



SPARC® Enterprise M4000/M5000 Servers Product Notes

For XCP Version 1081

Copyright 2009 Sun Microsystems, Inc., 4150 Network Circle, Santa Clara, California 95054, U.S.A. and FUJITSU LIMITED, 1-1, Kamikodanaka 4-chome, Nakahara-ku, Kawasaki-shi, Kanagawa-ken 211-8588, Japan. All rights reserved.

Sun Microsystems, Inc. and Fujitsu Limited each own or control intellectual property rights relating to products and technology described in this document, and such products, technology and this document are protected by copyright laws, patents and other intellectual property laws and international treaties. The intellectual property rights of Sun Microsystems, Inc. and Fujitsu Limited in such products, technology and this document include, without limitation, one or more of the United States patents listed at <http://www.sun.com/patents> and one or more additional patents or patent applications in the United States or other countries.

This document and the product and technology to which it pertains are distributed under licenses restricting their use, copying, distribution, and decompilation. No part of such product or technology, or of this document, may be reproduced in any form by any means without prior written authorization of Fujitsu Limited and Sun Microsystems, Inc., and their applicable licensors, if any. The furnishing of this document to you does not give you any rights or licenses, express or implied, with respect to the product or technology to which it pertains, and this document does not contain or represent any commitment of any kind on the part of Fujitsu Limited or Sun Microsystems, Inc., or any affiliate of either of them.

This document and the product and technology described in this document may incorporate third-party intellectual property copyrighted by and/or licensed from suppliers to Fujitsu Limited and/or Sun Microsystems, Inc., including software and font technology.

Per the terms of the GPL or LGPL, a copy of the source code governed by the GPL or LGPL, as applicable, is available upon request by the End User. Please contact Fujitsu Limited or Sun Microsystems, Inc.

This distribution may include materials developed by third parties.

Parts of the product may be derived from Berkeley BSD systems, licensed from the University of California. UNIX is a registered trademark in the U.S. and in other countries, exclusively licensed through X/Open Company, Ltd.

Sun, Sun Microsystems, the Sun logo, Java, Netra, Solaris, Sun Ray, Answerbook2, docs.sun.com, OpenBoot, and Sun Fire are trademarks or registered trademarks of Sun Microsystems, Inc., or its subsidiaries, in the U.S. and other countries.

Fujitsu and the Fujitsu logo are registered trademarks of Fujitsu Limited.

All SPARC trademarks are used under license and are registered trademarks of SPARC International, Inc. in the U.S. and other countries. Products bearing SPARC trademarks are based upon architecture developed by Sun Microsystems, Inc.

SPARC64 is a trademark of SPARC International, Inc., used under license by Fujitsu Microelectronics, Inc. and Fujitsu Limited.

The OPEN LOOK and Sun™ Graphical User Interface was developed by Sun Microsystems, Inc. for its users and licensees. Sun acknowledges the pioneering efforts of Xerox in researching and developing the concept of visual or graphical user interfaces for the computer industry. Sun holds a non-exclusive license from Xerox to the Xerox Graphical User Interface, which license also covers Sun's licensees who implement OPEN LOOK GUIs and otherwise comply with Sun's written license agreements.

United States Government Rights - Commercial use. U.S. Government users are subject to the standard government user license agreements of Sun Microsystems, Inc. and Fujitsu Limited and the applicable provisions of the FAR and its supplements.

Disclaimer: The only warranties granted by Fujitsu Limited, Sun Microsystems, Inc. or any affiliate of either of them in connection with this document or any product or technology described herein are those expressly set forth in the license agreement pursuant to which the product or technology is provided. EXCEPT AS EXPRESSLY SET FORTH IN SUCH AGREEMENT, FUJITSU LIMITED, SUN MICROSYSTEMS, INC. AND THEIR AFFILIATES MAKE NO REPRESENTATIONS OR WARRANTIES OF ANY KIND (EXPRESS OR IMPLIED) REGARDING SUCH PRODUCT OR TECHNOLOGY OR THIS DOCUMENT, WHICH ARE ALL PROVIDED AS IS, AND ALL EXPRESS OR IMPLIED CONDITIONS, REPRESENTATIONS AND WARRANTIES, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT, ARE DISCLAIMED, EXCEPT TO THE EXTENT THAT SUCH DISCLAIMERS ARE HELD TO BE LEGALLY INVALID. Unless otherwise expressly set forth in such agreement, to the extent allowed by applicable law, in no event shall Fujitsu Limited, Sun Microsystems, Inc. or any of their affiliates have any liability to any third party under any legal theory for any loss of revenues or profits, loss of use or data, or business interruptions, or for any indirect, special, incidental or consequential damages, even if advised of the possibility of such damages.

DOCUMENTATION IS PROVIDED "AS IS" AND ALL EXPRESS OR IMPLIED CONDITIONS, REPRESENTATIONS AND WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT, ARE DISCLAIMED, EXCEPT TO THE EXTENT THAT SUCH DISCLAIMERS ARE HELD TO BE LEGALLY INVALID.



Copyright 2009 Sun Microsystems, Inc., 4150 Network Circle, Santa Clara, California 95054, U.S.A. et FUJITSU LIMITED, 1-1, Kamikodanaka 4-chome, Nakahara-ku, Kawasaki-shi, Kanagawa-ken 211-8588, Japon. Tous droits réservés.

Entrée et revue tecnica fournies par Fujitsu Limited sur des parties de ce matériel.

Sun Microsystems, Inc. et Fujitsu Limited détiennent et contrôlent toutes deux des droits de propriété intellectuelle relatifs aux produits et technologies décrits dans ce document. De même, ces produits, technologies et ce document sont protégés par des lois sur le copyright, des brevets, d'autres lois sur la propriété intellectuelle et des traités internationaux. Les droits de propriété intellectuelle de Sun Microsystems, Inc. et Fujitsu Limited concernant ces produits, ces technologies et ce document comprennent, sans que cette liste soit exhaustive, un ou plusieurs des brevets déposés aux États-Unis et indiqués à l'adresse <http://www.sun.com/patents> de même qu'un ou plusieurs brevets ou applications brevetées supplémentaires aux États-Unis et dans d'autres pays.

Ce document, le produit et les technologies afférents sont exclusivement distribués avec des licences qui en restreignent l'utilisation, la copie, la distribution et la décompilation. Aucune partie de ce produit, de ces technologies ou de ce document ne peut être reproduite sous quelque forme que ce soit, par quelque moyen que ce soit, sans l'autorisation écrite préalable de Fujitsu Limited et de Sun Microsystems, Inc., et de leurs éventuels bailleurs de licence. Ce document, bien qu'il vous ait été fourni, ne vous confère aucun droit et aucune licence, expresses ou tacites, concernant le produit ou la technologie auxquels il se rapporte. Par ailleurs, il ne contient ni ne représente aucun engagement, de quelque type que ce soit, de la part de Fujitsu Limited ou de Sun Microsystems, Inc., ou des sociétés affiliées.

Ce document, et le produit et les technologies qu'il décrit, peuvent inclure des droits de propriété intellectuelle de parties tierces protégés par copyright et/ou cédés sous licence par des fournisseurs à Fujitsu Limited et/ou Sun Microsystems, Inc., y compris des logiciels et des technologies relatives aux polices de caractères.

Par limites du GPL ou du LGPL, une copie du code source régi par le GPL ou LGPL, comme applicable, est sur demande vers la fin utilisateur disponible; veuillez contacter Fujitsu Limited ou Sun Microsystems, Inc.

Cette distribution peut comprendre des composants développés par des tierces parties.

Des parties de ce produit pourront être dérivées des systèmes Berkeley BSD licenciés par l'Université de Californie. UNIX est une marque déposée aux États-Unis et dans d'autres pays et dans d'autres pays et licenciée exclusivement par X/Open Company, Ltd.

Sun, Sun Microsystems, le logo Sun, Java, Netra, Solaris, Sun Ray, Answerbook2, docs.sun.com, OpenBoot, et Sun Fire sont des marques de fabrique ou des marques déposées de Sun Microsystems, Inc., ou ses filiales, aux États-Unis et dans d'autres pays.

Fujitsu et le logo Fujitsu sont des marques déposées de Fujitsu Limited.

Toutes les marques SPARC sont utilisées sous licence et sont des marques de fabrique ou des marques déposées de SPARC International, Inc. aux États-Unis et dans d'autres pays. Les produits portant les marques SPARC sont basés sur une architecture développée par Sun Microsystems, Inc.

SPARC64 est une marque déposée de SPARC International, Inc., utilisée sous le permis par Fujitsu Microelectronics, Inc. et Fujitsu Limited.

L'interface d'utilisation graphique OPEN LOOK et Sun™ a été développée par Sun Microsystems, Inc. pour ses utilisateurs et licenciés. Sun reconnaît les efforts de pionniers de Xerox pour la recherche et le développement du concept des interfaces d'utilisation visuelle ou graphique pour l'industrie de l'informatique. Sun détient une licence non exclusive de Xerox sur l'interface d'utilisation graphique Xerox, cette licence couvrant également les licenciés de Sun qui mettent en place l'interface d'utilisation graphique OPEN LOOK et qui, en outre, se conforment aux licences écrites de Sun.

Droits du gouvernement américain - logiciel commercial. Les utilisateurs du gouvernement américain sont soumis aux contrats de licence standard de Sun Microsystems, Inc. et de Fujitsu Limited ainsi qu'aux clauses applicables stipulées dans le FAR et ses suppléments.

Avis de non-responsabilité: les seules garanties octroyées par Fujitsu Limited, Sun Microsystems, Inc. ou toute société affiliée de l'une ou l'autre entité en rapport avec ce document ou tout produit ou toute technologie décrit(e) dans les présentes correspondent aux garanties expressément stipulées dans le contrat de licence régissant le produit ou la technologie fourni(e). SAUF MENTION CONTRAIRE EXPRESSÉMENT STIPULÉE DANS CE CONTRAT, FUJITSU LIMITED, SUN MICROSYSTEMS, INC. ET LES SOCIÉTÉS AFFILIÉES REJETTENT TOUTE REPRÉSENTATION OU TOUTE GARANTIE, QUELLE QU'EN SOIT LA NATURE (EXPRESSE OU IMPLICITE) CONCERNANT CE PRODUIT, CETTE TECHNOLOGIE OU CE DOCUMENT, LESQUELS SONT FOURNIS EN L'ÉTAT. EN OUTRE, TOUTES LES CONDITIONS, REPRÉSENTATIONS ET GARANTIES EXPRESSES OU TACITES, Y COMPRIS NOTAMMENT TOUTE GARANTIE IMPLICITE RELATIVE À LA QUALITÉ MARCHANDE, À L'APTITUDE À UNE UTILISATION PARTICULIÈRE OU À L'ABSENCE DE CONTREFAÇON, SONT EXCLUES, DANS LA MESURE AUTORISÉE PAR LA LOI APPLICABLE. Sauf mention contraire expressément stipulée dans ce contrat, dans la mesure autorisée par la loi applicable, en aucun cas Fujitsu Limited, Sun Microsystems, Inc. ou l'une de leurs filiales ne sauraient être tenues responsables envers une quelconque partie tierce, sous quelque théorie juridique que ce soit, de tout manque à gagner ou de perte de profit, de problèmes d'utilisation ou de perte de données, ou d'interruptions d'activités, ou de tout dommage indirect, spécial, secondaire ou consécutif, même si ces entités ont été préalablement informées d'une telle éventualité.

LA DOCUMENTATION EST FOURNIE "EN L'ÉTAT" ET TOUTES AUTRES CONDITIONS, DECLARATIONS ET GARANTIES EXPRESSES OU TACITES SONT FORMELLEMENT EXCLUES, DANS LA MESURE AUTORISÉE PAR LA LOI APPLICABLE, Y COMPRIS NOTAMMENT TOUTE GARANTIE IMPLICITE RELATIVE A LA QUALITE MARCHANDE, A L'APTITUDE A UNE UTILISATION PARTICULIERE OU A L'ABSENCE DE CONTREFAÇON.

Contents

Contents v

Preface ix

Technical Support ix

Software Resources ix

Accessing Documentation x

Fujitsu Welcomes Your Comments xi

General Information About XCP 1081 1

What's New in XCP 1081 1

Supported Firmware and Software 2

Solaris Patch Information 3

Patches for Solaris 10 10/08 3

Patches for Solaris 10 5/08 3

Patches for Solaris 10 8/07 3

Patches for Solaris 10 11/06 3

Patches for Emulex PCI Express (PCIe) Cards 4

Updating to XCP 1081 4

Resetting the XSCF Firmware 4

Updating from a Version Earlier Than XCP 1050 4

Functionality Issues and Limitations	5
Limitations for SPARC64 VII Processors	5
General Functionality Issues and Limitations	5
Information About Hardware	8
Notes on Server Installation	8
Notes on the Use of 200V Power Supply	9
Notes on DVD Drives and Discs	9
Notes on the Use of USB Memory	9
Notes on Power-On After Power-Off	10
Hardware Issues and Workarounds	10
Sun Crypto Accelerator 6000 Cards	10
Hardware Documentation Updates	11
Updates of the SPARC Enterprise M4000/M5000 Servers Service Manual	12
Powering the Server Off	12
Installing the PCI Card	13
Information About Software	15
XCP Issues and Workarounds	15
Solaris OS Issues and Workarounds	18
Solaris OS Issues for All Supported Releases	18
Solaris OS Issues Fixed in Solaris 10 10/08	23
Solaris OS Issues Fixed in Solaris 10 5/08	26
Solaris OS Issues Fixed in Solaris 10 8/07	30
Software Documentation Updates	35
Identifying Degraded Memory in a System	37
Identifying Different Memory Sizes in a System Board	37
Using the <code>showdevices</code> Command	37
Using the <code>prtdiag</code> Command	38

Identifying Permanent Memory in a Target Board	39
CPU Upgrade	40
Adding a New SPARC64 VII CPUM as a New Domain	40
Upgrading SPARC64 VI CPU Module to SPARC64 VII CPU Module	43
Adding a New CPUM Equipped with SPARC64 VII to an Existing Domain Equipped with SPARC64 VI	46

Preface

These product notes contain late-breaking information about the SPARC® Enterprise M4000/M5000 servers hardware, software, or documentation that became known after the documentation set was published.

Technical Support

If you have technical questions or issues that are not addressed in the SPARC Enterprise M4000/M5000 servers documentation, contact a sales representative or a certified service engineer.

Software Resources

The Solaris™ Operating System and Sun Java™ Enterprise System software are preinstalled on your SPARC Enterprise M4000/M5000 servers.

Contact a sales representative or a certified service engineer for software resources for your SPARC Enterprise M4000/M5000 servers.

Note – For latest patch information go to:

Global Site

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

Japanese Site

<https://software.fujitsu.com/jp/security/products-others/unix/>

North American Site

<https://download.computers.us.fujitsu.com/>

Installation information and README files are included in the patch download.

Accessing Documentation

Instructions for installing, administering, and using your SPARC Enterprise M4000/M5000 servers are provided in the SPARC Enterprise M4000/M5000 servers documentation set.

The documentation set is available for download from the following website:

Global Site

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

Japanese Site

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

North American Site

<https://download.computers.us.fujitsu.com/>

Note – Information in these product notes supersedes the information in the SPARC Enterprise M4000/M5000 servers documentation set.

Solaris documentation is available at:

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

Fujitsu Welcomes Your Comments

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

For Users in U.S.A., Canada, and Mexico:

http://www.computers.us.fujitsu.com/www/support_servers.shtml?support/servers

For Users in Other Countries:

SPARC Enterprise contact

http://www.fujitsu.com/global/contact/computing/sparce_index.html

General Information About XCP 1081

This section describes the general information about XCP 1081.

- [What's New in XCP 1081](#)
- [Supported Firmware and Software](#)
- [Updating to XCP 1081](#)
- [Functionality Issues and Limitations](#)

What's New in XCP 1081

In XCP version 1081, the following new feature is introduced:

- The following new XSCF commands are supported:
 - `setloginlockout(8)`
 - `showloginlockout(8)`

For detail, see the manual pages for each command.

- 8GB DIMM is supported in XCP1081 or later.

Supported Firmware and Software

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

TABLE 1 Firmware and Operating System Versions

Firmware and Operating System	Version
XSCF Control Package (XCP)	1081
Solaris™ Operating System	
SPARC64 VI™ processors:	Solaris 10 11/06 or later, with required patches
SPARC64 VII™ processors:	Solaris 10 8/07 or later, with required patches

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

You can download the latest files of firmware at the following websites.

Global Site:

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

Japanese Site:

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

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

TABLE 2 Tested Web Browser Versions

Web Browser Application	Version
Microsoft® Internet Explorer	6.0 and 7.0
Netscape Navigator™*	7.x
Firefox (Solaris 10)	2.0

* Official support for the Netscape web browsers has been terminated. On the XSCF Web, we recommend the use of Internet Explorer or FireFox.

Solaris Patch Information

This section lists mandatory patches for the SPARC Enterprise M4000/M5000 servers.

For additional Solaris OS information, see [“Solaris OS Issues and Workarounds” on page 18](#).

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

Note – Apply the patches in the following order. For the procedures of CPU upgrade including the patches, see [“CPU Upgrade” on page 40](#).

Patches for Solaris 10 10/08

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

Patches for Solaris 10 5/08

The following patch is required for all M4000/M5000 servers running Solaris 10 5/08 OS:

- 137137-09

Patches for Solaris 10 8/07

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

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

Patches for Solaris 10 11/06

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

- 118833-36 (Install 118833-36 before 125100-04.)
- 125100-04 or later
- 120068-03 or later
- 123839-07 or later
- 125424-01 or later
- 125075-01 or later
- 125670-02 or later

Patches for Emulex PCI Express (PCIe) Cards

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

- XSEFC402AF Sun StorageTek Enterprise Class 4Gb Dual-Port Fibre Channel PCI-E HBA
- XSEFC401AF Sun StorageTek Enterprise Class 4Gb Single-Port Fibre Channel PCI-E HBA

Updating to XCP 1081

To update your XCP to XCP 1081, please pay attention to the following points depending on your current XCP version.

You can upgrade to XCP 1081 from XCP version 1050 or later. Refer to the *SPARC Enterprise M3000/M4000/M5000/M8000/M9000 Servers XSCF User's Guide* for instructions.

Resetting the XSCF Firmware

After updating the XCP firmware to 1081, do not fail to reset the XSCF by using the `rebootxscf(8)` command.

Updating from a Version Earlier Than XCP 1050

- You cannot update to XCP 1081 directly.
If you are currently running a version earlier than XCP 1050, you must first update to an interim version of XCP between 1050 and 1070 (inclusive) before updating to XCP 1081. Refer to the product notes document for the interim version for instructions.

- Delete any accounts named "admin".
Any accounts named admin must be deleted prior to updating to XCP 1050 or later. This account name is reserved in XCP 1050 and later. Use the `deleteuser(8)` command to delete the account.

Functionality Issues and Limitations

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

Limitations for SPARC64 VII Processors



Caution – You must complete the upgrades to the XCP firmware and to Solaris OS before inserting SPARC 64 VII processors into the chassis.

General Functionality Issues and Limitations



Caution – For dynamic reconfiguration (DR) and hot-plug issues, see [“Solaris OS Issues and Workarounds”](#) on page 18.

- Domains using the ZFS file system cannot use Dynamic Reconfiguration.
- SPARC Enterprise M4000/M5000 servers are cold service machines. Hot-swapping of the CPU module (CPUM), memory board (MEMB), I/O unit (IOU), or XSCF unit is not supported.
- For this XCP release, the XSCF browser user interface (XSCF Web) does not support the External I/O Expansion Unit Manager feature.
- At this time the power consumption monitoring function (the `showenvironment(8)` command with `power` operand) is not supported.
- At this time XSCF does not support the Log Archiving feature.
- When using XSCF as the NTP server of the domain, configure it so as not to block the ICMP protocol of the DNS server and the NTP server which the XSCF refers to.
- When you use the external power control interface of the external power controller, the following notification signals are not supported:
 - The OS panic or the server hardware error signal (*CPUN/RTNU)

- The server hardware error signal (power fail, temperature error, and fan error) (*ALARM)
- For 1027A-Z/X1027A-Z, PCIe Dual 10 Gigabit Ethernet Fiber XFP cards, these limits apply:
 - Do not use more than two cards per domain.
 - Do not use these cards in an External I/O Expansion Unit.
- For 4447A-Z/X4447A-Z, PCIe Quad-port Gigabit Ethernet Adapter UTP cards, these maximum limits apply:
 - No more than four cards in an External I/O Expansion Unit (two per PCIe I/O boat).
 - No more than four cards in a SPARC Enterprise M4000 server domain.
 - No more than eight cards in a SPARC Enterprise M5000 server domain.
- We recommend the domain to use the XSCF Unit as NTP server. In this case, pay attention to the following points:
 - XSCF must be connected to an external NTP server
 - When you connect one or more NTP servers in addition to XSCF, connect the same NTP server as XSCF is using

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

- You cannot use the following user account names, as they are reserved for system use:
root, bin, daemon, adm, operator, nobody, sshd, rpc, rpcuser, ldap, apache, ntp, admin, and default.
- The Firefox 3 is not supported in XSCF Web.
- To use XSCF Web, disable the cache function of your browser. If you leave the browser cache function enabled, the old cached data might be displayed. To disable the cache function:
 - Internet Explorer 6 and 7
[Tools] -> [Internet Options...] -> [Advanced] tab and check the "Do not save encrypted pages to disk" box.
 - Netscape 7.1 or later
[Edit] -> [Preferences] -> [Advanced] -> [Cache] -> [Compare the page in the cache to the page on the network] setting and select the "Every time I view the page" radio button.
 - Firefox 2
Type "about:config" in address box, then type "cache" in filter box. Change the "browser.cache.check_doc_frequency" settings value to "1."

- Using the XSCF Web, when you import XCP or update the firmware, Session ID error may be displayed on the web browser. And in the Autologout setting, when you specify the timeout period as over 30 minutes, Internal Server Error might be displayed when you perform the firmware update. Please close the current browser and open the new browser to reconnect to XSCF Web.
- When you use the XSCF Web, if a plug-in such as the search tool installed with the browser, remove the plug-in or disable the pop-up blocking.
- XSCF-LAN is compliant with auto-negotiation. When you connect XSCF-LAN and the network device which has been fixed to the full-duplex mode, according to the IEEE 802.3 rule, XSCF-LAN communicates in the half-duplex mode. Due to this, network communication speed may slow down or communication error may occur. Do not fail to set the network device which connects with XSCF-LAN to the auto-negotiation mode.
- While you are performing DR operation to a COD board, do not execute the `addcodlicense(8)/deletecodlicense(8)/setcod(8)` command.
- At this time the `restoredefaults(8)` command is not supported.
- If your domain is running one of the following versions of Solaris OS:
 - Solaris 10 5/08 OS
 - An earlier version of Solaris 10 OS with patch ID 127127-11

Then you must set the following parameter in the system specification file (`/etc/system`):

```
set heaplp_use_stlb=0
```

Then reboot the domain.

For more information, refer to CR 6720261 in [TABLE 6](#).

Information About Hardware

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

- [Notes on Server Installation](#)
 - [Notes on the Use of 200V Power Supply](#)
 - [Notes on DVD Drives and Discs](#)
 - [Notes on the Use of USB Memory](#)
 - [Notes on Power-On After Power-Off](#)
 - [Hardware Issues and Workarounds](#)
 - [Hardware Documentation Updates](#)
-

Notes on Server Installation

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

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

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

Notes on the Use of 200V Power Supply

For the servers that have the B-type plug, confirm that a 20A overcurrent protection device is available outside the server. If not, prepare an external 20A overcurrent protection that can be achieved by means of no-fuse breakers (NFBs) or fuses. The B-type plug refers to plugs other than grounding-type ones with two parallel blades, such as the NEMA L6-30, L6-20, L6-15, and L5-15.

Notes on DVD Drives and Discs

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

URL:

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

Notes on the Use of USB Memory

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

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

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

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

Notes on Power-On After Power-Off

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

Hardware Issues and Workarounds

Sun Crypto Accelerator 6000 Cards

If you are not using the correct version of the Sun Crypto Accelerator (SCA) 6000 card driver, hot-plug operations on SCA 6000 cards can cause SPARC Enterprise M4000/M5000 servers to panic or hang. Version 1.1 of the SCA6000 driver and firmware supports hot-plug operations after the required bootstrap firmware upgrade has been performed. Version 1.0 of the SCA6000 driver does not support hot-plug and should not be used.

Hardware Documentation Updates

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

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

TABLE 3 Hardware Documentation Updates

Title	Page Number	Update
SPARC Enterprise M4000/M5000 Servers Site Planning Guide	2-14	TABLE 2-6 "Powercord and Connector Types" The following note will be added. Note - For the servers that have the B-type plug, confirm that a 20A overcurrent protection device is available outside the server. If one is not available, prepare an external 20A overcurrent protection that can be achieved by means of no-fuse breakers (NFBs) or fuses. The B-type plug refers to plugs other than grounding-type ones with two parallel blades, such as the NEMA L6-30, L6-20, L6-15, and L5-15.
SPARC Enterprise M4000/M5000 Servers Installation Guide	2-8	TABLE 2-3 "Power Cords" The following note will be added. Note - For the servers that have the B-type plug, confirm that a 20A overcurrent protection device is available outside the server. If one is not available, prepare an external 20A overcurrent protection that can be achieved by means of no-fuse breakers (NFBs) or fuses. The B-type plug refers to plugs other than grounding-type ones with two parallel blades, such as the NEMA L6-30, L6-20, L6-15, and L5-15.
SPARC Enterprise M8000/M9000 Servers Service Manual	6-31	Please replace "single-rank" with "1 rank" and "dual-rank" with "2 rank" in the text.

Updates of the SPARC Enterprise M4000/M5000 Servers Service Manual

The following information supersedes the information in the *SPARC Enterprise M4000/M5000 Servers Service Manual*.

Powering the Server Off

Powering the Server Off Using Software

This is to correct the description in Section 4.4.1, "Powering the Server Off Using Software" on page 4-10.

1. **Notify users that the server is being powered off.**
2. **Back up the system files and data to tape, if necessary.**
3. **Log in to the XSCF Shell and type the `poweroff` command.**

```
XSCF> poweroff -a
```

The following actions occur when the `poweroff` command is used:

- The Solaris OS shuts down cleanly.
- The server powers off to Standby mode (the XSCF unit and one fan will still have power).

Refer to the *SPARC Enterprise M3000/M4000/M5000/M8000/M9000 Servers XSCF User's Guide* for details.

4. **Verify the state of the status LED on the XSCF.**
The POWER LED should be off.
5. **Disconnect all power cables from the input power source.**



Caution – There is an electrical hazard if the power cords are not disconnected. All power cords must be disconnected to completely remove power from the server.

Powering the Server Off Manually

This is to correct the description in Section 4.4.3, "Powering the Server Off Manually" on page 4-12."

1. **Notify users that the server is being powered off.**
2. **Back up the system files and data to tape, if necessary.**
3. **Place the keyswitch in the Service position.**
4. **Press and hold the Power switch on the operator panel for at least four seconds to initiate the power off.**
5. **Verify the state of the status POWER LED on the operator panel is off.**
6. **Disconnect all power cables from the input power source.**



Caution – There is an electrical hazard if the power cords are not disconnected. All power cords must be disconnected to completely remove power from the server.

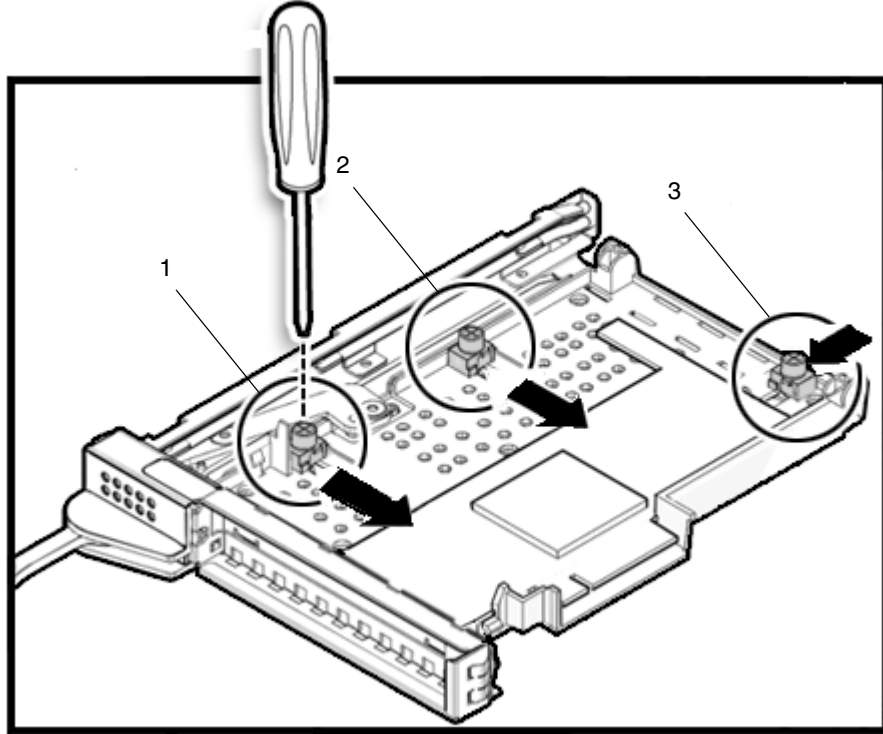
Installing the PCI Card

This is to correct step 4 in Section 8.2.2, "Installing the PCI Card" on page 8-9.

4. **Slide the adjustable stops into position against the PCI card to hold it in place and secure them with a screwdriver.**

Note – The adjustable stops should be snug against the card and securely tightened to ensure the card seats correctly. Also, fix the PCI card in position by following the 1-2-3 sequence in FIGURE 8-6.

FIGURE 8-6 Sequence of Fixing the PCI Card in Position



Information About Software

This section describes the special instructions and the issues about the SPARC Enterprise M4000/M5000 servers software.

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

XCP Issues and Workarounds

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

TABLE 4 XCP Issues and Workarounds

ID	Description	Workaround
RTIF1-070418-009	While XSCF is running, a process may go down, a watchdog timeout may occur, or a hang-up may occur. After this, XSCF may reset.	Check that XSCF is started. If not started, stop all the domains and then execute the system power off/on (AC OFF/ON). To turn on the system power that you turned off, wait at least 30 seconds before power-on.
RTIF1-070528-002	While XSCF is running, watchdog timeout may occur and XSCF may reboot.	Check that XSCF is started. If not started, stop all the domains and then execute the system power off/on (AC OFF/ON). To turn on the system power that you turned off, wait at least 30 seconds before power-on.

TABLE 4 XCP Issues and Workarounds (*Continued*)

ID	Description	Workaround
RTIF1-071102-002	The snmp daemon might quit.	To restart the snmp daemon, issue the command <code>setsnmp enable</code> .
RTIF1-080725-001	In <code>setsnmp adv3traphost</code> , when the authentication failed due to the reasons such as the trap host not working, or the wrong user name or password, the subsequent SNMP traps will not be notified.	No workaround is available. Confirm that the SNMP trap host is working and re-execute the <code>setsnmp(8)</code> command using the correct user name.
RTIF1-080725-002	When the SNMPv3 trap has been set, after the watchdog timeout occurred in XSCF and XSCF reset, the subsequent SNMP traps will not be notified.	Reset the XSCF.
RTIF1-080725-004	After set the Daylight Saving Time by using the XSCF shell, XSCF Web does not show the correct time in the Logs menu.	No workaround is available. Use the <code>showlogs(8)</code> command of the XSCF shell.
RTIF1-081006-002	In the <code>setemailreport(8)</code> command, when you specified over 255 characters in the SMTP address, an error results.	Do not specify over 255 characters in the SMTP address.
RTIF1-081006-005	The network configuration on the XSCF Web does not support the function equivalent to the <code>setnetwork -r</code> comand. And when you specified localhost or localdomain to the host name or the domain name, the error message "SessionID has expired" appears.	Use the <code>setnetwork -r</code> command on the XSCF shell.
RTIF1-081006-011	SNMP trap host configuration changes are not valid until <code>setsnmp disable</code> and <code>setsnmp enable</code> .	Modify the SNMP setting: XSCF> <code>setsnmp disable</code> XSCF> <code>setsnmp enable</code>
RTIF1-081016-001	Power failure at the commercial AC supply connector to the UPS does not send notification/send trap.	No workaround is available.
RTIF1-081030-002	When the timezone other than three characters has been set, the error logs cannot be displayed on XSCF Web "Error Log" page. In addition, XSCF Web "Panic Log" and "IPL Message Log" pages displays the date on the table with "---".	Use the <code>showlogs(8)</code> command on the XSCF shell.
RTIF1-081104-001	The monitor message log might not be registered when a PCI slot error detected.	No workaround is available. Use the <code>showlogs error</code> command or the <code>fmdump</code> command to check the fault information of PCI slot.

TABLE 4 XCP Issues and Workarounds (*Continued*)

ID	Description	Workaround
RTIF1-081225-001	In the <code>settimezone -c adddst</code> command, when you set eight or more letters to the abbreviation of time zone and the name of Daylight Saving Time, execution of the <code>showlogs</code> command induces a segmentation fault and results in an error.	Specify the abbreviation of time zone and the name of Daylight Saving Time in seven letters or less.
RTIF1-090108-002	In the dual power feed system, when the power failure and the power recovery occurred repeatedly on one line, all domains will be forcibly powered off. And in the power recovery from the forced power-off, a PSU illegal configuration might be registered in the error log and the power recovery might not be started.	You need to remove and insert the power cable.
RTIF1-090108-003	Date and time of the Last Update which displayed on the XSCF Web may not be updated.	Please refresh the display.
RTIF1-090115-001	When you execute the <code>settelnet -c disable</code> command, the Telnet service will be stopped immediately. However, unless you reset XSCF by using the <code>rebootxscf(8)</code> command, you might fail in the subsequent restart of the Telnet service.	After you stopped the Telnet service, execute the <code>rebootxscf(8)</code> command to reset XSCF.
RTIF1-090122-001	"Power recovery" message is output before a PSU has recovered.	After the "Power recovery" message is output, wait 60 seconds before removing power from another PSU.
RTIF1-090220-001	In a system connecting multiple hosts and one or more I/O units with RCI, the power-on operation to one of those RCI hosts may not power on any of the RCI I/O units.	All the RCI hosts shall be powered on.
RTIF1-090220-002	After replaced the XSCF unit, the RCI power interlocking setting restores to its default value.	If you have set the power interlocking to a value other than the default, replace the XSCF unit and then use the <code>setpwrmode(1M)</code> command to set the power interlocking setting again.

Solaris OS Issues and Workarounds

This section contains information about Solaris OS issues. [TABLE 5](#), [TABLE 6](#), [TABLE 7](#) and [TABLE 8](#) list issues you might encounter, depending upon which Solaris OS release you are using.

Solaris OS Issues for All Supported Releases

[TABLE 5](#) lists Solaris OS issues that you might encounter in any supported release of Solaris OS.

TABLE 5 Solaris OS Issues and Workarounds for All Supported Releases

CR ID	Description	Workaround
6440061	The domain console may display this message: ipsec_check_inbound_policy: Policy Failure for the incoming packet (not secure)	This message can be safely ignored.
6459540	The DAT72 internal tape drive on SPARC Enterprise M4000/M5000 may time out during tape operations.	Add the following definition to /kernel/drv/st.conf: <pre>tape-config-list = "SEAGATE DAT DAT72-000", "SEAGATE_DAT____DAT72-000", "SEAGATE_DAT____DAT72-000"; SEAGATE_DAT____DAT72-000= 1,0x34,0,0x9639,4,0x00,0x8c,0x8c, 0x8c,3;</pre> There are four spaces between SEAGATE DAT and DAT72-000.
6466617	Performing a hot plug operation with the PCI- Express slot too quickly interrupts a PCI leaf reset and occurs the following error: cfgadm: Component system is busy error	Pause a few seconds between the issue of each cfgadm -c command.

TABLE 5 Solaris OS Issues and Workarounds for All Supported Releases (*Continued*)

CR ID	Description	Workaround
6481002	Installing the Solaris from the network using certain PCI-Express cards may cause a panic.	If you are using a Sun PCI-E Dual Gigabit Ethernet Adapter MMF card or a Sun PCI-E Dual Gigabit Ethernet Adapter UTP card, do not install the Solaris using either of these cards. Instead, use other network devices, such as the onboard Gigabit Ethernet or another network device.
6515648	"Replumb Failed" error appears when dr@0:SB1::memory fails.	<p>Once the DR operation is complete, it can be plumbed up manually.</p> <p>Example steps to re-plumb the interface manually:</p> <pre># ifconfig interface plumb xxx.xxx.xxx.xxx netmask + broadcast + up # ifconfig interface group group-name # ifconfig interface addif xxx.xxx.xxx.xxx -failover deprecated up</pre> <p>This workaround assumes that the <code>/etc/hostname.interface</code> file is correctly configured for the IPMP group and does not need any modification. The IP addresses used in the example above should match what was previously used and what matches the <code>/etc/hostname.<interface></code> file.</p>
6516135	Ap_Id format and devices may not be shown correctly by <code>cfgadm(1M)</code> .	<p>Use the following operations to display all of the PCI slots.</p> <ol style="list-style-type: none"> 1) <code>devfsadm</code> (at Solaris prompt) 2) <code>cfgadm</code>
6519290	Large amounts of I/O on swap devices can cause the system to appear hung by overwhelming the I/O system. The amount of I/O required can be generated through a number of ways, eg memory shortage, heavy use of <code>/tmp</code> etc.	<p>Set the following to <code>/etc/system</code> and then reboot the domain:</p> <pre>set maxfastscan=0x2000</pre>
6522017	DR and ZFS may not be used in the same domain.	<p>Reduce the amount of kernel memory that ZFS can allocate by setting the <code>zfs_arc_max</code> parameter in the <code>/etc/system</code> file. The following example sets the maximum size to 512 Mbytes.</p> <pre>set zfs_arc_max = 0x20000000</pre>

TABLE 5 Solaris OS Issues and Workarounds for All Supported Releases (*Continued*)

CR ID	Description	Workaround
6529714	Warning messages occur while trying to configure more than four X4447A-Z or X1027A-Z1 cards into one I/O Boat.	No workaround is available.
6530753	Some of the PCI slots in the External I/O Expansion Unit PCI slots are not displayed during a normal boot operation.	Use one of the following operations to display all of the PCI slots. <ul style="list-style-type: none"> • <code>boot -r</code> (at open boot prompt) • <code>devfsadm -C</code> (at Solaris prompt) • <code>cfgadm</code> (twice at Solaris prompt)
6531036	The error message <code>network initialization failed</code> can appear repeatedly after boot net installation.	No workaround is available. This message can be safely ignored.
6531668	System hangs when executing parallel hot plug operation with SP DR in suspend phase.	No workaround is available.
6532215	<code>volfs</code> or <code>dscp</code> service may fail when domain is booted.	Restart the service if the failure is observed. To avoid the problem, issue the following commands.
	<pre>svc:/platform/sun4u/dscp:default: Method "/lib/svc/method/svc-dscp start" failed with exit status 95.</pre>	<pre># svccfg -s dscp setprop start/timeout_seconds=count: 300 # svccfg -s volfs setprop start/timeout_seconds=count: 300</pre>
	<pre>svc:/system/filesystem/volfs:default: Method or service exit timed out. Killing contract 59.</pre>	<pre># svcadm refresh dscp # svcadm refresh volfs</pre>
6537511	Bluetooth partner is hung during security tests execution	Restart application server
6565553 6674266	DR <code>deleteboard(8)</code> and <code>moveboard(8)</code> operations might fail. Example for messages on domain: <code>drmach: WARNING: Device driver failure: /pci</code> <code>dcs: <xxxx> config_change_state: Hardware specific failure: unconfigure SB1: Device driver failure: /pci</code>	No workaround is available. Try DR operations again.
6572827	The <code>prtdiag -v</code> command reports PCI bus types incorrectly. It reports "PCI" for PCI-X leaf devices and "UNKN" for legacy PCI devices.	No workaround is available.

TABLE 5 Solaris OS Issues and Workarounds for All Supported Releases (*Continued*)

CR ID	Description	Workaround
6588555	XSCF reset during DR operation to the permanent memory might cause domain panic.	Do not start an XSCF reset while a DR operation is running. Wait for a DR operation to finish before starting the reset.
6592302	Unsuccessful DR operation leaves memory partially configured.	Try <code>deleteboard(8)</code> again.
6619344	The Sun Crypto Accelerator (SCA) 6000 card might not work if hot-plug configured into slot 1.	To avoid the defect, do not hot-plug this card in slot 1.
6623226	The Solaris command <code>lockstat(1M)</code> or the <code>dtrace lockstat</code> provider might cause a system panic.	This has been fixed in patch 140336-01. [<i>Workaround</i>] Do not use the Solaris <code>lockstat(1M)</code> command or the <code>dtrace lockstat</code> provider.
6625734	Systems with large number of processors in a single domain environment may have suboptimal performance with certain workloads.	Use processor sets to bind application processes or LWPs to groups of processors. Refer to the <code>psrset(1M)</code> man page for more information.

TABLE 5 Solaris OS Issues and Workarounds for All Supported Releases (*Continued*)

CR ID	Description	Workaround
6660168	<p>If a <code>ubc.piowbeue-cpu</code> error occurs on a domain, the Solaris Fault Management <code>cpumem-diagnosis</code> module might fail, causing an interruption in FMA service.</p> <p>If this happens, you will see the following output in the console log:</p> <pre>SUNW-MSG-ID: FMD-8000-2K, TYPE: Defect, VER: 1, SEVERITY: Minor EVENT-TIME: Fri Apr 4 21:41:57 PDT 2008 PLATFORM: SUNW,SPARC-Enterprise, CSN: 2020642002, HOSTNAME: <hostname> SOURCE: fmd-self-diagnosis, REV: 1.0 EVENT-ID: 6b2e15d7-aa65-6bcc-bcb1- cb03a7dd77e3 DESC: A Solaris Fault Manager component has experienced an error that required the module to be disabled. Refer to http://sun.com/msg/FMD-8000-2K for more information. AUTO-RESPONSE: The module has been disabled. Events destined for the module will be saved for manual diagnosis. IMPACT: Automated diagnosis and response for subsequent events associated with this module will not occur. REC-ACTION: Use <code>fmdump -v -u <EVENT-ID></code> to locate the module. Use <code>fmadm reset <module></code> to reset the module.</pre>	<p>If FMA service fails, issue the following command on the domain to recover:</p> <pre># svcadm clear fmd</pre> <p>Then restart <code>cpumem-diagnosis</code>:</p> <pre># fmadm restart cpumem-diagnosis</pre>
6668237	<p>After DIMMs are replaced the corresponding DIMM faults are not cleared on the domain.</p>	<p>Use the following commands:</p> <pre># fmadm repair <i>fnri uuid</i> # fmadm rotate</pre>
6680733	<p>Sun Quad-port Gigabit Ethernet Adapter UTP (QGC) & Sun Dual 10 GigE Fiber XFP Low Profile Adapter (XGF) NICs might panic under high load conditions.</p>	<p>This has been fixed in patch 139570-01.</p>

TABLE 5 Solaris OS Issues and Workarounds for All Supported Releases (*Continued*)

CR ID	Description	Workaround
6689757	Sun Dual 10 GigE Fiber XFP Low Profile Adapter (XGF) with a single or improperly installed XFP optical transceivers might cause the following error to show on the console: The XFP optical transceiver is broken or missing.	This has been fixed in patch 139570-01. [Workaround] Check and make sure that both XFP optical transceivers are firmly seated in the housing. Do not mix INTEL and Sun XFP optical transceivers in the same Adapter. Do NOT plumb a port with the ifconfig command if the port does not contain an XFP optical transceiver or it contains one but the transceiver is not in use.
6745410	Boot program ignoresthe Kadb option which causes the system not to boot.	Use kmdb instead of kadb.

Solaris OS Issues Fixed in Solaris 10 10/08

[TABLE 6](#) lists issues that have been fixed in Solaris 10 10/08 OS. You might encounter them in supported releases earlier than Solaris 10 10/08.

TABLE 6 Solaris OS Issues Fixed in Solaris 10 10/08

CR ID	Description	Workaround
6511374	Unexpected error messages may be displayed on console after changing the system configuration. Example: WARNING: Translation error source /LSB0/B0/0, PA 3c000000000, target /LSB0/B0/20000000	This has been fixed in patch 137137-09. This message can be safely ignored.
6533686	When XSCF is low on system resources, DR operations involving relocating permanent memory, such as deleteboard(8) or moveboard(8), might fail with one or more of these errors: SCF busy DR parellel copy timeout This applies only to Quad-XSB configured system boards hosting multiple domains.	This has been fixed in patch 138397-01. [Workaround] Retry the DR operation at a later time.

TABLE 6 Solaris OS Issues Fixed in Solaris 10 10/08 (*Continued*)

CR ID	Description	Workaround
6608404	Hot-plug of the X4447A-Z, PCI-e Quad-port Gigabit Ethernet Adapter UTP card in slot 1 might cause other network devices to fail.	To avoid the defect, do not install this card in slot 1.
6614737	The DR <code>deleteboard(8)</code> and <code>moveboard(8)</code> operations might hang if any of the following conditions exist: <ul style="list-style-type: none"> • A DIMM has been degraded. • The domain contains system boards with different memory size. 	<p>For Solaris 10 5/08 or earlier, this has been in patch 137111-01.</p> <p>[<i>Workaround</i>]</p> <p>Avoid performing DR operations if any of the listed conditions exist.</p> <p>To determine whether the system contains degraded memory, use the XSCF <code>showstatus(8)</code> command. For sample output, see “Identifying Permanent Memory in a Target Board” on page 39.</p> <p>To determine whether the domain contains system boards with different memory sizes, display the list of memory sizes using the XSCF <code>showdevices(8)</code> command or the <code>prtdiag(8)</code> command on the domain. For sample of output, see “Identifying Degraded Memory in a System” on page 37</p> <p>If a DR command hangs, reboot the domain to recover.</p>
6632549	<code>fmd</code> service on domain might fail to maintenance mode after DR operations.	<p>This has been fixed in patch 138050-01.</p> <p>[<i>Workaround</i>]</p> <p>If <code>fmd</code> service fails, issue the following commands on the domain to recover:</p> <pre># svcadm clear fmd</pre>
6660197	DR might cause the domain to hang if either of the following conditions exist: <ul style="list-style-type: none"> • A domain contains 256 or more CPUs. • Memory error occurred and the DIMM has been degraded. 	<p>This has been fixed in patch 138397-01.</p> <p>[<i>Workaround</i>]</p> <ol style="list-style-type: none"> 1. Set the following parameter in the system specification file (<code>/etc/system</code>): <pre>set drmach:drmach_disable_mcopy = 1</pre> 2. Reboot the domain.

TABLE 6 Solaris OS Issues Fixed in Solaris 10 10/08 (*Continued*)

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

Solaris OS Issues Fixed in Solaris 10 5/08

[TABLE 7](#) lists issues that have been fixed in Solaris 10 5/08 OS. You might encounter them in supported releases earlier than Solaris 10 5/08.

TABLE 7 Solaris OS Issues Fixed in Solaris 10 5/08

CR ID	Description	Workaround
6472153	If you create a Solaris Flash archive on a non-SPARC Enterprise M4000/M5000 sun4u server and install it on a SPARC Enterprise M4000/M5000 sun4u server, the console's TTY flags will not be set correctly. This can cause the console to lose characters during stress.	<p>For Solaris 10 8/07 or earlier, this has been fixed in patch 137046-01.</p> <p>[<i>Workaround</i>]</p> <p>Just after installing Solaris OS from a Solaris Flash archive, telnet into the SPARC Enterprise M4000/M5000 server to reset the console's TTY flags a follows:</p> <pre># sttydefs -r console # sttydefs -a console -i "9600 hupcl opost onlcr crtscts" -f "9600"</pre> <p>This procedure is required only once.</p>
6522433	After the CPU hardware error occurred, the <code>fmddump(1M)</code> command on the domain may display an incorrect faulty component.	<p>For Solaris 10 8/07 or earlier, this has been fixed in patch 127127-11.</p> <p>[<i>Workaround</i>]</p> <p>Check system status on XSCF.</p>
6527811	The <code>showhardconf(8)</code> command on the XSCF cannot display PCI card information that is installed in External I/O Expansion Unit, if the External I/O Expansion Unit is configured using PCI hotplug.	<p>For Solaris 10 8/07 or earlier, this has been fixed in patch 128346-01.</p>

TABLE 7 Solaris OS Issues Fixed in Solaris 10 5/08 (Continued)

CR ID	Description	Workaround
6536564	<p>showlogs(8) and showstatus(8) command on XSCF might report wrong I/O component due to wrong diagnosis by Solaris Fault management Architecture when faults in I/O devices occur.</p>	<p>For Solaris 10 8/07 or earlier, this has been fixed in patch 125369-05.</p> <p>[Workaround]</p> <p>To avoid this problem, issue the following commands on the domain.</p> <pre># cd /usr/platform/SUNW,SPARC-Enterprise/lib/fm/topo/plugins # mv ioboard.so ioboard.so.orig # svcadm restart fmd</pre> <p>If the following messages are displayed on the domain, contact a service engineer.</p> <p>Example:</p> <pre>SUNW-MSG-ID: SUNOS-8000-1L, TYPE: Defect, VER: 1, SEVERITY: Minor EVENT-TIME: Sun May 6 18:22:24 PDT 2007 PLATFORM: SUNW,SPARC-Enterprise, CSN: BE80601007, HOSTNAME: sparc</pre>
6545143	<p>There is a low probability that a system panic can occur during trap processing of a TLB miss for a user stack address. The problem can occur if the user stack is unmapped concurrently with the user process executing a flush windows trap (ta 3). The panic message will contain the following string:</p> <pre>bad kernel MMU trap at TL 2</pre>	<p>For Solaris 10 8/07 or earlier, this has been fixed in patch 127111-08.</p> <p>No workaround is available.</p>
6545685	<p>If the following message displayed on the OS console, memory degradation or XSB deconfiguration may occur in the subsequent reboot.</p> <p>Example:</p> <pre>mc-opl: WARNING: mc-opl rewrite timeout on /LSB0/B0</pre>	<p>For Solaris 10 8/07 or earlier, this has been fixed in patch 127111-08.</p> <p>[Workaround]</p> <p>Add the following to /etc/system and then reboot the domain:</p> <pre>set mc-opl: mc_max_rewrite_loop = 20000</pre>

TABLE 7 Solaris OS Issues Fixed in Solaris 10 5/08 (Continued)

CR ID	Description	Workaround
6546188	<p>The system panics when running hotplug (<code>cfgadm(1M)</code>) and DR operations (<code>addboard(8)</code> and <code>deleteboard(8)</code>) on the following cards:</p> <ul style="list-style-type: none"> • X4447A-Z, PCI-e Quad-port Gigabit Ethernet Adapter UTP • X1027A-Z1, PCI-e Dual 10 Gigabit Ethernet Fiber XFP Low profile Adapter 	<p>For Solaris 10 8/07, this has been fixed in patch 127741-01.</p> <p>No workaround is available.</p>
6551356	<p>The system panics when running hotplug (<code>cfgadm(1M)</code>) to configure a previously unconfigured card. The message "WARNING: PCI Expansion ROM is not accessible" will be seen on the console shortly before the system panic. The following cards are affected by this defect:</p> <ul style="list-style-type: none"> • X4447A-Z, PCI-e Quad-port Gigabit Ethernet Adapter UTP • X1027A-Z1, PCI-e Dual 10 Gigabit Ethernet Fiber XFP Low profile Adapter 	<p>For Solaris 10 8/07, this has been fixed in patch 127741-01.</p> <p>[Workaround] Perform <code>cfgadm -c disconnect</code> to completely remove the card. After waiting at least 10 seconds, the card may be configured back into the domain using the <code>cfgadm -c configure</code> command.</p>
6559504	<p>Messages of the form <code>nxge: NOTICE: nxge_ipp_eccue_valid_check: rd_ptr = nnn wr_ptr = nnn</code> will be observed on the console with the following cards:</p> <ul style="list-style-type: none"> • X4447A-Z, PCI-e Quad-port Gigabit Ethernet Adapter UTP • X1027A-Z1, PCI-e Dual 10 Gigabit Ethernet Fiber XFP Low profile Adapter 	<p>For Solaris 10 8/07, this has been fixed in patch 127741-01.</p> <p>[Workaround] These messages can be safely ignored.</p>
6564934	<p>Performing a DR <code>deleteboard(8)</code> operation on a board which includes Permanent Memory when using the following network cards results in broken connections:</p> <ul style="list-style-type: none"> • X4447A-Z, PCI-e Quad-port Gigabit Ethernet Adapter UTP • X1027A-Z1, PCI-e Dual 10 Gigabit Ethernet Fiber XFP Low profile Adapter 	<p>For Solaris 10 8/07, this has been fixed in patch 127741-01.</p> <p>[Workaround] Re-configure the affected network interfaces after the completion of the DR operation. For basic network configuration procedures, refer to the <code>ifconfig</code> man page for more information</p>

TABLE 7 Solaris OS Issues Fixed in Solaris 10 5/08 (Continued)

CR ID	Description	Workaround
6568417	<p>After a successful CPU DR deleteboard(8) operation, the system panics when the following network interfaces are in use:</p> <ul style="list-style-type: none"> • X4447A-Z, PCI-e Quad-port Gigabit Ethernet Adapter UTP • X1027A-Z1, PCI-e Dual 10 Gigabit Ethernet Fiber XFP Low profile Adapter 	<p>For Solaris 10 8/07 or earlier, this has been fixed in patch 127111-02.</p> <p>[Workaround]</p> <p>Add the following line to <code>/etc/system</code> and reboot the system:</p> <pre>set ip:ip_soft_rings_cnt=0</pre>
6571370	<p>Use of the following cards have been observed to cause data corruption in stress test under laboratory conditions:</p> <ul style="list-style-type: none"> • X4447A-Z, PCI-e Quad-port Gigabit Ethernet Adapter UTP • X1027A-Z1, PCI-e Dual 10 Gigabit Ethernet Fiber XFP Low profile Adapter 	<p>For Solaris 10 8/07, this has been fixed in patch 127741-01.</p> <p>[Workaround]</p> <p>Add the following line in <code>/etc/system</code> and reboot the system: set</p> <pre>nxge:nxge_rx_threshold_hi=0</pre>
6589546	<p><code>prtdiag(8)</code> command does not show all I/O devices of the following cards:</p> <ul style="list-style-type: none"> • XSEFC402AF Sun StorageTek Enterprise Class 4Gb Dual-Port Fibre Channel PCI-E HBA • XSEFC401AF Sun StorageTek Enterprise Class 4Gb Single-Port Fibre Channel PCI-E HBA 	<p>For Solaris 10 8/07 or earlier, this has been fixed in patch 127127-11.</p> <p>[Workaround]</p> <p>Use <code>prtdiag -v</code> for full output.</p>

Solaris OS Issues Fixed in Solaris 10 8/07

[TABLE 8](#) lists issues that have been fixed in Solaris 10 8/07 OS. You might encounter them in supported releases earlier than Solaris 10 8/07.



Caution – CR ID #6534471: Improper handling of large page in kernel memory may cause random panics. Implement the workaround for CR ID #6534471 or check for the availability of a patch and install it immediately. This bug has been fixed by 125100-06 and Solaris 10 8/07.

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

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

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

CR ID	Description	Workaround
6496337	<p>The "cpumem-diagnosis" module may fail to load after uncorrectable error(UE) panic. Systems will function correctly but events normally automatically diagnosed by FMA using this module will require manual diagnosis.</p> <p>Example:</p> <pre>SUNW-MSG-ID: FMD-8000-2K, TYPE: Defect, VER: 1, SEVERITY: Minor EVENT-TIME: Thu Feb 15 15:46:57 JST 2007 PLATFORM: SUNW,SPARC-Enterprise, CSN: BE80601007, HOSTNAME: col2-ff- em7-d0</pre>	<p>For Solaris 10 11/06, this has been fixed in patch 125369-05.</p> <p>[Workaround]</p> <p>If problem occurred, implement the following workaround:</p> <ol style="list-style-type: none"> 1. Remove the following file. <pre># rm /var/fm/fmd/ckpt/cpumem- diagnosis/cpumem-diagnosis</pre> 2. Restart fmd service. <pre># svcadm restart fmd</pre> <p>To avoid this problem in advance, add "rm -f /var/fm/fmd/ckpt/cpumem-diagnosis/cpumem-diagnosis" in /lib/svc/method/svc-dumpadm file as below.</p> <pre># # We haven't run savecore on a dump device yet # savedev=none rm -f /var/fm/fmd/ckpt/cpumem- diagnosis/cpumem-diagnosis #</pre>
6499304	<p>CPU isn't offlined and unexpected message is displayed on console when many correctable error(CE) occurs.</p> <p>Example:</p> <pre>SUNW-MSG-ID: FMD-8000-11, TYPE: Defect, VER: 1, SEVERITY: Minor EVENT-TIME: Fri Feb 2 18:31:07 JST 2007 PLATFORM: SPARC-Enterprise, CSN: BE80601035, HOSTNAME: FF2-35-0</pre>	<p>For Solaris 10 11/06, this has been fixed in patch 125369-05.</p> <p>[Workaround]</p> <p>Check CPU status on XSCF.</p>

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

CR ID	Description	Workaround
6502204	<p>Unexpected error messages may be displayed on console on booting after CPU UE panic.</p> <p>Example:</p> <pre>SUNW-MSG-ID: FMD-8000-11, TYPE: Defect, VER: 1, SEVERITY: Minor EVENT-TIME: Tue Jan 9 20:45:08 JST 2007 PLATFORM: SUNW,SPARC-Enterprise, CSN: 2030636002, HOSTNAME: P2-DC1- 16-d0</pre>	<p>For Solaris 10 11/06, this has been fixed in patch 125369-05.</p> <p>[Workaround] If you see unexpected messages, use the XSCF command <code>showdomainstatus(8)</code> to check system status on XSCF.</p>
6502750	Notification message for inserted or removed card by PCI hot plug may not output.	<p>For Solaris 10 11/06, this has been fixed in patch 120011-08.</p> <p>No workaround is available.</p>
6508432	Many correctable errors (CE) may occur, and despite these are the correctable errors, domain may panic.	<p>For Solaris 10 11/06, this has been fixed in patch 120011-08.</p> <p>[Workaround] Set the following to <code>/etc/system</code> and then reboot the domain: <code>set pcie:pcie_aer_ce_mask = 0x2001</code></p>
6508434	The domain may panic when an additional PCI-X card is installed or a PCI-X card is replaced by using PCI hot plug.	<p>For Solaris 10 11/06, this has been fixed in patch 120011-08.</p> <p>[Workaround] Do not insert a different type of PCI-X card on the same PCI slot by using PCI hot plug.</p>
6509337	s10s_u3 wanboot fails - The server returned 416: Requested Range Not Satisfiable.	
6510861	When Dual-Channel Ultra320 SCSI Card (SE0X7SC2F, SE0X7SC2X) is mounted, correctable errors(CE) occur and system may panic.	<p>For Solaris 10 11/06, this has been fixed in patch 120011-08.</p> <p>[Workaround] Add the following entry to the <code>/etc/system</code> file and then reboot the system: <code>set pcie:pcie_aer_ce_mask = 0x31c1</code></p>

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

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

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

CR ID	Description	Workaround
6539909	Under Solaris 10 11/06, do not use the following I/O cards for network access when you are using the <code>boot net install</code> command to install the Solaris OS: <ul style="list-style-type: none">• X4447A-Z/X4447A-Z, PCIe Quad-port Gigabit Ethernet Adapter UTP• X1027A-Z/X1027A-Z, PCIe Dual 10 Gigabit Ethernet Fiber XFP	Use an alternate type of network card or onboard network device to install the Solaris OS via the network.
6542632	Memory leak in PCIe module if driver attach fails.	For Solaris 10 11/06, this has been fixed in patch 120011-09. No workaround is available.

Software Documentation Updates

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

The corrections for *SPARC Enterprise M3000/M4000/M5000/M8000/M9000 Servers XSCF Reference Manual*, if not otherwise specified, also apply to the man pages which XSCF provides. And they supersede the information on the man pages.

TABLE 9 lists known documentation updates.

TABLE 9 Software Documentation Updates

Title	Page Number	Update
SPARC Enterprise M3000/M4000/M5000/ M8000/M9000 Servers XSCF User's Guide	2-34	The description, "When you set the lockout time to 0 minutes to disable the account lockout function, the success of the first login with any user account will disable the function, whereas the failure of the first login will not disable the function. To disable the account lockout function you must set 0 minutes again.", will be changed as follows: "setloginlockout -s 0 will disable the account lockout. When the account lockout is disabled, a user can attempt to login, and fail, an unlimited number of times. If a user needs to access their locked account before the lockout time is complete they must get an administrator to disable the account lockout to allow them to login and then re-enable the lockout by setting a lockout time."
	3-4	The description, "The domain console is not forcibly logged out.", will be changed as follows: "When you return to XSCF shell console without logging out from the domain, the return causes automatically logging out from the domain. For detailed instructions on setting the session timeout value for domain console, see the Solaris OS manual."
SPARC Enterprise M3000/M4000/M5000/ M8000/M9000 Servers XSCF Reference Manual		New commands, the <code>setloginlockout(8)</code> and the <code>showloginlockout(8)</code> will be added. For details, see the <code>setloginlockout(8)</code> and the <code>showloginlockout(8)</code> man pages.
	<code>setssh(8)</code> command	The following new option for access control from domain to the SSH service via DSCP will be added: <code>-m dscp=mode</code> For details, see the <code>setssh(8)</code> man pages.

TABLE 9 Software Documentation Updates (*Continued*)

Title	Page Number	Update
SPARC Enterprise M3000/M4000/M5000/ M8000/M9000 Servers XSCF Reference Manual	showenvironm ent(8) command	The power operand for displaying the power consumption information will be added. For details, see the showenvironment(8) man pages.
	showssh(8) command	The description of displaying the current settings of the SSH service will be added.
	traceroute(8) command	The following description appears under Privileges but is incorrect: <ul style="list-style-type: none"><li data-bbox="572 505 1033 557">• To execute the command to DSCP address: fieldeng The following description should appear under OPERANDS but does not: When used to specify DSCP address to host, an error occurs.

Identifying Degraded Memory in a System

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

```
XSCF> showstatus
```

The following example identifies that DIMM number 0A on Memory Board #5 has degraded memory.

```
XSCF> showstatus
      MBU_B Status:Normal;
      MEMB#5 Status:Normal;
*      MEM#0A Status:Degraded;
```

Identifying Different Memory Sizes in a System Board

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

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

Using the `showdevices` Command

1. Log in to XSCF.

2. Type the following command:

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

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

```
XSCF> showdevices -d 1
Memory:
-----

```

DID	XSB	board mem MB	perm mem MB	base address	domain mem MB	target XSB	deleted mem MB	remaining mem MB
01	00-0	63680	0	0x0000004000000000	260288			
01	01-0	16384	7384	0x0000034000000000	260288			
01	01-1	16384	0	0x0000030000000000	260288			
01	01-2	16384	0	0x000002c000000000	260288			
01	01-3	16384	0	0x0000028000000000	260288			
...								

Using the prtdiag Command

- On the domain, execute the prtdiag command.

```
# prtdiag
```

The following example displays different memory sizes.

```
# prtdiag
===== Memory Configuration =====

```

LSB	Memory Group	Available Size	Memory Status	DIMM Size	# of DIMMs	Mirror Mode	Interleave Factor
00	A	8192MB	okay	2048MB	4	no	2-way
00	B	8192MB	okay	2048MB	4	no	2-way
01	A	8192MB	okay	2048MB	4	no	2-way
01	B	8192MB	okay	2048MB	4	no	2-way
03	A	8192MB	okay	2048MB	4	no	2-way
03	B	8192MB	okay	2048MB	4	no	2-way
...							

Identifying Permanent Memory in a Target Board

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

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

The following example shows a display of the `showdevices -d` command where `0` is the `domain_id`.

```
XSCF> showdevices -d 0
...
Memory:
-----

```

DID	XSB	board mem MB	perm mem MB	base address	domain mem MB	target XSB	deleted mem MB	remaining mem MB
00	00-0	8192	0	0x0000000000000000	24576			
00	00-2	8192	1674	0x000003c000000000	24576			
00	00-3	8192	0	0x0000034000000000	24576			

```
...
```

The entry for column 4 `perm mem MB` indicates the presence of permanent memory if the value is non-zero.

The example shows permanent memory on `00-2`, with 1674 MB.

If the board includes permanent memory, when you execute the `deleteboard(8)` command or the `moveboard(8)` command, the following notice appears:

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

CPU Upgrade

This section describes the procedure to mount the SPARC64 VII processor on the SPARC Enterprise M4000/M5000 server.

- [Adding a New SPARC64 VII CPUM as a New Domain](#)
- [Upgrading SPARC64 VI CPU Module to SPARC64 VII CPU Module](#)
- [Adding a New CPUM Equipped with SPARC64 VII to an Existing Domain Equipped with SPARC64 VI](#)

Note – Before upgrading firmware to XCP 1071 or later, refer to [“Updating to XCP 1081” on page 4](#).



Caution – You must complete the upgrades to the XCP firmware and to Solaris before inserting SPARC 64 VII processors into the chassis.

Adding a New SPARC64 VII CPUM as a New Domain

1. Log in to the XSCF on an account with platform administrative privileges.
2. Use the `showstatus(8)` command to confirm that a component in **Faulted or Deconfigured** status doesn't exist.

```
XSCF> showstatus
```

If no failures found, the following message appears: "No failures found in System Initialization." In case of other messages, contact a service engineer before proceeding to the next step.

3. Turn off the power to all domains.

```
XSCF> poweroff -a
```

4. Confirm that all domains stopped.

```
XSCF> showlogs power
```

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

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

This will be help in case any problem occurred in this procedure.

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

7. Update the XCP version to 1071 or later.

Before updating the XCP, be sure to see [“Updating to XCP 1081” on page 4.](#)

For the XCP updating procedures, see the *SPARC Enterprise M3000/M4000/M5000/M8000/M9000 Servers XSCF User’s Guide.*

8. Mount the SPARC64 VII CPU module (CPUM) to the system.

For the procedure, see the description about the CPU module installation in Section 12, "Replacing a CPU module" in the *SPARC Enterprise M4000/M5000 Servers Service Manual.*



Caution – After mounted the CPU module, get the power cable connected to the power supply.

9. Log in to the XSCF.

10. Execute the diagnosis of newly mounted CPU module by using the `testsb(8)` command and confirm that the mounted CPU module has been normal condition.

Example: In case of adding PSB#01 in SPARC Enterprise M5000 Server.

```
XSCF> testsb 01
Initial diagnosis is about to start. Continue? [y|n] : y
Initial diagnosis is executing.
Initial diagnosis has completed.
XSB Test      Fault
-----
01 Passed Normal
```

11. Confirm that the mounted CPU module has been recognized by the server, and the error indicator asterisk (*) is not displayed.

```
XSCF> showhardconf -M
```

12. Confirm no abnormality occurred by using `showlogs error -v` and `showstatus(8)` commands.

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

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

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

14. Power on existing domains.

```
XSCF> poweron -a
```

15. Sets the following for the added CPU module.

- Set up XSB for the added CPU module.
- Set up the domain.
- Set up the CPU operational mode of the domain.

For each setting, see the *SPARC Enterprise M3000/M4000/M5000/M8000/M9000 Servers XSCF User's Guide*.

16. Use the `setdomainmode(8)` command, disable the autoboot function of the target domain.

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

17. Power on the new domain.

```
XSCF> poweron -d domain_id
```

18. Confirm that the target domain has been correctly started.

```
XSCF> showlogs power
```

19. Confirm no abnormality occurred by using `showlogs error -v` and `showstatus(8)` commands.

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

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

20. Install Solaris 10 5/08 or later.

21. Use the `setdomainmode(8)` command, enable the autoboot function of the target domain.

For detail, see the *SPARC Enterprise M3000/M4000/M5000/M8000/M9000 Servers XSCF User's Guide*. The autoboot function is applied by a domain reboot.

Upgrading SPARC64 VI CPU Module to SPARC64 VII CPU Module

1. When the Solaris OS version is Solaris 10 8/07, update it to Solaris 10 5/08 or apply the mandatory patches described in [“Solaris Patch Information”](#) on page 3.
2. To use SPARC64 VII processors, apply the relevant patches to the software in use, if necessary.
3. Log in to the XSCF on an account with platform administrative privileges.
4. Use the `showstatus(8)` command to confirm that a component in Faulted or Deconfigured status doesn't exist.

```
XSCF> showstatus
```

If no failures found, the following message appears: "No failures found in System Initialization." In case of other messages, contact a service engineer before proceeding to the next step.

5. Turn off the power to all domains..

```
XSCF> poweroff -a
```

6. Confirm that all domains stopped.

```
XSCF> showlogs power
```

7. Change the key position on the operator panel from Locked to Service.
8. Collect an XSCF snapshot to archive system status prior to upgrade.
This will be help in case any problem occurred in this procedure.

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

9. Update the XCP version to 1071 or later.

Before updating the XCP, be sure to see [“Updating to XCP 1081”](#) on page 4. For the XCP updating procedures, see the *SPARC Enterprise M3000/M4000/M5000/M8000/M9000 Servers XSCF User's Guide*.

10. Log in to the XSCF.
11. Power on all domains, and apply OpenBoot PROM firmware.

```
XSCF> poweron -a
```

It stops at ok prompt. It is not necessary to start Solaris OS.

12. Check the applied OpenBoot PROM version.

The OpenBoot PROM version of XCP 1081 is 02.08.0000.

```
XSCF> version -c cmu -v

DomainID 00 : 02.03.0000
DomainID 01 : 02.03.0000
DomainID 02 : 02.08.0000
DomainID 03 : 02.08.0000

XSB#00-0 : 02.03.0000 (Current), 02.02.0000 (Reserve)
XSB#00-1 : 02.03.0000 (Current), 02.02.0000 (Reserve)
XSB#00-2 : 02.03.0000 (Current), 02.02.0000 (Reserve)
XSB#00-3 : 02.03.0000 (Current), 02.02.0000 (Reserve)
XSB#01-0 : 02.03.0000 (Reserve), 02.08.0000 (Current)
XSB#01-1 : 02.03.0000 (Reserve), 02.08.0000 (Current)
XSB#01-2 : 02.03.0000 (Reserve), 02.08.0000 (Current)
XSB#01-3 : 02.03.0000 (Reserve), 02.08.0000 (Current)
```

In case that the OpenBoot PROM version of the XSB to which the resource of the target CMU has been assigned is not displayed as 02.08.0000, contact a service engineer.

13. Turn off all domains.

```
XSCF> poweroff -a
```

14. Upgrade SPARC64 VI processors to SPARC64 VII processors to an existing domain.

For the procedure, see the description about the CPU module installation in Section 12, "Replacing a CPU module" in the *SPARC Enterprise M4000/M5000 Servers Service Manual*.



Caution – After mounted the CPU module, get the power cable connected to the power supply.

15. Log in to the XSCF.

16. Execute the diagnosis of newly mounted CPU module by using the `testsb(8)` command and confirm that the mounted CPU module has been normal condition.

Example: In case of adding PSB#01 in SPARC Enterprise M5000 Server.

```
XSCF> testsb 01
Initial diagnosis is about to start. Continue? [y|n] : y
Initial diagnosis is executing.
Initial diagnosis has completed.
XSB Test      Fault
-----
01 Passed Normal
```

17. Confirm that the mounted CPU module has been recognized by the server, and the error indicator asterisk (*) is not displayed.

```
XSCF> showhardconf -M
```

18. Confirm no abnormality occurred by using `showlogs error -v` and `showstatus(8)` commands.

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

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

19. Move the key position on the operator panel from Service to Locked.
20. Set up and confirm the CPU operational mode of the domain.

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

21. Power on all domains.

```
XSCF> poweron -a
```

22. Confirm that all domains has been correctly started.

```
XSCF> showlogs power
```

23. Confirm no abnormality occurred by using `showlogs error -v` and `showstatus(8)` commands.

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

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

Adding a New CPUM Equipped with SPARC64 VII to an Existing Domain Equipped with SPARC64 VI

1. When the Solaris OS version is Solaris 10 8/07, upgrade it to Solaris 10 5/08 or apply the mandatory patches described in [“Solaris Patch Information”](#) on page 3.
2. To use SPARC64 VII processors, apply the relevant patches to the software in use, if necessary.
3. Log in to the XSCF on an account with platform administrative privileges.
4. Use the `showstatus(8)` command to confirm that a component in Faulted or Deconfigured status doesn't exist.

```
XSCF> showstatus
```

If no failures found, the following message appears: "No failures found in System Initialization." In case of other messages, contact a service engineer before proceeding to the next step.

5. Turn off the power to all domains.

```
XSCF> poweroff -a
```

6. Confirm that all domains stopped.

```
XSCF> showlogs power
```

7. Change the key position on the operator panel from Locked to Service.
8. Collect an XSCF snapshot to archive system status prior to upgrade.

This will help in case any problem occurred in this procedure.

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

9. Update the XCP version to 1071 or later.

Before updating the XCP, be sure to see [“Updating to XCP 1081”](#) on page 4.

For the XCP updating procedures, see the *SPARC Enterprise M3000/M4000/M5000/M8000/M9000 Servers XSCF User's Guide*.

10. Log in to the XSCF.

11. Power on all domains, and apply OpenBoot PROM firmware.

```
XSCF> poweron -a
```

It stops at ok prompt. It is not necessary to start Solaris OS.

12. Check the applied OpenBoot PROM version.

The OpenBoot PROM version of XCP 1081 is 02.08.0000.

```
XSCF> version -c cmu -v

DomainID 00 : 02.03.0000
DomainID 01 : 02.03.0000
DomainID 02 : 02.08.0000
DomainID 03 : 02.08.0000

XSB#00-0 : 02.03.0000 (Current), 02.02.0000 (Reserve)
XSB#00-1 : 02.03.0000 (Current), 02.02.0000 (Reserve)
XSB#00-2 : 02.03.0000 (Current), 02.02.0000 (Reserve)
XSB#00-3 : 02.03.0000 (Current), 02.02.0000 (Reserve)
XSB#01-0 : 02.03.0000 (Reserve), 02.08.0000 (Current)
XSB#01-1 : 02.03.0000 (Reserve), 02.08.0000 (Current)
XSB#01-2 : 02.03.0000 (Reserve), 02.08.0000 (Current)
XSB#01-3 : 02.03.0000 (Reserve), 02.08.0000 (Current)
```

In case that the OpenBoot PROM version of the XSB to which the resource of the target CMU has been assigned is not displayed as 02.08.0000, contact a service engineer.

13. Turn off all domains.

```
XSCF> poweroff -a
```

14. Mount the CPU module (CPUM) on the server.

For the procedure, see Section 12, "Replacing a CPU module" in the *SPARC Enterprise M4000/M5000 Servers Service Manual*.



Caution – After mounted the CPU module, get the power cable connected to the power supply.

15. Log in to the XSCF.

16. Execute the diagnosis of newly mounted CPU module by using the `testsb(8)` command and confirm that the mounted CPU module has been normal condition.

Example: In case of adding PSB#01 in SPARC Enterprise M5000 Server.

```
XSCF> testsb 01
Initial diagnosis is about to start. Continue? [y|n] : y
Initial diagnosis is executing.
Initial diagnosis has completed.
XSB  Test      Fault
-----
01   Passed   Normal
```

17. Confirm that the mounted CPU module has been recognized by the server, and the error indicator asterisk (*) is not displayed.

```
XSCF> showhardconf -M
```

18. Confirm no abnormality occurred by using `showlogs error -v` and `showstatus(8)` commands.

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

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

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

20. Sets the following for the CPU module.

- Set up XSB.
- Set up the LSB.
- Add the XSB to the domain.
- Set up the CPU operational mode of the domain.

For each setting, see the *SPARC Enterprise M3000/M4000/M5000/M8000/M9000 Servers XSCF User's Guide*.

21. Power on all domains.

```
XSCF> poweron -a
```

22. Confirm that all domains has been correctly started.

```
XSCF> showlogs power
```

23. Confirm no abnormality occurred by using `showlogs error -v` and `showstatus(8)` commands.

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

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

