



# Sun SPARC® Enterprise M8000/M9000 Servers Product Notes

---

For XCP Version 1060

Sun Microsystems, Inc.  
[www.sun.com](http://www.sun.com)

Part No. 820-3611-10  
November 2007, Revision A

Submit comments about this document at: <http://www.sun.com/hwdocs/feedback>

Copyright 2007 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. 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 2007 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 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. 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 EXPRESSEMENT 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

---

**Preface** vii

Technical Support vii

Software Resources vii

    Obtaining the Latest Solaris Patches viii

        Using the Update Manager GUI to Obtain Patches viii

        Using the `smpatch` CLI to Obtain Patches x

    Additional Information xii

Accessing Documentation xii

Sun Welcomes Your Comments xii

**Sun SPARC Enterprise M8000/M9000 Servers**

**Product Notes** 1

Supported Firmware and Software Versions 1

Solaris Patch Information 2

    Installing the Solaris Patches 2

Known Issues 3

    General Functionality Issues and Limitations 3

Hardware Installation and Service Issues 4

    Issues and Workarounds 4

Hardware Documentation Updates 5

Updates in the Sun SPARC Enterprise M8000/M9000 Servers Site Planning Guide	6
Bottom Views of the Components	6
Software and Firmware Issues	9
XCP Issues and Workarounds	9
Solaris Issues and Workarounds.	11
Identifying Permanent Memory in a Target Board	19
Preparing to Upgrade to XCP 1050 or Later	20
Upgrading From XCP 104x to XCP 1050 or Later	22
Booting From a WAN Boot Server	27
Abbreviated Man Page for <code>getflashimage</code>	27
Software Documentation Updates	28

# Preface

---

These Product Notes contain important and late-breaking information about the Sun SPARC® Enterprise M8000/M9000 servers hardware, software, and 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 Sun SPARC Enterprise M8000/M9000 servers documentation, contact your local Sun™ Service representative.

For customers in the U.S. or Canada, call 1-800-USA-4SUN (1-800-872-4786). For customers in the rest of the world, find the World Wide Solution Center nearest you by visiting the following web site:

<http://www.sun.com/service/contacting/solution.html/>

---

## Software Resources

The Solaris™ Operating System and Sun Java™ Enterprise System software are preinstalled on your Sun SPARC Enterprise M8000/M9000 servers.

# Obtaining the Latest Solaris Patches

The mandatory Solaris patches for the SPARC Enterprise M8000/M9000 servers should be preinstalled on your system. See “[Solaris Patch Information](#)” on page 2 for the list of patches required on your version of the Solaris OS.



---

**Caution** – For Sun SPARC Enterprise M8000/M9000 servers running Solaris 10 11/06 OS, patches [123003-03](#) and [124171-06](#) must be installed on your system prior to using Sun Connection Update Manager. These patches can be downloaded from <http://sunsolve.sun.com/> if needed. These patches are not required for servers running Solaris 10 8/07 OS.

---

The Sun Connection Update Manager can be used to reinstall the patches if necessary or to update the system with the latest set of mandatory patches. For more Information about the Sun Connection Update Manager refer to the *Sun Update Connection System 1.0.8 Administration Guide*:

<http://docs.sun.com/app/docs/doc/819-4687>

Or visit:

<http://wikis.sun.com/display/SunConnection/Update+Manager>

There are two options available to register your system and use the Sun Connection Update Manager to obtain the latest Solaris OS patches. Installation information and README files are included in the patch download.

- “[Using the Update Manager GUI to Obtain Patches](#)” on page viii.
- “[Using the smpatch CLI to Obtain Patches](#)” on page x

## Using the Update Manager GUI to Obtain Patches

### 1. Launch the Update Manager.

- From JDS Launch menu, Launch->Applications->System Tools->Update Manager.
  - From a terminal window with the CLI, type in `/usr/bin/updatemanager`.
- a. If you have already registered, proceed to [Step 2](#).
  - b. If you have not yet registered, Update Manager will take you through the registration process. Follow the on-screen instructions.



---

**Note** – On Sun SPARC Enterprise M8000/M9000 servers, if the Sun Connection Update Manager GUI fails to register correctly, use the Command Line (CLI) interface option to obtain patches. See [“Using the `smpatch` CLI to Obtain Patches” on page x](#).

---

2. In the Available tab in the Update Manager, open the Update Collection dropdown menu and select *Sun SPARC(R) Enterprise M4000/M5000/M8000/M9000 Servers*.

Update Manager will analyze your system for any patches that are needed.

3. If patch *118833-xx* is recommended, select it by clicking the box to the left of the patch ID, then click the **Install** button.

The patch will be downloaded to `/var/sadm/spool`.

---

**Note** – 118833-xx is a kernel patch that requires special instructions for installation (see the patch README for specifics) and therefore is a download only (interactive) patch requiring manual installation. It is important to install patch 118833-xx first in order for any remaining patches in the patchset to be installed.

---

4. Continue by typing:

```
# cd /var/sadm/spool
# unzip 118833-xx.jar
```

5. Follow the installation instructions in the file `/var/sadm/spool/118833-xx/README.118833-xx`.
6. After installing *118833-xx*, restart the system.

Use the `init` or `shutdown` commands:

```
# init 6
```

```
# shutdown -i6
```

---

**Note** – The `reboot` command does not complete installations of patches that require a restart. Use either the Update Manager, the `init` command, or the `shutdown` command.

---

7. Launch the Update Manager again, and select the Enterprise Server collection.

8. If the Update Manager does not automatically start a new analysis, click the **Check for Updates** button.
9. Select any patches that are listed by checking the boxes to the left of the patch IDs.
10. Click the **Install** button.  
Update Manager will download and install the patches.

---

**Note** – If any restart required patches were installed, UM will offer to restart the system. Alternatively, shutdown or init as used in [Step 6](#) can be used. For restart required patches, the restart is required before the patches are effectively installed.

---

11. If any of the patches requires a system restart, see [Step 6](#).  
The patch installation is now complete.

## Using the smpatch CLI to Obtain Patches

1. Copy the file `/usr/lib/breg/data/RegistrationProfile.properties` to your `/tmp` directory.
2. Edit the file `/tmp/RegistrationProfile.properties` to add your user name, password, network proxy (if necessary), and port (if required).

---

**Note** – The user name and password is a Sun Online Account. To create an account, go to <http://sunsolve.sun.com>.

---

3. Register your system by typing the command:

```
# sconadm register -a -r /tmp/RegistrationProfile.properties
```

4. Obtain the correct patches for your system by typing the command:

```
# smpatch set patchpro.patchset=sem4k5k8k9k
```

5. Install patch 118833-xx, as follows.

This patch can be downloaded through the Sun Connection Update Manager.

a. Download the patch to your `/var/sadm/spool` directory by typing:

```
# smpatch update -i 118833-xx
```

b. To unzip the patch, type:

```
# cd /var/sadm/spool
# unzip 118833-xx.jar
```

c. To install the patch, follow the special installation instructions in the file `/var/sadm/spool/118833-xx/README.118833-xx`.

6. After installing patch 118833-xx, restart the system.

- To restart the system, use either the `init` command or the `shutdown` command.

```
# init 6
```

```
# shutdown -i6
```

---

**Note** – The `reboot` command does not complete installations of patches that require a restart.

---

7. Display a list of patches to be installed by typing the command:

```
# smpatch analyse
```

8. Download and install the patches by typing the command:

```
# smpatch update
```

9. If any of the patches requires a system restart, see [Step 6](#).

The patch installation is now complete.

## Additional Information

For additional information, read the release notes which come with your Solaris documentation, as well as the latest *Solaris 10 Sun Hardware Platform Guide*. Also, check the documentation web page for any additional supplements to this book. The most up-to-date information is posted at:

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

---

## Accessing Documentation

Instructions for installing, administering, and using your Sun SPARC Enterprise M8000/M9000 servers are provided in the Sun SPARC Enterprise M8000/M9000 servers documentation set. The entire documentation set is available for download from the following web site:

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

---

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

---

Solaris Operating System (Solaris OS) documentation is located at:

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

---

## Sun Welcomes Your Comments

Sun is interested in improving its documentation and welcomes your comments and suggestions. You can submit your comments by going to:

<http://www.sun.com/hwdocs/feedback/>

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

*Sun SPARC Enterprise M8000/M9000 Servers Product Notes for XCP Version 1060*, part number 820-3611-10

# Sun SPARC Enterprise M8000/M9000 Servers Product Notes

---

This document includes these sections:

- [Supported Firmware and Software Versions](#)
  - [Solaris Patch Information](#)
  - [Known Issues](#)
  - [Hardware Installation and Service Issues](#)
  - [Software and Firmware Issues](#)
  - [Software Documentation Updates](#)
- 

## Supported Firmware and Software Versions

The following firmware and software versions are supported in this release:

- XSCF Control Package (XCP) 1060 or later.
- These servers support Solaris 10 8/07 OS or later.
- The first version of the Solaris OS to support these servers is the Solaris 10 11/06 OS, plus patches. See [“Solaris Patch Information”](#) on page 2.



---

**Caution** – CR ID 6534471: The system might panic or trap during a normal operation. This bug has been fixed in Solaris 10 8/07. For systems running Solaris 10 11/06, you can upgrade to Solaris 10 8/07 or apply patch [120011-08](#). This CR is listed in the section, [“Solaris Issues and Workarounds”](#) on page 11.

---

---

**Note** – All Sun SPARC Enterprise M8000/M9000 servers must be upgraded to XCP 1050 or later in order to support adding future Capacity-On-Demand (COD) Right To Use (RTU) licenses. Contact your local Service Representative for assistance.

---

If you plan to boot your Sun SPARC Enterprise M8000/M9000 server from a Solaris WAN boot server on the network, you must upgrade the `wanboot` executable. See [“Booting From a WAN Boot Server” on page 27](#) for details.

---

**Note** – For the latest information on supported firmware and software versions, see [“Software Resources” on page vii](#).

---

---

## Solaris Patch Information

The following patches are mandatory for Sun SPARC Enterprise M8000/M9000 servers running Solaris 10 11/06 OS. These patches are not required for servers running Solaris 10 8/07 OS.

---

**Note** – The patches include a revision level, shown as a two-digit suffix. Check [SunSolve.Sun.COM](#) for the latest patch revision. See [“Software Resources” on page vii](#) for information on how to find the latest patches.

---

## Installing the Solaris Patches

- **Install the following patches in numerical order:**
  1. [118833-xx](#) (minimum revision -36. Reboot your domain before proceeding.)
  2. [125100-xx](#) (minimum revision -10)  
See the patch README file for a list of other patch requirements.
  3. [123839-xx](#) (minimum revision -07)
  4. [120068-xx](#) (minimum revision -03)
  5. [125424-xx](#) (minimum revision -01)
  6. [118918-xx](#) (minimum revision -24)

7. [120222-xx](#) (minimum revision -21)
8. [125127-xx](#) (minimum revision -01 Reboot your domain before proceeding.)
9. [125670-xx](#) (minimum revision -02)
10. [125166-xx](#) (minimum revision -05)

---

## Known Issues

This section describes known hardware and software issues in this release.

### General Functionality Issues and Limitations



---

**Caution** – For dynamic reconfiguration (DR) and hot-plug issues, see [TABLE 4, “Solaris Issues and Workarounds”](#) on page 11.

---

- For 1027A-Z/X1027A-Z, PCIe Dual 10 Gigabit Ethernet Fiber XFP cards, these limits apply:
  - Do not use more than two cards per domain.
  - Do not use these cards in an External I/O Expansion Unit.
- For 4447A-Z/X4447A-Z, PCIe Quad-port Gigabit Ethernet Adapter UTP cards, these maximum limits apply:
  - No more than two cards in an External I/O Expansion Unit
  - No more than eight cards in a Sun SPARC Enterprise M8000/M9000 servers
- The maximum number of IOUA cards in a single domain is six cards. Do not install more than six IOUA cards in a SPARC Enterprise M8000/M9000 server that is configured per domain.
- To complete updating the OpenBoot PROM firmware in the target domain, be sure to power off/on the domain.
- When the Solaris OS is in single user mode, do not switch from the domain console to the XSCF Shell as the Solaris OS might switch to multi-user mode.
- Do not use the CD-RW/DVD-RW drive unit and the TAPE drive unit at the same time.
- The XSCF web browser interface, also known as the browser interface (BUI), does not support the External I/O Expansion Unit Manager feature.

- The XSCF web browser interface, also known as the browser user interface (BUI), supports new features concerning the COD configuration.
- You cannot use the following user account names, as they are reserved by the XSCF firmware for system use: `root`, `bin`, `daemon`, `adm`, `operator`, `nobody`, `sshd`, `rpc`, `rpcuser`, `ldap`, `apache`, `ntp`, `admin`, and `default`.
- Do not use the Service Processor (SP) as the Network Time Protocol (NTP) server. Using an independent NTP server provides optimal reliability in maintaining consistent time on the SP and the domains. For more information about NTP, see the Sun Blueprint document, *Using NTP to Control and Synchronize System Clocks*: <http://www.sun.com/blueprints/0701/NTP.pdf>

---

## Hardware Installation and Service Issues

This section describes hardware-specific issues and workarounds.

### Issues and Workarounds

[TABLE 1](#) lists known hardware issues and possible workarounds.

**TABLE 1** Hardware Issues and Workarounds

CR ID	Description	Workaround
6433420	The domain console might display a Mailbox time-out or IOCB interrupt time-out error during boot.	Issue a <code>reset-all</code> command from the OBP (OK) prompt and reboot.
6488846	During boot, the domain console might display a checksum error for the SG(X)PCI2SCSIU320-Z SCSI controller I/O card.	Check for the availability of the latest controller card firmware.



---

# Hardware Documentation Updates

This section contains late-breaking hardware information that became known after the documentation set was published.

**TABLE 2** Documentation Updates

Title	Page Number	Update
All Sun SPARC Enterprise M8000/M9000 servers documentation		All DVD references are now referred to as CD-RW/DVD-RW.  Updated glossary terms: <i>External I/O Expansion Unit</i> — A rackmountable device to add on PCI slots. It is connected to the system's I/O unit through the PCIe connection and contains one or two I/O boats. <i>I/O boat</i> — An I/O unit in the External I/O Expansion Unit. The I/O boat connects to a PCI-Express (PCIe) slot through a PCIe switch or a PCI-X bridge on the I/O boat and offers either six PCI-X slots or six PCIe slots.
Sun SPARC Enterprise M8000/M9000 Servers Overview Guide	1-8	TABLE 1-1 "Main Unit Specifications" Main storage (memory module) describes the maximum capacity when 8GB DIMM mounted; however, 8GB DIMM can't be mounted at this time.
Sun SPARC Enterprise M8000/M9000 Servers Overview Guide	1-21	1.3.3, "I/O Unit" It describes the types of LAN port as "1000BASE-T/100Base-TX/100Base-T," which should be modified as "1000Base-T/100Base-TX/10Base-T."
Sun SPARC Enterprise M8000/M9000 Servers Overview Guide	1-26	1.5.3, "SPARC Enterprise M9000 Server (Expansion Cabinet) Option" It describes that the configuration can contain "up to 2B," which should be modified as "2TB." The memory size described here is the maximum capacity when 8GB DIMM mounted; however, 8GB DIMM can't be mounted at this time.

# Updates in the Sun SPARC Enterprise M8000/M9000 Servers Site Planning Guide

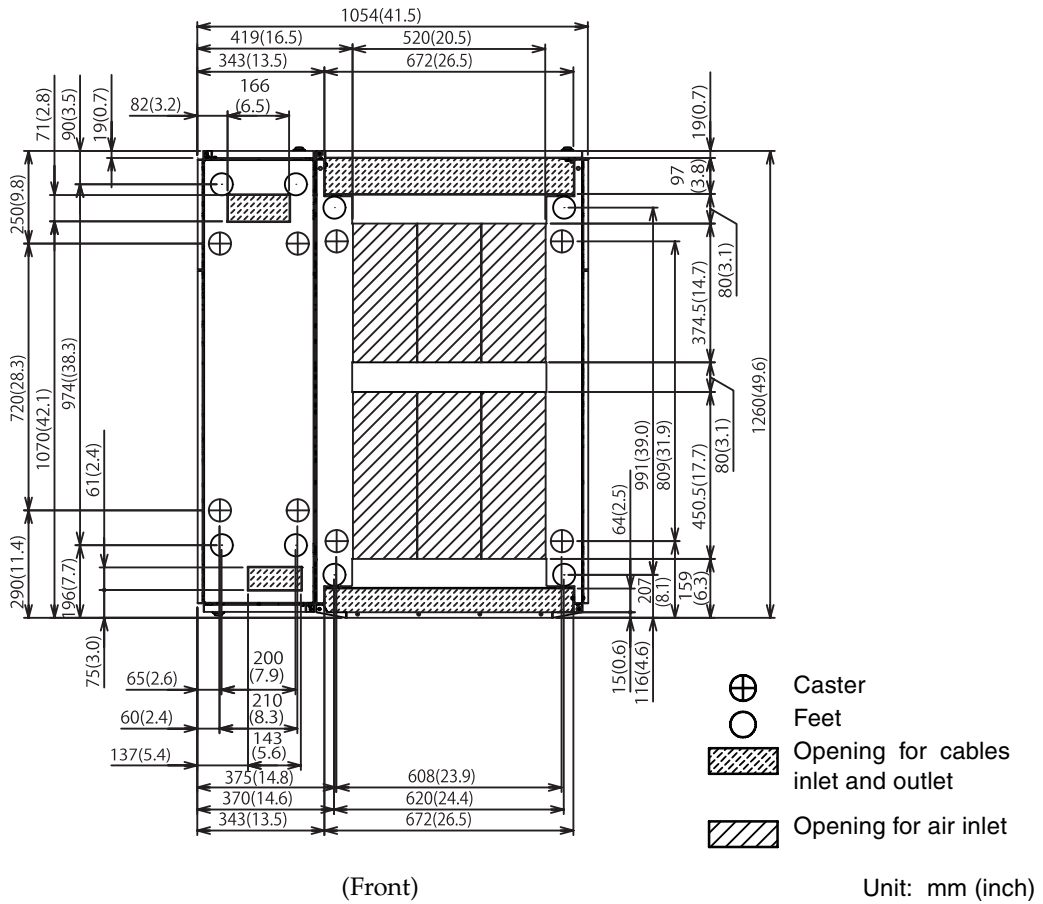
The following information supersedes the information in the *Sun SPARC Enterprise M8000/M9000 Servers Site Planning Guide*.

## Bottom Views of the Components

The following figures are a correction to the description in Section 1.2.2.2, "Bottom View of the Components".

**FIGURE 1** shows the Sun SPARC Enterprise M8000 Server + Power Cabinet Bottom View.

**FIGURE 2** shows the Sun SPARC Enterprise M9000 Server (Base Cabinet) + Power Cabinet Bottom View.



**FIGURE 1** Sun SPARC Enterprise M8000 Server + Power Cabinet Bottom View

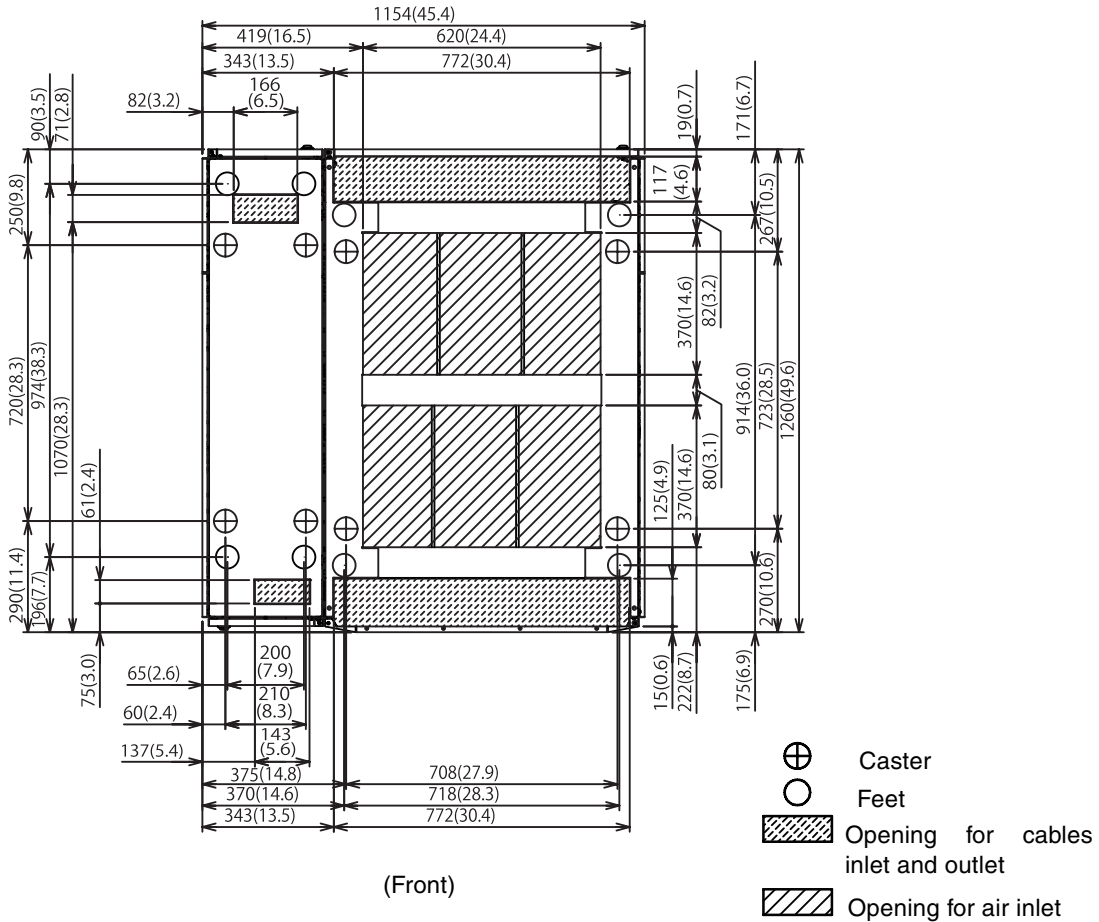


FIGURE 2 Sun SPARC Enterprise M9000 Server (Base Cabinet) + Power Cabinet Bottom View

---

# Software and Firmware Issues

This section describes specific software and firmware issues and workarounds.

## XCP Issues and Workarounds

TABLE 3 lists XCP issues and possible workarounds.

**TABLE 3** XCP Issues and Workarounds

ID	Description	Workaround
6565422	The Latest communication field in showarchiving is not updated regularly.	Disabling and re-enabling archiving refreshes the Latest communication field in showarchiving output.
6575425	Most SCF CLIs should display "Permission denied" when they are executed on the Standby SCF. Instead, such CLIs report various errors.	Only the following CLIs can be executed on the Standby XSCF: snapshot, switchscf Do not attempt to run any other CLI on the Standby XSCF.
6575771	Servicetags are not enabled when upgrading from XCP 104x to later XCP versions.	When Sun customers upgrade from XCP 104x to later XCP versions, they should run the following command with platadm privileges: XSCF> setservicetag -c enable to enable Sun Service Tags. Fujitsu customers can not enable service tags.  For more information, refer to: <a href="http://www.sun.com/bigadmin/hubs/connection">http://www.sun.com/bigadmin/hubs/connection</a>
6577801	An incorrect domain state is reported. After the command sendbreak is issued to a domain , showdomainstatus shows the state as "Running" when the domain is at the "ok" prompt.	There is no workaround. This is a side effect of the sendbreak operation.
6583053	An incorrect setup in XCP 1040 and 1041 could cause takeover ip to not work in subsequent XCP versions.	See, "Preparing to Upgrade to XCP 1050 or Later" on page 20.
6588650	On occasion, the system is unable to DR after an XSCF failover or XSCF reboot.	There is no workaround. Check for the availability of a patch for this defect.
6589870	A user account name which consists of 32 characters will display "Permission denied".	Use up to 31 characters to set the XSCF user account name.

**TABLE 3** XCP Issues and Workarounds (*Continued*)

ID	Description	Workaround
6590920	The CLI 'showldap -c' (which displays current LDAP certificates) will show proper data only when used with the same user account that had originally provided certificate information using 'setldap -c'. Any other user account will generate "Permission denied" error. Similarly, the XSCF Web's LDAP Configuration pop-up screen will display no data, when a different user account is used.	Use the same user account for all LDAP display or configuration operations, for both CLI and XSCF Web.
6598444	The XSCF firmware monitors itself and if it detects any inconsistencies, it forces an XSCF reboot.	There is no workaround. Allow the XSCF Unit to finish rebooting. It returns to normal operation within approximately five minutes.
6624646	Sun Connection Update Manager GUI might fail to register correctly.	Use Command Line interface (CLI) if you run into any GUI registration issues.
6626183	When Internet Explorer 7 browser is used, the License key deletion cannot be executed on the BUI COD page.	Use other browsers: <ul style="list-style-type: none"><li>• Microsoft Internet Explorer 6.0</li><li>• Firefox 2.0 or later</li><li>• Mozilla 1.7 or later</li><li>• Netscape Navigator 7.1 or later</li></ul>

# Solaris Issues and Workarounds.

TABLE 4 lists Solaris issues and possible workarounds.

**TABLE 4** Solaris Issues and Workarounds

CR ID	Description	Workaround
5076574	A PCIe error can lead to an invalid fault diagnosis on a large M9000/M8000 domain.	Create a file <code>/etc/fm/fmd/fmd.conf</code> containing the following lines; <code>setprop client.buflim 40m</code> <code>setprop client.memlim 40m</code>
6303418	A Sun SPARC Enterprise M9000 with a single domain and 11 or more fully populated system boards might hang under heavy stress.	Do not exceed 170 CPU strands. Limit the number of CPU strands to one per CPU core by using the Solaris <code>psradm</code> command to disable the excess CPU strands. For example, disable all odd-numbered CPU strands.  This bug has been fixed in Solaris 10 8/07.
6348554	Using the <code>cfgadm -c disconnect</code> command on the following cards might hang the command: <ul style="list-style-type: none"> <li>• SG-XPCIE2FC-QF4 Sun StorageTek Enterprise Class 4Gb Dual-Port Fibre Channel PCI-E HBA</li> <li>• SG-XPCIE1FC-QF4 Sun StorageTek Enterprise Class 4Gb Single-Port Fibre Channel PCI-E HBA</li> <li>• SG-XPCI2FC-QF4 Sun StorageTek Enterprise Class 4Gb Dual-Port Fibre Channel PCI-X HBA</li> <li>• SG-XPCI1FC-QF4 Sun StorageTek Enterprise Class 4Gb Single-Port Fibre Channel PCI-X HBA</li> </ul>	Do not perform <code>cfgadm -c disconnect</code> operation on the affected cards.  Check <a href="http://sunsolve.sun.com">http://sunsolve.sun.com</a> for patch 126670-01.
6449315	The Solaris <code>cfgadm(1M)</code> command does not unconfigure a DVD drive from a domain on a Sun SPARC Enterprise M8000/M9000 server	Disable the Volume Management Daemon ( <code>vold</code> ) before unconfiguring a DVD drive with the <code>cfgadm(1M)</code> command. To disable <code>vold</code> , stop the daemon by issuing the command <code>/etc/init.d/volmgt stop</code> . After the device has been removed or inserted, restart the daemon by issuing the command <code>/etc/init.d/volmgt start</code>

**TABLE 4** Solaris Issues and Workarounds (*Continued*)

CR ID	Description	Workaround
6459540	The DAT72 internal tape drive might time out during tape operations. The device might also be identified by the system as a QIC drive.	Add the following definition to <code>/kernel/drv/st.conf</code> :  <pre>tape-config-list= "SEAGATE DAT DAT72-000", "SEAGATE_DAT____DAT72-000", "SEAGATE_DAT____DAT72-000"; SEAGATE_DAT____DAT72-000= 1, 0x34, 0, 0x9639, 4, 0x00, 0x8c, 0x8c, 0x8c, 3;</pre> <p>There are four spaces between "SEAGATE DAT and DAT72-000.</p>
6472153	If you create a Solaris Flash archive on a non-Sun SPARC Enterprise M8000/M9000 sun4u server and install it on a Sun SPARC Enterprise M8000/M9000 sun4u server, the console's TTY flags will not be set correctly. This can cause the console to lose characters during stress.	Just after installing Solaris OS from a Solaris Flash archive, telnet into the Sun SPARC Enterprise M8000/M9000 server to reset the console's TTY flags as follows:  <pre># sttydefs -r console # sttydefs -a console -i "9600 hupcl opost onlcr crtscts" -f "9600"</pre> <p>This procedure is required only once.</p>
6498283	Using the DR <code>deleteboard</code> command while <code>psradm</code> operations are running on a domain might cause a system panic.	There is no workaround. Check for the availability of a patch for this defect.  This bug has been fixed in Solaris 10 8/07.
6508432	A large number of spurious PCIe correctable errors can be recorded in the FMA error log.	To mask these errors, add the following entry to <code>/etc/system</code> and reboot the system:  <pre>set pcie:pcie_aer_ce_mask = 0x2001</pre> <p>This bug has been fixed in Solaris 10 8/07.</p>
6510779	On a large single domain configuration, the system might incorrectly report very high load average at times.	There is no workaround. Check for the availability of a patch for this defect.
6510861	When using the PCIe Dual-Port Ultra320 SCSI controller card (SG-(X)PCIE2SCSIU320Z), a PCIe correctable error causes a Solaris panic.	Add the following entry to <code>/etc/system</code> to prevent the problem:  <pre>set pcie:pcie_aer_ce_mask = 0x31c1</pre> <p>This bug has been fixed in Solaris 10 8/07.</p>



**TABLE 4** Solaris Issues and Workarounds (*Continued*)

CR ID	Description	Workaround
6511374	Memory translation warning messages might appear during boot if memory banks were disabled due to excessive errors.	After the system is rebooted, the <code>fmadm repair</code> command may be used to prevent a recurrence of the problem on the next boot.
6520990	When a domain reboots, SCF might not be able to service other domains that share the same physical board. DR operation can exceed the default timeout period and panic can occur.	<p>Increase the DR timeout period by setting the following statement in <code>/etc/system</code> and reboot your system.:</p> <pre>set drmach:fmem_timeout = 30</pre> <p>This workaround is not needed if no physical board is shared among multiple domains</p> <p>This bug has been fixed in Solaris 10 8/07.</p>
6522017	DR and ZFS might not be used in the same domain.	Set the maximum size of the ZFS ARC lower. For detailed assistance contact Sun Service.
6522433	The incorrect motherboard may be identified by <code>fmddump</code> for cpu faults after reboot.	None at this time. Check for the availability of a patch for this defect.
6527781	The <code>cfgadm</code> command fails while moving the DVD/DAT drive between two domains.	<p>There is no workaround. To reconfigure DVD/Tape drive, execute <code>reboot -r</code> from the domain exhibiting the problem.</p> <p>This bug has been fixed in Solaris 10 8/07.</p>
6527811	The <code>showhardconf(8)</code> command on the XSCF cannot display PCI card information that is installed in the External I/O Expansion Unit, if the External I/O Expansion Unit is configured using PCI hot-plug.	There is no workaround. When each PCI card in the External I/O Expansion Unit is configured using PCI hotplug, the PCI card information is displayed correctly.
6530178	DR <code>addboard</code> command can hang. Once the problem is observed, further DR operations are blocked. Recovery requires reboot of the domain.	<p>There is no workaround. Check for the availability of a patch for this defect.</p> <p>This bug has been fixed in Solaris 10 8/07.</p>
6531036	The error message <code>network initialization failed</code> appears repeatedly after a boot net installation.	There is no workaround.
6533686	An error condition can occur when a physical board is shared between 2 domains.	If the board is shared between domains, do not use DR at the same time on this shared board.

**TABLE 4** Solaris Issues and Workarounds (*Continued*)

CR ID	Description	Workaround
6534471	Systems might panic/trap during normal operation.	Make sure you have the correct <code>/etc/system</code> parameter and reboot the system: <pre>set heaplp_use_stlb=0</pre>
		This bug has been fixed in Solaris 10 8/07.
6539084	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.	There is no workaround. Check for the availability of a patch for this defect.
	This defect only applies to Solaris 10 11/06.	Check <a href="http://sunsolve.sun.com">http://sunsolve.sun.com</a> for patch 125670-01.
6539909	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"><li>• X4447A-Z/X4447A-Z, PCIe Quad-port Gigabit Ethernet Adapter UTP</li><li>• X1027A-Z/X1027A-Z, PCIe Dual 10 Gigabit Ethernet Fiber XFP</li></ul>	When running Solaris 10 11/06, use an alternate type of network card or onboard network device to install the Solaris OS via the network.
6545143	When <code>kcage</code> daemon is expanding the <code>kcage</code> area, if the user stack exists in the expanded area, its area is demapped and might cause a <code>ptl_1</code> panic during the <code>flushw</code> handler execution.	There is no workaround. Check for the availability of a patch for this defect.
6545685	If the system has detected Correctable MemoryErrors (CE) at power-on self-test (POST), the domains might incorrectly degrade 4 or 8 DIMMs.	Increase the memory patrol timeout values used via the following setting in <code>/etc/system</code> and reboot the system: <pre>set mc-opl:mc_max_rewrite_loop = 20000</pre>
6546188	The system panics when running hot-plug ( <code>cfgadm</code> ) and DR operations ( <code>addboard</code> and <code>deleteboard</code> ) on the following cards: <ul style="list-style-type: none"><li>• X4447A-Z, PCI-e Quad-port Gigabit Ethernet Adapter UTP</li><li>• X1027A-Z1, PCI-e Dual 10 Gigabit Ethernet Fiber XFP Low profile Adapter</li></ul>	For Solaris 10 8/07, check <a href="http://sunsolve.sun.com">http://sunsolve.sun.com</a> for patch 127741-01.  For Solaris 10 11/06, check <a href="http://sunsolve.sun.com">http://sunsolve.sun.com</a> for patch 125670-04.

**TABLE 4** Solaris Issues and Workarounds (*Continued*)

CR ID	Description	Workaround
6551356	<p>The system panics when running hot-plug (<code>cfgadm</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"><li>• X4447A-Z, PCI-e Quad-port Gigabit Ethernet Adapter UTP</li><li>• X1027A-Z1, PCI-e Dual 10 Gigabit Ethernet Fiber XFP Low profile Adapter</li></ul>	<p>DO NOT use <code>cfgadm -c unconfigure</code> to disconnect the I/O card. Use <code>cfgadm -c disconnect</code> to completely remove the card. After waiting at least 10 seconds, the card might be configured back into the domain using the <code>cfgadm -c configure</code> command.</p> <p>For Solaris 10 8/07, check <a href="http://sunsolve.sun.com">http://sunsolve.sun.com</a> for patch 127741-01.</p>
6556742	<p>The system panics when DiskSuite cannot read the <code>metaadb</code> during DR. This bug affects the following cards:</p> <ul style="list-style-type: none"><li>• SG-XPCIE2FC-QF4, 4Gb PCI-e Dual-Port Fibre Channel HBA</li><li>• SG-XPCIE1FC-QF4, 4Gb PCI-e Single-Port Fibre Channel HBA</li><li>• SG-XPCI2FC-QF4, 4Gb PCI-X Dual-Port Fibre Channel HBA</li><li>• SG-XPCI1FC-QF4, 4Gb PCI-X Single-Port Fibre Channel HBA</li></ul>	<p>Panic can be avoided when a duplicated copy of the <code>metaadb</code> is accessible via another Host Bus Adaptor. Or you can apply patch.</p> <p>Check <a href="http://sunsolve.sun.com">http://sunsolve.sun.com</a> for patch 125166-06.</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"><li>• X4447A-Z, PCI-e Quad-port Gigabit Ethernet Adapter UTP</li><li>• X1027A-Z1, PCI-e Dual 10 Gigabit Ethernet Fiber XFP Low profile Adapter</li></ul>	<p>These messages can be safely ignored.</p> <p>For Solaris 10 8/07, check <a href="http://sunsolve.sun.com">http://sunsolve.sun.com</a> for patch 127741-01.</p>
6563785	<p>Hot-plug operation with the following cards might fail if a card is disconnected and then immediately reconnected:</p> <ul style="list-style-type: none"><li>• SG-XPCIE2SCSIU320Z Sun StorageTek PCI-E Dual-Port Ultra320 SCSI HBA</li><li>• SGXPCI2SCSILM320-Z Sun StorageTek PCI Dual-Port Ultra320 SCSI HBA</li></ul>	<p>After disconnecting a card, wait for a few seconds before re-connecting.</p> <p>Check <a href="http://sunsolve.sun.com">http://sunsolve.sun.com</a> for patch 127750-01.</p>
6564332	<p>Hot-plug operations on Sun Crypto Accelerator (SCA)6000 cards can cause Sun SPARC Enterprise M8000/M9000 servers to panic or hang.</p>	<p>Version 1.0 of the SCA6000 driver does not support hot-plug and should not be attempted. Version 1.1 of the SCA6000 driver and firmware supports hot-plug operations after the required bootstrap firmware upgrade has been performed.</p>

**TABLE 4** Solaris Issues and Workarounds (*Continued*)

CR ID	Description	Workaround
6564934	Performing a DR deleteboard operation on a board which includes Permanent Memory when using the following network cards results in broken connections: <ul style="list-style-type: none"><li>• X4447A-Z, PCI-e Quad-port Gigabit Ethernet Adapter UTP</li><li>• X1027A-Z1, PCI-e Dual 10 Gigabit Ethernet Fiber XFP Low profile Adapter</li></ul>	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.  Check <a href="http://sunsolve.sun.com">http://sunsolve.sun.com</a> for patch 127741-01.
6568417	After a successful CPU DR deleteboard operation, the system panics when the following network interfaces are in use: <ul style="list-style-type: none"><li>• X4447A-Z, PCI-e Quad-port Gigabit Ethernet Adapter UTP</li><li>• X1027A-Z1, PCI-e Dual 10 Gigabit Ethernet Fiber XFP Low profile Adapter</li></ul>	Add the following line to <code>/etc/system</code> and reboot the system:  <code>set ip:ip_soft_rings_cnt=0</code>  Check <a href="http://sunsolve.sun.com">http://sunsolve.sun.com</a> for patch 127111-02.
6571370	Use of the following cards have been observed to cause data corruption in stress test under laboratory conditions: <ul style="list-style-type: none"><li>• X4447A-Z, PCI-e Quad-port Gigabit Ethernet Adapter UTP</li><li>• X1027A-Z1, PCI-e Dual 10 Gigabit Ethernet Fiber XFP Low profile Adapter</li></ul>	Add the following line in <code>/etc/system</code> and reboot the system:  <code>set nxge:nxge_rx_threshold_hi=0</code>  For Solaris 10 8/07, check <a href="http://sunsolve.sun.com">http://sunsolve.sun.com</a> for patch 127741-01 .  For Solaris 10 11/06, check <a href="http://sunsolve.sun.com">http://sunsolve.sun.com</a> for patch 125670-04 .
6572827	On Sun SPARC Enterprise M8000/M9000 platforms, one of the columns in the IO Devices section of the output from <code>prtdiag -v</code> is "Type". This reports "PCIe", "PCIx", "PCI" or "UNKN" for each device. The algorithm used to compute this value is incorrect. It reports "PCI" for PCI-X leaf devices and "UNKN" for legacy PCI devices.	There is no workaround.
6575970	DR and XSCF failover are not compatible.	Do not start an XSCF failover while a DR operation is running. Wait for a DR operation to finish before starting the failover. If you start the failover first, wait for the failover to finish before starting the DR operation.

**TABLE 4** Solaris Issues and Workarounds (*Continued*)

CR ID	Description	Workaround
6583035	After using the <code>addfru</code> or <code>replacefru</code> command to hotplug a CMU, further DR operations might fail with a misleading message regarding the board being unavailable for DR.	When performing the <code>addfru</code> and <code>replacefru</code> commands, it is mandatory to run diagnostic tests. If you forget to run the diagnostic tests during <code>addfru/replacefru</code> then either run <code>testsb</code> to test the CMU or remove the CMU/IOU with the <code>deletefru</code> command and then use the <code>addfru</code> command with the diagnostic tests.
6584984	The <code>busstat(1M)</code> command with <code>-w</code> option might cause domains to reboot.	There is no workaround. Do not use <code>busstat(1M)</code> command with <code>-w</code> option on <code>pcmu_p</code> .
6588555	Permanent memory DR operation during XSCF failover might cause domain panic.	Do not start an XSCF failover while a DR operation is running. Wait for a DR operation to finish before starting the failover. If you start the failover first, wait for the failover to finish before starting the DR operation.
6589546	<code>prtdiag</code> does not show all IO devices of the following cards: <ul style="list-style-type: none"><li>• SG-XPCIE2FC-EM4 Sun StorageTek Enterprise Class 4Gb Dual-Port Fibre Channel PCI-E HBA</li><li>• SG-XPCIE1FC-EM4 Sun StorageTek Enterprise Class 4Gb Single-Port Fibre Channel PCI-E HBA</li></ul>	Use <code>prtdiag -v</code> for full output.

**TABLE 4** Solaris Issues and Workarounds (*Continued*)

<b>CR ID</b>	<b>Description</b>	<b>Workaround</b>
6589644	When the SB is added to the system by the <code>addboard</code> command, the information on the main console path is missing in the SRAM on that SB. This causes XSCF to not recognize the console path when XSCF switchover happens.	There is no workaround. Check for the availability of a patch for this defect.
6589833	The DR <code>addboard</code> command might cause a system hang if you are adding a Sun StorageTek Enterprise Class 4Gb Dual-Port Fibre Channel PCI-E HBA card (SG-XPCIE2FC-QF4) at the same time that an SAP process is attempting to access storage devices attached to this card. The chance of a system hang is increased if the following cards are used for heavy network traffic: <ul style="list-style-type: none"><li>• X4447A-Z, PCI-e Quad-port Gigabit Ethernet Adapter UTP</li><li>• X1027A-Z1, PCI-e Dual 10 Gigabit Ethernet Fiber XFP Low profile Adapter</li></ul>	There is no workaround. Check for the availability of a patch for this defect.
6592302	Unsuccessful DR operation leaves memory partially configured.	It might be possible to recover by adding the board back to the domain with an <code>addboard -d</code> command.

# Identifying Permanent Memory in a Target Board

1. Log in to XSCF.
2. Type 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:
-----

  board      perm      base      domain  target deleted remaining
  DID XSB   mem MB   mem MB   address  mem MB   XSB   mem MB   mem MB
  00  00-0    8192     0  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` command or the `moveboard` command, the following notice is displayed:

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

# Preparing to Upgrade to XCP 1050 or Later

There are two steps that must be completed prior to upgrading:

1. **Delete any routes configured on the lan#0 and lan#1 interfaces (failover interfaces).**

---

**Note** – The `applynetwork -n` command will not run unless some network configuration has changed. Resetting the hostname (`sethostname`) to exactly what it is will prompt the command to run.

---

The following example show two routes that must be deleted.

```
XSCF> applynetwork -n
The following network settings will be applied:
xscf#0 hostname   :m8000-0
xscf#1 hostname   :m8000-1
DNS domain name   :sun.com
nameserver        :100.200.300.400

interface         :xscf#0-lan#0
status            :up
IP address        :100.200.300.77
netmask           :255.255.254.0
route             :-n 0.0.0.0 -m 0.0.0.0 -g 100.200.300.1

interface         :xscf#0-lan#1
status            :down
IP address        :
netmask           :
route             :

interface         :xscf#0-if
status            :down
IP address        :
netmask           :

interface         :lan#0
status            :down
IP address        :
netmask           :
route             :-n 0.0.0.0 -m 0.0.0.0 -g 100.200.300.1
route             :-n 0.0.0.0 -m 0.0.0.0 -g 100.200.300.2
```



```

interface      :xscf#1-lan#0
status        :down
IP address    :
netmask      :
route        :

interface      :xscf#1-lan#1
status        :down
IP address    :
netmask      :
route        :

interface      :xscf#1-if
status        :down
IP address    :
netmask      :

interface      :lan#1
status        :down
IP address    :
netmask      :
route        :

The XSCF will be reset. Continue? [y|n] :n
XSCF> setroute -c del -n 0.0.0.0 -m 0.0.0.0 -g 100.200.300.2 lan#0
XSCF> setroute -c del -n 0.0.0.0 -m 0.0.0.0 -g 100.200.300.1 lan#0
XSCF> applynetwork

```

The last `applynetwork` should say "y" to reset and continue.

## 2. Delete any accounts named 'admin'.

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

---

**Note** – For more information on `admin` accounts, see [TABLE 5, “Software Documentation Updates”](#) on page 28.

---

# Upgrading From XCP 104x to XCP 1050 or Later

---

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

---

---

**Note** – LAN connections are disconnected when the XSCF resets. Use the XSCF serial connection to simplify the XCP upgrade procedure.

---

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

```
XSCF> showstatus
```

The `showstatus` prompt will return if there are no failures found in the System Initialization. If anything is listed, contact your authorized service representative before proceeding.

3. Power off all domains.

```
XSCF> poweroff -a
```

4. Confirm that all domains are stopped:

```
XSCF> showlogs power
```

5. Move the key position on the operator panel from Locked to Service.
6. Collect an XSCF snapshot to archive the system status for future reference.

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

7. Upload the XCP 1060 upgrade image by using the command line `getflashimage`.

```
XSCF> getflashimage http://server.domain.com/XCP1060/images/DCXCP1060.tar.gz
```

The BUI on XSCFU#0 can also be used to upload the XCP 1060 upgrade image.

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



---

**Caution** – `Flashupdate` will update one bank, reset the XSCF, and commence update of the second bank. Verify that the current and reserve banks are both updated. If both banks indicate XCP revision 1060, proceed to the next step.

---

```
XSCF> flashupdate -c update -m xcp -s 1060
```

Specify the XCP version to be updated. In this example, it is 1060.

**9. Confirm completion of the update.**

```
XSCF> showlogs event
```

Confirm no abnormality happens while updating XCSF\_B#0.

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

```
XSCF> version -c xcp

XSCF#0 (Active )
XCP0 (Reserve): 1060
XCP1 (Current): 1060
XSCF#1 (Standby)
XCP0 (Reserve): 0000
XCP1 (Current): 0000
```

If the Current and Reserve banks on XSCF#0 do not indicate XCP revision 1060, contact your authorized service representative.

**11. Confirm the newly introduced 'servicetag' facility is enabled.**

When a system is upgraded from XCP 104x to XCP 1050 or later, the newly introduced 'servicetag' facility is not automatically enabled.

**a. Check the 'servicetag' facility status by using the 'showservicetag' CLI.**

```
XSCF> showservicetag
Disabled
```

b. If it is currently disabled, you must enable it.

```
XSCF> setservicetag -c enable  
Settings will take effect the next time the XSCF is rebooted.
```

c. An XSCF reboot is required for the 'servicetag' facility to be enabled.

```
XSCF> rebootxscf  
The XSCF will be reset. Continue? [y|n] :y
```

---

**Note** – Service tags are used by Sun Service. Fujitsu customers cannot enable service tags.

---

d. Wait until XSCF firmware reaches the ready state.

This can be confirmed when the READY LED of the XSCF remains lit, or the message 'XSCF Initialize complete' appears on the serial console.

12. Turn off all of the server's power switches for 30 seconds.

13. After 30 seconds, turn the power switches back on.

14. Wait until XSCF firmware reaches the ready state.

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

15. Log in on to XSCFU#0 using a serial connection or LAN connection.

16. Confirm no abnormality occurred by using `showlogs error -v` and `showstatus` commands.

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

If you encounter any hardware abnormality of the XSCF contact your authorized service representative.

17. Confirm and update the imported XCP image again.

```
XSCF> flashupdate -c update -m xcp -s 1060
```

Specify the XCP version to be updated. In this example, it is 1060. XSCF#1 will be updated, and then XSCF#0 updated, again.

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

18. Log in to XSCFU#1 using a serial connection or LAN connection.
19. Confirm completion of the update by using the `showlogs event` command.

```
XSCF> showlogs event
```

Confirm no abnormality is found during the update.

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

```
XSCF> version -c xcp
```

```
XSCF#1 (Active )
XCP0 (Reserve): 1060
XCP1 (Current): 1060
XSCF#0 (Standby)
XCP0 (Reserve): 1060
XCP1 (Current): 1060
```

If the Current and Reserve banks on XSCF#0 do not indicate XCP revision 1060, contact your authorized service representative.

21. Confirm switching over between XSCFs works properly.

```
XSCF> switchscf -t Standby
```

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

- a. When the READY LED on XSCFU\_B#1 remains lit, log in to XSCFU#0 using a serial connection or LAN connection.
- b. Confirm switching over between XSCFs using the following commands:

```
XSCF> showhardconf
```

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

```
XSCF> showlogs error
```

Confirm no new errors have been recorded since the check in [Step 16](#).

```
XSCF> showlogs event
```

Confirm a message "XSCFU entered active state from standby state".

```
XSCF> showstatus
```

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

**22. Power on all domains.**

```
XSCF> poweron -a
```

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

```
XSCF> showlogs power
```

**24. Check that there are no new errors.**

```
XSCF> showlogs error
```

- In case an abnormality is encountered, take appropriate maintenance action and contact your authorized service representative.
- If no abnormality is found, proceed to [Step 25](#).

**25. Move position of the key switch on the operator panel from Service to Lock.**

# Booting From a WAN Boot Server

To support booting the Sun SPARC Enterprise M8000/M9000 server from a WAN boot server:

1. **Install the Solaris 10 11/06 OS on the WAN boot server.**
2. **Copy the `wanboot` executable from that release to the appropriate location on the install server. If you need further instructions, refer to the *Solaris 10 Installation Guide: Network-Based Installations* or refer to:**

<http://docs.sun.com/app/docs/doc/817-5504/6mkv4nh65?a=view>

3. **Create a WAN boot miniroot from the Solaris 10 11/06 OS. If you need further instructions, refer to:**

<http://docs.sun.com/app/docs/doc/817-5504/6mkv4nh63?a=view>

If you do not upgrade the `wanboot` executable, the Sun SPARC Enterprise M8000/M9000 server will panic, with messages similar to the following:

```
krtld: load_exec: fail to expand cpu/$CPU
krtld: error during initial load/link phase
panic - boot: exitto64 returned from client program
```

See <http://docs.sun.com/app/docs/doc/817-5504/6mkv4nh5i?a=view> for more information on WAN boot.

## Abbreviated Man Page for `getflashimage`

In XCP 105x, the command `getflashimage` is available, which can be used to download firmware images in place of the XSCF Web.

---

# Software Documentation Updates

This section contains late-breaking information on the software documentation that became known after the documentation set was published.

**TABLE 5** Software Documentation Updates (1 of 3)

Document	Page Number	Change
All Sun SPARC Enterprise M4000/M5000/M8000/M9000 servers documentation		All DVD references are now referred to as CD-RW/DVD-RW.
<i>Sun SPARC Enterprise M4000/M5000/M8000/M9000 Servers XSCF User's Guide</i>	Page 9-5	The list of web browsers supported by the XSCF Web include: <ul style="list-style-type: none"><li>• Microsoft Internet Explorer 6.0 or later</li><li>• Firefox 2.0 or later</li><li>• Mozilla 1.7 or later</li><li>• Netscape Navigator 7.1 or later</li></ul>
<i>Sun SPARC Enterprise M4000/M5000/M8000/M9000 Servers XSCF User's Guide</i>	Page 2-2	Setup Summary by the XSCF Shell section. Add the following Note: <p>Note: In addition to the standard <i>default</i> login, Sun SPARC Enterprise M4000/M5000/M8000/M9000 servers are delivered with a temporary login called <i>admin</i> to enable remote initial login, through a serial port. Its privileges are fixed to useradmin and cannot be changed. You cannot log in as temporary admin using the standard UNIX user name and password authentication or SSH public key authentication. It has no password, and one cannot be added for it.</p> <p>The temporary admin account is disabled after someone logs in as the default user, or after someone logged in as temporary admin has successfully added the first user with valid password and privileges.</p> <p>If, before the default login is used, you cannot log in as temporary admin, you can determine if someone else has done so by executing the following command:</p> <pre>showuser -l</pre>



**TABLE 5** Software Documentation Updates (2 of 3)

Document	Page Number	Change
<i>Sun SPARC Enterprise M4000/M5000/M8000/M9000 Servers XSCF User's Guide</i>	Page D-5	Frequently Asked Questions (FAQ) in "Troubleshooting XSCF and FAQ" The option for OS dump is not "request" but "panic". Correction: 1. First, execute the reset(8) command with the panic option from the XSCF Shell.
<i>Sun SPARC Enterprise M4000/M5000/M8000/M9000 Servers Administration Guide</i>	Page 2	Solaris OS Software section. The following Note has been added: Note: The XSCF firmware requires that all domains have the SUNWscmnr and SUNWscmu.u packages. Since the Core System, Reduced Network, and Minimal System versions of the Solaris OS do not automatically install these packages, you must do so on any domains that do not already have them.
<i>Sun SPARC Enterprise M4000/M5000/M8000/M9000 Servers Administration Guide</i>	Page 8	Logging in to the System section. Add the following Note: Note: In addition to the standard <i>default</i> login, Sun SPARC Enterprise M4000/M5000/M8000/M9000 servers are delivered with a temporary login called <i>admin</i> to enable remote initial login, through a serial port. Its privileges are fixed to useradmin and cannot be changed. You cannot log in as temporary admin using the standard UNIX user name and password authentication or SSH public key authentication. It has no password, and one cannot be added for it.  The temporary admin account is disabled after someone logs in as the default user, or after someone logged in as temporary admin has successfully added the first user with valid password and privileges.  If, before the default login is used, you cannot log in as temporary admin, you can determine if someone else has done so by executing the following command: <pre>showuser -l</pre>
<i>Sun SPARC Enterprise M4000/M5000/M8000/M9000 Servers Administration Guide</i>	Page 66	Audit Configuration section. Add the Note at the end of Audit File Tools: Note: This chapter describes how to set up archived log files. The SP Security (SUNWspec) Package gives administrators and service providers a means to view those files. To display the XSCF audit log files archived to your server, use the viewauditapp(8) and mergeaudit(8) off-platform audit file viewers.

**TABLE 5** Software Documentation Updates (3 of 3)

<b>Document</b>	<b>Page Number</b>	<b>Change</b>
<i>Sun SPARC Enterprise M4000/M5000/M8000/M9000 Servers XSCF Reference Manual</i>	setpowerupdate(8) manpage	The following description is added in EXTENDED DESCRIPTION: When the power is turned on from the operator panel, the wait time and warm-up time that you set are ignored. If you have set these times and wish for the system to use them at startup, perform the <code>poweron(8)</code> command.
<i>Sun SPARC Enterprise M4000/M5000/M8000/M9000 Servers XSCF Reference Manual</i>	setupplatform(8) manpage	The <code>-p user</code> option requires <code>useradm</code> privileges. The <code>-p network</code> option requires either <code>platadm</code> or <code>fieldeng</code> privileges. The <code>-p altitude</code> option requires <code>platadm</code> privileges. The <code>-p timezone</code> option requires <code>platadm</code> privileges.