	generic sparc64-class1 native	generic sparc64-class1
SPARC M10	generic sparc64-class1	generic sparc64-class1 native(*1)

*1 For details, see Table 3-4, Table 3-5, and Table 3-6.

To perform a live migration of a logical domain with cpu-arch=sparc64-class1 between a SPARC M12 system and a SPARC M10 system, perform the following procedure.

1. **Add the following lines to the /etc/system file on the logical domain.**

```
set enable_1ghz_stick = 1
set uhrt_enable=0x0
```

2. **Reboot the logical domain with the above settings.**

Note - If both of the following conditions are met, you do not need to perform the procedure.
- Oracle VM Server for SPARC 3.5 or later is installed on the control domain of the SPARC M10.
- SRU 11.3.23.5.0 or later is installed on the logical domain.

- When executing live migration of the domain with the kernel zone operating, from a SPARC M10 system with XCP 2230 or newer, the following output is displayed, and live migration fails.

```
# ldm migrate-domain ldg1 root@target-name
Target Password:
Failure occurred while preparing domain ldg1 for suspend
operation
Live migration failed because Kernel Zones are active.
Stop Kernel Zones and retry.
Timeout waiting for domain ldg1 to suspend
Domain Migration of domain ldg1 failed, domain suspend failure.
Domain Migration of LDom ldg1 failed
```

To execute live migration of a domain with kernel zone operating, stop the kernel zone beforehand.

- Live migration from a SPARC M10 system with XCP 2210 or newer, to another SPARC M10 system with XCP 2092 or older fails and produces the following error message:

```
primary# ldm migrate ldg1 root@target-name
Target Password:
Domain ldg1 is using features of the system firmware that are not supported in
 the version of the firmware running on the target machine.
Domain Migration of LDom ldg1 failed.
```

When performing live migration from a SPARC M10 system with XCP 2210 or newer, to another SPARC M10 system, make sure to update the XCP firmware of the target system to XCP 2210 or newer.

- Refer to the following table to determine the feasibility of performing a live migration based on the version of the firmware.

Table 3-8   Versions of the Firmware That Support Live Migration

Migrate To	SPARC M12	SPARC M10	SPARC M10	SPARC M10	SPARC T-series M-series	SPARC T-series M-series
Migrate From		XCP 2230 or Later	XCP 2210 or Later and Earlier Than XCP 2230	XCP 2092 or Earlier	SysFW 8.4 or Later	SysFW 8.3 or Earlier
SPARC M12	Available	Available(*2)	Available(*3)	Not available	Available(*3)	Not available
SPARC M10 (XCP 2230 or later)	Available(*4)	Available	Available(*6)	Not available	Available(*6)	Not available
SPARC M10 (XCP 2210 or later and earlier than XCP 2230)	Available(*4)	Available	Available	Not available	Available(*6)	Available(*6)
SPARC M10 (XCP 2092 or earlier)	Available(*4)	Available	Available	Available	Available(*6)	Available(*6)

Migrate To	SPARC M12	SPARC M10	SPARC M10	SPARC M10	SPARC T-series M-series	SPARC T-series M-series
Migrate From		XCP 2230 or Later	XCP 2210 or Later and Earlier Than XCP 2230	XCP 2092 or Earlier	SysFW 8.4 or Later	SysFW 8.3 or Earlier
SPARC T-series M-series(*1) (SysFW 8.4 or later)	Available(*5)	Available(*6)	Available(*6)	Not available	Available	Not available
SPARC T-series M-series(*1) (SysFW 8.3 or earlier)	Available(*5)	Available(*6)	Available(*6)	Not available	Available	Available

*1 It is a system like SPARC M5/M6 which supports Oracle VM Server for SPARC.
*2 Only when Oracle VM Server for SPARC 3.5 or later is installed on the control domain at the migration source, live migration is possible.
*3 Only when Oracle VM Server for SPARC 3.5 or later is installed on the control domain at the migration source and cpu-arch=generic is set, live migration is possible.
*4 Only when Oracle VM Server for SPARC 3.5 or later is installed on the control domain at the migration destination, live migration is possible.
*5 Only when Oracle VM Server for SPARC 3.5 or later is installed on the control domain at the migration destination and cpu-arch=generic is set, live migration is possible.
*6 Live migration is possible only for cpu-arch=generic.

- When a live migration is performed between a SPARC M12 system and a SPARC M10 system, the uptime of a logical domain may not be displayed correctly.

    [Example]
    UPTIME of a logical domain displays 6m for a SPARC M12 system.

```
M12# ldm list-domain
NAME            STATE       FLAGS    CONS    VCPU   MEMORY   UTIL   NORM   UPTIME
primary         active      -n-cv-   UART    24     8G       0.8%   0.2%   21d 5h
22m
guest           active      -n----   5000    8      8G       0.6%   0.6%   6m
```

    After a live migration is performed, UPTIME of the logical domain displays 1h11m for the SPARC M10 system.

```
M10# ldm list-domain
NAME            STATE       FLAGS    CONS    VCPU   MEMORY   UTIL   NORM   UPTIME
primary         active      -n-cv-   UART    8      8G       0.1%   0.1%   4h 18m
guest           active      -n----   5000    8      8G       0.0%   0.0%   1h 11m
```

Notes on a Case When Recovery Mode of Oracle VM Server for SPARC is Enabled

- Suppose that you add a system board using dynamic reconfiguration of physical partitions in the condition where the domain configuration has been recovered in the degraded configuration. The added resource is not allocated automatically to any logical domain. Allocate the added resource manually. Alternatively, execute the ldm set-spconfig command to select the original domain configuration and then reboot the physical partition using the poweron(8) and poweroff(8) commands.

- Suppose that you delete a system board (PSB) using the deleteboard(8) command where the version of Oracle VM Server for SPARC is earlier than 3.2 while the physical partition (PPAR) is powered on after the domain configuration is recovered in the degraded configuration. This deleteboard(8) command may fail. After a domain configuration is recovered in the degraded configuration, do not delete a system board using dynamic reconfiguration of physical partitions.

- Suppose the firmware is updated to XCP 2230 or later and the recovery mode supported in Oracle VM Server for SPARC 3.1.1.1 or later is enabled. If the physical partition is started with the logical domain configuration information created with XCP 2221 or earlier after those operations, the following message may be output to the console of the physical partition.

```
warning: Configuration 'xxxx' could not be imported from the
system controller.
```

This is because the recovery mode of the logical domain configuration information created with XCP 2221 or earlier is not enabled. Execute the ldm add-spconfig command of Oracle VM for SPARC on the control domain and save the logical domain configuration information.

Support for the Acceleration of Encryption Methods by SPARC M10 Systems

SPARC M10 systems provide acceleration for some of the encryption methods supported by Oracle Solaris 11.
The following table lists the encryption methods for which SPARC M10 systems support acceleration.

Table 3-9   Support for the Acceleration of Encryption Methods

Encryption Method	Providing OS
RSA	Oracle Solaris 11.2 (*1)
DSA	Oracle Solaris 11.2 (*1)
DES	Oracle Solaris 11.1

Table 3-9   Support for the Acceleration of Encryption Methods *(continued)*

Encryption Method	Providing OS
3DES	Oracle Solaris 11.1
AES	Oracle Solaris 11.1
DH	Oracle Solaris 11.2 (*1)
SHA1	Oracle Solaris 11.1
SHA256	Oracle Solaris 11.1
SHA384	Oracle Solaris 11.1
SHA512	Oracle Solaris 11.1
SHA224	Oracle Solaris 11.1

*1 These methods are further improved in function in SPARC64 X+.

Notes on a Case Where OpenSSL is Used

Oracle Solaris provides accelerated cryptographic libraries for SPARC M10 systems. These libraries can be used by using the PKCS11 engine of OpenSSL. For details, see the man pages openssl(5), engine(3openssl), and evp(3openssl).

Please note:

- The PKCS11 engine is the only way in OpenSSL to obtain the acceleration of cryptographic functions from the encryption arithmetic unit of the SPARC64 X+/SPARC64 X processor.

- The implementation of PKCS11 engine for OpenSSL in Oracle Solaris requires the enabling of EVP model for digest and encryption methods supported by engine.
  - The following digest methods have been optimized for the SPARC64 X+/SPARC64 X processor:
    SHA1, SHA224, SHA256, SHA384, SHA512

  - The following encryption methods have been optimized for the SPARC64 X+/SPARC64 X processor:
    DES-CBC, DES-EDE3-CBC, DES-ECB, DES-EDE3
    AES-128-CBC, AES-192-CBC, AES-256-CBC
    AES-128-ECB, AES-192-ECB, AES-256-ECB
    AES-128-CTR, AES-192-CTR, AES-256-CTR

  Here is an example on calling the accelerated version of AES-256-CBC method on SPARC64 X+/SPARC64 X processor:

```
# openssl speed -engine pkcs11 -evp AES-256-CBC
```

  - The following public key encryption methods have been optimized for the SPARC64 X+/SPARC64 X processor from Oracle Solaris 11.2.

RSA512, RSA1024, RSA2048

DSA512, DSA1024, DSA2048

The command in the following example invokes the RSA2048 method optimized for the SPARC64 X+/SPARC64 X processor.

```
# openssl speed -engine pkcs11 rsa2048
```

- To use the optimized digest method or encryption method in the PKCS11 engine with an application using the OpenSSL library (libssl, libcrypto), enable the EVP interface explained in evp(3openssl).

Notes and Restrictions on Oracle Solaris 11.3

Notes

- There are notes on live migration of Oracle VM Server for SPARC. See "Notes on Live Migration of Oracle VM Server for SPARC."
- There are notes on dynamic reconfiguration of physical partitions. See "2.5.2 Considerations in System Operation for Dynamic Reconfiguration" in the *Fujitsu SPARC M12 and Fujitsu M10/SPARC M10 Domain Configuration Guide*.
- Live migration of an Oracle Solaris kernel zone configured with ZOSS NFS may cause bug 20697332 in Oracle Solaris to occur. For details on bug 20697332, see the *Oracle Solaris 11.3 Release Notes*. This issue has been resolved in SRU 11.3.7.5.0 and later.

Restrictions

The Boot Pools function is not supported at present.

Notes on the Remote Maintenance Service

Note - Enhanced Support Facility (ESF) and Remote Customer Support System (REMCS) are supported only for SPARC M10 systems sold within Japan by Fujitsu.

This section describes notes when using the remote maintenance service. See the *Enhanced Support Facility User's Guide for REMCS* for how to set and use REMCS.

Before setting the remote maintenance service

To use the remote maintenance service with SPARC M10 Systems, you must perform settings for the REMCS agent function by using XSCF Web. In addition, the REMCS agent uses time zone information of XSCF. Perform the following settings in advance with the XSCF shell:

- Setting necessary for using the XSCF Web, such as enabling the HTTPS setting
- Setting the time zone for the XSCF

After completing the above settings, perform settings for the REMCS agent function by using the XSCF Web.
For details on the XSCF Web settings and time zone settings, see the *Fujitsu SPARC M12 and Fujitsu M10/SPARC M10 System Operation and Administration Guide*.

Time zone for the REMCS agent function

The REMCS agent uses the time zone currently set for the system. For this reason, when you change the system time zone with XSCF, set the periodical connection schedule again to update the information of REMCS center.

Notes on SNMP

■ When using the SNMPv3 agent, after setting up the authentication protocol and the encryption protocol using the setsnmp(8) command, be sure to set up User-based Security Model (USM) management information using the setsnmpusm(8) command and View-based Access Control Model (VACM) management information using the setsnmpvacm(8) command. Specification of the authentication protocol and the encryption protocol is required in the SNMPv3 agent setup process. Moreover, the password, set up when executing the setsnmp(8) and setsnmpusm(8) commands, will also be necessary.

■ If a server, on which the SNMP manager is not running, is registered as the inform trap host of SNMPv3, execution of setsnmp(8), setsnmpusm(8) or setsnmpvacm(8) commands may output the "Agent restart failed" message. This message is output when there is an abnormality in the restarting of the SNMP agent, but as the SNMP agent works properly even if this messages is output, it has no effect on the system. Register the trap host after the SNMP manager had been started.

■ If the setsnmp(8) command is executed with the "addtraphost" or the "addv3traphost" operands and a trap host is registered with the host name consisting of 16 or more characters, the UDP address of the trap that is reported to the trap host, becomes the IP address that is assigned to the XSCF-LAN (physical IP address), instead of the takeover IP address (virtual IP address). This symptom occurs when a takeover IP address is set up.
If the host name of the trap host consists more than 16 characters, register the trap host with its IP address, not its host name.

[Workaround]

If a host name with more than 16 characters has already been registered, execute the setsnmp(8) command with either the "remtraphost" or the "remv3traphost" operands to remove the trap host and register the trap host again with the IP address.

■ When the trap host is registered with the setsnmp(8) command, the following message may be output.

```
iptables v1.4.7: host/network 'example.com' not found
Try 'iptables -h' or 'iptables --help' for more information.
```

This message indicates that the name resolution has not been executed for the host name of the registered host.

Although the trap host has been properly registered, traps are not reported to the trap host as name of the trap host could not be resolved.

Set up the name server by executing the setnameserver(8) command and conduct name resolution for the target host.

Notes on Using the SPARC M12/M10 Plug-in for Oracle Enterprise Manager Cloud Control

The SPARC M12/M10 plug-in for Oracle Enterprise Manager Cloud Control requires Oracle Enterprise Manager Cloud Control 13.1 or later.
The SPARC M12/M10 plug-in for Oracle Enterprise Manager Cloud Control provides monitoring functionality for SPARC M12/M10 server hardware.
You can obtain the SPARC M12/M10 plug-in for Oracle Enterprise Manager Cloud Control and find the information including installation instructions at the sites listed below. For SPARC M12/M10 systems supported by Oracle, please open an SR in My Oracle Support to access support for this plug-in.

- Japanese site
  https://updatesite.jp.fujitsu.com/unix/jp/download/software/unix_soft/emcc_plug-in/download/index.html

- Global site
  https://updatesite.jp.fujitsu.com/unix/en/download/software/unix_soft/emcc_plug-in/download/index.html

Problems With XCP and Workarounds

This section describes problems with XCP and workarounds for each version.

Problems That Might Occur With XCP 2340 and Workarounds

The following table lists the problems that might occur with XCP 2340 and workarounds for them.

Table 3-10 Problems That Might Occur With XCP 2340 and Workarounds

RTI No.	**RTIF2-170626-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If only the host node (SPARC M10) loses power, the power of the ETERNUS is turned off when the power of the host node recovers. At this time, the power of the ETERNUS is not turned on even when the power of the physical partition (PPAR) is turned on. This may occur when the remote power management function (RCIL) is enabled on the SPARC M10 system with the ETERNUS connected.
Workaround	There is no effective workaround. If the power of the ETERNUS is not turned on, turn off and on the PPAR again to recover.
RTI No.	**RTIF2-170428-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	Even when XCP firmware has been updated, the old XCP firmware version before the update may be displayed under the following cases: - The [VERSION] button on XSCF Web is selected. - The prtdiag -v command is executed on Oracle Solaris. In this case, the correct XCP firmware version is displayed after the XSCF is rebooted, however, the following message appears at each XSCF login. "XCP version of XSCF and Back-Panel mismatched!"
Workaround	There is no effective workaround. [How to restore] Update the firmware again. To update the firmware with the flashupdate command, specify the -f option.
RTI No.	**RTIF2-170424-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	Suppose that the PCIe root complex connecting the PCI card is dynamically added to a logical domain with the ldm add-io command. In this case, there may be PCIe lane degrade on the PCI card. To check whether there is lane degrade, execute the prtdiag command of Oracle Solaris and check "Cur Speed/Width."
Workaround	There is no effective workaround. [How to restore] Restart the logical domain connected to this PCI card.
RTI No.	**RTIF2-170405-001**
Model	**SPARC M10-4S**
Description	After completing the master XSCF switchover and executing the rebootxscf -a command or the setdate command to reboot all XSCFs, hardware errors may not be detectable.
Workaround	After the master XSCF switchover has completed, wait about 20 minutes and then execute the rebootxscf command or the setdate command. [How to restore] Reboot all the XSCFs by executing the rebootxscf -a command.

RTI No.	**RTIF2-170405-002**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	Suppose you close the browser while collecting a snapshot from the XSCF Web and then execute the snapshot command to collect a snapshot. The newly executed command terminates normally but logs are not collected in the snapshot.
Workaround	To collect a snapshot after you close the browser while collecting a snapshot from the XSCF Web, collect it from the XSCF Web again or wait about an hour after closing the browser to execute the snapshot command.
RTI No.	**RTIF2-170405-003**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If the poweroff -f command is executed while the physical partition (PPAR) is restarting, the next execution of the poweron command may cause an error that does not allow the PPAR to be powered on. [Example] The PPAR cannot be powered on. XSCF> **poweron -p 0** PPAR-IDs to power on :00 Continue? [y|n] :**y** 00 : Not powering on : An internal error has occurred. Please contact your system administrator.
Workaround	Before executing the poweroff -f command, use the showpparprogress command to check the status of the target PPAR. If "PPAR reset" is displayed at this point, it means that the target PPAR is restarting. The PPAR restart is completed by the time that "The sequence of power control is completed." appears. Until this message appears, do not execute the poweroff -f command. If "This PPAR is powered on." or "This PPAR is powered off." appears, the PPAR has not been restarted. [Example] The PPAR restart has completed. XSCF> **showpparprogress -p 0** PPAR reset PPAR#0 [1/13] : CPU Start PPAR#0 [13/13] The sequence of power control is completed. XSCF> [How to restore] Turn off the input power to the system, wait 30 seconds, and then turn it on again. (AC OFF/ON)

Table 3-10   Problems That Might Occur With XCP 2340 and Workarounds *(continued)*

RTI No.	**RTIF2-170405-005**
Model	**SPARC M10-4S**
Description	If you execute a command listed in [Command list] during XSCF master/standby switching, the following problems occur. - The XSCF that executes the command stops due to "BOARD ERROR." - Moreover, you cannot power on the physical partition containing the PSB (BB) of the stopped XSCF. You can confirm that the XSCF master/standby switching is completed by executing the showhardconf command to check that [Status] of XBBOX or BB is "Normal." [Command list] restoreconfig(8) rebootxscf(8) flashupdate(8) setdate(8)
Workaround	Do not execute any of the commands listed in [Command list] above during XSCF master/standby switching. [How to restore] Recover the system by performing the following procedure. 1. Shut down Oracle Solaris on all logical domains. 2. Execute the poweroff -f command to forcibly power off all PPARs. 3. Turn off (AC OFF) the input power to every SPARC M10. 4. Turn on (AC ON) the input power to every SPARC M10.
RTI No.	**RTIF2-170405-007**
Model	**SPARC M10-4S**
Description	If the "SCF process down detected" error occurs on the standby XSCF while the XCP firmware is being updated, the "SCF panic detected" error may occur on the master XSCF.
Workaround	There is no effective workaround. After the reboot of every XSCF has completed, execute the flashupdate command with the -f option specified to update the XCP firmware again.
RTI No.	**RTIF2-170405-008**
Model	**SPARC M10-4S**
Description	If a low-voltage problem in the XSCF unit occurs on the master XSCF, automatic master/standby switching may not occur.
Workaround	There is no effective workaround. If the master XSCF does not respond, execute the switchscf command with the -f option specified from the standby XSCF to forcibly switch the master/standby XSCF. [Example] XSCF> **switchscf -t Master -f** The XSCF unit switch between the Master and Standby states. Continue? [y|n]:**y** After the master/standby switching, replace the non-responsive XSCF unit.

RTI No.	**RTIF2-170405-009**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	When executed while a POST diagnosis is in progress on a PPAR consisting of one system board (PSB), the console command may not display the console screen.
Workaround	Execute the console command before the PPAR starts or after the POST diagnosis is completed. [How to restore] Restart PPAR power-on, switch the master/standby XSCF, or reboot the master XSCF.
RTI No.	**RTIF2-170405-010**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	Normally, the occurrence of a memory configuration error is supposed to degrade all memory under the CPU. However, some memory has not been degraded. Powering on the PPAR at this time may register the non-degraded memory in an error log. [Example] The MEM#02B memory has been unmounted but the MEM#xxA memory is not degraded. XSCF> **showstatus** BB#00 Status:Normal; CMUL Status:Normal; * MEM#00B Status:Deconfigured; * MEM#01B Status:Deconfigured; * MEM#03B Status:Deconfigured; [Example] Example of an error log XSCF> **showlogs error** Date: Nov 22 10:57:37 JST 2016 Code: 40002000-004b830134110000ff-020014210000000000000000 Status: Warning Occurred: Nov 22 10:57:37.190 JST 2016 FRU: /BB#0/CMUL/MEM#03A,/BB#0/CMUL Msg: Failed to find write cycle adjustment value Diagnostic Code: 00000300 00000000 0000 00000001 00000000 0000
Workaround	Before powering on the PPAR, execute the showhardconf command and confirm that the memory is correctly mounted in accordance with memory mounting rules. Remount any memory that is not correctly mounted. [How to restore] Remount the memory correctly in accordance with memory mounting rules. With the mode switch in the Service mode position on the operation panel, turn on (AC ON) the input power to cancel the degradation of the memory registered with an error. Execute the showstatus command to confirm that the memory is not degraded.

RTI No.	RTIF2-161205-001
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	During firmware update for a PCI expansion unit, the "LINKCARD I2C error" error log may inadvertently be registered immediately after the start of the update.
	Nov 27 19:28:26 M10-1 Event: SCF:LINKCARD update is started (LINKCARD=9, bank=1, PCIBOX version=1210: last version=1180)
	Nov 27 19:28:29 M10-1 Warning: /BB#0/PCI#9/LINK:SCF:LINKCARD I2C error
Workaround	There is no effective workaround.
	Ignore the "LINKCARD I2C error" error log that is registered immediately after the start of the update.
	The firmware update for the PCI expansion unit will succeed.
RTI No.	**RTIF2-161116-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If available CPU resources in a physical partition (PPAR) have not been assigned when a CPU Activation Interim Permit expires, powering on the PPAR causes the PPAR to be reset repeatedly without power-on processing being suppressed.
	At this time, the following event log is registered repeatedly.
	SCF:PPAR-ID x: Reset
	SCF:SP-Config falling back to factory-default (PPARID 0 factor:0x1010000)
	SCF:PPAR-ID x: Reset released
Workaround	After a CPU Activation Interim Permit expires, execute the setinterimpermit disable command to disable the CPU Activation Interim Permit.
	To power on a PPAR, assign available CPU core resources in the PPAR.
	[How to restore]
	Perform the following procedure.
	1. Execute the poweroff -f command to forcibly power off the PPAR that is being reset repeatedly.
	2. Execute the poweroff command (without -f) to power off all PPARs other than that described above.
	3. Turn off/on (AC OFF/ON) the input power to every SPARC M10.
	4. Execute the setinterimpermit disable command to disable the CPU Activation Interim Permit.
RTI No.	**RTIF2-150730-001**
Model	**SPARC M10-4S**
Description	The message "Cannot communicate with BB#xx. Please check BB#xx's state." is output when the setprivileges(8) command is executed.
	[Example]
	XSCF> **setprivileges jsmith fieldeng platadm useradm auditadm**
	Cannot communicate with BB#01. Please check BB#01's state.
	XSCF>
Workaround	There is no effective workaround.
	User privileges are normally set. This message does not affect system operation.

RTI No.	**RTIF2-150728-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	When the ioxadm(8) command is executed for the first firmware update of the PCI expansion unit after shipment, the event log will display an incorrect firmware version: "last version=0000". [Example of the event log] May 28 11:27:40 Event: SCF:LINKCARD update is started (LINKCARD=0, bank=1, PCIBOX version=1200: last version=0000)
Workaround	There is no effective workaround. Ignore this version in the event log. This problem does not affect system operation.
RTI No.	**RTIF2-150702-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	Suppose you attempt to execute the dumpconfig(8) command to save XSCF setting information, and then execute the restoreconfig(8) command to restore the XSCF setting information in the same chassis or other chassis. In this case, some settings may not be saved/restored or may be excessively restored on other chassis. The following settings are not saved/restored in the same chassis or other chassis. - Setting values for power operation at power recovery, set with the setpowerschedule -c recover command - Setting values for enabling/disabling ASR function, set with the setservicetag(8) command - Setting values for configuring a remote power management group, changing its settings, and enabling/disabling the remote power management function for the group, set with the setremotepwrmgmt(8) command The following settings are excessively restored on the same or other chassis. - Information on the time difference between XSCF and the hypervisor of each physical partition (PPAR)
Workaround	There is no effective workaround. [How to restore] Perform the following procedure. 1. Before saving the XSCF setting information with the dumpconfig(8) command, confirm the following settings. - Setting for power operation at power recovery (recover mode) [Example] Not powering on at power recovery XSCF> **showpowerschedule -a -m state** PPAR-ID schedule member recover mode ------- -------- ------ ------------ 0 enable 4 off - ASR function (Service Tag) enable/disable setting [Example] Enabled XSCF> **showservicetag** Enabled - Remote power management group setting - Saving configuration and setting changes [Example] Saving management file to ftp server when registering one remote power management group XSCF> **getremotepwrmgmt -G 1 ftp://server[:port]/path/file** - Remote power management function enable/disable setting [Example] Enabled XSCF> **showremotepwrmgmt** [Remote Power Management Group#01 Information]

Remote Power Management Status :[Enable]

--- Omitted ---

2. Execute the dumpconfig(8) command to save the XSCF setting information.

3. Execute the restoreconfig(8) command to restore the XSCF setting information.

4. After restoring the XSCF setting information with the restoreconfig(8) command, execute the
   command below to implement a reset using the setting values confirmed in step 1.
   - Restoring setting for power operation at power recovery

[Example] Not powering on at power recovery

XSCF> **setpowerschedule -a -c recover=off**
   - Restoring ASR function (Service Tag) enable/disable setting

[Example] Setting to enable

XSCF> **setservicetag -c enable**
   - Restoring configuration and setting changes of remote power management group and
     enable/disable setting of remote power management function

[Example] Restoring setting information based on management file saved to FTP server

(1) If there are other hosts included in the remote power management group, disable the
    remote power management function for the hosts.

XSCF> **setremotepwrmgmt -c disable**

(2) Restore the management file of the remote power management group.

XSCF> **setremotepwrmgmt -c config "ftp://server[:port]/path/file"**

(3) Enable the remote power management function. If you have disabled other hosts, enable
    them, too.

XSCF> **setremotepwrmgmt -c enable**

5. Power on the physical partition, synchronize the Oracle Solaris time with the NTP server, or
   adjust the time with the date(1) command.

RTI No.	**RTIF2-150629-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	When using the Africa/Casablanca time zone, executing showtimezone -c dst-m standard does not display daylight saving time but outputs the following message: An internal error has occurred. Please contact your system administrator. This is a problem about the command output only. Daylight saving time is set as follows twice a year. Starts March 29, 2015 and ends June 13, 2015 Starts July 18, 2015 and ends October 25, 2015
Workaround	There is no effective workaround.

RTI No.	**RTIF2-150629-002**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	The log of "Event: SCF:XCP update has been completed" may be registered at the XCP firmware update time, indicating a successful firmware update. However, the firmware may not actually have been updated in some SPARC M10 system chassis or crossbar boxes.
Workaround	There is no effective workaround. In either of the following cases about the registered logs at the XCP firmware update time (logs from "SCF:XCP update is started (XCP version=xxxx:last version=yyyy)" to "SCF:XCP update has been completed (XCP version=xxxx:last version=yyyy)"), update the XCP firmware again. - Each SPARC M10 system chassis does not have "SCF:XSCF update is started (BBID=x, bank=y)" in two logs. - Either of the following logs is registered, indicating a connected SPARC M10 system chassis has an error. [Example 1] XSCF> **showlogs monitor -r** Alarm: /XBBOX#81/XSCFU:SCF:XSCF hang-up is detected [Example 2] XSCF> **showlogs monitor -r** Notice: /FIRMWARE,/BB#0/CMUL:SCF:SCF panic detected
RTI No.	**RTIF2-150226-002**
Model	**SPARC M10-4S**
Description	CHECK LED of the old master XSCF blinks during the master/standby switchover of XSCFs.
Workaround	There is no effective workaround. Ignore the blinking CHECK LED of the old master XSCF during the master/standby switchover of XSCFs.

Table 3-10   Problems That Might Occur With XCP 2340 and Workarounds *(continued)*

RTI No.	**RTIF2-150218-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	Suppose you execute any of the following on a system with a PCI expansion unit connected when the power to the physical partition is on. In such case, an SNMP Trap related to the addition of the PCI expansion unit or the link card is sent by mistake. - Reset XSCF - Switch master/standby XSCF - Change the SNMP agent from the disabled state to the enabled state - Set the SNMP agent management information when the SNMP agent is enabled In such case, the following SNMP Traps are sent. - PCI expansion unit addition scfPciBoxEvent scfTrapEventType=add(10) - Link card addition scfComponentEvent scfTrapEventType=add(10) Similarly, the following SNMP Trap on the PCIe card addition is sent by mistake in a system with a PCIe card connected. scfComponentEvent scfTrapEventType=add(10)
Workaround	There is no effective workaround. This incorrect SNMP Trap sending does not affect the behavior of the PCI expansion unit or the PCIe card.
RTI No.	**RTIF2-141204-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If the guest domain has been kept active for a long time, powering off and then powering on a physical partition (PPAR) may cause the guest domain time to deviate. This phenomenon occurs under the following conditions. - A guest domain is configured (*1), and - a long period of time passes after the ldm add-spconfig command is executed from Oracle VM Server for SPARC (*2), and - a physical partition power is turned on or reset *1 Time deviation does not occur on the control domain. *2 Time deviation comes to about 20 seconds per month.
Workaround	Immediately before powering off a physical partition or resetting it, execute the ldm addspconfig from Oracle VM Server for SPARC, and store the latest guest domain configuration information in XSCF. [How to restore] If the guest domain time deviates, boot Oracle Solaris in single-user mode, and then synchronize the time. [Example] Setting of 18:30:00 on June 27, 2014 # date 0627183014.00 # **date 0627183014.00**

RTI No.	**RTIF2-140804-002**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	Although the showstatus(8) command is executed when there are no faulty components, the message "No failures found in System Initialization." indicating that there is no faulty component does not appear. [Example] XSCF> **showstatus** XSCF>
Workaround	There is no effective workaround. If no message appears, there are no faulty components. You can continue system operation.
RTI No.	**RTIF2-140616-001**
Model	**SPARC M10-1**
Description	The showhardconf(8) command executed on a SPARC M10-1 does not display [Type] for the power supply unit (PSU). Either "Type: A" or "Type: B" should be displayed as the PSU type. The meaning of each value of "Type" is as follows: - Type: A: PSU for SPARC64 X - Type: B: PSU for SPARC64 X+
Workaround	When you execute the showhardconf(8) command, it displays "FRU-Part-Number: CAXXXXXXXXX-X/xxxxxxx ;" as part of the PSU information. You can determine the PSU type by checking the value of "CAXXXXX-XXXX-X" in this information. - If the value of CAXXXXX-XXXX-X is "CA01022-0750-M" 　Type: A: PSU for SPARC64 X - If the value of CAXXXXX-XXXX-X is "CA01022-0751-M" 　Type: B: PSU for SPARC64 X+ If multiple PSU types are mounted mixed, you can determine the PSU type by checking the value of "XXXXXX" in the error log "Code:80000000-XXXXXX0000ff0000ffxxxxxxxxxx00000000000000" output by the showlogs error command. - If the value of XXXXXX is "002400" 　Type: A: PSU for SPARC64 X - If the value of XXXXXX is "002401" 　Type: B: PSU for SPARC64 X+
RTI No.	**RTIF2-140616-002**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	When the procedure below is executed, the error message "An internal error has occurred. Please contact your system administrator." is displayed at execution of the prtfru(8) command and the command abnormally terminates. 1. Turn on the input power and then execute the rebootxscf(8) or switchscf(8) command to start or reset the XSCF. 2. Execute the snapshot(8) command. 3. Execute the prtfru(8) command.
Workaround	After starting or resetting the XSCF, execute the prtfru(8) command before executing the snapshot(8) command. [How to restore] Execute the rebootxscf -a command to reset all XSCFs.

Table 3-10	Problems That Might Occur With XCP 2340 and Workarounds *(continued)*
RTI No.	**RTIF2-140606-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	Suppose that a cluster system is built to fulfill the following condition: It is composed of multiple SPARC M10 Systems chassis each of which includes 10 or more guest domains (10 or more cluster nodes) running in one physical partition (PPAR). Moreover, PRIMECLUSTER software is installed on each of these guest domains. Alternatively, the cluster system is composed of multiple PPARs within the SPARC M10 Systems chassis. If you execute the poweroff -f command on one PPAR to forcibly turn off the power to that PPAR, the XSCF may slow down, panic, and then reset.
Workaround	Confirm that less than 10 cluster nodes are included in one PPAR that exists on an instance of SPARC M10-1, SPARC M10-4, or SPARC M10-4S. [How to restore] The system will be available as is because the poweroff(8) command continues being processed after the XSCF has panicked and reset.
RTI No.	**RTIF2-140606-004**
Model	**SPARC M10-4S**
Description	Suppose that you execute the addboard(8) and reset por commands to add a system board (PSB) to a physical partition (PPAR) that fulfills both of the conditions below. You may see an error message "No analytical target" repeatedly. Also, Oracle Solaris running on this PPAR may hang up. - The SPARC M10-4S (including a crossbar box) has a building-block configuration. - Power is supplied only to a PPAR made up of one PSB.

Workaround	To add a PSB to a PPAR that fulfills the conditions shown on the left, use one of the following methods:
	- Turn off the power to the PPAR, and then execute the addboard(8) command to add a PSB.
	- After executing the addboard(8) command to add a PSB, turn off the power to the PPAR, turn it on again, and then rebuild the PPAR.
	- Using the DR function, execute the addboard(8) command to add a PSB.
	[How to restore]
	- If the error message "No analytical target" is not displayed
	  Execute the poweroff(8) command to turn off the power to the PPAR, and then execute the poweron(8) command to turn on the power to the PPAR.
	- If the error message "No analytical target" is displayed
	  Execute the poweroff -f command to forcibly turn off the power to the PPAR and then execute the poweron(8) command to turn on the power to the PPAR.

RTI No.	**RTIF2-140606-008**
Model	**SPARC M10-4S**

Description	Suppose that you are attempting the following: Adding a system board (PSB) with the addboard -c configure command using dynamic reconfiguration of physical partitions (PPARs) or disconnecting a PSB using the deleteboard -c unassign or deleteboard -c disconnect command. If any of the conditions below is fulfilled, switching between master and standby XSCFs occurs.
	If the rebooting XSCF mentioned in the condition description is the standby XSCF, it becomes the master XSCF after the switching. However, the previous master XSCF is reset and deactivated.
	[Condition]
	- In the case of addboard
	  - The XSCF for the PSB to be added is rebooting.
	  - The XSCF for one of the PSBs making up the PPAR to which the PSB is to be added is rebooting.
	- In the case of deleteboard
	  - The XSCF for one of the PSBs making up the PPAR from which the PSB is to be deleted is rebooting.

Workaround	If there is a standby XSCF that fulfills the condition shown on the left, execute the addboard(8) or deleteboard(8) command after the standby XSCF has rebooted. Check whether the XSCF has rebooted, by executing the showhardconf(8) command to confirm that the [Status] of the SPARC M10-4S chassis (BB#xx) that includes the XSCF is "Normal". [Example] - The XSCF at BB#02 is running. XSCF> **showhardconf** SPARC M10-4S; --- Omitted --- BB#02 Status:Normal; Role:Slave; Ver:2220h; Serial:1234567890; - The XSCF at BB#02 is rebooting. XSCF> **showhardconf** SPARC M10-4S; --- Omitted --- BB#02 Status:Cannot communicate; [How to restore] Even if switching between master and standby XSCFs occurs, you can continue using the system because the addboard(8) or deleteboard(8) command has been executed correctly. If the previous master XSCF has stopped, execute the following procedure: 1. Execute the poweroff -a command to turn off the power to all PPARs. 2. Turn off the input power to the SPARC M10-4S chassis set on the master and standby XSCFs and then turn it on again. 3. Log in to the master XSCF and execute the showhardconf(8) command to confirm that the [Status] of the SPARC M10-4S chassis for the standby XSCF is "Normal".

Table 3-10	Problems That Might Occur With XCP 2340 and Workarounds *(continued)*
RTI No.	**RTIF2-140605-001**
Model	**SPARC M10-4S**
Description	Suppose the following scenario: You turn on the power to a physical partition (PPAR) that consists of multiple SPARC M10-4S chassis. The status of the PPAR/domain is between self diagnosis test (POST) completion (Initialization Complete) and OpenBoot PROM start completion (OpenBoot Running). If the XSCF in a SPARC M10-4S in the PPAR resets in this status, you may be unable to switch to the control domain console. You can confirm that this event has occurred by executing the showlogs event command and confirming that an event log for console path switching was registered during the time between POST diagnosis completion and OpenBoot PROM start completion. [Example] Event log message issued when PPAR_ID is 0 POST Diag complete from PPAR (PPAR ID 0) --- Omitted --- PPAR ID 0: Console path is switched --- Omitted --- PPARID 0 GID 00000000 state change (OpenBoot Running)
Workaround	There is no effective workaround. [How to restore] Perform one of the following operations: - Execute the rebootxscf -a command. - From XSCF Web, reset all XSCFs. - Turn off the power to the PPAR, and then turn it on again.

Table 3-10	Problems That Might Occur With XCP 2340 and Workarounds *(continued)*
RTI No.	**RTIF2-140605-002**
Model	**SPARC M10-4S**
Description	Suppose that all but one of the system boards (PSBs) that make up a physical partition (PPAR) are faulty. If you attempt to use the DR function to disconnect the normal PSB by executing the deleteboard(8) command, this command times out and terminates abnormally. In addition, if you execute the deleteboard(8) command using the DR function after then in an attempt to disconnect another PSB in the same PPAR, the command always times out. Furthermore, you can no longer connect to the control domain console by executing the console(8) command. [Example] deleteboard(8) command timeout XSCF> **deleteboard -c disconnect 00-0** PSB#00-0 will be unconfigured from PPAR immediately. Continue?[y|n] :**y** All domains are temporarily suspended, proceed?[y|n] :**y** Start unconfigure preparation of PSB. [1200sec] 0..... 30..... 60..... 90.....120.....150.....180.....210.....240.....\ 270.....300.....330.....360.....390.....420.....450.....480.....510.....\ 540.....570.....600.....630.....660.....690.....720.....750.....780.....\ 810.....840.....870.....900.....930.....960.....990.....1020.....1050.....- 1080.....1110.....1140.....1170.....end Timeout detected during unconfiguration of PSB#00-0. XSCF>
Workaround	If all but one of the PSBs are faulty, first turn off the power to the PPAR, and then execute the deleteboard(8) command to disconnect the normal PSB. [How to restore] Perform the following procedure. 1. Execute the rebootxscf -a command to reset the XSCF. 2. Check the error logs and messages to identify the cause of the error. 3. Eliminate the cause of the error. 4. Perform the operation described in "6.3.1 Example of Operations for Deleting a System Board Assignment" or the operation described in "6.3.3 Example of Operations for Reserving a System Board Unassignment" in the *Fujitsu SPARC M12 and Fujitsu M10/SPARC M10 Domain Configuration Guide*.

Table 3-10	Problems That Might Occur With XCP 2340 and Workarounds *(continued)*
RTI No.	**RTIF2-140605-006**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	When the OS panics, a large volume of panic messages may be sent to the XSCF. In this case, the XSCF cannot handle the large volume of panic messages. As a result, the codd process fails and OS-panic error logs are registered in large quantities as shown below. [Example] OS panic and process failure error logs XSCF> **showlogs error -v** Date: Dec 20 14:44:26 JST 2013 Code: 40000000-00ffff0000ff0000ff-01b900060000000000000000 Status: Warning Occurred: Dec 20 14:44:26.513 JST 2013 FRU: /UNSPECIFIED Msg: XSCF command: System status change (OS panic) (PPARID#00, path: 00) Diagnostic Code: 00000000 00000000 0000 00000000 00000000 0000 00000000 00000000 0000 00000000 00000000 00000000 00000000 00000000 00000000 0000 Date: Dec 20 15:00:01 JST 2013 Code: 20000000-00fcff00b0000000ff-010400010000000000000000 Status: Notice Occurred: Dec 20 14:59:56.838 JST 2013 FRU: /FIRMWARE,/XBBOX#81/XSCFU Msg: SCF process down detected Diagnostic Code: 00000000 00000000 0000 51000000 00000000 0000 00000000 00000000 0000 636f6464 2e323537 382e627a 32000000 00000000 00000000 0000 You can check codd by confirming that the first four bytes on the fourth line of the [Diagnostic Code:] have the value "636f6464".
Workaround	There is no effective workaround. [How to restore] The system is restored when the XSCF is reset by codd process failure.

Table 3-10	Problems That Might Occur With XCP 2340 and Workarounds *(continued)*
RTI No.	**RTIF2-140602-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	When the input power of a PCI expansion unit is turned off (AC OFF), an error log is registered but, notification through SNMP trap or REMCS is not performed. Confirmation that the input power of a PCI expansion unit had been turned off can be seen in the output of the showlogs error command, like the following: Date: May 29 20:03:05 JST 2014 　　Code: 10000400-00d4000000ff0000ff-1100002a0000000000000000 　　Status: Information　　　　　　　Occurred: May 29 20:03:00.905 JST 2014 　　FRU: /BB#0/PCI#8/PCIBOX#2003/PSU#0 　　Msg: AC FAIL 　　Diagnostic Code: 　　　　00083230 30330000 0000 　　　　00080000 00000000 0000 　　　　00080000 00000000 0000 　　　　00000000 00000000 00000000 00000000 　　　　00000000 00000000 0000
Workaround	There is no effective workaround.
RTI No.	**RTIF2-140507-003**
Model	**SPARC M10-4S**
Description	After adding or removing a system board with the dynamic reconfiguration of physical partitions (PPAR), if the PPAR is powered off, the output of the showpparprogress(8) command mistakenly shows the status of the procedure of powering on the system.
Workaround	There is no effective workaround. [How to restore] After the "PPAR-ID x: Reset" message is output to the event log, re-execute the showpparprogress(8) command for the right display.
RTI No.	**RTIF2-140507-005**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If a failure is detected in DC-DC converter (DDC), the "Power subsystem failure" error log may be registered twice.
Workaround	There is no effective workaround. Ignore the 2nd error log. Moreover, replace the faulty FRU as soon as possible.
RTI No.	**RTIF2-140507-006**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	When error logs (Critical ultrahigh temperature at XXX) at the time of abnormality of components due to high temperature (ultrahigh temperature level) are registered and the system is forcibly stopped, if the showlogs power command is executed, the "Cause" column of power log may show "-".
Workaround	There is no effective workaround.

Table 3-10   Problems That Might Occur With XCP 2340 and Workarounds *(continued)*

RTI No.	**RTIF2-140507-007**
Model	**SPARC M10-4, SPARC M10-4S**
Description	After a DC-DC converter (DDC) fault has been detected, if the system is run continuously without replacing the FRU that appears in the error logs, the following error is mistakenly detected at every turning off of input power. Msg: Power-off failure
Workaround	Replace the faulty FRU. Moreover, as this error message has no effect on the functioning of the system, ignore it.
RTI No.	**RTIF2-140507-009**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	Even when rotation abnormality is found on both fans at the same time in the same fan unit, error log for only one fan is registered and thus the system is not shutdown. As a result, temperature of components like CPU may rise.
Workaround	There is no effective workaround. [How to restore] If the system is not shut down when fan rotation abnormality is detected, if any of the following symptom is confirmed in the two fans which comprises the faulty fan unit, change the following fan unit as soon as possible: - The showenvironment fan command shows that the number of rotation has been decreased. - Visual judgment reveals that the number of rotation has been stopped.
RTI No.	**RTIF2-140507-014**
Model	**SPARC M10-4S**
Description	When replacefru(8), addfru(8) or, rebootxscf(8) command is executed, the "XSCF hang-up is detected" error message may be detected at the slave XSCF.
Workaround	There is no effective workaround. Ignore this error log as the command in question is terminated properly and thus it has no effect on the system.
RTI No.	**RTIF2-140507-016**
Model	**SPARC M10-4S**
Description	After configuring the XSCF network with the setnetwork(8) command and applying the configuration by the applynetwork(8) command, if the shownetwork(8) command is executed without executing the rebootxscf(8) command, the displayed IP address may not match the IP address that is being used on the present system.
Workaround	After executing the applynetwork(8) command to apply network configurations of the XSCF, execute the rebootxscf(8) command to reset the XSCF.

RTI No.	**RTIF2-140507-021**
Model	**SPARC M10-4S**
Description	In the middle of performing diagnosis by the "-p" and "-b" options of the diagxbu(8) command, if a failure occurs in the physical partition specified by the "-p" option, the diagxbu(8) command may terminate abnormally and powering off the SPARC M10 chassis, specified by the "-b" option may fail.
Workaround	There is no effective workaround. [How to restore] Perform the following procedure. 1. Turn off the input power (AC OFF) of SPARC M10 chassis using the "-b" option of the diagxbu(8) command. 2. Select the SPARC M10 chassis by the "-b" option of the replacefru(8) command. 3. When the message for the replacement of SPARC M10 chassis is output in the maintenance menu, turn on the input power (AC ON) of the SPARC M10 chassis without replacing it.
RTI No.	**RTIF2-140507-022**
Model	**SPARC M10-4S**
Description	When the crossbar cable of the crossbar unit (XBU) in SPARC M10-4S is in bad electrical contact, the crossbar cable components are depicted with a number of "#"s as the result of the showhardconf(8) command. [Example] When the crossbar cable is loose: + FRU-Part-Number:###############; Ver:####h; + Type:#######; Length: #;
Workaround	There is no effective workaround. [How to restore] Perform the following procedure. 1. Power off the physical partition (PPAR) by the poweroff(8) command. 2. Check the physical state of the crossbar cable (loose connection, disconnection etc.) who component information is depicted by a number of "#"s. 3. Execute the poweron(8) command to power on the PPAR. 4. Check the component information of the target crossbar cable with the showhardconf(8) command. [Example] When the crossbar cable is properly connected: + FRU-Part-Number:2123628-2 ; Ver:3920h; + Type:Optic; Length: 2;
RTI No.	**RTIF2-140410-002**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If, during execution of the restoreconfig(8) command, you power on or off the physical partition (PPAR) or execute diagnosis of the system board, the operations in progress are interrupted.

Workaround	During execution of the restoreconfig(8) command, do not power on or off the physical partition (PPAR) or execute diagnosis of the system board.
	[How to restore]
	- If the PPAR power on process is interrupted
	    Forcibly power off the PPAR using the poweroff -f command.
	- If the PPAR power off process or system board diagnosis is interrupted
	    Turn off the input power to all SPARC M10 system chassis or crossbar box chassis, and then turn it on again (AC-OFF/ON).

Table 3-10   Problems That Might Occur With XCP 2340 and Workarounds *(continued)*

RTI No.	**RTIF2-140410-003**
Model	**SPARC M10-4S**
Description	With the system input power turned off, if the CPU memory unit lower (CMUL) is replaced or the SPARC M10-4S is added without using the maintenance menu, the following error log may be registered when automatic synchronization of XCP firmware versions is enabled. Alarm: :SCF:Gaps between XBBOX-ID Or Information: :SCF:Gaps between BB-ID
Workaround	There is no effective workaround. Ignore this error log.
RTI No.	**RTIF2-140410-008**
Model	**SPARC M10-4S**
Description	After the input power is turned on with the XSCF DUAL control cable disconnected or faulty, data between the master and standby XSCFs is not synchronized even if the XSCF DUAL control cable is restored. System operation can continue. However, after master/standby XSCF switching, normal system operation is not guaranteed. This is because information in the old master XSCF is not reflected in the new XSCF. You can check, with the following error logs, whether the XSCF DUAL control cable is disconnected or faulty: - XSCF DUAL control cable is disconnected Msg: BB control cable detected unexpected - XSCF DUAL control cable is faulty Msg: Cannot communicate with the other XSCF
Workaround	Before turning on the input power, confirm that the XSCF DUAL control cable is correctly inserted. Also, use the showlogs error command to confirm that the error logs shown in [Description] are not registered. [How to restore] If the XSCF DUAL control cable is disconnected, make sure that it is properly connected. Then, execute the rebootxscf -a command to reboot all XSCFs. If the XSCF DUAL control cable is faulty, replace the cable.
RTI No.	**RTIF2-140410-009**
Model	**SPARC M10-4S**
Description	If the input power to the standby or slave chassis is turned off, a "Board control error (MBC link error)" error log may be registered.
Workaround	There is no effective workaround. Ignore this error log.
RTI No.	**RTIF2-140409-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	An error may be detected in the Realtime Clock (RTC) built into the SPARC M10 system and XSCF may not start.
Workaround	There is no effective workaround. [How to restore] Turn off the input power to the system and then turn it on again (AC OFF/ON).

RTI No.	**RTIF2-140407-005**
Model	**SPARC M10-4, SPARC M10-4S**
Description	Suppose that the system is operated continuously without replacing a CPU memory unit lower (CMUL) or CPU memory unit upper (CMUU) having a faulty DC-DC converter (DDC). In such case, even if an error occurs with the CPU mounted on the CMUL or CMUU having the faulty DDC, CPU related failures may not be detected, and the physical partition (PPAR) may hang up. For a DDC failure, confirm whether any of the following error logs is registered. Msg: Critical low voltage error Or Msg: Critical high voltage error Or Msg: Power subsystem failure
Workaround	Immediately replace the CMUU or CMUL where the DDC failure has occurred.
RTI No.	**RTIF2-140407-006**
Model	**SPARC M10-4S**
Description	For a SPARC M10-4S chassis with the XSCF stopped, or with the input power off (AC OFF), even if you execute the initbb -f command to forcibly disconnect the chassis from the system, the chassis remains assigned to the physical partition (PPAR). To check this phenomenon, execute the showboards(8) command to confirm whether Assignment of the target SPARC M10-4S chassis (PSB) remains "Assigned". XSCF> **showboards -av** PSB R PPAR-ID(LSB) Assignment Pwr Conn Conf Test Fault ---- - ------------ ----------- ---- ---- ---- ------- -------- 00-0 00(00) Assigned y y y Passed Normal 01-0 * 00(01) Assigned n n n Unmount Normal

Workaround	There is no effective workaround.
	[How to restore]
	Perform the following on the disconnected SPARC M10-4S chassis.
	1. Execute the replacefru(8) command to replace the chassis.
	2. Power on (AC ON) the replacement chassis.
	  - If the READY LED of the XSCF or XSCF unit is lit
	    a. Complete replacefru(8) command execution by following the maintenance menu.
	    b. Execute the initbb(8) command to disconnect the chassis from the system.
	  - If the READY LED of the XSCF or XSCF unit is not lit
	    Remove the chassis and replace the XSCF unit or CPU memory unit lower (CMUL) where a failure is suspected.

RTI No.	**RTIF2-140407-008**
Model	**SPARC M10-4S**
Description	If the poweroff(8) command is executed and the master chassis XSCF is reset during the time that it takes for a prompt to be returned, the following power on/power off operation cannot be executed.
Workaround	There is no effective workaround. If this phenomenon occurs, turn off the input power to all chassis and then turn it on again.

Table 3-10   Problems That Might Occur With XCP 2340 and Workarounds *(continued)*

RTI No.	**RTIF2-140304-001**
Model	**SPARC M10-4S**
Description	When performing AC OFF/ON, in some very rare cases. the "SCF process down detected" error message is registered and XSCF fails to start.
Workaround	There is no effective workaround. If this symptom has occurred, contact the maintenance staff.
RTI No.	**RTIF2-140304-002**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	The "SCF process down detected" error log may be registered when the flashupdate(8) command is running.

Workaround	There is no effective workaround.
	[When restoration is not required]
	If both of the following conditions are met, there is no need for restoration. It may be assumed that firmware update has completed properly.
	- The showlogs error -rv command reveals that the following diagnostic message along with the "Msg: SCF process down detected" error message had been registered when the flashupdate(8) command was running.
	  [Example]
	  Diagnostic Code: 00000000 00000000 0000 00000000 00000000 0000 00000000 00000000 0000
	  666c6173 68757064 6174652e xxxxxxxx 00000000 00000000 0000
	  where, xxxxxxxx is indefinite
	- The showlogs event command displays the "XCP update has been completed" event log.
	[How to restore]
	Re-execute the flashupdate(8) command.

RTI No.	**RTIF2-140304-003**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	In case of SNMPv3, if the trap host name registered by the setsnmp(8) command contains a colon (:), it does not show up properly by the showsnmp(8) command. [Example] In case the trap host name is "test:example.com", the host name is shown as "test" and port number is shown as "0".
Workaround	In case of SNMPv3, do not register a trap host name with the setsnmp(8) command, that contains a colon (:). If such a trap host name has already been registered, use the following command to remove the trap host name: setsnmp remv3traphost -u 'user_name' -p 'port_number' 'trap_host_name' In such a case, be sure to specify a port number. If the port number is not specified when removing a trap host name that includes a colon(:), the "Entry does not exist" message is displayed and the trap host name is not removed. The port number specified at the time of removal should be the one, which is not wrongly displayed by the showsnmp(8) command, but the one specified at the time of registration.

RTI No.	**RTIF2-140304-004**
Model	**SPARC M10-4S**
Description	In case of a SPARC M10-4S that is attached to crossbar box, if XSCF failure occurs on a portion of chassis when the physical partition (PPAR) is in the powered on state, the follow symptom may occur: - Symptom 1 When the poweroff(8) command is executed, the power on the PPAR is turned off, but the command prompt does not respond for about 20 minutes. - Symptom 2 When the PPAR is powered on, the "XB-XB interface fatal error" error is produced, the power on process is repeated and it does not end properly.

Workaround	If XSCF failure has occurred, replace the CPU memory unit lower (CMUL) or the XSCF unit.
	[How to restore]
	- Case of symptom 1
	  After about 20 minutes, the poweroff(8) command ends properly and the prompt comes back.
	- Case of symptom 2
	  Forcibly power off the PPAR using the poweroff -f command.

Table 3-10	Problems That Might Occur With XCP 2340 and Workarounds *(continued)*

RTI No.	**RTIF2-140304-005**
Model	**SPARC M10-4S**
Description	On a physical partition (PPAR) that is composed of several SPARC M10-4S (system board), after a system board has been degraded due to failure, if the setpciboxdio(8) command is executed to disable/enable the direct I/O feature of the PCI card mounted on the PCI expansion unit which is attached to the degraded chassis, without powering off the PPAR first, the following message is output and the command fails: This operation cannot be done because the PPAR including a PSB of the target BB is powered on. This symptom occurs when the state of system board is like the following, which can be derive from either the showhardconf(8) or the showboards(8) command. [Example] When PSB#01-0 (BB#01) has been degraded. XSCF> **showhardconf** ... * BB#01 Status:Deconfigured; ... XSCF> **showboards -a** PSB PPAR-ID(LSB) Assignment Pwr Conn Conf Test Fault --- ------------ ----------- ---- ---- ---- ------- -------- 01-0 00(01) Assigned n n n Passed Faulted
Workaround	Change the configuration of the direct I/O feature with the setpciboxdio(8) command only after removing the degraded system board from the physical partition with the deleteboard(8) command. [Example] XSCF> **deleteboard -c unassign 01-0** After changing the configuration of the direct I/O feature, assign the system board to the PPAR with the addboard(8) command and then mount the system board onto the PPAR, following the maintenance procedure. [Example] XSCF> **addboard -c assign -p 0 01-0** Meanwhile, from XCP 2210 onwards, this problem can be solved by performing maintenance on the degraded chassis by the replacefru(8) command. In such a case, the above procedure is unnecessary.
RTI No.	**RTIF2-140304-006**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	When the power supply unit (PSU) fails due to any of the following errors, and after active replacement or hot replacement of the PSU by the replacefru(8) command, if any of the following errors re-occur on the PSU of the same chassis, no error log is registered. - PSU shortage (power off started) - PSU shortage - Wrong PSU is installed
Workaround	Execute the replacefru(8) command to perform cold replacement if a PSU is replaced for the first time after any of the error logs shown in [Description] is registered. In such a case, do not perform active replacement or hot replacement.

Table 3-10	Problems That Might Occur With XCP 2340 and Workarounds *(continued)*

RTI No.	**RTIF2-140304-007**
Model	**SPARC M10-4S**
Description	When replacing power supply units (PSUs) with the replacefru(8) command, if the [f] key in the menu of the replacefru(8) command is pressed within 30 seconds after mounting the new PSU, any problem in the new PSU cannot be detected.
Workaround	See "Workaround for RTIF2-140304-007."
RTI No.	**RTIF2-140227-005**
Model	**SPARC M10-4S**
Description	At the time of cold replacement or cold addition of CPU memory unit lower (CMUL) or SPARC M10 chassis, if the following conditions are met, the "XCP firmware version synchronization failed" message may be registered to the event log and maintenance or addition fails. - Two or more CMUL or SPARC M10 chassis is cold replaced or cold added at one time. - The XCP versions of replacement components do not match the version of the master XCP.

Workaround	When cold replacing or cold adding two or more CMUL or SPARC M10 chassis, use the replacefru(8) or addfru(8) command to perform the operations one by one.
	[How to restore]
	Execute any of the following procedures.
	- Procedure 1
	  1. Perform AC OFF/ON.
	  2. Execute the flashupdate(8) command, specifying the XCP version.
	XSCF> **flashupdate -c update -m xcp -s** *xxxx* **-f**
	xxxx is the XCP version of the master XSCF.
	- Procedure 2
	  Execute the replacefru(8) command to perform a pseudo replacement of the CMUL or SPARC M10 chassis that failed to be cold replaced.

RTI No.	**RTIF2-140227-009**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If XSCF login is performed with a XSCF user account, whose privileges are managed by a LDAP server, specified by the setldap(8) command, execution of commands in the XSCF shell or operations on the XSCF Web may take a while.
Workaround	In case of a LDAP server, specified by the setldap(8) command, there is no effective workaround. Specify the LDAP server with the setldapssl(8) command.
RTI No.	**RTIF2-140227-010**
Model	**SPARC M10-4S**
Description	The following improper error message is displayed when the addboard -c configure command is executed, specifying a non-existent system board (PSB): PPAR is currently unavailable for DR, because XBU status has failed. Or The current configuration does not support this operation.
Workaround	There is no effective workaround. Execute the addboard -c configure command, specifying existent PSBs.

RTI No.	**RTIF2-140212-003**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	The OID information of "scfPsbInfo" in the definition file of XSCF extension MIB is not updated even if the information of the system board (PSB) is updated.
Workaround	Restart the snmp daemon using any of the setsnmp(8), setsnmpusm(8) or the setsnmpvacm(8) commands or reset XSCF.
RTI No.	**RTIF2-140212-005**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	In the OID information of "scfComponentStatusEvent" in the definition file of XSCF extended MIB, the path information of the suspected components may be denoted as "unspecified" in the trap notification. This symptom occurs when the OID "FaultEventCode" information is any of the following: 05018113 05018123 05018133 05018211 05018221 05018231
Workaround	There is no effective workaround. Execute the showlogs error command to confirm the suspected location.
RTI No.	**RTIF2-140212-007**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	When an attempt is made to register a password containing 256 or more characters, in the password input prompt of either the setsnmp(8) or the setsnmpusm(8) command, only 255 characters are registered.
Workaround	When setting up a password equal to or longer than 256 letters, use the password option of either the setsnmp(8) or the setsnmpusm(8) command, instead of using the password input prompt. [How to restore] If a password equal to or longer than 256 characters has been registered using the password input prompt, remove the target user data with either the setsnmp remv3traphost or setsnmpusm delete command and then register the user again.
RTI No.	**RTIF2-140212-011**
Model	**SPARC M10-4S**
Description	If the XSCF master/standby switchover occurs when the physical partition (PPAR) is running, in some very rare cases, XSCF process down may occur and the XSCF may be reset.
Workaround	There is no effective workaround. The system can be operated continuously as it will be restored after being reset.
RTI No.	**RTIF2-140212-014**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	Even if the "CPU cache degraded (CPU #xx)" error is detected, the CHECK LED of the operation panel may not light up.
Workaround	There is no effective workaround.

RTI No.	**RTIF2-140212-016**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	When resetting XSCF, the "snmpd[XXXXX] svrSP: error doAction ACTION_CONTROL_LED" error message regarding SNMP may be displayed on the XSCF serial terminal.
Workaround	There is no effective workaround. Ignore this message.
RTI No.	**RTIF2-140212-021**
Model	**SPARC M10-4S**
Description	If any of the physical partitions is reset due to some hardware failure, in the middle of the execution of the testsb(8) command, the testsb(8) command may terminate abnormally. The following is an example of such an error. [Example] XSCF> **testsb** *PSB_NO* Initial diagnosis is about to start, Continue?[y|n] :**y** SB power on sequence started. 0.....30.....end Initial diagnosis started. [7200sec] 0..... 30..... 60..... 90.....120.....150.....180.....210.....240..... 270.....300.....330.. Hardware error occurred by initial diagnosis. SB power off sequence started. [1200sec] 0..... 30..... 60..... 90.....120.....150.....180.....210.....240..... 270.....300.....330.....360.....390.....420.....450.....480.....510..... 540.....570.....600.....630.....660.....690.....720.....750.....780..... 810.....840.....870.....900.....930.....960.....990.....1020.....1050..... 1080.....1110.....1140.....1170.....1200end Failed to power off. Please check the FRU. An internal error has occurred. Please contact your system administrator. done.
Workaround	There is no effective workaround. [How to restore] Execute maintenance on the failed hardware after confirming it with the showlogs(8) command. After that, execute the testsb(8) command again.
RTI No.	**RTIF2-140121-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If the input power is turned off (AC OFF) while the XSCF is processing large amounts of data, only occasionally, XSCF may not start-up when the input power in turned on (AC ON) again.
Workaround	There is no effective workaround. Contact a field engineer if this problem occurs.

Table 3-10	Problems That Might Occur With XCP 2340 and Workarounds *(continued)*

RTI No.	**RTIF2-131213-002**
Model	**SPARC M10-4S**
Description	While in the process of adding or removing a system board (PSB) using the addboard(8) or deleteboard(8) command of the DR feature, if another physical partition is rebooted due to hardware failure or the poweroff(8)/poweron(8)/reset(8) command is executed on it, the executed addboard(8) or deleteboard(8) command may detect timeout and terminate abnormally.
Workaround	Do not execute the poweroff(8)/poweron(8)/reset(8) command while the addboard(8) or deleteboard(8) command is being executed. There is no effective workaround if any hardware failure occurs while executing DR. [How to restore] Check the status of the system board (PSB) using the showboards(8) command. Execute the addboard(8) or deleteboard(8) command after that.
RTI No.	**RTIF2-131213-003**
Model	**SPARC M10-4S**
Description	While executing the poweroff(8)/poweron(8)/reset(8) command on a physical partition, if the addboard(8) or the deleteboard(8) command of the DR feature is executed on another physical partition to add or remove a system board (PSB), the addboard(8) or deleteboard(8) command may detect timeout and terminate abnormally.

Workaround	Do not execute the addboard(8) or deleteboard(8) command while the poweroff(8)/poweron(8)/ reset(8) command is being executed elsewhere. There is no effective workaround if DR is executed while also executing power supply operations on another physical partition.
	[How to restore]
	Perform the following procedure.
	1. Execute the showboards(8) command.
	2. Check the status of /Pwr/Conn/Conf/Test of the system board (PSB) to confirm the end of power operations.
	  - Power-on/Reset completed
	    The Pwr/Conn/Conf/Test status is "y y y passed" respectively.
	  - End of power-off:
	    The status of Pwr/Conn/Conf is "n n n" respectively.
	3. Re-execute the addboard(8) or the deleteboard(8) command.

RTI No.	**RTIF2-131213-011**
Model	**SPARC M10-4S**
Description	When a SPARC M10-4S or a crossbar box is added using the addfru(8) command, the following message is output and the addition may fail. [Warning:036] Failed to find BB#x. The BB-ID setting and/or the cable connections of the BB#x will be wrong. Please confirm the BB-ID setting and the cable connections. Do you want to try to add BB#x again? [a:add|c:cancel] :
Workaround	When the following maintenance menu is output after executing the addfru(8) command, input power on the SPARC M10-4S or the crossbar box to be added and execute the next operation (step 2) after 20 minutes. Please execute the following steps: 1) After the added device is connected with the system,please turn on the breaker of the BB#x. 2) Please select[f:finish]: [How to restore] Input "a" in response to the "[a:add|c:cancel] :" message and re-execute the addfru(8) command.
RTI No.	**RTIF2-131213-019**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	While XSCF is starting after being powered on, watchdog timeout may occur and XSCF is rebooted. After this reboot is completed, the configuration information of the components mounted on the system cannot be checked by the showhardconf(8) command. Moreover, the following error logs regarding the configurations may be registered. Msg:Indispensable parts are not installed (PSU). Msg:Indispensable parts are not installed (FAN). Msg:Indispensable parts are not installed (OPNL). Msg:PSU shortage Msg:FAN shortage In this case, the physical partition may not be started.
Workaround	There is no effective workaround. [How to restore] Re-execute power off and on.

Table 3-10	Problems That Might Occur With XCP 2340 and Workarounds *(continued)*

RTI No.	**RTIF2-131213-022**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	After firmware update, when the XCP version is checked by the version(8) command or the XSCF Web interface, the displayed XCP version of SPARC M10-1, SPARC M10-4, each crossbar box (XBBOX), or SPARC M10-4S (BB) may not be the same as the updated XCP version. The following shows an example of firmware update from XCP 2042 to XCP 2052. The XCP version for "XCP0 (Reserve):" of BB#00 is not updated. XSCF> **version -c xcp -v** XBBOX#80-XSCF#0 (Master) XCP0 (Reserve): 2052 XSCF : 02.05.0002 XCP1 (Current): 2052 XSCF : 02.05.0002 XBBOX#81-XSCF#0 (Standby) XCP0 (Current): 2052 XSCF : 02.05.0002 XCP1 (Reserve): 2052 XSCF : 02.05.0002 BB#00-XSCF#0 XCP0 (Reserve): 2042 ~~~~ CMU : 02.05.0002 POST : 1.43.0 OpenBoot PROM : 4.34.0+1.22.0 Hypervisor : 0.27.8 XSCF : 02.04.0000 XCP1 (Current): 2052 CMU : 02.05.0002 POST : 1.43.0 OpenBoot PROM : 4.34.0+1.22.0 Hypervisor : 0.27.8 XSCF : 02.05.0002
Workaround	There is no effective workaround. [How to restore] For the 1BB configuration of SPARC M10-1, SPARC M10-4, or SPARC M10-4S, execute the rebootxscf command to reset the XSCF. For the building block configuration, specify the BB-ID of the crossbar box (XBBOX) or of the SPARC M10-4S (BB), which was not updated, to the rebootxscf -b BB-ID command and execute it to reset the XSCF of the specified chassis.
RTI No.	**RTIF2-131126-003**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	Update of the PCI expansion unit firmware may fail. If it fails, "LINKCARD update is failed" appears in the event log. [Example] SCF:LINKCARD update is failed (LINKCARD=1, bank=0, PCIBOX version=1130: last version=1120)
Workaround	There is no effective workaround. Execute the ioxadm -c update command to update the PCI expansion unit firmware again.

Table 3-10	Problems That Might Occur With XCP 2340 and Workarounds *(continued)*
RTI No.	**RTIF2-131112-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If data is transmitted via SSH by the snapshot(8) -t command, this transmission may be delayed by about 10 to 30 minutes in comparison with transfer using USB devices and XSCF Web.
Workaround	There is no effective workaround. Even if transfer is delayed, there is no problem with the collected data.
RTI No.	**RTIF2-131112-013**
Model	**SPARC M10-4S**
Description	Suppose that multiple physical partitions (PPARs) are simultaneously started by the poweron -a command. The error message "Error storing configuration variable. LDC is not up Configuration variable setting will not persist after a reset or power cycle" may be output to the OS console after the message "Unable to connect to Domain Service providers." Oracle Solaris may be started without applying the OpenBoot PROM environment variable specified with the setpparparam(8) command.
Workaround	There is no effective workaround. Restart the control domain for the physical partition (PPAR) for which the error message was output.
RTI No.	**RTIF2-131001-002**
Model	**SPARC M10-4S**
Description	While a physical partition (PPAR) is operating or when a PPAR is turned off, master/standby XSCF switching may occur. If master/standby switching occurs, the following message is displayed on the console of the master XSCF. Kernel panic - not syncing: MBC Dual ifcut interrupt.
Workaround	There is no effective workaround. As a result of this defect, master/standby switching occurs, but this does not affect the system, and the system can be operated continuously.
RTI No.	**RTIF2-130919-001**
Model	**SPARC M10-4S**
Description	In case of a system comprising of several SPARC M10-4S, if input power is turned off and on (AC OFF/ON) on a number of SPARC M10-4S chassis, while some other slave chassis are running, the physical partitions may not start.
Workaround	Workaround When performing AC OFF/ON, do so on all the chassis comprising a system. [How to restore] Turn off input power of all the chassis comprising the system and then turn on the input power.

RTI No.	**RTIF2-130710-001**
Model	**SPARC M10-4S**
Description	If XSCF switching is performed using the switchscf(8) command, in rare cases, the standby XSCF may not start.
Workaround	There is no effective workaround. [How to restore] Turn off and then turn on the input power supply (AC OFF/ON) to every SPARC M10-4S or execute the replacefru(8) command to perform pseudo replacement (replacement work without replacing any parts) of the SPARC M10-4S that does not start.
RTI No.	**RTIF2-130516-002**
Model	**SPARC M10-4S**
Description	If XSCF switching or an XSCF reboot occurred while the physical partition (PPAR) was being powered off, it may be impossible to turn off the power.
Workaround	There is no effective workaround. While powering off the PPAR, do not use the switchscf(8) command for the switching or the rebootxscf(8) command for the XSCF reboot. [How to restore] Turn off the input power, and then turn it on again. (AC-OFF/ON)
RTI No.	**RTIF2-130516-004**
Model	**SPARC M10-4S**
Description	If a hardware failure occurs in a 4BB or greater configuration, automatic cluster switching may fail. If 16 or more guest nodes are incorporated into a single cluster, the following warning message may be output to the console of the control domain. SA SA_xscf????.so to test host ??? failed
Workaround	If automatic cluster switching fails, follow the procedure in the manual of the cluster software to perform switching manually.
RTI No.	**RTIF2-130516-006**
Model	**SPARC M10-4S**
Description	If XSCF switching occurs while multiple physical partitions (PPARs) are being powered on at the same time, it may take more than usual to power them on.
Workaround	There is no effective workaround. Do not switch an XSCF by using the switchscf(8) command while PPARs are being powered on.

RTI No.	**RTIF2-130410-001**
Model	**SPARC M10-4S**
Description	Suppose that for the system connected to a crossbar box, you are powering on or off the physical partition (PPAR) that is not assigned to the maintenance-target FRU, and execute the diagxbu(8) or testsb(8) command. In this case, the diagnosis of a system board (PSB) may fail during the PSB power-off and the following message may be output. [Warning:010] An internal error has occurred.
Workaround	There is no effective workaround. Execute the showboards(8) command to check that the [Pwr] field of the relevant PSB is set to "n". If the field is set to "y", execute the showboards(8) command every few minutes to check that the field changes to "n".
RTI No.	**RTIF2-130410-002**
Model	**SPARC M10-4S**
Description	The switching of an XSCF may fail if the XSCF is switched by executing the switchscf(8) command while a physical partition (PPAR) is being powered on.
Workaround	Do not switch an XSCF by using the switchscf(8) command while a PPAR is being powered on.
RTI No.	**RTIF2-130410-003**
Model	**SPARC M10-4S**
Description	If a physical partition (PPAR) is powered on in the system that satisfies all the following conditions, other PPAR may also be powered on. - The remote power management is enabled with the setremotepwrmgmt(8) command. - A node is created whose SubNodeID is not set in a management item of the remote power management. - Multiple PPARs are configured.
Workaround	- When remote power management is not necessary Disable remote power management with setremotepwrmgmt -c disable and then delete the remote power management setting with the clearremotepwrmgmt(8) command. - When remote power management is necessary If the system has multiple PPARs, create a management file for remote power management by specifying a PPAR-ID as a SubNodeID, and then register the remote power management setting with setremotepwrmgmt -c config.
RTI No.	**RTIF2-130329-005**
Model	**SPARC M10-1**
Description	When you turn on the input power supply in SPARC M10-1, READY LED of XSCF remains blinking and the system may not start.
Workaround	There is no effective workaround. Power off the input power supply and then power it on again.

Table 3-10   Problems That Might Occur With XCP 2340 and Workarounds *(continued)*

RTI No.	**RTIF2-130305-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	"The limit of power has been exceeded" is registered in the event log if you perform the following. Execute the setpowercapping(8) command to set the power consumption limiting function to "Enable", the power consumption maximum allowable value to "powerlimit_p" (percentage), and the time extension when exceeding the maximum allowable power consumption to "none." Then, turn on the input power supply or turn off the power to the physical partition (PPAR).
Workaround	There is no effective workaround. Ignore this event log.
RTI No.	**RTIF2-130305-002**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If an error in the CPU or memory is detected and if the XSCF is switched while the XSCF is notifying the error information to the control domain, the error information may not be notified again to the control domain. Because of this, the error information displayed with the showlogs error command is not displayed in the Fault Report output by the fmdump command.
Workaround	There is no effective workaround. Maintain according to the FRU displayed by the showlogs error command.
RTI No.	**RTIF2-130305-007**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	FRU registered in the error log is displayed as "PPAR#30" if the configuration error of the system board (PSB) is detected when executing the testsb(8) command or diagxbu(8) command.
Workaround	There is no effective workaround. Maintain the applicable PSB of SPARC M10 system chassis.
RTI No.	**RTIF2-130305-013**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	While XSCF is starting, watchdog timeout may occur, which may cause XSCF to be reset.
Workaround	Perform the following procedure. 1. If Oracle Solaris is running, shut it down. 2. Confirm that Oracle Solaris has been shut down, and then turn off and on (AC OFF/ON) the input power of the system. When recycling the power supply to the system, wait for 30 seconds or more to turn on the input power supply after disconnecting it. In case XSCF is not started even if recycling the input power supply to the system, replace the CPU memory unit lower (CMUL) or the motherboard unit (MBU).
RTI No.	**RTIF2-130305-020**
Model	**SPARC M10-4S**
Description	If an XSCF panic or hang-up occurs, an error log showing that "XSCF hang-up is detected" may be posted many times.
Workaround	There is no effective workaround. Ignore the logs with the same contents that were notified at the same period of time considering that they are caused by the same reason.

RTI No.	**RTIF2-130305-022**
Model	**SPARC M10-4S**
Description	The poweron(8) command may fail with the output of the following message if an error log showing that "XSCF hang-up is detected" was detected and an "unknown" system board (PSB) was found by the showboards(8) command. The same can be said for the instruction of power-on using the XSCF Web, APCS, or the remote power management. Not powering on : An internal error has occurred. Please contact your system administrator.
Workaround	There is no effective workaround. Use the showboards(8) command to replace the XSCF of the PSB, which is shown as "unknown".
RTI No.	**RTIF2-130305-025**
Model	**SPARC M10-4S**
Description	If the poweroff(8) command is executed in the system that has more than one physical partition (PPAR), it takes time for the processing because the power of the PPARs is disconnected one by one. Depending on the system configuration, it may take about one hour.
Workaround	There is no effective workaround.
RTI No.	**RTIF2-130219-004**
Model	**SPARC M10-4S**
Description	If an error occurs with a crossbar unit mounted on a crossbar box, many instances of "failed to read/write interrupt mask register" may be registered in the error log.
Workaround	There is no effective workaround. Power off the physical partition (PPAR) and replace the crossbar unit in the crossbar box.
RTI No.	**RTIF2-130219-006**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If you reboot an XSCF by using the flashupdate(8) or rebootxscf(8) command while a physical partition (PPAR) is being powered on, the POST may stop in a state where the diagnosis is completed (Initialization Complete).
Workaround	There is no effective workaround. [How to restore] Execute the reset por command, or power off the PPAR by using the poweroff -f command and then power it on again.
RTI No.	**RTIF2-130109-003**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If you use the setpcl(8) command to change the LSB number of a SPARC M10 system chassis to which a PCI expansion unit is connected and start Oracle Solaris in the logical domain configuration, you cannot display the configuration information of the PCI expansion unit by executing the showhardconf(8) command.
Workaround	Use the setdomainconfig(8) command to set the logical domain configuration to the factory-default, and power on the physical partition (PPAR). Then, configure the logical domain again.

Workaround for RTIF2-140304-007

If PSU is replaced by the replacefru(8) command, after mounting the new PSU, wait for at least 30 seconds before pressing the [f] key of the menu of replacefru(8) command.

```
Do you want to continue?[r:replace|c:cancel] :r
Please execute the following steps:
1) Remove PSU#n.
2) Execute either the following:
  2-1) After installing the exchanged device, please select 'finish'.
  2-2) If you want to suspend the maintenance without exchanging device,
       please select 'cancel'.
[f:finish|c:cancel] :f
```

[How to restore]
If both PSUs become "Deconfigured" without performing workarounds, active replacement of the PSUs cannot be done with the replacefru(8) command.

```
Maintenance/Replacement Menu
Please select a FRU to be replaced.
No.  FRU                Status
--- ------------------ --------------
1   /PSU#0             Deconfigured
2   /PSU#1             Deconfigured
-----------------------------------------------------------------------------
Select [1,2|b:back] :2
[Warning:307]
PSU#1 cannot be replaced. Please verify the configuration.
Select [1,2|b:back] :2
[Warning:307]
PSU#1 cannot be replaced.
```

To restore, after removing the replaced PSUs without the replacefru(8) command, use the replacefru(8) command to replace the PSUs.

Problems Resolved in XCP 2340

The following table lists the problems resolved in XCP 2340.

Table 3-11   Problems Resolved in XCP 2340

RTI No.	RTIF2-170421-001
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	Booting from an external DVD drive may fail.
	[Example of output message]
	{0} ok boot /pci@8000/pci@4/pci@0/pci@2/pci@0/usb@4,1/cdrom@2/disk
	Boot device: /pci@8000/pci@4/pci@0/pci@2/pci@0/usb@4,1/cdrom@2/disk File and args:
	Can't open boot device

Table 3-11   Problems Resolved in XCP 2340 *(continued)*

Workaround	1. Stop OpenBoot PROM at the ok prompt.

1. Stop OpenBoot PROM at the ok prompt.
2. Perform the following steps to change the OpenBoot PROM environment variable nvramrc.
   a. Execute the nvedit command, and write nvramrc as shown below.
      {0} ok **nvedit**
        0: : **patch-zero 0 to my-adr0 0 ;**
        1: **' patch-zero ' 0 ' new-instance d# 28 + token@ (patch**
   b. Press the [Ctrl] + [C] keys to exit nvedit and return to the ok prompt.
   c. Execute nvstore to save the edited contents.
      {0} ok **nvstore**
   d. Check whether nvramrc was written correctly.
      {0} ok **printenv nvramrc**
      nvramrc = **: patch-zero 0 to my-adr0 0 ;**
                    ' patch-zero ' 0 ' new-instance d# 28 + token@ (patch
      {0} ok
3. Set the OpenBoot PROM environment variable use-nvramrc? to true.
      {0} ok **setenv use-nvramrc? true**
      use-nvramrc? = true
4. Execute the reset-all command to restart OpenBoot PROM.
      {0} ok **reset-all**

After executing the reset-all command and the system stops at the ok prompt, boot from a DVD drive.
Example: For booting from a DVD drive connected to a front USB port
  {0} ok **boot /pci@8000/pci@4/pci@0/pci@2/pci@0/usb@4,1/cdrom@2/disk**

To return the above setting described in [Workaround] to its original state, perform the following steps.
1. Stop OpenBoot PROM at the ok prompt.
2. Delete the set contents from the OpenBoot PROM environment variable nvramrc.
   a. Execute nvedit to delete ":patch=zero 0 to my-adr0 0;" and
      "' patch-zero ' 0 ' new-instance d# 28 + token@ (patch" from nvramrc.
      You can delete lines one by one by pressing the [Ctrl] + [K] keys twice at the beginning of a line.
      {0} ok **nvedit**
        0:
   b. Press the [Ctrl] + [C] keys to exit nvedit and return to the ok prompt.
   c. Execute nvstore to save the edited contents.
      {0} ok **nvstore**
   d. Check whether the nvramrc setting was deleted correctly.
      {0} ok **printenv nvramrc**
      nvramrc =
      {0} ok
3. Set the OpenBoot PROM environment variable use-nvramrc? to false.
   If it has been set to true before the workaround was performed, this step is unnecessary.
      {0} ok **setenv use-nvramrc? false**
      use-nvramrc? = false
      {0} ok
4. Execute the reset-all command to restart OpenBoot PROM.
      {0} ok **reset-all**

Table 3-11   Problems Resolved in XCP 2340 *(continued)*

RTI No.	**RTIF2-170407-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**

Description	The ttydm process may fail and the following logs may be registered if you reboot the XSCF by executing the rebootxscf(8), switchscf(8), or flashupdate(8) command while console messages are continuously output from the control domain.
	[Example]
	XSCF> **showlogs error -vr**
	Date: Mar 02 22:23:00 JST 2015
	    Code: 20000000-00fcff000e020000ff-010400010000000000000000
	    Status: Notice Occurred: Mar 02 22:22:54.396 JST 2015
	    FRU: /FIRMWARE,/MBU
	    Msg: SCF process down detected
	    Diagnostic Code:
	        00000000 00000000 0000
	        00000000 00000000 0000
	        00000000 00000000 0000
	        74747964 6d2e3237 36342e62 7a320000
	        00000000 00000000 0000
	You can check the ttydm process by confirming that the first four bytes on the fourth line of "Diagnostic Code" have the value "747479646d".

Workaround	There is no effective workaround. Logs are collected, but the XSCF is rebooted.
RTI No.	**RTIF2-170406-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	From XCP 2230 onwards, a process may produce a core dump if Dynamic Resource Management (DRM) of Oracle VM Server for SPARC is used or a virtual CPU is deleted by executing the ldm remove-vcpu command.
Workaround	There is no effective workaround.
RTI No.	**RTIF2-170406-002**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	When you select [XSCF] - [Logs] - [Console Log] menu from the XSCF Web and display the log information, the following error appears in a pop-up window and the screen returns to the login window. Description Server Internal error or the page you visit does not exist or has been deleted! Sorry for any inconvenience!
Workaround	There is no effective workaround. Execute the showlogs command of the XSCF shell to check console logs.
RTI No.	**RTIF2-170405-004**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If a security key is used for booting Oracle Solaris on the control domain and you save the domain configuration information by using the following procedure, the next boot fails. 1. Execute the set-security-key command or the set-ascii-security-key command at the ok prompt of OpenBoot PROM on the control domain to set a security key.

Table 3-11   Problems Resolved in XCP 2340 *(continued)*

2. Save the domain configuration information to the XSCF by executing the ldm add-spconfig command of Oracle VM Server for SPARC.

3. Boot Oracle Solaris on the control domain.

This problem does not occur on a guest domain.

[Example] Booting Oracle Solaris fails after a security key is set

SPARC M10-4S, No Keyboard

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OpenBoot 4.38.5, 126.0000 GB memory available, Serial #********.

[2.21.0]

Ethernet address **:**:**:**:**:**, Host ID: *******.

-- Omitted --

Boot device: /pci@8000/pci@4/pci@0/pci@9/network@0 File and args:

100 Mbps full duplex Link up

100 Mbps full duplex Link up

100 Mbps full duplex Link up

SunOS Release 5.11 Version 11.3 64-bit

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NOTICE: Configuring iSCSI boot session...

Hostname: solaris

solaris console login: root

Password:

Last login: Wed Jan ** **:**:** 2017 on console

Jan ** **:**:** solaris login: ROOT LOGIN /dev/console^M

Oracle Corporation SunOS 5.11 11.3 September 2015

You have mail.

root@solaris:~# ldm ls-spconfig

factory-default [current]

root@solaris:~# ldm add-spconfig ldm-cfg1

root@solaris:~# ldm ls-spconfig

factory-default

ldm-cfg1 [current]

root@solaris:~# init 6

-- Omitted --

SPARC M10-4S, No Keyboard

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OpenBoot 4.38.5, 126.0000 GB memory available, Serial #********.

[2.21.0]

Ethernet address **:**:**:**:**:**, Host ID: *******.

100 Mbps full duplex Link up

Boot device: net File and args:

100 Mbps full duplex Link up

ERROR: /iscsi-hba: iSCSI login failed

ERROR: /packages/obp-tftp: Could not open /iscsi-hba/disk

Boot load failed

Table 3-11   Problems Resolved in XCP 2340 *(continued)*

	Evaluating:
	{0} ok
Workaround	There is no effective workaround. [How to restore] After executing the ldm add-spconfig command from Oracle VM Server for SPARC to store the domain configuration information in the XSCF, set a security key again by executing the set-ascii-security-key command or the set-security-key command at the ok prompt of OpenBoot PROM.
RTI No.	**RTIF2-170405-006**
Model	**SPARC M10-4S**
Description	In a system with a building block configuration, the following error log may be registered when the input power is turned on (AC ON) or the rebootxscf -a command is used. XSCF data synchronization failed At this time, the physical partition cannot be powered on.
Workaround	There is no effective workaround. Reboot all the XSCFs by using the rebootxscf -a command.
RTI No.	**RTIF2-170405-011**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	The showinterimpermit command cannot be executed with the fieldeng privilege.
Workaround	Execute the command with any of the following user privileges. platadm, platop, pparadm, pparmgr, pparop
RTI No.	**RTIF2-170331-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	On a SPARC M10 system with SPARC64 X processors, Hypervisor may abort after executing live migration on a guest domain.
Workaround	There is no effective workaround.
RTI No.	**RTIF2-161215-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If a live migration of a guest domain fails, logical domains on the physical partition as the migration source may panic or Hypervisor may abort.
Workaround	There is no effective workaround. If a live migration fails, reboot the guest domain as soon as possible.

Table 3-11   Problems Resolved in XCP 2340 *(continued)*

RTI No.	**RTIF2-161117-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If you boot/reboot logical domains after the elapse of a certain period of time from physical partition (PPAR) power-on, the boot/reboot may fail. This problem occurs in a boot/reboot from an internal LAN. This problem happens during the time period described below. - The first period is the 15-minute period after the elapse of "24 days, 20 hours, 16 minutes, and 23.648 seconds" from physical partition (PPAR) power-on. Each subsequent period is the 15-minute period after the elapse of a multiple of time of "49 days, 17 hours, 02 minutes, and 47.296 seconds." 　(15-minute period on the 25th day and then the 75th day, 125th day, 175th day, and so on at an interval of approximately 50 days) [Example] Period of 15 minutes from 24th day, 20 hours, 16 minutes, and 23.648 seconds to (same day and hour) 31 minutes and 23.648 seconds Period of 15 minutes from 74th day, 13 hours, 19 minutes, and 10.944 seconds to (same day and hour) 34 minutes and 10.944 seconds [Example of failure] Oracle Solaris is booted from internal LAN in control domain on SPARC M10-4 SPARC M10-4S, No Keyboard Copyright (c) 1998, 2016, Oracle and/or its affiliates. All rights reserved. OpenBoot 4.38.5, xx.xxxx GB memory available, Serial #xxxxxxxx. [2.19.0] Ethernet address xx:xx:xx:xx:xx:xx, Host ID: xxxxxxxx. 1000 Mbps full duplex Link up Boot device: net:dhcp File and args: 1000 Mbps full duplex Link up Timed out waiting for BOOTP/DHCP reply Timed out waiting for BOOTP/DHCP reply Timed out waiting for BOOTP/DHCP reply Timed out waiting for BOOTP/DHCP reply Timed out waiting for BOOTP/DHCP reply Timed out waiting for BOOTP/DHCP reply : :
Workaround	There is no effective workaround. [How to restore] Execute the sendbreak command from the XSCF. After the system stops at the ok prompt and 15 minutes elapse, execute the boot command.

Table 3-11   Problems Resolved in XCP 2340 *(continued)*

RTI No.	**RTIF2-141008-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If the setsnmp command tries to set enabled immediately after disabled was set, the "Agent enable failed" message may appear, and the command may fail. This may cause the following phenomena. 1. If it is left as it is, the error log of "SCF panic detected" is registered and the XSCF is rebooted. 2. The setting has not been reflected, so if the showsnmp command is executed, it displays "Enabled" for "Agent Status" and "None" for "Enabled MIB Modules." 3. If the showsnmp command is executed, it displays "Enabled" for "Agent Status" and "SP MIB" for "Enabled MIB Modules." However, the setting has not actually been reflected, so rebooting the XSCF causes "None" to be displayed for "Enabled MIB Modules." 4. The setting has not been reflected, so when the showsnmp command displays "None" for "Enabled MIB Modules," the system using the cluster software detects the following error: "FJSVcluster: Error: DEV: 7240: Cannot connect to the XSCF." [Example] After the setsnmp command fails, the setting is not reflected. XSCF> **setsnmp disable** XSCF> **setsnmp enable** setsnmp: Agent enable failed XSCF> **showsnmp** Agent Status: Enabled Agent Port: 161 System Location: System-Location System Contact: System-Contact : Status: Enabled Community String: public Enabled MIB Modules: None XSCF> Similarly, this problem also occurs when the setsnmpusm command or setsnmpvacm command is executed to change the setting while the SNMP setting is enabled.
Workaround	To change the setting to enabled after it was changed to disabled, wait at least 30 seconds, the minimum interval. To change the setting with the setsnmpusm command or setsnmpvacm command, temporarily change the SNMP setting to disable, and then wait at least 30 seconds, the minimum interval. [How to restore] Temporarily set disable with the setsnmp command, and then wait at least 30 seconds, the minimum interval, to set enable. Next, execute the showsnmp, setsnmpusm, or showsnmpvacm command to confirm that the setting has been reflected as expected.

Problems Resolved in XCP 2332

The following table lists the problems resolved in XCP 2332.

Table 3-12   Problems Resolved in XCP 2332

RTI No.	RTIF2-170130-001
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	When you execute live migration of a logical domain, the following may not be displayed properly even after you save logical domain configuration information by executing the ldm add-spconfig command: - The state of the moved logical domain to be displayed by the XSCF showdomainstatus command - The state of the logical domain of scfDomainStatus in the XSCF extended MIB definition file At this time, in an environment that uses the cluster software, the software tries to switch clusters if the interconnect of all the clusters fails. In that case, there may be double startup of a user application, and as a result, data inconsistency may occur. [Example] After guest01 is moved from another SPARC M10 to the local SPARC M10 through live migration, the showdomainstatus command should display the Status of guest01 as Solaris running. However, it actually displays it as Host stopped. XSCF> **showdomainstatus -p 0 -y** Logical Domain Name Status primary Solaris running guest00 Solaris running guest01 Host stopped # **ldm list** NAME STATE FLAGS CONS VCPU MEMORY UTIL UPTIME primary active -t-cv 4 1G 0.5% 3d 21h 7m guest00 active -t--- 5000 8 1G 23% 10h guest01 active -t--- 5001 8 1G 23% 20h
Workaround	Before moving a guest domain from another SPARC M10 to the local SPARC M10 through live migration, reboot all the XSCFs connected to the local SPARC M10 by using the rebootxscf -a command. XSCFs must be rebooted every time a PPAR is powered off and on again. Reboot the XSCFs after powering off the PPAR but before executing live migration. If you turn the input power off and on again when powering off and on the PPAR again, you do not need to execute the rebootxscf -a command. [How to restore] After rebooting all the XSCFs connected to the SPARC M10 by using the rebootxscf -a command, execute live migration to move the guest domain whose state is not displayed properly, or restart the guest domain.

Problems Resolved in XCP 2330

The following table lists the problems resolved in XCP 2330.

Table 3-13   Problems Resolved in XCP 2330

RTI No.	**RTIF2-161129-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	From XCP 2290 or later, Hypervisor may abort after executing live migration on a guest domain running Oracle Solaris 11.2 or later.
Workaround	There is no effective workaround. After a guest domain is moved by executing live migration, reboot the guest domain as soon as possible or restart (stop and start) the PPAR.
RTI No.	**RTIF2-161108-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**

Description	If you boot/reboot logical domains after the elapse of a certain period of time from physical partition (PPAR) power-on, the boot/reboot fails and the system stops at the ok prompt.
	This problem does not occur in a boot/reboot from an internal disk or USB device.
	The problem occurs in a boot/reboot from any of the following devices:
	- Virtual disk (*1), virtual network, virtual HBA, and F160/F320 card
	  *1 This also holds true for cases where an internal disk is used as a virtual disk.
	
	This problem happens during the time period described below.
	- The first period is the 15-minute period after the elapse of "24 days, 20 hours, 16 minutes, and 23.648 seconds" from physical partition (PPAR) power-on. Each subsequent period is the 15-minute period after the elapse of a multiple of time of "49 days, 17 hours, 02 minutes, and 47.296 seconds."
	  (15-minute period on the 25th day and then the 75th day, 125th day, 175th day, and so on at an interval of approximately 50 days)
	
	[Example]
	Period of 15 minutes from 24th day, 20 hours, 16 minutes, and 23.648 seconds to (same day and hour) 31 minutes and 23.648 seconds
	Period of 15 minutes from 74th day, 13 hours, 19 minutes, and 10.944 seconds to (same day and hour) 34 minutes and 10.944 seconds
	
	[Example of failure] Oracle Solaris is booted from guest domain virtual network on SPARC M10-1
	
	SPARC M10-1, No Keyboard
	Copyright (c) 1998, 2016, Oracle and/or its affiliates. All rights reserved.
	OpenBoot 4.38.5, 14.0000 GB memory available, Serial #xxxxxxxx.
	[2.19.0]
	Ethernet address xx:xx:xx:xx:xx:xx, Host ID: xxxxxxxx.
	
	WARNING: /virtual-devices@100/channel-devices@200/network@0: Unable to connect to virtual switch
	No viable default device found in boot-device variable.
	
	Evaluating:
	
	{0} ok

Workaround	There is no effective workaround. [How to restore] After system stops with ok prompt and the elapse of 15 minutes, execute the boot command.

Table 3-13   Problems Resolved in XCP 2330 *(continued)*

RTI No.	**RTIF2-161108-003**
Model	**SPARC M10-4S**
Description	In the system configuration with two crossbar boxes, logs may be registered with wrong BB-ID if an error of "XB detected fatal clock failure" or XB internal fatal error" occurs. [Example] BB-ID of "Code:" shows correct value "01", but BB-ID of "FRU" shows incorrect value "0". XSCF> **showlogs error** Date: May 16 08:49:52 JST 2016 Code: 80002100-0076110000ff0000ff-050067003013015f000000000 ^^ Status: Alarm Occurred: May 16 08:49:35.147 JST 2016 FRU: /BB#0/XBU#1 ^ Msg: XB detected fatal clock failure
Workaround	There is no effective workaround. After executing the showlogs error command, identify faulty components and replace them based on the value of "Code:" indicating suspected location.
RTI No.	**RTIF2-161012-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	Virtual function (VF) may be unusable if you forcibly stop (e.g. ldm stop-domain command with -f option) the I/O domain to which the VF of the 10 Gigabit Ethernet card is assigned.
Workaround	When stopping the I/O domain to which the VF is assigned, use the shutdown command. [How to restore] After clearing the Fault Report of the appropriate VF by the fmadm command on the I/O domain with the VF assigned, as well as on the root domain providing physical function (PF) of the VF, stop and start the I/O domain and the root domain by the shutdown command.
RTI No.	**RTIF2-161012-002**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	In the I/O domain to which the 10 Gigabit Ethernet card and the like are assigned, Oracle Solaris may hang up when Oracle Solaris is booting.
Workaround	There is no effective workaround.

Table 3-13   Problems Resolved in XCP 2330 *(continued)*

RTI No.	**RTIF2-160912-001**
Model	**SPARC M10-4, SPARC M10-4S**
Description	When a root complex other than BB#0/CMUL fails, FRU of PCI access error, which is displayed by the showlogs error command of XSCF, may not be displayed properly.

Workaround	There is no effective workaround.
	[How to restore]
	When a root complex fails, identify the failure location and replace the failure part according to the result displayed by the showstatus(8) command of XSCF as shown below.
	Note - Do not identify the failure location and perform maintenance according to the FRU of PCI access error displayed by the showlogs error command of XSCF and the output result of the fmdump/fmadm command of Oracle Solaris.
	
	[Example] When the root complex of BB#01/CMUU/CPU#1 fails
	  XSCF> **showstatus**
	    BB#01 Status:Normal;
	  * CMUU Status:Degraded;
	  * CPU#1 Status:Degraded;

RTI No.	**RTIF2-160616-001**
Model	**SPARC M10-1**
Description	In a system with two PCI expansion units connected, you may be unable to identify the connection of a PCI expansion unit from the XSCF by executing the ioxadm -v list command after the physical partition (PPAR) is powered on. However, you may be able to identify it from Oracle Solaris or OpenBoot PROM on the physical partition. In this case, it is not possible to perform active replacement of the LINK card used with the XSCF functions, or a fan unit or power supply unit of the PCI expansion unit. The settings are reset to the factory default and the logical domain may not be able to start if the system operates with a logical domain configuration.
Workaround	There is no effective workaround. Power off the physical partition (PPAR) and power it on again.
RTI No.	**RTIF2-160606-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If the reset command is executed while the physical partition (PPAR) is powered off, "no PSB available in PPAR" is registered in the error log at the PPAR power-on time, and PPAR power-on fails.
Workaround	Do not execute the reset command while the physical partition (PPAR) is powered off. Execute the rebootxscf command to reboot the XSCF or turn off the input power of the system if the error log of "no PSB available in PPAR" is registered after executing the reset command.

Problems Resolved in XCP 2322

The following table lists the problems resolved in XCP 2322.

Table 3-14   Problems Resolved in XCP 2322

RTI No.	**RTIF2-161013-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If IP addresses are set to both XSCF-LAN#0 and XSCF-LAN#1, the XSCF-LAN#1 IP address may be set as the Agent Address for the SNMP Trap of SNMPv1. Therefore, a retry by resource management software (ServerView Resource Orchestrator) to switch the servers may fail. This symptom occurs when no takeover IP address is set for the SPARC M10-4S.
Workaround	There is no effective workaround.
RTI No.	**RTIF2-161004-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	The OID information of "scfPPARStatus" (PPAR status information) in the definition file of XSCF extension MIB is not updated even if the control domain is rebooted. Therefore, a retry by resource management software (ServerView Resource Orchestrator) to switch the servers may fail.
Workaround	There is no effective workaround.
RTI No.	**RTIF2-161004-002**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If you mount an IHV graphics card on a PCI Express expansion unit from IHV and connect the PCI Express expansion unit to the SPARC M10, the error "IOC register compare error" may be detected.
Workaround	Set the POST diagnosis level to "off". Perform the following. 1. Power off the physical partition. 　XSCF> **poweroff -p _x_** 2. Set the POST diagnosis level to "off". 　XSCF> **setpparmode -p _x_ -m diag=off**

Problems Resolved in XCP 2321

The following table lists the problems resolved in XCP 2321.

Table 3-15	Problems Resolved in XCP 2321
RTI No.	**RTIF2-160909-002**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	After Oracle Solaris startup, the following errors may be detected.

XSCF> showlogs error -V
Date: xxx xx xx:xx:xx.xxx xxx xxxx
    Code: 40000000-00a20400480400a204-12bb00000000000000000000
    Status: Warning   Occurred: xxx xx xx:xx:xx.xxx xxx xxxx
    FRU: xxxxxxxxxxxx
    Msg: PCI access error
    Diagnostic Code:
        00000200 00000000 0000
        00000100 00000000 0000
        00000200 00000000 0000
        00000000 00000000 00000000 00000000
        00000000 00000000 0000
    Diagnostic Messages
        IO-FaultReport:
        TIME   UUID
        xxx xx xx:xx:xx   xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx
        MSG-ID
        xxxxxxxxxxxx

If one of the following is indicated in FRU, it corresponds to this problem.
    /BB#0/CMUL,/BB#0/CMUU
    /BB#0/CMUL
    /BB#0/CMUU
    /MBU

If one of the following is indicated in MSG-ID, it corresponds to this problem.
    PCIEX-8000-YJ
    PCIEX-8000-KP
    PCIEX-8000-J5

| **Workaround** | There is no effective workaround.
Update the XCP firmware to XCP 2321 or later. |

Problems Resolved in XCP 2320

The following table lists the problems resolved in XCP 2320.

Table 3-16 Problems Resolved in XCP 2320

RTI No.	**RTIF2-161108-002**
Model	**SPARC M10-4**
Description	If PCI expansion unit is connected to PCI slot #9 of SPARC M10-4, it may take a few more minutes to restart logical domains using resource of the PCI expansion for PCI slot #9 unit than other logical domains.
Workaround	There is no effective workaround.
RTI No.	**RTIF2-160613-002**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	Security fixes. (CVE-2016-0800) For details, see the Oracle website relating to the following:*Critical Patch Updates* http://software.fujitsu.com/jp/security/vulnerabilities
Workaround	Update the XCP firmware to XCP 2320 or later.
RTI No.	**RTIF2-160607-001**
Model	**SPARC M10-4**
Description	Suppose that the PCI expansion unit is connected to PCI slot #9 of the SPARC M10-4. For the PCI expansion unit connected to PCI slot #9, it is not possible to execute the ioxadm command to cause a chassis LED (locater) to blink to give directions. Nor is it possible to perform active replacement of the fan unit and power supply unit (PSU) of the PCI expansion unit.
Workaround	There is no effective workaround. If the ioxadm command was executed for a PCI expansion unit connected to a slot other than PCI slot #9, execute the ioxadm command again. To replace a fan unit or PSU of a PCI expansion unit connected to PCI slot #9, power off the physical partition connecting the PCI expansion unit and then replace the fan unit or PSU.
RTI No.	**RTIF2-160520-001**
Model	**SPARC M10-4**
Description	If the firmware of the PCI expansion unit is updated when the unit is connected to PCI slot #9 of the SPARC M10-4, the update may fail with the following message displayed. **Note -** The update will fail even on a PCI expansion unit connected to a slot other than PCI slot #9. [Example of output message] XSCF> **ioxadm -c update PCIBOX#8002 -s 1200** Firmware update is started. (version=1200) Operation was not successful. In a PCI expansion unit firmware update to a PCI expansion unit connected to PCI slot #9, it may take two hours or more until the ioxadm command ends with an error. Even though the firmware update of the PCI expansion unit failed, it does not affect the operation of the physical partition.
Workaround	There is no effective workaround. If the ioxadm command was executed for a PCI expansion unit connected to a slot other than PCI slot #9, execute the ioxadm command again. To replace a fan unit or PSU of a PCI expansion unit connected to PCI slot #9, power off the physical partition connecting the PCI expansion unit and then replace the fan unit or PSU.

Table 3-16	Problems Resolved in XCP 2320 *(continued)*
RTI No.	**RTIF2-160520-002**
Model	**SPARC M10-4, SPARC M10-4S**
Description	The connection of a PCI expansion unit may not be identifiable from the XSCF by executing the ioxadm -v list command after the physical partition (PPAR) is powered on, although it is identifiable from Oracle Solaris or OpenBoot PROM on the physical partition. In this case, it is not possible to perform active replacement of the LINK card used with the XSCF functions, or a fan unit or power supply unit of the PCI expansion unit.
Workaround	There is no effective workaround. Power off the physical partition and power it on again.

Table 3-16	Problems Resolved in XCP 2320 *(continued)*
RTI No.	**RTIF2-160520-003**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If the graphics card (SP0X7GR1F) is used to start GNOME Display Manager (GDM), nothing may appear on the display unit. This problem occurs when Oracle Solaris is in the factory-default configuration.
Workaround	Perform either [Workaround 1] or [Workaround 2] below. [Workaround 1] After commenting out BusID in the desktop environment information used by GNOME, operate the system. This operation does not affect system performance, etc. Perform the following procedure. 1. Edit BusID in /etc/X11/xorg.conf to make it a comment line (add "#" to the beginning of the line). [Example] Comment out BusID written between the # First card start line and the # First card end line. **# First card start** (Omitted) **# BusID "PCI:8:0:0"** (Omitted) **# First card end** 2. Apply the changed desktop environment information to GNOME. - If you are logged in to GNOME, log off from GNOME, and log in again. - If you are not logged in to GNOME, restart GDM, and log in to GNOME. [Example] If you are not logged in to GNOME, restart GDM. **# /usr/sbin/svcadm restart gdm** [Workaround 2] After saving logical domain configuration information, operate the system. GFX 550e Driver Software must be reinstalled because this problem may have incorrectly configured the PCI information used by the graphics card. If the hardware configuration has changed (including a change to the CPU Activation settings), this operation needs to be performed again. Perform the following procedure. 1. Start Oracle Solaris with the current configuration (factory-default) left as is. 2. Execute the ldm add-spconfig command to save the current logical domain configuration information. [Example] **# /usr/sbin/ldm add-spconfig *<config>*** 3. Stop Oracle Solaris. [Example] **# /usr/sbin/shutdown -y -g0 -i5** 4. Start Oracle Solaris. and reinstall GFX 550e Driver Software. After performing the procedure, operate the system with the logical domain configuration information saved in step 2.

Table 3-16   Problems Resolved in XCP 2320 *(continued)*

RTI No.	**RTIF2-160520-004**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If you execute the reset command to a logical domain while executing the reset command to another logical domain, the later reset command may be blocked. For this reason, if cluster software tries to switch clusters by executing the reset command, the cluster switching may fail. The clusters are switched successfully in the end because the cluster software changes paths in sequential order and executes the reset command to switch the clusters.
Workaround	There is no effective workaround.
RTI No.	**RTIF2-160512-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	The ldmd service may enter maintenance mode 734 days after starting the physical partition (PPAR). Consequently, none of the following will be available: Oracle VM Server for SPARC ldm command, logical domain operations (start/stop/change configuration/migration), automatic replacement of CPU cores, dynamic CPU/memory degradation, and monitoring (Host Watchdog) between a hypervisor and logical domain.
Workaround	There is no effective workaround. After starting a physical partition (PPAR), restart (stop/start) the PPAR before 734 days have elapsed. [How to restore] Restart (stop/start) the physical partition (PPAR).
RTI No.	**RTIF2-150521-002**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	When the ioxadm(8) command is executed, the message "Operation was not successful." is displayed and the command may fail. [Example] XSCF> **ioxadm -c update PCIBOX#0000 -s 1234** Firmware update is started. (version=1234) Operation was not successful. When the prtfru(8) command is executed, the message "An internal error has occurred. Please contact your system administrator." is displayed and the command may fail. [Example] XSCF> **prtfru** An internal error has occurred. Please contact your system administrator.
Workaround	There is no effective workaround. [How to restore] Execute the command again.

Problems Resolved in XCP 2290

The following table lists the problems resolved in XCP 2290.

Table 3-17	Problems Resolved in XCP 2290
RTI No.	**RTIF2-160401-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	Security fixes. (CVE-2015-7547) (CVE-2013-4786) For details, see the Oracle website relating to the following: *Critical Patch Updates* http://software.fujitsu.com/jp/security/vulnerabilities
Workaround	Update the XCP firmware to XCP 2290 or later. To use the remote power management function, see "Notes on the Remote Power Management Function (RCIL)."
RTI No.	**RTIF2-160203-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**

Description	When you set a string of 1017 or more characters in the OpenBoot PROM environment variable nvramrc, the following message appears, and the system may stop with the ok prompt displayed.
	FATAL: free-memory: bad address.
	ERROR: Last Trap: Memory Address not Aligned
	TL: 1
	
	%TL:1 %TT:34 %TPC:f0209020 %TnPC:f0209024
	%TSTATE:4420001600 %CWP:0
	   %PSTATE:16 AG:0 IE:1 PRIV:1 AM:0 PEF:1 RED:0 MM:0 TLE:0 CLE:0 MG:0 IG:0
	   %ASI:20 %CCR:44 XCC:nZvc ICC:nZvc
	
	%TL:2 %TT:60 %TPC:f0246b54 %TnPC:f0200680
	%TSTATE:14420001400 %CWP:0
	   %PSTATE:14 AG:0 IE:0 PRIV:1 AM:0 PEF:1 RED:0 MM:0 TLE:0 CLE:0 MG:0 IG:0
	   %ASI:20 %CCR:44 XCC:nZvc ICC:nZvc
	   omitted
	
	{0} ok

Workaround	Confirm that a string of 1016 or less characters is set in nvramrc. Perform the following procedure at the ok prompt. 1. If the OpenBoot PROM environment variable auto-boot? is true, set it to false, and then execute the reset-all command to restart the OpenBoot PROM. 2. Execute the nvedit command. 3. Edit the contents of nvramrc so that it contains a string of 1016 or fewer characters. 4. Execute the nvstore command to apply the contents of nvramrc. 5. Reset the OpenBoot PROM environment variable auto-boot?, and then execute the reset-all command to restart the OpenBoot PROM.

Table 3-17   Problems Resolved in XCP 2290 *(continued)*

RTI No.	**RTIF2-160129-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**

Description	If a hardware failure error log, displaying Status of the faulty component as "Faulted" or "Degraded," is registered after executing the showstatus command, Status may be incorrectly displayed as "Deconfigured" in some very rare cases.
	[Example] If an Alarm level memory failure is detected, Status is displayed as "Deconfigured" instead of "Faulted."
	XSCF> **showlogs_error**
	  Date: Jan 1 00:00:00 JST 2016
	  Code: 80002000-006e070069040000ff-019204110000000000000000
	  Status: Alarm Occurred: Jan 1 00:00:00.000 UTC 2016
	  FRU: /BB#0/CMUL/MEM#00A,/BB#0/CMUL
	  Msg: DIMM initialization serious error
	
	XSCF> **showstatus**
	  BB#00 Status:Normal;
	  CMUL Status:Normal;
	* MEM#00A Status:Deconfigured;
	* MEM#01A Status:Deconfigured;
	* MEM#02A Status:Deconfigured;
	* MEM#03A Status:Deconfigured;

Workaround	There is no effective workaround. Status is not correctly displayed with the showstatus command, but the faulty component has been degraded. Therefore, perform maintenance on the component.
RTI No.	**RTIF2-160129-002**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	When you are maintaining a fan unit using the replacefru(8) command, an configuration error log of fan may be incorrectly registered. If this happens, the system or chassis with a fan unit maintained by executing the showhardconf command or showstatus command is displayed as degraded, although it is not degraded. [Error message example] Msg: FAN shortage [Example] When the BB#00 fan was maintained XSCF> **showstatus** * BB#00 Status:Deconfigured;
Workaround	There is no effective workaround. [How to restore] Ignore this error log as it has no effect on the maintenance work. After you finish maintaining the fan unit using the replacefru command, the chassis is no longer shown as degraded.

Table 3-17	Problems Resolved in XCP 2290 *(continued)*
RTI No.	**RTIF2-160129-004**
Model	**SPARC M10-4, SPARC M10-4S**

Description	When the CPU memory unit upper (CMUU) is removed, the number of CPU core resources displayed in "Installed" with the showcodusage command, and in "CPU Cores" and "Cores" with the showpparinfo command, is displayed incorrectly, instead showing the number when the CMUU is mounted.
	[Example] When the CMUU is removed from the SPARC M10-4, the number of CPU core resources is supposed to be 32 but is displayed as 64.
	XSCF> **showcodusage**
	Resource In Use Installed CoD Permitted Status
	-------- ------ --------- ------------- ------
	PROC 0 64 64 OK: 64 cores available ~~
	PPAR-ID/Resource In Use Installed Assigned
	---------------- ------ --------- --------------
	<pre>0 - PROC 0 64 64 cores</pre>
	~~
	<pre>1 - PROC 0 0 0 cores
	2 - PROC 0 0 0 cores
	3 - PROC 0 0 0 cores
	4 - PROC 0 0 0 cores
	5 - PROC 0 0 0 cores
	6 - PROC 0 0 0 cores
	7 - PROC 0 0 0 cores
	8 - PROC 0 0 0 cores
	9 - PROC 0 0 0 cores
	10 - PROC 0 0 0 cores
	11 - PROC 0 0 0 cores
	12 - PROC 0 0 0 cores
	13 - PROC 0 0 0 cores
	14 - PROC 0 0 0 cores
	15 - PROC 0 0 0 cores
	Unused - PROC 0 0 64 cores</pre>

Workaround	There is no effective workaround.

Table 3-17   Problems Resolved in XCP 2290 *(continued)*

RTI No.	**RTIF2-151124-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	When you perform the following procedure, "Hypervisor Abort" occurs, and the logical domain may fail to start. If you try to start the PPAR again at this time, the PPAR is rebooted repeatedly, and the logical domain cannot be started. In addition, the logical domain configuration information cannot be restored. 1. Execute the dumpconfig command to save the XSCF setting information, including the logical domain configuration information. 2. Change the logical domain configuration information. 3. Specify the configuration information name before the change. Then, execute the ldm remove-spconfig and ldm add-spconfig commands to replace the current logical domain configuration information with the updated one and save it to the XSCF. 4. Execute the restoreconfig command to restore the XSCF setting information, including the logical domain configuration information, saved in step 1. 5. Start the physical partition (PPAR).
Workaround	To restore the logical domain configuration information, perform the following procedure after step 4, instead of step 5 in [Description]. 1. Start the PPAR with the factory-default configuration. 2. Restore the logical domain configuration information already saved to the XML file. 3. Execute the ldm add-spconfig command to save the logical domain configuration information to the XSCF.
RTI No.	**RTIF2-150914-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	Suppose you use any of the operations below to turn on the power to the physical partition (PPAR) when you use the flashupdate(8) command to update the firmware. An "FMEM serious error" error log may be registered, the motherboard unit (MBU) or CPU memory unit (lower) (CMUL) may be degraded, and the PPAR power-on processing and firmware update may fail. - Power on using the operation panel power switch - Issue power on instruction by remote power management function (RCIL) - Issue power on instruction by auto power control system (APCS)
Workaround	When you use the flashupdate(8) command to update the firmware, do not turn on the power to the physical partition (PPAR) using the power switch on the operation panel, RCIL, or APCS. Perform these operations after the firmware update is complete. You can use the showlogs event command to confirm whether the firmware update is complete. If firmware update is complete, the following message is output. "XCP update has been completed (XCP version=xxxx:last version=yyyy)" [How to restore] Replace the motherboard unit (MBU) or the CPU memory unit (lower) (CMUL).

Table 3-17	Problems Resolved in XCP 2290 *(continued)*
RTI No.	**RTIF2-150521-001**
Model	**SPARC M10-4S**
Description	Suppose you have used the flashupdate(8) command to update the firmware with the power to the physical partition (PPAR) turned on. If you add a system board (PSB) by dynamic reconfiguration, the following error log is registered, and the PSB may fail to be added. Warning: /BB#x/CMUL:SCF:POST/OBP/HV data write error Notice: /UNSPECIFIED:HYPERVISOR:DR failed Also, the PPAR at the PSB add destination is reset.

Workaround	Execute the version -c xcp -v command, and check the [CMU BACKUP] lines.
	[Example]
	XSCF> **version -c xcp -v**
	BB#00-XSCF#0 (Master)
	XCP0 (Reserve): 2260
	CMU : 02.25.0000
	    POST : 3.9.0
	    OpenBoot PROM : 4.36.1+2.10.0
	    Hypervisor : 1.4.1
	XSCF : 02.26.0000
	XCP1 (Current): 2260
	CMU : 02.25.0000
	    POST : 3.9.0
	    OpenBoot PROM : 4.36.1+2.10.0
	    Hypervisor : 1.4.1
	XSCF : 02.26.0000
	BB#01-XSCF#0 (Standby)
	XCP0 (Reserve): 2260
	CMU : 02.25.0000
	    POST : 3.9.0
	    OpenBoot PROM : 4.36.1+2.10.0
	    Hypervisor : 1.4.1
	XSCF : 02.26.0000
	XCP1 (Current): 2260
	CMU : 02.25.0000
	    POST : 3.9.0
	    OpenBoot PROM : 4.36.1+2.10.0
	    Hypervisor : 1.4.1
	XSCF : 02.26.0000
	CMU BACKUP
	#0: 02.26.0000
	#1: ..
	XSCF>
	
	Check the line where Current is displayed either for XCP0 or XCP1 on the PSB (BB#xx) where the PPAR is running. If the CMU firmware version shown on the next line after it ("CMU:02.25.0000" in the above example) is not the same as the CMU firmware version under [CMU BACKUP] ("#0: 02.26.0000" in the above example), update the XCP firmware to the CMU firmware version shown on the next line after Current while the PPAR is running.
	If the CMU firmware versions are the same, you do not need to update the firmware.

Table 3-17   Problems Resolved in XCP 2290 *(continued)*

Afterward, regardless of whether the CMU firmware versions are the same, perform the following procedure in advance of any firmware update using the flashupdate(8) command while the PPAR is running.
1. Execute the switchscf(8) command to switch the master XSCF.
2. Execute the rebootxscf -a command to reset all XSCFs.
The above steps 1. and 2. are not necessary for a firmware update while the PPAR is stopped.

Problems Resolved in XCP 2280

The following table lists the problems resolved in XCP 2280.

Table 3-18   Problems Resolved in XCP 2280

RTI No.	**RTIF2-160909-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	The XSCF may be unable to detect power supply unit (PSU) failures.
Workaround	Use one of the following methods to determine whether a PSU has failed. If a PSU failure has been determined, replace the PSU. - The PSU LED goes on (amber) or blinks (green) while the physical partition (PPAR) is running. - After the physical partition (PPAR) is powered off, a PSU failure is registered in an XSCF log when the PPAR is powered on again.
RTI No.	**RTIF2-160613-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	Security fixes. (CVE-2013-2566) For details, see the Oracle website relating to the following: *Critical Patch Updates* http://software.fujitsu.com/jp/security/vulnerabilities
Workaround	Update the XCP firmware to XCP 2280 or later.

Table 3-18   Problems Resolved in XCP 2280 *(continued)*

RTI No.	**RTIF2-151117-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If there are multiple iSCSI targets when the show-iscsi command is executed at the ok prompt, one of the iSCSI targets may be unable to log in. The detection of such a target will terminate the command with the "login failed" error displayed. At this time, no information is output about other iSCSI targets that have not tried to log in. [Example] Login failure of the second iSCSI target {0} ok **show-iscsi /pci@8100/pci@4/pci@0/pci@0/network@0** 1000 Mbps full duplex Link up Target: iqn.1986-03.com.sun:02:27f6951c-a432-4a86-b6c4-de72743cd25a Lun 0-0-0-0 Disk SUN COMSTAR 1.0 71669440 Blocks, 36 GB Lun 1-0-0-0 Disk SUN COMSTAR 1.0 71669440 Blocks, 36 GB Target: iqn.1986-03.com.sun:02:c5662c3b-a6d9-4a69-b0d0-c6445a23383b Evaluating: login failed {0} ok
Workaround	If the output of the show-iscsi command does not show the intended iSCSI target, check the iSCSI target information from the target side. For the check procedure from the iSCSI target side, see the respective target manual.
RTI No.	**RTIF2-151105-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	Security fixes. (CVE-2015-4000) For details, see the Oracle website relating to the following: *Critical Patch Updates* http://software.fujitsu.com/jp/security/vulnerabilities
Workaround	Update the XCP firmware to XCP 2280 or later.
RTI No.	**RTIF2-151105-002**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	Suppose that you select [Verified Boot] from the [PPAR Operation] menu of XSCF Web to register the X.509 public key certificate for the user using the verified boot. In this case, "Space is not allowed." is displayed for the attempt to register the copied X.509 public key certificate, and the certificate cannot be registered.
Workaround	To register the copied X.509 public key certificate, use the addvbootcerts(8) command. Use XSCF Web to register the X.509 public key certificate by specifying USB media or an http/https server.
RTI No.	**RTIF2-151105-003**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If a fan failure occurs, the physical partition (PPAR) may be powered off even when it does not need to be powered off.
Workaround	There is no effective workaround. [How to restore] Replace the faulty fan unit. After that, power on the PPAR.

Table 3-18	Problems Resolved in XCP 2280 *(continued)*

RTI No.	**RTIF2-151105-004**
Model	**SPARC M10-4, SPARC M10-4S**
Description	If "PSU input power failure / PSU input power recover" is frequently registered in the event log because of power supply unit (PSU) failures, XSCF panic may occur repeatedly, and the XSCF may stop.
Workaround	There is no effective workaround. If this is frequently registered in the PSU event log, replace the faulty PSU.
RTI No.	**RTIF2-151105-005**
Model	**SPARC M10-4S**
Description	Suppose that an FRU fails when you replace or add a SPARC M10-4S chassis or replace an XSCF unit (XSCFU). In this case, a timeout may occur in 90 minutes even though the timeout is supposed to occur in 45 minutes according to the display of the maintenance menu. [Example] An FRU of the XSCFU is faulty. Waiting for XBBOX#81/XSCFU to enter ready state. [This operation may take up to 45 minute(s)] (progress scale reported in seconds) 0..... 30..... 60..... 90..... 120..... 150..... 180..... 210..... 240..... 270..... 300..... 330..... 360..... 390..... 420..... 450..... 480..... 510..... 540..... 570..... 600..... 630..... 660..... 690..... --- Omitted --- 2400.....2430.....2460.....2490.....2520.....2550.....2580.....2610.... 2640.....2670.....2700.....Omitted
Workaround	There is no effective workaround. [How to restore] Use another FRU.
RTI No.	**RTIF2-151105-006**
Model	**SPARC M10-1**
Description	Suppose that you select [PSB Configuration] from the [PPAR Operation] menu of XSCF Web to set memory mirror mode for the CPU of the system board. In this case, "System error: unknown error." is displayed and the setting cannot be made.
Workaround	To set memory mirror mode for the SPARC M10-1, use the setupfru(8) command.

Table 3-18	Problems Resolved in XCP 2280 *(continued)*
RTI No.	**RTIF2-151020-001**
Model	**SPARC M10-4S**
Description	Suppose that the system configuration has 3 BB or more or the crossbar box and that the firmware version is XCP 2250 or later. In this system configuration, if Oracle Solaris stays running for a long time after XSCF master/standby switching, the Oracle Solaris time may deviate when the physical partition (PPAR) is powered off and on. Also, in the same system configuration with a similar firmware version, the following error log is registered with the XSCF every 10 days after XSCF master/standby switching. Date: Sep 15 11:42:38 JST 2015 Code: 20000000-00560300fcff0000ff-01e400010000000000000000 Status: Notice Occurred: Sep 15 11:43:08.531 JST 2015 FRU: /BB#2/CMUL,/FIRMWARE Msg: XSCF self diagnosis warning detection
Workaround	After XSCF master/standby switching, promptly perform any of the following operations. - Execute the rebootxscf(8) command to reset all the XSCFs. - Execute the rebootxscf(8) command to reset the XSCFs that are neither the master nor standby. - Stop all the PPARs, and then turn off all the input power supplies. After that, wait at least 30 seconds, and then turn on the input power supplies. [How to restore] Execute the following procedure to start Oracle Solaris in single-user mode and then set the time. 1. Execute the poweroff(8) command to power off the PPAR. 2. Execute the showpparstatus(8) command to confirm that the status is "Powered off," indicating that the PPAR power is off. 3. Set the OpenBoot PROM environment variable auto-boot? to "false." XSCF> **setpparparam -p** *ppar_id* **-s bootscript "setenv auto-boot? false"** 4. Execute the poweron(8) command to power on the PPAR. 5. Execute the console(8) command to connect to the control domain console and display the ok prompt. 6. Boot Oracle Solaris in single-user mode. {0} ok **boot -s** 7. Execute the date(1) command to set the Oracle Solaris time. [Example] Setting for 18:30:00 on October 20, 2015 # **date 1020183015.00**

Table 3-18   Problems Resolved in XCP 2280 *(continued)*

RTI No.	**RTIF2-150818-001**
Model	**SPARC M10-4S**

Description   When you execute the deleteboard(8) command with the DR feature to remove a system board (PSB) where the XSCF is rebooting, the deleteboard(8) command may end abnormally with an "SCF process down detected" error. If the target system board is the standby XSCF, the master XSCF will become non-responsive while inactive. If the target system board is the slave XSCF, the master XSCF will reboot, with the result of switching between the master XSCF and standby XSCF.

In contrast, when the addboard(8) command is executed to add a PSB, and a command timeout is detected, then the command ends abnormally. In this event, the master XSCF and standby XSCF are not switched.

The following example shows the deleteboard(8) command terminated due to an internal error:
[Example]
XSCF> **deleteboard -c disconnect -m unbind=resource 00-0**
PSB#00-0 will be unconfigured from PPAR immediately. Continue?[y|n] :**y**
All domains are temporarily suspended, proceed?[y|n] :**y**
Start unconfigure preparation of PSB. [1200sec]
0||/end
An internal error has occurred. Please contact your system administrator.
XSCF>

Workaround   Execute the showhardconf(8) command to confirm that [Status] of every crossbar box and the SPARC M10-4S is "Normal." Then, execute the deleteboard(8) or addboard(8) command. During the execution of the deleteboard(8) or addboard(8) command, do not execute any command that involves an XSCF reboot by the rebootxscf -a or switchscf(8) command.
[How to restore]
- If the target system board is the standby XSCF
  Turn off the input power to all SPARC M10 system chassis or crossbar box chassis, and then turn it on again (AC-OFF/ON).
- If the target system board is the slave XSCF
  Follow the instructions in [Workaround] to remove or add the system board using the DR feature.

RTI No.	**RTIF2-150729-002**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**

Description   When a DIMM failure is detected during the self-diagnosis test (POST) on the physical partition (PPAR), the component is marked as a failure. Even after DIMM replacement, the failure mark is not cleared. In the following example, after replacement, components are marked as failures and their status is "Deconfigured."
[Example]
XSCF> **showstatus**
* MBU Status:Deconfigured;
* CPU#0 Status:Deconfigured;
* MEM#00A Status:Deconfigured;
* MEM#01A Status:Deconfigured;
* MEM#02A Status:Deconfigured;
* MEM#03A Status:Deconfigured;

Workaround   There is no effective workaround.
[How to restore]
Update the firmware to XCP 2250 or later. Set the mode switch on the operation panel to Service mode, turn off the input power, and then turn it on again (AC OFF/ON).

Table 3-18   Problems Resolved in XCP 2280 *(continued)*

RTI No.	**RTIF2-150708-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	Suppose the motherboard unit (MBU), CPU memory unit lower (CMUL), or CPU memory unit upper (CMUL) is replaced at the same time as a microSD card. The self-diagnosis test (POST) on the physical partition (PPAR) detected and marked the component as a failure. Even after replacement, the failure mark is not cleared. In the following example, after replacement, components are marked as failures and their status is "Deconfigured." [Example] XSCF> **showstatus** * MBU Status:Deconfigured; * CPU#0 Status:Deconfigured; * MEM#00A Status:Deconfigured; * MEM#01A Status:Deconfigured; * MEM#02A Status:Deconfigured; * MEM#03A Status:Deconfigured;
Workaround	When replacing the motherboard unit (MBU), CPU memory unit lower (CMUL), or CPU memory unit upper (CMUL) and a microSD card, replace them one at a time, not at the same time. [How to restore] Update the firmware to XCP 2250 or later. Set the mode switch on the operation panel to Service mode, turn off the input power, and then turn it on again (AC OFF/ON).
RTI No.	**RTIF2-150626-001**
Model	**SPARC M10-4S**
Description	Suppose that you select [PPAR Operation] from the [Verified Boot] menu of the XSCF Web and specify a PPAR that is not PPAR#0 to display details of the X.509 public key certificate for the user using the verified boot. In this case, the wrong X.509 public key certificate is displayed for PPAR#0.
Workaround	To check the public key certificate of a PPAR that is not PPAR#0, use the showvbootcerts(8) command.
RTI No.	**RTIF2-140808-003**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	After the occurrence of a component failure, you may fail to power off the physical partition (PPAR). This phenomenon may occur when the following procedure is performed: 1. While the PPAR is being reactivated due to a component failure, the poweroff(8) command is executed without the -f option. 2. After the PPAR is powered off upon a PPAR reactivation failure due to a component failure, the poweron(8) command is executed to power on the PPAR. 3. The poweroff(8) command is executed without the -f option.
Workaround	Do not execute the poweroff(8) command while the PPAR is being reactivated due to a component failure. [How to restore] Execute the shutdown command from Oracle Solaris to power off the PPAR. [Example] # **shutdown -y -g0 -i5**

Table 3-18   Problems Resolved in XCP 2280 *(continued)*

RTI No.	**RTIF2-140616-005**
Model	**SPARC M10-4S**

Description
If you turn off the input power of the master XSCF (AC OFF) and then turn it on again (AC ON) when the power to the physical partition (PPAR) is off, error handling may fail due to the temporary absence of the master XSCF. In addition, the PPAR may remain abnormal so that you may be unable to power on the PPAR again.
You can determine the occurrence of this phenomenon by executing the showboards(8) command. If the value of "Pwr Conn Conf" displayed as the master XSCF PSB status is "n y n," this phenomenon has occurred.
[Example] If the master XSCF is BB#00
XSCF> **showboards -a**
PSB PPAR-ID Assignment Pwr Conn Conf Test Fault
--- ------- ----------- ---- ---- ---- ------- --------
00-0 00(00) Assigned   n   y   n   Passed Normal
01-0 01(00) Assigned   y   y   n   Passed Normal

Workaround
There is no effective workaround.
[How to restore]
Turn off the input power to all SPARC M10-4S chassis that make up the system and then turn it on again.

RTI No.	**RTIF2-140507-010**
Model	**SPARC M10-4S**

Description
In a system with three or more BBs or with cross boxes, if the master/standby switchover if executed for more than 256 times, the "SCF process down detected" error is detected on the slave XSCF and XSCF "coremgrd" may cause process down.

Workaround
Do not perform consecutive XSCF master/standby switchover.
[How to restore]
Reset the XSCF. The system will become usable.

RTI No.	**RTIF2-140507-012**
Model	**SPARC M10-4S**

Description
In a system with several SPARC M10-4S, if a crossbar box or the XSCF unit of a crossbar box is replaced after powering off all chassis and then the input power is turned on, the following error log may be registered.
Indispensable parts are not installed (OPNL).
Indispensable parts are not installed (FAN).
Indispensable parts are not installed (PSU).

Workaround
When replacing a crossbar box, do so after turning off the input power (AC OFF) of the target crossbar box only.
When replacing the XSCF unit of a crossbar box, execute the replacefru(8) command to do so.
Refer to the *Fujitsu M10-4/Fujitsu M10-4S/SPARC M10-4/SPARC M10-4S Service Manual* for replacing the crossbar box or the XSCF unit in the crossbar box.
[How to restore]
Turn off/on the input power (AC OFF/ON) of the replaced crossbar box.

Table 3-18   Problems Resolved in XCP 2280 *(continued)*

RTI No.	**RTIF2-140410-005**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If a hardware error is detected immediately after powering off or restarting the physical partition (PPAR), the PPAR power off or restart process may be stopped, and may not be completed. To check whether this phenomenon has occurred, power off or restart the PPAR and then execute the showpparprogress(8) command. If the PPAR remains in the power on state and the power off process has not completed after at least one minute has passed, this phenomenon has occurred. [Example of unsuccessful power off] XSCF> **showpparprogress -p 0** This PPAR is powered on. Normally, when the PPAR power off completes, the power off sequence and PPAR state are as follows. [Example of successful power off] XSCF> **showpparprogress -p 0** PPAR Power Off PPAR#0 [1/3] CPU Stop PPAR#0 [2/3] PSU Off PPAR#0 [3/3] The sequence of power control is completed.
Workaround	There is no effective workaround. [How to restore] If the PPAR power supply remains in the power-on state 30 minutes after executing the showpparprogress(8) command, turn off the input power to all chassis and then turn it on again (AC-OFF/ON).
RTI No.	**RTIF2-140409-002**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If you disconnect and then connect the USB memory while the executed snapshot(8) command is collecting information into the memory, the hardware error below may be detected. Msg: DMA timeout error Hard detected At this time, the logical domain is continuously operated but the functions that access hardware (e.g., power on/off, monitoring function) no longer operate.
Workaround	Do not connect and then disconnect the USB memory while information is being collected into the memory by the snapshot(8) command. [How to restore] Turn off the input power to the system and then turn it on again (AC OFF/ON).

Table 3-18   Problems Resolved in XCP 2280 *(continued)*

RTI No.	**RTIF2-140409-003**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	An error log due to hardware is erroneously registered in the following cases. - A watchdog timeout occurs due to a software factor - XSCF RESET switch is pressed - XSCF panic occurs due to firmware [Example] - Incorrect Status: Alarm FRU: /FIRMWARE,/MBU Msg: SCF panic detected - Correct Status: Notice FRU: /FIRMWARE,/MBU Msg: SCF panic detected
Workaround	There is no effective workaround. Read the "Alarm" status as "Notice".
RTI No.	**RTIF2-140402-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	The following special characters cannot be included in the mail address input field for the [Settings] - [Service] - [SMTP], [Settings] - [Email Reporting], [Settings] - [Audit], and [Settings] - [CoD Activation] menus on the XSCF Web. "!" "#" "$" "%" "&" "'" "*" "+" "/" "=" "?" "^" "`" "{" "|" "}" "~"
Workaround	Use the setemailreport(8) command of the XSCF shell.
RTI No.	**RTIF2-140402-003**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	When using XSCF Web in Internet Explorer, if you attempt to delete the second and subsequent User/Group settings of [Groups] and [View Access] of VACM in the [XSCF] - [Settings] - [Service] - [SNMP Security] menu, an error message is output and the deletion cannot be executed.
Workaround	Execute the deletion by using XSCF Web in Firefox or the setsnmpvacm(8) command of the XSCF shell.
RTI No.	**RTIF2-140212-008**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	When powering on, or rebooting a physical partition (PPAR), even if the process is stopped due to the failure of a component, the POWER LED of the operation panel keeps blinking. This problem does not occur while operating the system.
Workaround	There is no effective workaround. Blinking of the POWER LED on the operation panel is canceled if the physical partition (PPAR) is powered on when the process of powering on/restarting the physical partition (PPAR) is interrupted.

Table 3-18 Problems Resolved in XCP 2280 *(continued)*

RTI No.	**RTIF2-140212-012**
Model	**SPARC M10-4S**
Description	In a system configuration with 3 or more BBs or with a crossbar box, if the XSCF master/standby switchover occurs for 60 or more times, a process down may occur on the slave XSCF and the slave XSCF is reset.
Workaround	There is no effective workaround. The slave XSCF will be restored by the reset and the system can be used continuously after that.
RTI No.	**RTIF2-131213-012**
Model	**SPARC M10-4S**
Description	After replacing SPARC M10 with the replacefru(8) command, diagnosis processing may not terminate properly. [Example] The replacement of BB#2 Diagnostic tests for BB#2 have started. Initial diagnosis is about to start, Continue?[y|n] :y PSB#02-0 power on sequence started. 0.....30.....end Initial diagnosis started. [7200sec] 0..... 30..... 60..... 90.....120.....150.....180.....210.....240..... 270.....300.....330.....360.....390.....420.....450.....480.....510..... 540.....570.....600.....630.....660.....690.....720.....750.....780..... 810.....840.....870.....900..end Initial diagnosis has completed. PSB power off sequence started. [1200sec] 0..... 30..... 60..... 90.....120.....150.....180.....210.....240..... 270.....300.....330.....360.....390.....420.....450.....480.....510..... 540.....570.....600.....630.....660.....690.....720.....750.....780..... 810.....840.....870.....900.....930.....960.....990.....1020.....1050..... 1080.....1110.....1140.....1170.....1200end Failed to power off. Please check the FRU. An internal error has occurred. Please contact your system administrator. done [Warning:030] testsb failed.[c:cancel] :
Workaround	There is no effective workaround. [How to restore] Re-execute the replacefru(8) command.
RTI No.	**RTIF2-130802-003**
Model	**SPARC M10-4S**
Description	When you replace the XSCF unit of the crossbar box by using the replacefru(8) command, the command is completed normally, but the following error log may be registered. The suspected location indicated by this error log is incorrect. SCF:Board control error (link failed)
Workaround	Replace the XSCF unit of the same crossbar box by using the replacefru(8) command again. If you have turned off the input power (AC OFF) during the replacement work, disconnect and then connect all the XSCF BB control cables.

Table 3-18	Problems Resolved in XCP 2280 *(continued)*
RTI No.	**RTIF2-130711-003**
Model	**SPARC M10-4S**
Description	Before active replacement of the XSCF unit of the crossbar box is completed, the replacefru(8) command is completed normally.
Workaround	When you use the replacefru(8) command to replace the XSCF unit, the following message may appear after you replace the XSCF unit. If it does, wait for 10 minutes, and then enter "f". The replacement of XBBOX#xx/XSCFU has completed normally.[f:finish] :
RTI No.	**RTIF2-130305-023**
Model	**SPARC M10-4S**
Description	If an error occurs in the DC-DC converter of a crossbar unit, "XB-XB interface link-up error." is erroneously registered instead of the correct error log of "LSI detected errors with power subsystem failure."
Workaround	There is no effective workaround. Check for power errors if the error log of "XB-XB interface link-up error" was registered. Ignore the error log for "XB-XB interface link-up error" if a power error has occurred.

Problems Resolved in XCP 2271

The following table lists the problems resolved in XCP 2271.

Table 3-19	Problems Resolved in XCP 2271
RTI No.	**RTIF2-150929-001**
Model	**SPARC M10-4S**
Description	When you turn on the input power to the SPARC M10-4S or crossbar box that has a failure in the connection between chassis in a system having a building block configuration, the XSCF of these chassis may not start. After that, the failed XSCF or the XSCF BB control cable connected to this XSCF may not be displayed as a suspected location.
Workaround	There is no effective workaround. [How to restore] Replace the CPU memory unit lower (CMUL) of the XSCF that has not been started or the XSCF unit. Also replace the XSCF BB control cable connected to it.
RTI No.	**RTIF2-150929-002**
Model	**SPARC M10-4S**
Description	When you turn on the input power to all the chassis in a system having a building block configuration, the master XSCF may be reset and switched.
Workaround	There is no effective workaround. Execute the switchscf(8) command to switch the master XSCF.

Table 3-19   Problems Resolved in XCP 2271 *(continued)*

RTI No.	**RTIF2-150729-001**
Model	**SPARC M10-4S**
Description	In a system where SPARC M10-4S units from a 2BB configuration to a 4BB configuration are connected via direct inter-chassis connection, the deleteboard(8) command is executed to delete a system board with dynamic reconfiguration of a physical partition (PPAR DR). However, subsequent PPAR DR operations fail.
Workaround	There is no effective workaround. [How to restore] Execute the poweroff(8) and poweron(8) commands, turn off the power to the PPAR, and then turn it on again.
RTI No.	**RTIF2-150710-002**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	Indicating an excessive fan rotation speed, "FAN speed too high" in the error log is mistakenly registered for a non-defective fan.
Workaround	There is no effective workaround. [How to restore] Execute the replacefru(8) command, and select the fan registered in the error log. Use the fan as is. Perform fan replacement by following the maintenance menu.

Table 3-19   Problems Resolved in XCP 2271 *(continued)*

RTI No.	**RTIF2-150629-003**
Model	**SPARC M10-4S**
Description	Suppose that a total of 29 or more PCIe or link cards is installed in some or all of the SPARC M10-4S units in a system consisting of multiple SPARC M10-4S units. When executed in this system, the testsb -a command takes time for the communication processing between each card and the XSCF, and the command terminates abnormally. For example, in a system in an 8BB configuration, the command terminates abnormally approximately 30 minutes after the start of command execution.
	Also suppose that a total of 29 or more PCIe or link cards is installed in some or all of the SPARC M10-4S units in a physical partition (PPAR) consisting of multiple SPARC M10-4S units. When executed, the poweron(8) command causes repeated XSCF retry processing, and the PPAR cannot be powered on. "Event: SCF:Reset retry" is registered in the event log at this time.
	[Example of the testsb command]
	XSCF> **testsb -v -p -s -a -y**
	Initial diagnosis is about to start, Continue?[y|n] :**y**
	PSB power on sequence started.
	Hardware error occurred by initial diagnosis.
	PSB power off sequence started. [1200sec]
	0....end
	PSB powered off.
	PSB Test Fault
	---- ------- --------
	00-0 Failed Faulted
	01-0 Failed Faulted
	02-0 Failed Faulted
	03-0 Failed Faulted
	04-0 Failed Faulted
	05-0 Failed Faulted
	06-0 Failed Faulted
	07-0 Failed Faulted
	A hardware error occurred. Please check the error log for details.
Workaround	There is no effective workaround.
	Update the XCP firmware to XCP 2271 or later.
	[How to restore]
	Turn off and on (AC OFF/ON) the input power to all the SPARC M10-4S chassis.
RTI No.	**RTIF2-150522-001**
Model	**SPARC M10-1**
Description	If you disconnect one of the power cords from the power supply units (PSU), the following problems may occur. -The event logs for power failure are not registered. -"ON; AC:xxx V;" appears in "Power_Status" of the power supply unit (PSU) with the showhardconf(8) command.
Workaround	There is no effective workaround.
	[How to restore]
	Connect the power cord again.

Problems Resolved in XCP 2270

The following table lists the problems resolved in XCP 2270.

Table 3-20   Problems Resolved in XCP 2270

RTI No.	**RTIF2-160129-003**
Model	**SPARC M10-4S**
Description	When a total of 47 or more PCI cards or link cards is installed in one physical partition (PPAR) and the PPAR is powered on, the error log "Msg: SB deconfigured (not running)" is registered, and the PPAR may be powered on with the PSB degraded.
Workaround	There is no effective workaround. Perform the following procedure. 1. Set the mode switch on the operation panel (OPNL) of the master chassis to Service. 2. Turn off the input power to the system and then turn it on again (AC OFF/ON). 3. Reset the mode switch on the OPNL of the master chassis. 4. Power on the PPAR.

Problems Resolved in XCP 2260

The following table lists the problems resolved in XCP 2260.

Table 3-21   Problems Resolved in XCP 2260

RTI No.	**RTIF2-150710-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	Security fixes. (JVNDB-2014-007551/CVE-2014-3570), (JVNDB-2014-007552/CVE-2014-3571), (JVNDB-2014-007553/CVE-2014-3572), (JVNDB-2014-007554/CVE-2014-8275), (JVNDB-2015-001009/CVE-2015-0204), (JVNVU#99234709 /CVE-2015-0235) For details, see the Oracle website relating to the following:*Critical Patch Updates* http://software.fujitsu.com/jp/security/vulnerabilities/
Workaround	Update the XCP firmware to XCP 2260 or later.

Table 3-21   Problems Resolved in XCP 2260 *(continued)*

RTI No.	**RTIF2-150622-001**
Model	**SPARC M10-1**
Description	The following phenomena occur while a physical partition (PPAR) is powered on. 1. When an excessively low fan speed is detected, it is registered in the error log. If this error is detected multiple times, domain power-on will fail. 2. The fan speed level reaches level 5 (full speed), resulting in a noisy fan. One or no fan error is registered in the error log at this time.

Workaround	There is no effective workaround.
	[How to restore]
	Use either of the following procedures.
	- How to restore 1
	  Execute the replacefru(8) command for pseudo active replacement of all the fans (temporarily remove and then reinstall the fans).
	- How to restore 2
	  Turn off the power to the PPAR, and then disconnect and reconnect the input power supply of the system (AC OFF/ON). When recycling the power supply to the system, wait for 30 seconds or more to turn on the input power supply after disconnecting it.
	Even after you have tried both of the above procedures, the fan may again rotate at the maximum speed with no reduction in noise.

RTI No.	**RTIF2-150611-001**
Model	**SPARC M10-4, SPARC M10-4S**
Description	The fan speed may increase although the physical partition is powered off.
Workaround	There is no effective workaround.
RTI No.	**RTIF2-150514-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If you connect a PCI expansion unit to PCI slot #0 of a SPARC M10 system chassis and execute the prtfru(8) or snapshot(8) command, a process down may occur and the XSCF may be reset. Also, if you connect a PCI expansion unit to PCI slot #0 of a SPARC M10 system chassis and execute the prtfru(8) or snapshot(8) command, a process down may occur and the XSCF may be reset.

Workaround	- To execute the prtfru(8) command, connect the PCI expansion unit to a PCI slot other than #0.
	- To execute the snapshot(8) command, perform either of the following operations:
	  - Connect the PCI expansion unit to a PCI slot other than #0.
	  - Execute the snapshot(8) command without specifying the Full log set (-L F) option.
	[How to restore]
	Since the system is restored by resetting the XSCF, you can continue to operate the system.

RTI No.	**RTIF2-150514-002**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If the XCP version at dumpconfig(8) command execution is different from the XCP version at restoreconfig(8) command execution, a problem may occur. For details, see "Problems related to RTIF2-150514-002."
Workaround	See "RTIF2-150514-002 workarounds and how to restore."

Table 3-21　　Problems Resolved in XCP 2260 *(continued)*

RTI No.	**RTIF2-150514-004**
Model	**SPARC M10-4S**
Description	If you power on a physical partition or execute the diagxbu(8) command while the testsb(8) command is being executed, the testsb(8) command may terminate abnormally.
Workaround	There is no effective workaround. If the testsb(8) command terminates abnormally, execute the testsb(8) command again.
RTI No.	**RTIF2-150507-002**
Model	**SPARC M10-1, SPARC M10-4S**
Description	The power supply units (PSUs) of SPARC M10-1 or a crossbar box are in a redundant configuration. Suppose that you connect the power cord of PSU#0 (AC ON), and start an XSCF without connecting the power cord of PSU#1 (AC OFF). Once the READY LED of the XSCF is lit, the input power connection of PSU#1 is not recognized even if you connect the disconnected power cord of PSU#1 afterward. In this case, the Power_Status of PSU#1 is displayed as "Input fail; AC: - ;" by executing the showhardconf(8) command.
Workaround	When connecting the power cords of the PSUs, be sure to connect the power cords of all the PSUs at the same time. For SPARC M10-1, connect the cables within 5 minutes when the startup mode of the XSCF startup mode function is set to normal, or within 2 and a half minutes in fast mode. [How to restore] Perform either of the following operations: - Switch the mode switch on the operation panel to Locked or Service. - Select PSU#1 by executing the replacefru(8) command, and perform a pseudo replacement of the PSU.
RTI No.	**RTIF2-150331-001**
Model	**SPARC M10-4S**
Description	If you update the firmware after importing a firmware file for a PCI expansion unit to the system by using XSCF Web, an "Operation was not successful." error is detected and the update may fail.
Workaround	There is no effective workaround. Use the getflashimage(8) command to import a firmware file for a PCI expansion unit to the system. Then, execute the ioxadm -c update command to update the firmware.
RTI No.	**RTIF2-150331-002**
Model	**SPARC M10-4S**
Description	The serial number and part number of a link card connected to a chassis other than the master chassis are not displayed in the output result of the ioxadm -v list command.
Workaround	There is no effective workaround. To confirm the serial number and part number of the connected link card, directly check the link card.

Table 3-21	Problems Resolved in XCP 2260 *(continued)*

RTI No.	**RTIF2-150331-003**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	The CPU utilization (system time: sys) of a CPU on the domain may reach 100% during XSCF resetting.
Workaround	There is no effective workaround. No corrective action is required since CPU utilization returns to normal after the XSCF resetting is completed.
RTI No.	**RTIF2-150313-001**
Model	**SPARC M10-4S**
Description	After updating the firmware with the flashupdate(8) command while the physical partition is powered on, if dynamic reconfiguration of PPARs is performed without first rebooting the PPAR in order to update the CMU firmware, the following error log may be registered: Warning: /BB#x/CMUL:SCF:POST/OBP/HV data write error
Workaround	When updating the firmware with the flashupdate(8) command while the physical partition is powered on, reboot the PPAR before performing dynamic reconfiguration of PPARs. Moreover, the error message when the problem occurs, may be ignored as it has no effect on the proper functioning of the system.
RTI No.	**RTIF2-150305-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If an Oracle Solaris kernel zone has been created or started on any of the following domains, the guest domain or kernel zone enters the panic state: - Live-migrated guest domain - Guest domain in a physical partition (PPAR) from which a system board was deleted by dynamic reconfiguration (DR) of the PPAR The same phenomenon also occurs when you resume a suspended kernel zone.
Workaround	- Restart the guest domain before creating or starting the kernel zone. - If an Oracle Solaris kernel zone has been suspended, do not resume the kernel zone but instead start it with the -R option specified. [Example] guest# **zoneadm -z kz000 boot -R** [How to restore] Restart the PPAR that has the guest domain and the PPAR where the kernel zone has been resumed.
RTI No.	**RTIF2-141031-002**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	Expiration date for the self-authenticated certificate used by the HTTPS service will arrive in 1 year, not in 10 years.
Workaround	You can access to XSCF Web even though the certificate has expired. Use the same certificate, or create a certificate, or import a certificate with the sethttps(8) command.

Table 3-21   Problems Resolved in XCP 2260 *(continued)*

RTI No.	**RTIF2-140616-004**
Model	**SPARC M10-4S**
Description	When you execute the switchscf(8) command, XSCF master/standby switching may take time. As a result, the following error may occur: Master switch synchronization timeout.
Workaround	There is no effective workaround. If the current master XSCF differs from what you intended, re-execute the switchscf(8) command.
RTI No.	**RTIF2-140407-001**
Model	**SPARC M10-4S**
Description	On a SPARC M10-4S to which one of XCP 2210 to XCP 2250 is applied, the dumpconfig(8)/ restoreconfig(8) command cannot save/restore the PPAR DR feature setting values configured with the setpparmode -p ppar_id -m ppar_dr command.
Workaround	There is no effective workaround. Update the firmware to XCP 2260 or later. Save and restore the PPAR DR feature setting values in XCP 2260 or later. [How to restore] Perform the following procedure. 1. Execute the showpparmode(8) command to check whether the PPAR DR feature is enabled or disabled. 2. Execute the setpparmode(8) command to enable/disable the PPAR DR feature. [Example] Enabling the PPAR DR feature for PPAR#0 XSCF> **setpparmode -p 0 -m ppar_dr=on** [Example] Disabling the PPAR DR feature for PPAR#0 XSCF> **setpparmode -p 0 -m ppar_dr=off**
RTI No.	**RTIF2-131213-010**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	When the firmware of the PCI expansion unit is updated with the ioxadm -c update command, process down may occur at the XSCF firmware.
Workaround	There is no effective workaround. Re-execute the ioxadm -c update command to update the PCI expansion unit firmware again.
RTI No.	**RTIF2-130702-001**
Model	**SPARC M10-4, SPARC M10-4S**
Description	If the following applies, "I/O devices error detected" is detected at the time of PPAR power-on and control domain reboot: In SPARC M10-4/M10-4S, the CPU memory unit upper (CMUU) is added to a configuration that has been operated with only the CPU memory unit lower (CMUL) and false has been set as the IOreconfigure setting of the physical partition (PPAR).
Workaround	There is no workaround for errors that are detected at power-on after the addition. Making the following setting prevents the error detection that occurs every time the PPAR is powered on or the control domain is rebooted. 1. After starting Oracle Solaris, execute the ldm rm-io command to delete the PCIe root complex of the added CMUU from the configuration of the control domain. 2. Execute the ldm add-spconfig command to save the constructed logical domain configuration to the XSCF.

Problems related to RTIF2-150514-002

If the XCP version at dumpconfig(8) command execution is different from the XCP version at restoreconfig(8) command execution, a problem listed in Table 3-22 may occur.

Table 3-22   Combinations of XCP versions and related problems in dumpconfig(8) and restoreconfig(8) command execution

	XCP version executing dumpconfig (8) command	XCP version executing restoreconfig(8) command	Problem occurring
(1)	2092 or earlier	2210 to 2221	(a)
(2)	2092 or earlier	2230 to 2250	(a) or (b)
(3)	2210 to 2221	2230 to 2250	(b)
(4)	2210 to 2221	2092 or earlier	(c)
(5)	2230 to 2240	2092 or earlier	(c)
(6)	2250	2240 or earlier	(c)
(7)	2260	2250 or earlier	(c)

- **Problem (a)**
  Physical partition fails to start and then the XSCF stops.

- **Problem (b)**
  Suppose that XSCF setting information saved in XCP 2221 or earlier is used to restore the XSCF when recovery mode, which is supported in Oracle VM Server for SPARC 3.1 or later, is enabled. Since the physical partition starts with logical domain configuration information created with XCP 2221 or earlier, the command may fail to restore the logical domain configuration information, and the XSCF may remain switched to the factory-default state.

  This is because the recovery mode of the logical domain configuration information created with XCP 2221 or earlier is not enabled.   Subsequently, even with the logical domain configuration information created again with XCP 2230 or later, the command may fail to restore the logical domain configuration information, and the XSCF may remain switched to the factory-default state.

- **Problem (c)**
  The following error occurs.

  [Example]

```
XSCF> restoreconfig -u user https://...
--- Omitted ---
restoreconfig: could not verifying backup file.(...)
```

RTIF2-150514-002 workarounds and how to restore

The RTIF2-150514-002 workarounds are as follows.

- **For (1) to (3) in Table 3-22**
  Perform the following procedure.

    1. **Execute the version(8) command to check the XCP version.**

    2. **Execute the flashupdate(8) command to update the firmware to the XCP version used when the XSCF setting information was previously saved by the dumpconfig(8) command.**

    3. **Execute the restoreconfig(8) command to restore the XSCF setting information.**

    4. **Execute the flashupdate(8) command to update the firmware again to the original XCP version checked in step 1.**

- **For (4) to (7) in Table 3-22**
  There is no effective workaround.

The restore methods for RTIF2-150514-002 are as follows.

- **For (1) to (3) in Table 3-22**
  Perform the following procedure.

    1. **Execute the version(8) command to check the XCP version.**

    2. **Execute the flashupdate(8) command to update the firmware to the XCP version used when the XSCF setting information was previously saved by the dumpconfig(8) command.**

    3. **For a system configuration with multiple SPARC M10-4S units, execute the initbb(8) command to disconnect all slave chassis from the system.**

    4. **Execute the restoredefaults -c factory command to initialize the system to the factory default state.**

    5. **Turn off the input power to all SPARC M10 system chassis or crossbar boxes. Then, turn on the chassis or crossbar boxes again and confirm that the READY LED of the XSCF or XSCF unit is lit.**

    6. **Execute the restoreconfig(8) command to restore the XSCF setting information.**

    7. **Execute the flashupdate(8) command to update the firmware again to the original XCP version checked in step 1.**

- **For (4) to (7) in Table 3-22**
  Perform the following procedure.

    1. **Execute the version(8) command to check the XCP version.**

    2. **Execute the flashupdate(8) command to update the firmware to the XCP version used when the XSCF setting information was previously saved by the dumpconfig(8) command.**

    3. **Execute the restoreconfig(8) command to restore the XSCF setting information.**

    4. **Execute the flashupdate(8) command to update the firmware again to the original XCP version checked in step 1.**

Problems Resolved in XCP 2250

The following table lists the problems resolved in XCP 2250.

Table 3-23   Problems Resolved in XCP 2250

RTI No.	**RTIF2-150514-003**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If you execute the rebootxscf(8) command to reset an XSCF, "SCF panic detected" may be detected and the XSCF may stop.
Workaround	There is no effective workaround. [How to restore] Turn off the input power to the system and then turn it on again (AC OFF/ON).
RTI No.	**RTIF2-150507-001**
Model	**SPARC M10-4, SPARC M10-4S**
Description	If the temperature of the parts in a SPARC M10 system chassis or crossbar box rises, a high temperature part warning may be registered in rare cases even when the warning level has not been reached.
Workaround	There is no effective workaround. If a high temperature warning is registered, the system will automatically recover. This problem does not affect the system operation.
RTI No.	**RTIF2-150507-003**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	The "LINKCARD I2C error" error log may inadvertently be registered during firmware update for a PCI expansion unit.
Workaround	There is no effective workaround. Ignore this error log. The firmware update for the PCI expansion unit will end normally.
RTI No.	**RTIF2-150227-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If you connect a power cord of one of the power supply units (PSUs) in a redundant configuration right after disconnecting it, the event logs for power failure and power recovery may not be registered. In addition, if you repeat the operation of connecting the power cord of a PSU right after disconnecting it, "Input fail; AC: - ;" may appear in "Power Status" of PSU shown with the showhardconf(8) command even when the power cord is connected.
Workaround	Wait for at least 10 seconds after you disconnect a power cord before connecting it again. [How to restore] If "Input fail; AC: - ;" appears in "Power Status" of the PSU shown with the showhardconf(8) command even when the power cord is connected, wait for at least 10 seconds after you disconnect the power cord, and then connect it again.

Table 3-23   Problems Resolved in XCP 2250 *(continued)*

RTI No.	**RTIF2-150226-001**
Model	**SPARC M10-4S**
Description	Suppose you set the remote power management group with the setremotepwrmgmt(8) command when the remote power management function (RCIL) is used on a system configured with two or more SPARC M10-4S. If you execute the switchscf command on the master XSCF to switch between master and standby, remote power management may fail in the subsequent power supply operation.
Workaround	There is no effective workaround. [How to restore] Execute the rebootxscf(8) command to reset the standby XSCF.
RTI No.	**RTIF2-150220-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If XSCF is reset due to any of the following while the physical partition (PPAR) is active, a break signal may be sent to the control domain of PPAR. - rebootxscf(8) command execution - watchdog timeout occurrence due to a firmware factor - Panic occurrence due to a firmware factor - Pressing of RESET switch of XSCF This problem may occur even when you execute the setppartmode(8) command to set the break signal suppression.
Workaround	There is no effective workaround.
RTI No.	**RTIF2-150218-002**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If an XSCF-LAN network is configured while an XSCF-LAN cable is not connected to an XSCF-LAN port, XSCF-LAN may seem to be in the active state of "RUNNING". [Example] If no cable is connected to XSCF-LAN#1 XSCF> **shownetwork -a** bb#00-lan#0 Link encap:Ethernet HWaddr 00:00:00:12:34:56 inet addr: 192.168.11.10 Bcast: 192.168.11.255 Mask:255.255.255.0 UP BROADCAST RUNNING MULTICAST MTU:1500 Metric:1 (Omitted) bb#00-lan#1 Link encap:Ethernet HWaddr 00:00:00:12:34:57 inet addr:192.168.10.10 Bcast: 192.168.10.255 Mask:255.255.255.0 UP BROADCAST RUNNING MULTICAST MTU:1500 Metric:1 (Omitted)
Workaround	This state does not affect the system operation. Use it as is.

Table 3-23	Problems Resolved in XCP 2250 *(continued)*
RTI No.	**RTIF2-150129-001**
Model	**SPARC M10-1**

Description	[1] If the input voltage drops, usually a power failure notification is issued and the power of the physical partition is turned off. However, if the input voltage of SPARC M10-1 drops instantaneously, no power failure notification is issued and the power of the physical partition is turned off.
	
	[2] If you execute the console(8) command to switch to the control domain console and input texts or keys during the physical partition power-off due to the trouble in [1], the following error log may be detected and the mother board unit (MBU) may need to be replaced.
	
	MBC-CPU interface fatal error
	
	Check all the following five conditions are satisfied to see if the trouble in [1] occurs.
	- Any of the following error logs is registered.
	  - MBU:SCF:failed to read/write interrupt mask register
	  - MBU:SCF:failed to read/write active status register
	  - Voltage out of range error
	- Oracle Solaris is not accessible via the network.
	- No power failure notification is issued. (*1)
	- The physical partition status display that you can check by the showpparstatus(8) command is not updated and indicates the physical partition is active (the status is other than "Powered Off").
	- You can access XSCF, but the execution result of the showlogspower command does not include "SCF Reset" indicating that XSCF is reset.
	
	*1 If a power failure notification is issued, usually the following log is registered by the showlogsevent command.
	PSU input power failure(/PSU#0)
	PSU input power failure(/PSU#1)
	
	In addition, the following error log is detected in many cases when the trouble in [1] occurs:
	failed to read/write extended active status register

Workaround	There is no effective workaround. If "MBC-CPU interface fatal error" is detected, replace the MBU. If "MBC-CPU interface fatal error" is not detected, turn off the input power supply and then turn it on again.

Table 3-23   Problems Resolved in XCP 2250 *(continued)*

RTI No.	**RTIF2-150126-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If XSCF is reset while the system is operating with the remote power management function enabled, the power of an external I/O device may be turned off incorrectly.

Workaround	Disable the remote power management function by RCIL, and enable it again every time after the power of the physical partition (PPAR) is turned on.
	This also applies when the power of the PPAR is automatically turned on due to power failure, power recovery, auto power control system (APCS), RCIL, etc.
	[Example]
	XSCF> setremotepwrmgmt -c disable
	XSCF> setremotepwrmgmt -c enable
	Perform the following procedure when you cannot perform this workaround due to a system operation issue.
	- When two or more SPARC M10 systems are registered to the remote power management group, do not reset an XSCF at the same time as another SPARC M10 system's XSCF.
	- When only a single SPARC M10 system is registered to the remote power management group
	Perform either (1) or (2) below.
	  (1) Disable only the power-off of the remote power management function.
	    1. Execute "setremotepwrmgmt -c disable" to disable the remote power management.
	    2. Specify "0x01" for the Linkage value in the management file of the remote power management.
	[Example]
	1,1,0x01,000000000000000000000000000000011,0x01,0x00,,,10.20.300.40,0x20,aa:bb:cc:dd:ee:f0,,,,,,,,,
	1,2,<u>0x10</u>,000000000000000000000000000000022,0x01,0x00,,,10.20.300.41,0x20,aa:bb:cc:dd:ee:f1,,,,,,,,,
	    3. Execute "setremotepwrmgmt -c config [file name]" to apply the management file.
	    4. Execute "setremotepwrmgmt -c enable" to enable the remote power management.
	  (2) Disable the remote power management function.
	    1. Execute "setremotepwrmgmt -c disable" to disable the remote power management.
	    2. If the external I/O device is ETERNUS, set the ETERNUS to LOCAL mode for operation.

RTI No.	**RTIF2-150119-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	The message " WARNING: Time of Day clock error: reason [Reversed by YYYY]" or "WARNING: Time of Day clock error: reason [Jumped by YYYY]" may appear on the OS console.
Workaround	There is no effective workaround. [How to restore] If you need an accurate time while the NTP client is not set, reboot Oracle Solaris so that it references the hardware time. Confirm the time after this reboot.

Table 3-23   Problems Resolved in XCP 2250 *(continued)*

RTI No.	**RTIF2-141226-001**
Model	**SPARC M10-4S**
Description	If time synchronization of the master XSCF and the NTP server fails during master/standby XSCF switching, the XSCF time may deviate and the ntpd may not start. If ntpd is not active, a message "NTP is unavailable." is output by executing the showntp -l command. Note that this problem does not occur if the NTP client setting of XSCF and the NTP server setting are disabled.
Workaround	There is no effective workaround. [How to restore] If ntpd is not active when the NTP client setting of XSCF or the NTP server setting is enabled, execute the rebootxscf(8) command to reset XSCF.
RTI No.	**RTIF2-141208-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	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 ---
Workaround	Execute the setaudit -p count command to configure the audit system to delete new audit records when the audit trail has reached its full capacity. (Default) [How to restore] Perform the following procedure. 1. Perform login authentication using the default user account. 2. Execute the restoredefaults xscf command. The audit log is erased. You can execute the setaudit command. 3. Execute the setaudit -p count command to configure the audit system to delete new audit records when the audit trail has reached its full capacity. (Default)

Table 3-23	Problems Resolved in XCP 2250 *(continued)*
RTI No.	**RTIF2-141111-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	On SPARC M10-1/M10-4 or SPARC M10-4S in a single-chassis configuration, the content of the scheduled operation setting for automatic power-on/power-off is lost and automatic power-on/power-off becomes disabled. It occurs even when the PSU backplane (PSUBP) and the microSD card, or the PSU backplane unit (PSUBPU) and the microSD card are not replaced at the same time as shown in the following procedure. 1. Turn off the input power (AC OFF) and replace PSUBP or PSUBPU. 2. Turn on the input power (AC ON) and start XSCF. 3. Turn off the input power (AC OFF) and replace the microSD card on the mother board unit (MBU) or CPU memory unit lower (CMUL). Note that this problem occurs even if the microSD card is replaced first.
Workaround	After the first FRU is replaced, disable the scheduled operation and then enable it again to transfer the contents of the scheduled operation to the replacing FRU. Execute the following procedure. 1. Replace the first FRU. (step 1 in the Description) 2. Disable the scheduled operation. XSCF> **setpowerschedule -a -c control=disable** 3. Enable the scheduled operation again. XSCF> **setpowerschedule -a -c control=enable** 4/ Execute step 2 and the subsequent steps in the Description. [How to restore] - If the dumpconfig(8) command is used to save the XSCF setting information, execute the restoreconfig(8) command and restore the XSCF setting information. - If the XSCF setting information is not saved, execute the setpowerschedule(8) command and reset the scheduled operation.

Table 3-23	Problems Resolved in XCP 2250 *(continued)*

RTI No.	**RTIF2-141111-002**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If any of the following events occur and the XSCF is reset, an incorrect error log may be registered. In addition, the XSCF time after the error occurrence time may be initialized to January 1, 1970. - XSCF panic - watchdog timeout - The RESET switch on the rear panel pressed The following two examples show the cases when incorrect error logs are registered and the error occurrence times are also initialized. [Example 1] Date: Jan 01 09:05:40 JST 1970 Code: 80002008-000e010000ff0000ff-018b00010000000000000000 Status: Alarm Occurred: Jan 01 09:04:56.276 JST 1970 FRU: /MBU Msg: Hardware access error. Diagnostic Code: 00000000 00000000 0000 00000000 00000000 0000 00000000 00000000 0000 00000000 00000000 00000000 00000000 00000000 00000000 0000 [Example 2] Date: Jan 01 09:05:51 JST 1970 Code: 10000000-000e010000ff0000ff-010240020000000000000000 Status: Information Occurred: Jan 01 09:05:35.008 JST 1970 FRU: /MBU Msg: TWI access error Diagnostic Code: 00000000 00000000 0000 00000000 00000000 0000 00000000 00000000 0000 00000000 00000000 00000000 00000000 00000000 00000000 0000
Workaround	There is no effective workaround. Do not press the RESET switch unless it is urgent and required. [How to restore] After turning off the power of the physical partition (PPAR), turn off and then turn on (AC OFF/ON) the input power of the system. By turning on the power again, the XSCF time is restored automatically.
RTI No.	**RTIF2-140929-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	"NOTICE: Unable to get TX queue state!" is displayed mistakenly if Oracle Solaris is started in the system configured with Oracle Solaris kernel zones.
Workaround	There is no effective workaround. Ignore this message.

Table 3-23   Problems Resolved in XCP 2250 *(continued)*

RTI No.	**RTIF2-140929-002**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	The setting of the remote power management function (RCIL) disappears if a microSD card, which is mounted on a mother board unit (MBU) or a CPU memory unit lower (CMUL), is replaced in the system with a single unit configuration of SPARC M10-1, SPARC M10-4 or SPARC M10-4S.
Workaround	There is no effective workaround. [How to restore] See the *Fujitsu SPARC M12 and Fujitsu M10/SPARC M10 RCIL User Guide*, and reconfigure RCIL.
RTI No.	**RTIF2-140808-002**
Model	**SPARC M10-4S**
Description	When the showhardconf(8) command is executed after the input power is turned off and then on, information on the configuration of components installed on the system may not be recognized.
Workaround	There is no effective workaround. [How to restore] Execute the rebootxscf -a command to reset all XSCFs.

Table 3-23   Problems Resolved in XCP 2250 *(continued)*

RTI No.	**RTIF2-140407-003**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If [Ctrl] + [t] is pressed in response to the ok prompt that appears after starting OpenBoot PROM, the following trap related error message is output on the domain console of the logical domain. {0} ok ERROR: Last Trap: Fast Instruction Access MMU Miss TL: 1 %TL:1 %TT:64 %TPC:1056e6f20 %TnPC:1056e6f24 %TSTATE:4420001600 %CWP:0 %PSTATE:16 AG:0 IE:1 PRIV:1 AM:0 PEF:1 RED:0 MM:0 TLE:0 CLE:0 MG:0 IG:0 %ASI:20 %CCR:44 XCC:nZvc ICC:nZvc %TL:2 %TT:183 %TPC:f0248e68 %TnPC:f0200c80 %TSTATE:14420001400 %CWP:0 %PSTATE:14 AG:0 IE:0 PRIV:1 AM:0 PEF:1 RED:0 MM:0 TLE:0 CLE:0 MG:0 IG:0 %ASI:20 %CCR:44 XCC:nZvc ICC:nZvc --- Omitted --- ?? Called from (f0227228) at f0227240 0 (emit Called from (lf at f020c3c8 (lf Called from lf at f020c404 lf Called from crlf at f020c424 pop-base Called from (f0225fe0) at f0226024 pop-base Called from (f0225fe0) at f0226024 (f0225fe0) Called from (f0248350) at f024838c 7ffffffffffff98 80000000fecdaff8 (f02081dc) Called from (f0248350) at f024837c {0} ok
Workaround	There is no effective workaround. [How to restore] From the ok prompt, execute the reset-all command to restart OpenBoot PROM. {0} ok **reset-all**
RTI No.	**RTIF2-140403-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If you connect to the control domain console by executing the console(8) command on the XSCF serial terminal and then execute any of the following while the control domain console outputs a message, the "SCF process down detected" error may occur and the XSCF may be reset. - Entering "#" to disconnect the control domain console - Executing the console(8) command by specifying the -f option from another terminal to forcibly connect to the control domain console of the physical partition (PPAR) - Executing the switchscf(8) command to switch the master XSCF - Executing the rebootxscf(8) command to reset the XSCF
Workaround	Execute the console(8) command after connecting to the XSCF via telnet or ssh, or terminate the console(8) command after powering off the PPAR.

Table 3-23   Problems Resolved in XCP 2250 *(continued)*

RTI No.	**RTIF2-140227-004**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If a link card is removed from the system by PCI hot plugging (PHP), using the cfgadm command on the logical domain on which it is mounted, will stop power supply to the link card and inadvertently register the "LINKCARD I2C error" log.
Workaround	There is no effective workaround. Ignore this error log. Power supply to the link card has been stopped for sure and the system can be operated continuously.
RTI No.	**RTIF2-140212-013**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	When powering on the physical partition (PPAR), the failure of a DIMM might register "CPU internal fatal error" for the following components: motherboard unit (MBU), CPU memory unit lower (CMUL), or CPU memory unit upper (CMUU).
Workaround	There is no effective workaround. If after replacing the MBU, CMUL or CMUU in question, the same error is registered again, replace all the DIMMs that are mounted on the MBU, CMUL and the CMUU.

Problems Resolved in XCP 2240

The following table lists the problems resolved in XCP 2240.

Table 3-24   Problems Resolved in XCP 2240

RTI No.	**RTIF2-141208-002**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**

Description	After a "CPU fatal error" occurs, the time required for a physical partition (PPAR) restart may be 6 to 30 minutes longer than usual. The required restart time varies depending on the number of mounted PCIe cards.
	If many PCIe cards are mounted, the following error may be mistakenly detected.
	- In the case of a SPARC M10-4S system consisting of 2BB or more
	  "SRAM data error"
	- In the case of a SPARC M10-1/M10-4 system
	  "Timeout of Reset Watch. PPARID 0"

Workaround	There is no effective workaround.
	[How to restore]
	- If "SRAM data error" has been detected
	  Replace the component at the suspected location indicated by the error log. After that, update the XCP firmware to XCP 2240 or later.
	- If "Timeout of Reset Watch. PPARID 0" has been detected
	  Update the XCP firmware to XCP 2240 or later.

Table 3-24	Problems Resolved in XCP 2240 *(continued)*
RTI No.	**RTIF2-141203-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	In some rare cases, "CPU Internal Serious error" might occur.
Workaround	There is no effective workaround.
RTI No.	**RTIF2-141113-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	Security fixes. (CVE-2014-3566) For details, see the Oracle website relating to the following: *Critical Patch Updates* http://software.fujitsu.com/jp/security/vulnerabilities
Workaround	Update the XCP firmware to XCP 2240 or later.
RTI No.	**RTIF2-141110-001**
Model	**SPARC M10-4S**
Description	Oracle VM Server for SPARC ldm command may not display correct CPU utilization and the dynamic resource management (DRM) may not work correctly on large domain systems where 150 domains or more exist.
Workaround	There is no effective workaround.
RTI No.	**RTIF2-141106-001**
Model	**SPARC M10-1**
Description	Any of the following errors related to abnormal temperature may be erroneously registered. - Temperature out of range error - High temperature at SW In these error logs, the first two bytes of the second field in [Code:] has the value of "0013".
Workaround	There is no effective workaround. Ignore this message because there is no impact on system operation.
RTI No.	**RTIF2-141031-003**
Model	**SPARC M10-4S**
Description	After the system board is deleted by dynamic reconfiguration of physical partitions (PPAR DR), I/O devices on I/O domain may not work, or root domain or I/O domain may cause a panic.
Workaround	There is no effective workaround. [How to restore] If I/O devices does not cause a panic after physical partitions (PPAR DR), reboot the I/O domain.
RTI No.	**RTIF2-141031-004**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	Hypervisor Abort may occur if all of cores are degraded on primary domain.
Workaround	There is no effective workaround.

Table 3-24   Problems Resolved in XCP 2240 *(continued)*

RTI No.	**RTIF2-141020-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	When using the ASR function and an abnormality occurs with the fan unit in the PCI expansion unit or the SPARC M10 system chassis, the following incorrect fault telemetry is sent to ASR Manager.

- An error in the fan unit of a PCI expansion unit is sent as an error in the fan unit of a SPARC M10 system chassis.
- An error in the fan unit of a SPARC M10 system chassis is sent as an error in the fan unit of a PCI expansion unit.

[Example] Error in fan unit of SPARC M10 system chassis
- Incorrect
  message ID: device.fan.toofast_pcibox
- Correct
  message ID: device.fan.tooslow

This problem occurs when the fourth byte from the beginning of the third field of [Code:] at execution of the showlogs error command is as shown below.
01911026, 01911027, 01911028, 01911029, 0191102a, 0191102b

[Example] Error in fan unit of PCI expansion unit
- Incorrect
  message ID: device.fan.tooslow
- Correct
  message ID: device.fan.toofast_pcibox

This problem occurs when the fourth byte from the beginning of the third field of [Code:] at execution of the showlogs error command is as shown below.
1100002E, 1100002F

Workaround	There is no effective workaround. When the fourth byte from the beginning of the third field of [Code:] as shown in the [Example] in [Description] at execution of the showlogs error command, take action by interpreting the message to be correct.
RTI No.	**RTIF2-141016-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	AC input power may be incorrectly determined to have a mix of 100 V and 200 V if any of the power supply units (PSU) in redundant configuration triggers an AC input error, and then power loss/recovery repeats in a short time. Consequently, though system operation may continue when power is recovered, two PSUs are degraded with the "PSU shortage (power off started)" message displayed and the system stops.
Workaround	There is no effective workaround. Replace the PSU where the power loss/recovery was detected.

Table 3-24	Problems Resolved in XCP 2240 *(continued)*

RTI No.	**RTIF2-140715-001**
Model	**SPARC M10-1**
Description	In SPARC M10-1, if the power supply unit (PSU) has a redundant configuration and the power cable connected to one of the power supply units is pulled out, a PSU error may be erroneously detected, and the SPARC M10-1 chassis CHECK LED (amber) may go on. At this time, executing the showlogs error command outputs the "Msg: PSU failed" log.

Workaround	There is no effective workaround.
	[How to restore]
	Use either of the following procedures.
	- How to restore 1
	  Turn off the power to the SPARC M10 chassis connected to the PCI expansion unit. Then disconnect both PCI expansion unit power cables (AC OFF). Then, wait for 30 seconds to reconnect the cables (AC ON).
	- How to restore 2
	  Perform pseudo active replacement of the PSU in which the error has been detected (temporarily remove the PSU and then reinstall it). When performing pseudo replacement of the PSU, use the replacefru(8) command. Note that the fieldeng privilege is required to execute the replacefru(8) command.

RTI No.	**RTIF2-140711-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	After Oracle Solaris has been kept active for a long time, powering off and then powering on a physical partition (PPAR) may cause the Oracle Solaris time to deviate. This phenomenon occurs in one of the following cases: - The setting specifying the XSCF as an NTP client is enabled and the Oracle Solaris does not use the NTP server. - The setting specifying the XSCF as an NTP client is enabled and Oracle Solaris uses the NTP server. At the time of Oracle Solaris booting, the ntpdate command is not executed or the ntpdate command fails to correct the time.
Workaround	There is no effective workaround. **Note -** To update the firmware from XCP 2232 or earlier to XCP 2040 or later, in which this problem has been resolved, see "RTIF2-140711-001 additional information." [How to restore] Execute the following procedure to boot Oracle Solaris in single-user mode and set the time. 1. Execute the poweroff(8) command to power off the PPAR. 2. Execute the showpparstatus(8) command to confirm that the status is "Powered off" meaning that the PPAR is disconnected. 3. Set the OpenBoot PROM environment variable auto-boot? to "false." XSCF> **setpparparam -p PPAR-ID -s bootscript "setenv auto-boot? false"** 4. Execute the poweron(8) command to power on the PPAR. 5. Execute the console(8) command to connect to the control domain console and display the ok prompt. 6. Boot Oracle Solaris in single-user mode. {0} ok **boot -s** 7. Execute the date command to set the Oracle Solaris time. [Example] Setting of 18:30:00 on June 27, 2014 # date 0627183014.00 # **date 0627183014.00**

Table 3-24	Problems Resolved in XCP 2240 *(continued)*
RTI No.	**RTIF2-140710-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	After you replace a motherboard or CPU memory unit lower (CMUL), the XCP firmware version should differ from the pre-replacement version. Nevertheless, the message "XCP version of XSCF and Back-Panel mismatched!" that should appear at the time of login to XSCF is not displayed.
Workaround	There is no effective workaround. [How to restore] When replacing a component, execute the following procedure: 1. Before replacement, execute the version(8) command to check the XCP version. [Example] XSCF> **version -c xcp** BB#00-XSCF#0 (Master) XCP0 (Current): 2051 XCP1 (Reserve): 2051 2. After replacement, execute the version(8) command to check the XCP version again. 3. If the XCP versions before and after replacement do not match, execute the flashupdate(8) command to update the firmware. [Example] Updating to XCP 2052 XSCF> **flashupdate -c update -m xcp -s 2052**

Table 3-24   Problems Resolved in XCP 2240 *(continued)*

RTI No.	**RTIF2-140616-003**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If a problem occurs with the microSD card on the XSCF or the XSCF unit, you may not be able to access data in the restored XSCF. This may cause the output of the error message " An internal error has occurred. Please contact your system administrator." at the execution of the following command. After this, the command terminates abnormally. initbb(8) resetdateoffset(8) setpciboxdio(8) setpowercapping(8) setpparmode(8) setpparparam(8) setservicetag(8) In addition, the following command execution terminates normally but the setting information is not reflected in the system. addboard(8) deleteboard(8) setpcl(8) setupfru(8) This problem also occurs when you perform the setting on the XSCF Web.

Workaround	There is no effective workaround.
	[How to restore]
	Replace the following part.
	- SPARC M10-1
	  PSU backplane (PSUBP)
	- SPARC M10-4/M10-4S
	  PSU backplane unit (PSUBP)
	- SPARC M10-4S (with crossbar box)
	  XSCF interface unit (XSCFIFU)

RTI No.	**RTIF2-140523-001**
Model	**SPARC M10-1**
Description	In the event of an instantaneous power failure lasting 11 ms or more, the CHECK LED on the operation panel will remain on after recovery, and the XSCF may not start. Therefore, even if the system is set to automatically start after recovery, it may not actually start automatically.
Workaround	There is no effective workaround. [How to restore] After turning off the input power, wait for at least 10 seconds before turning it on again.

Table 3-24   Problems Resolved in XCP 2240 *(continued)*

RTI No.	**RTIF2-140515-001**
Model	**SPARC M10-1**
Description	In order to configure the XSCF startup mode function, after changing the startup mode with the xscfstartupmode(8) command or setting the operation panel mode switch to "Locked" or "Service", if the rebootxscf(8) command is executed to reset XSCF, the new startup mode gets enabled. However, under normal circumstances, the configuration of the startup mode is not enabled when XSCF is reset using the rebootxscf(8) command. It is enabled only when the input power of the system is turned off/on (AC OFF/ON). This state can be confirmed by the xscfstartupmode -d command, as follows: [Example] When startup mode is set to "fast" after setting the operation panel mode switch to "Locked" XSCF> **xscfstartupmode -d** Setting Mode: normal Current Mode: normal XSCF> **xscfstartupmode -m fast** XSCF> **rebootxscf -a** XSCF> **xscfstartupmode -d** Setting Mode: fast[need AC OFF/ON] Current Mode: fast However, the correct result will be that the "Current Mode" be "normal" like the following: XSCF> **xscfstartupmode -d** Setting Mode: fast [need AC OFF/ON] Current Mode: normal
Workaround	There is no effective workaround.
RTI No.	**RTIF2-140507-013**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	Even if two default gateways are set up using the setroute(8) command, connection from other networks is possible only on either XSCF-LAN#0 or XSCF-LAN#1.
Workaround	Among XSCF-LAN#0 and XSCF-LAN#1, use the IP address of the gateway that can be connected to.
RTI No.	**RTIF2-140314-001**
Model	**SPARC M10-1**

Description	In case of a SPARC M10-1, to which XCP 2210 is applied, if an internal component failure occurs in Type B motherboard unit (MBU), it may not be detected and the following error may be registered in numbers.
	 - Voltage problem within MBU
	   FRU: /MBU
	   Msg: Critical low voltage error
	 Or
	 - Fan speed problem
	   FRU: /FAN#x,/MBU
	   Msg: FAN speed too low

Workaround	There is no effective workaround. [How to restore] Replace the MBU.

Table 3-24   Problems Resolved in XCP 2240 *(continued)*

RTI No.	RTIF2-140227-001
Model	**SPARC M10-4S**
Description	When the crossbar boxes are powered on (AC ON) for the first time, the "SCF panic detected" or the "XSCF hang up is detected" error log may be registered when XSCF is started.
Workaround	There is no effective workaround. [How to restore] Perform the following procedure. 1. Confirm that all crossbar boxes and SPARC M10-4S are displayed with the showhardconf(8) command. 2. Perform AC OFF/ON on all crossbar boxes and SPARC M10-4S. 3. Check the master XSCF with the showbbstatus(8) command. If XBBOX#81 had been switched to master XSCF, use the switchscf(8) command to make XBBOX#80 the master XSCF.
RTI No.	**RTIF2-130305-003**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If you reconnect the input power cable soon after it is unplugged, the error log of PSUs detect 100 V and 200 V at AC inputs indicating that an error in the configuration of the input power supply may be registered. - XCP 2041 or later Wrong PSU is installed - XCP 2032 or earlier PSUs detect 100 V and 200 V at AC inputs
Workaround	There is no effective workaround. Ignore this error log.

RTIF2-140711-001 additional information

This problem (RTIF2-140711-001) has been resolved for XCP 2240 and later versions. However, the Oracle Solaris time may deviate if a physical partition is started up immediately after updating the firmware from XCP 2232 or earlier to XCP 2240 or later.
To synchronize the time, see "Notes on the Logical Domain Time."

Problems Resolved in XCP 2232

The following table lists the problems resolved in XCP 2232.

Table 3-25	Problems Resolved in XCP 2232
RTI No.	**RTIF2-141031-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	Security fixes. (CVE-2013-4784) For details, see the Oracle website relating to the following:*Critical Patch Updates* http://software.fujitsu.com/jp/security/vulnerabilities
Workaround	Update the XCP firmware to XCP 2232 or later.

Problems Resolved in XCP 2231

The following table lists the problems resolved in XCP 2231.

Table 3-26	Problems Resolved in XCP 2231
RTI No.	**RTIF2-161011-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	In logical domains (including the control domain), dynamically adding or deleting a CPU may cause I/O to hang up.
Workaround	There is no effective workaround.
RTI No.	**RTIF2-141003-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	After executing live migration on a system with XCP 2230, adding CPU(s) to a logical domain or creating a new logical domain on the source machine may cause the logical domain to hang up.
Workaround	There is no effective workaround. [How to restore] After the live migration is conducted, power off the physical partition (PPAR) which is the source machine and then power it on again.
RTI No.	**RTIF2-140930-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	Security fixes. (JVNVU#97219505/CVE-2014-7169) For details, see the Oracle website relating to the following:*Critical Patch Updates* http://software.fujitsu.com/jp/security/vulnerabilities
Workaround	Update the XCP firmware to XCP 2231 or later.

Problems Resolved in XCP 2230

The following table lists the problems resolved in XCP 2230.

Table 3-27   Problems Resolved in XCP 2230

RTI No.	**RTIF2-140910-001**
Model	**SPARC M10-4S**
Description	If Oracle Solaris 11.2 and later is running and the system board is deleted by dynamic reconfiguration of physical partitions, Hypervisor may abort.
Workaround	There is no effective workaround.
RTI No.	**RTIF2-140819-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	When the XSCF is rebooted or the input power is turned on again, the following problem may, in rare cases, occur: ntpd is left inactive and, as a result, synchronization of the XSCF time with the NTP server time fails. To confirm whether ntpd is inactive, execute the showntp -l command. If the message "NTP is unavailable." appears, ntpd is inactive. This problem does not occur if the setting specifying the XSCF as an NTP client or NTP server is disabled.
Workaround	There is no effective workaround. [How to restore] If the setting specifying the XSCF as an NTP client or NTP server is enabled and ntpd is inactive, execute the rebootxscf(8) command to reboot the XSCF.
RTI No.	**RTIF2-140815-001**
Model	**SPARC M10-4S**
Description	If the system board is deleted by the dynamic reconfiguration of physical partitions (DR), the monitoring of Host Watchdog for logical domains may stop.
Workaround	After the system board is deleted, to restart the monitoring of Host Watchdog, reboot one of logical domains in the physical partition (PPAR).

Table 3-27   Problems Resolved in XCP 2230 *(continued)*

RTI No.	**RTIF2-140813-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**

Description	When an attempt is made to install Oracle Solaris via vnet, installation menu activation may take one hour or more in the following case: the network speed between the SPARC M10 system chassis and the installation server is exceeding 1 Gbps or the system consists of multiple SPARC M10-4S chassis.
	  [Example] Network installation on a SPARC M10-4S via vnet
	{0} ok **boot net:dhcp - install**
	Boot device: /virtual-devices@100/channel-devices@200/network@0:dhcp File and args: - install
	<time unavailable> wanboot info: WAN boot messages->console
	<time unavailable> wanboot info: configuring /virtual-devices@100/channel-devices@200/network@0:dhcp
	<time unavailable> wanboot info: Starting DHCP configuration
	<time unavailable> wanboot info: DHCP configuration succeeded
	<time unavailable> wanboot progress: wanbootfs: Read 368 of 368 kB (100%)
	<time unavailable> wanboot info: wanbootfs: Download complete
	Wed Aug 13 06:24:51 wanboot progress: miniroot: Read 4864 of 243471 kB (1%)
	(*1)
	  *1 This step takes time.

Workaround	Install Oracle Solaris from a vdisk or DVD-ROM created using an ISO image.
RTI No.	**RTIF2-140808-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	On a SPARC M10 system to which an uninterruptible power supply (UPS) is connected, the following problem may occur: After recovery from a power failure occurring while Oracle Solaris is inactive or the physical partition (PPAR) is powered off, PPAR may erroneously reboot even though the PPAR should remain powered off. **Note -** When a power failure occurs while Oracle Solaris is active and a UPS is connected, Oracle Solaris will automatically reboot upon power recovery. This phenomenon may occur when the operation below is followed by a power failure recurrence and then a recovery therefrom. - A power failure occurs while Oracle Solaris is active. After Oracle Solaris boots automatically upon power recovery, the shutdown command is executed on Oracle Solaris to stop Oracle Solaris (display the ok prompt). [Example] # **shutdown -y -g0 -i0** - A power failure occurs while Oracle Solaris is active. After Oracle Solaris boots automatically upon power recovery, the shutdown command is executed on Oracle Solaris to power off the PPAR. [Example] # **shutdown -y -g0 -i5**
Workaround	If you want to stop Oracle Solaris, there is no effective workaround. To power off the PPAR, execute the poweroff(8) command on the XSCF. [How to restore] Execute the poweroff(8) command on the XSCF to power off the PPAR.

Table 3-27   Problems Resolved in XCP 2230 *(continued)*

RTI No.	**RTIF2-140808-004**
Model	**SPARC M10-1**
Description	A PCI Express correctable error may occur if you connect a PCI Express expansion unit (connected by PCI Express Gen1), which is an IHV product, to a SPARC M10-1.
Workaround	There is no effective workaround.
RTI No.	**RTIF2-140805-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	1. If the building block (PSB) is deleted by the dynamic reconfiguration of physical partitions (PPAR DR), a process on the logical domains may produce a core dump by SIGILL (Illegal Instruction). (SPARC M10-4S only) 2. After a live migration of a guest domain is performed, some commands using libcrypt library (e.g., ssh, pkg, zonename) on the guest domain may produce a core dump by SIGILL (Illegal Instruction) if the guest domain is Oracle Solaris 11.1 or Oracle Solaris 11.2 with PRIMECLUSTER GD or PRIMECLUSTER GDS applied to the guest domain.
Workaround	There is no effective workaround.
RTI No.	**RTIF2-140731-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	An Event Log ("Host stopped") is not displayed by a showlogs(8) event and showmonitorlog(8) when the primary domain is shutdown.
Workaround	There is no effective workaround.
RTI No.	**RTIF2-140623-002**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If you specify "pop" as the authentication method by executing the setsmtp(8) command, e-mail sending may fail even after you execute the setemailreport(8) command to enable e-mail notification.
Workaround	When executing the setsmtp(8) command to specify an authentication method, specify either "smtp-auth" or "none" instead of "pop".
RTI No.	**RTIF2-140623-003**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	Suppose that the XSCF STANDBY LED on the operation panel blinks immediately after turning on the input power (AC ON). If the power switch on the operation panel is pressed, powering on/off the physical partition (PPAR) becomes disabled. The power to the PPAR is turned on/off when: - The power switch on the operation panel is manipulated. - The poweron(8) or poweroff(8) command is executed. - PPAR power on/off operation is performed on XSCF Web. - Remote power management by RCIL takes place. - The auto power control system (APCS) issues a power on/off instruction.
Workaround	To operate the power switch on the operation panel immediately after turning on the input power, wait at least 30 seconds after the STANDBY LED switches from blinking to being constantly on.

Table 3-27	Problems Resolved in XCP 2230 *(continued)*
RTI No.	**RTIF2-140606-002**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	Even though the "AEV_AUTHENTICATE" audit event is enabled, XSCF Web login failure events are not registered in the audit log.
Workaround	There is no effective workaround.
RTI No.	**RTIF2-140606-003**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	When an attempt is made to look at an audit log concerning XSCF Web operation using the viewaudit(8) command, the command displays incorrect values. The displayed values of the port number and IP address at the time of XSCF Web access are "0" and "0000".
Workaround	There is no effective workaround.
RTI No.	**RTIF2-140606-006**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	When specifying a system board (PSB) for a logical system board (LSB) on the [PPAR Operation] - [PPAR Configuration] screen of XSCF Web, you need to note the following: A PSB cannot be specified if it has already been assigned to another physical partition (PPAR).
Workaround	For the setting, use the setpcl(8) command of the XSCF shell.

Table 3-27	Problems Resolved in XCP 2230 *(continued)*
RTI No.	**RTIF2-140606-007**
Model	**SPARC M10-4S**
Description	Suppose that the system is made up of multiple physical partitions (PPARs) consisting of multiple SPARC M10-4S chassis. If you turn on the power to multiple PPARs at the same time, for the first time after turning on the input power or resetting the XSCF, the following event may occur: A PPAR ID error is registered, the self-diagnosis test (POST) on some PPARs is not completed, and these PPARs fail to start. You can confirm this event by executing the showpparstatus command. [Example] Only PPAR #4 is indicated with "Initialization Phase" and fails to complete POST processing. XSCF> **poweron -a** XSCF> **showpparstatus -a** PPAR-ID PPAR Status 00 Initialization Complete 01 - 02 - 03 - 04 Initialization Phase 05 - 06 Initialization Complete 07 - 08 - 09 - 10 - 11 Initialization Complete 12 - 13 - 14 - 15 - XSCF>
Workaround	Do not use the poweron -a command to turn on the power to multiple PPARs at the same time. Use the poweron -p command to turn on the power to PPARs one at a time. [How to restore] Turn off the power to PPARs by using the following procedure and then turn it on again: 1. Execute the poweroff -f command to forcibly turn off the power to the PPARs that have failed to start. XSCF> **poweroff -y -f -p** *ppar_id* 2. Confirm that the status of each PPAR specified in step 1 is "Powered OFF". XSCF> **showpparstatus -p** *ppar_id* --- Omitted --- 04 Powered Off --- Omitted --- 3. Turn on the power to the PPAR again. XSCF> **poweron -y -p** *ppar_id*

Table 3-27   Problems Resolved in XCP 2230 *(continued)*

RTI No.	**RTIF2-140527-001**
Model	**SPARC M10-4S**
Description	On a system that is configured with several SPARC M10-4S, if XSCF rebooting is not performed with the rebootxscf(8) command or if the input power is not turned off for about 10 days in respect to the XSCFs of the following status, the "XSCF self-diagnosis warning detection" error message is logged: - A standby XSCF which did not perform master/standby switchover for about 10 days. - Slave XSCF.
Workaround	There is no effective workaround. Ignore this error log.
RTI No.	**RTIF2-140212-009**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	When the XSCF is under high load due to high volume of packets sent to the XSCF network by the L2 loop etc., the false error "RTC read data error" or "Hardware access error" regarding the power unit (PSU) is detected. Moreover, the PSU is marked as failed due to this error.
Workaround	If the reason for the high load is the L2 loop, eliminate the root cause by reviewing the network connection etc. [How to restore] To remove the "Failure" mark from the PSU, set the mode switch on the operation panel to Service mode, turn off the input power, and then turn it on again. After that, restore the mode switch to its original state.

Problems Resolved in XCP 2221

The following table lists the problems resolved in XCP 2221.

Table 3-28   Problems Resolved in XCP 2221

RTI No.	**RTIF2-140617-002**
Model	**SPARC M10-4, SPARC M10-4S**
Description	In SPARC M10-4/M10-4S, remote power management by RCIL does not work. Moreover, if the following RCIL-related commands are executed, the "Controller response timeout" error message is output and the command ends abnormally. setremotepwrmgmt(8) showremotepwrmgmt(8) getremotepwrmgmt(8) clearremotepwrmgmt(8)
Workaround	There is no effective workaround. Operate power supply of the target SPARC M10 systems and I/O devices manually.

Table 3-28	Problems Resolved in XCP 2221 *(continued)*
RTI No.	**RTIF2-140611-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	Security fixes. (JVN#61247051/CVE-2014-0224) For details, see the Oracle website relating to the following:*Critical Patch Updates* http://software.fujitsu.com/jp/security/vulnerabilities
Workaround	Update the XCP firmware to XCP 2221 or later.

Problems Resolved in XCP 2220

The following table lists the problems resolved in XCP 2220.

Table 3-29   Problems Resolved in XCP 2220

RTI No.	**RTIF2-141106-002**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	For XCP 2210 or earlier, the error log "PCI Express link up failed" may be erroneously registered, and an on-board I/O device or a PCI slot may be degraded if a physical partition (PPAR) is powered on/off after any of the following error logs related to abnormal temperature is registered. - Temperature out of range error - High temperature at SW - Hardware access error.(thermal sensor) In these error logs, the first two bytes of the second field in [Code:] has the value of "0013".
Workaround	There is no effective workaround. [How to restore] Turn off the system input power, then restore the power (AC-OFF/ON).
RTI No.	**RTIF2-140804-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	When the fan speed is switched due to a change in the intake air temperature, an error log indicating an abnormal fan speed may be erroneously registered for a fan that is not faulty.
Workaround	There is no effective workaround. [How to restore] Execute the replacefru(8) command, and select the fan registered in the error log. Follow the replacement instructions on the maintenance menu, without replacing the fan.

Table 3-29   Problems Resolved in XCP 2220 *(continued)*

RTI No.	**RTIF2-140606-005**
Model	**SPARC M10-4S**

Description	Suppose that the testsb(8) command running for system board (PSB) diagnosis detects one of the errors listed below during the period between power-off and power-on of the SPARC M10 Systems chassis or crossbar box chassis. In this case, the command terminates, leaving the power to the chassis on.
	- The DC-DC converter (DDC) in the chassis is faulty.
	   Error log: Msg: Power-on failure
	- The circuit that monitors cooling components within the chassis is abnormal.
	   Error log: Msg: LLC protection circuit test error
	- A crossbar cable is connected to the crossbar unit (XBU) within the chassis in an invalid combination.
	   Error log: Msg: XB CABLE configuration error
	You can determine the occurrence of this phenomenon from the above error log and the output of the showboards(8) command. If this phenomenon has occurred, the command outputs "y" for [Pwr] and "Failed" for [Test].
	[Example] If the power to the SPARC M10-4S chassis is on and the system board diagnosis
	              indicates an error
	XSCF> **showboards -a**
	PSB PPAR-ID(LSB) Assignment Pwr Conn Conf Test Fault
	---- ------------ ----------- ---- ---- ---- ------- --------
	00-0 00(00) Assigned y n n Failed Faulted

Workaround	There is no effective workaround. Check the error log and perform maintenance on the component.
RTI No.	**RTIF2-140605-007**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	For XCP 2041 or later, when an error log for a configuration error in a power supply unit (PSU) is registered, inappropriate message text is registered for this log. Although the message text should indicate the mixing of different AC input voltages (100 V and 200 V), it indicates the existence of an incorrect combination of PSU types. [Example] Message text (to the right of "Msg:") inappropriately registered when different AC input voltages of 100 V and 200 V are mixed. Code: 80000000-0001020000ff0000ff-018af0220000000000000000 Status: Alarm Occurred: May 27 11:22:00.0000 JST 2014 FRU: /MBU Msg: Wrong PSU is installed The correct message indicating the mixing of different AC input voltages is as follows: Msg: PSUs detected 100V and 200V at AC inputs

Workaround	There is no effective workaround.
	Execute the showlogs error command and check the value of the third and fourth bytes in the third field in [Code:]. Depending on this value, take appropriate action by following the correct message indicated below instead of the output message.
	- If the value of the bytes is "f022"
	   Different AC input voltages of 100 V and 200 V are mixed on the PSU. Check the PSU for AC input connection status.
	- If the value of the bytes is not "f022"
	   The combination of PSU types is incorrect. Contact a field engineer.

Table 3-29   Problems Resolved in XCP 2220 *(continued)*

RTI No.	**RTIF2-140507-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	In a SPARC M10 system with XCP 2043 or newer, when a disk failure occurs due to its removal from a hardware RAID (RAID1 or RAID1E), if the state of the Open Boot PROM is transitioned due to the execution of input power off/on, rebooting of Oracle Solaris or the execution of the shutdown -i0 command, even after the restoration of the disk, it is not placed in the original RAID volume but in another RAID volume. Moreover, the original RAID volume stays in the degraded state.
Workaround	Execute any of the following procedures according to the encountered circumstances. - If the disk, which is a part of the RAID volume, fails while the system is running, do not restart Oracle Solaris and replace the disk while the system is running. - If the disk, which is a part of the RAID volume, is removed while the system is running, do not restart Oracle Solaris and remount the removed disk while the system is running. - If the disk, which is a part of the RAID volume, is removed while the PPAR is powered off, remount the removed disk while the PPAR is in the powered off state. [How to restore] Perform the following procedure if this symptom occurs: 1. Remove the newly created RAID volume. 2. Set up the target disk as "hot spare". When the "hot spare" feature is enabled, the disk will be automatically placed in the original RAID volume. Meanwhile, refer to "F.5 Creating a Hot Spare of a Hardware RAID Volume" and "F.6 Deleting a Hot Spare of a Hardware RAID Volume" in the *Fujitsu SPARC M12 and Fujitsu M10/SPARC M10 System Operation and Administration Guide* for the procedures of removing a volume or setting up a hot spare.
RTI No.	**RTIF2-140507-002**
Model	**SPARC M10-4S**
Description	If the system board is deleted by dynamic reconfiguration of physical partitions, Oracle Solaris on the domain may panic, or Hypervisor may abort.
Workaround	There is no effective workaround.
RTI No.	**RTIF2-140507-015**
Model	**SPARC M10-4, SPARC M10-4S**
Description	If the showhardconf(8) command is executed on a system configuration with 3 or more BBs or crossbar boxes, wrong information may be output at the FRU-Part-Number of the crossbar cable. [Example] In case of crossbar cable no. R0: Incorrect: CBL#R0 Status:Normal; + FRU-Part-Number:@@@D00Q@; Ver:0020h; + Type:Optic; Length: 2; Correct: CBL#R0 Status:Normal; + FRU-Part-Number: ALLT03FQPE; Ver:0020h; + Type:Optic; Length: 2;
Workaround	There is no effective workaround. There is no effect of this wrong display on the system.

Table 3-29   Problems Resolved in XCP 2220 *(continued)*

RTI No.	**RTIF2-140507-017**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If XSCF is reset using the rebootxscf(8) command, the XSCF may stop due to XSCF failure.
Workaround	There is no effective workaround. [How to restore] Turn off the input power to the system and then turn it on again (AC OFF/ON).
RTI No.	**RTIF2-140507-018**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	When the system is in the initialized state, XSCF may not start even after turning on the input power.
Workaround	There is no effective workaround. [How to restore] Replace the CPU memory unit lower (CMUL), the XSCF unit (XSCFU), or the motherboard unit (MBU).
RTI No.	**RTIF2-140418-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	The Dynamic Resource Management(DRM) of Oracle VM Server for SPARC does not work.
Workaround	There is no effective workaround.
RTI No.	**RTIF2-140407-002**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	In a system configuration with a connected PCI expansion unit, you may update XCP firmware or reset XSCF with the physical partition (PPAR) powered on. In this case, the PCI expansion unit information is not output to the result of executing the ioxadm(8) command or showhardconf(8) command. Or, the PCI expansion unit can no longer be controlled with the ioxadm(8) command.
Workaround	There is no effective workaround. [How to restore] Perform one of the following operations: - Power off the PPAR and then power it on again. - Use PCI hot plug (PHP) to remove the link card from the system and reinstall it.

Table 3-29   Problems Resolved in XCP 2220 *(continued)*

RTI No.	**RTIF2-140407-004**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	Suppose you execute the setaudit -a command to set the user audit policy, and then reset the XSCF. In this case, the audit policy of the registered user may be used as the audit policy of the user account "default", and the audit policy of the registered user may be erased. This occurs when the user account "default" has no set audit policy. [Example] Setting an audit policy for yyyyy user XSCF> **setaudit -a yyyyy=disable** XSCF> **showaudit all** --- Omitted --- User policy: yyyyy disabled Events: AEV_AUDIT_START enabled XSCF> **rebootxscf -a** XSCF> **showaudit all** --- Omitted --- User policy: default disabled Events: AEV_AUDIT_START enabled
Workaround	If user account "default" is not displayed for [User Policy:] in the output result of the showaudit all command, execute the setaudit -a command to set the audit policy of the user account "default". [Example] Set the audit policy for the user account "default". XSCF> **setaudit -a yyyyy=disable** [How to restore] Perform the following procedure. 1. Execute the setaudit -a command to reset the user audit policy that had been used as the audit policy of the user account "default". 2. Execute the rebootxscf(8) command to reset XSCF. 3. Execute the showaudit all command to confirm that the set user audit policy is displayed for [User Policy:].
RTI No.	**RTIF2-140402-002**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	In the search function for each log in the [XSCF] - [Logs] menu on the XSCF Web, if you click the [Search] button with both [Start] and [End] times set to execute a search, a message indicating an error in the specified period may be output and it may not be possible to execute the search.
Workaround	Use the showlogs(8) command of the XSCF shell.

Table 3-29	Problems Resolved in XCP 2220 *(continued)*
RTI No.	**RTIF2-140314-002**
Model	**SPARC M10-4S**
Description	In case XCP 2210 is applied to a SPARC M10-4S, that is attached to a crossbar box (XBBOX), if the crossbar cable is degraded due to some problems, the following symptom may occur while the system is running. - If a failure occurs in the crossbar unit (XBU) of the crossbar box (XBBOX), it may not be detected and the physical partition may hang up. Failure of crossbar cable can be confirmed by any of the following error logs: FRU: /BB#n/XBU#x/CBL#y,/BB#n/XBU#x,/XBBOX#m/XBU#x Msg: XB-XB interface fatal bus protocol error Or FRU: /BB#n/XBU#x/CBL#y,/BB#n/XBU#x,/XBBOX#m/XBU#x Msg: XB-XB interface timeout error Or FRU: /BB#n/XBU#x/CBL#y,/BB#n/XBU#x,/XBBOX#m/XBU#x Msg: XB-XB interface link-up error
Workaround	If a problem of any crossbar cable has occurred, stop all PPARs immediately and replace the crossbar cable. [How to restore] 1. Stop all PPARs. If any of them cannot be stopped normally, stop it forcibly. 2. Replace the degraded crossbar cable. 3. Diagnose the hardware with the testsb -a command and confirm whether there is any failure of the XBU of XBBOX. 4. If there is any failure in the XBU, replace it.
RTI No.	**RTIF2-140312-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	Configuration of SNMP fails when it is done from the [SNMP] or the [SNMP Security] menu of XSCF Web.
Workaround	Do not configure SNMP from XSCF Web. Use the following XSCF shell commands to configure SNMP. - setsnmp(8) - setsnmpusm(8) - setsnmpvacm(8)
RTI No.	**RTIF2-140310-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If server certificate is imported with the setldap -c command, an error is produced and importing fails.
Workaround	There is no effective workaround when the setldap(8) command is used. Use the encryption feature of LDAP (LDAP over SSL) with the setldapssl(8) command.

Table 3-29   Problems Resolved in XCP 2220 *(continued)*

RTI No.	**RTIF2-140227-003**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	After the detection of a degradation of SPARC M10 chassis, if reboot or AC OFF/ON is executed on the physical partitions, the "PSU shortage" error message may be mistakenly registered. Moreover, the PSU is marked as failed due to this error.

Workaround	There is no effective workaround.
	[How to restore]
	Execute the following procedures.
	- If the "Status" of the power supply unit (PSU) has not become "Faulted":
	    1. Eliminate the cause of the degradation of SPARC M10 chassis.
	    2. If a "Failure" mark is attached to the PSU, perform AC OFF/ON to remove it.
	- If the "Status" of the power supply unit (PSU) has become "Faulted":
	    1. Replace the PSU.
	    2. Perform AC OFF/ON to remove the "Failure" mark from the PSU.

RTI No.	**RTIF2-140227-006**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If [Ctrl]+[C] is pressed when any of the following command is running, in some very rare cases, the command may not terminate, moreover, other running commands executed by other logged in users may not terminate as well. ping(8), setservicetag(8), shownetwork(8), showntp(8), showpacketfilters(8), showservicetag(8), traceroute(8)
Workaround	There is no effective workaround. [How to restore] Perform AC OFF/ON.
RTI No.	**RTIF2-140227-007**
Model	**SPARC M10-4S**
Description	When the SSCP IP address of an unmounted SPARC M10-4S chassis is set up using the setsscp(8) command, the showsscp(8) command displays the "Not installed" message and thus, the set IP address cannot be confirmed. Therefore, before adding SPARC M10-4S chassis or cross-bar boxes with the addfru(8) command, SSCP IP address of the added chassis cannot be confirmed with the showsscp(8) command.
Workaround	There is no effective workaround.
RTI No.	**RTIF2-140227-008**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	When the lockout feature of user accounts is enabled with the setloginlockout(8) command, if three logins to the XSCF Web are performed with the same user account, further logins are disabled for the duration of the configured lockout time.
Workaround	Disable the lockout feature of user accounts.

Table 3-29   Problems Resolved in XCP 2220 *(continued)*

RTI No.	**RTIF2-140221-003**
Model	**SPARC M10-4S**
Description	If the addboard(8) or deleteboard(8) command is executed using the DR feature, addition or removal of system boards using the DR feature may fail with displaying the following message: Failed to evacuate board resources
Workaround	Re-execute the addboard(8) or deleteboard(8) command. If it fails again, either reboot the control domain only or reset XSCF using the rebootxscf -a command. After that, re-execute the addboard(8) or deleteboard(8) command, using the DR feature.
RTI No.	**RTIF2-140212-002**
Model	**SPARC M10-4S**
Description	If the crossbar cable in the crossbar unit (XBU) of SPARC M10-4S fails, the name of the failed component is wrongly displayed with the showstatus(8) command. The numerical and alphabetical part of the component name is displayed in the reverse order. [Example] In case of crossbar cable number 0L Wrong display: CBL#L0 Status: Deconfigured; Right display: CBL#0L Status: Deconfigured;
Workaround	There is no effective workaround. Please adjust the reading to the right sequence.
RTI No.	**RTIF2-140212-004**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	The OID information of "scfPPAROsMachine" in the definition file of XSCF extension MIB should have a value of "sun4v", but instead, it contains the CMU firmware version information like "02090000".
Workaround	There is no effective workaround.
RTI No.	**RTIF2-140212-006**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	In case of SNMPv1 or SNMPv2, if the trap host name, which contains the XSCF host name, is registered by the setsnmp(8) command, the trap host is not displayed by the showsnmp(8) command. [Example of non-displaying with the showsnmp(8) command] XSCF host name: example.com Trap host name: test.example.com
Workaround	Either specify a trap host name which does not contain the XSCF host name or specify the IP address of the trap host.

Table 3-29   Problems Resolved in XCP 2220 *(continued)*

RTI No.	**RTIF2-140212-022**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If the trap host is registered by specifying the trap type with the "-t inform" option to the setsnmp addtraphost command, the UDP address of the trap that is reported to the trap host, becomes the IP address that is assigned to the XSCF-LAN (physical IP address), instead of the takeover IP address (virtual IP address). This symptom occurs when a takeover IP address is set up.
Workaround	There is no effective workaround.
RTI No.	**RTIF2-130806-001**
Model	**SPARC M10-1, SPARC M10-4S**
Description	Suppose that the XSCF is configured as an NTP client and is synchronized with the upper level NTP server in time. If you replace one of FRUs listed below for each model and then power on the physical partition (PPAR), the Oracle Solaris time may become January 1, 2001. [SPARC M10-1] - Motherboard unit (MBU) - PSU backplane (PSUBP) [SPARC M10-4S] - crossbar backplane unit (XBBPU) - XSCF unit (XSCFU) You can determine the occurrence of this problem by executing the showdateoffset(8) command. If an extremely large value (400 million seconds or more) is displayed in [Domain Date Offset], this problem has occurred. [Example] XSCF> **showdateoffset -a** PPAR-ID Domain Date Offset 00 424915200 sec 01 424915200 sec 02 424915200 sec 03 424915200 sec --- Omitted --- 15 424915200 sec

Workaround	Use the following procedure to replace an FRU listed in "Description":
	- If the setting specifying the XSCF as an NTP client is disabled
	  This problem will not occur. Perform the ordinary replacement procedure.
	- If the setting specifying the XSCF as an NTP client is enabled:
	  1. Disconnect the LAN cable from the XSCF-LAN port and then perform replacement.
	  2. After the XSCF starts, connect the serial cable to the serial port. Do not connect the LAN cable at this time.
	  3. Disable the setting specifying the XSCF as an NTP client. You need to reboot the XSCF to make your change effective.
	  4. Execute the setdate(8) command to set the XSCF time. After this, the XSCF is rebooted.
	  5. Connect the LAN cable to the XSCF-LAN port.
	  6. Enable the setting specifying the XSCF as an NTP client. You need to reboot the XSCF to make your change effective.
	[How to restore]
	After replacing the FRU listed in "Description," perform the following:
	When you power on the physical partition, the Oracle Solaris time becomes January 1, 2001. Start Oracle Solaris in single-user mode and then set the time.

Problems Resolved in XCP 2210

The following table lists the problems resolved in XCP 2210.

Table 3-30   Problems Resolved in XCP 2210

RTI No.	**RTIF2-140605-005**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If either of the following events occurs, the ttydm process may fail, causing the XSCF to be reset: - The console(8) command is executed to connect to the control domain console after one of the following events occurs: A large amount of data is output to the screen of the domain console and the console(8) command terminates when the XSCFs for multiple SPARC M10-4S chassis are reset. - The console(8) command is executed to forcibly connect to the control domain console. If the ttydm process fails, the following error log is registered: [Example] XSCF> **showlogs error -v** Date: Dec 01 22:08:13 JST 2013 Code: 20000000-00fcff00b0000000ff-010400010000000000000000 Status: Notice Occurred: Dec 01 22:08:04.886 JST 2013 FRU: /FIRMWARE,/XBBOX#80/XSCFU Msg: SCF process down detected Diagnostic Code: 00000000 00000000 0000 50000000 00000000 0000 00000000 00000000 0000 74747964 6d2e3239 37302e62 7a320000 00000000 00000000 0000 If the first five bytes on the fourth line in [Diagnostic Code:] are "747479646d", the ttydm process has failed.

Workaround	There is no effective workaround.
	[How to restore]
	- In the case of a system that consists of multiple SPARC M10-4S chassis
	  By executing the console(8) command after XSCF resetting, which causes master/standby XSCF switching, you can connect to the control domain console.
	- In the case of SPARC M10-1, SPARC M10-4, or SPARC M10-4S in a single-chassis configuration
	  By executing the console(8) command after XSCF resetting, you can connect to the control domain console.

RTI No.	**RTIF2-140507-019**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If Firefox 26 is used in an environment with XSCF firmware older than XCP 2210, the frame of the pop-up window appears in thick black line.
Workaround	Ignore the thick black frame.

Table 3-30   Problems Resolved in XCP 2210 *(continued)*

RTI No.	RTIF2-140507-020
Model	**SPARC M10-4S**
Description	If the master XSCF is switched to standby state just after executing the poweroff -f -p -n (n is a partition number) command, the following message is registered in the error log, displayed by the showlogs error command. Msg: SCF process down detected
Workaround	There is no effective workaround. This symptom has no effect on the system operation.
RTI No.	**RTIF2-140410-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	An XSCF NTP server function may be used as the platform for a DDoS attack (CVE-2013-5211).
Workaround	Update the XCP firmware to XCP 2210 or later.
RTI No.	**RTIF2-140410-007**
Model	**SPARC M10-4S**
Description	When setting the takeover IP address (virtual IP address) for the XSCF network, the XSCF-LAN IP address (physical IP address) needs to be set for both master and standby XSCFs. Otherwise, the takeover IP address setting may not be reflected after the setting is applied and XSCF is reset.
Workaround	Set the XSCF-LAN IP address (physical IP address) of both master and standby XSCFs and then set the takeover IP address.
RTI No.	**RTIF2-140407-007**
Model	**SPARC M10-4S**
Description	After a degraded system board is replaced using the replacefru(8) command, the replacement system board is diagnosed using the replacefru(8) command menu or the testsb(8) command. The diagnosis fails if all of the following conditions are met. - Physical partition (PPAR) consists of multiple system boards and the PPAR power is on. - Some system boards in the PPAR are stopped through degradation.
Workaround	Use either of the following procedures to replace a system board and execute diagnosis. 1.Before replacing the system board, execute the deleteboard(8) command to change the system board state to system board pool (SP). 2. After completing system board replacement and diagnosis, execute the addboard(8) command to assign the system board to PPAR again. Or 1. After powering off the PPAR, execute system board replacement and diagnosis. [How to restore] After executing the deleteboard(8) command to change the system board state to system board pool (SP) or after powering off the PPAR, redo the system board diagnosis.
RTI No.	**RTIF2-140303-002**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	In some very rare cases, XSCF does not start after performing AC OFF/ON.
Workaround	There is no effective workaround. Contact the maintenance staff if this symptom occurs.

Table 3-30   Problems Resolved in XCP 2210 *(continued)*

RTI No.	**RTIF2-140221-002**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	The "LDC Protocol info from PPAR (PPAR ID X : Domain Service Data Send Failed)" message is registered while logical domains are running and the "WARNING: ds@x: ds_handle_recv: invalid message length, received xxx bytes, expected xxx" message is displayed on the control domain console.
Workaround	There is no effective workaround. Reset XSCF with the rebootxscf -a command. After that, execute the svcs command on the control domain to restart the picl, fmd, and ldmd services.
RTI No.	**RTIF2-140212-001**
Model	**SPARC M10-4S**
Description	In a system configuration with several SPARC M10-4S (system boards), after a system board in a physical partition has been degraded due to failure, when the system board is attempted to be replaced with the replacefru(8) command, the system board is recognized as being running and the attempt of replacement fails with the following error message: [Warning:028] BB#XX cannot be replaced because the PSB in the BB that you indicated is running. Similarly, an attempt to initialize the degraded system board with the initbb(8) command fails with the following error message: Hardware error occurred by initial diagnosis. This symptom occurs if the system board is in the following state, when the showhardconf(8) or the showboards(8) command is executed: [Example] In case PSB#01-0 (BB#01) has been degraded. XSCF> **showhardconf** ... * BB#01 Status:Deconfigured; ... XSCF> **showboards -a** PSB PPAR-ID(LSB) Assignment Pwr Conn Conf Test Fault --- ------------ ----------- ---- ---- ---- ------- -------- 01-0 00(01) Assigned n n n Passed Faulted
Workaround	After removing the degraded system board from the physical partition with the deleteboard(8) command, execute either the replacefru(8) or the initbb(8) command to replace or remove the system board. [Example] XSCF> **deleteboard -c unassign 01-0** After replacing the system board, assign the system board to the physical partition using the addboard(8) command and follow the maintenance procedures to add it in the physical partition. [Example] XSCF> **addboard -c assign -p 0 01-0**
RTI No.	**RTIF2-140212-010**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If [Ctrl]+[C] is executed in the middle of executing the setsnmp(8), setsnmpusm(8) or the setsnmpvacm(8) commands, SNMP cannot be set up using the above commands after that. In such a case, the error message "configuration being changed by another user" may be displayed.
Workaround	There is no effective workaround.

Table 3-30   Problems Resolved in XCP 2210 *(continued)*

RTI No.	**RTIF2-140212-015**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If the version(8) command is executed after replacing the CPU memory unit lower (CMUL), XSCF unit (XSCFU) or the motherboard unit (MBU), the state of "Current Bank" and "Reserve Bank" is wrongly displayed. [Example] - Before replacing CMUL 　XSCF> **version -c xcp** 　BB#00-XSCF#0 (Master) 　XCP0 (Reserve): 2210 　XCP1 (Current): 2210 - (Wrong) After replacing CMUL 　XSCF> **version -c xcp** 　BB#00-XSCF#0 (Master) 　XCP0 (Reserve): 2210 　XCP1 (Current): 2210 - (Right) After replacing CMUL 　XSCF> **version -c xcp** 　BB#00-XSCF#0 (Master) 　XCP0 (Current): 2210 　XCP1 (Reserve): 2210
Workaround	There is no effective workaround. It will not affect the system as it is only a problem of the command output. [How to restore] Re-execute the flashupdate(8) command.
RTI No.	**RTIF2-140212-017**
Model	**SPARC M10-4S**
Description	After removing SPARC M10-4S or crossbar boxes (XBBOX) with the initbb(8) or the replacefru (8) commands, if the XSCF network (host and domain names, SSCP, IP address, routing, name server) is setup and the applynetwork(8) command is executed, the "An internal error has occurred. Please contact your system administrator" error message is output and the XSCF network parameters are not enabled.
Workaround	There is no effective workaround. [How to restore] After re-connecting or replacing the removed SPARC M10-4S or XBBOX, set up the XSCF network again.
RTI No.	**RTIF2-140212-018**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	In the REMCS customer information input screen, if any of the following two-byte characters are input in the two-byte input field, input error message may be output. - The leading character corresponds to A1xx of the EUC code. - The trailing character corresponds to xxA1 of the EUC code.
Workaround	Do not input the two-byte characters at the beginning and end of the character strings, which produce errors.

Table 3-30   Problems Resolved in XCP 2210 *(continued)*

RTI No.	**RTIF2-140212-019**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	When turning on the input power, the voltage reading of the power supply unit (PSU) fails and the PSU error "Hardware access error" may be mistakenly detected and the PSU is degraded.
Workaround	There is no effective workaround. [How to restore] Ignore this error log. To dissolve the degraded state of the PSU, turn off the input power and turn it on again.
RTI No.	**RTIF2-140212-020**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	When hot-swapping a fan, if the fan is installed right after removing it, hot-swapping may fail.
Workaround	When replacing a fan, after removing it, wait for at least 10 seconds before reinstalling it.
RTI No.	**RTIF2-140212-023**
Model	**SPARC M10-4, SPARC M10-4S**

Description	If CPU failures like the following, occur on a SPARC M10-4/M10-4S to which a CPU memory unit lower (CMUL) and a CPU memory unit upper (CMUU) is mounted, when starting a physical partition (PPAR) the "Hypervisor Abort" error is produced and the PPAR may not be used anymore.
	- In case of SPARC M10-4,
	  if all the CPUs mounted on the CMUL are degraded.
	- In case of SPARC M10-4S,
	  if all the CPUs mounted on the CMUL on all the chassis that configures the PPAR, are degraded.

Workaround	There is no effective workaround. Replace the CMUL on which the failed CPUs are mounted.
RTI No.	**RTIF2-140212-024**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	After executing the ldm add-spconfig or ldm set-spconfig command on Oracle Solaris, if the auto-boot? environment variable of OpenBoot PROM is changed, the set value does not show up when the XSCF showpparparam(8) command is executed. The value that existed before the ldm add-spconfig or ldm set-spconfig command was executed is displayed. This symptom occurs when the following procedures are conducted in the following sequence. 1. Start the physical partition (PPAR). 2. Execute the ldm add-spconfig command from the control domain of the started PPAR to save the configuration information of the logical domain. Or, execute the ldm set-spconfig command from the control domain of the started PPAR to specify the name (config-name) of the configuration information of the logical domain that is to be used at the time of the next starting of the PPAR. 3. From Oracle Solaris on the control domain, execute "eeprom auto-boot?=xxxx" to change theenvironment variable of the OpenBoot PROM or, change the OpenBoot PROM environment variable from the OpenBoot PROM itself.
Workaround	There is no effective workaround. However, the value itself has been enabled. Check the value of the OpenBoot PROM environment variable "auto-boot?", which will be used at the next starting of the PPAR, not from the XSCF, but from Oracle Solaris on the control domain or from the OpenBoot PROM.

Table 3-30	Problems Resolved in XCP 2210 *(continued)*
RTI No.	**RTIF2-140212-025**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	In case of SPARC M10-4/M10-4S, if all I/O cease to be used on the CPU memory unit lower (CMUL) of the chassis which construct the physical partition (PPAR), or in case of SPARC M10-1, if all I/O cease to be used on the motherboard unit (MBU), if the PPAR is powered on without replacing the failed components, the starting of hypervisor is aborted. Or, after Oracle Solaris is started, the state of Oracle VM Server for SPARC becomes "suspended". If all I/O cease to be used, any of the following must have occurred. - I/O power supply has failed. - All PCI Express root complex have failed. - All PCI switches have failed.
Workaround	There is no effective workaround. [How to restore] In case of SPARC M10-4S/M10-4, replace the CMUL on which the I/O has failed. In case of SPARC M10-1, replace the MBU on which the I/O has failed.
RTI No.	**RTIF2-140122-001**
Model	**SPARC M10-4S**
Description	When a PCI Expansion Unit is connected to a logical system board whose LSB number is equal to or more than 01 (LSB#01), if direct I/O feature is enabled in respect to the PCI Expansion Unit, the PCI Expansion Unit may not be recognized by the logical domain.
Workaround	If the PCI Expansion Unit is not recognized, reboot the logical domain.
RTI No.	**RTIF2-131218-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	While Solaris OS is running, if physical partition is reset due to the output of the "Hypervisor Abort" message on the OS console, the state of Oracle VM Server for SPARC may change to maintenance mode at the next reboot of the physical partition.
Workaround	There is no effective workaround. [How to restore] Reboot the control domain only. If the state of Oracle VM Server for SPARC does not become "online", execute the rebootxscf -a command to reset all the XSCFs and then check the state of Oracle VM Server for SPARC once again. If the state has not yet become "online", once more reboot the control domain only.

Table 3-30   Problems Resolved in XCP 2210 *(continued)*

RTI No.	**RTIF2-131213-001**
Model	**SPARC M10-4S**
Description	In a configuration with 3 or more BBs, or with crossbar boxes, when the XSCF master/standby switchover is executed due to some abnormality on the master XSCF, the master XSCF may fail to switch over to the standby XSCF and start up as another master XSCF. Due to this, the system seems to contain two master XSCFs. Normal behavior of a system is not guaranteed when there are two master XSCFs in the system. This state can be confirmed by a lighted MASTER LED at the rear panel of two chassis.
Workaround	There is no effective workaround. [How to restore] The system can be operated normally when the number of master XSCFs automatically returns to one after a few minutes. If the number of master XSCFs does not return to one even after 15 minutes, press the RESET switch at the rear panel of all existing SPARC M10 systems and crossbar boxes. The system can be operated normally after that.
RTI No.	**RTIF2-131213-004**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If the PPAR DR feature is enabled/disabled on XSCF Web, selecting the [PPAR Operation] - [PPAR Mode Configuration] menu, selecting PPAR-DR(Current) or PPR-DR(Next) and clicking [Configure], a wrong dialog box appears and the PPAR DR feature is not enabled / disabled.
Workaround	Execute the XSCF setpparmode(8) command to enable/disable the PPAR DR feature.
RTI No.	**RTIF2-131213-008**
Model	**SPARC M10-4S**
Description	In a configuration with 3 or more BBs, or with crossbar boxes, after XSCF switchover occurs due to some problems on the master XSCF while the addboard -c configure command is running, the deleteboard(8) command, executed on the new master XSCF may not get any response. This symptom occurs if two master XSCFs exist on a system after a master/standby switchover of XSCFs. (Reference: RTIF2-131213-001) This state can be confirmed by a lighted MASTER LED at the rear panel of two chassis.
Workaround	There is no effective workaround. [How to restore] Execute the deleteboard(8) command when the number of master XSCFs automatically returns to one after a few minutes. If the number of master XSCFs does not return to one even after 15 minutes, press the RESET switch at the rear panel of all existing SPARC M10 systems and crossbar boxes. Execute the deleteboard(8) command after that.
RTI No.	**RTIF2-131213-009**
Model	**SPARC M10-4S**
Description	If the addboard(8) or deleteboard(8) command is executed using the DR feature, addition or removal of system boards using the DR feature may fail with displaying the following message: "Failed to evacuate board resources"
Workaround	Re-execute the addboard(8) or deleteboard(8) command. If it fails again, either reboot the control domain or reboot the XSCF with the rebootxscf –a command. After that, re-execute the addboard(8) or deleteboard(8) command of the DR feature.

Table 3-30   Problems Resolved in XCP 2210 *(continued)*

RTI No.	**RTIF2-131213-021**
Model	**SPARC M10-4S**
Description	The timeout error log "Timeout detected during unconfiguration of PSB#xx-x." may be registered and an abnormal termination may occur when a system board (PSB) is removed by the deleteboard(8) command of the DR feature. In such a case, the showboards(8) command shows that the status of all the Pwr/Conn/Conf of the system board (PSB) is "y".
Workaround	There is no effective workaround. [How to restore] Reboot all the XSCFs by executing the rebootxscf -a command.
RTI No.	**RTIF2-131212-001**
Model	**SPARC M10-4S**
Description	If there is a physical partition (PPAR) whose LSB number is 01 or larger, the showlogs error command either does not show the "I/O device error detected" log even if I/O errors occur, or the FRU in the "I/O device error detected" message is displayed mistakenly.
Workaround	There is no effective workaround.
RTI No.	**RTIF2-131126-005**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	The [Physical] or [Logical] tree displayed in the menu frame is not updated even if you click the [Refresh] button of the masthead frame on XSCF Web.
Workaround	Click the [Physical] or [Logical] tab of the menu frame to redisplay the tree.
RTI No.	**RTIF2-130801-002**
Model	**SPARC M10-1, SPARC M10-4**
Description	If a DIMM failure occurs, a configuration error is erroneously detected and the following event log is registered. SCF:DIMM configuration error on PSB#xx-0
Workaround	There is no effective workaround. Ignore this event log. Using the maintenance procedure for DIMM failures, turn off the input power to the SPARC M10 system chassis in which the failed DIMM is mounted, replace the DIMM, and then turn on the power. These steps will remove the configuration error and failure.

Problems Resolved in XCP 2092

The following table lists the problems resolved in XCP 2092.

Table 3-31　Problems Resolved in XCP 2092

RTI No.	**RTIF2-140115-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If a failure occurs in the PCI Expansion Unit, all the domains that are situated in the physical partition (PPAR) that is connected to the PCI Expansion Unit, are shut down.
Workaround	There is no effective workaround.
RTI No.	**RTIF2-140110-001**
Model	**SPARC M10-4S**
Description	In a SPARC M10-4S (with crossbar box) configuration, the following event log, which notifies power off, is not registered. BB#xx was stopped by power failure. Power failure date is yyyy/mm/dd hh:mm:ss
Workaround	There is no effective workaround.
RTI No.	**RTIF2-140110-002**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	When the flashupdate(8) command is executed, only occasionally, XSCF may not start-up.
Workaround	There is no effective workaround. Contact a field engineer if this problem occurs.
RTI No.	**RTIF2-131213-015**
Model	**SPARC M10-4S**
Description	In case, all of the three conditions below are met on a physical partition, the crossbar unit (XBU) error "Msg: XB-XB interface fatal error" is detected. [Condition 1] The physical partition is configured by several SPARC M10-4S. [Condition 2] The XSCF BB control cables that are connected to the SPARC M10-4S chassis are either defective or have been disconnected. In such a case, the "Msg: BB control cable detected unexpected" error log is registered. [Condition 3] The physical partition was rebooted due to a hardware failure, the poweron(8) or reset(8) command was executed. Moreover, XSCF had either rebooted the physical partition due to a hardware failure or had performed retrial of the poweron(8) or the reset(8) command when this symptom occurred previously.
Workaround	There is no effective workaround. Do not execute the poweron(8) or the reset(8) command while the XSCF BB control cable is disconnected. [How to restore] If hardware failure had occurred, execute power off and on, on the physical partition. If XSCF is performing retrial operations, execute the poweroff -f -p ppar-id command to forcibly power off the physical partition. After that power it on.

Problems Resolved in XCP 2091

The following table lists the problems resolved in XCP 2091.

Table 3-32   Problems Resolved in XCP 2091

RTI No.	**RTIF2-140117-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	When the setsnmp(8), setsnmpusm(8), setsnmpvacm(8) commands or [XSCF] - [Settings] - [Service] - [SNMP], [XSCF] - [Settings] - [Service] - [SNMP Security] on XSCF Web is executed, the "exclusive control file open error" error message is output and all setups regarding SNMP fail. This problem occurs only on XCP 2090.
Workaround	Update firmware either to XCP 2080 or older, or to 2091 or later.

Problems Resolved in XCP 2090

The following table lists the problems resolved in XCP 2090.

Table 3-33   Problems Resolved in XCP 2090

RTI No.	**RTIF2-140617-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	When the showhardconf -u command is executed on a system connected to a PCI expansion unit, the number of PCI cards installed on the PCI expansion unit is erroneously displayed as "11" (the maximum number of cards that can be installed).
Workaround	There is no effective workaround. To confirm information on PCI cards installed on the PCI expansion unit, execute the showhardconf(8) command with no options.
RTI No.	**RTIF2-140605-003**
Model	**SPARC M10-4S**
Description	Suppose that an XSCF failure occurs on one SPARC M10-4S chassis in a physical partition (PPAR) and the CHECK LED is on and the READY LED is off on the XSCF. If you attempt to power on this PPAR, the system erroneously judges that an error has occurred on every SPARC M10-4S chassis in this PPAR and you cannot power on the PPAR.
Workaround	There is no effective workaround. Follow the maintenance procedure for XSCF failures to replace the CPU memory unit lower (CMUL) on the faulty SPARC M10-4S chassis.

Table 3-33	Problems Resolved in XCP 2090 *(continued)*

RTI No.	**RTIF2-140605-004**
Model	**SPARC M10-4S**
Description	When you add or replace one SPARC M10-4S chassis (BB#00 or BB#01) or crossbar box chassis (XBBOX#80 or XBBOX#81), power control schedule settings for automatic power-on/off are not synchronized between the existing and additional/replacement chassis. If master/standby XSCF switching is performed in this state, automatic power-on/off is not performed because the power control schedule settings remain unavailable.
Workaround	There is no effective workaround. Execute the following procedure to synchronize power control schedule settings for automatic power-on/off between the master and standby XSCFs: 1. Execute the showpowerschedule -m list command to confirm that the power control schedule has been registered. If the power control schedule has not been registered, re-register it by using the addpowerschedule(8) and setpowerschedule(8) commands. 2. Execute the setpowerschedule -c control command to enable or disable the power control schedule.
RTI No.	**RTIF2-140410-004**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**

Description	If a CPU error occurs while powering on a physical partition (PPAR), an erroneous error log may be registered. This symptom can be confirmed by using the showlogs error -v command.
	If the result of the showlogs error -v command is "Msg: SP InternalError Occurred", and the first 4 bytes of the 5th line of the [Diagnostic Code] is "01920212", it corresponds to this symptom.
	[Example]
	XSCF> **showlogs error -v**
	  Date: Nov 11 18:29:04 JST 2013
	  Code: 40000000-00fcff0000ff0000ff-0186ffff0000000000000000
	  Status: Warning Occurred: Nov 11 18:29:04.871 JST 2013
	  FRU: /FIRMWARE
	  Msg: SP Internal Error Occurred
	  Diagnostic Code:
	00000000 00000000 0000
	  00000000 00000000 0000
	  00000000 00000000 0000
	  0007000b 02040002 00000000 00000000
	  01920212 00620000 0000

Workaround	There is no effective workaround.
	[How to restore]
	Execute the showstatus(8) command to check whether a part has failed. A CPU whose [Status] is "Deconfigured" has failed. Follow the maintenance procedure to replace the FRU mounted on the CPU.
	[Example] When a "Deconfigured" CPU exists
	XSCF> **showstatus**
	  BB#11 Status:Normal;
	   CMUU Status:Normal;
	  * CPU#0 Status:Deconfigured;

Table 3-33   Problems Resolved in XCP 2090 *(continued)*

RTI No.	**RTIF2-140410-006**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If you execute the reset xir command immediately after starting Oracle Solaris or the ldmd service, "LDC Protocol info from PPAR (PPAR ID 0 : Domain Service Data Send Failed)" may be registered in the event log and the XSCF process down and reset may occur.
Workaround	There is no effective workaround. After XSCF is reset, execute the showlogs event command to confirm the event logs. Or, execute the showpparstaus(8) command to confirm that the physical partition (PPAR) was reset. If the physical partition has not been reset, execute the reset xir command again.
RTI No.	**RTIF2-140303-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	Response may become slow when using XSCF Web.
Workaround	There is no effective workaround.
RTI No.	**RTIF2-131216-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	The "XCP update is started." message is mistakenly displayed when the flashupdate -c check command is executed.
Workaround	There is no effective workaround. Ignore this message.
RTI No.	**RTIF2-131213-006**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	The "LDC Protocol info from PPAR (PPAR ID X : Domain Service Data Send Failed)" event log is registered on a running logical domain and shutdown of that logical domain may not be properly executed.
Workaround	There is no effective workaround. Either reboot the control domain or execute the rebootxscf -a command to reboot XSCF.

Table 3-33	Problems Resolved in XCP 2090 *(continued)*

RTI No.	**RTIF2-131213-017**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	Any of the following may occur while XSCF is running. - Symptom 1 Process down occurs and XSCF resets. - Symptom 2 Response of commands which deals with acquiring MIB information (get command, etc.) becomes slow. - Symptom 3 Execution of commands like showhardconf(8) takes time. Moreover, when the showhardconf(8) command is executed, the following message may be output and the command is terminated abnormally."Cannot communicate with the other XSCF. Check the other XSCF' stat" - Symptom 4 The "SCF panic detected" error is produced and the XSCF is reset. - Symptom 5 Login to XSCF Web fails. However, login to the XSCF shell is possible.

Workaround	There is no effective workaround.
	[How to restore]
	- For symptoms 1, 2, and 4:
	  The system can be recovered by resetting XSCF. The system can be used after that.
	- For symptoms 3 and 5:
	  Reset XSCF with the rebootxscf(8) command.

RTI No.	**RTIF2-131213-018**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If XSCF has disabled the setup of NTP client, the time difference between XSCF and the hypervisor of each physical partition (PPAR) is mistakenly updated and the time of the logical domain may be misaligned after PPAR is rebooted.
Workaround	Enable the NTP client setup of XSCF by executing the setntp -s client -c enable command and synchronize XSCF with the upper level NTP server. Otherwise, execute the following.Perform the following procedure. 1. Execute the showdateoffset(8) command before powering on or rebooting the PPAR and confirm the time difference between XSCF and the hypervisor. 2. If the time difference is too large, execute the resetdateoffset(8) command with the PPAR at stopped state, in order to reset the time difference. 3. After powering on the PPAR, reset the time of Solaris OS.
RTI No.	**RTIF2-131213-020**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	Due to the retry functionality of XSCF, if any abnormality occurs in the recoverable backup memory inside the PSU backplane (PSUBP) for more than three times, XSCF regards it wrongly as a fixed error and the starting of XSCF may be deterred. In such a case, the "REBOOT: COUNTER ERROR" message is displayed.
Workaround	There is no effective workaround. [How to restore] Re-execute power off and on.

Table 3-33	Problems Resolved in XCP 2090 *(continued)*

RTI No.	**RTIF2-131129-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**

Description	If there is a mounted memory, the last eight digits of whose "Code" start with "00", as displayed by the showhardconf(8) command in, execution of any of the following actions may result in incorrect display, showing a value of 0 for both the "Code" and the "Size" of that memory, as shown.
	- Execute the restoredefaults factory command
	- Execute the initbb(8) command
	- Change the mounting point of memory
	[Example 1]
	XSCF>**showhardconf**
	 :
	  MEM#10B Status:Normal;
	    + Code:ce8001M393B2
	      G70QH0-YK0 0000
	      -00511571;
	    + Type:07; Size:16 GB;
	[Example 2]
	XSCF>**showhardconf**
	 :
	* MEM#10B Status:Deconfigured;
	    + Code:000000 0000-00000000;
	    + Type: ; Size:0 GB;

Workaround	Apply the latest version of the XCP, and then execute power off and on.

RTI No.	**RTIF2-131126-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	Suppose that a system satisfying one of the conditions described in [Conditions] sets the remote power management function. If Oracle Solaris is running and one of the events mentioned in [Event] occurs, an external I/O device may be erroneously powered off. [Condition] - Multiple SPARC M10 systems are registered in the remote power management group, and the physical partitions other than those of the SPARC M10 system that resets the XSCF are powered off. [Event] - Firmware update was executed from the flashupdate(8) command and XSCF Web, and the XSCF was rebooted. - The XSCF was reactivated from the rebootxscf(8) command and XSCF Web, and the XSCF was rebooted - The XSCF was rebooted because of a failure.
Workaround	Apply either of the following countermeasures: - Before firmware update or XSCF reboot, execute the setremotepwrmgmt -c disable command to disable the remote power management function. Subsequently, update the firmware or reboot the XSCF. After the XSCF has been activated, execute the setremotepwrmgmt -c enable command to enable the remote power management function. - Disable the remote power management function with the setremotepwrmgmt -c disable command and then manually power on the external I/O device.

Table 3-33	Problems Resolved in XCP 2090 *(continued)*

RTI No.	**RTIF2-131126-002**
Model	**SPARC M10-4S**

Description	If one of BB#0/BB#01/XBBOX#80/XBBOX#81 is installed or replaced, the synchronous processing of the CPU Activation key in the master/standby XSCF will fail. Subsequently, if the master and standby are switched, the CPU Activation key may be lost. This generates the following phenomena.
	[If the PPAR power is on]
	  The PPAR power is powered off because of a CPU Activation violation.
	[If the PPAR power is off]
	  PPAR power-on fails because there is an insufficient number of CPU Activations.

Workaround	After installation/replacement, the synchronous processing of the CPU Activation key is performed when the following is executed.
	- If the master/standby XSCF is not switched
	  Execute the rebootxscf -a or addcodactivation(8) command from the master XSCF that requested installation/replacement.
	- If the master/standby XSCF has been switched
	  Execute the switchscf(8) command to return the master XSCF to the pre-installation/replacement state. After that, execute the rebootxscf -a or addcodactivation(8) command.
	  Note - Do not perform the following operations before restoring the master XSCF to its original state by executing the switchscf(8) command. If these operations are performed, it may be necessary to register the CPU Activation key again.
	  - rebootxscf -a
	  - addcodactivation(8)
	  - deletecodactivation(8)
	  - Input power off/on

RTI No.	**RTIF2-131126-004**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**

Description	When the firmware update of the PCI expansion unit and link card is complete, the firmware version of the PCI expansion unit is erroneously displayed. Specifically, "PCIBOX version" of the event log displays the pre-update version, while "last version" displays the post-update version.
	[Example] Version displayed after an update from 1120 to 1130
	- Incorrect
	  LINKCARD=1, bank=1, PCIBOX version=1120: last version=1130
	- Correct
	  LINKCARD=1, bank=1, PCIBOX version=1130: last version=1120

Workaround	There is no effective workaround. Replace the version number. Moreover, update the XCP firmware to XCP 2090 or later.
RTI No.	**RTIF2-131112-002**
Model	**SPARC M10-4S**
Description	Suppose that the system uses a crossbar box and contains two or more physical partitions (PPARs) each consisting of 2BB or more. In this system, if a hardware failure that affects all the PPARs occurs, the failed part is degraded such that the PPAR reactivation processing may fail, causing all the PPAR power supplies to remain turned off.
Workaround	There is no effective workaround. The failed parts are degraded. Power on the PPAR again.

Table 3-33   Problems Resolved in XCP 2090 *(continued)*

RTI No.	**RTIF2-131112-003**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If the testsb(8), diagxbu(8), or flashupdate -c sync command is executed during the execution of the flashupdate(8) command, the error log "FMEM serious error" is registered, and the testsb(8), diagxbu(8), or flashupdate -c sync command may fail.
Workaround	Do not execute the testsb(8), diagxbu(8), or flashupdate -c sync command while the flashupdate (8) command is being executed. To confirm the completion of the flashupdate(8) command, execute the showlogs event command and then check for the following message. XCP update has been completed (XCP version=xxxx:last version=yyyy)
RTI No.	**RTIF2-131112-008**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	Suppose that the error log "SCF Diagnosis error on System backup memory" is registered, which is related to the PSU backplane (PSUBP) or XSCF interface unit (XSCFIFU). The FRU of the error log registered immediately after that error log may not be correct. In this case, any one of the following messages is displayed to indicate that the FRU PSUBP or XSCFIFU is not correct. Msg: SCF Diagnosis initialize RTC FRU: PSUBP or XSCFIFU Or Msg: SCF Diagnosis error on XXXX FRU: PSUBP or XSCFIFU XXXX indicates any of the following FRUs: CPU, L2 cache, SDRAM, RTC, SPI FMEM, NAND
Workaround	There is no effective workaround. Replace the FRU as follows. For SPARC M10-1: FRU: /MBU For SPARC M10-4: FRU: /BB#00/CMUL For SPARC M10-4S: FRU: /BB#xx/CMUL or FRU: /XBBOX#xx/XSCFU
RTI No.	**RTIF2-131112-011**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If the physical partition (PPAR) is powered on and then the ioxadm(8) command is executed before the power-on processing is complete, the error log "SCF process down detected" is registered, and the ioxadm(8) command may fail.
Workaround	Do not execute the ioxadm(8) command until the PPAR power-on processing is complete. You can check the progress of the PPAR power-on processing by executing the showpparstatus (8) command. If the "Running" message appears as a result of executing the showpparstatus(8) command, it indicates that the PPAR power-on processing has been completed. Once the PPAR power-on processing has been completed, execute the ioxadm(8) command again.

Table 3-33   Problems Resolved in XCP 2090 *(continued)*

RTI No.	**RTIF2-131112-012**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	Suppose that the error log "FAN speed too high" is registered because of an excessive fan rotation count. Subsequently, if an event that changes the fan rotation speed occurs, the fan rotation speed may not be switched to the correct value and instead may be switched to level 5 (full speed). If an event that changes the fan rotation speed occurs, the following event logs are registered. However, the displayed fan rotation speed will not be correct. The actual fan rotation speed level is 5, which is full speed. - Low temperature was detected at air inlet. FANs are changed to speed (level-1) mode - Low temperature was detected at air inlet. FANs are changed to speed (level-2) mode - Middle temperature was detected at air inlet. FANs are changed to speed (level-3) mode - High temperature was detected at air inlet. FANs are changed to speed (level-4) mode - Air outlet temperature recovered from warning state
Workaround	There is no effective workaround. [How to restore] Replace the fan of the detected excessive rotation speed error.
RTI No.	**RTIF2-131112-014**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If the following mail server is being used and REMCS registration or REMCS environment setting is performed, a communication timeout with the mail server is detected, causing processing to fail. - Windows ExchangeServer - E-PORT - qmail
Workaround	After changing the mail server to be used to sendmail or postfix, perform REMCS registration or REMCS environment setting. If it is difficult to change the mail server, update its firmware to XCP 2090 or later.
RTI No.	**RTIF2-131112-015**
Model	**SPARC M10-4S**
Description	If the initbb(8) or replacefru(8) command is executed, an event log stating "Change Master Failed" may be registered.
Workaround	There is no effective workaround. Ignore the event log.
RTI No.	**RTIF2-131107-001**
Model	**SPARC M10-4S**
Description	If the XSCF BB control cable is faulty or loose or if an XSCF failure occurs, it may take several hours to disconnect or reset the power supply of the physical partition (PPAR) consisting of multiple SPARC M10-4S units.
Workaround	There is no effective workaround.

Table 3-33   Problems Resolved in XCP 2090 *(continued)*

RTI No.	**RTIF2-131023-003**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	OID of scfDomainInfoGroup is duplicated and defined in the MIB definition file for XSCFexpansion. Therefore, any attempt to install the MIB definition file for XSCF expansion in the server management software (e.g., JP1/Integrated Management manufactured by Hitachi) may fail.
Workaround	Delete the line of text of the duplicated OID from the MIB definition file for XSCF expansion. Then, install the MIB definition file for XSCF expansion again. The line of text to be deleted is that in which scfDomainInfoGroup containing "::= {scfMIBObjectGroups 14 }" is defined. [Example] For the MIB definition file for XSCF expansion (XSCF-SP-MIB_2050.mib), delete the following lines 3558 to 3566. -------------- 3558: scfDomainInfoGroup OBJECT-GROUP 3559: OBJECTS { 3560: scfDomainNumber, scfPPARId, scfDomainName, 3561: scfDomainStatus 3562: } 3563: STATUS current 3564: DESCRIPTION 3565: "A collection of objects providing PPAR information." 3566: ::= { scfMIBObjectGroups 14 } --------------
RTI No.	**RTIF2-130305-009**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	Suppose that 129 or more IP addresses of the trap hosts are registered by the setsnmpaddtraphost or setsnmp addv3traphost command. Then, executing the showsnmp(8) command displays each of the SNMPv1, SNMPv2, SNMPv2-inform, and SNMPv3 trap hosts, up to a maximum of 128 entries. Similarly, suppose that 129 or more entries are registered by the setsnmpusm create, setsnmpvacm creategroup, setsnmpvacm createview, or setsnmpvacm createaccess command. Then, executing the showsnmpusm or showsnmpvacm command displays no more than 128 entriesfor a user, view, group, and access.
Workaround	There is no effective workaround. When 129 or more data entries are registered by the setsnmp(8), setsnmpusm(8), or setsnmpvacm(8) command without an abnormal end, the data entries have been registered successfully.

Table 3-33	Problems Resolved in XCP 2090 *(continued)*
RTI No.	**RTIF2-130219-003**
Model	**SPARC M10-4S**
Description	The following error log is registered if you remove a XSCF BB control cable when removing a SPARC M10-4S with the initbb(8) command or replace a SPARC M10-4S or an XSCF unit with the replacefru(8) command. Msg: Board control error (MBC link error) Msg: BB control cable detected unexpected Msg: XSCF hang-up is detected
Workaround	There is no effective workaround. Ignore the error log.
RTI No.	**RTIF2-130219-007**
Model	**SPARC M10-4S**
Description	When you turn on the input power to a crossbar box or SPARC M10-4S after disconnecting it in a system having a building block configuration, "Board control error (MBC link error)" may be registered in the error log. In addition, an non-existing crossbar box or SPARC M10-4S may be displayed as a faulty unit.
Workaround	This error log is registered when you disconnect the input power supply. Ignore this error log.

Problems Resolved in XCP 2080

The following table lists the problems resolved in XCP 2080.

Table 3-34	Problems Resolved in XCP 2080
RTI No.	**RTIF2-140507-008**
Model	**SPARC M10-4S**
Description	The testsb(8) command detects the "STICK Stop Register error (does not stop)" or the "STICK does not stop (CPU)" error message and may fail.
Workaround	There is no effective workaround. [How to restore] Collect diagnosis information by executing the snapshot(8) command. After the collection is complete, turn off/on the input power (AC OFF/ON) of all the chassis of SPARC M10 system, and then contact the maintenance staff.

Table 3-34   Problems Resolved in XCP 2080 *(continued)*

RTI No.	**RTIF2-131126-006**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	Suppose that the input power is turned off and on, or that the XSCF is reset. If an operation related to CPU Activation is performed for the first time using XSCF Web rather than the XSCF shell, it may fail. The procedure that fails is any of the following. 1. Perform any of the following on XSCF Web. ■ From the [Settings] - [CoD Activation] menu, add the CPU Activation key. ■ From the [Maintenance] - [Configuration Management] menu, save the XSCF setting information. ■ From the [Maintenance] - [Configuration Management] menu, save/restore the CPU Activation key. 2. Execute the deletecodactivation(8) or setcod(8) command on the XSCF shell. Alternatively, delete the CPU Activation key on XSCF Web. Alternatively, change the assignment of the CPU Activation on XSCF Web. Or 1. Perform any of the following on XSCF Web. ■ From the [Settings] - [CoD Activation] menu, delete the CPU Activation key. ■ From the [Settings] - [CoD Reservation] menu, release the assignment of the CPU Activation. 2. Log in to the XSCF shell or XSCF Web with another user account. 3. Execute the deletecodactivation(8) or setcod(8) command on the XSCF shell. Alternatively, delete the CPU Activation key on XSCF Web. Alternatively, change the assignment of the CPU Activation on XSCF Web.
Workaround	To perform an operation related to the CPU Activation for the first time after the input power is turned off and on or after the XSCF is reset, execute it on the XSCF shell. [How to restore] Execute the rebootxscf(8) command to reset the XSCF. Then, execute the deletecodactivation(8) or setcod(8) command on the XSCF shell.
RTI No.	**RTIF2-131112-009**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If the physical partition (PPAR) is powered on, the event log of "LDC Protocol info from PPAR (PPAR ID 0:Domain Service Data Send Failed)" is output. Moreover, after Oracle Solaris activation, "ldoms/ldmd:default failed: transitioned to maintenance" is output to the OS console. This may cause Oracle VM Server for SPARC to enter maintenance mode.
Workaround	There is no effective workaround. [How to restore] Execute the rebootxscf -a command to reset all the XSCFs, and then reactivate the control domain. If restoration fails, execute the poweroff(8) and poweron(8) commands on the XSCF to power off and then power on the physical partitions (PPARs).
RTI No.	**RTIF2-131108-002**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	The warning message "WARNING: invalid vector intr: number 0x10001, pil 0x11000" may be output to /var/adm/messages.
Workaround	Ignore this message.

Table 3-34   Problems Resolved in XCP 2080 *(continued)*

RTI No.	RTIF2-131023-001
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If the XSCF is reset by the rebootxscf(8) or switchscf(8) command executed while the logical domain is either starting or stopped, the following problems may occur. - If the showdomainstatus(8) command is executed, the logical domain state is not displayed properly. - If the showlogs event command is executed, the log used for notification of the logical domain state is not displayed. - An SNMP Trap for notification of the state of the logical domain is not sent.
Workaround	There is no effective workaround. [How to restore] To display the state of the logical domain properly, update it such as by reactivating the logical domain.
RTI No.	**RTIF2-131023-004**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	Even when an I/O failure is detected in the logical domain, the XSCF may not be notified of an error. For this reason, the I/O failure information in Fault Report to be displayed from the execution of Oracle Solaris fmdump command in logical domains is not displayed, even if the showlogs error command is executed. Moreover, even if a CPU or memory error is detected in the XSCF, no notification may be sent to the logical domain. For this reason, Fault Report does not display the CPU or memory failure information to be displayed from the execution of the showlogs error command, even if the fmdump command is executed.
Workaround	There is no effective workaround. If an I/O failure is detected in the logical domain, locate the failed portion from the display in Fault Report by executing the fmdump command, and perform maintenance on the failed part. If a CPU or memory failure is detected in the XSCF, perform maintenance according to the FRU displayed by executing the showlogs error command.
RTI No.	**RTIF2-131001-001**
Model	**SPARC M10-4S**
Description	If the SPARC M10-4S or the crossbar box is disconnected with the initbb(8) command, and then all chassis are turned off and then on again with the XSCF BB control cable left connected, the chassis disconnected with the initbb(8) command will become the master chassis, and the XSCF settings will be initialized to the factory defaults.
Workaround	Be sure to follow the procedure below when disconnecting the SPARC M10-4S and the crossbar box. 1. Execute the initbb(8) command to stop the target chassis. 2. Turn off the stopped chassis first and then disconnect the XSCF BB control cable.

Table 3-34   Problems Resolved in XCP 2080 *(continued)*

RTI No.	**RTIF2-130307-001**
Model	**SPARC M10-4S**
Description	If any SPARC M10-4S that is specified with the diagxbu(8) command is not implemented, the message "PSB#xx-0 is not installed." showing the PSB No. that represents the unimplemented SPARC M10-4S should appear. However, the PSB No. of the SPARC M10-4S which actually has been implemented may be erroneously output.
Workaround	There is no effective workaround. Execute the showhardconf(8) command to check the status of the SPARC M10-4S to which the corresponding PSB No. is assigned. The SPARC M10-4S which has not been implemented is not displayed with the showhardconf (8) command. When the corresponding SPARC M10-4S is displayed, read the PSB No. in the message "PSB#xx-0 is not installed." as that of the unimplemented SPARC M10-4S that was specified when this command was executed.
RTI No.	**RTIF2-130305-018**
Model	**SPARC M10-4S**
Description	An internal error may occur when performing "Diagnostic tests" when selecting "BB" with the replacefru(8) command or executing the testsb(8) command. If you check the error log at this time, you can see that "no PSB available in PPAR" was registered in "PPAR#30" when the internal error occurred.
Workaround	An error occurred in the applicable SPARC M10-4S and the system board (PSB) is in an unavailable state. Check the error log and replace the SPARC M10-4S.
RTI No.	**RTIF2-130305-019**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	Diagnosis continues even when an error occurred on the testsb(8) command and timeout occurs after a two-hour wait.
Workaround	Execute the showboards(8) command in another session while executing the testsb(8) command to check the status of PSB to be diagnosed. An operation will fail if "Test" is set to other than "Testing" and "Pwr" is set to "n". In this case, cancel the testsb(8) command by pressing [Ctrl] + [C].
RTI No.	**RTIF2-121219-011**
Model	**SPARC M10-4S**
Description	The power of a physical partition (PPAR) may not be disconnected if deleteboard -c unassign is executed to the system board that belongs to the PPAR while the power of the PPAR is being disconnected using the poweroff(8) command.
Workaround	After executing the poweroff(8) command, confirm that the status field of the relevant PPAR shows Powered Off by using the showpcl(8) command. Then, execute the deleteboard(8) command.

Problems Resolved in XCP 2070

The following table lists the problems resolved in XCP 2070.

Table 3-35   Problems Resolved in XCP 2070

RTI No.	**RTIF2-140623-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	Even when the snapshot(8) command is executed, it does not collect log data concerning NTP-related statistics.
Workaround	There is no effective workaround. This problem does not affect system operation.
RTI No.	**RTIF2-131213-014**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If the time zone of XSCF is changed using the settimezone(8) command, the time zone of Oracle Solaris on that physical partition, which is booted after the change, gets misaligned to the tune of the time difference before and after changing the time zone of the XSCF. [Example] If the time zone before setup was UTC and after setup is JST, the time misalignment of Oracle Solaris will be 9 hours.
Workaround	There is no effective workaround. Boot the Oracle Solaris after executing the resetdateoffset(8) command and set to the right time on the Oracle Solaris.
RTI No.	**RTIF2-131112-010**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If you execute the XSCF commands in the following order, the setting information for the setntp(8) or settelnet(8) command is not applied and may return to the original state. 1. Execute any of the sethostname(8), setnameserver(8), setnetwork(8), setroute(8), or setsscp(8) command. 2. Execute either the setntp(8) or settelnet(8) command. 3. Execute the applynetwork(8) command.
Workaround	After executing any of the sethostname(8), setnameserver(8), setnetwork(8), setroute(8), or setsscp(8) command is executed, do not execute the setntp(8) or settelnet(8) command until the applynetwork(8) command is executed and the settings are applied.

Table 3-35   Problems Resolved in XCP 2070 *(continued)*

RTI No.	**RTIF2-131112-016**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If you use the deleteuser(8) command to delete a user account for which an SSH user public key is registered, it is deleted but the user public key is not deleted. User public keys will continue to increase in number such that it may not be possible to register one for a new user account. Moreover, if a user account with the same name is registered again, the SSH user public key registered previously is set.
Workaround	Before deleting a user account with the deleteuser(8) command, execute setssh -c delpubkey -a -u to delete the SSH user public key registered for the user account. [How to restore] Perform the following procedure. 1. Execute the adduser(8) command to register the deleted user account again. 2. Execute the rebootxscf -a command to reset the XSCF, or turn off and on the input power. 3. Execute setssh -c delpubkey -a -u to delete the SSH user public key. 4. Execute the deleteuser(8) command to delete the user account.
RTI No.	**RTIF2-131108-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If the "SCF Diagnosis initialize RTC" error occurs, or if the motherboard unit (MBU) is replaced with the SPARC M10-1 and the CPU memory unit lower (CMUL) is replaced with the SPARC M10-4/M10-4S, the following phenomena may occur. - Symptom 1 The XSCF time may return to January 1, 2001. - Symptom 2 The time difference between the XSCF and all physical partitions (PPARs) may become a value of 400 million seconds or more. You can check this phenomenon by executing the showdateoffset(8) command, since the time difference between the XSCF and all PPARs is displayed as a value of "400000000 sec" or more. XSCF> **showdateoffset -a** PPAR-ID Domain Date Offset 00 400000100 sec 01 400000100 sec : : 15 400000100 sec - Symptom 3 If you reset the PPAR or power off and on the PPAR, the Oracle Solaris time may return to January 1, 2001.
Workaround	There is no effective workaround. Update to firmware version XCP 2221 or later. [How to restore] See "Restoration after the "SCF Diagnosis initialize RTC" error (RTIF2-131108-001)."

Table 3-35   Problems Resolved in XCP 2070 *(continued)*

RTI No.	**RTIF2-131004-001**
Model	**SPARC M10-1**
Description	If firmware update is executed when the physical partition (PPAR) is powered on, the "CPU-MBC interface fatal error" error which is related to the motherboard unit (MBU), is mistakenly detected and may be registered in the error log. This mistaken detection may lead to stopping of the logical domains.
Workaround	Execute firmware update when the physical partition (PPAR) is powered off.
RTI No.	**RTIF2-131004-002**
Model	**SPARC M10-4S**
Description	If, in a system configured with 3 BB or greater, the chassis of the master XSCF and the standby XSCF are turned off and then on again, the system enters a state in which there is no master XSCF. If the master XSCF is stopped while the XSCF DUAL control cable is either faulty or not connected, master/standby XSCF switching is suppressed, so that the standby XSCF is not switched to the master XSCF.
Workaround	There is no effective workaround. Update to firmware version XCP 2070 or later.
RTI No.	**RTIF2-131004-003**
Model	**SPARC M10-4S**
Description	If master/standby XSCF switching occurs while the XSCF DUAL control cable is either faulty or not connected, switching may be performed even though communication between the master and standby is not guaranteed. If an XSCF is configured and master/standby XSCF switching is performed while the XSCF DUAL control cable is either faulty or not connected, the information set in the XSCF will be erased.
Workaround	There is no effective workaround. Perform master/standby XSCF switching while the XSCF DUAL control cable is connected normally. Whether the XSCF DUAL control cable is connected normally can be confirmed with the following procedure. 1. Execute the showsscp -a command. 2. Check that, in the output results obtained in Step 1., "Cannot communicate." is not displayed for the Address for which the SSCP link network ID (network_id) is 2 or 4. [Example]If there is no crossbar box, confirm the Address with an SSCP link network ID (network_id) of 2.

XSCF> **showsscp -a -N 2**
```
      :
      :
Location       Address
------------ ---------------
bb#00-if#2    169.254.1.17
bb#01-if#2    169.254.1.18
```

Similarly, if there is a crossbar box, confirm the Address with an SSCP link network ID (network_id) of 4.

Table 3-35   Problems Resolved in XCP 2070 *(continued)*

RTI No.	**RTIF2-130930-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If, in an environment for which a time zone is set for the XSCF and daylight saving time is introduced, a physical partition (PPAR) is restarted or a PPAR is turned off and then on again, the start time of the logical domain may be advanced or delayed for 3600 seconds or longer. This can be confirmed by executing the showdateoffset(8) command. In the following execution example, the time difference between PPAR and XSCF is +/-3600 seconds or greater, indicating that this defect has occurred. [Example] XSCF> **showdateoffset -a** PPAR-ID Domain Date Offset 00 -7205 sec 01 -7205 sec 02 -7205 sec 03 -7205 sec 04 -7205 sec 05 -7205 sec 06 -7205 sec 07 -7205 sec 08 -7205 sec 09 -7205 sec 10 -7205 sec 11 -7205 sec 12 -7205 sec 13 -7205 sec 14 -7205 sec 15 -7205 sec
Workaround	There is no effective workaround. For every logical domain in the system, make the settings so that they can be synchronized with the NTP server in time, and if the start time of a logical domain shifts, correct the time on the NTP.
RTI No.	**RTIF2-130903-002**
Model	**SPARC M10-4S**
Description	In a system consisting of multiple SPARC M10-4S units, it may take longer than usual from the time a physical partition (PPAR) is turned on until the Power-On Self test (POST) starts. For example, for a 2BB configuration, POST usually starts after about 10 minutes, but it may take 20 minutes or longer.
Workaround	There is no effective workaround. If this defect occurs, execute the rebootxscf -a command to reset all the XSCFs and restore the system.

Table 3-35	Problems Resolved in XCP 2070 *(continued)*

RTI No.	**RTIF2-130903-006**
Model	**SPARC M10-4S**
Description	If multiple physical partitions (PPARs) exist in a system consisting of multiple SPARC M10-4S units, and some SPARC M10-4S units are turned off and then on again, an "SRAM Serious Error" may occur, requiring the replacement of the CPU memory unit lower (CMUL). When the state is displayed with the showpparstatus(8) command or the showdomainstatus(8) command, the PPAR state may not be displayed correctly.
Workaround	There is no effective workaround. While a PPAR is operating, do not turn off the SPARC M10-4S. Use the poweroff(8) command, for example, to stop a PPAR before turning it off.
RTI No.	**RTIF2-130903-007**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If the setcod(8) command is executed repeatedly on the physical partition (PPAR) in the PowerOn state, the resources available within the process may be exhausted, and codd may cause a process down.
Workaround	You can avoid this by executing setcod(8) when PPAR is in the PowerOff state. [How to restore] Restart codd.

Table 3-35	Problems Resolved in XCP 2070 *(continued)*

RTI No.	**RTIF2-130903-008**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**

Description	If any device is specified with the select command of OpenBoot PROM first but then the unselect-dev command is not executed, and subsequently the boot command is used to start Oracle Solaris from a network device, the following defect will occur.
	
	On the console of the logical domain, the "seek failed" and "Can't mount root" messages are displayed, and the starting of Oracle Solaris fails. Then, the "I/O device error detected" message is registered in the error log, and the logical domain is reset. After the logical domain is reset, the device specified with the select command is degraded.
	After reset, the logical domain enters either of the following states depending on the setting of OpenBoot PROM environment variable "auto-boot?".
	- If auto-boot? is true
	  Oracle Solaris is started from the device that is set as the boot-device. If, however, the device specified with the select command, above, is the same as the device that has been set as the boot-device, this device is degraded, so that Oracle Solaris will fail to start, and the ok prompt appears.
	- If auto-boot? is false
	  The ok prompt appears, in the same way as in normal operation.

Workaround	After specifying a device and executing the select command, be sure to execute the unselect-dev command before executing the boot command.
	[Example]
	  {0} ok **select /pci@8000/pci@4/pci@0/pci@1/network@0**
	  {0} ok **unselect-dev**
	  {0} ok **boot net**
	[How to restore]
	- If, after the defect occurs, the logical domain is in the ok prompt state
	  Execute the following command to reset the logical domain.
	    {0} ok **reset-all**
	- If, after the defect occurs, Oracle Solaris has been started in the logical domain
	  Use the shutdown command to first enter the ok prompt state and then set environment variable auto-boot? to false. Then, use the reset-all command to restart OpenBoot PROM.
	[Example]
	  # **shutdown -y -g0 -i0**
	  {0} ok **setenv auto-boot? false**
	  {0} ok **reset-all**
	After recovery, any device that was degraded as a result of this defect will be recognized normally. Ignore the message registered in the error log when the defect occurred.

Table 3-35   Problems Resolved in XCP 2070 *(continued)*

RTI No.	**RTIF2-130902-001**
Model	**SPARC M10-4S**
Description	If the firmware is updated while a logical domain is operating in a system consisting of multiple SPARC M10-4S units, the master XSCF may not switch to a standby XSCF, causing the firmware update to fail.
Workaround	There is no effective workaround.
	Recover the system by following the procedure described below.
	1. Log in to either standby XSCF, and then execute the following command.
	XSCF> **rebootxscf -s**
	2. After 10 seconds, log in to the other standby XSCF, and then execute the following command.
	XSCF> **rebootxscf -a**
	3. Wait for 20 minutes, log in to the master XSCF, and then execute the flashupdate(8) command again.
RTI No.	**RTIF2-130826-001**
Model	**SPARC M10-4S**
Description	If you log in to the XSCF Web from the master XSCF when the standby XSCF is in either the maintenance or input power off state, a dialog starting with "Cannot communicate with BB#xxx: ..." that indicates a non-breaking communication error is output.
Workaround	There is no effective workaround.
	The message in the dialog indicates a display defect, so you can operate the system as is. Ignore the dialog related to this communication error.
RTI No.	**RTIF2-130802-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	When you specify USB memory for the getflashimage(8) command, the following message may be output and the execution of the command may fail.
	Error: Unable to mount USB device.
Workaround	After disconnecting and then connecting the USB memory, execute the getflashimage(8) command again.
RTI No.	**RTIF2-130802-002**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	When Oracle Solaris is operating, if you change the SNMP setting with the setsnmp(8) command, the following phenomena may occur.
	1. A part of the data such as the XCP version number is not output as a result of the prtpicl -v and prtdiag -v commands.
	2. For /var/adm/messages of Oracle Solaris, the following warning message is output.
	PICL snmpplugin: cannot fetch object value
Workaround	There is no effective workaround.
	- If 1. occurs:
	Recover with the following procedure.
	1) End the prtdiag command with [Ctrl] + [C].
	2) Wait for about 30 minutes, and let an SNMP timeout occur in the XSCF.
	3) On the logical domain, execute the svcadm command to restart the picl service.
	- If 2. occurs:
	The system can be operated continuously because this is a temporary warning message.

Table 3-35   Problems Resolved in XCP 2070 *(continued)*

RTI No.	**RTIF2-130801-001**
Model	**SPARC M10-4S**
Description	Even if you execute the switchscf(8) command, the XSCF may not be switched. At this time, the master XSCF and standby XSCF cannot communicate with each other, and the redundancy of the XSCF is not maintained.
Workaround	There is no effective workaround. If the XSCF is not switched even by executing the switchscf(8) command, execute the replacefru(8) command to perform active replacement of the XSCF unit that is in the standby chassis. Also, when you disconnect the XSCF unit, disconnect and then connect the XSCF BB control cable.
RTI No.	**RTIF2-130716-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	When you update the PCI expansion unit firmware by executing the ioxadm(8) command, a "LINKCARD I2C error" error may occur.
Workaround	There is no effective workaround. However, if both of the conditions below can be confirmed, the update of the PCI expansion unit firmware has been completed normally. In this case, ignore the "LINKCARD I2C error" error message, and continue the operation. - The update of the PCI expansion unit firmware by using the ioxadm(8) command has been completed normally. - Executing the ioxadm -v list command displays the version number of the PCI expansion unit firmware that has been specified for the update.
RTI No.	**RTIF2-130711-001**
Model	**SPARC M10-4S**
Description	When you perform maintenance of the SPARC M10-4S by executing the replacefru(8) or addfru(8) command, the "FMEM serious error" error log may be registered and the replacefru(8) or addfru(8) command may fail. Also, when you turn on the power to the physical partition (PPAR) during the execution of the flashupdate(8) command, similarly, the "FMEM serious error" error log may be registered and the flashupdate(8) command may fail.
Workaround	For details, see "Response to "FMEM serious error" of SPARC M10-4S (RTIF2-130711-001)."

Table 3-35   Problems Resolved in XCP 2070 *(continued)*

RTI No.	**RTIF2-130709-001**
Model	**SPARC M10-4S**
Description	In the state where the physical partition (PPAR) is powered on, when switching of the master XSCF occurs, it may take time before the standby XSCF switches to the master XSCF. As a result, the following error may occur: Master switch synchronization timeout

Workaround	There is no effective workaround.
	[How to restore]
	- If the error occurs during execution of the flashupdate(8) command when the power to the PPAR is on:
	    Turn off the power to the PPAR, and then execute the flashupdate(8) command again.
	- If the error occurs during execution of the switchscf(8) command when the power to the PPAR is on, or if the error occurs due to an XSCF failure (process down etc.) when the power to the PPAR is on:
	    Perform recovery of the SPARC M10-4S chassis for which the "XSCF hang-up is detected" error log has been registered by using either of the following methods.
	    - Execute the replacefru(8) command to replace the CPU memory unit lower (CMUL) or XSCF unit (XSCFU).
	    - Power off and on the CPU memory unit lower (CMUL) or the XSCF unit (XSCFU).

RTI No.	**RTIF2-130516-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	In a system configuration for which remote power management with the ETERNUS is set, the ETERNUS is not powered on even if the power is turned on from the power switch located on the operation panel of the SPARC M10 system.
Workaround	Turn on the power in one of the following ways: - XSCF command, poweron(8) command - Menu on the XSCF Webpage - Automatic power turning on with schedule settings
RTI No.	**RTIF2-130228-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If a physical partition (PPAR) is powered on again after the PPAR is forcefully powered off with the poweroff -f command while starting up Oracle Solaris, "Unable to connect to Domain Service providers" is output to the OS console and Oracle Solaris may not be started.
Workaround	Power on the PPAR again with the poweron(8) command after disconnecting the power of the PPAR with the poweroff(8) command. If Oracle Solaris does not start up even after that, reset the XSCF after disconnecting the power of the PPAR and then power on the PPAR again.

Response to "FMEM serious error" of SPARC M10-4S (RTIF2-130711-001)

- Replacing SPARC M10-4S
  When replacing the SPARC M10-4S by following the maintenance menu displayed by executing the replacefru(8) command, perform Step 3 and then turn on the input power to the target SPARC M10-4S (BB#x). Then, after waiting for 50

minutes, manually enter "f" in Step 4 to perform the work.

```
Please execute the following steps:
1) Remove (Delete) the BB#x from a system.
2) Turn off the breaker of the BB#x.
3) After the exchanged device is connected with the system, turn on
   the breaker of the BB#x.
4) Please select[f:finish] :
```

- Adding SPARC M10-4S
  When adding the SPARC M10-4S by following the maintenance menu displayed
  by executing the addfru(8) command, perform Step 1 and then turn on the input
  power to the target SPARC M10-4S (BB#x). Then, after waiting for 50 minutes,
  manually enter "f" in Step 2 to perform the work.

```
Please execute the following steps:
1) After the added device is connected with the system, please turn on
   the breaker of the BB#x.
2) Please select[f:finish] :
```

- Executing the flashupdate(8) command
  Do not power on the physical partition (PPAR) during the execution of the
  flashupdate(8) command. If you power on the PPAR during the execution of the
  flashupdate(8) command, power it on again after the completion of the command.
  Upon the completion of the flashupdate(8) command, execute the showlogs event
  command to confirm the following message.

```
XCP update has been completed (XCP version=xxxx:last version=yyyy)
```

Restoration after the "SCF Diagnosis initialize RTC" error (RTIF2-131108-001)

[How to restore]

- If phenomenon 1 occurs:
  - Case 1

    If the Oracle Solaris time has returned to January 1, 2001, execute the setdate(8)
    command to set the XSCF time again. In this case, the XSCF is rebooted. After
    that, power off and on the PPAR.After this, the XSCF is reset. After that, power
    on the PPAR.

  - Case 2

    If the Oracle Solaris time is other than January 1, 2001, contact a field engineer.
    In this case, do not execute the resetdateoffset(8) of setdate(8) command on the
    XSCF.

  - Case 3

If the PPAR power is off, power on the PPAR. After that, check the Oracle Solaris time, and perform the above case 1 or case 2.

- If phenomenon 2 occurs:
  - Case 1

    If the Oracle Solaris time has returned to January 1, 2001, it is necessary to initialize the time difference between the XSCF time and Hypervisor on all of the PPARs. Stop all the PPARs, and execute the resetdateoffset -a command to clear the time difference.

  - Case 2

    If the Oracle Solaris time is other than January 1, 2001, contact a field engineer. In this case, do not execute the resetdateoffset(8) of setdate(8) command on the XSCF.

  - Case 3

    If the PPAR power is off, power on the PPAR. After that, check the Oracle Solaris time, and perform the above case 1 or case 2.

- If phenomenon 3 occurs:
  If phenomenon 1 or 2 also occurs, perform its [How to restore] action first.

  Set the Oracle Solaris time again.

Problems Resolved in XCP 2052

The following table lists the problems resolved in XCP 2052.

Table 3-36   Problems Resolved in XCP 2052

RTI No.	**RTIF2-131004-004**
Model	**SPARC M10-4S**
Description	If the standby XSCF is rebooted while the XSCF BB control cable is either faulty or not connected, it is started as the master XSCF, so that there are two master XSCF units in the system. When there are two master XSCF units, system operation cannot be guaranteed. This state can be confirmed from the fact that there are two chassis for which the MASTER LED is lit on their rear panels.
Workaround	There is no effective workaround. Do not reset an XSCF when the XSCF BB control cable between the master and standby is either faulty or not connected. [How to restore] If there are two master XSCF units in the system, turn off all the chassis and then turn them on again.

Table 3-36   Problems Resolved in XCP 2052 *(continued)*

RTI No.	**RTIF2-130903-004**
Model	**SPARC M10-4S**
Description	If XSCF master/standby switchover takes place when either the XSCF BB control cable or the XSCF DUAL control cable is not connected properly, the settings at the master XSCF side may not be properly carried on to the standby XSCF and thus, it may not operate properly.
Workaround	There is no effective workaround. Please make sure that the XSCF BB control cable and the XSCF DUAL control cable is properly connected. If this symptom occurs, confirm whether each setting by master XSCF had been stored after confirming that the cables are properly connected. Set up XSCF again when the setting has not been saved.
RTI No.	**RTIF2-130827-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	A timeout or connection failure may be detected for the communication party because XSCF packet reception is delayed, delaying the response, due to a defect in the XSCF-LAN hardware settings.
Workaround	There is no effective workaround.

Problems Resolved in XCP 2051

The following table lists the problems resolved in XCP 2051.

Table 3-37   Problems Resolved in XCP 2051

RTI No.	**RTIF2-130717-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If an error occurs in the USB-SSD in the XSCF interface unit (XSCFIFU) of the PSU backplane (PSUBP) or crossbar box, the "System backup memory access error" error log may be registered. In this case, a problem such as the inability to execute the poweron(8) command or the inability to collect data with the snapshot(8) command may occur.
Workaround	There is no effective workaround. When this problem occurs, power off the input power supply and then power it on again (AC OFF/ON).

Problems Resolved in XCP 2050

The following table lists the problems resolved in XCP 2050.

Table 3-38   Problems Resolved in XCP 2050

RTI No.	**RTIF2-131107-002**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**

Description	If the input power to the system is turned on, the XSCF is reset, or the XCP firmware is updated, the "SCF Diagnosis initialize RTC" error is erroneously detected, causing the following phenomena to occur.
	- Symptom 1
	The XSCF time may return to January 1, 1970.
	- Symptom 2
	The time difference between the XSCF and all physical partitions (PPARs) may become a value of 1.3 billion seconds or more. You can check this phenomenon by executing the showdateoffset (8) command, since the time difference between the XSCF and all the PPARs is displayed as a value of "1300000000 sec" or more.
	XSCF> **showdateoffset -a**
	PPAR-ID Domain Date Offset
	00 1300000100 sec
	01 1300000100 sec
	    :
	    :
	15 1300000100 sec
	- Symptom 3
	If you reset the PPAR or power off and on the PPAR, the Oracle Solaris time may return to January 1, 1970.

Workaround	There is no effective workaround. Update to firmware version XCP 2050 or later. [How to restore] See "Restoration after erroneous detection of the "SCF Diagnosis initialize RTC" error (RTIF2-131107-002)."
RTI No.	**RTIF2-131023-005**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If [Physical] bar is selected on the XSCF Web menu, PCI (excluding the link card) may appear to be abnormal (⚠).
Workaround	There is no effective workaround. Even if PCI (excluding the link card) is indicated as being abnormal (⚠), ignore it.
RTI No.	**RTIF2-130903-005**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	In the XSCF e-mail notification function, the following characters cannot be included in the local part or the domain part of the reply mail address which is sent by the setsmtp(8) command. "!" "#" "$" "%" "&" "'" "*" "+" "/" "=" "?" "^" "_" "`" "{" "|" "}" "~"
Workaround	Use reply mail addresses which do not include the characters shown by the description.

Table 3-38	Problems Resolved in XCP 2050 *(continued)*

RTI No.	**RTIF2-130528-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	You cannot use the PCI hot plug (PHP) function to add a Quad Gigabit Ethernet card (SE1X7GQ2F) to a PCI Express slot of a PCI expansion unit.
Workaround	This has been modified with XCP 2050 and SRU 11.1.6.4.0. If XCP and SRU are not applied, you must stop the logical domain to which you want to add the PCI card before adding it. [Precautions] To resolve this problem when you have saved the configuration information of the logical domain and are operating the system with a configuration other than factory-default, you must reconstruct the logical domain configuration after update of the XCP firmware. For details, see "Reconstructing the logical domain (RTIF2-130528-001)."

RTI No.	**RTIF2-130516-003**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If the XSCF load is high, the following warning message may be output, indicating the power supply unit (PSU) as a suspected location. Insufficient FAN rotation speed PSU voltage out of range error PSU output current too high PSU over temperature warning
Workaround	There is no workaround. This is a warning message, so you can operate it as it is. Ignore the message.

RTI No.	**RTIF2-130329-004**
Model	**SPARC M10-4S**
Description	In a system with building block configuration, if the following operations are performed during power-on of the physical partition (PPAR), connection to the control domain console may not be possible. 1. XSCF for any of the SPARC M10-4S units constituting PPAR is reset. 2. Switching of the master XSCF and standby XSCF occurs. 3. XSCF of the SPARC M10-4S that was reset in 1. is reset again.
Workaround	There is no effective workaround. Reset the master XSCF using the switchscf(8) command.

RTI No.	**RTIF2-130329-006**
Model	**SPARC M10-4S**
Description	If XSCF of SPARC M10-4S belonging to the physical partition (PPAR) in operation is rebooted due to a panic or watchdog timeout while the master XSCF and the standby XSCF are restarting simultaneously, connection to the control domain console may not be possible.
Workaround	There is no effective workaround. Power off the PPAR by using the poweroff -f command, and then power it on again.

Table 3-38   Problems Resolved in XCP 2050 *(continued)*

RTI No.	**RTIF2-130319-002**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	Before power-off of the physical partition (PPAR) completes in SPARC M10-4S, if you power off and then power on the input power supply of a SPARC M10-4S or a crossbar box again and power on the PPAR again, the PPAR in operation may be powered off if the master XSCF is switched with the switchscf(8) command, firmware update, or failure.
Workaround	If you power off the PPAR before powering off the input power supply of SPARC M10-4S or crossbar box, check that power-off the target PPAR and SPARC M10-4S is complete, by using the showboards(8) and showlogs power commands. Then, power off the input power supply of SPARC M10-4S or crossbar box.
RTI No.	**RTIF2-130319-003**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If the shutdown -i5 command and power-off command compete for power-off of the PPAR when the former is executed in the control domain or the latter is executed from the ok prompt while power-off of the physical partition (PPAR) is performed with the poweroff(8) command, "SCF:PPAR issued power-off request (PPARID X)" may be registered many times.
Workaround	Ignore the registered event log, because the PPAR has been normally powered off.
RTI No.	**RTIF2-130305-016**
Model	**SPARC M10-4S**
Description	Timeout may occur if the XCP firmware version of a SPARC M10-4S or crossbar box is updated using the flashupdate -c sync command.
Workaround	Execute the flashupdate(8) command by specifying the -f option to re-update the XCP firmware for all SPARC M10-4S or crossbar boxes.
RTI No.	**RTIF2-130219-002**
Model	**SPARC M10-4S**
Description	When maintaining SPARC M10-4S with a slave XSCF, if you incorrectly connect the standby XSCF and the slave XSCF with an XSCF connection cable, the maintenance is considered to have finished normally without detecting the error.
Workaround	After switching between the master XSCF and the standby XSCF by using the switchscf(8) command, execute the testsb(8) command to the target slave XSCF. The incorrect connection with the XSCF connection cable is detected and an error log is issued.

Reconstructing the logical domain (RTIF2-130528-001)

To resolve this problem when you have saved the configuration information of the logical domain and are operating the system with a configuration other than factory-default, you must reconstruct the logical domain configuration after update of the XCP firmware through the following procedure:

1. **Check the current configuration information of the logical domain stored in XSCF.**
   This example assumes that the name of the saved logical domain configuration information is config1.

```
XSCF> showdomainconfig -p 0
20xx-yy-zz hh:mm:ss
PPAR-ID     :0
Booting config
(Current)   :config1
(Next)      :config1
-------------------------------------------------------------
Index       :1
config_name :factory-default
domains     :1
date_created:-
-------------------------------------------------------------
Index       :2
config_name :config1
domains     :2
date_created:'20xx-yy-zz hh:mm:ss'
```

2. **Set a dummy variable and then clear it for all logical domains.**
   Execute the following commands for all logical domains.

```
primary# ldm set-variable fix-php=true ldom
primary# ldm remove-variable fix-php ldom
```

3. **Save the changed configuration in XSCF to replace the current configuration information.**
   In this example, the name of the current configuration information is replaced with config1.

```
primary# ldm remove-spconfig config1
primary# ldm add-spconfig config1
```

4. **Restart all logical domains.**

Restoration after erroneous detection of the "SCF Diagnosis initialize RTC" error (RTIF2-131107-002)

[How to restore]

- If phenomenon 1 occurs:
  - Case 1

    If the Oracle Solaris time has returned to January 1, 1970, execute the setdate(8) command to set the XSCF time again. In this case, the XSCF is rebooted. After that, power off and on the PPAR.After this, the XSCF is reset. After that, power on the PPAR.

  - Case 2

    If the Oracle Solaris time is other than January 1, 1970, contact a field engineer.

In this case, do not execute the resetdateoffset(8) of setdate(8) command on the XSCF.

- Case 3

If the PPAR power is off, power on the PPAR. After that, check the Oracle Solaris time, and perform the above case 1 or case 2.

■ If phenomenon 2 occurs:
- Case 1

If the Oracle Solaris time has returned to January 1, 1970, it is necessary to initialize the time difference between the XSCF time and Hypervisor on all of the PPARs. Stop all the PPARs, and execute the resetdateoffset -a command to clear the time difference.

- Case 2

If the Oracle Solaris time is other than January 1, 1970, contact a field engineer. In this case, do not execute the resetdateoffset(8) of setdate(8) command on the XSCF.

- Case 3

If the PPAR power is off, power on the PPAR. After that, check the Oracle Solaris time, and perform the above case 1 or case 2.

■ If phenomenon 3 occurs:
If phenomenon 1 or 2 also occurs, perform its [How to restore] action first.

Set the Oracle Solaris time again.

Problems Resolved in Versions Prior to XCP 2050

The following table lists the problems resolved in versions prior to XCP 2050.

Table 3-39   Problems Resolved in Versions Prior to XCP 2050

RTI No.	**RTIF2-130612-001**
Model	**SPARC M10-4S**
Description	If the XCP firmware version is XCP 2041, XCP 2042, or XCP 2043, SPARC M10-4S cannot be replaced by using the replacefru(8) command in a system with more than one SPARC M10-4S.
Workaround	Perform cold replacement (replacement performed with the input power off) or update the XCP firmware version to XCP 2044 or later before performing replacement.
RTI No.	**RTIF2-130516-005**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If the showcodactivation(8) command is executed while data is being restored with the restoreconfig(8) or restorecodactivation(8) command, it may be impossible to display the execution results. If this occurs, the showcodactivation(8) command ends with a "codd internal error".
Workaround	To display the showcodactivation(8) command execution result, execute it after the execution of the restoreconfig(8) or restorecodactivation(8) command has completed.

Table 3-39   Problems Resolved in Versions Prior to XCP 2050 *(continued)*

RTI No.	**RTIF2-130515-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	While the system is operating, the following events may occur: 1. Oracle Solaris prtpicl command no longer responds. 2. Display data (such as the XCP version) of prtpicl -v and prtdiag -v is not output as expected. 3. For /var/adm/messages, the warning message, "PICL snmpplugin: cannot fetch object value", is output. 4. XSCF CMDD process shutdown occurs and an XSCF is reset repeatedly, such that it becomes unusable. At this time, system operation can be continued.

Workaround	There is no effective workaround.
	[How to restore]
	If event 1 occurs:
	  Recover with the following procedure.
	  1. End the prtdiag command with [Ctrl] + [C].
	  2. Wait for about 30 minutes, and allow an SNMP timeout to occur in the XSCF.
	  3. In the control domain, execute the svcadm command to restart the picl service.
	If event 2 occurs:
	  Execute the command again. If results are displayed, the system can be operated continuously. If the state where results are not displayed as expected continues, check whether the XSCF is operating.
	  - If the XSCF is operating, use the rebootxscf(8) command to reset the XSCF.
	  - If the XSCF is not operating, turn the input power supply of the system off and then back on (AC OFF/ON) to recover.
	If event 3 occurs:
	  The system can be operated continuously because this is a temporary warning message.
	If event 4 occurs:
	  Turn off the input power supply of the system, and then back on (AC OFF/ON) to recover.

RTI No.	**RTIF2-130507-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	There is a case where a RAID volume cannot be recognized after a power failure occurred while using the hardware RAID function.
Workaround	Please run the activate-volume command at ok prompt to activate a hardware RAID volume. For the detailed procedure, see "14.2.11 Re-enabling a Hardware RAID Volume" in the *Fujitsu SPARC M12 and Fujitsu M10/SPARC M10 System Operation and Administration Guide*.
RTI No.	**RTIF2-130417-001**
Model	**SPARC M10-4S**
Description	If the XSCF mounted in the crossbar box panics, it may be impossible to perform communication between the master XSCF and non-master XSCF.
Workaround	There is no effective workaround. [How to restore] If the event occurs, wait for 15 minutes or longer, and then use rebootxscf -s to reset the master XSCF.

Table 3-39   Problems Resolved in Versions Prior to XCP 2050 *(continued)*

RTI No.	**RTIF2-130416-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If the PCI device in the I/O domain is deleted (ldm rm-io) or a PCI device is added (ldm add-io), hypervisor abort may occur when the I/O domain starts.
Workaround	To delete the PCI device in the I/O domain, delete all devices under the same route complex as that of the PCI device to be deleted (which have the same xxxx of /pci@xxxx) and then add the necessary devices again. Alternatively, do not assign multiple devices under the same route complex to a single I/O domain.
RTI No.	**RTIF2-130415-001**
Model	**SPARC M10-4, SPARC M10-4S**
Description	In SPARC M10-4/M10-4S, if the firmware version is XCP 2031 or XCP 2032, the initial value of the following OpenBoot PROM environment variable differs from the default. Even if the setting is changed by using the setpparparam(8) command of the XSCF shell or the setenv command from the OpenBoot PROM prompt, it will return to the original value. auto-boot? false diag-switch? true fcode-debug? true local-mac-address? false
Workaround	There is no effective workaround. Make a firmware update to XCP 2041 or a later version, and then set the value of the OpenBoot PROM environment variable again.
RTI No.	**RTIF2-130410-004**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	The power may not be turned on/off from the operation panel.
Workaround	If you power on from the XSCF shell, execute the poweron(8) command. If you power off from the XSCF shell, execute the poweroff(8) command. [How to restore] If this event occurs, power off the physical partition (PPAR) by using the poweroff -f command.
RTI No.	**RTIF2-130410-005**
Model	**SPARC M10-4S**
Description	Executing the poweron -a command leads to the failure of power-on if more than one PPAR is powered on or more than one PPAR has failed in the system that has multiple physical partitions (PPARs).
Workaround	Specify the -p option to execute the poweron(8) command and turn on the power of each PPAR. [How to restore] If this event occurs, execute the poweroff -f command to forcefully power off the PPAR whose power has stopped being supplied during the middle of the power supply process. Then execute the poweron -p command to power on the PPAR.

Table 3-39	Problems Resolved in Versions Prior to XCP 2050 *(continued)*

RTI No.	**RTIF2-130410-006**
Model	**SPARC M10-4S**
Description	If a crossbar box has failed in the system that satisfies all the following conditions, a crossbar box may be degraded and the operation may not be continued. - Two or more crossbar boxes are configured. - Multiple PPARs are configured. - Each physical partition (PPAR) is configured with multiple CPU memory units (CMUU/CMUL).
Workaround	There is no effective workaround. [How to restore] Execute the poweron -p command to power on the PPAR again whose power has been turned off due to an error in the crossbar box.
RTI No.	**RTIF2-130410-007**
Model	**SPARC M10-4S**
Description	If you forcefully turn off the power of the physical partition using the poweroff -f command immediately after you powered on the physical partition, you may not be able to power on/off the physical partition after that.
Workaround	After powering on a PPAR, do not execute the poweroff -f command until the ok prompt is displayed. [How to restore] If you fail to forcefully turn off the power of a PPAR, power off the input power supply and then turn on the power again (AC OFF/ON).
RTI No.	**RTIF2-130329-001**
Model	**SPARC M10-4S**
Description	During firmware updating in SPARC M10-4S, ALARM LED of the master chassis suddenly turns on and remains stopped, and the firmware updating may not complete.
Workaround	There is no effective workaround.
RTI No.	**RTIF2-130329-002**
Model	**SPARC M10-4S**
Description	If the configuration has two or more crossbar boxes and the physical partition (PPAR) is configured not to use any crossbar box, you cannot disconnect the power supply from the operating panel.
Workaround	Disconnect the power by using the poweroff(8) command.

Table 3-39   Problems Resolved in Versions Prior to XCP 2050 (*continued*)

RTI No.	**RTIF2-130329-003**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If you power off the input power supply while the status of the physical partition (PPAR) is PowerOn (from the startup of Oracle Solaris to the completion of PowerOff), an SRAM serious error occurs in any of the SPARC M10-4S units in the PPAR when you next power on the input power supply, preventing you from powering on the input power supply.
Workaround	When you power off the input power supply, do so after disconnecting the PPAR power supply in advance and making sure that disconnection is complete. [How to restore] If any problem occurs, restore the configuration with the following procedure: 1. Save settings with the dumpconfig(8) command. 2. Initialize the system to the factory default with the restoredefaults -c factory command. 3. Confirm that the READY LED of XSCF or XSCF unit is lighted up after performing AC OFF/ON. 4. Replace the CPU memory unit lower (CMUL) or the motherboard unit (MBU). 5. Execute the restoreconfig(8) command to restore the XSCF setting information.
RTI No.	**RTIF2-130319-001**
Model	**SPARC M10-4, SPARC M10-4S**
Description	Immediately after the input power supply of SPARC M10-4/M10-4S is powered on, "DMA timeout error Hard detected" may be detected. The CPU memory unit lower (CMUL) will be degraded if you start the logical domain with "DMA timeout error Hard detected" detected.
Workaround	There is no effective workaround. Before starting the logical domain, disconnect the input power supply and then power it on again.
RTI No.	**RTIF2-130305-005**
Model	**SPARC M10-4S**
Description	If XSCF panic occurs in a SPARC M10-4S while processing the diagnose by the POST after a physical partition (PPAR) is powered on in the system that has more than one SPARC M10-4S chassis, then the power may be disconnected without continuing the process of powering on the PPAR.
Workaround	There is no effective workaround. Make sure that the XSCF of each SPARC M10-4S is rebooted. Power on the PPAR again if they are rebooted.
RTI No.	**RTIF2-130305-008**
Model	**SPARC M10-4S**
Description	If each physical partition (PPAR) is configured with one system board (PSB) in the system that has more than one SPARC M10-4S chassis and crossbar box, the power of the crossbar unit of a crossbar box is not stopped and the crossbar box is also powered on.
Workaround	There is no effective workaround.

Table 3-39   Problems Resolved in Versions Prior to XCP 2050 *(continued)*

RTI No.	**RTIF2-130305-010**
Model	**SPARC M10-4S**
Description	Hypervisor Abort or OS PANIC may occur if all the PPARs are powered on using the poweron -a command in a system that has four or more SPARC M10-4S chassis units with multiple physical partitions (PPARs).
Workaround	Do not power on all the PPARs at the same time using the poweron -a command. Power on each PPAR using the -p option.
RTI No.	**RTIF2-130305-021**
Model	**SPARC M10-4S**
Description	Immediately after starting the XSCF, the system board (PSB) may be recognized as "Unmount" and the addboard(8) command or the poweron(8) command may fail.
Workaround	Wait for about 30 seconds after starting up the XSCF and check that the target PSB is mounted using the showboards(8) command. Then execute the addboard(8) or poweron(8) command.
RTI No.	**RTIF2-130305-024**
Model	**SPARC M10-4S**
Description	If the input power supply of a crossbar box is disconnected and then powered on again in the state where a physical partition (PPAR) is powered on in the system that has the crossbar boxes, the following message may be output in the control domain console and the power-on process of the PPAR may not be completed. WARNING: Unable to connect to Domain Service providers
Workaround	There is no effective workaround. [How to restore] If the power-on process of the PPAR is canceled, disconnect the power of the PPAR forcefully using the poweroff -f command. After that, reset all the XSCFs using the rebootxscf -a command or disconnect the input power supply of all the SPARC M10-4S chassis and then power on again.
RTI No.	**RTIF2-130227-001**
Model	**SPARC M10-4S**
Description	If you collect a snapshot by specifying the -a option, "XSCF Kernel Panic" may occur due to the increased load on the master XSCF.
Workaround	If you collect a snapshot of the entire system, collect snapshots one by one by specifying a BB-ID of SPARC M10-4S using -b option and not -a option. Perform this operation on all SPARC M10-4S.
RTI No.	**RTIF2-130219-001**
Model	**SPARC M10-4S**
Description	The takeover IP address of an XSCF cannot be specified as a value for "IPAddress" or "SlaveAddress," which can be set in the management file for a remote power management group.
Workaround	Specify the IP addresses of XSCF-LAN#0 and XSCF-LAN#1 of the master XSCF and the standby XSCF for "IPAddress" and "SlaveAddress," respectively.

Table 3-39   Problems Resolved in Versions Prior to XCP 2050 *(continued)*

RTI No.	**RTIF2-130219-005**
Model	**SPARC M10-4, SPARC M10-4S**
Description	If a failure occurs in a component in a physical partition (PPAR), the status of the PPAR in the SNMP MIB is not updated.
Workaround	There is no effective workaround.
RTI No.	**RTIF2-130219-008**
Model	**SPARC M10-4S**
Description	If you turn on the input power supply to a SPARC M10-4S chassis while a physical partition (PPAR) is being powered on in a system that has multiple PPARs, the SPARC M10-4S chassis for which the input power supply is turned on may not be recognized by the master XSCF.
Workaround	Power on the input power supply to all the crossbar boxes and SPARC M10-4S chassis that compose the system before powering on a PPAR.
RTI No.	**RTIF2-130215-001**
Model	**SPARC M10-4S**
Description	After the hardware initial diagnosis detects a system board (PSB) error as described in the following error log, the PSB may not be degraded but the physical partition (PPAR) may be reset repeatedly. Code: 40002000-003cff0000ff0000ff-02000e000000000000000000 FRU: /BB#x Msg: SB deconfigured (SB-SB access error) Code: 40002000-003cff0000ff0000ff-02000e010000000000000000 FRU: /BB#x Msg: SB deconfigured (not running)
Workaround	Disconnect the PSB where an error is detected from the PPAR configuration by using the deleteboard(8) command.
RTI No.	**RTIF2-130215-002**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	Even when policy is set to psb by the setpcl(8) command, a unit of resource to be degraded when an error occurs may not be a system board but Field Replaceable Unit (FRU).
Workaround	Disconnect the PSB where an error is detected from the PPAR configuration by using the deleteboard(8) command.
RTI No.	**RTIF2-130212-001**
Model	**SPARC M10-4S**
Description	If the power save operation, which is set by the setpparmode(8) command, is "enabled," the following problems may occur. - A hang-up (heartbeat function) in a logical domain may be unable to be detected. - If the CPU core resources are reduced during system startup (while a physical partition (PPAR) is operating), the PPAR may be powered off.
Workaround	Set the power save operation to "disabled" by using the setpparmode(8) command.

Table 3-39　　Problems Resolved in Versions Prior to XCP 2050 *(continued)*

RTI No.	**RTIF2-130212-002**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	When you check the domain status by using the showdomainstatus(8) command from the XSCF after executing the ldm add-spconfig command from Oracle Solaris, "Host stopped" is displayed for all domains, including the control domain.
Workaround	There is no effective workaround. Execute the ldm list-domain command from Oracle Solaris to check the domain status.
RTI No.	**RTIF2-130212-003**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If you execute the testsb(8) command to a system board (PSB) that is being diagnosed by the testsb(8) or diagxbu(8) command in a different session, the PSB that is being diagnosed may enter an abnormal state and become unavailable.
Workaround	Confirm that the PWR of the PSB to be diagnosed is "n" and that Test is not "Testing" by using the showboards(8) command before executing the testsb(8) command. If a PSB becomes unavailable, power off the entire system and then power it on again.
RTI No.	**RTIF2-130130-001**
Model	**SPARC M10-4, SPARC M10-4S**
Description	If you turn on the AC when the system configuration has no CPU memory unit upper (CMUU), a "Hardware access error" error log is generated for CMUU. The same phenomenon occurs when you add or replace SPARC M10-4S.
Workaround	The error log is registered because no CMUU is mounted. So, ignore it.
RTI No.	**RTIF2-130109-002**
Model	**SPARC M10-4S**
Description	If "Console path is switched" is registered in the event log of a system in which the physical partition (PPAR) consists of multiple system boards (PSBs), the PPAR-ID may have an invalid value.
Workaround	There is no effective workaround.
RTI No.	**RTIF2-130109-005**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If you use the replacefru(8) command to replace a power supply unit (PSU), "Indispensable parts are not installed (PSU)" may be registered in the event log.
Workaround	This is an error log that is registered because a PSU is removed. Ignore it.

Table 3-39   Problems Resolved in Versions Prior to XCP 2050 *(continued)*

RTI No.	**RTIF2-130109-006**
Model	**SPARC M10-4S**
Description	If you change the setting information of the remote power management function while the standby XSCF is in failure or starting, the changed setting information may not be reflected in the standby XSCF even after the start of the standby XSCF is completed. If XSCF switching occurs in this state, the master XSCF after the switching may not be able to achieve remote power management based on the changed setting information.
Workaround	Disable the remote power management function, and then configure it again using the following procedure: 1. Execute the setremotepwrmgmt -c disable command to disable the remote power management function. 2. Save the management file, and then use the clearremotepwrmgmt(8) command to initialize the setting information. - If the standby XSCF is starting, execute the clearremotepwrmgmt(8) command after the start is completed. - If the standby XSCF is in failure, use the replacefru(8) command to replace the target FRU, and then execute the clearremotepwrmgmt(8) command. 3. After the start of the standby XSCF is completed, execute the setremotepwrmgmt -c config command to restore the setting information based on the saved management file. 4. Execute the setremotepwrmgmt -c enable command to enable the remote power management function.
RTI No.	**RTIF2-130109-007**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If all physical partitions (PPARs) are stopped and you try to power on a PPAR, the PPAR may not be powered on with no error log registered.
Workaround	There is no effective workaround. Turn off the input power supply and turn it back on to all SPARC M10 system chassis and then try to power on the PPAR again.
RTI No.	**RTIF2-121219-002**
Model	**SPARC M10-4S**
Description	Some chassis may not be recognized if all power cables are not connected within four minutes when connecting the power cables of the system that is composed of multiple SPARC M10-4S chassis.
Workaround	Make sure not to exceed four minutes to finish connecting all the power cables when the system is composed of multiple SPARC M10-4S chassis. Remove and connect the power cables of all the chassis again when there is a SPARC M10-4S chassis that is not recognized.
RTI No.	**RTIF2-121219-004**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	While powering on/off the remote power management group, the showremotepwrmgmt(8) command may be abnormally terminated with the following message. Controller response timeout.
Workaround	Execute the showremotepwrmgmt(8) command again.

Table 3-39   Problems Resolved in Versions Prior to XCP 2050 *(continued)*

RTI No.	**RTIF2-121219-005**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	When a component with high temperature or low temperature at an air inlet is registered, the information on the second faulty component (the second suspect component) displayed in the FRU may not be correct.
Workaround	Ignore the information on the displayed second faulty component (the second suspect component).
RTI No.	**RTIF2-121219-006**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	Replacement of the power supply unit (PSU) using the replacefru(8) command may fail with "Warning:005".
Workaround	Execute the replacefru(8) command again and replace the PSU.
RTI No.	**RTIF2-121219-009**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If an error log indicating a fan failure, "Power-on failure" or "Power-off failure", is registered, other than the correct component may be displayed as the faulty FRU.

Workaround	If the failure is "Power-on failure" or "Power-off failure", and the faulty component is a fan, replace the following component.
	- For the SPARC M10-1
	  Motherboard unit (MBU)
	- For the SPARC M10-4/M10-4S
	  PSU backplane unit

RTI No.	**RTIF2-121219-010**
Model	**SPARC M10-4S**
Description	Error log "XSCF hang-up is detected" may be registered when the switchscf(8) command is executed.
Workaround	Ignore this error log.

Table 3-39   Problems Resolved in Versions Prior to XCP 2050 *(continued)*

RTI No.	**RTIF2-121219-012**
Model	**SPARC M10-4S**
Description	When a SPARC M10-4S chassis is replaced using the replacefru(8) command, replacement of the SPARC M10-4S chassis may fail with "internal error" displayed.

Workaround	Use the following procedure to replace a SPARC M10-4S chassis by using the replacefru(8) command.
	1. Enter "r" to replace the chassis in response to the message "Do you want to continue?[r: replace|c:cancel]" which is displayed after the replacefru(8) command is executed.
	2. Replace the SPARC M10-4S chassis and wait for about 15 minutes after the input power of the chassis is turned on.
	3. Execute the showlogs event command to display an event log.
	4. Continue the replacement using either of the following methods.
	  - If the event log displays "XSCF update is started"
	    Wait until the "XCP update has been completed" log is registered. When "XCP update has been completed" is displayed, enter "f" in response to "Please select[f:finish]" and then continue the replacement by following the instructions displayed on the screen.
	  - If the event log does not display "XSCF update is started"
	    Enter "f" in response to "Please select[f:finish]" and then continue the replacement according to the instructions on the screen.

RTI No.	**RTIF2-121219-013**
Model	**SPARC M10-4S**
Description	When a SPARC M10-4S chassis finds an error indicating that the XSCF cannot be started, not only an error log for the SPARC M10-4S chassis where the error occurred but also an error log regarding a cable connection error in a chassis that does not exist may be registered.
Workaround	Ignore the error log regarding a cable connection error registered for a SPARC M10-4S chassis that does not exist.
RTI No.	**RTIF2-121219-014**
Model	**SPARC M10-4S**
Description	When cold replacement is performed (replacement performed while the input power is off) due to an error with BB#00, the setting information for the XSCF is deleted.
Workaround	To replace a SPARC M10-4S chassis due to an error in BB#00, use the replacefru(8) command.
RTI No.	**RTIF2-121219-015**
Model	**SPARC M10-4S**
Description	When a SPARC M10-4S chassis is removed with the initbb(8) command, the information on the removed chassis remains without being completely deleted.
Workaround	To remove a SPARC M10-4S chassis, perform the cold removal (the chassis is removed by turning off the input power).
RTI No.	**RTIF2-121219-016**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	An "internal error" may occur if the prtfru(8) command is executed while powering on/off or resetting the physical partition (PPAR).
Workaround	Wait for the power on/off or reset of the PPAR to complete and then execute the prtfru(8) command again.

Table 3-39   Problems Resolved in Versions Prior to XCP 2050 *(continued)*

RTI No.	**RTIF2-121219-017**
Model	**SPARC M10-4S**
Description	If a SPARC M10-4S chassis is powered off after an error log is registered because a memory error occurred in BB#00 or BB#01, the same error log may be registered again.
Workaround	There is no effective workaround.
RTI No.	**RTIF2-121219-018**
Model	**SPARC M10-4S**
Description	In a system in which two or more SPARC M10-4S chassis units constitute multiple physical partitions (PPARs), if you power on the PPAR after switching the master XSCF as a result of any of the following, error logs of "STICK does not start (CPU)", "STICK does not start (MBC)", or "STICK count up error" may be registered, causing degradation of the CPU memory units (CMUU/CMUL). - Performing firmware update - Detecting an XSCF failure - Executing the switchscf(8) command
Workaround	There is no effective workaround. After switching of the master XSCF is performed, power off the input power supply of all SPARC M10-4S chassis and power them on again, without powering on the PPAR.
RTI No.	**RTIF2-121219-019**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	When a PCI card is inserted to or removed from a PCI expansion unit, a number that is different from the relevant PCI card number (PCI#) is displayed in the log. In addition, when error log "PCICARD failed" is registered due to an error with the PCIe slot on the PCI expansion unit or the PCI card, a number other than that of the relevant PCI card number (PCI#) is displayed in the error log.
Workaround	Read it as the number obtained by subtracting one from the PCI number (PCI#) displayed in the log.
RTI No.	**RTIF2-121206-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	When starting the domain, the following error message may appear. Msg: PCI Express link not active
Workaround	Ignore this message if the showhardconf(8) command recognizes the PCI Express (PCIe) card.
RTI No.	**RTIF2-121204-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	The dynamic resource management software (ServerView Resource Orchestrator) sometimes fails to register a server to be monitored.
Workaround	There is no effective workaround. Register the server to be monitored again by the dynamic resource management software.

Table 3-39   Problems Resolved in Versions Prior to XCP 2050 *(continued)*

RTI No.	**RTIF2-121204-002**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If a node of PRIMECLUSTER stops, node switching does not occur automatically.
Workaround	There is no effective workaround. Switch nodes manually in PRIMECLUSTER.
RTI No.	**RTIF2-121204-003**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	When you set or change environment variables of OpenBoot PROM by setenv or nvramrc of OpenBoot PROM, or by the eeprom or ldm set-var commands of Oracle Solaris, the setting or changes may not be retained after recycling the power supply to the system.
Workaround	After you update an environment variable of OpenBoot PROM, execute the ldm add-config command to save the domain configuration information to XSCF.
RTI No.	**RTIF2-121204-004**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	When you enable the auto boot function of the guest domain by the setpparmode(8) command of XSCF and then start the control domain and the guest domain simultaneously, you may encounter the situation where the following error message is recorded and Oracle Solaris cannot be started in the guest domain. Code: 20000000-00ffff0000ff0000ff-0300000200000000000000000 Status: Notice Occurred: Nov 16 16:55:25.518 JST 2012 FRU: /UNSPECIFIED Msg: Boot process failed
Workaround	Use the XSCF setpparmode(8) to disable the autoboot function of the guest domain, and then start Oracle Solaris of the control domain. Then use the ldm start-domain command for Oracle VM Server for SPARC to start the guest domain. [How to restore] After stopping the guest domain with the ldm stop-domain command for Oracle VM Server for SPARC, execute the ldm start-domain command to start the guest domain.
RTI No.	**RTIF2-121130-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	When you enable and disable the remote power management of RCIL, and then enable it again, the remote power management of the ETERNUS DX80/DX90/DX410/DX440/DX8100/DX8700 S2 may not work.
Workaround	When you enable and disable the remote power management of RCIL, reboot XSCF.

Table 3-39   Problems Resolved in Versions Prior to XCP 2050 *(continued)*

RTI No.	**RTIF2-121129-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	During operation of the XSCF firmware, a "system backup memory access error", which is an error in the PSU backplane (PSUBP), may be erroneously detected and registered in the error log. If this erroneous detection occurs during the start process of the physical partition (PPAR), the start of the PPAR may fail. Also, if it occurs during the collection of log information, the log information collection fails. In addition, a failure mark may be displayed on the PSUBP when the error is detected. If the failure mark is displayed on the PSUBP, the resources necessary for starting the PPAR are insufficient. Therefore, when start of the PPAR is requested, a log indicating that the start of the PPAR failed is registered in the power log. You can display the power log with the showlogs power command.

Workaround	If you find a log described in "Description," execute the showstatus(8) or showhardconf(8) command to check whether the failure mark is displayed on the PSUBP.
	- When the failure mark is not displayed on the PSUBP:
	  No problem has occurred in the hardware. So, ignore the error log and continue the operation.
	- When the failure mark is displayed on the PSUBP:
	  Clear the failure mark by using the following procedure.
	  1. Switch the mode switch on the operation panel to the Service mode position.
	  2. Turn the power to the target SPARC M10 system chassis off and then on again, and then reboot the XSCF. For the SPARC M10-4S, turn the power to every SPARC M10-4S chassis off and then on again.
	  3. After the XSCF has been rebooted, return the mode switch on the operation panel to its original position.
	If the same error recurs even after rebooting the XSCF, there is a possibility that the error has not been erroneously detected but that a PSUBP hardware failure has occurred. Ask your Fujitsu field engineer (service provider) to replace the PSUBP.

RTI No.	**RTIF2-121129-002**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	When you replace the CPU memory unit lower (CMUL) or motherboard unit (MBU), the XSCF user account information may be deleted. To recover the XSCF user account information, you need to use the restoreconfig(8) command to restore the information saved by the dumpconfig(8) command.
Workaround	After you have conducted the replacement, use the restoreconfig(8) command to restore the information saved by the dumpconfig(8) command, or set the XSCF user account information again.
RTI No.	**RTIF2-121129-004**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	The restoredefaults(8) cannot initialize the following information. The setting information remains as it is. - Time zone of the XSCF - Server certificate for HTTPS
Workaround	There is no effective workaround. Reset by the settimezone(8), sethttps(8), and setssh(8) commands.

Table 3-39   Problems Resolved in Versions Prior to XCP 2050 *(continued)*

RTI No.	**RTIF2-121113-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	After setting an invalid value for the user name with the setsmtp(8) command, you execute the setemailreport(8) command to send a test mail. Then the reply address shows that the mail has been successfully sent.
Workaround	There is no effective workaround. Even if it is displayed that the test mail has been successfully sent, it is not sent.
RTI No.	**RTIF2-121113-002**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If you execute the setaudit delete command and use the viewaudit(8) to display the audit log, some audit logs may not be deleted.
Workaround	There is no effective workaround.
RTI No.	**RTIF2-121113-006**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If you display the XSCF Web screen in another window or in another tab without using the XSCF Web menu, contents may not be normally displayed.
Workaround	For operation to display the XSCF Web screen, use the menu tree.
RTI No.	**RTIF2-121113-007**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	While XSCF is starting, process down, panic or watchdog timeout occurs, which may cause XSCF to be reset.
Workaround	Confirm that XSCF is successfully started. If it is not started, turn off the power of the physical partition (PPAR), and then disconnect the input power supply to the system and back on again (AC OFF/ON). When recycling the power supply to the system, wait for 30 seconds or more to turn on the input power supply after disconnecting it. In case XSCF is not started even if recycling the input power supply to the system, replace the CPU memory unit lower (CMUL) or the motherboard unit (MBU).
RTI No.	**RTIF2-121113-009**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	While XSCF is running, process down, panic or watchdog timeout occurs, which may cause XSCF not to be rebooted after XSCF reset.
Workaround	Confirm that XSCF is successfully started. If it is not started, turn off the power of the physical partition (PPAR), and then disconnect the input power supply to the system and back on again (AC OFF/ON). When recycling the power supply to the system, wait for 30 seconds or more to turn on the input power supply after disconnecting it. In case XSCF is not started even if recycling the input power supply to the system, replace the CPU memory unit lower (CMUL) or the motherboard unit (MBU).

Table 3-39	Problems Resolved in Versions Prior to XCP 2050 *(continued)*
RTI No.	**RTIF2-121113-011**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If you execute the showsnmp(8) command, the following message may appear, which means that the snmp daemon has been terminated. Agent Status: Disabled
Workaround	Execute the showsnmp(8) command again to confirm that the snmp daemon is restarted. If "Agent Status: Disabled" remains displayed, execute the setsnmp enable command to restart the snmp daemon.
RTI No.	**RTIF2-121113-014**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	The error message "/etc/redhat-release not found" appears while XSCF is starting.
Workaround	Ignore this message.
RTI No.	**RTIF2-121113-018**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	When you replace an FRU with the replacefru(8) command, the message "configuration changed (...)" showing the configuration change may be registered more than once in the event log.
Workaround	Ignore the message that appears second time and later.
RTI No.	**RTIF2-121113-019**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	When the power supply of the physical partition (PPAR) is disconnected according to the power supply schedule, "-" may be displayed as the cause (Cause) in the power log.
Workaround	There is no effective workaround.
RTI No.	**RTIF2-121113-021**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If time cannot be read accurately due to a failed clock in the XSCF board, an error showing a clock failure may not be recorded in the error log.
Workaround	There is no effective workaround. If the following message appears when you execute the poweron(8) command, the clock in the XSCF board has failed. Replace the XSCF board. Poweron canceled due to invalid system date and time.
RTI No.	**RTIF2-121113-022**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If the operation panel has failed or is not connected, XSCF cannot be started.
Workaround	Connect the operation panel. If the operation panel has failed, replace it.

Table 3-39   Problems Resolved in Versions Prior to XCP 2050 *(continued)*

RTI No.	**RTIF2-121113-023** **RTIF2-121113-028**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If a CPU failure occurs while Hypervisor is running, the physical partition (PPAR) is reset more than once, and restarting of the PPAR may take time.
Workaround	There is no effective workaround.
RTI No.	**RTIF2-121113-025**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	When a CPU failure occurs, an error message showing degradation or offline on Oracle Solaris may not be output to Syslog.
Workaround	Use the showlogs(8) command to check a failure state on XSCF.
RTI No.	**RTIF2-121113-027**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If you update the firmware and then upload XCP with XSCF Web without rebooting XSCF, uploading of XCP will fail and the XSCF Web session will time out.
Workaround	If you update the firmware and then continue to upload XCP with XSCF Web, reboot XSCF.
RTI No.	**RTIF2-121113-031**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	After creating an I/O domain to which the PCI card is assigned with Oracle VM Server for SPARC, turn on the power of the I/O domain. If you then stop it in ok prompt, the configuration information of the PCI card may not be displayed with the showhardconf(8) command of XSCF.
Workaround	Start Oracle Solaris of the logical domain to which the PCI card is assigned with Oracle VM Server for SPARC.

Problems With Oracle Solaris and Workarounds

This section describes problems with Oracle Solaris and workarounds for each version.

Problems That Might Occur in Any Versions of Oracle Solaris and Workarounds

The following table lists the problems that might occur in any versions of Oracle Solaris being supported and workarounds for them.

Table 3-40   Problems That Might Occur in Any Versions of Oracle Solaris and Workarounds

Bug	**25028104**
Model	**SPARC M12-2S, SPARC M10-4S**
Description	If the root complex is dynamically added/deleted by dynamic reconfiguration of the physical partition, the PCIe end point device under the added/deleted root complex may not be reflected to the PCIe end point device configuration information shown by the XSCF showpparinfo(8) command.
Workaround	There is no workaround. [How to restore] Execute the svcadm command in the control domain to restart the ldoms/ldmd services. # svcadm restart Idoms/ldmd
Bug	**24718083**
Model	**SPARC M12-1, SPARC M12-2, SPARC M12-2S, SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If the XSCF is rebooted while the control domain is running, the power capping function will not work.
Workaround	There is no effective workaround. [How to restore] Execute the svcadm command to restart the ldoms/ldmd service. # svcadm restart ldmd

Table 3-40	Problems That Might Occur in Any Versions of Oracle Solaris and Workarounds *(continued)*
Bug	**23025823**
Model	**SPARC M12-2S, SPARC M10-4S**
Description	The addboard command fails to revert the I/O devices which have been degraded with the deleteboard command. This phenomenon occurs when all of the following conditions are true: - There is/are root domain(s) with two or more root complexes. - The deleteboard command removes root complexes from the root domain(s). - At least one endpoint in one or more of the removed root complexes is either unassigned or assigned to another domain. - The addboard command restores the root complex(es). [Error message example] `-------------------------------------------------------------------` XSCF> **addboard -v -y -c configure -m bind=resource -p 0 00-0** PSB#00-0 will be configured into PPAR-ID 0. Continue?[y|n] :**y** Start connecting PSB to PPAR. [3600sec] 0./ (Omitted) Processing of the incoming DR request by the LDoms Manager is pending Incoming DR request is being processed by the LDoms ManagerDR sequence started (sequence#=2, message#=6) ...../ Restoring primary failed, it failed in the allocation of PCIE0 60../ Restoring primary failed, it failed in the allocation of PCIE1 .- Restoring primary failed, it failed in the allocation of PCIE2 ..\ Restoring primary succeeded, PCIE3 was assigned 90| Restoring ioroot failed, it failed in the allocation of PCIE4 ..| Restoring ioroot failed, it failed in the allocation of PCIE5 ./ Restoring primary failed, it failed in the allocation of PCIE6 .\ Restoring primary failed, it failed in the allocation of PCIE7 (Omitted) Restoring primary succeeded, 15 core(s) were assigned .| Restoring guest1 succeeded, 34896609280 byte memory were assigned DR sequence finished (sequence#=2, message#=6) end PSB#00-0 could not be configured into PPAR-ID 0 due to operating system or Logical Domains Manager error. XSCF> `-------------------------------------------------------------------` Moreover, once this phenomenon occurs, retrying addboard fails and the ldmd daemon might dump core.
Workaround	Execute the addboard command with -m bind=none option and recover the I/O configuration manually.

Table 3-40 Problems That Might Occur in Any Versions of Oracle Solaris and Workarounds *(continued)*

Bug	-
Model	**SPARC M12-1, SPARC M12-2, SPARC M12-2S, SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	When a logical domain with a 10 Gigabit Ethernet card (SP1X7HF1F) for which the value of OpenBoot PROM environment variable diag-switch? is set to true, the console displays the following warning message and the error log records "Msg: Device error (FCode informed error)". WARNING: /pci@X,XXXXXX: FCODE mapin doesn't match decoded register type; Also, executing the showstatus(8) command may show "Degraded" for the FRU on which the relevant PCI card is mounted.
Workaround	Ignore all these outputs. To prevent these outputs, execute the following command on the ok prompt to change the value of OpenBoot PROM environment variable diag-switch? to false. setenv diag-switch? false
Bug	-
Model	**SPARC M12-2S, SPARC M10-4S**
Description	If dynamic reconfiguration is performed on a physical partition which has a dual channel 10G FCoE card (SP1X7FBR2F/SP1X7FBS2F/7101683 (7101684)+7101687 (7101688)) mounted on it, system panic may occur due to the processing of the emlxs driver.
Workaround	There is no effective workaround. Use Oracle Solaris 11.2 SRU 11.2.2.8.0 or later and Oracle Solaris 10 1/13 or later. If this specific card is mounted on a system, conduct any reconfiguration in deactivated state instead of dynamic reconfiguration.
Bug	-
Model	**SPARC M12-2S, SPARC M10-4S**
Description	If dynamic reconfiguration is performed on a physical partition which has a Dual Port Gigabit Ethernet card (MMF) (SP1X7GD1F/7100482 (7100481)), connection is terminated.
Workaround	There is no effective workaround. If this specific card is mounted on a system, conduct any reconfiguration in deactivated state instead of dynamic reconfiguration.
Bug	-
Model	**SPARC M12-1, SPARC M12-2, SPARC M12-2S, SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	When "Oracle VM Server for SPARC 3.1.1.1" is installed on the control domain, messages like the following will be registered to the log file (/var/svc/log/ldoms-ldmd:default.log) of the ldoms/ldmd service. [Example of message] Get Device ID command failed: Unknown (0x7E) ERROR: Cannot connect to BMC
Workaround	There is no effective workaround. Ignore this message because there is no impact on system operation.

Table 3-40	Problems That Might Occur in Any Versions of Oracle Solaris and Workarounds *(continued)*

Bug	-
Model	**SPARC M12-2S, SPARC M10-4S**

Description	When physical partition dynamic reconfiguration (PPAR DR) is performed to replace a building block in a physical partition containing logical domains with the whole-core constraint and logical domains without the whole-core constraint, the number of CPUs and memory size of the whole-core constrained domains may not be restored correctly.
	With the ldm list-domain command, you can check whether the whole-core constraint is enabled for a logical domain. In the following example, the whole-core constraint is applied on the logical domain domain-A and not on the logical domain domain-B.
	primary# **ldm list-domain -o resmgmt**
	NAME
	domain-A
	
	CONSTRAINT
	   cpu=whole-core
	   max-cores=unlimited
	
	-- 	
	NAME
	domain-B
	
	CONSTRAINT

Workaround	Enable the whole-core constraint for all logical domains in the physical partition, or disable it for all the logical domains. For details on how to set the whole-core constraint, see the *Oracle VM Server for SPARC 3.4 Administration Guide*. [How to restore] Execute the ldm command to manually restore the resources of the domain.
Bug	-
Model	**SPARC M12-1, SPARC M12-2, SPARC M12-2S**
Description	When you start the SunVTS 7.0 ps19 tests on a SPARC M12 system, they may terminate with an error.
Workaround	There is no effective workaround.

Problems That Might Occur With Oracle Solaris 11 and Workarounds

The following table lists the problems that might occur with Oracle Solaris 11 and workarounds for them.

Table 3-41   Problems That Might Occur With Oracle Solaris 11 and Workarounds

Bug	**16312511**
Model	**SPARC M12-2S, SPARC M10-4S**
Description	In the environment described below, if the system board is deleted by the physical partition dynamic reconfiguration (PPAR DR) function, a system board deletion failure, stop of virtual function (VF) communication, a root domain panic, and other phenomena may occur. The environment has an SR-IOV configuration, and either a 10 Gigabit Ethernet card running the ixgbe driver for the root domain or the onboard LAN of the SPARC M12-2S is assigned there.
Workaround	PPAR DR cannot be used in the above SR-IOV configuration. Use it in a virtual network (vnet) configuration.
Bug	**24567071**
Model	**SPARC M12-1, SPARC M12-2, SPARC M12-2S**
Description	If dynamic PCIe bus assignment and the dynamic reconfiguration function for PCIe end points are executed in the following procedure, only one of the two onboard ixgbe ports of the SPARC M12 is recognized. 1. Assign the PCIe bus that is connected to the two onboard ixgbe ports to the root domain by using the dynamic PCIe bus assignment function. 2. Delete the two onboard ixgbe ports under the PCIe bus assigned in step 1 from the root domain by using the dynamic reconfiguration function for PCIe end points. 3. Assign the two ixgbe ports deleted in step 2 to an I/O domain by using the dynamic reconfiguration function for PCIe end points. 4. Delete the two ixgbe ports added in step 3 from the I/O domain by using the dynamic reconfiguration function for PCIe end points. 5. Return the two ixgbe ports deleted in step 4 to the root domain by using the dynamic reconfiguration function for PCIe end points.
Workaround	This has been modified with SRU 11.3.17.5.0. Apply SRU 11.3.17.5.0 or later to the control and root domains.
How to restore	Using the dynamic PCIe bus assignment function, delete the PCIe bus from the root domain and then assign the PCIe bus to the root domain again.

Bug	**24754492**
Model	**SPARC M12-2, SPARC M12-2S, SPARC M10-4, SPARC M10-4S**

Description	The logical domain panic may occur or the ldmd daemon may generate a core dump when you execute the ldm shrink-socket command to remove memory from logical domains if both of the following conditions are met.
	- Oracle Solaris is running in logical domains.
	- Multiple memory blocks on the same CPU socket are allocated to logical domains.
	You can check memory allocation of each CPU socket's memory by the ldm list-socket command. In the following example, two memory blocks on CPU socket #0 are allocated to logical domain domain-A.
	  # ldm list-socket -o memory domain-A
	
	  MEMORY
	    PA SIZE SOCKET_ID BOUND
	    0x7e0450000000 16G 0 domain-A
	    0x7e08d0000000 1536M 0 domain-A

Workaround	This has been modified with SRU 11.3.14.6.0. Execute the ldm remove-memory command in place of the ldm shrink-socket command to remove memory from logical domains.
Bug	**24973255**
Model	**SPARC M12-2, SPARC M12-2S**
Description	Even when the following settings are implemented for Oracle Solaris kernel zones, warm/live migration of the Oracle Solaris kernel zone that is set with cpu_arch= sparc64-class from a SPARC M12 system to a SPARC M10 system may fail. /etc/system file --- set enable_1ghz_stick = 1 set uhrt_enable=0x0 --- For details on settings in the /etc/system file, see "8.2.3　Notes on Oracle Solaris Kernel Zones" in the *Fujitsu SPARC M12 and Fujitsu M10/SPARC M10 System Operation and Administration Guide*. This bug occurs when the OS of the Oracle Solaris kernel zone is Oracle Solaris 11.3 SRU 11.3.15.4.0 or Oracle Solaris 11.3 SRU 11.3.16.3.0.
Workaround	This has been modified with SRU 11.3.17.5.0. Apply SRU 11.3.17.5.0 to the Oracle Solaris kernel zone for which warm/live migration is executed.

Table 3-41   Problems That Might Occur With Oracle Solaris 11 and Workarounds *(continued)*

Bug	**25262938** **25954620**
Model	**SPARC M12-1, SPARC M12-2, SPARC M12-2S**
Description	Execution of the nvmeadm or fwupdate command may fail with the following message displayed. [Display example] # nvmeadm ERROR: Platform not supported # fwupdate ERROR: Platform not supported
Workaround	Perform the following procedure.

1. Delete the configuration information files in /etc/ssm/hmp.
       # rm /etc/ssm/hmp/*
2. Execute nvmeadm or fwupdate.
       # nvmeadm
               Or
       # fwupdate

   Configuration information files are automatically created in /etc/ssm/hmp.

3. Create the following configuration information files.
   Create the following two files in a text editor:
     host_profile.xml
     platforms.json

- Creating host_profile.xml
cat /tmp/host_profile.xml
```xml
<?xml version="1.0" encoding="utf-8"?>
<hmp_profile schemaVersion="1">
    <control>
        <!-- Time in seconds from Epoch. -->
        <timestamp>1438633604</timestamp>

        <!-- Minimum version of HMP supported -->
        <hmp_min_ver>2.3.2</hmp_min_ver>

        <!-- ilom, host, patch, other -->
        <origin>ILOM</origin>

        <supported_platforms>SPARC M12-1</supported_platforms>
        <supported_platforms>SPARC M12-2</supported_platforms>
        <supported_platforms>SPARC M12-2S</supported_platforms>
    </control>

    <tool_support>
        <element>

            <platform_name>SPARC M12-1</platform_name>
            <platform_name>SPARC M12-2</platform_name>
            <platform_name>SPARC M12-2S</platform_name>
```

```
                <utility_property>
                    <name>ALL</name>
                    <supported>NO</supported>
                    <add_runtime_mode>DEFAULT</add_runtime_mode>
                </utility_property>
                <utility_property>
                    <name>FWUPDATE</name>
                    <supported>YES</supported>
                    <add_runtime_mode>DEFAULT</add_runtime_mode>
                </utility_property>
                <utility_property>
                    <name>NVMEADM</name>
                    <supported>YES</supported>
                    <add_runtime_mode>DEFAULT</add_runtime_mode>
                </utility_property>
            </element>
        </tool_support>
        <platform_data>
        {
            "version": "1.0.0.0",
            "platforms": {
                "aliases": {
                    "SPARC  M12-1": "undefined",
                    "SPARC  M12-2": "undefined",
                    "SPARC  M12-2S": "undefined"
                },
                "hosts": {
                    "undefined": {
                        "internal_hbas": {
                            "1000:0050:1000:3060":
                            {
                                "backplanes": [ "internal_4_square" ],
                                "nac_name_format": "/SYS/SASBP/HDD%d"
                            }
                        }
                    }
                }
            }
        }
        </platform_data>
    </hmp_profile>

    - Creating platforms.json
    # cat /tmp/platforms.json
        {
            "version": "1.0.0.0",
            "platforms": {
                "aliases": {
                    "SPARC  M12-1": "undefined",
                    "SPARC  M12-2": "undefined",
                    "SPARC  M12-2S": "undefined"
                },
```

```
"hosts": {
    "undefined": {
        "internal_hbas": {
            "1000:0050:1000:3060":
            {
                "backplanes": [ "internal_4_square" ],
                "nac_name_format": "/SYS/SASBP/HDD%d"
            }
        }
    }
}
```

4. Replace files with these configuration information files.
    # rm /etc/ssm/hmp/host_profile.xml
    # rm /etc/ssm/hmp/platforms.json
    # cp /tmp/host_profile.xml   /etc/ssm/hmp/host_profile.xml
    # cp /tmp/platforms.json /etc/ssm/hmp/platforms.json

5. Execute the fwupdate or nvmeadm command again.
    No error message will appear, and the command will be executed normally.

Bug	**24819902**
Model	**SPARC M12-2S, SPARC M10-4S**
Description	In the control domain with SRU 11.3.8.7.0 (Oracle VM Server for SPARC 3.4) or later applied, the deleteboard command may behave inappropriately where at least one logical domain binds cores shared with another logical domain. This is because Oracle VM Server for SPARC wrongly calculates the number of CPU cores to be removed. [Example] - The deleteboard -m unbind=resource command succeeds but the more CPUs are removed than necessary. - The deleteboard -m unbind=resource command fails even if the CPU allocation is the same as one where it succeeds with Oracle VM Server for SPARC 3.3. - The deleteboard -m unbind=none command fails even though there are sufficient free CPUs in the remaining system boards.

Workaround	Apply either of the following (1) or (2).
	(1) Assign virtual CPUs with the whole-core constraint.
	(2) Change the PPAR DR policy to "targeted".
	  # svcadm disable ldmd
	  # svccfg -s ldmd setprop ldmd/fj_ppar_dr_policy=targeted
	  # svcadm refresh ldmd
	  # svcadm enable ldmd

Table 3-41	Problems That Might Occur With Oracle Solaris 11 and Workarounds *(continued)*
Bug	**20882700**
Model	**SPARC M12-1, SPARC M12-2, SPARC M12-2S, SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	After you execute dynamic reconfiguration of physical partitions, or after you execute the ldm add-io/remove-io command to add/delete a resource dynamically, a message indicating that the resource was added/deleted may be output to the console.
	[Example 1]
	SUNW-MSG-ID: FMD-8000-CV, TYPE:
	Alert, VER: 1, SEVERITY: Minor
	EVENT-TIME: Mon May 11 20:04:48 JST 2015
	PLATFORM: ORCL,SPARC64-X, CSN:
	2081232009, HOSTNAME: 4S-408-D0
	SOURCE: software-diagnosis, REV: 0.1
	EVENT-ID: 76d8e4f6-d621-4ede-a86e-
	93abcdc908a6
	DESC: FRU '/SYS//BB0/CMUU/CMP1/
	MEM17A' has been removed from the
	system.
	...
	[Example 2]
	SUNW-MSG-ID: FMD-8000-A0, TYPE:
	Alert, VER: 1, SEVERITY: Minor
	EVENT-TIME: Thu May 14 15:50:31 JST 2015
	PLATFORM: unknown, CSN: unknown, HOSTNAME: iodom0
	SOURCE: software-diagnosis, REV: 0.1
	EVENT-ID: 1f8d1ae8-9097-4204-b5d6-d605aac28390
	DESC: FRU '/SYS/BB#1-PCI#6' has been added to the system.
	...
Workaround	Before executing dynamic reconfiguration of physical partitions, or before executing the ldm add-io/remove-io command to add/delete a resource dynamically, add the setting below to the /usr/lib/fm/fmd/plugins/fru-monitor.conf file of all logical domains where Oracle Solaris 11.3 is installed. Then, restart the logical domains.
	setprop fmon_alert_enable "false"

Table 3-41   Problems That Might Occur With Oracle Solaris 11 and Workarounds *(continued)*

Bug	**20950622**
Model	**SPARC M12-1, SPARC M12-2, SPARC M12-2S, SPARC M10-4, SPARC M10-4S**
Description	Suppose the root domain is running Oracle Solaris 11.3 or later when an I/O domain created in one of the following procedures is started/restarted. Then, OpenBoot PROM aborts, and the I/O domain cannot be started/restarted. [Creation pattern 1] 1. Add a PCI expansion unit to the root domain by using the PCI hot plug (PHP) function. 2. Add two PCI cards to the PCI expansion unit by using PHP. 3. Dynamically create a virtual function (VF) from the physical function (PF) of each PCI card. 4. If the created VF is dynamically assigned to an active I/O domain, OpenBoot PROM will abort when the I/O domain restarts. Or 4. If the created VF is statically assigned to an inactive I/O domain, OpenBoot PROM will abort when the I/O domain starts. [Creation pattern 2] 1. Add the PCIe bus to the root domain by using dynamic PCIe bus assignment. 2. Add two PCI cards to the same PCIe bus on the root domain by using PHP. 3. If each PCI card is dynamically assigned to an active I/O domain, OpenBoot PROM will abort when the I/O domain restarts. Or 3. If each PCI card is statically assigned to an inactive I/O domain, OpenBoot PROM will abort when the I/O domain starts. After step 2, even if you dynamically create a virtual function (VF) from the physical function (PF) of each PCI card and assign the created VF to an I/O domain, the same phenomenon occurs. [Creation pattern 3] 1. With two PCI cards mounted to the same PCIe bus, use dynamic PCIe bus assignment to add the PCIe bus to the root domain. 2. If each PCI card is dynamically assigned to an active I/O domain, OpenBoot PROM will abort when the I/O domain restarts. If each PCI card is statically assigned to an inactive I/O domain, OpenBoot PROM will abort when the I/O domain starts. After step 1, if you dynamically create a virtual function (VF) from the physical function (PF) of each PCI card and assign the created VF to an I/O domain, the same phenomenon occurs.
Workaround	To prevent OpenBoot PROM from aborting, delete the VFs and the PCI cards assigned to the I/O domain by using the ldm remove-io command before starting/restarting the I/O domain. After starting the I/O domain, dynamically reassign the VFs and the PCI cards with the ldm add-io command.
Bug	**21654442**
Model	**SPARC M12-1, SPARC M12-2, SPARC M12-2S, SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If the Virtual SCSI Host Bus Adapter function is used, the following warning message may be output for the root domain or an I/O domain. [Example] vsan: WARNING: vsan_walk_match_func: iport-dip(40010ef2fd8): dip(40010ef29b8): prop(class) not found
Workaround	This has been modified with SRU 11.2.11.5.0. This message has no effect on the functioning of the system, ignore it.

Table 3-41	Problems That Might Occur With Oracle Solaris 11 and Workarounds *(continued)*
Bug	**21849217**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	For Oracle Solaris 11.2 SRU 11.2.14.5.0 or later and for Oracle Solaris 11.3 or later, the following error message may be output when the fwupdate command is executed, and the command may terminate abnormally. ERROR: Could not identify host type
Workaround	Delete all the files in the /etc/ssm/hmp directory, and then execute the fwupdate command. # cd /etc/ssm/hmp # rm -f * Do not delete the /etc/ssm/hmp directory at this time. After you execute the fwupdate command, new files are created in the /etc/ssm/hmp directory. Do not delete these files.

Table 3-41 Problems That Might Occur With Oracle Solaris 11 and Workarounds *(continued)*

Bug	**21779989**
Model	**SPARC M12-1, SPARC M12-2, SPARC M12-2S, SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If you execute the ldm list-hba command supported in Oracle VM Server for SPARC 3.3 in a system with the PCI expansion unit connected, the device alias of SLOT4 and later of the PCI expansion unit is displayed by mistake.

[Example]
ldm list-hba -l -t -d primary
NAME   VSAN
----   ----
/SYS/MBU/SASHBA/HBA0/PORTf
[/pci@8000/pci@4/pci@0/pci@0/scsi@0/iport@f]
 :
/SYS/PCI1/<u>SLOT2</u>/HBA0/PORT0/0/f
          SLOT4 is correct.
[/pci@8100/pci@4/pci@0/pci@1/pci@0/pci@0/pci@0/pci@1/pci@0/pci@10/pci@0/pci@0/LSI,sas@0/
iport@f]
    init-port w500605b0045c8a90
    Transport Protocol SAS
/pci@8100/pci@4/pci@0/pci@1/pci@0/pci@0/pci@0/pci@1/pci@0/pci@10/pci@0/pci@0/LSI,sas@0/
iport@f/smp@w50080e52b93fd03f
    tport w50080e52b93fd03f
c31t50000394281BBA1Ad0s0
    tport w50000394281bba1a
    lun 0
/pci@8100/pci@4/pci@0/pci@1/pci@0/pci@0/pci@0/pci@1/pci@0/pci@10/pci@0/pci@0/LSI,sas@0/
iport@f/enclosure@w50080e52b93fd03d,0
    tport w50080e52b93fd03d
    lun 0
 :

Workaround	This has been modified with SRU 11.2.11.5.0.

This problem may occur even after SRU 11.3.4.5.0 is applied. In such a case, follow the procedure in "10.12   Saving/Restoring Logical Domain Configuration Information in an XML File" in the *Fujitsu SPARC M12 and Fujitsu M10/SPARC M10 System Operation and Administration Guide* to save and then restore the logical domain configuration information.
[Alternative method]
If you execute vHBA related commands such as ldm add-vsan, specify the device path instead of the device alias.
[Example]
ldm add-vsan /pci@8100/pci@4/pci@0/pci@1/pci@0/pci@0/pci@0/pci@1/pci@0/pci@10/ pci@0/pci@0/LSI,sas@0/iport@f vsan0 ldom1

Bug	-
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	When the fwupdate command is executed, the following message may be output. Get Device ID command failed: Unknown (0x7E) No metadata provided, so version verification can not be completed
Workaround	Ignore this error message because there is no impact on command operation.

Bug	20646928
Model	**SPARC M12-2S, SPARC M10-4S**
Description	If you perform dynamic deletion with the dynamic reconfiguration function of the physical partition for a system board with the system volume located in the following environment, system board deletion processing may fail. [Problem occurrence conditions] 1) A ZFS mirror of the system volume has been created using multiple disks, and 2) the mirroring disk and mirrored disk are located on different system boards, and 3) the system board to which the system volume is assigned has been dynamically deleted. [Example of output message] XSCF> **deleteboard -c disconnect -m unbind=resource 00-0** PSB#00-0 will be unconfigured from PPAR immediately. Continue?[y|n] :**y** All domains are temporarily suspended, proceed?[y|n] :**y** Start unconfigure preparation of PSB. [1200sec] 0end Unconfigure preparation of PSB has completed. Start unconfiguring PSB from PPAR. [7200sec] 0.... \ The removal of PCIE0 from the domain primary failed. Error message from svc:/ldoms/agents in domain primary: ERROR: devices or resources are busy. end PSB#00-0 could not be unconfigured from PPAR-ID 0 due to operating system or Logical Domains Manager error.
Workaround	This has been modified with SRU 11.3.5.6.0.
Bug	25473170
Model	**SPARC M12-1, SPARC M12-2, SPARC M12-2S, SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	In Oracle Solaris 11.2 SRU 8.4 or later, suppose that the network interface of the dual 10Gbps FCoE card that is made by QLogic and runs the qlcnic driver is deactivated. When it is activated again (*1), panic may occur with the following message displayed during communication using this interface. panic[cpux]/thread=xxxxxxxxxxx: Fatal error has occured in: PCIe fabric.(0x40)(0x41) *1 This applies to the following cases, where the dual 10Gbps FCoE card is used. - To change the configuration, the interface has been deactivated by the ipadm delete-ip or ifconfig unplumb command, and activated again by the ipadm create-ip or ifconfig plumb command. - The FCoE interface is assigned to a logical domain. Even after the logical domain has been suspended and resumed, the physical partition dynamic reconfiguration (PPAR DR) function is used to continue operation. - PRIMECLUSTER Global Link (NIC switching method) has been used to switch or switch back a redundant NIC.
Workaround	Perform the following procedure. 1. Copy the /kernel/drv/qlcnic.conf file to the /etc/driver/drv directory. 2. Add the "enable_multi_rds_sets = 0;" line to the copied file. 3. Restart the OS.

Table 3-41	Problems That Might Occur With Oracle Solaris 11 and Workarounds *(continued)*
Bug	**25976819**
Model	**SPARC M12-1, SPARC M12-2, SPARC M12-2S, SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	In an environment with Oracle VM Server for SPARC 3.3 or later installed on the control domain, a logical domain may not recognize the replacement CPU after a faulty CPU was automatically replaced.
Workaround	This has been modified with SRU 11.3.23.5.0. [How to restore] Reboot the logical domain where the problem occurred.
Bug	**26052693**
Model	**SPARC M12-2S**
Description	In an environment with Oracle VM Server for SPARC 3.4.0.3 (SRU 11.3.18.6.0) or later installed on the control domain, if you reboot a logical domain after dynamically reconfiguring physical partitions with the XSCF deleteboard(8) command, then a panic on the logical domain may persist. [Panic message example] panic[cpu0]/thread=xxxxxxxx: tilelet_assign_cb: assigning pfns [4a0000, 4a8000) to mgid 39, mnodeid 57: pachunk 12 already assigned to mgid 3b, mnodeid 59

Workaround	This has been modified with SRU 11.3.23.5.0.
	[How to restore]
	Take action as follows for each logical domain where a panic occurred.
	- If a panic occurs on the control domain
	  1. Stop the physical partition.
	  2. With the addboard(8) command of the XSCF, return the physical partition to the state before the reconfiguration.
	  3. Start the physical partition again.
	  [Example]
	  XSCF> **poweroff -y -p 0**
	  XSCF> **addboard -y -c configure -m bind=none -p 0 01-0**
	  XSCF> **poweron -y -p 0**
	- If a panic occurs on a guest domain
	  Unbind the resource, and bind the resource again.
	  [Example]
	  primary# **ldm stop-domain guest**
	  primary# **ldm unbind-domain guest**
	  primary# **ldm bind-domain guest**
	  primary# **ldm start-domain guest**

Problems That Might Occur With Oracle Solaris 10 and Workarounds

The following table lists the problems that might occur with Oracle Solaris 10 and workarounds for them.

Table 3-42   Problems That Might Occur With Oracle Solaris 10 and Workarounds

Bug	15738030
Model	**SPARC M12-1, SPARC M12-2, SPARC M12-2S, SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If both of the following conditions are satisfied, a control domain panic may occur with "BAD TRAP: type=31". - The operating system of the control domain is Oracle Solaris 10. - As a result of executing ldm list-domain -o memory primary, the RA (real address) is greater than 0x200000000000.
Workaround	This has been modified with patch 148888-03 for Oracle Solaris 10. Perform the following procedure. 1. Execute ldm list-domain -o memory primary to display the value of SIZE. 2. Execute ldm start-reconf primary to enter the delayed reconfiguration mode. 3. Execute ldm remove-memory 256M primary to reduce the assigned memory. 4. Execute ldm set-memory <SIZE value in step 1> primary to return the assigned memory back to the original size. 5. Restart the Oracle Solaris of the control domain. 6. Execute ldm list-domains -o memory primary to confirm that the RA is smaller than 0x200000000000. 7. Execute ldm add-spconfig <configuration information name> to save the configuration information to the XSCF.

Problems Resolved in Oracle Solaris 11.3

The following table lists the problems resolved in Oracle Solaris 11.3. You might encounter them in supported releases earlier than Oracle Solaris 11.3.

Table 3-43   Problems Resolved in Oracle Solaris 11.3

Bug	15813959 15813960 (7196117)
Model	**SPARC M12-1, SPARC M12-2, SPARC M12-2S, SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	A PCI expansion unit is added using Oracle Solaris hotplug(1M) in a SPARC M12/M10 system. However, devices on the PCI expansion unit are not recognized.
Workaround	Before you add a PCI expansion unit by hotplug(1M), add the following line in the /etc/system file in advance and restart Oracle Solaris. set pcicfg:pcicfg_slot_busnums = 4 Note that the system does not recognize a device of a PCI expansion unit if you add the PCI expansion unit by PHP to a root complex that has been added by either of the following: the dynamic reconfiguration of the physical partition, or the Dynamic PCIe bus assignment. If this problem occurs, restart the logical domain to which the PCI expansion unit is assigned to make the system recognize the device of the PCI expansion unit.
Bug	17561541
Model	**SPARC M12-1, SPARC M12-2, SPARC M12-2S, SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	In a SPARC M10 environment with XCP 2230 or later applied, or in a SPARC M12 environment with XCP 3021 or later applied, suppose that the ldm add-io command is executed after the ldm remove-io command was executed during delayed reconfiguration. Then, the ldmd daemon may cause a core dump and restart.
Workaround	This has been modified with SRU 11.2.8.4.0 and Oracle VM Server for SPARC 3.2 for Oracle Solaris 10. During delayed reconfiguration, execute the ldm remove-io command after executing the ldm add-io command.
Bug	18502702
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If the SunVTS 7.0 ps17. 1 test is started on a SPARC M10 system with SPARC64 X+ processors, it may end with an error.
Workaround	This has been modified with SRU 11.2.1.5.0, and patch 151265-03 for Oracle Solaris 10.

Table 3-43   Problems Resolved in Oracle Solaris 11.3 *(continued)*

Bug	18595023
Model	**SPARC M12-1, SPARC M12-2, SPARC M12-2S, SPARC M10-1, SPARC M10-4, SPARC M10-4S**

Description	If the ldm list-io command is executed after PCI cards, which support the SR-IOV function, are mounted on PCI Expansion Unit's SLOT4 or higher, the pseudonym of the physical function of the PCI cards mounted on SLOT4 or higher is mistakenly shown as SLOT2. Moreover, the virtual functions created from the physical functions of the PCI cards that are mounted on SLOT4 or higher cannot be assigned to logical domains.
	[Example of command output]
	# **ldm ls-io -l**
	NAME TYPE BUS DOMAIN STATUS
	---- ---- --- ------ ------
	...
	/SYS/PCI1/SLOT5 PCIE PCIE1 primary OCC [pci@8100/pci@4/pci@0/pci@1/pci@0/
	pci@0/pci@0/pci@1/pci@0/pci@10/pci@0/pci@1]
	    network@0
	    network@0,1
	...
	/SYS/PCI1/SLOT2/IOVNET.PF0 PF PCIE1 primary
	[pci@8100/pci@4/pci@0/pci@1/pci@0/pci@0/pci@0/pci@1/pci@0/pci@10/pci@0/pci@1/network@0]
	    maxvfs = 7
	...

Workaround	This has been modified with SRU 11.2.2.5.0, and patch 150817-03 for Oracle Solaris 10.
Bug	18615814
Model	**SPARC M12-1, SPARC M12-2, SPARC M12-2S, SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	An I/O domain may output the following message, and Oracle Solaris panic may occur if a system board is deleted by executing dynamic reconfiguration of physical partitions (PPAR DR) or a PCIe end point device is dynamically removed from the I/O domain by executing the ldm remove-io command. panic[cpuX]/thread=XXXXXXXXXXX: mutex_exit: not owner, lp=XXXXXXXX owner=X thread=XXXXXXXXXXX
Workaround	This has been modified with SRU 11.2.8.4.0. Execute the svcadm(1M) command on the I/O domain to disable the intrd(1M) service before deleting the system board by executing dynamic reconfiguration of physical partitions (PPAR DR) or before removing the PCIe end point device from the I/O domain. # **svcadm disable intrd** Enable the intrd(1M) service after the process of the ldm remove-io command is completed. # **svcadm enable intrd**
Bug	18665751
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	When using XCP 2210, the Dynamic Resource Management (DRM) feature of Oracle VM Server for SPARC does not work.
Workaround	This has been modified with SRU 11.2.8.4.0 and Oracle VM Server for SPARC 3.2 for Oracle Solaris 10. Update the XCP firmware to XCP 2220 or later.

Table 3-43	Problems Resolved in Oracle Solaris 11.3 (*continued*)

Bug	**18747641**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	Core dumps may be produced or wrong calculation results may be obtained or a panic may occur when a program, which performs double-precision floating point instructions after enabling SPARC64 X/SPARC64 X+ processor-specific options and 4-byte boundary alignment (*1) and compiled with Oracle Solaris Studio compiler version 12.3 2013/06/17 or newer, is executed on a SPARC M10 system with Oracle Solaris 11.1 or newer. *1 The 4-byte boundary alignment is enabled by default when creating 64-bit programs. In case of 32-bit programs, it is enabled if "-xmemalign=Ns (N=1,2,4,8,16)" or "-fast" is not specified. [Procedure of checking compiler version] The "-V" option shows version information. The date is output at the end of version notation. The compiler version that corresponds to this bug is 2013/06/17 or newer. $ **cc -V** cc: Sun C 5.12 SunOS_sparc Patch 148917-06 2013/06/17 $ **f95 -V** (f90 and f77 are also same.) f95: Sun Fortran 95 8.6 SunOS_sparc Patch 148517-05 2013/06/17 $ **CC -V** CC: Sun C++ 5.12 SunOS_sparc Patch 148506-11 2013/06/17
Workaround	This has been modified with SRU 11.2.4.6.0. Recompile the program with the following "-xarch" flag. -xarch=sparcima
Bug	**19074260**
Model	**SPARC M10-4S**
Description	The following messages may be output in the log of ldoms/ldmd services (/var/svc/log/ldomsldmd:default.log), and the communication between ldmd daemon and XSCF may be disconnected during or after physical partition dynamic reconfiguration (PPAR DR). [Example of message] Sep 18 13:31:37 warning: Device busy: open_ldc_channel: Open of/devices/virtual-devices@100/channel-devices@200/virtual-channel@3:spds failed After that time, processes which need to communicate with XSCF such as PPAR DR or ldm list-spconfig command fail.
Workaround	This has been modified with SRU 11.2.8.4.0. [How to restore] Execute Oracle Solaris svcadm(1M) command to restart the ldoms/ldmd services. # **svcadm restart ldmd**
Bug	**19310540**
Model	**SPARC M10-4S**
Description	If the addboard(8) command is executed in the "factory-default" configuration, CPU cores may not be assigned to the control domain.
Workaround	This has been modified with SRU 11.2.8.4.0 and Oracle VM Server for SPARC 3.2 for Oracle Solaris 10. Add the CPU cores or threads which were not added, using the ldm add-core command or the ldm add-vcpu command.

Table 3-43   Problems Resolved in Oracle Solaris 11.3 *(continued)*

Bug	**19310550**
Model	**SPARC M12-2S, SPARC M10-4S**
Description	On a physical partition, to which 8 or more system boards have been assigned, when collecting dump files of the hypervisor which is executed as the ldoms/ldmd service is started, the following console messages is output by the ldoms/ldmd service, and it may fall back to maintenance mode. [Example of message] Feb 28 16:19:39 svc.startd[11]: ldoms/ldmd:default failed: transitioned to maintenance (see 'svcs -xv' for details)
Workaround	This has been modified with SRU 11.2.8.4.0 and Oracle VM Server for SPARC 3.2 for Oracle Solaris 10. [How to restore] Use the following process to change the timeout value of starting the ldoms/ldmd service to 600. **# svccfg -s ldmd listprop** : start/timeout_seconds count <u>180</u> : **# svccfg -s ldmd setprop start/timeout_seconds=600** **# svccfg -s ldmd listprop** : start/timeout_seconds count <u>600</u> : **# svcadm refresh ldmd** **# svcadm restart ldmd**
Bug	**19358400**
Model	**SPARC M12-1, SPARC M12-2, SPARC M12-2S, SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If the root complex is dynamically added/deleted, the PCIe end point device configuration information shown by the showpparinfo(8) command will not reflect the PCIe end point device under the added/deleted root complex.
Workaround	This has been modified with SRU 11.2.9.5.0. [How to restore] By restarting the logical domain that added/deleted the root complex dynamically, the showpparinfo(8) command displays the correct configuration information.

Table 3-43   Problems Resolved in Oracle Solaris 11.3 *(continued)*

Bug	19424242
Model	**SPARC M12-1, SPARC M12-2, SPARC M12-2S, SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	On a system to which Oracle VM Server for SPARC 3.1.0.1 or later is applied, the following event may occur: If all CPUs or memory in an I/O domain are degraded due to a CPU or memory failure, the ldmd service abnormally terminates, and, as a result, the ldm(1M) command terminates with an error.
Workaround	This has been modified with SRU 11.2.8.4.0 and Oracle VM Server for SPARC 3.2 for Oracle Solaris 10. [How to restore] Replace the faulty CPU or memory. If you want to boot Oracle Solaris while leaving the faulty CPU or memory installed, perform the following procedure on the XSCF: 1. Power off the physical partition (PPAR) by the poweroff(8) command. 2. Execute the setdomainconfig(8) command to place the PPAR in the factory-default state. XSCF> **setdomainconfig -p** *ppar_id* **-c default** 3. Execute the poweron(8) command to activate the PPAR. Oracle Solaris reboots in a configuration that includes only the control domain (factorydefault).
Bug	19424359
Model	**SPARC M12-1, SPARC M12-2, SPARC M12-2S, SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If the domain configuration is restored in the degraded configuration, both of the following settings are reset to their default values: the setting specifying whether to enable/disable hypervisor dump collection and the setting specifying whether to enable/disable automatic reboot during hypervisor dump collection. [Default values] Hypervisor dump collection: Enabled Automatic reboot during hypervisor dump collection: Disabled
Workaround	This has been modified with SRU 11.2.8.4.0 and Oracle VM Server for SPARC 3.2 for Oracle Solaris 10. [How to restore] After executing Oracle VM Server for SPARC ldm(1M) command to change the hypervisor dump setting, save the domain configuration information. # **ldm set-hvdump hvdump=***XXXX* **hvdump-reboot=***YYYY* # **ldm add-spconfig** *ZZZZ* After replacing the faulty component, execute the setdomainconfig(8) command to initiate a reboot with the original domain configuration.
Bug	19513561
Model	**SPARC M12-1, SPARC M12-2, SPARC M12-2S, SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	Oracle VM Server for SPARC ldmd daemon may repeat core dump if suspend process of the appropriate domain fails during live migration.
Workaround	This has been modified with SRU 11.2.8.4.0 and Oracle VM Server for SPARC 3.2 for Oracle Solaris 10. [How to restore] Restart the physical partition according to the following steps. 1. Execute the poweroff(8) command to power off the physical partition (PPAR). 2. Execute the poweron(8) command to restart PPAR.

Table 3-43   Problems Resolved in Oracle Solaris 11.3 *(continued)*

Bug	19680186
	19454809
Model	**SPARC M12-2S, SPARC M10-4S**
Description	If Oracle Solaris 11.2 and later is running and the system board is deleted by dynamic reconfiguration of physical partitions (PPAR DR), Oracle Solaris may panic.
Workaround	This has been modified with SRU 11.2.10.5.0. Add the following setting to /etc/system of all logical domains, and restart Oracle Solaris: **set lgrp_topo_levels=1** Be sure to delete set lgrp_topo_levels=1 in /etc/system before applying SRU 11.2.10.5.0 or later.
Bug	19728345
Model	**SPARC M10-4S**
Description	The physical partition dynamic reconfiguration (PPAR DR) fails if the ldoms/ldmd services are restarted because of Oracle Solaris panic and the like during PPAR DR.
Workaround	This has been modified with SRU 11.2.8.4.0 and Oracle VM Server for SPARC 3.2 for Oracle Solaris 10. [How to restore] Hypervisor abort may be caused from the operation of adding/removing memory to/from PPAR DR or a logical domain after the ldoms/ldmd services are recovered. Therefore, execute the poweroff(8) command for XSCF firmware to power off the physical partition (PPAR), then execute the poweron(8) command to power on the PPAR.
Bug	19913088
Model	**SPARC M12-1, SPARC M12-2, SPARC M12-2S, SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If a root complex with PCI expansion unit connected is added dynamically to the logical domain with the ldm add-io command, the logical domain may output the following message, causing Oracle Solaris to panic. panic[cpuX]/thread=XXXXXXXXXXXX: bad stack overflow at TL 1
Workaround	This has been modified with SRU 11.2.10.5.0. Before adding the root complex to the logical domain dynamically, add the following setting to /etc/system, and then reboot Oracle Solaris. set default_stksize = 0xa000
Bug	20061005
	19200041
Model	**SPARC M10-4S**
Description	If you use the ipadm(1M) command or the ifconfig(1M) command on the guest domain that has the physical device after you delete the system board dynamically with the deleteboard(8) command, the guest domain may output the following message, causing Oracle Solaris to panic. panic[cpuXX]/thread=XXXXXXXXXXXX: assertion failed: obj->afo_corep == NULL, file: ../../common/os/numaio.c, line: 724
Workaround	This has been modified with SRU 11.2.10.5.0. If you delete the system board dynamically with the deleteboard(8) command, execute the following command before you execute the ipadm(1M) command or the ifconfig(1M) command on the guest domain. # **modunload -i 0**

Table 3-43	Problems Resolved in Oracle Solaris 11.3 *(continued)*
Bug	**20458698**
Model	**SPARC M12-1, SPARC M12-2, SPARC M12-2S, SPARC M10-1, SPARC M10-4, SPARC M10-4S**

Description	No response time from the migration source domain may become long because a different process from the original live migration is performed during live migration. Network services and the like operating on the migration source domain may time out because of no response. This case occurs if the migration source domain meets both of the following conditions.
	- The difference between the maximum RA of the migration source domain (actual address) and its minimum RA cannot be divided by 64 MB
	- The remainder is 32 MB or less when the difference between the maximum RA of the migration source domain and its minimum RA is divided by 64 MB
	The maximum RA and the minimum RA of the domain can be checked with the following command.
	[Example]
	# **ldm list-domain -o memory domain-name**
	NAME
	domain-name
	MEMORY
	RA PA SIZE
	0x10000000 0x7b0fc0000000 1G
	      minimum RA
	0x400800000 0x7f01a0800000 11G
	           (a) (b)
	The maximum RA is the sum of (a) + (b), which will be 0x6c0800000.
	0x400800000 + 0x2c0000000(11G) = 0x6c0800000
	The difference between the maximum RA and the minimum RA is 27400 MB.
	0x6c0800000 - 0x10000000 = 0x6b0800000 = 27400 MB
	Therefore, the remainder is 8 MB in this example.
	27400 MB / 64 MB = 428 and the remainder is 8 MB

Workaround	This has been modified with SRU 11.2.11.5.0.

Table 3-43   Problems Resolved in Oracle Solaris 11.3 *(continued)*

Bug	20878144
Model	**SPARC M12-1, SPARC M12-2, SPARC M12-2S, SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	For Oracle Solaris 11.2 SRU 11.2.8.4.0 or later, "OS Started. No state support" is displayed by the showdomainstatus(8) command or in the event log when Oracle Solaris starts. This message indicates that the status of a logical domain has changed to Oracle Solaris. The following is an example of the message. XSCF> **showlogs event** Date Message --- Omitted --- Mar 27 15:55:31 ** Event: SCF:PPARID 0 GID 00000000 state change (OpenBoot Running) Mar 27 15:55:32 ** Event: SCF:PPARID 0 GID 00000000 state change (OpenBoot Primary Boot Loader) Mar 27 15:55:33 ** Event: SCF:PPARID 0 GID 00000000 state change (OpenBoot Running OS Boot) Mar 27 15:55:35 ** Event: SCF:PPARID 0 GID 00000000 state change (OS Started. No state support) Mar 27 15:55:36 ** Event: SCF:PPARID 0 GID 00000000 state change (OS Started. No state support) Mar 27 15:56:42 ** Event: SCF:PPARID 0 GID 00000000 state change (Solaris booting) Mar 27 15:57:37 ** Event: SCF:PPARID 0 GID 00000000 state change (Solaris booting) Mar 27 15:57:37 ** Event: SCF:PPARID 0 GID 00000000 state change (Solaris running) XSCF> **showdomainstatus -p 0** 2015-MM-DD hh:mm:ss Logical Domain Name Status primary OS Started. No state support.
Workaround	This has been modified with SRU 11.2.11.5.0. Ignore this message since it does not affect the system operation.

Table 3-43   Problems Resolved in Oracle Solaris 11.3 *(continued)*

Bug	20974426
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	In an environment with Oracle VM Server for SPARC 3.2 applied to the control domain and configuration information already saved in the XSCF, if the SPARC M10 system chassis or physical partition (PPAR) is stopped or started, the SPARC M10 system chassis or PPAR may not be able to start with the saved configuration information. This problem occurs when the configuration information is saved by any of the following means: - ldm add-spconfig -r command - Automatic recovery using automatic recovery policy 3 of Oracle VM Server for SPARC ldmd daemon (automatic saving of configuration information) You can check the automatic recovery policy of the ldmd daemon with the following command. The default for the automatic recovery policy is 1 (display warning messages in log files) [Example] # **svccfg -s ldmd listprop ldmd/autorecovery_policy** ldmd/autorecovery_policy integer 3
Workaround	This has been modified with SRU 11.2.11.5.0. [How to restore] - If the ldm add-spconfig -r command was executed, delete the saved configuration information, and overwrite it by saving the current configuration. [Example] # **ldm remove-spconfig CONF-A** # **ldm add-spconfig CONF-A** - If the automatic recovery policy is set to 3, change the automatic recovery policy to 1 by performing the following procedure. [Example] # **svccfg -s ldmd setprop ldmd/autorecovery_policy=1** # **svcadm refresh ldmd** If the SPARC M10 system chassis or PPAR cannot start with the saved configuration information, start the system in the factory-default configuration, and then restore the configuration information already saved in the XML file.
Bug	21106074
Model	**SPARC M12-1, SPARC M12-2, SPARC M12-2S, SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If any of aes-128-ccm, aes-192-ccm, and aes-256-ccm is specified for the encryption algorithm, accessing the ZFS data set with encryption enabled may cause a system panic. The default encryption algorithm is aes-128-ccm. If ZFS is encrypted with no encryption algorithm specified, aes-128-ccm is assumed specified. [Panic message example] panic[cpu34]/thread=2a1053d9c20: bad floating point trap at TL 1 %tl %tpc %tnpc %tstate %tt 1 00000000123eabc0 00000000123eabc4 8880001600 077 %gl: 00 %ccr: 88 %asi: 80 %cwp: 0 %pstate: 16 (Omitted)
Workaround	This has been modified with SRU 11.2.12.5.0. Add the following statements to the /etc/system file, and reboot. set auxv_cap_exclude_hw1=0x10000 set auxv_cap32_exclude_hw1=0x10000

Table 3-43   Problems Resolved in Oracle Solaris 11.3 *(continued)*

Bug	**21306352**
Model	**SPARC M12-2S, SPARC M10-4S**
Description	The physical partition dynamic reconfiguration (PPAR DR) feature may fail if used to delete a system board in an environment containing a root domain (not a control domain) running Oracle Solaris 11.2 SRU 11.2.9.5.0 or later. [Example] XSCF> **deleteboard -y -c disconnect -m unbind=resource 01-0** PSB#01-0 will be unconfigured from PPAR immediately. Continue?[y|n] :**y** Start unconfigure preparation of PSB. [1200sec] 0.end Unconfigure preparation of PSB has completed. Start unconfiguring PSB from PPAR. [7200sec] 0..... 30..... 60..... 90.....- end Timeout detected during communicate with Logical Domains Manager. XSCF>
Workaround	You can avoid this problem by deleting the PCIe bus on the target system board from the domain before the PPAR DR feature deletes the system board. [Example] primary# **ldm remove-io PCIE8 domainX** : primary# **ldm remove-io PCIE15 domainY** XSCF> **deleteboard -y -c disconnect -m unbind=resource 01-0** [How to restore] After deleting the PCIe bus on the target system board from the domain, re-execute the deleteboard command on the XSCF. [Example] primary# **ldm remove-io PCIE8 domainX** : primary# **ldm remove-io PCIE15 domainY** XSCF> **deleteboard -y -c disconnect -m unbind=resource 01-0**

Problems Resolved in Oracle Solaris 11.2

The following table lists the problems resolved in Oracle Solaris 11.2. You might encounter them in supported releases earlier than Oracle Solaris 11.2.

Table 3-44   Problems Resolved in Oracle Solaris 11.2

Bug	15812880
Model	**SPARC M12-2S, SPARC M10-4S**
Description	If you try to access, via telnet or ssh, a domain where 8000 GB (about 7.8 TB) or greater memory is mounted, the following message appears on the destination control domain console and the access fails. - For ssh error: /dev/ptmx: Not enough space error: session_pty_req: session 0 alloc failed - For telnet telnetd: open /dev/ptmx: Not enough space
Workaround	This has been modified with Oracle Solaris 11.1 SRU 3.5.1, and patch 148888-04 for Oracle Solaris 10. Execute the following command to change ptmx_ptymax: [Example] # **echo "ptms_ptymax/Z 0x400000" | mdb -kw** ptms_ptymax: 0 = 0x400000
Bug	15822113
Model	**SPARC M12-1, SPARC M12-2, SPARC M12-2S, SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If ldm add-vcpu and ldm remove-vcpu are repeatedly executed in a shell script, the process that is being run may cause a core dump and abnormally terminate.
Workaround	This has been modified with SRU 11.1.7.5.0. If this defect occurs because SRU is not applied, execute the command again. In addition, when executing ldm remove-vcpu, execute it in such a condition that the process load is low.

Table 3-44   Problems Resolved in Oracle Solaris 11.2 *(continued)*

Bug	**15823255**
Model	**SPARC M12-2S, SPARC M10-4S**

Description	An Oracle Solaris panic may occur if the CPU allocation is changed using Oracle Solaris psradm(1M) command or psrset(1M) command or the configuration of a virtual CPU is dynamically changed using Oracle VM Server for SPARC ldm command under the environment that meets the following two conditions.
	- The environment where the physical partition (PPAR) is composed of two or more SPARC M10-4S chassis.
	- The environment where the following lgroup exists when the lgrpinfo command is executed on the control domain or logical domain.
	Among the lgroups that are displayed as "lgroup XX (intermediate):",
	only one number is displayed before (CPU) of the "Lgroup resources:" field.
	This number is not displayed before (memory).
	[Example]
	# **/usr/bin/lgrpinfo**
	
	...
	lgroup 12 (intermediate):
	      Children: 10, Parent: 0
	      CPUs: 0 1
	      Memory: installed 520M, allocated 494M, free 26M
	      Lgroup resources: 1 (CPU); 10 11 (memory)
	      Latency: 21
	
	...

Workaround	This has been modified with Oracle Solaris 11.1 SRU 5.5, and patch 150400-01 for Oracle Solaris 10. Add the following line to /etc/system and restart Oracle Solaris: set lgrp_topo_levels=2
Bug	**15825208**
Model	**SPARC M12-1, SPARC M12-2, SPARC M12-2S, SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	In SPARC M10 Systems, the scp(1), sftp(1), and ssh(1) commands of Oracle Solaris may generate an error or installation of Oracle RAC may fail.
Workaround	This has been modified with Oracle Solaris 11.1 SRU 1.4. See "An error occurs in executing the scp(1), sftp(1), or ssh(1) command of Oracle Solaris or the installation of Oracle RAC fails (CR:15825208)."
Bug	**15826052**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	You cannot use the PCI hot plug (PHP) function to add a Quad Gigabit Ethernet card (SE1X7GQ2F) to a PCI Express slot of a PCI expansion unit.
Workaround	This has been modified with XCP 2050 and SRU 11.1.6.4.0. For XCP 2050, see the description of RTIF2-130528-001. If XCP and SRU are not applied, stop the logical domain to which you want add the PCI card before adding it.

Table 3-44   Problems Resolved in Oracle Solaris 11.2 (*continued*)

Bug	**15840018**
Model	**SPARC M12-1, SPARC M12-2, SPARC M12-2S, SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	After the firmware is updated to XCP 2031 or later on the SPARC M10 or to XCP 3021 or later on the SPARC M12, the following message appears at Oracle Solaris startup. NOTICE: skipping unsupported token: fjorclnum
Workaround	This has been modified with SRU 11.1.6.4.0, and patch 148888-03 for Oracle Solaris 10. Ignoring this message does not have an impact on the system.
Bug	**15851224**
Model	**SPARC M12-1, SPARC M12-2, SPARC M12-2S, SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	When starting the I/O domain, the following message may be output and the panic may persist. recursive rw_enter, lp=XXXXXXX wwwh=XXXXXXXX thread=XXXXXXXX
Workaround	This has been modified with SRU 11.1.12.5.0, and patch 150840-01 for Oracle Solaris 10. Add the following to /etc/system of the I/O domain and restart Oracle Solaris: forceload: drv/vpci Note that if starting of the I/O domain is disabled, you must change to inactive state the guest domain to which the virtual disk (vdisk), which is a target of the virtual disk service (vds) of the I/O domain, is assigned, with the ldm stop-domain and ldm unbind-domain commands. This will enable starting of the I/O domain. After starting the I/O domain, set the above.
Bug	**15851441**
Model	**SPARC M12-1, SPARC M12-2, SPARC M12-2S, SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	When the memory fails and is degraded, the following message may be output at startup of Oracle Solaris, and the panic may persist. tilelet_assign_fini_cb(): tile 0xX in memgrp X was unused This may also occur when you set the mirror mode for the memory after saving the logical domain setting with ldm add-spconfig.
Workaround	This has been modified with SRU 11.1.11.4.0. See "If Oracle Solaris is activated during memory degradation, a panic may occur (CR:15851441)."
Bug	**15858713** **16769782**
Model	**SPARC M12-1, SPARC M12-2, SPARC M12-2S, SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If memory fault occurs and all memories allocated to guest domains are degraded, Oracle VM Server for SPARC ldmd daemon generates a core dump and terminates abnormally, and the ldm(1M) command ends with an error.
Workaround	This has been modified with SRU 11.1.10.5.0. On Oracle Solaris 10, it has been modified with Oracle VM Server for SPARC 3.1. If this defect occurs because SRU is not applied, replace the memory having an error. If you want to start Oracle Solaris while the memory having an error remains to be mounted, start it using the following procedure from XSCF. 1. Execute the poweroff(8) command to power off the physical partition (PPAR). 2. Execute the setdomainconfig(8) command to place the PPAR in the factory-default state. XSCF> **setdomainconfig -p** *ppar_id* **-c default** 3. Execute the poweron(8) command to restart PPAR. Oracle Solaris reboots in a configuration that includes only the control domain (factorydefault).

Table 3-44	Problems Resolved in Oracle Solaris 11.2 *(continued)*
Bug	**15887244**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	When you start the SunVTS 7.0 ps14 and ps15 tests in a SPARC M10 system, they may terminate with an error.
Workaround	This has been modified with Oracle Solaris 11.1 SRU 4.6, and patch 149395-02 for Oracle Solaris 10. There is no workaround other than applying the modification.
Bug	**16238762**
Model	**SPARC M12-2S, SPARC M10-4S**
Description	If a system board is added to the PPAR by dynamic reconfiguration of physical partitions after booting the Oracle Solaris in the control domain with the factory-default configuration, or if CPUs on the system board are added to a domain by the ldm add-vcpu command after the system board is added by dynamic reconfiguration of physical partitions, the system will panic with the following message: panic[cpuX]/thread=XXXXXXXXXXX: mpo_cpu_add: Cannot read MD
Workaround	This has been modified with SRU 11.1.7.5.0, and patch 150400-12 for Oracle Solaris 10. Meanwhile, when this fix has been applied to the system, if a system board is added to the system by means of the dynamic reconfiguration of physical partitions, the following message may be output but as it has no effect on the system, ignore it. WARNING: mpo_cpu_add: defaulting to lgroup x for CPU x For the control domain or the domain whose CPU is added by the ldm add-vcpu command, add the following line to the domain's /etc/system file and reboot the Oracle Solaris. set suspend_count = 1
Bug	**16292272**
Model	**SPARC M12-2S, SPARC M10-4S**
Description	If you configure many guest domains in a system where 16 BBs compose one physical partition (PPAR), it takes time to perform binding for the guest domains. The time taken by new binding processing for each guest domain is approximately (number of guest domains that are already bound + 1) x 6 + 10 seconds. Therefore, if there are no domains for which binding has been performed, and binding is performed for the guest domains one by one through the ldm bind-domain command, the required time is obtained by summing the times taken to perform binding for all of them.
Workaround	This has been improved with SRU 11.1.16.4.0, and patch 150011-03 for Oracle Solaris 10. We recommend that you do not configure the system with a single PPAR but divide it into multiple PPARs and then configure guest domains in each PPAR. Using the recommended configuration described above, not only mitigates the described phenomenon but also helps improve fault tolerance. If a virtual network switch (vsw) is configured, you can reduce the time for binding by half by setting inter-vnet-link to off. For notes when inter-vnet-link is set to off, see the *Oracle VM Server for SPARC Administration Guide* or *Oracle VM Server for SPARC Release Notes*.

Table 3-44   Problems Resolved in Oracle Solaris 11.2 *(continued)*

Bug	17510986
Model	**SPARC M12-1, SPARC M12-2, SPARC M12-2S, SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If the guest domain is Oracle Solaris 11.1 and SRU 11.1.9.5.1 or later is applied to it, or if the guest domain is Oracle Solaris 10 and 150400-01 or newer is applied to it, system panic may occur when conducting live migration or dynamic reconfiguration of physical partitions.
Workaround	This has been modified with SRU 11.1.14.5.0, and patch 150400-07 for Oracle Solaris 10.
Bug	17627526
Model	**SPARC M12-1, SPARC M12-2, SPARC M12-2S, SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	Messages like the following are output to the console at the time of starting Oracle Solaris and the ldoms/ldmd service is put to maintenance mode. [Example of message] Jan 20 16:01:37 svc.startd[11]: svc:/ldoms/ldmd:default: Method "/opt/SUNWldm/bin/ldmd_start" failed with exit status 96. Jan 20 16:01:38 svc.startd[11]: ldoms/ldmd:default misconfigured: transitioned to maintenance (see 'svcs -xv' for details) At this time, messages like the following will be registered to the log file (/var/svc/log/ldomsldmd: [Example of message] [Jan 21 20:08:55 Executing start method ("/opt/SUNWldm/bin/ldmd_start").] ldmd cannot communicate with the hypervisor as the required device does not exist: /devices/virtual-devices@100/channel-devices@200/virtual-channel@0:hvctl
Workaround	This has been modified with SRU 11.1.19.6.0, and patch 150840-04 for Oracle Solaris 10. [How to restore] After confirming that the device file in question exists, restore the ldoms/ldmd service using the svcadm(1M) command of Oracle Solaris. # **ls -l** /devices/virtual-devices@100/channel-devices@200/virtual-channel@0:hvctl crw------- 1 root sys 148, 2048 Jan 21 20:08 /devices/virtual-devices@100/channel-devices@200/virtual-channel@0:hvctl # **svcadm clear ldmd**
Bug	17709858
Model	**SPARC M12-2S, SPARC M10-4S**
Description	If the system board is deleted by dynamic reconfiguration of the physical partition, any of the following phenomena may occur. - The following message is output from the logical domain, and Oracle Solaris enters the panic state. Fatal error has occurred in: PCIe fabric.(0xxx)(0xxx) - There is a hang during the device resume processing of a logical domain, and deleteboard(8) ends with an error due to a timeout.
Workaround	This has been modified with SRU 11.1.15.4.0.

Table 3-44 Problems Resolved in Oracle Solaris 11.2 *(continued)*

Bug	**17777004**
Model	**SPARC M10-4S**
Description	If the logical domain has degraded memory because of a memory failure, when dynamic reconfiguration of the physical partition is executed with the deleteboard(8) command, Oracle Solaris on the domain with the degraded memory may enter the panic state.
Workaround	This has been modified with SRU 11.1.17.5.0, and patch 150817-02 for Oracle Solaris 10. Before executing dynamic reconfiguration of the physical partition, check whether memory degradation has occurred from the control domain. If memory degradation has occurred, delete the associated memory area in advance. [How to check] Execute "ldm list-devices -a -S memory". If the resulting STATUS column displays "fail", the memory area has been degraded by SIZE from PA (physical address) displayed on the same line. [How to delete a memory area] Execute "ldm remove-memory <total value of above SIZEs> <domain name>".
Bug	**18055846**
Model	**SPARC M12-2, SPARC M12-2S, SPARC M10-4, SPARC M10-4S**
Description	When adding a PCI Expansion Unit by PCI hot plug (PHP), Oracle Solaris may panic by producing the following message. panic[cpuX]/thread=XXXXXXXXX: Fatal error has occurred in: PCIe fabric.(0xX)(0xXX)
Workaround	This has been modified with Oracle Solaris 11.2, and patch 150400-18 for Oracle Solaris 10.
Bug	**18112775**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	When Oracle VM Server for SPARC 3.1.0.1/SRU 11.1.14.5.0 is installed on the control domain, if dynamically assigned memory is reduced from a guest domain, which is running Oracle Solaris 10, with the ldm set-memory or the ldm remove-memory command, Oracle VM Server for SPARC ldmd daemon on the control domain may produce a core dump and it may be restarted.
Workaround	This has been modified with SRU 11.1.17.5.0, and patch 150817-02 for Oracle Solaris 10. Check the memory size that has been assigned to a logical domain with the ldm list-domain command and reduce it to the required size in several steps, using the ldm remove-memory command. It is recommended to reduce memory size by less than 256 MB at one time, but memory may also be reduced by a larger amount at one time. Meanwhile, the reduction may fail due to the occurrence of the same symptom while performing this action. In such a case, reduce the memory in smaller units.
Bug	**18009532**
Model	**SPARC M12-2S, SPARC M10-4S**
Description	If dynamic reconfiguration is performed on a physical partition which has a dual channel 10Gbps FCoE card (SP1X7FAR2F/SP1X7FAS2F/7101673 (7101674)+7101677 (7101678)) mounted on it, system panic may occur due to the suspend processing of the inactivated qlcnic driver.
Workaround	This has been modified with SRU 11.1.19.6.0, and patch 149167-03 for Oracle Solaris 10. Before dynamically reconfiguring a physical partition on which this specific card is mounted, activate any unplumbed qlcnic interface with the ifconfig <interface_name> plumb command.

Table 3-44   Problems Resolved in Oracle Solaris 11.2 *(continued)*

Bug	-
Model	**SPARC M12-1, SPARC M12-2, SPARC M12-2S, SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If Java VM is started on a SPARC M12 system or on a SPARC M10 system with the SPARC64 X+ processor, the following message may be output along with the production of a core dump. [Example of message] # A fatal error has been detected by the Java Runtime Environment: # # Internal Error (output.cpp:1576), pid=1310, tid=91 # guarantee((int)(blk_starts[i+1] - blk_starts[i]) >= (current_offset - blk_offset)) failed: shouldn't increase block size # <...> # Abort (core dumped) Moreover, due to the production of the core dump by Java VM, the following events may occur: 1. On a SPARC M12 system or on a SPARC M10 system with the SPARC64 X+ processor, the [Add Asset] operation on Oracle Solaris fails. 2. On a SPARC M12 system or on a SPARC M10 system with the SPARC64 X+ processor, the [Install Server] operation for Oracle Solaris installation fails. 3. On a SPARC M12 system or on a SPARC M10 system with the SPARC64 X+ processor, Enterprise Controller and Proxy Controller (Ops Center management server) installation on the domains fail.
Workaround	This has been modified with SRU 11.1.17.5.0.
Bug	-
Model	**SPARC M10-4S**
Description	If dynamic reconfiguration is performed on a physical partition which has a Dual 10Gbps FCoE card (SE0X7EC12F/SE0X7EF12F/SG-PCIEFCOE2-Q-TA (SG-XPCIEFCOE2-Q-TA, 7105382)/ SGPCIEFCOE2-Q-SR (SG-XPCIEFCOE2-Q-SR,7105381)) mounted on it, system panic may occur due to the processing of the qlge driver.
Workaround	This has been modified with SRU 11.1.8.4.0, and patch 145648-04 for Oracle Solaris 10. There is no workaround other than applying the modification. If this specific card is mounted on a system, conduct any reconfiguration in deactivated state instead of dynamic reconfiguration.

An error occurs in executing the scp(1), sftp(1), or ssh(1) command of Oracle Solaris or the installation of Oracle RAC fails (CR:15825208)

[Workaround]
Using the following procedure, change the setting so that the AES_CTR, AES_CBC_ MAC, and AES_CFB128 algorithms are not used with the assist function of the encryption unit.

- If you use it with the client function (scp(1), sftp(1), ssh(1), etc.):
  1. **Add the content of the setting to the target file as one line. A space is necessary only between "Cipher" and "aes128-cbc."**
     - Target file
     Settings for entire system: /etc/ssh/ssh_config
     Settings per user: $HOME/.ssh/ssh_config

- Setting contents

```
Ciphers aes128-cbc,aes192-cbc,aes256-cbc,3des-bc,arcfour128,
arcfour256,arcfour,blowfish-cbc
```

- If you use it with the server function (such as Oracle Solaris sshd daemon)
  1. **Add the content of the setting to the target file as one line.**
     - Target file
     /etc/ssh/ssh_config
     - Setting contents (recommended)

```
Ciphers 3des-cbc,arcfour128,arcfour256,arcfour,blowfish-cbc
```

  2. **Restart the service with the following command:**

```
# svcadm restart svc:/network/ssh:default
```

- If the problem cannot be resolved with any of the client function and server function:
  1. **Add the following, in place of the above content of the setting:**

```
UseOpenSSLEngine no
```

If Oracle Solaris is activated during memory degradation, a panic may occur (CR:15851441)

[Workaround]
If a panic occurs due to a memory failure, replace the failed memory.
If a panic occurs due to the memory mirror mode setting, start the system from the XSCF by using the following procedure.
Also, if a panic occurs due to a memory failure, starting the system from the XSCF by using the procedure shown below may prevent the problem, but this method is not always reliable. If a panic recurs even after the system is started by using the following procedure, replace the failed memory.

1. **Execute the poweroff(8) command to power off the physical partition (PPAR).**

2. **Execute the setdomainconfig(8) command to place the PPAR in the factory-default state.**

```
XSCF> setdomainconfig -p ppar_id -c default
```

3. **Execute the poweron(8) command to activate the PPAR.**

Oracle Solaris reboots in a configuration that includes only the control domain (factorydefault).

If you set the mirror mode for the memory, configure a logical domain after setting the mirror mode in the factory-default condition. Then, save the settings with ldm add-spconfig.
If the settings were saved with the mirror mode not set, do not specify them in the ldm set-spconfig command or the setdomainconfig(8) command of the XSCF for an environment using the mirror mode.

Chapter 4

Information on SPARC M10-1 Hardware

This chapter describes special instructions and problems related to the SPARC M10-1 hardware.

- Notes and Restrictions
- Problems With Hardware and Workarounds

Notes and Restrictions

Notes on Using an Internal SAS Drive

We recommend using an internal SAS drive of the SPARC M10 systems after enabling the Oracle Solaris MPxIO setting.
For details on differences based on an internal SAS drive type and Oracle Solaris release, reasons to recommend enabling the MPxIO, effects of a disabled MPxIO, setting procedures, confirmation procedures, and so on, see "Notes on Internal SAS Disk Drives and Oracle Solaris MPxIO Settings" in "Notes and Restrictions" in "Chapter 3   Information on Software."

Notes on Using an External DVD Drive

USB bus power drive is not supported for external DVD drives connected via USB.

Notes on Using USB Memory

Use USB memory as follows. Install Oracle Solaris from USB memory, save/restore the system with Oracle Solaris Unified Archives (integrated archives), and save data with XSCF commands.

Before executing an Oracle Solaris or XSCF command that specifies USB memory as the data save destination, connect the USB memory used as the media.
The saved data contains system-related information. When using USB memory, you need to take care to manage the USB memory that has the saved data, from the standpoint of maintaining security.

- Fujitsu does not guarantee the operation of the USB memory currently sold by any manufacturer.

- USB memory is not suitable for long-term data retention. Use magnetic tape or disk units for long-term data retention.

- Some types of USB memory used are thought to possibly cause errors such as a data read/write failure. If such an error occurs, immediately stop using the USB memory.

- Connect USB memory directly to a server or XSCF USB port. A connection via a USB hub, extension cable, etc. may cause an error.

- Do not disconnect USB memory during access. Doing so may result in an error or a command being unable to respond.

- To connect or disconnect USB memory in the OpenBoot PROM state, stop the SPARC M10 system and then perform the operation. If you perform the operation without stopping the system, the OpenBoot PROM may become non-responsive

Problems With Hardware and Workarounds

There is no problem that has been confirmed as of this moment.

Chapter 5

Information on SPARC M10-4 Hardware

This chapter describes special instructions and problems concerning the SPARC M10-4 hardware.

- Notes and Restrictions
- Problems With Hardware and Workarounds

Notes and Restrictions

Notes on Using an Internal SAS Drive

We recommend using an internal SAS drive of the SPARC M10 systems after enabling the Oracle Solaris MPxIO setting.
For details on differences based on an internal SAS drive type and Oracle Solaris release, reasons to recommend enabling the MPxIO, effects of a disabled MPxIO, setting procedures, confirmation procedures, and so on, see "Notes on Internal SAS Disk Drives and Oracle Solaris MPxIO Settings" in "Notes and Restrictions" in "Chapter 3 Information on Software."

Notes on Using an External DVD Drive

USB bus power drive is not supported for external DVD drives connected via USB.

Notes on Using USB Memory

Use USB memory as follows. Install Oracle Solaris from USB memory, save/restore the system with Oracle Solaris Unified Archives (integrated archives), and save data with XSCF commands.

Before executing an Oracle Solaris or XSCF command that specifies USB memory as the data save destination, connect the USB memory used as the media.
The saved data contains system-related information. When using USB memory, you need to take care to manage the USB memory that has the saved data, from the standpoint of maintaining security.

- Fujitsu does not guarantee the operation of the USB memory currently sold by any manufacturer.

- USB memory is not suitable for long-term data retention. Use magnetic tape or disk units for long-term data retention.

- Some types of USB memory used are thought to possibly cause errors such as a data read/write failure. If such an error occurs, immediately stop using the USB memory.

- Connect USB memory directly to a server or XSCF USB port. A connection via a USB hub, extension cable, etc. may cause an error.

- Do not disconnect USB memory during access. Doing so may result in an error or a command being unable to respond.

- To connect or disconnect USB memory in the OpenBoot PROM state, stop the SPARC M10 system and then perform the operation. If you perform the operation without stopping the system, the OpenBoot PROM may become non-responsive

Problems With Hardware and Workarounds

There is no problem that has been confirmed as of this moment.

Chapter 6

Information on SPARC M10-4S Hardware

This chapter describes special instructions and problems concerning the SPARC M10-4S hardware.

- Notes and Restrictions
- Problems With Hardware and Workarounds

Notes and Restrictions

Notes on Using an Internal SAS Drive

We recommend using an internal SAS drive of the SPARC M10 systems after enabling the Oracle Solaris MPxIO setting.
For details on differences based on an internal SAS drive type and Oracle Solaris release, reasons to recommend enabling the MPxIO, effects of a disabled MPxIO, setting procedures, confirmation procedures, and so on, see "Notes on Internal SAS Disk Drives and Oracle Solaris MPxIO Settings" in "Notes and Restrictions" in "Chapter 3 Information on Software."

Notes on Using an External DVD Drive

USB bus power drive is not supported for external DVD drives connected via USB.

Notes on Using USB Memory

Use USB memory as follows. Install Oracle Solaris from USB memory, save/restore the system with Oracle Solaris Unified Archives (integrated archives), and save data with XSCF commands.

Before executing an Oracle Solaris or XSCF command that specifies USB memory as the data save destination, connect the USB memory used as the media.
The saved data contains system-related information. When using USB memory, you need to take care to manage the USB memory that has the saved data, from the standpoint of maintaining security.

- Fujitsu does not guarantee the operation of the USB memory currently sold by any manufacturer.
- USB memory is not suitable for long-term data retention. Use magnetic tape or disk units for long-term data retention.
- Some types of USB memory used are thought to possibly cause errors such as a data read/write failure. If such an error occurs, immediately stop using the USB memory.
- Connect USB memory directly to a server or XSCF USB port. A connection via a USB hub, extension cable, etc. may cause an error.
- Do not disconnect USB memory during access. Doing so may result in an error or a command being unable to respond.
- To connect or disconnect USB memory in the OpenBoot PROM state, stop the SPARC M10 system and then perform the operation. If you perform the operation without stopping the system, the OpenBoot PROM may become non-responsive

Restrictions on Replacing a Crossbar Box

Replacement of a crossbar box using the replacefru(8) command is not supported at present. To replace a crossbar box, perform the following procedure:

1. **Execute the showhardconf command to confirm that the crossbar box to be replaced is not the master chassis.**
   The crossbar box with the "Role:Master" indication is the master chassis.

```
XSCF> showhardconf
        :
   XBBOX#80 Status:Normal; Role:Master; Ver:2038h; Serial:2111206001;
        :
```

2. **If the crossbar box to be replaced is the master chassis, first execute the switchscf command to switch the box to standby.**

```
XSCF> switchscf -y -t Standby
```

3. **The master XSCF is switched. Log in to the XSCF again.**

4. **Power off the physical partition (PPAR) that uses the crossbar box, and then power off the crossbar box to be replaced.**
   Confirm that the Power-LED on the operation panel of the crossbar box is turned off.

5. **Disconnect the power supply to the crossbar box to be replaced, and then**

replace it.

Note - Although error logs for the crossbar box to be replaced are registered when the input power supply is disconnected, they can safely be ignored.

---

6. **Connect the power cord of the crossbar box to the input power supply.**
   For details, see "5.3   Connecting Cables to a Crossbar Box" in the *Fujitsu M10-4S/SPARC M10-4S Installation Guide*.

   Wait until STANDBY-LED on the operation panel of the crossbar box turns on.

7. **Execute the diagxbu command to perform diagnosis of the newly installed crossbar box.**

   ```
   XSCF> diagxbu -y -b XX -t YY -t ZZ
   ```

   Specify the BB_IDs (00 to 15) of SPARC M10-4S that is powered off in XX, YY, and ZZ.

8. **Execute the showlogs command to confirm that no error occurred during the diagnosis.**

   ```
   XSCF> showlogs error
   ```

9. **Confirm that there are no faulty components.**

   ```
   XSCF> showstatus
   ```

Restrictions on Adding Expansion Rack 2

Addition of a crossbar box using the addfru(8) command is not supported at present. To add a crossbar box, see "9.4   Installing Expansion Rack 2" in the *Fujitsu M10-4S/SPARC M10-4S Installation Guide* and read steps 17 and 18 as follows:

17. **Connect all the power cords of the crossbar box and SPARC M10-4S to the input power supply.**
    For details, see "5.1   Connecting Cables to the SPARC M10-4S" and "5.3 Connecting Cables to a Crossbar Box."

18. **Update the firmware to the same version as that of the master XSCF.**

    - XCP 2040 or earlier

    ```
    XSCF> getflashimage file:///media/usb_msd/images/XCPxxxx.tar.gz
    XSCF> flashupdate -c update -m xcp -s version
    ```

    - XCP 2041 or later

```
XSCF> flashupdate -c sync
```

Problems With Hardware and Workarounds

There is no problem that has been confirmed as of this moment.

Chapter 7

Information on the PCI Expansion Unit

This chapter describes special instructions and problems concerning the PCI expansion unit.

- Existing PCI Expansion Unit Firmware Versions
- Direct I/O Function for the PCI Expansion Unit
- Problems With PCI Expansion Units and Workarounds

Existing PCI Expansion Unit Firmware Versions

The following lists the PCI expansion unit firmware versions that have been released for the SPARC M10 systems.

Table 7-1   PCI Expansion Unit Firmware Versions

Version
1310
1220
1210
1200
1180
1170
1150
1130
1120
1110
1100

Direct I/O Function for the PCI Expansion Unit

For XCP 2044 or later of SPARC M10-1/M10-4 and for XCP 2050 or later of SPARC M10-4S, the direct I/O function of Oracle VM Server for SPARC is supported for the PCI expansion unit. This makes it possible to assign an I/O domain for each slot of the PCI expansion unit. For details on the direct I/O function of Oracle VM Server for SPARC, see the *Oracle VM Server for SPARC Administration Guide* for the version used. If the PCI expansion unit is connected to SPARC M10-4/M10-4S, make the setting below before using the direct I/O function. For SPARC M10-1, the setpciboxdio setting need not be made. The direct I/O function can be used simply by connecting the PCI expansion unit to SPARC M10-1.

Setting/Displaying the Direct I/O Function

To set the direct I/O function for the PCI expansion unit, use the setpciboxdio(8) command of the XSCF firmware. To confirm the present settings, use the showpciboxdio(8) command.
For details on the setpciboxdio(8) and showpciboxdio(8) commands, see the *Fujitsu SPARC M12 and Fujitsu M10/SPARC M10 XSCF Reference Manual* or the man page for each command.

Problems With PCI Expansion Units and Workarounds

This section describes problems regarding the PCI expansion unit as well as the workarounds for them for each version of the PCI expansion unit firmware.

Problems and Their Workarounds for All Versions of the PCI Expansion Unit Firmware

The following table shows problems that might occur in any versions of Oracle Solaris being supported and workarounds for them.

Table 7-2	Problems and Their Workarounds for All Versions of the PCI Expansion Unit Firmware
RTI No.	**RTIF2-170215-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	Suppose that the PCIe root complex connecting the PCI expansion unit is dynamically added to a logical domain with the ldm add-io command. In this case, any of the following phenomena may occur on the PCI cards mounted in slots of the PCI expansion unit. - The following error may be registered: [Error message example] FRU: /BB#0/PCI#0/PCIBOX#0000/PCI#11 Msg: PCICARD failed - There may be lane degrade. To check whether there is lane degrade, execute the prtdiag command of Oracle Solaris and check "Cur Speed/Width."
Workaround	There is no effective workaround. [How to restore] Restart the logical domain connected to this PCI expansion unit.
RTI No.	**RTIF2-130724-002**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If a 6 Gbps SAS card is mounted in the PCI expansion unit with PCI hot plug (PHP), linkup with PCI Express 8 Lane may not succeed, and Speed may be displayed as "5.0GTx4" or "5.0GTx2" by the prtdiag command of Oracle Solaris. [prtdiag output example] /SYS/PCI0 PCIE LSI,sas-pciex1000,72 LSI,2008 5.0GTx2 /pci@8000/pci@4/pci@0/pci@8/pci@0/pci@0/pci@0/pci@1/pci@0/pci@8/LSI,sas@0
Workaround	Restart the physical partitions (PPARs) or I/O domain, or reinstall the 6Gbps SAS card by PHP.
RTI No.	**RTIF2-130724-003**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	The following error may be registered for the PCI cards mounted in slots 6, 7, 10, and 11 of the PCI expansion unit when the physical partitions (PPARs) are started. [Error message example] FRU: /MBU/PCI#0/PCIBOX#0000/PCI#7 Msg: PCICARD failed
Workaround	When the device can be recognized from Oracle Solaris, ignore this error message.
RTI No.	**RTIF2-130703-001**
Model	**SPARC M10-4, SPARC M10-4S**
Description	When installing a PCI expansion unit by PCI hot plug (PHP), among PCI expansion unit slots 6, 7, 10 and 11, those without HBA will have command execution result "disconnected" instead of "empty" for the Oracle Solaris cfgadm(1M) command. Although the display is not appropriate, the slots work normally if you mount HBA. This phenomenon does not occur if you restart the logical domain after connecting the PCI expansion unit.
Workaround	This is just a display problem and does not affect operation.

RTI No.	**RTIF2-130703-002**
Model	**SPARC M10-4, SPARC M10-4S**
Description	When you install a PCI expansion unit with PCI hot plug (PHP), there may be lane degrade.
Workaround	When using PHP, execute cfgadm -c configure instead of cfgadm -c connect.
RTI No.	**RTIF2-130703-003**
Model	**SPARC M10-4, SPARC M10-4S**
Description	When you install a PCI expansion unit by PCI hot plug (PHP), a PCI-Express correctable error may occur and cause degradation of the PCI expansion unit at the next reboot.
Workaround	If there a fault error message is output after installing a PCI expansion unit with PHP, reinstalled the PCI expansion unit.
RTI No.	**RTIF2-130703-004**
Model	**SPARC M10-4, SPARC M10-4S**
Description	When you install a PCI expansion unit with PCI hot plug (PHP), the PCI expansion unit may not be recognized.
Workaround	If the PCI expansion unit is not recognized after installing it with PHP, reinstall the PCI expansion unit.

Problems Resolved in Version 1310 of the PCI Expansion Unit Firmware

The following table lists the problems resolved in version 1310 of the PCI expansion unit firmware.

Table 7-3   Problems Resolved in Version 1310 of the PCI Expansion Unit Firmware

RTI No.	**RTIF2-170214-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	When the physical partition (PPAR) connecting the PCI expansion unit is powered on, a link card error may be erroneously detected. [Error message example] XSCF> **showlogs error** Date: Jun 03 19:09:19 JST 2016 Code: 80000480-009d01009fff00d500-11000057d000000000000000 Status: Alarm Occurred: Jun 03 19:09:16.185 JST 2016 FRU: /BB#0/PCI#9/LINK,/BB#0/PCI#9/LINK/MGCBL,/BB#0/PCI#9/PCIBOX#0000/LINKBD,* Msg: TWI access error
Workaround	There is no effective workaround. [How to restore] Power off and then on again the PPAR connected to the PCI expansion unit.

RTI No.	**RTIF2-170209-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	In either of the following cases, in the PCI expansion unit, the POWER LED of the PCIe slot where the PCIe card is not mounted goes on by mistake. - The SPARC M10-4S (system board) connected to the PCI expansion unit was added by the addboard(8) command using dynamic reconfiguration (DR) of physical partitions (PPARs) in a system having a building block configuration. - The PCIe root complex connecting the PCI expansion unit was dynamically added/deleted using the ldm command of Oracle VM Server for SPARC.
Workaround	There is no effective workaround. [How to restore] Execute any of the following actions to bring the state of the POWER LED of a PCIe slot back to normal. - Reboot Oracle Solaris. - Power off the PPAR. - Incorporate a PCIe card using PHP

Problems Resolved in Version 1220 of the PCI Expansion Unit Firmware

The following table lists the problems resolved in version 1220 of the PCI expansion unit firmware.

Table 7-4   Problems Resolved in Version 1220 of the PCI Expansion Unit Firmware

RTI No.	**RTIF2-161014-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	The PCI expansion unit firmware may unable to detect power supply unit (PSU) failures in the PCI expansion unit.
Workaround	Use one of the following methods to determine whether the PSU of the PCI expansion unit has failed. If a PSU failure has been determined, replace the PSU. - The PSU LED goes on (amber) or blinks (green) while the physical partition (PPAR) is running. - After the PPAR is powered off, a PSU failure is registered in an XSCF log when the PPAR is powered on again.

Problems Resolved in Version 1200 of the PCI Expansion Unit Firmware

The following table lists the problems resolved in version 1200 of the PCI expansion unit firmware.

Table 7-5   Problems Resolved in Version 1200 of the PCI Expansion Unit Firmware

RTI No.	**RTIF2-150225-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If the input voltage drops instantaneously on the system with the PCI expansion unit connected, a failure of the power supply unit (PSU) of the PCI expansion unit may be detected by mistake, and the CHECK LED (amber) of the PCI expansion unit may go on.

Description	If the input voltage drops instantaneously on the system with the PCI expansion unit connected, a failure of the power supply unit (PSU) of the PCI expansion unit may be detected by mistake, and the CHECK LED (amber) of the PCI expansion unit may go on. You can confirm this symptom by referring to the showlogs error -v command. If the execution result of the showlogs error -v command is "Msg:PSU failed" or "PSU failed(PSU) shortage)" and the fourth line of the Diagnostic Code has the following values, the symptom corresponds to this problem. 1) Fourth byte: the leftmost (x80) bit is 0 (any of 0*, 1*, 2*, 3*, 4*, 4*, 6*, and 7*), and 2) Fourth byte: the seventh (x02) bit from the left is 0 (any of *0, *1, *4, *5, *8, *9, *c, and *d), and 3) Fifth byte: the leftmost (x80) bit is 0 (any of 0*, 1*, 2*, 3*, 5*, 4*, 6*, and 7*), and 4) Seventh byte: For the PCI expansion unit firmware version 1120 or earlier: Any value For the PCI expansion unit firmware version 1130 or later: the left-most (x80) bit is 0 and the second (x40) bit from the left is 0 (any of 0*, 1*, 2*, and 3*). Date: Jan 13 15:19:40 JST 2015 Code: 80000408-00cb000000ff0000ff-11000025600 10000000000000 Status: Alarm Occurred: Jan 13 15:19:40.742 JST 2015 FRU: /MBU/PCI#1/PCIBOX#1111/PSU#0 Msg: PSU failed Diagnostic Code: 00013131 31310000 0000 00010000 00000000 0000 00010000 00000000 0000 01410800 00000000 00000000 00000000 00000000 00000000 0000
Workaround	There is no effective workaround. [How to restore] Use either of the following procedures. - How to restore 1 Turn off the power to the SPARC M10 chassis connected to the PCI expansion unit. Then, disconnect both PCI expansion unit power cables (AC OFF). Then, wait 30 seconds before reconnecting the cables (AC ON). - How to restore 2 Perform pseudo active replacement of the PSU in which the error has been detected (temporarily remove the PSU and then reinstall it). When performing pseudo active replacement of the PSU, use the ioxadm(8) command. Note that the fieldeng privilege is required to execute the ioxadm(8) command.

Problems Resolved in Version 1180 of the PCI Expansion Unit Firmware

The following table lists the problems resolved in version 1180 of the PCI expansion unit firmware.

RTI No.	**RTIF2-141111-003**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	In a PCI expansion unit, a power supply unit (PSU) failure is erroneously detected if you perform the following operations in the condition that a power cable connected to either of PSUs in a redundant configuration is pulled out. - Power-on of a physical partition (PPAR) - Mount a PCI expansion unit in PCI hot plug (PHP) Also, CHECK LED (amber) of the PCI expansion unit chassis may go on. You can confirm this symptom with the showlogs error -v command. If the result of the showlogs error -v command shows "Msg:PSU failed", and the fifth (x08) bit from left of the second byte of the forth line of Diagnostic Code shows 1 (any of *8, *9, *a, *b, *c, *d, *e, *f), it corresponds to this failure. [Error message example] If the left of the second byte of the forth line of Diagnostic Code shows "49": XSCF> **showlogs error -v** Date: Nov 06 17:10:14 JST 2014 　Code: 80000408-00d4000000ff0000ff-11000025610000000000000000 　Status: Alarm Occurred: Nov 06 17:10:10.509 JST 2014 　FRU: /BB#0/PCI#9/PCIBOX#2005/PSU#1 　Msg: PSU failed 　Diagnostic Code: 　　00093131 31310100 0000 　　00090000 00000000 0000 　　00090000 00000000 0000 　　01492800 00000038 00000000 00000000 　　00000000 00000000 0000
Workaround	There is no effective workaround. - How to restore 1 　Turn off the power to the SPARC M10 chassis connected to the PCI expansion unit. Then, disconnect both PCI expansion unit power cables (AC OFF). Then, wait 30 seconds before reconnecting the cables (AC ON). - How to restore 2 　Perform pseudo active replacement of the PSU in which the error has been detected (temporarily remove the PSU and then reinstall it). When performing pseudo active replacement of the PSU, use the ioxadm(8) command. Note that the fieldeng privilege is required to execute the ioxadm(8) command.

RTI No.	**RTIF2-140715-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	In a PCI expansion unit, if the power supply unit (PSU) has a redundant configuration and the power cable connected to one of the power supply units is pulled out, a PSU error may be erroneously detected, and the PCI expansion unit chassis CHECK LED (amber) may go on. At this time, executing the showlogs error command outputs the "Msg: PSU failed" log.

Workaround	There is no effective workaround.
	[How to restore]
	Use either of the following procedures.
	- How to restore 1
	  Turn off the power to the SPARC M10 chassis connected to the PCI expansion unit. Then, disconnect both PCI expansion unit power cables (AC OFF). Then, wait 30 seconds before reconnecting the cables (AC ON).
	- How to restore 2
	  Perform pseudo active replacement of the PSU in which the error has been detected (temporarily remove the PSU and then reinstall it). When performing pseudo active replacement of the PSU, use the ioxadm(8) command. Note that the fieldeng privilege is required to execute the ioxadm(8) command.

Problems Resolved in Version 1170 of the PCI Expansion Unit Firmware

The following table lists the problems resolved in version 1170 of the PCI expansion unit firmware.

Table 7-7   Problems Resolved in Version 1170 of the PCI Expansion Unit Firmware

RTI No.	**RTIF2-140902-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If input power for the PCI expansion unit is disconnected (AC OFF) or power failure occurs, a PSU "Information" level error log is supposed to be registered. However, a failure level error log "Alarm" is incorrectly registered. At this point, CHECK LED on the front of the PCI expansion unit lights up, "Faulted" is displayed on the PSU status, and the error message "AC Fail" is displayed. You can check the error message of this phenomenon by executing the showlogs error command, and check the status by executing the showhardconf command. [Error message example] XSCF> **showlogs error** Date: Jul 10 16:25:02 JST 2014 Code: 80000400-00d4000000ff0000ff-1100002a0000000000000000 Status: Alarm Occurred: Jul 10 16:24:57.269 JST 2014 FRU: /BB#0/PCI#8/PCIBOX#2003/PSU#1 Msg: AC FAIL [PSU status example] XSCF> **showhardconf** --- Omitted --- PCIBOX#2003; Status:Normal; Ver:1150h; Serial:2121152003; --- Omitted --- * PSU#1; Status:Faulted; Serial:FEJD1201000170;
Workaround	Update the PCI expansion unit firmware to 1170 or later, and the XCP firmware to XCP 2220 or later. There is no impact on system operation from this phenomenon.
RTI No.	**RTIF2-140902-002**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	Link card fault may be incorrectly registered if logs related to one PCI expansion unit are registered more than once in a short time (5 to 10 minutes) when one or more physical partitions (PPAR) are operating in the configuration with PCI expansion units connected. For details on how to check this symptom, see "Confirmation method of RTIF2-140902-002."
Workaround	Ignore this error message as it has no effect on the system.

Table 7-7   Problems Resolved in Version 1170 of the PCI Expansion Unit Firmware *(continued)*

RTI No.	**RTIF2-131224-003**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	The following error messages related to the link board may be displayed if the link board with Part Number "CA20365-B60X007AD/7061035" is connected to the PCI expansion unit. [Error message example 1] FRU: /BB#0/PCI#3/PCIBOX#1234/IOB,/BB#0/PCI#3/PCIBOX#1234/LINKBD Msg: PCI access error [Error message example 2] FRU: /BB#0/PCI#3/PCIBOX#1234/IOB Msg: PCI access error [Error message example 3] FRU: /BB#0/PCI#3/LINK,/BB#0/PCI#3/LINK/LINKCBL#-,/BB#0/PCI#3/PCIBOX#1234/LINKBD,* Msg: PCI Express lane is degraded The Part Number can be checked in the "Part Num" line upon executing the ioxadm -v list command. [Example] XSCF> **ioxadm -v list** Location Type FW Ver Serial Num Part Num State --- Omitted --- PCIBOX#9011/LINKBD BOARD - PP134701CJ CA20365-B60X 007AD/7061035 On
Workaround	There is no effective workaround.

Confirmation method of RTIF2-140902-002

The phenomenon of RTIF2-140902-002 can be checked in the following ways.

1. **Executing the showlogs error -v command outputs the following.**
   - FRU displays "LINK" or "LINKBD"
   - Msg displays "TWI access error"
   - The first byte in the fourth line of the Diagnostic Code is "07"

   [Example of incorrect registration]

```
XSCF> showlogs error -v
Date: Dec 20 10:50:05 JST 2013
Code: 80000480-001f010021ff00cc01-11000057d000000000000000
Status: Alarm Occurred: Dec 20 10:49:59.136 JST 2013
FRU: /MBU/PCI#1/LINK,/MBU/PCI#1/LINK/MGCBL,/MBU/PCI#1/PCIBOX#3001/LINKBD,*
Msg: TWI access error
Diagnostic Code:
00010000 00000000 0000
00010000 00000000 0000
00013330 30310000 0000
07100000 00000000 00000000 00000000
^^
00000000 00000000 0000
```

2. **When the showlogs event command or showlogs error command is executed on the same PCI expansion unit within 10 minutes, the multiple logs shown below are registered.**

- 12 or more event logs related to the PCIe card are registered upon executing the showlogs event command. The number of event logs is calculated as follows depending on the event type.

- PCIe card insertion event: 2

- Event other than PCIe card insertion: 1

For example, if a PCIe card is repeatedly inserted and removed four times, eight message lines are displayed. However, the number of registered event logs is 12, calculated by multiplying three events by four. This applies to this case.

[Example of PCIe card insertion/removal]

```
XSCF> showlogs event
Dec 20 10:49:59 JST 2013 Attach operation (/BB#0/PCI#1/
PCIBOX#3001/PCI#1) Dec 20 10:49:59 JST 2013 Detach
operation (/BB#0/PCI#1/PCIBOX#3001/PCI#1)
--- Omitted ---
```

- Six or more logs are registered by the PCI expansion unit firmware (the first byte in the third field of Code is 11) upon executing the showlogs error command.

[Example of log registration by PCI expansion unit firmware]

```
XSCF> showlogs error
Date: Jun 06 10:55:28 JST 2014
Code: 80000400-00d4000000ff0000ff-1100002a0000000000000000
                                  ^^
Status: Alarm Occurred: Jun 06 10:55:28.028 JST 2014
FRU: /BB#0/PCI#1/PCIBOX#3001/PSU#0
Msg: AC FAIL
Date: Jun 06 10:55:34 JST 2014
Code: 10000400-00d4000000ff0000ff-1100002b0000000000000000
                                  ^^
Status: Information Occurred: Jun 06 10:55:34.479 JST 2014
FRU: /BB#0/PCI#1/PCIBOX#3001/PSU#0
Msg: PSU RECOVERY
--- Omitted ---
```

Problems Resolved in Version 1150 of the PCI Expansion Unit Firmware

The following table lists the problems resolved in version 1150 of the PCI expansion unit firmware.

Table 7-8	Problems Resolved in Version 1150 of the PCI Expansion Unit Firmware
RTI No.	**RTIF2-131224-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	Oracle Solaris may hang while starting up, if using the direct I/O feature, in respect to the PCI Expansion Unit. The probability of the occurrence of this symptom increases with the number of PCI cards that are mounted on the PCI Expansion Unit.
Workaround	There is no effective workaround.
RTI No.	**RTIF2-131224-002**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	When the PCI Expansion Unit and the chassis of SPARC M10 system are connected by optical cables in a low-temperature environment, optical cable error logs may be registered. You can confirm this symptom with the showlogs error -v command. If the result of the showlogs error -v command is "Msg: LINKCBL failed", and the 3rd byte of the 4th line of the Diagnostic Code is either "10", "50" or "60", it corresponds to this symptom. [Error message example] In case the 3rd byte of the 4th line of the "Diagnostic Code" is "10": XSCF> **showlogs error -v** Date: Dec 17 15:50:11 JST 2013 Code: 10000400-009eff0000ff0000ff-1100004400000000000000000 Status: Information Occurred: Dec 17 15:50:06.930 JST 2013 FRU: /BB#0/PCI#3/LINK/LINKCBL#1 Msg: LINKCBL failed Diagnostic Code: 00030001 00000000 0000 00030000 00000000 0000 00030000 00000000 0000 00001000 00000000 00000000 00000000 00000000 00000000 0000
Workaround	Ignore this error message as it has no effect on the system.

Problems Resolved in Version 1130 of the PCI Expansion Unit Firmware

The following table lists the problems resolved in version 1130 of the PCI expansion unit firmware.

Table 7-9   Problems Resolved in Version 1130 of the PCI Expansion Unit Firmware

RTI No.	**RTIF2-131120-001**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If an external factor causes an instantaneous voltage drop or the like, an error in the power supply unit (PSU) of the PCI expansion unit is erroneously detected, and the error log of "Msg: PSU failed" may be registered. Moreover, if the erroneous detection of this PSU error occurs simultaneously in two PSUs of the PCI expansion unit, the physical partition (PPAR) is shut down. You can use the showlogs error -v command to check whether this problem is due to an instantaneous voltage drop caused by an external factor. Suppose that the execution result for this command is "Msg: PSU failed" and that the first, second, and third bytes on the fourth line of the Diagnostic Code have the following values. The problem may be due to, for example, an instantaneous voltage drop caused by an external factor. First byte; "00" Second byte; The sixth (x04) bit from the left is 0 (any of *0, *1 *2, *3, *8, *9, *a, or *b). Third byte: The third (x20) bit from the left is 1 (any of 2*, 3*, 6*, 7*, a*, b*, e*, or f*). "*" for the second and third bytes indicates any value. The first to third bytes on the fourth line of the Diagnostic Code are "000120" XSCF> **showlogs error -v** Date: Oct 30 10:27:17 JST 2013 Code: 80000408-00cb000000ff0000ff-11000024610100000000000 Status: Alarm Occurred: Oct 30 10:27:17.597 JST 2013 FRU: /MBU/PCI#1/PCIBOX#7010/PSU#1 Msg: PSU failed Diagnostic Code: 00013730 31300100 0000 00010000 00000000 0000 00010000 00000000 0000 00012000 00000000 00000000 00000000 00000000 00000000 0000
Workaround	There is no effective workaround. If the value of the first to third bytes on the fourth line of Diagnostic Code does not match the value in the [Description] column, assume that a PSU failure occurred. [How to restore] -- If this event occurs in a single PSU - If the error log "Msg: PSU RECOVERY" is registered, the system has already been restored from an instantaneous voltage drop. The system can be operated continuously. - If the error log "Msg: PSU RECOVERY" is not registered, a PSU failure has occurred. Replace the PSU. -- If this event occurs in two PSUs The PPAR is shut down. Reactivate the PPAR. If the PCI expansion unit cannot be powered on, it indicates that a PSU has failed. Replace the PSU.

Problems Resolved in Version 1120 of the PCI Expansion Unit Firmware

The following table lists the problems resolved in version 1120 of the PCI expansion unit firmware.

RTI No.	RTIF2-130703-009
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	When physical partitions (PPARs) or the I/O domain is started, the 6Gbps SAS card mounted in the PCI expansion unit may not be successfully linked up with the PCI Express 8lane.
Workaround	If the 6Gbps SAS card is not successfully linked up with the PCI Express 8lane, restart the PPARs or I/O domain, or reinstall the 6Gbps SAS card by PCI hot plug (PHP).

Problems Resolved in Version 1110 of the PCI Expansion Unit Firmware

The following table lists the problems resolved in version 1110 of the PCI expansion unit firmware.

Table 7-11   Problems Resolved in Version 1110 of the PCI Expansion Unit Firmware

RTI No.	RTIF2-130703-007
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	When physical partitions (PPARs) or the I/O domain is started, a link card may be erroneously detected as having an error. [Example of message] FRU: /BB#0/PCI#1/LINK Msg: TWI access error
Workaround	The display of this error message does not affect the operation.
RTI No.	RTIF2-130703-008
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	When physical partitions (PPARs) or the I/O domain is started, a PCI-Express correctable error may occur and cause degradation of the PCI expansion unit at the next reboot of Oracle Solaris.
Workaround	If the error message is output, restart the PPARs or I/O domain, or reinstall the PCI expansion unit by PCI hot plug (PHP).

Problems Resolved in Version 1100 of the PCI Expansion Unit Firmware

The following table lists the problems resolved in version 1100 of the PCI expansion unit firmware.

Table 7-12   Problems Resolved in Version 1100 of the PCI Expansion Unit Firmware and Their Workarounds

RTI No.	**RTIF2-130703-005**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	When physical partitions (PPARs) or the I/O domain is started, the PCIe card or link board mounted in the PCI expansion unit may be erroneously detected as having an error. [Example of PCIe card message] FRU: /BB#0/PCI#3/PCIBOX#1234/PCI#3 Msg: PCICARD failed [Example of link board message] FRU: /BB#0/PCI#0/PCIBOX#1234/LINKBD Msg: TWI access error
Workaround	The display of this error message does not affect the operation. When this problem occurs in the link board, the CHECK LED on the PCI expansion unit turns on. However, if this problem does not occur at the next start of the PPAR, the CHECK LED turns off.
RTI No.	**RTIF2-130703-006**
Model	**SPARC M10-1, SPARC M10-4, SPARC M10-4S**
Description	If the serial number of the PCI expansion unit that is displayed upon the execution of the ioxadm -v list command consists entirely of 0's ("0000000000"), the following occurs: Hardware errors detected after the input power to the PCI expansion unit is turned on but before the power to the first physical partition (PPAR) is turned on are not registered as errors.
Workaround	Do not replace an I/O board together with a fan backplane. Also, do not mount in the PCI expansion unit an I/O board or fan backplane that has been used previously in another PCI expansion unit. If the serial number of the PCI expansion unit that is displayed in response to execution of the ioxadm -v list command consists entirely of 0's ("0000000000"), execute the ioxadm(8) command of the XSCF firmware to restore the serial number. In this case, you need the fieldeng privilege. For details, see "Restoring the serial number of the PCI expansion unit (RTIF2-130703-006)."

Restoring the serial number of the PCI expansion unit (RTIF2-130703-006)

If the serial number of the PCI expansion unit that is displayed in response to execution of the ioxadm -v list command consists entirely of 0's ("0000000000"), execute the ioxadm(8) command of the XSCF firmware to restore the serial number. In this case, you need the fieldeng privilege.

```
XSCF> ioxadm [-fvAM] serial target serial_num
```

For target, specify the identifier of the target PCI expansion unit. In this case, "PCIBOX#0000" is specified. For serial_num, specify the serial number of the PCI expansion unit before the change in the format of "nnnnnnnnnn". The serial number is found on the label on the chassis of the PCI expansion unit.

This command replaces the serial number and identifier of the PCI expansion unit. By executing the ioxadm -v list command, you can confirm that the serial number and identifier have been replaced.

In the following example, the serial number of the PCI expansion unit is "2121212006".

```
XSCF> ioxadm serial PCIBOX#0000 2121212006
XSCF> ioxadm -v list
Location          Type     FW Ve  Serial Num       Part Num              State
PCIBOX#2006       PCIBOX   -      2121212006                             On
PCIBOX#2006/PSU#0 PSU      -      FEJD1201000170 CA01022-0750-D/         On
PCIBOX#2006/PSU#1 PSU      -      FEJD1245001342 CA01022-0750-D/7060988 On
PCIBOX#2006/IOB   IOBOARD  1110   PP121001JM     CA20365-B66X 007AF      On
PCIBOX#2006/LINKBD BOARD   -      PP123300TR     CA20365-B60X 001AA      On
PCIBOX#2006/FANBP FANBP    -      PP120904SY     CA20365-B68X 004AC      On
BB#00-PCI#00      CARD     1110                                          On
XSCF>
```

Chapter 8

Information on SPARC M10 Manuals

There are currently no revisions.