

# **Fujitsu M10/SPARC M10 Systems**

Product Notes for XCP Version 2220

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Contents of revision of *Fujitsu M10-4/Fujitsu M10-4S/SPARC M10-4/SPARC  
M10-4S Service Manual* 176

# Preface

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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.

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**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.

- Japanese site  
<http://jp.fujitsu.com/platform/server/sparc/manual/>
  - Global site  
<http://www.fujitsu.com/global/services/computing/server/sparc/downloads/manual/>
- 

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

This preface includes the following sections:

- [Audience](#)
- [How to Use This Document](#)
- [Related Documentation](#)
- [Disposal and recycling](#)
- [Documentation Feedback](#)

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## Audience

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

# 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 <a href="#">Software Requirements</a>	x	x	x
Chapter 2 <a href="#">XCP 2220-Related Information</a>	x	x	x
Chapter 3 <a href="#">Information on Software</a>	x	x	x
Chapter 4 <a href="#">Information on SPARC M10-1 Hardware</a>	x		
Chapter 5 <a href="#">Information on SPARC M10-4 Hardware</a>		x	
Chapter 6 <a href="#">Information on SPARC M10-4S Hardware</a>			x
Chapter 7 <a href="#">Information on PCI Expansion Unit Hardware</a>	x (when introduced)	x (when introduced)	x (when introduced)
Chapter 8 <a href="#">Contents of Revision of Documentation</a>	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 manuals (Oracle Solaris, and so on)  
<http://www.oracle.com/documentation/>
- Fujitsu documents  
Japanese site  
<http://jp.fujitsu.com/platform/server/sparc/manual/>

Global site

<http://www.fujitsu.com/global/services/computing/server/sparc/downloads/manual/>

The following table lists documents related to SPARC M10 Systems.

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**SPARC M10 Systems related documentation (\*1)**

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*Fujitsu M10/SPARC M10 Systems Getting Started Guide (\*2)*

*Fujitsu M10/SPARC M10 Systems Quick Guide*

*Fujitsu M10/SPARC M10 Systems Important Legal and Safety Information (\*2)*

*Software License Conditions for Fujitsu M10/SPARC M10 Systems*

*Fujitsu M10/SPARC M10 Systems Safety and Compliance Guide*

*Fujitsu M10/SPARC M10 Systems Security Guide*

*Fujitsu M10/SPARC M10 Systems/SPARC Enterprise/PRIMEQUEST Common Installation Planning Manual*

*Fujitsu M10/SPARC M10 Systems Installation Guide*

*Fujitsu M10-1/SPARC M10-1 Service Manual*

*Fujitsu M10-4/Fujitsu M10-4S/SPARC M10-4/SPARC M10-4S Service Manual*

*PCI Expansion Unit for Fujitsu M10/SPARC M10 Systems Service Manual*

*Fujitsu M10/SPARC M10 Systems PCI Card Installation Guide*

*Fujitsu M10/SPARC M10 Systems System Operation and Administration Guide*

*Fujitsu M10/SPARC M10 Systems Domain Configuration Guide*

*Fujitsu M10/SPARC M10 Systems XSCF Reference Manual*

*Fujitsu M10/SPARC M10 Systems RCIL User Guide (\*3)*

*Fujitsu M10/SPARC M10 Systems Product Notes*

*Fujitsu M10/SPARC M10 Systems Glossary*

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\*1 The listed manuals are subject to change without notice.

\*2 The printed manual comes with the product.

\*3 This document applies specifically to the FUJITSU M10 and FUJITSU ETERNUS storage system.

## Documents provided on DVD-ROM SPARC M10/SPARC Enterprise Software DVD

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

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Remote maintenance service

- Enhanced Support Facility User's Guide for REMCS (J2X1-7753-EN)

## Information on firmware

This is information for customers of Fujitsu.

Obtain the firmware for your server from the following sources.

- Japanese site  
The customers who subscribed SupportDesk can obtain the firmware from the SupportDesk-Web.
- Global site  
Please contact your local support provider to obtain the files required for XCP update.

The following files are provided.

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

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**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.

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## Disposal and recycling

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**Note** - This information is applicable to SPARC M10 systems sold within Japan by Fujitsu.

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For product disposal and recycling (paid service), contact your sales representatives.

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## Documentation 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:

- Japanese site  
<http://jp.fujitsu.com/platform/server/sparc/manual/>
- Global site  
<http://www.fujitsu.com/global/services/computing/server/sparc/downloads/manual/>

# Chapter 1

## Software Requirements

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

- [XCP/Oracle Solaris and Essential SRU/Patch](#)
- [How to Obtain XCP and Oracle Solaris SRU/Patch/Oracle VM Server for SPARC](#)
- [Web Browser](#)
- [Existing XCP Firmware Versions and Support Information](#)

## XCP/Oracle Solaris and Essential SRU/Patch

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

Table 1-1 XCP/Oracle Solaris and essential SRU/patch support list

Server	XCP	Oracle Solaris	Required packages(*4) Required products(*5)	Essential SRU(*4) Essential patch(*5)
SPARC M10-1				
SPARC64 X+ 3.2 GHz	2210 or later	Oracle Solaris 11.1	system/ldoms(*1) system/ldoms/ldomsmanager(*2)	SRU1.4 or later(*3)
		Oracle Solaris 10 1/13	Oracle VM Server for SPARC 3.0 or later(*3)	150310-01
SPARC64 X 2.8 GHz	2012 or later	Oracle Solaris 11.1	system/ldoms(*1) system/ldoms/ldomsmanager(*2)	SRU1.4 or later(*3)
		Oracle Solaris 10 1/13	Oracle VM Server for SPARC 3.0 or later(*3)	150310-01
SPARC M10-4				
SPARC64 X+ 3.4 GHz	2210 or later	Oracle Solaris 11.1	system/ldoms(*1) system/ldoms/ldomsmanager(*2)	SRU1.4 or later(*3)

Table 1-1 XCP/Oracle Solaris and essential SRU/patch support list (continued)

Server	XCP	Oracle Solaris	Required packages(*4) Required products(*5)	Essential SRU(*4) Essential patch(*5)
		Oracle Solaris 10 1/13	Oracle VM Server for SPARC 3.0 or later(*3)	150310-01
SPARC64 X 2.8 GHz	2012 or later	Oracle Solaris 11.1	system/ldoms(*1) system/ldoms/ldomsmanager(*2)	SRU1.4 or later(*3)
		Oracle Solaris 10 1/13	Oracle VM Server for SPARC 3.0 or later(*3)	150310-01
SPARC M10-4S (Direct inter-chassis connection)				
SPARC64 X+ 3.7 GHz	2210 or later	Oracle Solaris 11.1	system/ldoms(*1) system/ldoms/ldomsmanager(*2)	SRU1.4 or later(*3)(*7)
		Oracle Solaris 10 1/13(*6)	Oracle VM Server for SPARC 3.0 or later(*3)(*7)(*8)	150310-01(*8)
SPARC64 X 3.0 GHz	2031 or later	Oracle Solaris 11.1	system/ldoms(*1) system/ldoms/ldomsmanager(*2)	SRU1.4 or later(*3)(*7)
		Oracle Solaris 10 1/13(*6)	Oracle VM Server for SPARC 3.0 or later(*3)(*7)(*8)	150310-01(*8)
SPARC M10-4S (Connection through crossbar box)				
SPARC64 X+ 3.7 GHz	2210 or later	Oracle Solaris 11.1	system/ldoms(*1) system/ldoms/ldomsmanager(*2)	SRU1.4 or later(*3)(*7)
		Oracle Solaris 10 1/13(*6)	Oracle VM Server for SPARC 3.0 or later(*3)(*7)(*8)	150310-01(*8)
SPARC64 X 3.0 GHz	2043 or later	Oracle Solaris 11.1	system/ldoms(*1) system/ldoms/ldomsmanager(*2)	SRU1.4 or later(*3)(*7)
		Oracle Solaris 10 1/13(*6)	Oracle VM Server for SPARC 3.0 or later(*3)(*7)(*8)	150310-01(*8)

\*1 Required for the control domain and the guest domain. Included in group/system/solaris-large-server and group/system/solaris-small-server.

\*2 Required only for the control domain. Included in group/system/solaris-large-server and group/system/solaris-small-server.

\*3 Required only for the control domain.

\*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. There are no LSB number limitations on the CPUs that can be assigned to the guest domain. If the Oracle Solaris 10 1/13 is run in the guest domain, however, up to 1024 CPUs (vcpus) can be assigned to a single guest domain.

\*7 Refer to "Notes when using a version older than Oracle VM Server for SPARC 3.1.0.1".

\*8 Refer to "Notes on using Oracle Solaris 10".

---

**Note** - When Oracle Solaris 11.1 is installed or booted from DVD media in a SPARC M10 system, the following two messages are output. Ignore these messages because they have no impact on installation work.

[Message example 1]

```
Dec 21 02:18:22 solaris genunix: NOTICE: core_log: ldmd[1978] core dumped: /tmp/core
Dec 21 02:18:22 solaris svc.startd[9]: ldoms/ldmd:default failed fatally: transitioned to
maintenance (see 'svcs -xv' for details)
```

[Message example 2]

```
SUNW-MSG-ID: SMF-8000-YX, TYPE: defect, VER: 1, SEVERITY: major
EVENT-TIME: Fri Dec 21 02:18:50 UTC 2012
PLATFORM: ORCL,SPARC64-X, CSN: 2081210008, HOSTNAME: solaris
SOURCE: software-diagnosis, REV: 0.1
EVENT-ID: 5cf4edb8-0613-cbe0-acb1-a9a28a2fac10
DESC: A service failed - a start, stop or refresh method failed.
AUTO-RESPONSE: The service has been placed into the maintenance state.
IMPACT: svc:/ldoms/ldmd:default is unavailable.
REC-ACTION: Run 'svcs -xv svc:/ldoms/ldmd:default' to determine the generic reason why
the service failed, the location of any logfiles, and a list of other services impacted. Please
refer to the associated reference document at http://support.oracle.com/msg/SMF-8000-YX
for the latest service procedures and policies regarding this diagnosis.
```

---

**Note** - When Oracle Solaris 11.1 is installed in SPARC M10 Systems, the following message appears at the start of Oracle Solaris.

[Example of message]

```
WARNING: failed to instantiate provider ldmd for process 753
WARNING: failed to instantiate provider ldmd for process 753
Sep 24 06:15:59 svc.startd[11]: svc:/ldoms/ldmd:default: Method "/opt/SUNWldm/bin/ldmd_
start" failed with exit status 95.
Sep 24 06:15:59 svc.startd[11]: ldoms/ldmd:default failed fatally: transitioned to maintenance
(see 'svcs -xv' for details)
```

After Oracle Solaris 11.1 is installed, apply SRU1.4 or later.

Then, the Oracle VM Server for SPARC package is updated to the version supporting SPARC M10 Systems, and such message will no longer be output.

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For other information about Oracle Solaris, see "[Problems with Oracle Solaris and Workarounds](#)."

## 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, refer to *Fujitsu M10/SPARC M10 Systems 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, refer to *Fujitsu M10/SPARC M10 Systems 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.

## Required XCP/Oracle Solaris and essential SRU/patch to enable dynamic reconfiguration of physical partition

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

Table 1-2 XCP/Oracle Solaris and essential SRU/patch support list for dynamic reconfiguration of physical partition

Server	XCP	Oracle Solaris	Required packages Required products	Essential SRU Essential patch
SPARC M10-4S	2220 or later(*6)	Oracle Solaris 11.1	system/ldoms(*1) system/ldoms/ldomsmanager(*2)	SRU11.1.14 or later(*3)

**Table 1-2** XCP/Oracle Solaris and essential SRU/patch support list for dynamic reconfiguration of physical partition (*continued*)

Server	XCP	Oracle Solaris	Required packages Required products	Essential SRU Essential patch
		Oracle Solaris 10 1/13	Oracle VM Server for SPARC 3.1(*4)	150310-01 150817-02 or later(*4)(*5)

\*1 Required for the control domain and the guest domain. Included in group/system/solaris-large-server and group/system/solaris-small-server.

\*2 Required only for the control domain. Included in group/system/solaris-large-server and group/system/solaris-small-server.

\*3 Required for the control domain and the guest domain. For users of SRU11.1.14, an IDR patch (to fix BugID#17709858) is required to ensure stable DR functionality. This issue has been resolved in SRU11.1.15 and later.

\*4 Required only for the control domain.

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

\*6 RTIF2-140507-002 has been fixed by XCP 2220 firmware. If you are using from XCP 2090 to XCP 2210, update the XCP firmware to XCP 2220 or later.

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

The customers who subscribed SupportDesk can obtain the latest XCP firmware and Oracle Solaris SRU/patch/Oracle VM Server for SPARC from the SupportDesk-Web.

## Web Browser

Table 1-2 lists the web browsers on which the XSCF Web operation is confirmed. For other information about XSCF Web, see "[Notes and restrictions on XSCF Web](#)."

**Table 1-3** Version of web browser of which operation has been confirmed

Web browser	Version
Microsoft Internet Explorer	8.0 and 9.0
Firefox	10.0 or later

# Existing XCP Firmware Versions and Support Information

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

**Table 1-4** Previous XCP version releases and support information

<b>XCP version</b>	<b>Main support information</b>	<b>CMU version</b>
XCP 2220	Support for XSCF startup mode function (SPARC M10-1)	02.22.0000
XCP 2210	<ul style="list-style-type: none"> <li>- Support for SPARC64 X+ processors</li> <li>- Support for CPU operational mode which specifies how a CPU should operate</li> <li>- Enable the factory default configuration for the dynamic reconfiguration of physical partitions feature.</li> <li>- The LDAP, Active Directory, LDAP over SSL features have been supported for the XSCF user account.</li> <li>- The SR-IOV feature in combination with Oracle VM Server for SPARC, has been supported.</li> <li>- The "no-io" feature when configuring physical partition has been supported.</li> </ul>	02.21.0000
XCP 2092	Improvement of XCP firmware defects	02.09.0000
XCP 2091	Improvement of XCP firmware defects	02.09.0000
XCP 2090	<ul style="list-style-type: none"> <li>- Support of 64 GB memory</li> <li>- Support of the dynamic reconfiguration (DR) function of the system board in a physical partition (PPAR)</li> <li>- Support of multiple specifications of the port and community string for the Trap host of the SNMP agent function</li> <li>- Support for automatic XCP firmware version synchronization between chassis when maintenance is done in off state of the input power supply.</li> </ul>	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	<ul style="list-style-type: none"> <li>- Support of the AES algorithm encryption function for the SNMP agent function</li> <li>- Support of different memories in the chassis</li> </ul>	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

**Table 1-4** Previous XCP version releases and support information (*continued*)

<b>XCP version</b>	<b>Main support information</b>	<b>CMU version</b>
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

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**Note** - The version `-c xcp -v` command can be used to check the individual XSCF and CMU firmware versions in XCP.

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**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.

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# Chapter 2

## XCP 2220-Related Information

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This chapter provides XCP 2220-related information.

- [Latest Information on XCP 2220](#)
- [Notes and Restrictions](#)
- [XCP 2220 Problems and Workarounds](#)

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## Latest Information on XCP 2220

Here, we will explain the main changes in XCP 2220.

- [SPARC M10-1]  
The XSCF startup mode function, which provides automatic startup of physical partitions (PPAR) after the input power is turned on, has been supported.  
The XSCF startup mode function is configured by the `xscfstartupmode(8)` command of XSCF firmware. For details, refer to *Fujitus M10/SPARC M10 Systems System Operation and Administration Guide*.

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## Notes and Restrictions

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

### Notes and restrictions on dynamic reconfiguration of physical partitions

#### Notes

- 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 M10/SPARC M10 Systems Domain Configuration Guide*.

- After dynamic reconfiguration of a physical partition, the execution results of `prtdiag(1M)` executed from the control domain may differ from the actual physical configuration.  
Executing "`svcadm restart picl`" can update to the latest information.
- 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.

## Restrictions

- 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, as there is a chance of the logical domain to hang or the `deleteboard(8)` command to fail.  
Due to this problem, 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 patches 150400-01 to 150400-06 on Oracle Solaris 10. In such a case, dynamic reconfiguration of physical partitions may cause 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.Regarding maintenance using DR or PHP, refer to either *Fujitsu M10-4/Fujitsu M10-4S/SPARC M10-4/SPARC M10-4S Service Manual* or *PCI Expansion Unit for Fujitsu M10/SPARC M10 Systems Service Manual*.  
Regarding details on the "ldm" command, refer to *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 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 *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 *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 *Fujitsu M10/SPARC M10 Systems PCI Card Installation Guide*.

### Restrictions

- [SPARC M10-1]  
The SR-IOV function for PCI cards which are mounted on PCI Expansion Unit's SLOT4 or higher, are not supported at the present moment.
- [SPARC M10-4/M10-4S]

When the PCI Expansion Unit's direct I/O function has been enabled by the `setpciboxdio(8)` command, the SR-IOV function for PCI cards which are mounted on PCI Expansion Unit's SLOT4 or higher, are not supported at the present moment.

## Notes on OpenBoot PROM

- If you execute the `sendbreak(8)` command after the OpenBoot PROM banner appears on the domain console 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 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 `nvrnrc`, 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 `nvrnrc`, 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 to the domain console 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.
```

## Notes on maintenance for CPU memory unit and motherboard unit

- 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.

- To replace the lower part of the CPU memory unit (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 SPARC M10-4S units and that the firmware is XCP 2044 or later. If the lower part of the CPU memory unit (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 lower part of the CPU memory unit (CMUL) or install the SPARC M10-4S again.

- [SPARC M10-4S]

From XCP2090 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 XCP firmware versions can be confirmed by 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

## 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.
- 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 greater in [Time-out value].

#### (2) Internet Explorer

There are no notes known at present.

#### (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.

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

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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 no restrictions known at present.

(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 no restrictions known at present.

## 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.	<ol style="list-style-type: none"> <li><b>1. Execute the flashupdate(8) command from the master XSCF of BB#00.</b></li> <li>-&gt; The XSCF of BB#00 that has executed the flashupdate(8) command is in the standby status immediately after XSCF reset.</li> <li>-&gt; XSCF automatic switchover is performed after the update has been completed.</li> <li>-&gt; When XSCF automatic switchover is completed, the XSCF of BB#00 that has executed the flashupdate(8) command is restored to the status of the original master.</li> <li><b>2. Confirm that the update has been completed by referring to the log message for the master XSCF of BB#00.</b></li> </ol>
XCP 2044 or earlier	The master XSCF and the standby XSCF that have been switched over during update will stay switched over.	<ol style="list-style-type: none"> <li><b>1. Execute the flashupdate(8) command from the master XSCF of BB#00.</b></li> <li>-&gt; The XSCF of BB#00 that has executed the flashupdate(8) command is in the standby status immediately after XSCF reset.</li> <li>-&gt; 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 stay in the standby status.</li> <li><b>2. Confirm that the update has been completed by referring to the log message for the master XSCF of BB#01.</b></li> <li><b>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.</b></li> </ol>

- When updating firmware, if the occurrence of a failure is indicated in "[Problems with XCP and Workarounds](#)" and a countermeasure is described as a workaround, take the action to prevent the failure. After that, update the firmware.

# Notes on configurations with a PCI expansion unit connected

- [SPARC M10-1]

If one of the following cases, the logical domain configuration of physical partitions (PPARs) is restored to the factory-default state at the next startup. Moreover, when there is a guest domain in the logical domain configuration, the OpenBoot PROM environment variable is initialized.

- Firmware of version XCP 2043 or earlier is updated to that of XCP 2044 or later in a configuration with a PCI expansion unit connected.
- A PCI expansion unit is added to or removed from a system with firmware of XCP 2044 or later.

Save the logical domain configuration information to an XML file from Oracle Solaris in advance. Execute the `ldm list-constraints -x` command to save the logical domain configuration information to an XML file. Execute the `ldm init-system -i` command to restore the logical domain configuration information from an XML file. Make a note of the OpenBoot PROM environment variable setting information for the control domain beforehand so that you can subsequently reconfigure it.

To display the information, execute the `printenv` command in the `ok` prompt. For details of these procedures, see "1.7.2 How to save the configuration information and the OpenBoot PROM environment variable in the logical domain and subsequently restore them" in the *PCI Expansion Unit for Fujitsu M10/SPARC M10 Systems Service Manual*.

If you need to save/restore information related to the PCI expansion unit configuration, see the information in the following table.

Table 2-2 Required work regarding the PCI expansion unit configuration

Mounting of PCI expansion unit	Domain configuration	Reconstructing Oracle VM Server for SPARC config	Setting OpenBoot PROM environment variables again
No	factory-default	Unnecessary	Unnecessary
No	Guest domain exists.	Unnecessary	Unnecessary
Yes	factory-default	Unnecessary	Unnecessary
Yes	Guest domain exists.	Necessary (XML)	Necessary

- [SPARC M10-4/M10-4S]

If either of the tasks is performed with the `setpciboxdio(8)` command, using firmware of version XCP 2044 or later for the SPARC M10-4 or version XCP 2050 or later for the SPARC M10-4S, the logical domain configuration of the physical partitions (PPARs) is restored to the factory default at the next startup. Moreover, when the domain configuration includes a guest domain, the OpenBoot PROM environment variable is initialized.

- The enable/disable setting for the direct I/O function of the PCI expansion unit is

changed.

- A PCI expansion unit is added, removed, or replaced for a PCI slot of SPARC M10 chassis for which the direct I/O function of a PCI expansion unit is enabled.

Save the logical domain configuration information to an XML file from Oracle Solaris in advance. Execute the `ldm list-constraints -x` command to save the logical domain configuration information to an XML file. Execute the `ldm init-system -i` command to restore the logical domain configuration information from an XML file. Also, write down in advance the setting information of the OpenBoot PROM environment variable for the control domain, and set it again. To display the information, execute the `printenv` command in the `ok` prompt. For details of these procedures, see "1.7.2 How to save the configuration information and the OpenBoot PROM environment variable in the logical domain and subsequently restore them" in the *PCI Expansion Unit for Fujitsu M10/SPARC M10 Systems Service Manual*.

If you need to save/restore various information when you change the enable/disable setting of the direct I/O function of PCI expansion units by executing the `setpciboxdio(8)` command, the information in the following table applies.

**Table 2-3** Work for switching the enable/disable setting by executing the `setpciboxdio` command

Configuration of PCI expansion unit	Domain configuration	Reconstructing Oracle VM Server for SPARC config	Setting OpenBoot PROM environment variables again
Yes/No	factory-default	Unnecessary	Necessary
Yes/No	Guest domain exists.	Necessary (XML)	Necessary

If you add, remove, or replace a PCI expansion unit for a PCI slot of SPARC M10 chassis for which the direct I/O function of a PCI expansion unit is enabled, by executing the `setpciboxdio(8)` command, the cases in which you need to save/restore information are listed in the following table.

**Note** - In maintenance on a PCI expansion unit with the PCI hot plug (PHP) function, the direct I/O function is disabled. Therefore, no information needs to be saved/restored.

**Table 2-4** Work to be performed after you add, remove, or replace a PCI expansion unit for a PCI slot of SPARC M10 chassis for which the direct I/O function is enabled

Maintenance environment	Domain configuration	Reconstructing Oracle VM Server for SPARC config	Setting OpenBoot PROM environment variables again
When addition/removal is performed by stopping the PPAR	factory-default Guest domain exists.	Unnecessary Necessary (XML)	Unnecessary Necessary

**Table 2-4** Work to be performed after you add, remove, or replace a PCI expansion unit for a PCI slot of SPARC M10 chassis for which the direct I/O function is enabled  
(continued)

Maintenance environment	Domain configuration	Reconstructing Oracle VM Server for SPARC config	Setting OpenBoot PROM environment variables again
When a faulty PCI expansion unit(*) is replaced by stopping the PPAR	factory-default Guest domain exists.	Unnecessary Necessary (XML)	Unnecessary Necessary
When a normal PCI expansion unit(*) is replaced by stopping the PPAR	factory-default Guest domain exists.	Unnecessary Unnecessary	Unnecessary Unnecessary

\*1: Includes cases in which a link card, link cable, management cable, or link board is replaced.

## 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.

## Other notes and restrictions

### Notes

- 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.
- [SPARC M10-1/M10-4/M10-4S]  
The maximum number of users who can concurrently connect to the XSCF via Telnet and SSH is as follows:
  - M10-1: 20 users
  - M10-4: 40 users
  - M10-4S (without crossbar box): 40 users
  - 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.
- Settings made by the `setdualpowerfeed(8)` command are immediately applied. Therefore, the XSCF does not need to be reset.
- The `ioxadm poweroff(8)` command can be specified with the `-f` option only for a power supply unit.
- 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 becomes unable 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 `tests(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]  
Depending on the system configuration, it may take time to reboot.
  - 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.
  - Do not register the same node with multiple power supply interlocking groups. If power supply interlocking is performed by registering a single node with multiple power supply interlocking groups, the operation may not be as intended. With the `setremotepwrmgmt(8)` command, you cannot confirm whether a single node is registered with multiple power supply interlocking groups. When creating or modifying a power supply interlocking group management information file, 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 power supply interlocking groups, and both of the conditions below are met, the I/O node is turned on and off alternately.
    - `setremotepwrmgmt -c enable` is executed, and the power supply interlocking 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 power supply interlocking first and then use `clearremotepwrmgmt` to delete the power control group setting. After

deletion, create a power supply interlocking group management information file so that the I/O node is not registered with multiple groups, and then use `setremotepwrmgmt -c config` to register it again.

- If XCP2080 or earlier is used together with a single SPARC M10 system that is connected to an external I/O device, do not use the power supply interlocking function. The external I/O device may be erroneously powered off when the XSCF is reset.
- 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 (CMU) 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. Check the configuration information of the logical domain stored in 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-sconfig ldm-set1
primary# ldm add-sconfig 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-03000001000000000000000000
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.
  - Perform the following procedure when replacing crossbar boxes (XBBOX):
    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 microSD card is unnecessary. For details on maintenance, refer to *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 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.

## Restrictions

- At this point, no-mem, to be set with the -s option of the setppl(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 restarted 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) 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 restarted 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(1M) 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.
- The -c wait option, which is used to set the air-conditioning wait time for the setpowerupdelay(8) command, is not supported at present.
- Replacement of a crossbar box using the replacefru(8) command is not supported at present. For how to replace a crossbar box, see "[Restrictions on replacing 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 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 M10-4/M10-4S]  
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.
- [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. See "RTIF2-131004-001" of "[Problems resolved in XCP 2070](#)" for this issue.
- 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]-[Setting]-[User Manager]-[LDAP] on the XSCF Web, cannot be set up with [XSCF]-[Setting]-[User Manager]-[Account] on the XSCF Web. Set up user privilege with the `setprivileges(8)` command on XSCF shell prompt.
- The log file transfer function of the audit log set with the `setaudit archive` command is not supported at present.

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## XCP 2220 Problems and Workarounds

See "[Problems that might occur with XCP 2220 and workarounds](#)" for information on problems that can occur with XCP 2220. See "[Problems resolved in XCP 2220](#)" for information on problems resolved in XCP 2220.



# Chapter 3

## Information on Software

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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](#)

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## Notes and Restrictions

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

## Notes on live migration of Oracle VM Server for SPARC

- 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 configuration options, refer to the *Reference Manual* of your Oracle VM Server for SPARC.
- The values 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. Please refer to the following table. For details on CPU operational modes of physical partitions, refer to section 7.2.1 of *Fujitsu M10/SPARC M10 Systems System Operation and Administration Guide*.

**Table 3-1** List of `cpu-arch` properties 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 3-2 List of cpu-arch properties 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 3-3 List of cpu-arch properties that support live migration (For 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

## Notes on a case where openssl is used

Oracle Solaris provides accelerated cryptographic libraries for SPARC64 M10 systems. These libraries can be used by using the PKCS11 engine of OpenSSL. See man pages `openssl(5)`, `engine(3openssl)`, and `evp(3openssl)`, or the following OpenSSL documents:

<http://www.openssl.org/docs/crypto/engine.html>  
<http://www.openssl.org/docs/crypto/evp.html>

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 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 processor:
    - SHA1, SHA224, SHA256, SHA384, SHA512
  - The following encryption methods have been optimized for the 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 method on SPARC64-X:

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

- 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 on remote maintenance service

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

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This section describes notes when using the remote maintenance service. See *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 timezone 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 timezone for XSCF

After completing the above settings, perform settings for the REMCS agent function by using the XSCF Web.

See *Fujitsu M10/SPARC M10 Systems System Operation and Administration Guide* for details of the XSCF Web settings and timezone settings.

### Timezone for the REMCS agent function

The REMCS agent uses the timezone currently set for the system. For this reason, when you change the system timezone 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 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.

---

## Problems with XCP and Workarounds

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

### Problems that might occur with XCP 2220 and workarounds

The following table shows problems that might occur with XCP 2220 and workarounds for them.

Table 3-4 Problems that might occur with XCP 2220 and workarounds

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-121113-007	x	x	x	While XSCF is starting, process down, panic or watchdog timeout occurs, which may cause XSCF to be reset.	<p>Confirm that XSCF is successfully started.</p> <p>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).</p> <p>When recycling the power supply to the system, wait for 30 seconds or more to turn on the input power supply after disconnecting.</p> <p>In case XSCF is not started even if recycling the input power supply to the system, replace the CPU memory unit (CMU).</p>
RTIF2-130109-003	x	x	x	If you use the <code>setpcl(8)</code> 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 <code>showhardconf(8)</code> command.	<p>Use the <code>setdomainconfig(8)</code> command to set the logical domain configuration to the factory-default, and power on the physical partition (PPAR). Then, configure the logical domain again.</p>
RTIF2-130219-004			x	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.	<p>There is no effective workaround. Power off the physical partition (PPAR) and replace the crossbar unit in the crossbar box.</p>
RTIF2-130219-006	x	x	x	If you restart an XSCF by using the <code>flashupdate(8)</code> or <code>rebootxscf(8)</code> command while a physical partition (PPAR) is being powered on, the POST may stop in a state where the diagnosis is completed (Initialization Complete).	<p>Execute the <code>reset por</code> command, or power off the PPAR by using the <code>poweroff -f</code> command and then power it on again.</p>
RTIF2-130219-007			x	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	<p>This error log is registered when you disconnect the input power supply. Ignore this error log.</p>

Table 3-4 Problems that might occur with XCP 2220 and workarounds (*continued*)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
				log. In addition, a non-existing crossbar box or SPARC M10-4S may be displayed as a faulty unit.	
RTIF2-130305-001	x	x	x	"The limit of power has been exceeded" is registered in the event log if you perform the following. Execute the <code>setpowercapping(8)</code> command to set the power consumption limiting function to "Enable", the power consumption maximum allowable value to "Specify 100 percent (default)", 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).	There is no effective workaround. Ignore this event log.
RTIF2-130305-002	x	x	x	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 <code>showlogs</code> error command is not displayed in the Fault Report output by the <code>fmdump</code> command.	There is no effective workaround. Maintain according to the FRU displayed by the <code>showlogs</code> error command.
RTIF2-130305-003	x	x	x	If you reconnect the input power cable soon after it is unplugged, the error log of PSUs detect 100V and 200V 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 100V and 200V at AC inputs	There is no effective workaround. Ignore this error log.

Table 3-4 Problems that might occur with XCP 2220 and workarounds (*continued*)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-130305-004			x	When an XSCF unit of SPARC M10-4S or crossbar box is replaced using the <code>replacefru(8)</code> command, the replacement may fail with the following message displayed. [Warning:010] An internal error has occurred.	Replace the unit again after the <code>replacefru(8)</code> command is completed. If replacement still fails, stop the system and then replace the unit.
RTIF2-130305-007	x	x	x	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 <code>testsb(8)</code> command or <code>diagxbu(8)</code> command.	There is no effective workaround. Maintain the applicable PSB of SPARC M10 system chassis.
RTIF2-130305-013	x	x	x	While XSCF is starting, process down, panic or watchdog timeout occurs, which may cause XSCF to be reset.	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. In case XSCF is not started even if recycling the input power supply to the system, replace the CPU memory unit (CMU).
RTIF2-130305-020			x	If an XSCF panic or hang-up occurs, an error log showing that "XSCF hang-up is detected" may be posted many times.	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.

Table 3-4 Problems that might occur with XCP 2220 and workarounds (*continued*)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-130305-022			x	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 power supply interlocking. Not powering on : An internal error has occurred. Please contact your system administrator.	There is no effective workaround. Use the showboards(8) command to replace the XSCF of the PSB, which is shown as "unknown".
RTIF2-130305-023			x	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."	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.
RTIF2-130305-025			x	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.	There is no effective workaround.
RTIF2-130329-005	x			When you turn on the input power supply in SPARC M10-1, READY LED of XSCF remains blinking and the system may not start.	There is no effective workaround. Power off the input power supply and then power it on again.
RTIF2-130410-001			x	The diagnosis of the system board may fail during the power-off of the system board (PSB) by executing the diagxbu(8) or testsb(8) command, displaying the following message. [Warning:010] An internal error has occurred.	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".

Table 3-4 Problems that might occur with XCP 2220 and workarounds (*continued*)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-130410-002			x	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.	Do not switch an XSCF by using the switchscf(8) command while a PPAR is being powered on.
RTIF2-130410-003			x	<p>If a physical partition (PPAR) is powered on in the system that satisfies all the following conditions, other PPAR may also be powered on.</p> <ul style="list-style-type: none"> <li>- The power supply interlocking is enabled with the setremotepwrmgmt(8) command.</li> <li>- A node is created whose SubNodeID is not set in a power supply interlocking management item.</li> <li>- Multiple PPARs are configured.</li> </ul>	<ul style="list-style-type: none"> <li>- When power supply interlocking is not necessary Disable power supply interlocking with setremotepwrmgmt -c disable and then delete the power supply interlocking setting with the clearremotepwrmgmt(8) command.</li> <li>- When power supply interlocking is necessary If the system has multiple PPARs, create a management file for power supply interlocking by specifying a PPAR-ID as a SubNodeID, and then register the power supply interlocking setting with setremotepwrmgmt -c config.</li> </ul>
RTIF2-130516-002			x	If XSCF switching or an XSCF reset occurs while the physical partition (PPAR) is being powered off, it may be impossible to turn off the power.	There is no effective workaround. While powering off PPAR, do not use the switchscf(8) command to perform XSCF switching or the rebootxscf(8) command to perform an XSCF reset.
RTIF2-130516-004			x	<p>If a hardware failure occurs in a 4BB or greater configuration, automatic cluster switching may fail.</p> <p>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</p>	If automatic cluster switching fails, follow the procedure in the manual of the cluster software to perform switching manually.

Table 3-4 Problems that might occur with XCP 2220 and workarounds (*continued*)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-130516-006			x	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.	There is no effective workaround. Do not switch an XSCF by using the switchscf(8) command while PPARs are being powered on.
RTIF2-130702-001		x	x	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).	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-sponconfig command to save the constructed logical domain configuration to the XSCF.
RTIF2-130710-001			x	If XSCF switching is performed using the switchscf(8) command, in rare cases, the standby XSCF may not start.	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.
RTIF2-130711-003			x	Before active replacement of the XSCF unit of the crossbar box is completed, the replacefru(8) command is completed normally.	When replacing the XSCF unit by using the replacefru(8) command, wait for 10 minutes after the following message is output, and then proceed to the next operation. After replacement has been completed, please select[f:finish] :

Table 3-4 Problems that might occur with XCP 2220 and workarounds (*continued*)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-130801-001			x	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.	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.
RTIF2-130802-003			x	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)	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.
RTIF2-130919-001			x	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.	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.
RTIF2-131001-002			x	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.	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.
RTIF2-131112-001	x	x	x	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.	There is no effective workaround. Even if transfer is delayed, there is no problem with the collected data.

Table 3-4 Problems that might occur with XCP 2220 and workarounds (*continued*)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-131112-013			x	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.	There is no effective workaround. Restart the control domain for the physical partition (PPAR) for which the error message was output.
RTIF2-131126-003	x	x	x	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)	There is no effective workaround. Execute the <code>ioxadm -c update</code> command to update the PCI expansion unit firmware again.
RTIF2-131213-001			x	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.	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.

Table 3-4 Problems that might occur with XCP 2220 and workarounds (*continued*)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-131213-002			x	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.	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.
RTIF2-131213-003			x	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.	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] Execute the following: 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. - End of power-on/reset: The status of Pwr/Conn/Conf/Test 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.
RTIF2-131213-010	x	x	x	When the firmware of the PCI Expansion Unit is updated with the "ioxadm -c update" command, process down may occur at the XSCF firmware.	There is not effective workaround. Re-execute the "ioxadm -c update" command to update the PCI Expansion Unit firmware again.

Table 3-4 Problems that might occur with XCP 2220 and workarounds (*continued*)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-131213-011			x	<p>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.</p> <pre>[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] :</pre>	<p>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.</p> <p>Please execute the following steps:</p> <ol style="list-style-type: none"> <li>1) After the added device is connected with the system, please turn on the breaker of the BB#x.</li> <li>2) Please select[f:finish] :</li> </ol> <pre>[How to restore] Input "a" in response to the "[a:add c:cancel] :" message and re-execute the addfru(8) command.</pre>

Table 3-4 Problems that might occur with XCP 2220 and workarounds (*continued*)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-131213-012			x	<p>After replacing SPARC M10 with the replacefru(8) command, diagnosis processing may not terminate properly.</p> <p>Example of 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.</p> <pre> 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] :</pre>	<p>There is no effective workaround.</p> <p>[How to restore]            Re-execute the replacefru(8) command.</p>

Table 3-4 Problems that might occur with XCP 2220 and workarounds (*continued*)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-131213-014	x	x	x	<p>If the time zone of XSCF is changed using the <code>settimezone(8)</code> 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.</p> <p>[Example] If the time zone before setup was UTC and after setup is JST, the time misalignment of Oracle Solaris will be 9 hours.</p>	<p>There is no effective workaround. Boot the Oracle Solaris after executing the <code>resetdateoffset(8)</code> command and set to the right time on the Oracle Solaris.</p>
RTIF2-131213-019	x	x	x	<p>While XSCF is starting after being powered on, watchdog timeout may occur and XSCF is reset. After this reset is completed, the configuration information of the components mounted on the system cannot be checked by the <code>showhardconf(8)</code> command.</p> <p>Moreover, error logs regarding the following configurations may be registered.</p> <p>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</p>	<p>There is no effective workaround. [How to restore] Re-execute power off and on.</p>
RTIF2-131213-022			x	<p>After firmware update, if the XCP version is checked by the <code>version(8)</code> command or the XSCF Web interface, versions of each crossbar box (XBBOX) or the XCP of SPARC M10-4S (BB) may not be the same as the updated XCP version.</p> <p>In the following example, although the firmware has been updated to XCP2052 from XCP 2042, the XCP of "XCP0 (Reserve):" of BB#00 has not been updated.</p> <p>XSCF&gt; <b>version -c xcp -v</b></p>	<p>There is no effective workaround. [How to restore] Specify the BB-ID of the crossbar box (XBBOX) or of the SPARC M10-4S (BB), which was not updated, to the <code>"rebootxscf -b BB-ID"</code> command and execute it to reset the XSCF of the specified chassis.</p>

Table 3-4 Problems that might occur with XCP 2220 and workarounds (*continued*)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
				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	
RTIF2-140121-001	x	x	x	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 is turned on (AC ON) again.	There is no effective workaround. Contact a field engineer if this problem occurs.
RTIF2-140212-003	x	x	x	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.	Restart the snmp daemon using any of the setsnmp(8), setsnmpusm(8) or the setsnmpvacm(8) commands or reset XSCF.
RTIF2-140212-005	x	x	x	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	There is no effective workaround.

Table 3-4 Problems that might occur with XCP 2220 and workarounds (*continued*)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
				05018133 05018211 05018221 05018231	
RTIF2-140212-007	x	x	x	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.	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 the "setsnmpusm delete" command and then register the user again.
RTIF2-140212-008	x	x	x	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.	There is no effective workaround.
RTIF2-140212-009	x			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 "Hardware access error" regarding the power unit (PSU) is detected. Moreover, the PSU is marked as failed due to this error.	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 clear the failure mark on PSU, turn off the input power and then turn it back on.
RTIF2-140212-011			x	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.	There is no effective workaround. The system can be operated continuously as it will be restored after being reset.

Table 3-4 Problems that might occur with XCP 2220 and workarounds (*continued*)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-140212-012			x	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.	There is no effective workaround. The slave XSCF will be restored by the reset and the system can be used continuously after that.
RTIF2-140212-013	x	x	x	Due to the failure of a DIMM, the "CPU internal fatal error", which suspects the MBU, CMUL or the CMUU, may be registered when powering on the physical partition (PPAR).	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.
RTIF2-140212-014	x	x	x	Even if the "CPU cache degraded (CPU #xx)" error is detected, the CHECK LED of the operation panel may not light up.	There is no effective workaround.
RTIF2-140212-016	x	x	x	When resetting XSCF, the "snmpd[XXXXX] svrSP: error doAction ACTION_CONTROL_LED" error message regarding SNMP may be displayed on the XSCF serial terminal.	There is no effective workaround. Ignore this message.

Table 3-4 Problems that might occur with XCP 2220 and workarounds (*continued*)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-140212-021			x	<p>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.</p> <p>The following is an example of such an error.</p> <p>[Example]</p> <pre>XSCF&gt; 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.</pre>	<p>There is no effective workaround.</p> <p>[How to restore]</p> <p>Execute maintenance on the failed hardware after confirming it with the showlogs(8) command. After that, execute the testsb(8) command again.</p>

Table 3-4 Problems that might occur with XCP 2220 and workarounds (*continued*)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-140227-001			x	When the cross-bar 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.	There is no effective workaround.  [How to restore] 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.
RTIF2-140227-004	x	x	x	If a link card is removed from the system by PCI hot plugging (PHP), using the cfgadm(1M) command on the logical domain on which it is mounted, and thus power supply to it is stopped, the "LINK CARD 12C error" log may be mistakenly registered.	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.
RTIF2-140227-005			x	At the time of cold replacement or cold addition of CPU Memory Units (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.	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> <b>flashupdate -c update -m xcp -s x.x.x.x -f</b> * x.x.x.x 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 replace.

Table 3-4 Problems that might occur with XCP 2220 and workarounds (*continued*)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-140227-009	x	x	x	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.	In case of a LDAP server, specified by the setldap(8) command, there is no effective workaround. Specify the LDAP server with the setldaps(8) command.
RTIF2-140227-010			x	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	There is no effective workaround. Execute the "addboard -c configure" command, specifying existent PSBs.
RTIF2-140304-001			x	When performing AC OFF/ON, in some very rare cases, the "SCF process down detected" error message is registered and XSCF fails to start.	There is no effective workaround. If this symptom has occurred, contact the maintenance staff.

Table 3-4 Problems that might occur with XCP 2220 and workarounds (*continued*)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-140304-002	x	x	x	The "SCF process down detected" error log may be registered when the flashupdate(8) command is running.	<p>There is no effective workaround. [When restoration is not required]</p> <p>If both of the following conditions are met, there is no need for restoration. It may be assumed that firmware update has completed properly.</p> <ul style="list-style-type: none"> <li>- 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.</li> </ul> <p>[Example]            Diagnostic Code: 00000000            00000000 0000 00000000            00000000 0000 00000000            00000000 0000 666c6173            68757064 6174652e xxxxxxxx            00000000 00000000 0000            where, xxxxxxxx is indefinite</p> <ul style="list-style-type: none"> <li>- The "showlogs event" command displays the "XCP update has been completed" event log.</li> </ul> <p>[How to restore]            Re-execute the flashupdate(8) command.</p>

Table 3-4 Problems that might occur with XCP 2220 and workarounds (*continued*)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-140304-003	x	x	x	<p>In case of SNMPv3, if the trap host name registered by the <code>setsnmp(8)</code> command contains a colon (:), it does not show up properly by the <code>showsnmp(8)</code> command.</p> <p>[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".</p>	<p>In case of SNMPv3, do not register a trap host name with the <code>setsnmp(8)</code> 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:</p> <pre>setsnmp remv3traphost -u 'username' -p 'port_number' trap_host_name</pre> <p>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 <code>showsnmp(8)</code> command, but the one specified at the time of registration.</p>
RTIF2-140304-004			x	<p>In case of a SPARC M10-4S that is attached to cross-bar 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:</p> <p>[Symptom 1] When the <code>poweroff(8)</code> command is executed, the power on the PPAR is turned off, but the command prompt does not respond for about 20 minutes.</p> <p>[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.</p>	<p>If XSCF failure has occurred, replace the CPU Memory Unit (Lower) (CMUL) or the XSCF unit.</p> <p>[How to restore] [Symptom 1] After about 20 minutes, the <code>poweroff(8)</code> command ends properly and the prompt comes back.</p> <p>[Symptom 2] Forcibly power off the PPAR using the "<code>poweroff -f</code>" command.</p>

Table 3-4 Problems that might occur with XCP 2220 and workarounds (*continued*)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-140304-005			x	<p>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:</p> <p>"This operation cannot be done because the PPAR including a PSB of the target BB is powered on"</p> <p>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.</p> <p>[Example]</p> <p>When PSB#01-0 (BB#01) has been degraded.</p> <p>XSCF&gt; <b>showhardconf</b></p> <p>...</p> <p>* BB#01 Status:Deconfigured;</p> <p>...</p> <p>XSCF&gt; showboards -a</p> <p>PSB PPAR-ID(LSB)</p> <p>Assignment Pwr Conn Conf</p> <p>Test Fault</p> <p>---</p> <p>-----</p> <p>01-0 00(01) Assigned</p> <p>n n n Passed Faulted</p>	<p>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.</p> <p>[Example]</p> <p>XSCF&gt; <b>deleteboard -c unassign 01-0</b></p> <p>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.</p> <p>[Example]</p> <p>XSCF&gt; <b>addboard -c assign -p 0 01-0</b></p> <p>Meanwhile, from XCP2210 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.</p>

Table 3-4 Problems that might occur with XCP 2220 and workarounds (*continued*)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-140304-006	x	x	x	When the power supply unit 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. <ul style="list-style-type: none"> <li>- PSU shortage (power off started)</li> <li>- PSU shortage</li> <li>- Wrong PSU is installed</li> </ul>	If any of the error logs included in [Example] is being registered, cold replace the PSU.
RTIF2-140304-007			x	When replacing power supply units (PSU) 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.	See " <a href="#">Workaround for RTIF2-140304-007</a> ".
RTIF2-140314-001	x			In case of a SPARC M10-1, to which XCP 2210 is applied, if an internal component failure occurs in Type B Mother Board Unit (MBU), it may not be detected and the following error may be registered in numbers. <ul style="list-style-type: none"> <li>- Voltage problem within MBU FRU: /MBU Msg: Critical low voltage error</li> </ul> Or, <ul style="list-style-type: none"> <li>- Fan speed problem FRU: /FAN#x, /MBU Msg: FAN speed too low</li> </ul>	There is no effective workaround. [How to restore] Replace the MBU.
RTIF2-140402-001	x	x	x	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] - [CoDActivation] menus on the XSCF Web. !"#\$%&'()*+,-./:; :;"?@"^_`{ }~	Use the setemailreport(8) command of the XSCF shell.

Table 3-4 Problems that might occur with XCP 2220 and workarounds (*continued*)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-140402-003	x	x	x	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.	Execute the deletion by using XSCF Web in Firefox or the setsnmpvacm(8) command of the XSCF shell.
RTIF2-140403-001	x	x	x	<p>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.</p> <ul style="list-style-type: none"> <li>- Entering "#" to disconnect the control domain console</li> <li>- 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)</li> <li>- Executing the switchscf(8) command to switch the master XSCF</li> <li>- Executing the rebootxscf(8) command to reset the XSCF</li> </ul>	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 3-4 Problems that might occur with XCP 2220 and workarounds (*continued*)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-140407-001	x	x	x	<p>Suppose you attempt to execute the <code>dumpconfig(8)</code> command to save XSCF setting information, and then execute the <code>restoreconfig(8)</code> 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.</p> <ul style="list-style-type: none"> <li>- Setting values for power operation at power recovery, set with the <code>setpowerschedule -c recover</code> command</li> <li>- Setting values for enabling/disabling ASR function, set with the <code>setservicetag(8)</code> command</li> <li>- PPAR DR feature setting values set with the <code>setpparmode -pppar_id -m ppar_dr</code> command for XCP 2210 or later of the SPARC M10-4S.</li> </ul> <p>The following setting may be excessively restored to other chassis at recovery.</p> <ul style="list-style-type: none"> <li>- Information on the time difference between XSCF and the hypervisor of each physical partition (PPAR)</li> </ul> <p>Furthermore, since the PPAR DR feature setting values cannot be saved/restored, powering on the PPAR after executing the following procedure switches the logical domain configuration information to the factory-default state.</p> <ol style="list-style-type: none"> <li>1. Execute the <code>setpparmode -p ppar_id -mppar_dr</code> command to enable/disable the PPAR DR feature.</li> <li>2. Execute the <code>dumpconfig(8)</code> command to save XSCF setting information.</li> <li>3. Initialize the chassis to factory</li> </ol>	<p>There is no effective workaround. [How to restore] Execute the following procedure.</p> <ol style="list-style-type: none"> <li>1. Before saving the XSCF setting information with the <code>dumpconfig(8)</code> command, confirm the following settings. <ul style="list-style-type: none"> <li>- Setting for power operation at power recovery(recover mode)</li> </ul> <p>[Example] Not powering on at power recovery</p> <pre>XSCF&gt; showpowerschedule -a -m state PPAR-ID schedule member recover mode ----- 0 enable 4 off - ASR function (Service Tag) enable/disable setting XSCF&gt; showservicetag Enabled - PPAR DR feature enable/ disable setting [Example] Disabled XSCF&gt; showpparmode -p 0 --- Omitted --- PPAR DR(Current) :- PPAR DR(Next) :off - Time difference between XSCF and the hypervisor of each PPAR [Example] If there is a time difference between XSCF and the hypervisor of each PPAR XSCF&gt; showdateoffset -a PPAR-ID Domain Date Offset 00 12 sec 01 12 sec --- Omitted --- 15 12 sec</pre> </li> <li>2. After restoring the XSCF setting information with the <code>restoreconfig(8)</code> command, execute the command below to implement a reset using the setting values confirmed in step 1. Or, initialize the time difference. <ul style="list-style-type: none"> <li>- Restoring setting for power operation at power recovery</li> </ul> </li> </ol>

Table 3-4 Problems that might occur with XCP 2220 and workarounds (*continued*)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
				defaults by executing the <code>initbb(8)</code> or the <code>restoredefaults(8)</code> command.	[Example] Not powering on at power recovery XSCF> <b>setpowerschedule -a -c recover=off</b>
				4. Restore the XSCF configuration information of the chassis in procedure 3 with executing the <code>restoreconfig(8)</code> command.	- Restoring ASR function (Service Tag) enable/disable setting
				5. Power on the PPAR by executing the <code>poweron(8)</code> command.	[Example] Setting to enable XSCF> <b>setservicetag -c enable</b> - Restoring PPAR DR feature enable/disable setting [Example] Setting to disable XSCF> <b>setpparmode -p 0 -m ppar_dr=off</b> - Initializing time difference between XSCF and hypervisor of each PPAR [Example] Time difference existing at saving XSCF> <b>resetdateoffset -y -a</b>

Table 3-4 Problems that might occur with XCP 2220 and workarounds (*continued*)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-140407-003	x	x	x	<p>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.</p> <pre>{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 80000000fecdaaff8 (f02081dc) Called from (f0248350) at f024837c {0} ok</pre>	<p>There is no effective workaround. [How to restore]</p> <p>From the ok prompt, execute the reset-all command to restart OpenBoot PROM.</p> <pre>{0} ok <b>reset-all</b></pre>

Table 3-4 Problems that might occur with XCP 2220 and workarounds (*continued*)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-140407-005	x		x	<p>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.</p> <p>Msg: Critical low voltage error Or Msg: Critical high voltage error Or Msg: Power subsystem failure</p>	Immediately replace the CMUU or CMUL where the DDC failure has occurred.
RTIF2-140407-006			x	<p>For a SPARC M10-4S chassis with the XSCF stopped, or with the input power off (AC OFF), even if you execute the <code>initbb -f</code> command to forcibly disconnect the chassis from the system, the chassis remains assigned to the physical partition (PPAR). To check this phenomenon, execute the <code>showboards(8)</code> command to confirm whether Assignment of the target SPARC M10-4S chassis (PSB) remains "Assigned".</p> <pre>XSCF&gt; 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</pre>	<p>There is no effective workaround. [How to restore]</p> <p>Perform the following on the disconnected SPARC M10-4S chassis.</p> <ol style="list-style-type: none"> <li>Execute the <code>replacefru(8)</code> command to replace the chassis.</li> <li>Power on (AC ON) the replacement chassis. <ul style="list-style-type: none"> <li>If the READY LED of the XSCF or XSCF unit is lit <ol style="list-style-type: none"> <li>Complete <code>replacefru(8)</code> command execution by following the maintenance menu.</li> <li>Execute the <code>initbb(8)</code> command to disconnect the chassis from the system.</li> </ol> </li> <li>If the READY LED of the XSCF or XSCF unit is not lit <ul style="list-style-type: none"> <li>Remove the chassis and replace the XSCF unit or CPU memory unit lower (CMUL) where a failure is suspected.</li> </ul> </li> </ul> </li> </ol>

Table 3-4 Problems that might occur with XCP 2220 and workarounds (*continued*)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-140407-008			x	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.	There is no effective workaround. If this phenomenon occurs, turn off the input power to all chassis and then turn it on again.
RTIF2-140409-001	x	x	x	An error may be detected in the Realtime Clock (RTC) built into the SPARC M10 system and XSCF may not start.	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).
RTIF2-140409-002	x	x	x	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.	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).
RTIF2-140409-003	x	x	x	If a watchdog timeout occurs due to a software factor, it is erroneously registered in the hardware factor error log. [Example] (Incorrect) Status: Alarm FRU: /FIRMWARE,/MBU Msg: SCF panic detected (Correct) Status: Notice FRU: /FIRMWARE,/MBU Msg: SCF panic detected	There is no effective workaround. Read the "Alarm" status as "Notice".

Table 3-4 Problems that might occur with XCP 2220 and workarounds (*continued*)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-140410-002	x	x	x	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.	<p>During execution of the restoreconfig(8) command, do not power on or off the physical partition (PPAR) or execute diagnosis of the system board.</p> <p>[How to restore]</p> <ul style="list-style-type: none"> <li>- If the PPAR power on process is interrupted Execute the poweron -f command to forcibly power off the PPAR.</li> <li>- 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).</li> </ul>
RTIF2-140410-003			x	<p>With the system input power off, if the CPU memory unit lower (CMUL) is replaced or if the SPARC M10-4S is added without using the maintenance menu, the following error log may be registered as a result of automatic synchronization of XCP firmware versions.</p> <p>Alarm: :SCF:Gaps between XBBOX-ID</p> <p>Or</p> <p>Alarm: :SCF:Gaps between BB-ID</p>	There is no effective workaround. Ignore this error log.

Table 3-4 Problems that might occur with XCP 2220 and workarounds (*continued*)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-140410-005	x	x	x	<p>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.</p> <p>To check whether this phenomenon has occurred, power off or restart the PPAR and then execute the <code>showpparprogress(8)</code> 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.</p> <p>[Example of unsuccessful power off]</p> <pre>XSCF&gt; showpparprogress -p 0</pre> <p>This PPAR is powered on.</p> <p>Normally, when the PPAR power off completes, the power off sequence and PPAR state are as follows.</p> <p>[Example of successful power off]</p> <pre>XSCF&gt; showpparprogress -p 0</pre> <p>PPAR Power Off PPAR#0 [ 1/ 3] CPU Stop PPAR#0 [ 2/ 3] PSU Off PPAR#0 [ 3/ 3]</p> <p>The sequence of power control is completed.</p>	<p>There is no effective workaround.</p> <p>[How to restore]</p> <p>If the PPAR power supply remains in the power-on state 30 minutes after executing the <code>showpparprogress(8)</code> command, turn off the input power to all chassis and then turn it on again (AC-OFF/ON).</p>

Table 3-4 Problems that might occur with XCP 2220 and workarounds (*continued*)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-140410-008			x	Even if the XSCF DUAL control cable is reconnected after the system input power has been turned on with this cable disconnected, data synchronization between the master chassis and standby chassis cannot be secured. Continuous system operation is possible. However, after switching the master and standby XSCFs, normal system operation is not guaranteed. This is because information in the old master XSCF is not reflected in the new XSCF.	Before turning on the input power, confirm that the XSCF DUAL control cable is correctly inserted. [How to restore] Execute the <code>rebootxscf -a</code> command to reset all XSCFs.
RTIF2-140410-009			x	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.	There is no effective workaround. Ignore this error log.
RTIF2-140507-003			x	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 <code>showpparprogress(8)</code> command mistakenly shows the status of the procedure of powering on the system.	There is no effective workaround. [How to Restore] After the "PPAR-ID x: Reset" message is output to the event log, re-execute the <code>showpparprogress(8)</code> command for the right display.

Table 3-4 Problems that might occur with XCP 2220 and workarounds (*continued*)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-140507-004	x	x	x	<p>In a system which implements daylight saving time, if the current time is changed with the "setdate -s" command to a time that is within one hour of the ending of daylight saving time, the time is changed to a time beyond daylight saving time.</p> <p>[Example]</p> <p>If the ending of daylight saving time be October 31 AM 2:00 and the local time being attempted to set to October 31 AM 1:40 (JDT), the time is set to the standard local time of October 31 AM 1:47 (JST).</p> <pre>XSCF&gt; showdate Wed Apr 30 10:16:57 JDT 2014 XSCF&gt; setdate -y -s <b>103101402014.00</b> 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 XSCF&gt; showdate Fri Oct 31 01:47:16 JST 2014</pre>	To set up the local time to something around the daylight saving time, use the "setdate -u" command and set the time in UTC.
RTIF2-140507-005	x	x	x	<p>If a failure is detected in DC-DC converter (DDC), the "Power subsystem failure" error log may be registered twice.</p>	<p>There is no effective workaround. Ignore the 2nd error log. Moreover, replace the faulty FRU as soon as possible.</p>
RTIF2-140507-006	x	x	x	<p>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 "-".</p>	<p>There is no effective workaround.</p>

Table 3-4 Problems that might occur with XCP 2220 and workarounds (*continued*)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-140507-007		x	x	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	Replace the faulty FRU. Moreover, as this error message has no effect on the functioning of the system, ignore it.
RTIF2-140507-008			x	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.	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 and then contact the maintenance staff.
RTIF2-140507-009	x	x	x	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.	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.
RTIF2-140507-010			x	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.	Do not perform consecutive XSCF master/standby switchover. [How to Restore] Reset the XSCF. The system will become usable.

Table 3-4 Problems that might occur with XCP 2220 and workarounds (*continued*)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-140507-011	x	x	x	<p>If cold replacement of CPU Memory Unit (Lower) (CMUL) or the Mother Board Unit (MBU) is done in the following procedure, the physical partitions (PPAR) may not start.</p> <ol style="list-style-type: none"> <li>1. Execute the "restoredefaults -c factory" command.</li> <li>2. After XSCF has stopped, turn off the input power of the system (AC OFF).</li> <li>3. Replace the CMUL or MBU without replacing the microSD card.</li> <li>4. Turn on the input power of the system.</li> </ol>	<p>Replace CMULs or MBUs in the following procedure.</p> <ol style="list-style-type: none"> <li>1. Execute the "restoredefaults -c factory" command.</li> <li>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.</li> <li>3. Replace the targeted CMULs or MBUs.</li> </ol> <p>[How to Restore] Restore with the following procedure:</p> <ol style="list-style-type: none"> <li>1. Turn off the input power of the system (AC OFF).</li> <li>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.</li> <li>3. Confirm that XSCF has started after turning on the input power (AC ON).</li> <li>4. Turn off the input power of the system (AC OFF).</li> <li>5. Extract the microSD card that was temporarily mounted and mount the original microSD card.</li> <li>6. Turn on the input power of the system (AC ON).</li> </ol>
RTIF2-140507-012			x	<p>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.</p> <p>Indispensable parts are not installed (OPNL). Indispensable parts are not installed (FAN). Indispensable parts are not installed (PSU).</p>	<p>When replacing a crossbar box, do so after turning off the input power (AC OFF) of the target crossbar box only.</p> <p>When replacing the XSCF unit of a crossbar box, execute the <code>replacefru(8)</code> command to do so. Refer to <i>Fujitsu M10-4/Fujitsu M10-4S/SPARC M10-4/SPARC M10-4S Service Manual</i> for replacing the crossbar box or the crossbar box XSCF unit.</p> <p>[How to Restore] Turn off/on the input power (AC OFF/ON) of the replaced crossbar box.</p>

Table 3-4 Problems that might occur with XCP 2220 and workarounds (*continued*)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-140507-013	x	x	x	Even if two default gateways are set up using the <code>setroute(8)</code> command, connection from other networks is possible only on either XSCF-LAN#0 or XSCF-LAN#1.	Among XSCF-LAN#0 and XSCF-LAN#1, use the IP address of the gateway that can be connected to.
RTIF2-140507-014			x	When <code>replacefru(8)</code> , <code>addfru(8)</code> or, <code>rebootxscf(8)</code> command is executed, the "XSCF hang-up is detected" error message may be detected at the slave XSCF.	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.
RTIF2-140507-016			x	After configuring the XSCF network with the <code>setnetwork(8)</code> command and applying the configuration by the <code>applynetwork(8)</code> command, if the <code>shownetwork(8)</code> command is executed without executing the <code>rebootxscf(8)</code> command, the displayed IP address may not match the IP address that is being used on the present system.	After executing the <code>applynetwork(8)</code> command to apply network configurations of the XSCF, execute the <code>rebootxscf(8)</code> command to reset the XSCF.
RTIF2-140507-021			x	In the middle of performing diagnosis by the "-p" and "-b" options of the <code>diagxbu(8)</code> command, if a failure occurs in the physical partition specified by the "-p" option, the <code>diagxbu(8)</code> command may terminate abnormally and powering off the SPARC M10 chassis, specified by the "-b" option may fail.	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 <code>diagxbu(8)</code> command. 2. Select the SPARC M10 chassis by the "-b" option of the <code>replacefru(8)</code> 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.

Table 3-4 Problems that might occur with XCP 2220 and workarounds (*continued*)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-140507-022			x	<p>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.</p> <p>[Example]            When the crossbar cable is loose:            + FRU-Part-Number:            #####; Ver:###h;            + Type:#####; Length: #;</p>	<p>There is no effective workaround.</p> <p>[How to Restore]            Perform the following procedures:</p> <ol style="list-style-type: none"> <li>1. Power off the physical partition (PPAR) by the poweroff(8) command.</li> <li>2. Check the physical state of the crossbar cable (loose connection, disconnection etc.) who component information is depicted by a number of "#"s.</li> <li>3. Execute the poweron(8) command to power on the PPAR.</li> <li>4. Check the component information of the target crossbar cable with the showhardconf(8) command.</li> </ol> <p>[Example]            When the crossbar cable is properly connected:            + FRU-Part-Number:2123628-2 ;            Ver:3920h;            + Type:Optic; Length: 2;</p>

Table 3-4 Problems that might occur with XCP 2220 and workarounds (*continued*)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-140515-001	x			<p>In order to configure the XSCF startup mode function, after changing the startup mode with the <code>xscfstartupmode(8)</code> command and setting the operation panel mode switch to "Locked" or "Service", if the <code>rebootxscf(8)</code> 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 <code>rebootxscf(8)</code> 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 <code>"xscfstartupmode -d"</code> command, as follows:</p> <p>[Example] When startup mode is set to "fast" after setting the operation panel mode switch to "Locked"</p> <pre>XSCF&gt; xscfstartupmode -m fast XSCF&gt; rebootxscf -a XSCF&gt; xscfstartupmode -d Setting Mode: fast [need AC OFF/ON] Current Mode: fast</pre> <p>However, the correct result will be that the "Current Mode" be "normal" like the following:</p> <pre>XSCF&gt; xscfstartupmode -d Setting Mode: fast [need AC OFF/ON] Current Mode: normal</pre>	There is no effective workaround.

### 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 2220

The following table lists the problems resolved in XCP 2220.

Table 3-5 Problems resolved in XCP 2220

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-130806-001	x	x	x	<p>When any of the following FRUs of any of the models is replaced, the XSCF clock is initialized to 2001/1/1 (in accordance to the specification). Due to this reason, when the XSCF is set as an NTP client and a physical partition is powered on after replacing any of these FRUs, the clock of the control domain may get offset to a significant amount.</p> <p>[SPARC M10-1]</p> <ul style="list-style-type: none"> <li>- Motherboard Unit (MBU)</li> <li>- PSU Backplane Unit (PSUBP)</li> </ul> <p>[SPARC M10-4]</p> <ul style="list-style-type: none"> <li>- CPU Memory Unit (Lower) (CMUL)</li> </ul> <p>[SPARC M10-4S]</p> <ul style="list-style-type: none"> <li>- CPU Memory Unit (Lower) (CMUL)</li> <li>- Crossbar backplane unit (XBBPU)</li> <li>- XSCF Unit (XSCFU)</li> </ul> <p>This problem can be confirmed from the huge offset values (more than 10 years) of the "Domain Date Offset" column in the output of the showdateoffset(8) command, which shows the time difference of the XSCF and the control domain.</p> <p>[Example]</p> <pre>XSCF&gt; showdateoffset -a PPAR-ID      Domain Date Offset 00           7931983 sec 01           7931983 sec 02           7931983 sec 03           7931983 sec : 15           7931983 sec</pre>	<p>There is no effective workaround. Execute the following tasks after replacing the FRUs, as described in [Description].</p> <ol style="list-style-type: none"> <li>1. Before powering on the physical partition, check the values of the "Domain Date Offset" column using the showdateoffset(8) command. <ul style="list-style-type: none"> <li>- If the values of the "Domain Date Offset" is not high (more than 10 years), continue with normal operation of the system.</li> <li>- On the other hand, if the values are significantly high (more than 10 years), execute procedure 2 and onwards.</li> </ul> </li> <li>2. Execute the resetdateoffset(8) command to reset the difference of clock time between the XSCF and the control domain. <pre>XSCF&gt; resetdateoffset -a</pre> Clear the offset of all PPARs? <pre>[y n] :y XSCF&gt;</pre> </li> <li>3. Power on all physical partitions using the "poweron -a" command.</li> <li>4. Execute the showdateoffset(8) command to confirm that the difference of clock time between the XSCF and the control domain had been synchronized by checking that the values of the "Domain Date Offset" column for all of the physical partitions has changed to 0.</li> <li>5. If the XSCF and the control domain are to be operated in different time zones, use the date(1M) command to set the date of the control domain.</li> </ol>

Table 3-5 Problems resolved in XCP 2220 (continued)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-140212-002			x	<p>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.</p> <p>[Example] In case of crossbar cable number 0L Wrong display: CBL#L0 Status: Deconfigured; Right display: CBL#0L Status: Deconfigured;</p>	There is no effective workaround. Please adjust the reading to the right sequence.
RTIF2-140212-004	x	x	x	<p>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".</p>	There is no effective workaround.
RTIF2-140212-006	x	x	x	<p>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.</p> <p>[Example of non-displaying with the showsnmp(8) command] XSCF host name: example.com Trap host name: test.example.com</p>	Either specify a trap host name which does not contain the XSCF host name or specify the IP address of the trap host.
RTIF2-140212-022	x	x	x	<p>If the trap host is registered by specifying the trap type with the "-t" option as "inform", 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.</p>	There is no effective workaround.

Table 3-5 Problems resolved in XCP 2220 (continued)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-140221-003			x	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	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.
RTIF2-140227-003	x	x	x	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, when the error is detected, a "Failure" mark is attached to the PSU.	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.
RTIF2-140227-006	x	x	x	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)	There is no effective workaround. [How to restore] Perform AC OFF/ON.

Table 3-5 Problems resolved in XCP 2220 (*continued*)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-140227-007			x	When the SSCP IP address of an unmounted SPARC M10-4S chassis is set up using the <code>setsscp(8)</code> command, the <code>showsscp(8)</code> 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 <code>addfru(8)</code> command, SSCP IP address of the added chassis cannot be confirmed with the <code>showsscp(8)</code> command.	There is no effective workaround.
RTIF2-140227-008	x	x	x	When the lockout feature of user accounts is enabled with the <code>setloginlockout(8)</code> 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.	Disable the lockout feature of user accounts.
RTIF2-140310-001	x	x	x	If server certificate is imported with the " <code>setldap -c</code> " command, an error is produced and importing fails.	There is no effective workaround when the <code>setldap(8)</code> command is used. Use the encryption feature of LDAP (LDAP over SSL) with the <code>setldapssl(8)</code> command.
RTIF2-140312-001	x	x	x	Configuration of SNMP fails when it is done from the [SNMP] or the [SNMP Security] menu of XSCF Web.	Do not configure SNMP from XSCF Web. Use the following XSCF shell commands to configure SNMP. <ul style="list-style-type: none"> <li>- <code>setsnmp(8)</code></li> <li>- <code>setsnmpusm(8)</code></li> <li>- <code>setsnmpvacm(8)</code></li> </ul>

Table 3-5 Problems resolved in XCP 2220 (continued)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-140314-002			x	<p>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.</p> <ul style="list-style-type: none"> <li>- 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.</li> </ul> <p>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</p>	<p>If a problem of any crossbar cable has occurred, stop all PPARs immediately and replace the crossbar cable.  [How to restore]</p> <ol style="list-style-type: none"> <li>1. Stop all PPARs. If any of them cannot be stopped normally, stop it forcibly.</li> <li>2. Replace the degraded crossbar cable.</li> <li>3. Diagnose the hardware with the "testsb -a" command and confirm whether there is any failure of the XBU of XBBOX.</li> <li>4. If there is any failure in the XBU, replace it.</li> </ol>
RTIF2-140402-002	x	x	x	<p>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.</p>	<p>Use the showlogs(8) command of the XSCF shell.</p>
RTIF2-140407-002	x	x	x	<p>In a system configuration with a connected PCI expansion unit,</p>	<p>There is no effective workaround.  [How to restore]</p>

Table 3-5 Problems resolved in XCP 2220 (continued)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
				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 <code>ioxadm(8)</code> command or <code>showhardconf(8)</code> command. Or, the PCI expansion unit can no longer be controlled with the <code>ioxadm(8)</code> command.	Execute either of the following. <ul style="list-style-type: none"> <li>- Power off the PPAR and then power it on again.</li> <li>- Use PCI hot plug (PHP) to remove the link card from the system and reinstall it.</li> </ul>
RTIF2-140407-004	x	x	x	<p>Suppose you execute the <code>setaudit -a</code> 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.</p> <p>[Example] Setting an audit policy for yyyy user</p> <pre>XSCF&gt; setaudit -a yyyy=disable XSCF&gt; showaudit all --- Omitted --- User policy:   yyyy disabled Events:   AEV_AUDIT_START enabled XSCF&gt; rebootxscf -a XSCF&gt; showaudit all --- Omitted --- User policy:   default disabled Events:   AEV_AUDIT_START enabled</pre>	<p>If user account "default" is not displayed for [User Policy:] in the output result of the <code>showaudit all</code> command, execute the <code>setaudit -a</code> command to set the audit policy of the user account "default".</p> <p>[Example] User account Set the audit policy for "default".</p> <pre>XSCF&gt; setaudit -a default=enable [How to restore] Execute the following procedure. 1. Execute the <code>setaudit -a</code> command to reset the user audit policy that had been used as the audit policy of the user account "default". 2. Execute the <code>rebootxscf(8)</code> command to reset XSCF. 3. Execute the <code>showaudit all</code> command to confirm that the set user audit policy is displayed for [User Policy:].</pre>
RTIF2-140418-001	x	x	x	The Dynamic Resource Management(DRM) of Oracle VM Server for SPARC does not work.	There is no effective workaround.

Table 3-5 Problems resolved in XCP 2220 (continued)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-140507-001	x	x	x	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.	<p>Execute any of the following procedures according to the encountered circumstances.</p> <ul style="list-style-type: none"> <li>- 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.</li> <li>- 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.</li> <li>- 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.</li> </ul> <p>[How to Restore] Perform the following procedure if this symptom occurs:</p> <ol style="list-style-type: none"> <li>1. Remove the newly created RAID volume.</li> <li>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.</li> </ol> <p>Meanwhile, refer to "F.4 Creating Hot Spare of Hardware RAID Volume" or "F.5 Deleting Hot Spare of Hardware RAID Volume" of <i>Fujitsu M10/SPARC M10 Systems System Operation and Administration Guide</i> for the procedures of removing a volume or setting up a hot spare.</p>
RTIF2-140507-002			x	If the system board is deleted by dynamic reconfiguration of physical partitions, Oracle Solaris on the domain may panic, or Hypervisor may abort.	There is no effective workaround.

Table 3-5 Problems resolved in XCP 2220 (*continued*)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-140507-015		x	x	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: Error: 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;	There is no effective workaround. There is no effect of this wrong display on the system.
RTIF2-140507-017	x	x	x	If XSCF is reset using the rebootxscf(8) command, the XSCF may stop due to XSCF failure.	There is no effective workaround. [How to Restore] Turn off/on the input power (AC OFF/ON) of the system.
RTIF2-140507-018	x	x	x	When the system is in the initialized state, XSCF may not start even after turning on the input power.	There is no effective workaround. [How to Restore] Replace the CPU Memory Unit (Lower) (CMUL) or XSCF Unit (XSCFU).

## Problems resolved in XCP 2210

The following table lists the problems resolved in XCP 2210.

Table 3-6 Problems resolved in XCP 2210

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-130801-002	x	x		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	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.
RTIF2-131126-005	x	x	x	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.	Click the [Physical] or [Logical] tab of the menu frame to redisplay the tree.
RTIF2-131212-001			x	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.	There is no effective workaround.
RTIF2-131213-004	x	x	x	If the PPAR DR feature is enabled/disabled on XSCF Web, selecting the [PPAR Operation]-[PPAR Mode Configuration] menu , selecting PPAR-DR (Current) or PPAR-DR(Next) and clicking [Configure], a wrong dialogue box appears and the PPAR DR feature is not enabled / disabled.	Execute the XSCF setpparmode (8) command to enable/disable the PPAR DR feature.
RTIF2-131213-008			x	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.	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 system and crossbar boxes. Execute the deleteboard(8)

Table 3-6 Problems resolved in XCP 2210 (continued)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
				(Reference: RTIF2-131213-001) This state can be confirmed by a lighted MASTER LED at the rear panel of two chassis.	command after that.
RTIF2-131213-009			x	The "Failed to evacuate board resources" message may be output when the addboard(8) or deleteboard(8) command of the DR feature is executed and the addition or removal of system boards with DR feature fails.	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.
RTIF2-131213-021			x	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".	There is no effective workaround. [How to restore] Reboot all the XSCFs by executing the "rebootxscf -a" command.
RTIF2-131218-001	x	x	x	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.	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.
RTIF2-140122-001			x	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.	If the PCI Expansion Unit is not recognized, reboot the logical domain.

Table 3-6 Problems resolved in XCP 2210 (continued)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-140212-001			x	<p>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 <code>replacefru(8)</code> 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 <code>initbb(8)</code> 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 <code>showhardconf(8)</code> or the <code>showboards(8)</code> command is executed:            [Example]            In case PSB#01-0 (BB#01) has been degraded.            XSCF&gt; <b>showhardconf</b>            ...            * BB#01 Status:Deconfigured;            ...            XSCF&gt; <b>showboards -a</b>            PSB PPAR-ID(LSB) Assignment            Pwr Conn Conf Test Fault            --- -----            -----            01-0 00(01) Assigned            n n n Passed Faulted</p>	<p>After removing the degraded system board from the physical partition with the <code>deleteboard(8)</code> command, execute either the <code>replacefru(8)</code> or the <code>initbb(8)</code> command to replace or remove the system board.            [Example]            XSCF&gt; <b>deleteboard -c unassign 01-0</b>            After replacing the system board, assign the system board to the physical partition using the <code>addboard(8)</code> command and follow the maintenance procedures to add it in the physical partition.            [Example]            XSCF&gt; <b>addboard -c assign -p 0 01-0</b></p>

Table 3-6 Problems resolved in XCP 2210 (continued)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-140212-010	x	x	x	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.	There is no effective workaround.
RTIF2-140212-015	x	x	x	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> <b>version -c xcp</b> BB#00-XSCF#0 (Master) XCP0 (Reserve): 2210 XCP1 (Current): 2210 - (Wrong) After replacing CMUL XSCF> <b>version -c xcp</b> BB#00-XSCF#0 (Master) XCP0 (Reserve): 2210 XCP1 (Current): 2210 - (Right) After replacing CMUL XSCF> <b>version -c xcp</b> BB#00-XSCF#0 (Master) XCP0 (Current): 2210 XCP1 (Reserve): 2210	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.
RTIF2-140212-017			x	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.	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.

Table 3-6 Problems resolved in XCP 2210 (continued)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-140212-018	x	x	x	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. <ul style="list-style-type: none"> <li>- The leading character corresponds to A1xx of the EUC code.</li> <li>- The trailing character corresponds to xxA1 of the EUC code.</li> </ul>	Do not input the two-byte characters at the beginning and end of the character strings, which produce errors.
RTIF2-140212-019	x	x	x	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.	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.
RTIF2-140212-020	x	x	x	When hot-swapping a fan, if the fan is installed right after removing it, hot-swapping may fail.	When replacing a fan, after removing it, wait for at least 10 seconds before reinstalling it.
RTIF2-140212-023		x	x	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. <ul style="list-style-type: none"> <li>- In case of SPARC M10-4, if all the CPUs mounted on the CMUL are degraded.</li> <li>- In case of SPARC M10-4S, if all the CPUs mounted on the CMUL on all the chassis that configures the PPAR, are degraded.</li> </ul>	There is no effective workaround. Replace the CMUL on which the failed CPUs are mounted.

Table 3-6 Problems resolved in XCP 2210 (continued)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-140212-024	x	x	x	<p>After executing the "ldm add-spconfig" or the "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 showpparam(8) command is executed. The value that existed before executing the "ldm add-spconfig" or "ldm set-spconfig" command, is displayed. This symptom occurs when the following procedures are conducted in the following sequence.</p> <ol style="list-style-type: none"> <li>1. Start the physical partition (PPAR).</li> <li>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.</li> <li>3. From Oracle Solaris on the control domain, execute "eeprom auto-boot?=xxxx" to change the environment variable of the OpenBoot PROM or, change the OpenBoot PROM environment variable from the OpenBoot PROM itself.</li> </ol>	<p>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.</p>

Table 3-6 Problems resolved in XCP 2210 (continued)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-140212-025	x	x	x	<p>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.</p> <p>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.</p> <ul style="list-style-type: none"> <li>- I/O power supply has failed.</li> <li>- All PCI Express root complex have failed.</li> <li>- All PCI switches have failed.</li> </ul>	<p>There is no effective workaround. [How to Restore]</p> <p>In case of SPARC M10-4S/M10-4, replace the CMUL on which the I/O has failed.</p> <p>In case of SPARC M10-1, replace the MBU on which the I/O has failed.</p>
RTIF2-140221-002	x	x	x	<p>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.</p>	<p>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 the "ldmd" services.</p>
RTIF2-140303-002	x	x	x	<p>In some very rare cases, XSCF does not start after performing AC OFF/ON.</p>	<p>There are no effective workaround. Contact the maintenance staff if this symptom occurs.</p>

Table 3-6 Problems resolved in XCP 2210 (continued)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-140407-007			x	<p>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.</p> <ul style="list-style-type: none"> <li>- Physical partition (PPAR) consists of multiple system boards and the PPAR power is on.</li> <li>- Some system boards in the PPAR are stopped through degradation.</li> </ul>	<p>Use either of the following procedures to replace a system board and execute diagnosis.</p> <ol style="list-style-type: none"> <li>1. Before replacing the system board, execute the deleteboard(8) command to change the system board state to system board pool (SP).</li> <li>2. After completing system board replacement and diagnosis, execute the addboard(8) command to assign the system board to PPAR again.</li> </ol> <p>Or</p> <ol style="list-style-type: none"> <li>1. After powering off the PPAR, execute system board replacement and diagnosis.</li> </ol> <p>[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.</p>
RTIF2-140410-001	x	x	x	An XSCF NTP server function may be used as the platform for a DDoS attack (CVE-2013-5211).	Update the XCP firmware version to XCP 2210 or later.
RTIF2-140410-007			x	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.	Set the XSCF-LAN IP address (physical IP address) of both master and standby XSCFs and then set the takeover IP address.
RTIF2-140507-019	x	x	x	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.	Ignore the thick black frame.

Table 3-6 Problems resolved in XCP 2210 (*continued*)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-140507-020			x	If the master XSCF is switched to standby state just after executing the "poweroff -f -p -n" (n is partition number) command, the following message is registered in the error log, displayed by the "showlogs error" command. Msg: SCF process down detected	There is no effective workaround. This symptom has no effect on the system operation.

## Problems resolved in XCP 2092

The following table lists the problems resolved in XCP 2092.

Table 3-7 Problems resolved in XCP 2092

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-131213-015			x	<p>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.</p> <p>[Condition 1] The physical partition is configured by several SPARC M10-4S.</p> <p>[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.</p> <p>[Condition 3] The physical partition was rebooted due to a hardware failure, the poweron(8) or reset(8) command was executed.</p> <p>Moreover, XSCF had either rebooted the physical partition due to a hardware failure or had performed retrieval of the poweron(8) or the reset(8) command when this symptom occurred previously.</p>	<p>There is no effective workaround. Do not execute the poweron(8) or the reset(8) command while the XSCF BB control cable is disconnected.</p> <p>[How to restore] If hardware failure had occurred, execute power off and on, on the physical partition. If XSCF is performing retrieval operations, execute the "poweroff -f -p ppar-id" command to forcibly power off the physical partition. After that power it on.</p>
RTIF2-140110-001			x	<p>In a SPARC M10-4S (with crossbar box) configuration, the following event log, which notifies power off, is not registered.</p> <p>BB#xx was stopped by power failure. Power failure date is yyyy/mm/dd hh:mm:ss</p>	There is no effective workaround.
RTIF2-140110-002	x	x	x	When the flashupdate(8) command is executed, only occasionally, XSCF may not start-up.	There is no effective workaround. Contact a field engineer if this problem occurs.
RTIF2-140115-001	x	x	x	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.	There is no effective workaround.

# Problems resolved in XCP 2091

The following table lists the problems resolved in XCP 2091.

Table 3-8 Problems resolved in XCP 2091

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-140117-001	x	x	x	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.	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 3-9 Problems resolved in XCP 2090

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-130219-003			x	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	There is no effective workaround. Ignore the error log.

Table 3-9 Problems resolved in XCP 2090 (continued)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-130305-009	x	x	x	Suppose that 129 or more IP addresses of the trap hosts are registered by the setsnmp addtraphost 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 entries for a user, view, group, and access.	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 3-9 Problems resolved in XCP 2090 (continued)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-131023-003	x	x	x	OID of scfDomainInfoGroup is duplicated and defined in the MIB definition file for XSCF expansion. 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.	<p>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.</p> <p>The line of text to be deleted is that in which scfDomainInfoGroup containing " ::= { scfMIBObjectGroups 14 }" is defined.</p> <p>[Example]</p> <p>For the MIB definition file for XSCF expansion (XSCF-SP-MIB_2050.mib), delete the following lines 3558 to 3566.</p> <pre> ----- 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 } ----- </pre>
RTIF2-131107-001			x	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.	There is no effective workaround.

Table 3-9 Problems resolved in XCP 2090 (continued)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-131112-002			x	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.	There is no effective workaround. The failed parts are degraded. Power on the PPAR again.
RTIF2-131112-003	x	x	x	If the testsb(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) or flashupdate -c sync command may fail.	Do not execute the testsb(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)
RTIF2-131112-008	x	x	x	Suppose that the error log "SCF Diagnosis error on System backup memory" is registered, which is related to the PSU backplane unit (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	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

Table 3-9 Problems resolved in XCP 2090 (continued)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-131112-011	x	x	x	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.	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 3-9 Problems resolved in XCP 2090 (continued)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-131112-012	x	x	x	<p>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.</p> <ul style="list-style-type: none"> <li>- Low temperature was detected at air inlet. FANs are changed to speed (level-1) mode</li> <li>- Low temperature was detected at air inlet. FANs are changed to speed (level-2) mode</li> <li>- Middle temperature was detected at air inlet. FANs are changed to speed (level-3) mode</li> <li>- High temperature was detected at air inlet. FANs are changed to speed (level-4) mode</li> <li>- Air outlet temperature recovered from warning state</li> </ul>	<p>There is no effective workaround. [How to restore] Replace the fan of the detected excessive rotation speed error.</p>
RTIF2-131112-014	x	x	x	<p>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.</p> <ul style="list-style-type: none"> <li>- Windows ExchangeServer</li> <li>- E-PORT</li> <li>- qmail</li> </ul>	<p>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.</p>

Table 3-9 Problems resolved in XCP 2090 (continued)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-131112-015			x	If the <code>initbb(8)</code> or <code>replacefru(8)</code> command is executed, an event log stating "Change Master Failed" may be registered.	There is no effective workaround. Ignore the event log.
RTIF2-131126-001	x	x	x	<p>Suppose that a system satisfying one of the conditions described in [Conditions] sets the power supply interlocking 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.</p> <p>[Conditions]</p> <ul style="list-style-type: none"> <li>- A single SPARC M10 system is registered in the power supply interlocking group.</li> <li>- Multiple SPARC M10 systems are registered in the power supply interlocking group, and the physical partitions other than those of the SPARC M10 system that resets the XSCF are powered off.</li> </ul> <p>[Event]</p> <ul style="list-style-type: none"> <li>- Firmware update was executed from the <code>flashupdate(8)</code> command and XSCF Web, and the XSCF was reset.</li> <li>- The XSCF was reactivated from the <code>rebootxscf(8)</code> command and XSCF Web, and the XSCF was reset.</li> <li>- The XSCF was reset because of a failure.</li> </ul>	<p>Apply either of the following countermeasures:</p> <ul style="list-style-type: none"> <li>- Before firmware update or XSCF reactivation, execute the <code>setremotepwrmgmt -c disable</code> command to disable the power supply interlocking function. Subsequently, update the firmware or reactivate the XSCF. After the XSCF has been activated, execute the <code>setremotepwrmgmt -c enable</code> command to enable the power supply interlocking function.</li> <li>- Disable the power supply interlocking function with the <code>setremotepwrmgmt -c disable</code> command and then manually power on the external I/O device.</li> </ul>

Table 3-9 Problems resolved in XCP 2090 (continued)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-131126-002			x	<p>If one of BB#0/BB#01/XBBOX#80/XBBOX#81 is installed or replaced, the synchronous processing of the CPU core activation key in the master/standby XSCF will fail. Subsequently, if the master and standby are switched, the CPU core activation key may be lost. This generates the following phenomena.</p> <p>[If the PPAR power is on] The PPAR power is powered off because of a CPU core activation violation.</p> <p>[If the PPAR power is off] PPAR power-on fails because there is an insufficient number of CPU core activations.</p>	<p>After installation/replacement, the synchronous processing of the CPU core activation keys is performed when the following is executed.</p> <p>[If the master/standby XSCF is not switched] Execute the <code>rebootxscf -a</code> or <code>addcodactivation(8)</code> command from the master XSCF that requested installation/replacement.</p> <p>[If the master/standby XSCF has been switched] Execute the <code>switchscf(8)</code> command to return the master XSCF to the pre-installation/replacement state. After that, execute the <code>rebootxscf -a</code> or <code>addcodactivation(8)</code> command.</p> <p>Note - Do not perform the following operations before restoring the master XSCF to its original state by executing the <code>switchscf(8)</code> command. If these operations are performed, it may be necessary to register the CPU core activation key again.</p> <ul style="list-style-type: none"> <li>- <code>rebootxscf -a</code></li> <li>- <code>addcodactivation(8)</code></li> <li>- <code>deletecodactivation(8)</code></li> <li>- Input power off/on</li> </ul>

Table 3-9 Problems resolved in XCP 2090 (continued)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-131126-004	x	x	x	<p>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.</p> <p>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</p>	<p>There is no effective workaround. Replace the version number. Moreover, update the XCP firmware to XCP 2090 or later.</p>
RTIF2-131129-001	x	x	x	<p>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 .</p> <ul style="list-style-type: none"> <li>- Execute the restoredefaults factory command</li> <li>- Execute the initbb(8) command</li> <li>- Change the mounting point of memory</li> </ul> <p>XSCF&gt;<b>showhardconf</b> : MEM#10B Status:Normal; + Code: ce8001M393B2G70QH0-YK0 0000-00511571; + Type:07; Size:16 GB;</p> <p>XSCF&gt;<b>showhardconf</b> : * MEM#10B Status:Deconfigured; + Code:000000 0000-00000000; + Type: ; Size:0 GB;</p>	<p>There is no effective workaround.</p> <p>Contact a field engineer if this symptom occurs.</p>

Table 3-9 Problems resolved in XCP 2090 (continued)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-131213-006	x	x	x	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.	There is no effective workaround. Either reboot the control domain or execute the "rebootxscf -a" command to reboot XSCF.
RTIF2-131213-017	x	x	x	Any of the following may occur while XSCF is running. [Symptom1] Process down occurs and XSCF resets. [Symptom2] Response of commands which deals with acquiring MIB information (get command, etc.) becomes slow. [Symptom3] 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.	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 symptom 3, reset XSCF with the rebootxscf(8) command.

Table 3-9 Problems resolved in XCP 2090 (continued)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-131213-018	x	x	x	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.	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. <ol style="list-style-type: none"> <li>1. Execute the showdateoffset(8) command before powering on or rebooting the PPAR and confirm the time difference between XSCF and the hypervisor.</li> <li>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.</li> <li>3. After powering on the PPAR, reset the time of Solaris OS.</li> </ol>
RTIF2-131213-020	x	x	x	Due to the retry functionality of XSCF, if any abnormality occurs in the recoverable backup memory inside the PSU backplane unit (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.	There is no effective workaround. [How to restore] Re-execute power off and on.
RTIF2-131216-001	x	x	x	The "XCP update is started." message is mistakenly displayed when the "flashupdate -c check" command is executed.	There is no effective workaround. Please ignore this message.
RTIF2-140303-001	x	x	x	Response may become slow when using XSCF Web.	There is no effective workaround.

Table 3-9 Problems resolved in XCP 2090 (continued)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-140410-004	x	x	x	<p>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.</p> <p>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.</p> <p>[Example]  XSCF&gt; <b>showlogs error -v</b>  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</p>	<p>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&gt; <b>showstatus</b>  BB#11 Status:Normal;  CMUU Status:Normal;  * CPU#0 Status:Deconfigured;</p>
RTIF2-140410-006	x	x	x	<p>If you execute the reset xir command immediately after starting Oracle Solaris or the ldmd service, "LDC Protocol info fromPPAR (PPAR ID 0 : Domain Service Data Send Failed)" may be registered in the event log and the XSCF process down and reset may occur.</p>	<p>There is no effective workaround. After XSCF is reset, execute the showlogs event command to confirm the event logs. Or, execute the showpparstatus(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.</p>

## Problems resolved in XCP 2080

The following table lists the problems resolved in XCP 2080.

Table 3-10 Problems resolved in XCP 2080

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-121219-011			x	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.	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.
RTIF2-130305-018			x	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.	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.
RTIF2-130305-019	x	x	x	Diagnosis continues even when an error occurred on the testsb(8) command and timeout occurs after a two-hour wait.	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].
RTIF2-130307-001			x	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.	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.

Table 3-10 Problems resolved in XCP 2080 (continued)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-131001-001			x	If the SPARC M10-4S or the crossbar box is disconnected with the <code>initbb(8)</code> 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 <code>initbb(8)</code> command will become the master chassis, and the XSCF settings will be initialized to the factory defaults.	Be sure to follow the procedure below when disconnecting the SPARC M10-4S and the crossbar box. 1. Execute the <code>initbb(8)</code> command to stop the target chassis. 2. Turn off the stopped chassis first and then disconnect the XSCF BB control cable.
RTIF2-131023-001	x	x	x	If the XSCF is reset by the <code>rebootxscf(8)</code> or <code>switchscf(8)</code> command executed while the logical domain is either starting or stopped, the following problems may occur. - If the <code>showdomainstatus(8)</code> command is executed, the logical domain state is not displayed properly. - If the <code>showlogs event</code> 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.	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.
RTIF2-131023-004	x	x	x	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 the <code>fmdump(1M)</code> command is not displayed, even if the <code>showlogs error</code> 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 <code>showlogs error</code> command, even if the <code>fmdump(1M)</code>	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 <code>fmdump(1M)</code> 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 <code>showlogs error</code> command.

Table 3-10 Problems resolved in XCP 2080 (continued)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
				command is executed.	
RTIF2-131108-002	x	x	x	The warning message "WARNING: invalid vector intr: number 0x10001, pil 0x11000" may be output to /var/adm/ messages.	Ignore this message.
RTIF2-131112-009	x	x	x	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.	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).

Table 3-10 Problems resolved in XCP 2080 (continued)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-131126-006	x	x	x	<p>Suppose that the input power is turned off and on, or that the XSCF is reset. If an operation related to CPU core 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.</p> <ol style="list-style-type: none"> <li>Perform any of the following on XSCF Web. <ul style="list-style-type: none"> <li>From the [Settings] - [CoD Activation] menu, add the CPU core activation key.</li> <li>From the [Maintenance] - [Configuration Management] menu, save the XSCF setting information.</li> <li>From the [Maintenance] - [Configuration Management] menu, save/restore the CPU core activation key.</li> </ul> </li> <li>Execute the deletecodactivation(8) or setcod(8) command on the XSCF shell. Alternatively, delete the CPU core activation key on XSCF Web. Alternatively, change the assignment of the CPU core activation on XSCF Web.</li> </ol> <p>Alternatively,</p> <ol style="list-style-type: none"> <li>Perform any of the following on XSCF Web. <ul style="list-style-type: none"> <li>From the [Settings] - [CoD Activation] menu, delete the CPU core activation key.</li> <li>From the [Settings] - [CoD Reservation] menu, release the assignment of the CPU core activation.</li> </ul> </li> <li>Log in to the XSCF shell or XSCF Web with another user account.</li> <li>Execute the deletecodactivation(8) or setcod(8) command on the XSCF shell. Alternatively, delete the CPU core activation key on XSCF Web. Alternatively, change the assignment of the CPU core activation on XSCF Web.</li> </ol>	<p>To perform an operation related to the CPU core 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.</p>

# Problems resolved in XCP 2070

The following table lists the problems resolved in XCP 2070.

Table 3-11 Problems resolved in XCP 2070

RTIF No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-130228-001	x	x	x	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.	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.
RTIF2-130516-001	x	x	x	In a system configuration for which power supply interlocking with ETERNUS is set, ETERNUS is not powered on even if the power is turned on from the power switch located on the operation panel of the SRARC M10 system.	Turn on the power in one of the following ways: <ul style="list-style-type: none"> <li>- XSCF command, poweron(8) command</li> <li>- Menu on the XSCF Webpage</li> <li>- Automatic power turning on with schedule settings</li> </ul>
RTIF2-130709-001			x	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	There is no effective workaround. [How to restore] <ul style="list-style-type: none"> <li>- 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.</li> <li>- 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. <ul style="list-style-type: none"> <li>- Execute the replacefru(8) command to replace the CPU memory unit (lower) (CMUL) or XSCF unit</li> </ul> </li> </ul>

Table 3-11 Problems resolved in XCP 2070 (continued)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
					(XSCFU). - Power off and on the CPU memory unit (lower) (CMUL) or the XSCF unit (XSCFU).
RTIF2-130711-001			x	When you perform maintenance of the SPARC M10-4S by executing the <code>replacefru(8)</code> or <code>addfru(8)</code> command, the "FMEM serious error" error log may be registered and the <code>replacefru(8)</code> or <code>addfru(8)</code> command may fail. Also, when you turn on the power to the physical partition (PPAR) during the execution of the <code>flashupdate(8)</code> command, similarly, the "FMEM serious error" error log may be registered and the <code>flashupdate(8)</code> command may fail.	For details, see " <a href="#">Response to "FMEM serious error" of SPARC M10-4S (RTIF2-130711-001).</a> "
RTIF2-130716-001	x	x	x	When you update the PCI expansion unit firmware by executing the <code>ioxadm(8)</code> command, a "LINKCARD I2C error" error may occur.	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 <code>ioxadm(8)</code> command has been completed normally. - Executing the <code>ioxadm -v list</code> command displays the version number of the PCI expansion unit firmware that has been specified for the update.
RTIF2-130802-001	x	x	x	When you specify USB memory for the <code>getflashimage(8)</code> command, the following message may be output and the execution of the command may fail. Error: Unable to mount USB device.	After disconnecting and then connecting the USB memory, execute the <code>getflashimage(8)</code> command again.

Table 3-11 Problems resolved in XCP 2070 (continued)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-130802-002	x	x	x	<p>When Oracle Solaris is operating, if you change the SNMP setting with the <code>setsnmp(8)</code> command, the following phenomena may occur.</p> <ol style="list-style-type: none"> <li>1. A part of the data such as the XCP version number is not output as a result of the <code>prtpicl -v</code> and <code>prtdiag -v</code> commands.</li> <li>2. For <code>/var/adm/messages</code> of Oracle Solaris, the following warning message is output. PICL snmpplugin: cannot fetch object value</li> </ol>	<p>There is no effective workaround.</p> <ul style="list-style-type: none"> <li>- If 1. occurs: Perform recovery by using the following procedure. <ol style="list-style-type: none"> <li>1) End the <code>prtdiag</code> command with <code>[Ctrl] + [C]</code>.</li> <li>2) Wait for about 30 minutes, and let an SNMP timeout occur in the XSCF.</li> <li>3) On the logical domain, execute the <code>svcadm</code> command to restart the <code>picl</code> service.</li> </ol> </li> <li>- If 2. occurs: The system can be operated continuously because this is a temporary warning message.</li> </ul>
RTIF2-130826-001			x	<p>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.</p>	<p>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.</p>
RTIF2-130902-001			x	<p>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.</p>	<p>There is no effective workaround. Recover the system by following the procedure described below.</p> <ol style="list-style-type: none"> <li>1. Log in to either standby XSCF, and then execute the following command. <code>XSCF&gt; rebootxscf -s</code></li> <li>2. After 10 seconds, log in to the other standby XSCF, and then execute the following command. <code>XSCF&gt; rebootxscf -a</code></li> <li>3. Wait for 20 minutes, log in to the master XSCF, and then execute the <code>flashupdate(8)</code> command again.</li> </ol>

Table 3-11 Problems resolved in XCP 2070 (continued)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-130903-002			x	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.	There is no effective workaround. If this defect occurs, execute the <code>rebootxscf -a</code> command to reset all the XSCFs and restore the system.
RTIF2-130903-006			x	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 <code>showpparstatus(8)</code> command or the <code>showdomainstatus(8)</code> command, the PPAR state may not be displayed correctly.	There is no effective workaround. While a PPAR is operating, do not turn off the SPARC M10-4S. Use the <code>poweroff(8)</code> command, for example, to stop a PPAR before turning it off.
RTIF2-130903-007	x	x	x	If the <code>setcod(8)</code> command is executed repeatedly on the physical partition (PPAR) in the PowerOn state, the resources available within the process may be exhausted, and <code>codd</code> may cause a process down.	You can avoid this by executing <code>setcod(8)</code> when PPAR is in the PowerOff state. [How to restore] Restart <code>codd</code> .

Table 3-11 Problems resolved in XCP 2070 (continued)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-130903-008	x	x	x	<p>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.</p> <p>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?".</p> <ul style="list-style-type: none"> <li>- If auto-boot? is true           <p>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.</p> </li> <li>- If auto-boot? is false           <p>The ok prompt appears, in the same way as in normal operation.</p> </li> </ul>	<p>After specifying a device and executing the select command, be sure to execute the unselect-dev command before executing the boot command.</p> <p>[Example]</p> <pre>{0} ok <b>select /pci@8000/pci@4/pci@0/pci@1/network@0</b> {0} ok <b>unselect-dev</b> {0} ok <b>boot net</b></pre> <p>[How to restore]</p> <ul style="list-style-type: none"> <li>- If, after the defect occurs, the logical domain is in the ok prompt state           <p>Execute the following command to reset the logical domain.</p> <pre>{0} ok <b>reset-all</b></pre> </li> <li>- If, after the defect occurs, Oracle Solaris has been started in the logical domain           <p>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.</p> <p>[Example]</p> <pre># <b>shutdown -y -g0 -i0</b> {0} ok <b>setenv auto-boot?</b> <b>false</b> {0} ok <b>reset-all</b></pre> </li> </ul> <p>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.</p>

Table 3-11 Problems resolved in XCP 2070 (continued)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-130930-001	x	x	x	<p>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.</p> <p>This can be confirmed by executing the showdateoffset(8) command.</p> <p>In the following execution example, the time difference between PPAR and XSCF is +/-3600 seconds or greater, indicating that this defect has occurred.</p> <pre>XSCF&gt; 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</pre>	<p>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.</p>
RTIF2-131004-001	x			<p>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.</p>	<p>Execute firmware update when the physical partition (PPAR) is powered off.</p>

Table 3-11 Problems resolved in XCP 2070 (continued)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-131004-002			x	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.	There is no effective workaround.  Update to firmware version XCP 2070 or later.
RTIF2-131004-003			x	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.	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. <ol style="list-style-type: none"> <li>Execute the showsscp -a command.</li> <li>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.</li> </ol> [Example] If there is no crossbar box, confirm the Address with an SSCP link network ID (network_id) of 2. XSCF> <b>showsscp -a -N 2</b> : : 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 3-11 Problems resolved in XCP 2070 (continued)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-131108-001	x	x	x	<p>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.</p> <p>[Phenomenon 1] The XSCF time may return to January 1, 2001.</p> <p>[Phenomenon 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.</p> <pre>XSCF&gt; showdateoffset -a PPAR-ID Domain Date Offset 00 400000100 sec 01 400000100 sec : : 15 400000100 sec</pre> <p>[Phenomenon 3] If you reset the PPAR or power off and on the PPAR, the Oracle Solaris time may return to January 1, 2001.</p>	<p>There is no effective workaround. Update to firmware version XCP 2070 or later.</p> <p>[How to restore] For details, see "<a href="#">Restoration after the "SCF Diagnosis initialize RTC" error (RTIF2-131108-001).</a>"</p>
RTIF2-131112-010	x	x	x	<p>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.</p> <ol style="list-style-type: none"> <li>Execute any of the sethostname(8), setnameserver(8), setnetwork(8), setroute(8), or setsscp(8) command.</li> <li>Execute either the setntp(8) or settelnet(8) command.</li> <li>Execute the applynetwork(8) command.</li> </ol>	<p>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.</p>

Table 3-11 Problems resolved in XCP 2070 (continued)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-131112-016	x	x	x	<p>If you use the <code>deleteuser(8)</code> 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.</p> <p>User public keys will continue to increase in number such that it may not be possible to register one for a new user account.</p> <p>Moreover, if a user account with the same name is registered again, the SSH user public key registered previously is set.</p>	<p>Before deleting a user account with the <code>deleteuser(8)</code> command, execute <code>setssh -c delpubkey -a -u</code> to delete the SSH user public key registered for the user account.</p> <p>[How to restore] Perform the following procedure.</p> <ol style="list-style-type: none"> <li>1. Execute the <code>adduser(8)</code> command to register the deleted user account again.</li> <li>2. Execute the <code>rebootxscf -a</code> command to reset the XSCF, or turn off and on the input power.</li> <li>3. Execute <code>setssh -c delpubkey -a -u</code> to delete the SSH user public key.</li> <li>4. Execute the <code>deleteuser(8)</code> command to delete the user account.</li> </ol>

## 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:
  - a. 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 reset. After that, power off and on the PPAR.
  - b. 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.
  - c. If the PPAR power is off, power on the PPAR. After that, check the Oracle Solaris time, and perform the above steps a. or b.
- If phenomenon 2 occurs:
  - a. 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.
  - b. 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.
  - c. If the PPAR power is off, power on the PPAR. After that, check the Oracle Solaris time, and perform the above steps a. or b.
- 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 3-12 Problems resolved in XCP 2052

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-130827-001	x	x	x	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.	There is no effective workaround.
RTIF2-130903-004			x	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.	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.
RTIF2-131004-004			x	If the standby XSCF is restarted 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.	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.

## Problems resolved in XCP 2051

The following table lists the problems resolved in XCP 2051.

Table 3-13 Problems resolved in XCP 2051

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-130717-001	x	x	x	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.	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 3-14 Problems resolved in XCP 2050

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-130219-002			x	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.	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.
RTIF2-130305-016			x	Timeout may occur if the XCP firmware version of a SPARC M10-4S or crossbar box is updated using the flashupdate -c sync command.	Execute the flashupdate(8) command by specifying the -f option to reupdate the XCP firmware for all SPARC M10-4S or crossbar boxes.

Table 3-14 Problems resolved in XCP 2050 (continued)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-130319-002	x	x	x	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.	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.
RTIF2-130319-003	x	x	x	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.	Ignore the registered event log, because the PPAR has been normally powered off.
RTIF2-130329-004			x	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. <ol style="list-style-type: none"> <li>1. XSCF for any of the SPARC M10-4S units constituting PPAR is reset.</li> <li>2. Switching of the master XSCF and standby XSCF occurs.</li> <li>3. XSCF of the SPARC M10-4S that was reset in 1. is reset again.</li> </ol>	There is no effective workaround.  Reset the master XSCF using the switchscf(8) command.

Table 3-14 Problems resolved in XCP 2050 (continued)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-130329-006			x	If XSCF of SPARC M10-4S belonging to the physical partition (PPAR) in operation is reset 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.	There is no effective workaround.  Power off the PPAR by using the poweroff -f command, and then power it on again.
RTIF2-130516-003	x	x	x	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	There is no workaround. This is a warning message, so you can operate it as it is. Ignore the message.
RTIF2-130516-005	x	x	x	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".	The execution results can be displayed if the showcodactivation(8) command is executed after the execution of the restoreconfig(8) or restorecodactivation(8) command is completed.

Table 3-14 Problems resolved in XCP 2050 (continued)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-130528-001	x	x	x	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.	<p>This has been modified with XCP 2050 and SRU11.1.6.4.0.</p> <p>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.</p> <p>[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 "<a href="#">Reconstructing the logical domain (RTIF2-130528-001)</a>."</p>
RTIF2-130903-005	x	x	x	<p>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.</p> <pre> "! " "#" "\$" "%" "&amp;" "' " "*" "+" "/" "=" "?" "^" "_" "\" "[" "]" "~" </pre>	Use reply mail addresses which do not include the characters shown by the Description.
RTIF2-131023-005	x	x	x	If [Physical] bar is selected on the XSCF Web menu, PCI (excluding the link card) may appear to be abnormal (⚠).	There is no effective workaround. Even if PCI (excluding the link card) is indicated as being abnormal (⚠), ignore it.

Table 3-14 Problems resolved in XCP 2050 (continued)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-131107-002	x	x	x	<p>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.</p> <p>[Phenomenon 1] The XSCF time may return to January 1, 1970.</p> <p>[Phenomenon 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.</p> <pre>XSCF&gt; showdateoffset -a PPAR-ID Domain Date Offset 00 1300000100 sec 01 1300000100 sec : : 15 1300000100 sec</pre> <p>[Phenomenon 3] If you reset the PPAR or power off and on the PPAR, the Oracle Solaris time may return to January 1, 1970.</p>	<p>There is no effective workaround. Update to firmware version XCP 2050 or later.</p> <p>[How to restore] For details, see "<a href="#">Restoration after erroneous detection of the "SCF Diagnosis initialize RTC" error (RTIF2-131107-002).</a>"</p>

## 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:
  - a. 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 reset. After that, power off and on the PPAR.
  - b. 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.
  - c. If the PPAR power is off, power on the PPAR. After that, check the Oracle Solaris time, and perform the above steps a. or b.

- If phenomenon 2 occurs:
  - a. 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.
  - b. If the Oracle Solaris time is other than January 1, 1970, contact a field engineer. In this case, do not execute the `resetdateoffset(8)` or `setdate(8)` command on the XSCF.
  - c. If the PPAR power is off, power on the PPAR. After that, check the Oracle Solaris time, and perform the above steps a. or b.
- 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 3-15 Problems resolved in versions prior to XCP 2050

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-121113-001	x	x	x	After setting an invalid value for the user name with the <code>setsmtp(8)</code> command, you execute the <code>setemailreport(8)</code> command to send a test mail. Then the reply address shows that the mail has been successfully sent.	There is no effective workaround. Even if it is displayed that the test mail has been successfully sent, it is not sent.
RTIF2-121113-002	x	x	x	If you execute the <code>setaudit delete</code> command and use the <code>viewaudit(8)</code> to display the audit log, some audit logs may not be deleted.	There is no effective workaround.
RTIF2-121113-006	x	x	x	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.	For operation to display the XSCF Web screen, use the menu tree.

Table 3-15 Problems resolved in versions prior to XCP 2050 (continued)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-121113-009	x	x	x	While XSCF is running, process down, panic or watchdog timeout occurs, which may cause XSCF not to be restarted after XSCF reset.	<p>Confirm that XSCF is successfully started.</p> <p>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).</p> <p>When recycling the power supply to the system, wait for 30 seconds or more to turn on the input power supply after disconnecting.</p> <p>In case XSCF is not started even if recycling the input power supply to the system, replace the CPU memory unit (CMU).</p>
RTIF2-121113-011	x	x	x	If you execute the <code>showsnmp(8)</code> command, the following message may appear, which means that the snmp daemon has been terminated. Agent Status: Disabled	<p>Execute the <code>showsnmp(8)</code> command again to confirm that the snmp daemon is restarted.</p> <p>If "Agent Status: Disabled" remains displayed, execute the <code>setsnmp enable</code> command to restart the snmp daemon.</p>
RTIF2-121113-014	x	x	x	The error message "/etc/redhat-release not found" appears while XSCF is starting.	Ignore this message.
RTIF2-121113-018	x	x	x	When you replace an FRU with the <code>replacefru(8)</code> command, the message "configuration changed (...)" showing the configuration change may be registered more than once in the event log.	Ignore the message that appears second time and later.
RTIF2-121113-019	x	x	x	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.	There is no effective workaround.
RTIF2-121113-021	x	x	x	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.	<p>There is no effective workaround.</p> <p>If the following message appears when you execute the <code>poweron(8)</code> command, the clock in the XSCF board has failed.</p> <p>Replace the XSCF board.</p> <p>Poweron canceled due to invalid system date and time.</p>

Table 3-15 Problems resolved in versions prior to XCP 2050 (*continued*)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-121113-022	x	x	x	If the operation panel has failed or is not connected, XSCF cannot be started.	Connect the operation panel. If the operation panel has failed, replace it.
RTIF2-121113-023 RTIF2-121113-028	x	x	x	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.	There is no effective workaround.
RTIF2-121113-025	x	x	x	When a CPU failure occurs, an error message showing degradation or offline on Oracle Solaris may not be output to Syslog.	Use the showlogs(8) command to check a failure state on XSCF.
RTIF2-121113-027	x	x	x	If you update the firmware and then upload XCP with XSCF Web without restarting XSCF, uploading of XCP will fail and the XSCF Web session will time out.	If you update the firmware and then continue to upload XCP with XSCF Web, restart XSCF.
RTIF2-121113-031	x	x	x	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.	Start Oracle Solaris of the logical domain to which the PCI card is assigned with Oracle VM Server for SPARC.

Table 3-15 Problems resolved in versions prior to XCP 2050 (continued)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-121129-001	x	x	x	<p>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.</p>	<p>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.</p> <p>[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.</p> <p>[When the failure mark is displayed on the PSUBP] Clear the failure mark by using the following procedure.</p> <ol style="list-style-type: none"> <li>1. Switch the mode switch on the operation panel to the Service mode position.</li> <li>2. Turn the power to the target SPARC M10 system chassis off and then on again, and then restart the XSCF. For the M10-4S, turn the power to every SPARC M10-4S chassis off and then on again.</li> <li>3. After the XSCF has been restarted, return the mode switch on the operation panel to its original position.</li> </ol> <p>If the same error recurs even after restarting 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.</p>
RTIF2-121129-002	x	x	x	<p>When you replace the CPU memory unit (CMU) 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.</p>	<p>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.</p>

Table 3-15 Problems resolved in versions prior to XCP 2050 (continued)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-121129-004	x	x	x	The restoredefaults(8) cannot initialize the following information. The setting information remains as it is. - Timezone for XSCF - Server certificate for HTTPS	There is no effective workaround. Reset by the settimezone(8), sethttps(8), and setssh(8) commands.
RTIF2-121130-001	x	x	x	When you enable and disable the power supply interlocking of RCIL, and then enable it again, the power supply interlocking of ETERNUS DX80/DX90/DX410/DX440/DX8100/DX8700 S2 may not work.	When you enable and disable the power supply interlocking of RCIL, restart XSCF.
RTIF2-121204-001	x	x	x	The dynamic resource management software (ServerView Resource Orchestrator) sometimes fails to register a server to be monitored.	There is no effective workaround. Register the server to be monitored again by the dynamic resource management software.
RTIF2-121204-002	x	x	x	If a node of PRIMECLUSTER stops, node switching does not occur automatically.	There is no effective workaround. Switch nodes manually in PRIMECLUSTER.
RTIF2-121204-003	x	x	x	When you set or change environment variables of OpenBoot PROM by setenv or nvramrc of OpenBoot PROM, or by the eeprom(1M) or ldm set-var commands of Oracle Solaris, the setting or changes may not be retained after recycling the power supply to the system.	After you update an environment variable of OpenBoot PROM, execute the ldm add-config command to save the domain configuration information to XSCF.

Table 3-15 Problems resolved in versions prior to XCP 2050 (continued)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-121204-004	x	x	x	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-030000020000000000000000 Status: Notice Occurred: Nov 16 16:55:25.518 JST 2012 FRU: /UNSPECIFIED Msg: Boot process failed	Use the XSCF setpparmode(8) to disable the auto boot function of the guest domain, and then start Oracle Solaris of the control domain. Then use the ldm start command of Oracle VM Server for SPARC to start the guest domain.  [How to restore] Use the ldm stop command of Oracle VM Server for SPARC to stop the guest domain, and then use the ldm start command to start the guest domain.
RTIF2-121206-001	x	x	x	When starting the domain, the following error message may appear. Msg: PCI Express link not active	Ignore this message if the showhardconf(8) command recognizes the PCI Express (PCIe) card.
RTIF2-121219-002			x	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.	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.
RTIF2-121219-004	x	x	x	While powering on/off the power supply interlocking group, the showremotepwrmgmt(8) command may be abnormally terminated with the following message. Controller response timeout.	Execute the showremotepwrmgmt(8) command again.
RTIF2-121219-005	x	x	x	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.	Ignore the information on the displayed second faulty component (the second suspect component).

Table 3-15 Problems resolved in versions prior to XCP 2050 (*continued*)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-121219-006	x	x	x	Replacement of the power supply unit (PSU) using the replacefru(8) command may fail with "Warning:005".	Execute the replacefru(8) command again and replace the PSU.
RTIF2-121219-009	x	x	x	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.	If the failure is "Power-on failure" or "Power-off failure", and the faulty component is a fan, replace the following component. <ul style="list-style-type: none"> <li>- For the SPARC M10-1 Motherboard unit (MBU)</li> <li>- For the SPARC M10-4/M10-4S PSU backplane</li> </ul>
RTIF2-121219-010			x	Error log "XSCF hang-up is detected" may be registered when the switchscf(8) command is executed.	Ignore this error log.

Table 3-15 Problems resolved in versions prior to XCP 2050 (continued)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-121219-012			x	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.	<p>Use the following procedure to replace a SPARC M10-4S chassis by using the replacefru (8) command.</p> <ol style="list-style-type: none"> <li>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.</li> <li>2. Replace the SPARC M10-4S chassis and wait for about 15 minutes after the input power of the chassis is turned on.</li> <li>3. Execute the showlogs event command to display an event log.</li> <li>4. Continue the replacement using either of the following methods. <ul style="list-style-type: none"> <li>- 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.</li> <li>- 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.</li> </ul> </li> </ol>
RTIF2-121219-013			x	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.	Ignore the error log regarding a cable connection error registered for a SPARC M10-4S chassis that does not exist.

Table 3-15 Problems resolved in versions prior to XCP 2050 (continued)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-121219-014			x	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.	To replace a SPARC M10-4S chassis due to an error in BB#00, use the replacefru(8) command.
RTIF2-121219-015			x	When a SPARC M10-4S chassis is removed with the initbb(8) command, the information on the removed chassis remains without being completely deleted.	To remove a SPARC M10-4S chassis, perform the cold removal (the chassis is removed by turning off the input power).
RTIF2-121219-016	x	x	x	An "internal error" may occur if the prtfru(8) command is executed while powering on/off or resetting the physical partition (PPAR).	Wait for the power on/off or reset of the PPAR to complete and then execute the prtfru(8) command again.
RTIF2-121219-017			x	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.	There is no effective workaround.
RTIF2-121219-018			x	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 unit (CMUU/CMUL). - Performing firmware update - Detecting an XSCF failure - Executing the switchscf(8) command	There is no effective workaround. After switching of the master XSCF is performed, power off the input power supply of all SPARC M10-4Ss and power them on again, without powering on the PPAR. When error log "STICK does not start (CPU)", "STICK does not start(MBC)", or "STICK count up error" is registered and a failure mark (*) appears on a part when you power on the PPAR after switching of the master XSCF, contact your field engineer.

Table 3-15 Problems resolved in versions prior to XCP 2050 (*continued*)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-121219-019	x	x	x	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.	Read it as the number obtained by subtracting one from the PCI number (PCI#) displayed in the log.
RTIF2-130109-002			x	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.	There is no effective workaround.
RTIF2-130109-005	x	x	x	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.	This is an error log that is registered because a PSU is removed. Ignore it.

Table 3-15 Problems resolved in versions prior to XCP 2050 (continued)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-130109-006			x	If you change the setting information of the power supply interlocking 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 power supply interlocking based on the changed setting information.	<p>Disable the power supply interlocking function, and then configure it again using the following procedure:</p> <ol style="list-style-type: none"> <li>1. Execute the <code>setremotepwrmgmt -c disable</code> command to disable the power supply interlocking function.</li> <li>2. Save the management file, and then use the <code>clearremotepwrmgmt(8)</code> command to initialize the setting information. <ul style="list-style-type: none"> <li>- If the standby XSCF is starting, execute the <code>clearremotepwrmgmt(8)</code> command after the start is completed.</li> <li>- If the standby XSCF is in failure, use the <code>replacefru(8)</code> command to replace the target FRU, and then execute the <code>clearremotepwrmgmt(8)</code> command.</li> </ul> </li> <li>3. After the start of the standby XSCF is completed, execute the <code>setremotepwrmgmt -c config</code> command to restore the setting information based on the saved management file.</li> <li>4. Execute the <code>setremotepwrmgmt -c enable</code> command to enable the power supply interlocking function.</li> </ol>
RTIF2-130109-007	x	x	x	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.	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.
RTIF2-130130-001		x	x	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.	The error log is registered because no CMUU is mounted. So, ignore it.

Table 3-15 Problems resolved in versions prior to XCP 2050 (continued)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-130212-001			x	<p>If the power save operation, which is set by the setpparmode(8) command, is "enabled," the following problems may occur.</p> <ul style="list-style-type: none"> <li>- A hang-up (heartbeat function) in a logical domain may be unable to be detected.</li> <li>- If the CoD resources of a CPU core are reduced during system startup (while a physical partition (PPAR) is operating), the PPAR may be powered off.</li> </ul>	Set the power save operation to "disabled" by using the setpparmode(8) command.
RTIF2-130212-002	x	x	x	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.	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.
RTIF2-130212-003	x	x	x	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.	<p>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.</p> <p>If a PSB becomes unavailable, power off the entire system and then power it on again.</p>

Table 3-15 Problems resolved in versions prior to XCP 2050 (continued)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-130215-001			x	<p>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.</p> <p>Code: 40002000-003cff0000ff0000ff-02000e000000000000000000 FRU: /BB#x Msg: SB deconfigured (SB-SB access error)</p> <p>Code: 40002000-003cff0000ff0000ff-02000e010000000000000000 FRU: /BB#x Msg: SB deconfigured (not running)</p>	Disconnect the PSB where an error is detected from the PPAR configuration by using the deleteboard(8) command.
RTIF2-130215-002	x	x	x	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).	Disconnect the PSB where an error is detected from the PPAR configuration by using the deleteboard(8) command.
RTIF2-130219-001			x	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 power supply interlocking group.	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.
RTIF2-130219-005		x	x	If a failure occurs in a component in a physical partition (PPAR), the status of the PPAR in the SNMP MIB is not updated.	There is no effective workaround.
RTIF2-130219-008			x	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.	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.

Table 3-15 Problems resolved in versions prior to XCP 2050 (continued)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-130227-001			x	If you collect a snapshot by specifying the -a option, "XSCF Kernel Panic" may occur due to the increased load on the master XSCF.	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.
RTIF2-130305-005			x	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.	There is no effective workaround. Make sure that the XSCF of each SPARC M10-4S is restarted. Power on the PPAR again if they are restarted.
RTIF2-130305-008			x	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.	There is no effective workaround.
RTIF2-130305-010			x	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).	Do not power on all the PPARs at the same time using the poweron -a command. Power on each PPAR using the -p option.
RTIF2-130305-021			x	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.	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.

Table 3-15 Problems resolved in versions prior to XCP 2050 (continued)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-130305-024			x	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	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.
RTIF2-130319-001		x	x	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 side) (CMUL) will be degraded if you start the logical domain with "DMA timeout error Hard detected" detected.	There is no effective workaround. Before starting the logical domain, disconnect the input power supply and then power it on again. If the degradation state of CMUL is not cleared after you start the logical domain, contact field engineers.
RTIF2-130329-001			x	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.	There is no effective workaround.
RTIF2-130329-002			x	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.	Disconnect the power by using the poweroff(8) command.

Table 3-15 Problems resolved in versions prior to XCP 2050 (continued)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-130329-003	x	x	x	If you power off the input power supply while the status of the physical partition (PPAR) is PowerOn (from the startup of Oracle Solaris OS 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.	<p>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.</p> <p>[How to restore] If any problem occurs, restore the configuration with the following procedure:</p> <ol style="list-style-type: none"> <li>1. Save settings with the <code>dumpconfig(8)</code> command.</li> <li>2. Initialize the system to the factory default with the <code>restoredefaults -c factory</code> command.</li> <li>3. Confirm that the READY LED of XSCF or XSCF unit is lighted up after performing AC OFF/ON.</li> <li>4. Replace the CPU Memory Unit (Lower) (CMUL) or motherboard unit.</li> <li>5. Restore the configuration with the <code>restoreconfig(8)</code> command.</li> </ol>
RTIF2-130410-004	x	x	x	The power may not be turned on/off from the operation panel.	<p>If you power on from the XSCF shell, execute the <code>poweron(8)</code> command. If you power off from the XSCF shell, execute the <code>poweroff(8)</code> command.</p> <p>[How to restore] If this event occurs, power off the physical partition (PPAR) by using the <code>poweroff -f</code> command.</p>

Table 3-15 Problems resolved in versions prior to XCP 2050 (*continued*)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-130410-005			x	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).	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.
RTIF2-130410-006			x	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).	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.
RTIF2-130410-007			x	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.	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).

Table 3-15 Problems resolved in versions prior to XCP 2050 (*continued*)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-130415-001		x	x	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 setpparam(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	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.
RTIF2-130416-001	x	x	x	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.	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.
RTIF2-130417-001			x	If the XSCF mounted in the crossbar box panics, it may be impossible to perform communication between the master XSCF and non-master XSCF.	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.
RTIF2-130507-001	x	x	x	There is a case where a RAID volume cannot be recognized after a power failure occurred while using the hardware RAID function.	Please run the activate-volume command at ok prompt to activate a hardware RAID volume. For the detailed procedure, see "12.2.8 Re-enabling hardware RAID volume" in the <i>Fujitsu M10/SPARC M10 Systems System Operation and Administration Guide</i> .

Table 3-15 Problems resolved in versions prior to XCP 2050 (continued)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-130515-001	x	x	x	<p>While the system is operating, the following events may occur:</p> <ol style="list-style-type: none"> <li>1. The prtpicl command no longer responds.</li> <li>2. Display data (such as the XCP version) of prtpicl -v and prtdiag -v is not output as expected.</li> <li>3. For /var/adm/messages, the warning message, "PICL snmplugin: cannot fetch object value", is output.</li> <li>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.</li> </ol>	<p>There is no effective workaround.</p> <p>[How to restore]</p> <p>If event 1. occurs, recover with the following procedure.</p> <ol style="list-style-type: none"> <li>1. End the prtdiag(1M) command with [Ctrl-C].</li> <li>2. Wait for about 30 minutes, and allow an SNMP timeout to occur in the XSCF.</li> <li>3. In the control domain, execute the svcadm(1M) command to restart the picl service.</li> </ol> <p>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.</p> <ul style="list-style-type: none"> <li>- If the XSCF is operating, use the rebootxscf(8) command to reset the XSCF.</li> <li>- If the XSCF is not operating, turn the input power supply of the system off and then back on (AC OFF/ON) to recover.</li> </ul> <p>If event 3. occurs, the system can be operated continuously because this is a temporary warning message.</p> <p>If event 4. occurs, turn off the input power supply of the system, and then back on (AC OFF/ON) to recover.</p>
RTIF2-130612-001			x	<p>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.</p>	<p>Perform cold replacement (replacement performed with the input power off) or update the XCP firmware version to XCP 2044 or later before performing replacement.</p>

# Problems with Oracle Solaris and Workarounds

This section describes problems with Oracle Solaris and workarounds for each version.

## Problems relating to all the versions of Oracle Solaris and their workarounds

The following table shows problems that might occur in any versions of Oracle Solaris being supported and workarounds for them.

**Table 3-16** Problems that might occur in any versions of Oracle Solaris and their workarounds

CR ID	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
15812880			x	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	This has been modified with Oracle Solaris 11.1 SRU3.5.1, and the patch 148888-04 for Oracle Solaris 10.  [Workaround] Execute the following command to change ptmx_ptymax: [Example] # echo "ptmx_ptymax/Z0x400000"   mdb -kw ptmx_ptymax: 0 = 0x400000
15813959 15813960 (7196117)	x	x	x	When a PCI expansion unit is added by hotplug(1M) in a SPARC M10 system, devices on the PCI expansion unit are not recognized.	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
15822113	x	x	x	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.	This has been modified with SRU11.1.7.5.0.  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 3-16 Problems that might occur in any versions of Oracle Solaris and their workarounds (*continued*)

CR ID	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
15823255			x	<p>An Oracle Solaris panic may occur if the CPU allocation is changed using the <code>psradm(1M)</code> or <code>psrset(1M)</code> command or the configuration of a virtual CPU is dynamically changed using the <code>ldm(1M)</code> command under the environment that meets the following two conditions.</p> <ul style="list-style-type: none"> <li>- The environment where the physical partition (PPAR) is composed of two or more SPARC M10-4S chassis.</li> <li>- The environment where the following <code>lgroup</code> exists when the <code>lgrpinfo</code> command is executed on the control domain or logical domain.</li> </ul> <p>Among the <code>lgroups</code> 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)</p> <p>[Example]</p> <pre># /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 ...</pre>	<p>This has been modified with Oracle Solaris 11.1 SRU5.5, and the patch 150400-01 for Oracle Solaris 10.</p> <p>[Workaround]</p> <p>Add the following line to <code>/etc/system</code> and restart Oracle Solaris:</p> <pre>set lgrp_topo_levels=2</pre>
15825208	x	x	x	<p>In SPARC M10 Systems, the <code>scp(1)</code>, <code>sftp(1)</code>, and <code>ssh(1)</code> commands of Oracle Solaris may generate an error or installation of Oracle RAC may fail.</p>	<p>This has been modified with Solaris 11.1 SRU1.4.</p> <p>[Workaround]</p> <p>For details, see "<a href="#">An error occurs in executing the <code>scp(1)</code>, <code>sftp(1)</code>, or <code>ssh(1)</code> command of Oracle Solaris or the installation of Oracle RAC fails (CR:15825208).</a>"</p>

Table 3-16 Problems that might occur in any versions of Oracle Solaris and their workarounds (*continued*)

CR ID	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
15826052	x	x	x	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.	This has been modified with XCP 2050 and SRU11.1.6.4.0.  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.
15840018	x	x	x	When the firmware is updated to XCP2031 or later, the following message is displayed when starting Oracle Solaris. NOTICE: skipping unsupported token: fjorclnum	This has been modified with SRU11.1.6.4.0, and the patch 148888-03 for Oracle Solaris 10.  Ignoring this message does not have an impact on the system.
15851224	x	x	x	When starting the I/O domain, the following message may be output and the panic may persist. recursive rw_enter, lp=XXXXXXXX wwwwh=XXXXXXXX thread=XXXXXXXX	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.

Table 3-16 Problems that might occur in any versions of Oracle Solaris and their workarounds (*continued*)

CR ID	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
15851441	x	x	x	<p>When the memory fails and is degraded, the following message may be output at startup of Oracle Solaris, and the panic may persist.</p> <pre>tilelet_assign_fini_cb(): tile 0xX in memgrp X was unused</pre> <p>This may also occur when you set the mirror mode for the memory after saving the logical domain setting with <code>ldm add-spconfig</code>.</p>	<p>This has been modified with SRU11.1.11.4.0.</p> <p>[Workaround] For details, see "<a href="#">If Oracle Solaris is activated during memory degradation, a panic may occur (CR:15851441)</a>."</p>
15858713 16769782	x	x	x	<p>If a memory error occurs and all the memories assigned to the guest domain are degraded, <code>ldmd(1M)</code> causes a core dump to abnormally terminate and the <code>ldm(1M)</code> command ends with an error.</p>	<p>This has been modified with SRU11.1.10.5.0. On Oracle Solaris 10, it has been modified with Oracle VM Server for SPARC 3.1.</p> <p>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.</p> <ol style="list-style-type: none"> <li>1. Execute the <code>poweroff(8)</code> command to turn off the power of the physical partitions (PPARs).</li> <li>2. Execute the <code>setdomainconfig(8)</code> command to restore PPARs to their factory-default state. <code>setdomainconfig -p ppar_id -c default</code></li> <li>3. Execute the <code>poweron(8)</code> command to start the PPARs.</li> </ol> <p>Oracle Solaris is started in the factory-default configuration which consists of only control domains.</p>

Table 3-16 Problems that might occur in any versions of Oracle Solaris and their workarounds (*continued*)

CR ID	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
15887244	x	x	x	When you start the SunVTS 7.0 ps14 and ps15 tests in a SPARC M10 system, they may terminate with an error.	This has been modified with Oracle Solaris 11.1 SRU4.6, and the patch 149395-02 for Oracle Solaris 10.  There is no workaround other than applying the modification.
16238762			x	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 <code>ldm add-vcpu</code> command after the system board is added by dynamic reconfiguration of physical partitions, the system will panic with the following message: panic[cpuX]/ thread=XXXXXXXXXX: mpo_cpu_add: Cannot read MD	This has been fixed by SRU11.1.7.5 and Oracle Solaris 10 patch 150400-12. 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 [Workaround] For the control domain or the domain whose CPU is added by the <code>ldm add-vcpu</code> command, add the following line to the domain's <code>/etc/system</code> file and reboot the Oracle Solaris. <code>set suspend_count = 1</code>

Table 3-16 Problems that might occur in any versions of Oracle Solaris and their workarounds (*continued*)

CR ID	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
16292272			x	<p>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.</p> <p>It takes approximately (the number of guest domains for which binding has already been performed + 1) x 6 + 10 seconds to perform binding.</p> <p>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 <code>ldm bind-domain</code> command, the required time is obtained by summing the times taken to perform binding for all of them.</p>	<p>This has been improved with SRU11.1.16.4.0, and patch 150011-03 for Oracle Solaris 10.</p> <p>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.</p> <p>Using the recommended configuration described above, not only mitigates the described phenomenon but also helps improve fault tolerance.</p> <p>If a virtual network switch (vsw) is configured, you can reduce the time for binding by half by setting <code>inter-vnet-link</code> to off. For notes when <code>inter-vnet-link</code> is set to off, see <i>Oracle VM Server for SPARC Administration Guide</i> or <i>Oracle VM Server for SPARC Release Notes</i>.</p>
17510986	x	x	x	<p>If the guest domain is Oracle Solaris 11.1 and SRU11.1.9 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.</p>	<p>It has been fixed by SRU11.1.14.5.0 and the Oracle Solaris 10 patch 150400-07.</p>

Table 3-16 Problems that might occur in any versions of Oracle Solaris and their workarounds (*continued*)

CR ID	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
17627526	x	x	x	<p>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.</p> <p>[Example of the messages]  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/ldoms-ldmd:default.log) of the ldoms/ldmd service.  [Example of the messages]  [ 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</p>	<p>There is no effective workaround.</p> <p>[How to restore]  After confirming that the device file in question exists, restore the ldoms/ldmd service using the svcadm(1M) command.</p> <pre># 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</pre>
18055846		x	x	<p>When adding a PCI Expansion Unit by PCI hot plugging (PHP), Oracle Solaris may panic by producing the following message.</p> <pre>panic[cpuX]/ thread=XXXXXXXXXX: Fatal error has occurred in: PCIe fabric.(0xX)(0xXX)</pre>	<p>There is no effective workaround.</p> <p>Do not hot plug a PCI Expansion Unit. There is no problem in hot replacing in respect to the same slot.</p>

Table 3-16 Problems that might occur in any versions of Oracle Solaris and their workarounds (*continued*)

CR ID	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
-	x	x	x	If an access error is detected when accessing an internal SAS disk drive, further access to the disk may become impossible.	<p>Perform settings for multipathing (MPxIO) on the internal HDD. If the Enhanced Support Facility 5.0 or later is applied, you do not have to perform the following operations:</p> <p><b>Note</b> - Enhanced Support Facility (ESF) is supported only for SPARC M10 systems sold within Japan by Fujitsu.</p> <p>[Setting example]</p> <ol style="list-style-type: none"> <li>1. Use the <code>format(1M)</code> command to check the product and model of the HDD which is mounted. # <code>format</code></li> <li>2. Add the internal HDD information to the <code>/kernel/drv/scsi_vhci.conf</code> file.  [Setting example of <code>scsi_vhci.conf</code> file] - For Oracle Solaris 11 <code>scsi-vhci-failover-override = "TOSHIBA MBF2600RC", "f_sym";</code>  - For Oracle Solaris 10 <code>device-type-scsi-options-list = "TOSHIBA MBF2600RC", "sym-opt";</code> <code>sym-opt = 0x1000000;</code></li> <li>3. Use the <code>stmsboot(1M)</code> command to enable MPxIO. # <code>stmsboot -e</code></li> </ol>

Table 3-16 Problems that might occur in any versions of Oracle Solaris and their workarounds (*continued*)

CR ID	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
-	x	x	x	<p>When a logical domain with a 10 Gigabit Ethernet card (SP1X7HF1F) for which the value of OpenBoot PROM environment variable <code>diag-switch?</code> is set to true, the console displays the following warning message and the error log records "Msg: Device error (FCode informed error)".</p> <p>WARNING: /pci@X,XXXXXX: FCODE mapin doesn't match decoded register type;</p> <p>Also, executing the <code>showstatus (8)</code> command may show "Degraded" for the FRU on which the relevant PCI card is mounted.</p>	<p>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 <code>diag-switch?</code> to false.</p> <pre>setenv diag-switch? false</pre>
-			x	<p>If the logical domain has degraded memory because of a memory failure, when dynamic reconfiguration of the physical partition is executed with the <code>deleteboard(8)</code> command, Oracle Solaris on the domain with the degraded memory may enter the panic state.</p>	<p>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.</p> <p>[How to check] Execute <code>"ldm list-devices -a -S memory"</code>. If the resulting STATUS column displays "fail", the memory area has been degraded by SIZE from PA (physical address) displayed on the same line.</p> <p>[How to delete a memory area] Execute <code>"ldm remove-memory &lt;total value of above SIZES&gt; &lt;domain name&gt;"</code>.</p>

Table 3-16 Problems that might occur in any versions of Oracle Solaris and their workarounds (*continued*)

CR ID	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
-	x	x	x	When "Oracle VM Server for SPARC 3.1.0.1/SRU11.1.14" 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, the ldmd(1M) command on the control domain may produce a core dump and it may be restarted.	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.
-			x	If the addboard(8) command is executed in the "factory-default" configuration, CPU cores may not be assigned to the control domain.	Add the CPU cores or threads which were not added, using the "ldm add-core" command or the "ldm add-vcpu" command.
-			x	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.	There is no effective workaround. If this specific card is mounted on a system, conduct any reconfiguration in deactivated state instead of dynamic reconfiguration.
-			x	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)/SG-PCIEFCOE2-Q-SR (SG-XPCIEFCOE2-Q-SR, 7105381)) mounted on it, system panic may occur due to the processing of the qlge driver.	There is no effective workaround. If this specific card is mounted on a system, conduct any reconfiguration in deactivated state instead of dynamic reconfiguration.

Table 3-16 Problems that might occur in any versions of Oracle Solaris and their workarounds (*continued*)

CR ID	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
-			x	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.	Before dynamically reconfiguring a physical partition on which this specific card is mounted, activate any unplumbed qlcnic interface with the "ifconfig <i>interface_name</i> plumb" command.
-			x	If dynamic reconfiguration is performed on a physical partition which has a Dual Port Gigabit Ethernet card (MMF) (SP1X7GD1F/7100482 (7100481)), connection is terminated.	There is no effective workaround. If this specific card is mounted on a system, conduct any reconfiguration in deactivated state instead of dynamic reconfiguration.



Table 3-16 Problems that might occur in any versions of Oracle Solaris and their workarounds (*continued*)

CR ID	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
-			x	<p>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.</p> <p>[Example of message] Feb 28 16:19:39 svc.startd[11]: ldoms/ldmd:default failed: transitioned to maintenance (see 'svcs -xv' for details)</p>	<p>Use the following process to change the timeout value of starting the ldoms/ldmd service to 600.</p> <pre># svccfg -s ldmd listprop : start/timeout_seconds                                 CO unt          180 : # svccfg -s ldmd setprop start/timeout_seconds=600 # svccfg -s ldmd listprop : start/timeout_seconds                                 CO unt          600 : # svcadm refresh ldmd # svcadm restart ldmd</pre> <p>[How to restore] If this symptom occurs, use the following procedure to restore.</p> <pre># svccfg -s ldmd listprop : start/timeout_seconds                                 CO unt          180 : # svccfg -s ldmd setprop start/timeout_seconds=600 # svccfg -s ldmd listprop : start/timeout_seconds                                 CO unt          600 : # svcadm refresh ldmd # svcadm clear ldmd</pre>

Table 3-16 Problems that might occur in any versions of Oracle Solaris and their workarounds (*continued*)

CR ID	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
-	x	x	x	<p>If Java VM is started on a SPARC M10 system with SPARC64 X+ processors, the following message may be output along with the production of a core dump. [Example of message]</p> <pre># # Internal Error (output.cpp: 1576), pid=1310, tid=91 # guarantee((int)(blk_starts[i+ 1] - blk_starts[i]) &gt;= (current_ offset - blk_offset)) failed: shouldn't increase block size # &lt;...&gt; # Abort (core dumped)</pre> <p>Moreover, due to the production of the core dump by Java VM, the following events may occur:</p> <ol style="list-style-type: none"> <li>1. On a SPARC M10 system with SPARC64 X+ processors, the "Add Asset" operation on Solaris fails.</li> <li>2. On a SPARC M10 system with SPARC64 X+ processors, installation of Solaris (the "Install Server" feature) fails.</li> <li>3. On a SPARC M10 system with SPARC64 X+ processors, installation of Enterprise Controller and Proxy Controller (Ops Center management server) on the domains fail.</li> </ol>	This has been modified with SRU11.1.17.5.
-	x	x	x	<p>When using XCP 2210, the Dynamic Resource Management (DRM) feature of Oracle VM Server for SPARC does not work.</p>	Update the XCP firmware to XCP 2220 or newer.

## 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-cbc, arcfour128, arcfour256, arcfour, blowfish-cbc
```

- If you use it with the server function (sshd(1M) etc.):
  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 is started in the factory-default configuration which consists of only control domains.

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`.

In addition, you must not specify with `ldm set-config` or the `setdomainconfig(8)` command of XSCF the settings that were saved with no mirror mode set, to the environment where the mirror mode is used.

## Problems with Oracle Solaris 11 and workarounds

The following table shows problems that might occur with Oracle Solaris 11 being supported and workarounds for them.

Table 3-17 Problems that might occur with Oracle Solaris 11 and workarounds

CR ID	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
17709858			x	If the system board is deleted by dynamic reconfiguration of the physical partition, any of the following phenomena may occur. <ul style="list-style-type: none"><li>- 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)</li><li>- There is a hangup during the device resume processing of a logical domain, and <code>deleteboard(8)</code> ends with an error due to a timeout.</li></ul>	This has been modified with SRU11.1.15.4.0.

Table 3-17 Problems that might occur with Oracle Solaris 11 and workarounds (*continued*)

CR ID	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
-	x	x	x	<p>If a binary file that is compiled by using the Oracle Solaris Studio version 12.3 2013/06/17 or newer and specifying both SPARC64 X/SPARC64 X+ processor specific options (-xarch=native or -xtarget=native) and alignment boundary options at the same time, is executed on a SPARC M10 system, the accuracy of floating point calculations may decrease or the binary may dump core.</p> <p>[Procedure of checking compiler version]</p> <p>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.</p> <pre>\$ 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</pre>	<p>Specify the "-xarch=sparcima" option or the "-xarch=sparcfmaf" option when creating a binary using alignment boundary options.</p>

## Problems with Oracle Solaris 10 and workarounds

The following table shows problems that might occur with Oracle Solaris 10 being supported and workarounds for them.

Table 3-18 Problems that might occur with Oracle Solaris 10 and workarounds

CR ID	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
15738030	x	x	x	<p>If both of the following conditions are satisfied, a control domain panic may occur with "BAD TRAP: type=31".</p> <ul style="list-style-type: none"> <li>- The operating system of the control domain is Oracle Solaris 10.</li> <li>- As a result of executing <code>ldm list-domain -o memory primary</code>, the RA (real address) is greater than 0x200000000000 (32 TB).</li> </ul>	<p>This has been modified with the patch 148888-03 for Solaris 10.</p> <p>[Workaround] Perform the following procedure:</p> <ol style="list-style-type: none"> <li>1. Execute <code>ldm list-domain -o memory primary</code> to display the value of SIZE.</li> <li>2. Execute <code>ldm start-reconf primary</code> to enter the delayed reconfiguration mode.</li> <li>3. Execute <code>ldm remove-memory 256M primary</code> to reduce the assigned memory.</li> <li>4. Execute <code>ldm set-memory primary</code> to return the assigned memory back to the original size.</li> <li>5. Restart the Oracle Solaris of the control domain.</li> <li>6. Execute <code>ldm list-domains -o memory primary</code> to confirm that the RA is smaller than 0x200000000000.</li> <li>7. Execute <code>ldm add-spconfig</code> to save the configuration information to the XSCF.</li> </ol>



## Information on SPARC M10-1 Hardware

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This chapter describes special instructions and problems concerning the SPARC M10-1 hardware.

- [Notes and Restrictions](#)
- [Problems with Hardware and Workarounds](#)

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## Notes and Restrictions

### Notes on using external DVD drive

USB bus power drive is not supported for external DVD drives connected via USB.

### Notes on using USB memory

Prepare a USB memory as a medium in advance if you execute the command specifying the USB memory as a destination of saving data, among XSCF commands. The saved data contains information on the system. If you use the USB memory, consideration should be made for the management of the USB memory in which the data is saved, for security reasons.

Not all the commercially available USB memories of any manufacturer are guaranteed for their connectivity and operability with XSCF. Abnormalities may occur such as an XSCF firmware error or reset depending on your USB memories. In such a case, immediately stop using the USB memory.

When connecting a USB memory to the USB port for XSCF, directly connect it to the USB port. If you connect the USB memory via the USB hub or USB extension cable, it may cause an error.

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# 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

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This chapter describes special instructions and problems concerning the SPARC M10-4 hardware.

- [Notes and Restrictions](#)
- [Problems with Hardware and Workarounds](#)

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## Notes and Restrictions

### Notes on using external DVD drive

USB bus power drive is not supported for external DVD drives connected via USB.

### Notes on using USB memory

Prepare a USB memory as a medium in advance if you execute the command specifying the USB memory as a destination of saving data, among XSCF commands. The saved data contains information on the system. If you use the USB memory, consideration should be made for the management of the USB memory in which the data is saved, for security reasons.

Not all the commercially available USB memories of any manufacturer are guaranteed for their connectivity and operability with XSCF. Abnormalities may occur such as an XSCF firmware error or reset depending on your USB memories. In such a case, immediately stop using the USB memory.

When connecting a USB memory to the USB port for XSCF, directly connect it to the USB port. If you connect the USB memory via the USB hub or USB extension cable, it may cause an error.

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# 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

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This chapter describes special instructions and problems concerning the SPARC M10-4S hardware.

- [Notes and Restrictions](#)
- [Problems with Hardware and Workarounds](#)

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## Notes and Restrictions

### Notes on using external DVD drive

USB bus power drive is not supported for external DVD drives connected via USB.

### Notes on using USB memory

Prepare a USB memory as a medium in advance if you execute the command specifying the USB memory as a destination of saving data, among XSCF commands. The saved data contains information on the system. If you use the USB memory, consideration should be made for the management of the USB memory in which the data is saved, for security reasons.

Not all the commercially available USB memories of any manufacturer are guaranteed for their connectivity and operability with XSCF. Abnormalities may occur such as an XSCF firmware error or reset depending on your USB memories. In such a case, immediately stop using the USB memory.

When connecting a USB memory to the USB port for XSCF, directly connect it to the USB port. If you connect the USB memory via the USB hub or USB extension cable, it may cause an error.

## Restrictions on replacing 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 indicated as "Role:Master" 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, execute the `switchscf` command to switch it 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 input power supply to the crossbar box to be replaced, and replace it.**

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**Note** - Although error logs for the crossbar box to be replaced are registered when the input power supply is disconnected, ignore all of them.

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6. **Connect the power cord of the crossbar box to the input power supply.**  
For details, see "5.4 Connecting Cable to Crossbar Box" in the *Fujitsu M10/SPARC M10 Systems 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 the "8.4 Adding the Expansion Rack 2" in the *Fujitsu M10/SPARC M10 Systems Installation Guide* and read Steps 17 and 18 as follows:

17. **Connect all power cords of the crossbar box and SPARC M10-4S to the input power supply.**  
For details, see "5.2 Connecting Cable to SPARC M10-4/SPARC M10-4S" and "5.4 Connecting Cable to Crossbar Box."
18. **Update the firmware to the same version as 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
```

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## Problems with Hardware and Workarounds

There is no problem that has been confirmed as of this moment.



# Chapter 7

## Information on PCI Expansion Unit Hardware

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This chapter describes special instructions and problems concerning the PCI expansion unit hardware.

- [Direct I/O Function for the PCI Expansion Unit](#)
- [Problems with PCI Expansion Units and Workarounds](#)

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## 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 *Oracle VM Server for SPARC Administration Guide* for the version used. If the PCI expansion unit is connected to SPARC M10-4, make the setting below before using the direct I/O function. For SPARC M10-1, the setting below 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 *Fujitsu M10/SPARC M10 Systems XSCF Reference Manual* or the manual 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 7-1 Problems and their workarounds for all versions of the PCI expansion unit firmware

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-130703-001		x	x	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 <code>cfgadm(1M)</code> 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.	This is just a display problem and does not affect operation.
RTIF2-130703-002		x	x	When you install a PCI expansion unit with PCI hot plug (PHP), there may be lane degrade.	When using PHP, execute <code>cfgadm -c configure</code> instead of <code>cfgadm -c connect</code> .
RTIF2-130703-003		x	x	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.	If there a fault error message is output after installing a PCI expansion unit with PHP, reinstalled the PCI expansion unit.
RTIF2-130703-004		x	x	When you install a PCI expansion unit with PCI hot plug (PHP), the PCI expansion unit may not be recognized.	If the PCI expansion unit is not recognized after installing it with PHP, reinstall the PCI expansion unit.

Table 7-1 Problems and their workarounds for all versions of the PCI expansion unit firmware (*continued*)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-130724-002	x	x	x	If you install a 6Gbps SAS card in the PCI expansion unit with the PCI hot plug (PHP), linkup with PCI Express 8lane may not be successful and Speed may be displayed as "5.0GTx4" or "5.0GTx2" in response to executing the prtdiag(1M) command.  [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	Restart the physical partitions (PPARs) or I/O domain, or reinstall the 6Gbps SAS card by PHP.
RTIF2-130724-003	x	x	x	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	When the device can be recognized from Oracle Solaris, ignore this error message.

## 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 7-2 Problems resolved in version 1150 of the PCI expansion unit firmware

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-131224-001	x	x	x	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.	There is no effective workaround.

Table 7-2 Problems resolved in version 1150 of the PCI expansion unit firmware (*continued*)

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-131224-002	x	x	x	<p>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.</p> <p>This symptom can be confirmed by 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.</p> <p>[Example of the error message]            In case the 3rd byte of the 4th line of the "Diagnostic Code" is "10":            XSCF&gt; <b>showlogs error -v</b>            Date: Dec 17 15:50:11 JST 2013            Code: 10000400-            009eff0000ff0000ff-            11000044000000000000000000            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</p>	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 7-3 Problems resolved in version 1130 of the PCI expansion unit firmware

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-131120-001	x	x	x	<p>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 "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 Diagnostic Code have the following values. The problem may be due to, for example, an instantaneous voltage drop caused by an external factor.</p> <p>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.</p> <p>The first to third bytes on the fourth line of Diagnostic Code are "000120".            XSCF&gt; showlogs error -v            Date: Oct 30 10:27:17 JST 2013            Code: 80000408-00cb000000ff0000ff-110000246101000000000000            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</p>	<p>There is no effective workaround.</p> <p>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.</p> <p>[How to restore]</p> <ul style="list-style-type: none"> <li>- For this event occurring in a single PSU</li> <li>- If the error log "Msg: PSU RECOVERY" is registered, the system has already been restored from the instantaneous voltage drop. The system can be operated continuously.</li> <li>- If the error log "Msg: PSU RECOVERY" is not registered, a PSU failure occurred. Replace the PSU.</li> <li>- For this event occurring in two PSUs</li> </ul> <p>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.</p>

## 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.

Table 7-4 Problems resolved in version 1120 of the PCI expansion unit firmware

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-130703-009	x	x	x	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.	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 7-5 Problems resolved in version 1110 of the PCI expansion unit firmware

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-130703-007	x	x	x	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	The display of this error message does not affect the operation.
RTIF2-130703-008	x	x	x	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.	If the 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 7-6** Problems resolved in version 1100 of the PCI expansion unit firmware and their workarounds

RTI No.	SPARC M10-1	SPARC M10-4	SPARC M10-4S	Description	Workaround
RTIF2-130703-005	x	x	x	<p>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.</p> <p>[Example of PCIe card message] FRU: /BB#0/PCI#3/ PCIBOX#1234/PCI#3 Msg: PCICARD failed</p> <p>[Example of link board message] FRU: /BB#0/PCI#0/ PCIBOX#1234/LINKBD Msg: TWI access error</p>	<p>The display of this error message does not affect the operation.</p> <p>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.</p>
RTIF2-130703-006	x	x	x	<p>If the serial number of the PCI expansion unit that is displayed upon execution of the <code>ioxadm -v</code> 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.</p>	<p>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.</p> <p>If the serial number of the PCI expansion unit that is displayed in response to execution of the <code>ioxadm -v</code> list command consists entirely of 0's ("0000000000"), execute the <code>ioxadm(8)</code> command of the XSCF firmware to restore the serial number.</p> <p>In this case, you need the <code>fieldeng</code> privilege. For details, see "<a href="#">Restoring the serial number of the PCI expansion unit (RTIF2-130703-006)</a>."</p>

## 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

## Contents of Revision of Documentation

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This chapter describes the latest information which has been confirmed after documentations related to SPARC M10 Systems are released and contents of revision of documentations.

- [Contents of Revision of Fujitsu M10-1/SPARC M10-1 Service Manual](#)
- [Contents of revision of Fujitsu M10-4/Fujitsu M10-4S/SPARC M10-4/SPARC M10-4S Service Manual](#)

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## Contents of Revision of *Fujitsu M10-1/SPARC M10-1 Service Manual*

This section describes the currently confirmed contents of revision of the *Fujitsu M10-1/SPARC M10-1 Service Manual*.

**Table 8-1** Contents of revision of *Fujitsu M10-1/SPARC M10-1 Service Manual*

Section number or name	Contents of revision
Table 2-4 Table 2-6	The explanation on CHECK LED in Table 2-4 and Table 2-6 has been changed as follows: On: Abnormal state. Some error has been detected. Blinking (*): Chassis that was specified by XSCF command to blink. Used to locate a chassis (locator) in order to perform maintenance on it.

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# Contents of revision of *Fujitsu M10-4/Fujitsu M10-4S/SPARC M10-4/SPARC M10-4S Service Manual*

This section describes the currently confirmed contents of revision of the *Fujitsu M10-4/Fujitsu M10-4S/SPARC M10-4/SPARC M10-4S Service Manual*.

**Table 8-2** Contents of revision of *Fujitsu M10-4/Fujitsu M10-4S/SPARC M10-4/SPARC M10-4S Service Manual*

Section number or name	Contents of revision
Table 2-6 Table 2-8	The explanation on CHECK LED in Table 2-6 and Table 2-8 has been changed as follows: On: Abnormal state. Some error has been detected. Blinking (*): Chassis that was specified by XSCF command to blink. Used to locate a chassis (locator) in order to perform maintenance on it.