Sun SPARC® Enterprise M4000/M5000 Servers Product Notes

For XCP Version 1041

Sun Microsystems, Inc.
www.sun.com

Part No. 820-2221-13
November 2007, Revision A

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

Please
Recycle

Contents

Preface

These Product Notes contain important and late-breaking information about XCP 1041 and the Sun SPARC® Enterprise M4000/M5000 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 M4000/M5000 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 M4000/M5000 servers.

Obtaining the Latest Patches

The mandatory Solaris patches for the SPARC Enterprise M4000/M5000 servers should be preinstalled on your system. See "Solaris Patch Information" on page 2 for the list of patches.

Note – Each patch ID listed includes a revision level, shown as a two-digit suffix. Check `SunSolve.Sun.COM` for the latest patch revision.

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.

Information about the Sun Connection Update Manager is available in the *Sun Update Connection System 1.0.8 Administration Guide* which is located at the following web site:

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

Complete the following steps 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.

Note – 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.

Two options are available for obtaining the patches:

- "Using the `smpatch` CLI to Obtain Patches" on page viii
- "Using the Update Manager GUI to Obtain Patches" on page x.

Using the `smpatch` CLI to Obtain Patches

1. **Copy the file `/usr/lib/breg/data/RegistrationProfile.properties` to the `/tmp` directory.**
2. **Edit the file `/tmp/RegistrationProfile.properties` to add your user name, password, and if necessary, a network proxy.**
3. **Register your system by entering the command:**

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

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

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

5. **Install the patch, as follows.**

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

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

```
# smpatch update -i xxxxxx-xx
```

   b. **To unzip the patch, enter:**

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

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

6. **After installing the patch, you might be required to restart the system.**

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

```
# init 6
```

```
# shutdown -i6
```

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

```
# smpatch analyse
```

8. **Download and install the patches by entering the command:**

```
# smpatch update
```

9. **If any of the patches requires a system restart, see** Step 6.

The patch installation is now complete.

Using the Update Manager GUI to Obtain Patches

1. **Copy the file** `/usr/lib/breg/data/RegistrationProfile.properties` **to the** `/tmp` **directory.**
2. **Edit the file** `/tmp/RegistrationProfile.properties` **to add your user name, password, and if necessary, a network proxy.**
3. **Register your system by entering the command:**

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

4. **Launch the Update Manager:**

```
# /usr/bin/updatemanager
```

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

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

6. **If patch** *xxxxxx-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`.

7. **Continue by entering:**

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

8. **Follow the installation instructions in the file** `/var/sadm/spool/`*xxxxxx-xx*`/README.`*xxxxxx-xx*.

9. **After installing** *xxxxxx-xx*, **you might be required to restart the system.**

   Follow the instructions in Update Manager for restarting, or use the shutdown or init 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 instead.

10. **Launch the Update Manager again, and select the Enterprise Server collection.**
11. **If the Update Manager does not automatically start a new analysis, click the `Check for Updates` button.**
12. **Select any patches that are listed by checking the boxes to the left of the patch IDs.**
13. **Click the `Install` button.**

    Update Manager will download and install the patches.
14. **If any of the patches requires a system restart, see** Step 9**.**

    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 servers are provided in the Sun SPARC Enterprise M4000/M5000 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 M4000/M5000 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 M4000/M5000 Servers Product Notes for XCP Version 1041, part number 820-2221-13

Sun SPARC Enterprise M4000/M5000 Servers Product Notes

This document includes these sections:

Supported Firmware and Software Versions

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

- XSCF Control Package (XCP) 1041 or later is preinstalled in your server.
- The first version of the Solaris™ Operating System (OS) to support these servers is the Solaris 10 11/06 OS.
- These servers also support Solaris 10 8/07 OS.

Caution – CR ID 6534471: The system may 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 19.

- XCP 1041 supports the Sun External I/O Expansion Unit.
- This XCP release does not support the Capacity-On-Demand (COD) feature.

Note – It is required that all SPARC Enterprise M4000/M5000 servers be upgraded to XCP 1050 in order to support adding future COD Right To Use (RTU) licenses. Contact your local Service Representative for assistance.

If you plan to boot your SPARC Enterprise M4000/M5000 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 25 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 M4000/M5000 servers running Solaris 10 11/06 OS. These patches are not required for servers running Solaris 10 8/07 OS.

Note – Each patch ID listed below includes 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.

Install the patches in the following order:

- 118833-36

  After installing patch 118833-36, reboot your domain before proceeding.

- 125100-08

  Install version 125100-08 at minimum. See the 125100-08 README file for a list of other patch requirements.

- 123839-07
- 120068-03
- 125424-01
- 118918-24
- 120222-21
- 125127-01

After installing patch 125127-01, reboot your domain before proceeding.

- 125670-02
- 125166-05

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 9, "Solaris Issues and Workarounds" on page 19.

- The XSCF web browser interface, also known as the browser user interface (BUI), has limited availability in this release. It can be used for importing the XSCF firmware and it supports the snapshot Full log set collection function. Use the command-line interface (CLI) instead on the Service Processor and the domains for other activities.
- 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 per I/O boat
  - No more than four cards in a Sun SPARC Enterprise M4000 server
  - No more than eight cards in a Sun SPARC Enterprise M5000 server
- 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`.

Hardware Installation and Service Issues

This section describes hardware-specific issues and workarounds.

Specific Issues and Workarounds

TABLE 1 lists known issues for which a defect change request ID has been assigned. The table also lists possible workarounds.

TABLE 1 Hardware Issues and Workarounds

CR ID	Description	Workaround
6433420	The domain console might display a Mailbox timeout or IOCB interrupt timeout error during boot.	Issue a `reset-all` 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.
6498780	On the Sun SPARC Enterprise M4000/M5000 servers, the OpenBoot™ PROM (OBP) might not detect the on-board disk (HDD) boot device. Performing a `boot disk` results in a console message: `Can't locate boot device`	The PCI or PCI-X plug-in adapter card might not be seated correctly. Reseat the card in slot 0 of the IOU.

U320 PCIe SCSI Card

U320 PCIe SCSI card, part numbers 375-3357-01/02, is not supported in PCI cassettes for SPARC Enterprise M4000/M5000 servers. Customers must use 375-3357-03 or later.

DIMM Replacement

The DIMMs are cold FRU replacement components. The entire server must be powered off and the power cords disconnected to replace the DIMMs.

You can mount up to 4 memory boards on the SPARC Enterprise M4000 server and up to 8 memory boards on the SPARC Enterprise M5000 server. The DIMMs on the memory board are grouped into group A and group B.

Here are the DIMM mount conditions:

DIMM mounting rules:

- Four(4) DIMMs per group can be mounted.
- Capacity of the DIMMs in group A must be equal to or larger than the capacity of the DIMMs in group B.
- The capacity of the DIMMs in group B must be equal to or less than the capacity of the DIMMs in group A. DIMMs in group B are optional.
- For both groups, DIMMs must be of the same capacity and rank within a group. DIMMs of different capacity cannot be mixed in a group.

Installing the PCI Cassette

The following changes belong in the *Sun SPARC Enterprise M4000/M5000 Servers Service Manual*.

Caution – *Do not force* the PCI cassette into a slot. Doing so can cause damage to the cassette and server.

1. **Align the PCI cassette on the gray plastic guide and install it into the slot.**
2. **Lock the lever into place to seat the cassette.**

Note – As the lever is moved pressure will build up, then just prior to locking into place the pressure will suddenly release. If the lever locks in place without the pressure release, the card may not be seated correctly. If this happens remove and reinstall the card.

Note – When you insert the PCI cassette using hot-swap, the cassette is automatically powered on and configured. Check that the power LED on the cassette is *lit* to be certain the cassette is correctly seated.

3. **Connect all cables to the PCI cassette and reconnect the cable management arm if necessary.**

Attaching End Caps to the Rails

The following information belongs in the *Sun SPARC Enterprise Equipment Rack Mounting Guide.*

After securing the cable management arm (CMA) to the Sun SPARC Enterprise M4000/M5000 server, attach the provided end caps to the rails.

1. **Secure the CMA to the server.**

   Refer to the *Sun SPARC Enterprise Equipment Rack Mounting Guide* for information on installing the CMA to the server.

2. **Attach the end caps onto the slide rails.**
   - For the Sun SPARC Enterprise M4000 server, an end cap is attached to both the right and left rear rails (FIGURE 1).
   - For the Sun SPARC Enterprise M5000 server, both end caps are attached to the rails on the same side to which the CMA is not attached (FIGURE 2).

Note – If the CMA is not used, attach all end caps to the rails of the server. The SPARC Enterprise M4000 server uses two end caps. The SPARC Enterprise M5000 server uses four end caps.

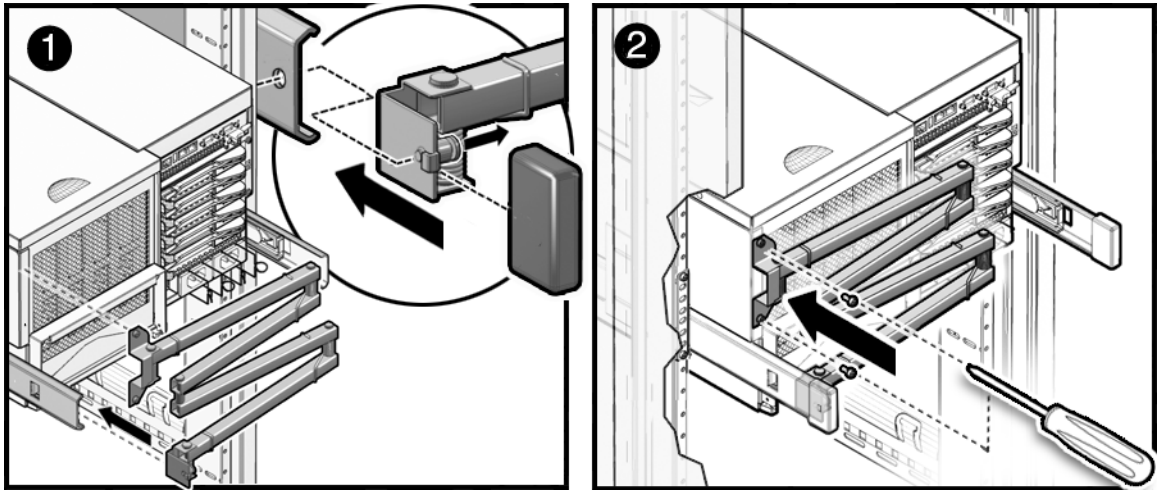

FIGURE 1 End Caps on the Sun SPARC Enterprise M4000 Slide Rails

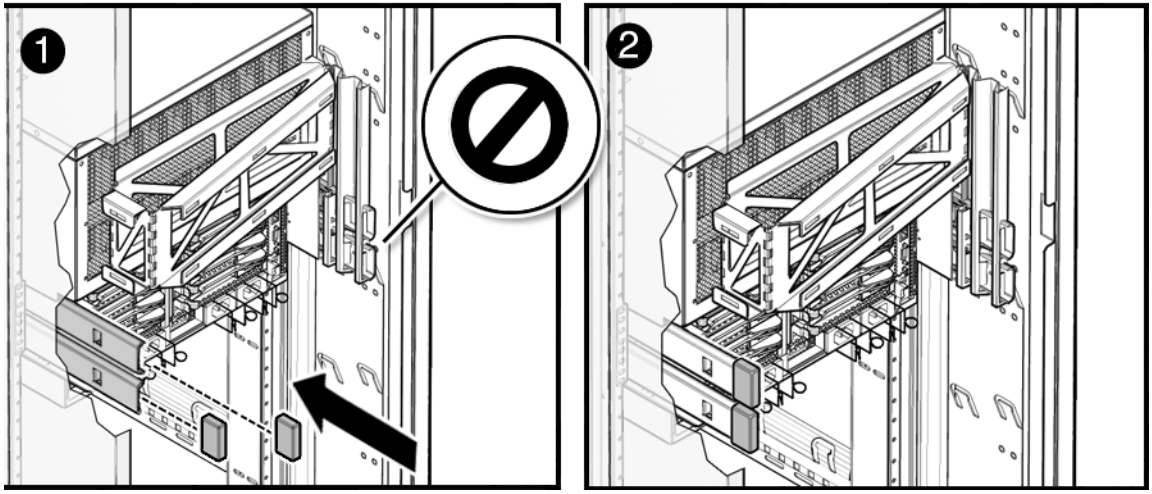

FIGURE 2 End Caps on the Left Rear of the Sun SPARC Enterprise M5000 Slide Rails

3. **Connect the power cables to the rear of the server and secure them with the cable retention clamps.**

Caution – Do not connect the power cables to a power source at this time.

4. **Run the power cables beneath the CMA and secure them in place with tie wraps.**

   The power cables and infiniband cables should hang loosely in a service loop behind the server or the CMA might not be able to fully retract.

Note – If additional attachment points are required to route the cables, install the optional bracket kit. See "Installing the Bracket Kit (Optional)" on page 9.

5. **Ensure that the server can slide in and out of the equipment rack without dislodging the power cables.**

   FIGURE 3 and FIGURE 4 shows how the CMA extends and retracts.

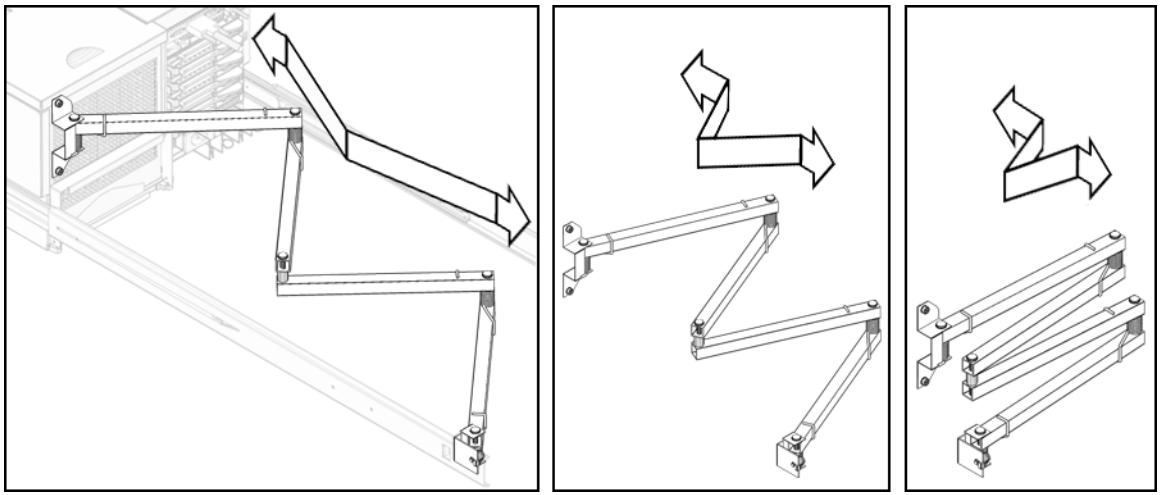

FIGURE 3 CMA Extended and Retracted on the Sun SPARC Enterprise M4000 Server

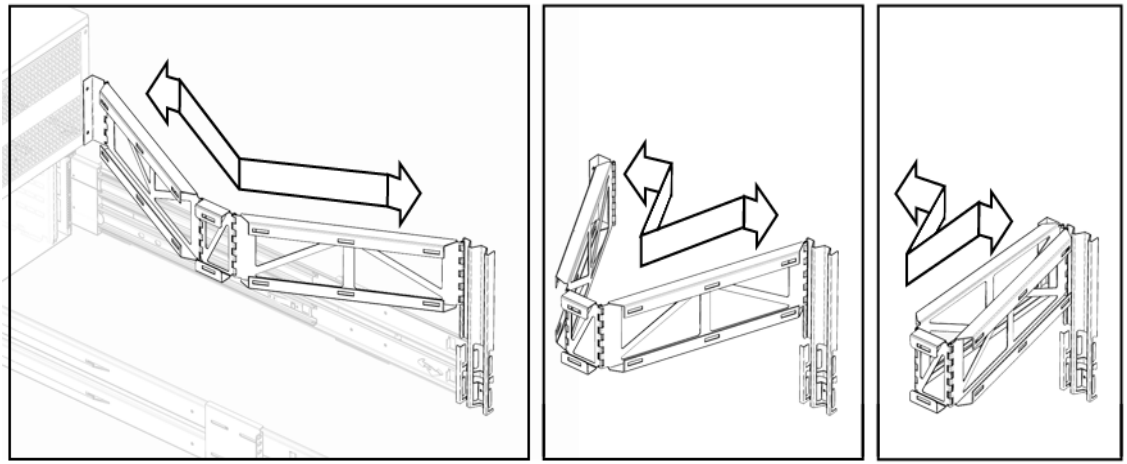

FIGURE 4 CMA Extended and Retracted on the Sun SPARC Enterprise M5000 Server

6. **Slide the server into the equipment rack.**
7. **Tighten the four (4) captive screws at the front of the server to secure the server in the equipment rack.**
8. **Replace the rack stabilizer to its original position.**

Installing the Bracket Kit (Optional)

If additional attachment points are required to route the cables, the bracket kit can be installed. The bracket kit includes the following:

- Two (2) brackets
- Four (4) m5 screws
- Four (4) cage nuts
- 14 velcro strips

These brackets can be used with or without the CMA for the Sun SPARC Enterprise M4000/M5000 servers.

1. **Extend the rack stabilizer.**
2. **Slide the server out of the rack several inches for access to the rear of the Sun Rack.**
3. **Position the cage nuts behind the threaded ears of the Sun Rack and insert the two (2) screws through the bracket and rack ear (FIGURE 5).**

   Brackets should be positioned near the top level of the server or slightly below it.

Note – Brackets can be installed one per side, one only (right or left side), or two on one side, as desired for convenience in cable management.

---

4. **Twist the cage nuts onto the screws from behind the rack ears.**

   The flat edges of the cage nuts should be aligned with the rack post to prevent the server from scraping against it.

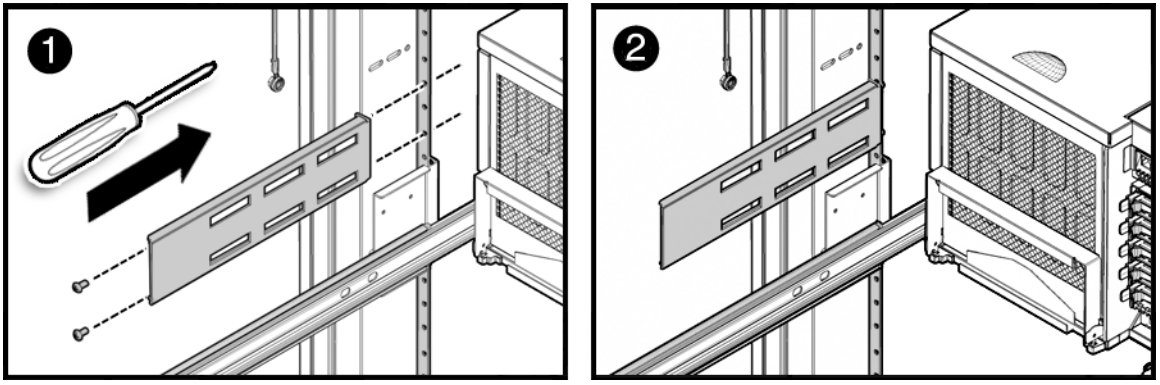

FIGURE 5 Installing the Bracket Kit in a Sun Rack 1000

5. **Insert velcro strips in the desired slots of the bracket to hold back cables.**

   Built-in cut-outs along the sides of the Sun Rack can also be used to insert velcro strips to hold back cables, as desired.

6. **Slide the server into the equipment rack.**

7. **Replace the rack stabilizer to its original position.**

Power Wiring Configurations

To ensure redundant power sourcing, use the provided wiring configurations for the Sun SPARC Enterprise M4000/M5000 servers in a Sun Rack 1000 38/42.

The Sun Rack 1000-38/42 can fit up to two modular power supply (MPS). Each MPS is two rack units tall. The MPS must always be installed into the bottom of the rack.

Note – The numbering in a Sun Rack reads from bottom to top and right to left.

TABLE 2 Wiring Connections for Six M4000 Servers with One 60A 3phase MPS

Server	M4000 PSU_1	M4000 PSU_0
M4000_5	MPS_0-A5	MPS_0-B5
M4000_4	MPS_0-A4	MPS_0-B4
M4000_3	MPS_0-A3	MPS_0-B3
M4000_2	MPS_0-A2	MPS_0-B2
M4000_1	MPS_0-A1	MPS_0-B1
M4000_0	MPS_0-A0	MPS_0-B0

TABLE 3 Wiring Connections for Six M4000 Servers with Two 30A 3phase MPS

Server	M4000 PSU_1	M4000 PSU_0
M4000_5	MPS_1-B5	MPS_1-A5
M4000_4	MPS_0-B4	MPS_0-A4
M4000_3	MPS_1-B3	MPS_1-A3
M4000_2	MPS_0-B2	MPS_0-A2
M4000_1	MPS_1-B1	MPS_1-A1
M4000_0	MPS_0-B0	MPS_0-A0

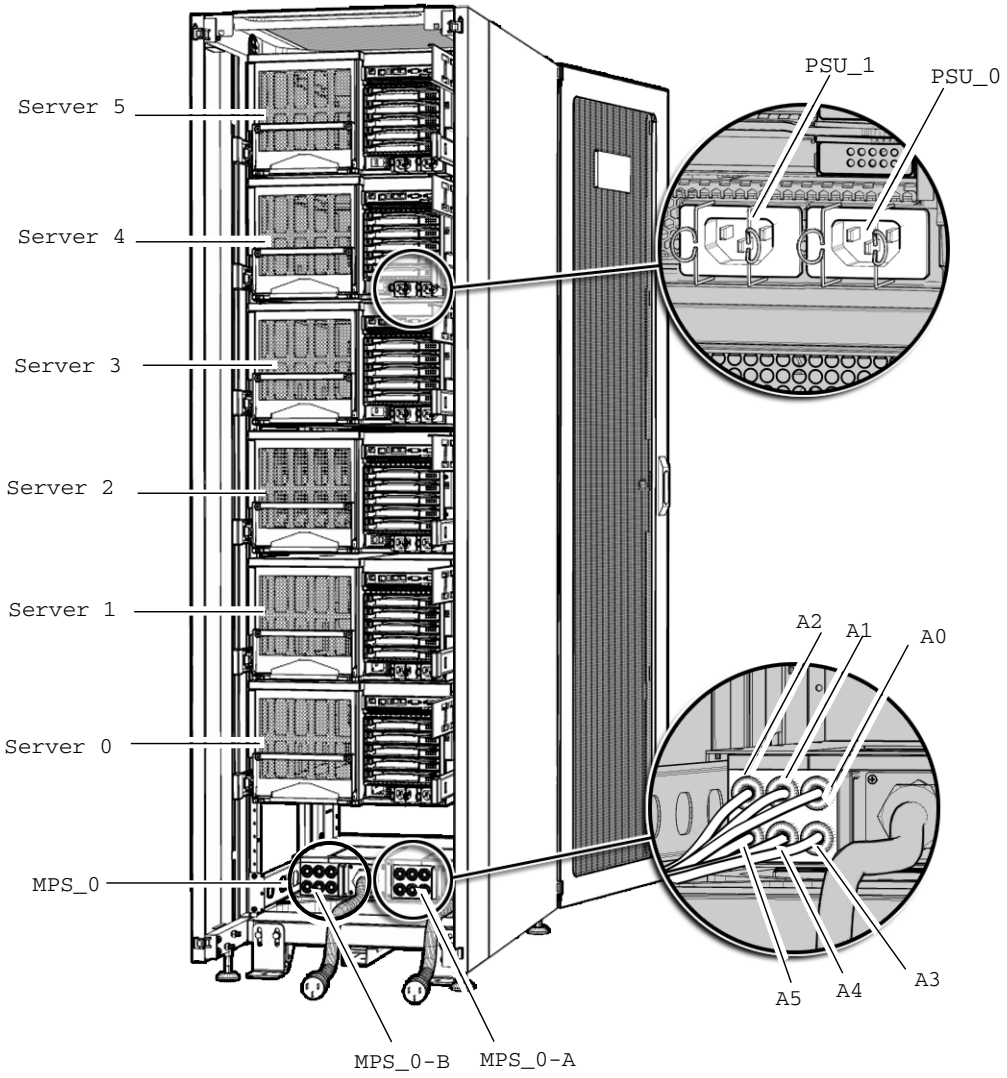

FIGURE 6 The Sun Rack 1000 With Six SPARC Enterprise M4000 Servers and One MPS

Note – The numbering in a Sun Rack reads from bottom to top and right to left.

TABLE 4 Wiring Connections for Three M5000 Servers with One 60A 3phase MPS

Server	M5000 PSU_3	M5000 PSU_2	M5000 PSU_1	M5000 PSU_0
M5000_2	MPS_0-B5	MPS_0-A5	MPS_0-B4	MPS_0-A4
M5000_1	MPS_0-B3	MPS_0-A3	MPS_0-B2	MPS_0-A2
M5000_0	MPS_0-B1	MPS_0-A1	MPS_0-B0	MPS_0-A0

TABLE 5 Wiring Connections for Three M5000 Servers with Two 30A 3phase MPS

Server	M5000 PSU_3	M5000 PSU_2	M5000 PSU_1	M5000 PSU_0
M5000_2	MPS_1-B2	MPS_1-A2	MPS_0-B2	MPS_0-A2
M5000_1	MPS_1-B1	MPS_1-A1	MPS_0-B1	MPS_0-A1
M5000_0	MPS_1-B0	MPS_1-A0	MPS_0-B0	MPS_0-A0

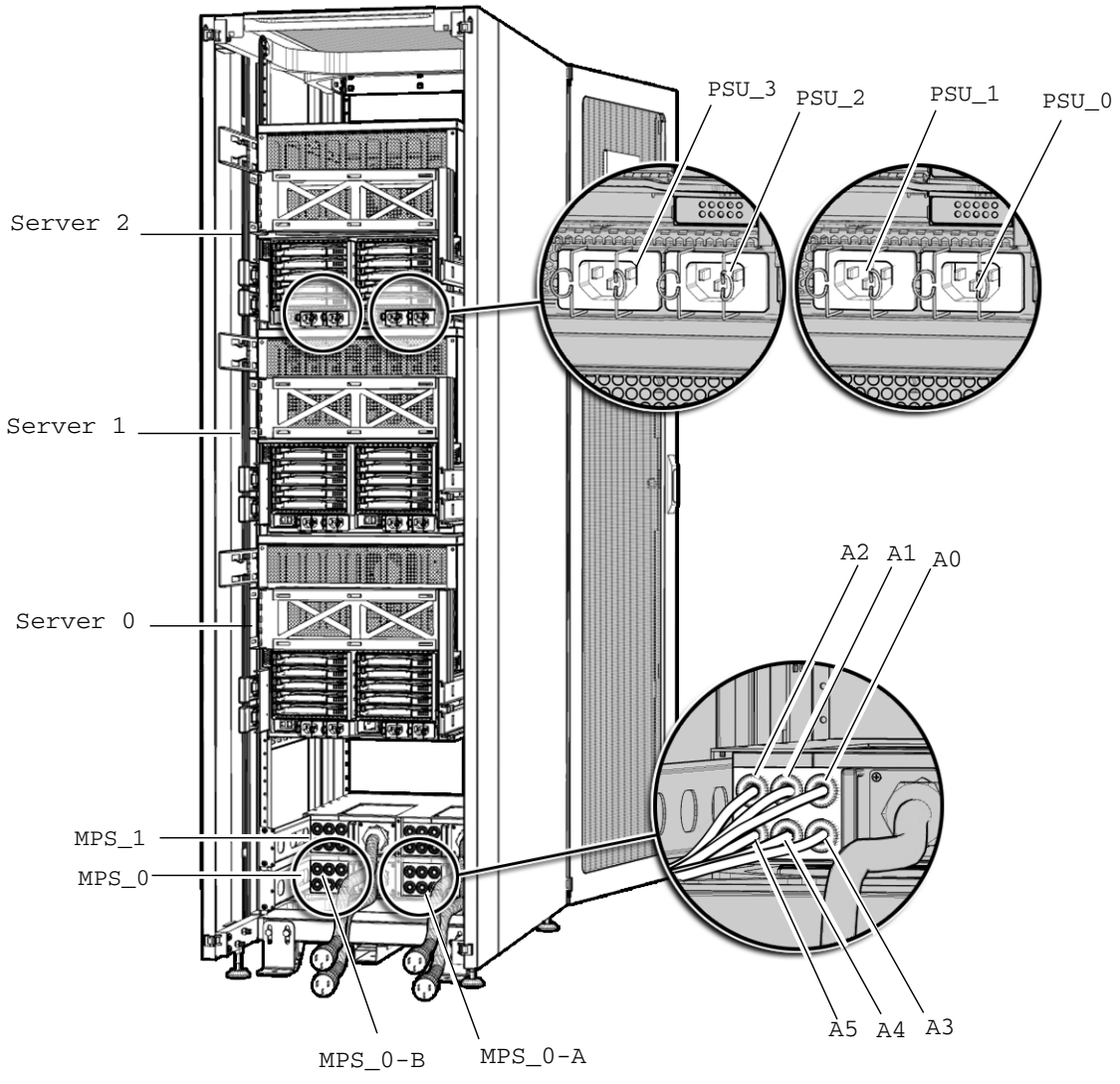

FIGURE 7 The Sun Rack 1000 With Three SPARC Enterprise M5000 Servers and Two MPS

Electrical Specifications

The following changes belong in the *SPARC Enterprise M4000/M5000 Servers Site Planning Guide* and the *SPARC Enterprise M4000/M5000 Servers Service Manual*.

TABLE 6 Midrange Servers Electrical Specifications

	SPARC Enterprise M4000	SPARC Enterprise M5000
Maximum current	24.0A at 100–127 VAC (12A/cord) 12.0A at 200–240 VAC (12A/cord)	48A at 100–127 VAC (12A/cord) 24A at 200–240 VAC (12A/cord)
Input voltage	100–127 VAC 200–240 VAC	100–127 VAC 200–240 VAC
Plug type	IEC 60320 C20 IEC 60309 16A 250V (All other locations except Japan, Korea, and Taiwan) NEMA L5-15 125V 15A (Americas and Taiwan) NEMA L6-20 250V 20A (Americas, Japan, Korea, and Taiwan)	IEC 60320 C20 IEC 60309 16A 250V (All other locations except Japan, Korea, Taiwan) NEMA L5-15 125V 15A (Americas and Taiwan) NEMA L6-20 250V 20A, Americas, Japan, Korea, and Taiwan)

Hardware Documentation Updates

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

TABLE 7 lists known documentation updates.

TABLE 7 Hardware Documentation Updates

Title	Page Number	Update
All SPARC Enterprise M4000/M5000 servers documentation		All DVD references are now referred to as CD-RW/DVD-RW.

TABLE 7 Hardware Documentation Updates

Title	Page Number	Update
		Updated glossary terms: ***External I/O Expansion Unit*** — A rack mountable 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/O boat*** — 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 M4000/M5000 Servers Site Planning Guide	1-7	TABLE 1-3 "Midrange Servers Physical Specifications" Correct numerical value of "Depth" is 810mm/31.9 in. for the SPARC Enterprise M4000/M5000 servers.
	2-4	TABLE 2-2 "Midrange Servers Electrical Specifications" See "Electrical Specifications" on page 15 for the changes.
Sun SPARC Enterprise M4000/M5000 Servers Service Manual	8-6	8.1.3, "Installing the PCI Cassette" See "Installing the PCI Cassette" on page 5 for the changes.
	11-7	11.2, "DIMM Replacement" See "DIMM Replacement" on page 4 for the changes.
	C-7	TABLE C-5 "Power Supply Feature" See "Electrical Specifications" on page 15 for the changes.
Sun SPARC Enterprise M4000/M5000 Servers Installation Manual	8-3	3.3, "Connecting the Administration Console". The RJ-11 connector at the top of Figure 3-1 was not labelled. The RJ-11 connector is not for connection to TNV circuits. Do not use this connector.
SPARC Enterprise M8000/M9000 Servers Overview Guide	Page 1-8	In Table 1-1, "Main Unit Specification" The following information will be added. Architecture: SPARCV9 architecture Platform groups: sun4u Platform names: SunW, SPARC-Enterprise

Software and Firmware Issues

This section describes specific software and firmware issues and workarounds.

XCP Issues and Workarounds

TABLE 8 lists known XCP issues and possible workarounds.

TABLE 8 XCP Issues and Workarounds *(1 of 2)*

CR ID	Description	Workaround
6486286	Domain console connection does not cancel shell when disconnected.	Always log out of the Solaris OS before exiting the console connection. If you accidentally disconnect the domain console without logging out: • Log in again to the domain console • Log out • Exit the console connection
6519877	All domains must be powered off before upgrading the XCP firmware.	Power off domains before using the `flashupdate` command to upgrade XCP firmware.
6521896	If you log in to the XSCF Unit while it is still booting, you may get a `bash$` prompt instead of the `XSCF>` prompt, and be unable to perform most operations.	Log out of the `bash$` prompt and wait for the XSCF Unit to finish booting.
6529635	The `showdomainstatus -a` command shows domain status as Powered Off, but the `showboards -a` command shows the domain is testing.	Use the `showboards` command to check the status of domain power. The `showdomainstatus` command takes a longer time to show the correct status.
6532036	Some commands that update configuration data take a relatively long time to execute.	Do not cancel `set*` commands. They appear to hang, but eventually complete in about 30 seconds.
6533158	The fault (`memory.block.ue`) is encountered and reported periodically	An uncorrectable error exists in a DIMM and the DIMM should be replaced.
6537345	When using the XSCF Web to import a firmware image, if the image is corrupted, the flashupdate command might later report an internal error.	Import a firmware image again. Reboot the XSCF Unit, then use the flashupdate command again to clear the internal error.

TABLE 8 XCP Issues and Workarounds *(2 of 2) (Continued)*

CR ID	Description	Workaround
6538564	Using the `rebootxscf` command might result in a process down error, and possibly an FMA event with MSG ID SCF-8005-NE	There is no workaround. Check for the availability of a patch for this defect.

6543260	The `showaudit all` command shows a long list of defaults in the policy section after the database is cleared.	To clear the non-existent user default settings, run the following commands:
		`setaudit -a opl=enable`
		`setaudit -a opl=default`

6565422	The `Latest communication` field in `showarchiving` is not updated regularly.	Disabling and re-enabling archiving refreshes the `Latest communication` field in `showarchiving` output.
6573729	When the snapshot CLI attempts to write to a USB stick that has write protect set results in an I/O error.	Do not attempt to use write-protected USB devices for collecting `snapshot`.
6577801	An incorrect domain state is reported. After the command `sendbreak to domain` is issued, `showdomainstatus` continues to show the state as `'Running'` when the domain is actually at 'ok' prompt.	There is no workaround. This is the side affect of the `sendbreak` operation.
6595501	If an invalid SMTP server is configured, a subsequent attempt to disable email service (using the `setemailreport` CLI) may block for up to 30 minutes.	Wait for the CLI to complete. The rest of the system will function normally during this time. • The CLI can also be aborted by ^C. Note that the operation (disabling `emailreport`) is completed, even if ^C is used. • `showemailreport` can be used to confirm that the service has been disabled.

Solaris Issues and Workarounds

TABLE 9 lists Solaris issues and possible workarounds.

TABLE 9 Solaris Issues and Workarounds *(1 of 5)*

CR ID	Description	Workaround
6348554	Using the `cfgadm -c disconnect` command on the following cards might hang the command: • SG-XPCIE2FC-QF4 Sun StorageTek Enterprise Class 4Gb Dual-Port Fibre Channel PCI-E HBA • SG-XPCIE1FC-QF4 Sun StorageTek Enterprise Class 4Gb Single-Port Fibre Channel PCI-E HBA • SG-XPCI2FC-QF4 Sun StorageTek Enterprise Class 4Gb Dual-Port Fibre Channel PCI-X HBA • SG-XPCI1FC-QF4 Sun StorageTek Enterprise Class 4Gb Single-Port Fibre Channel PCI-X HBA	Do not perform `cfgadm -c` disconnect operation on the affected cards.

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 `/kernel/drv/st.conf`:
		`tape-config-list=`
		`"SEAGATE DAT  DAT72-000",`
		`"SEAGATE_DAT____DAT72-000",`
		`"SEAGATE_DAT____DAT72-000";`
		`SEAGATE_DAT____DAT72-000=`
		`1,0x34,0,0x9639,4,0x00,0x8c,0x8c,`
		`0x8c,3;`
		There are four spaces between "SEAGATE DAT and DAT72-000.

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.	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 as follows: **# sttydefs -r console** **# sttydefs -a console -i "9600 hupcl opost onlcr crtscts" -f "9600"** This procedure is required only once.

TABLE 9 Solaris Issues and Workarounds *(2 of 5) (Continued)*

CR ID	Description	Workaround
6495303	The use of a PCIe Dual-Port Ultra320 SCSI controller card (SG-(X)PCIE2SCSIU320Z) in IOU Slot 1 on a SPARC Enterprise M4000/M5000 server may result in a system panic.	Do not use this card in IOU Slot 1 on a SPARC Enterprise M4000/M5000 server. This bug has been fixed in Solaris 10 8/07.
6498283	Using the DR `deleteboard` command while `psradm` 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 the `/etc/system` file and then reboot the system: `set pcie:pcie_aer_ce_mask = 0x2001` This bug has been fixed in Solaris 10 8/07.
6522017	Domains using the ZFS file system cannot use DR.	Set the maximum size of the ZFS ARC lower. For detailed assistance please contact Sun Service.
6530178	DR `addboard` command can hang. Once problem is observed, further DR operations are blocked. Recovery requires reboot of the domain.	There is no workaround. Check for the availability of a patch for this defect. This bug has been fixed in Solaris 10 8/07.
6531036	The error message `network initialization failed` can appear repeatedly after boot net installation.	There is no workaround.
6534471	Systems may panic/trap during normal operation.	Make sure you have the correct /etc/system parameter: `set heaplp_use_stlb=0` This bug has been fixed in Solaris 10 8/07.
6539909	Do not use the following I/O cards for network access when you are using the `boot net install` command to install the Solaris OS: • X4447A-Z/X4447A-Z, PCIe Quad-port Gigabit Ethernet Adapter UTP • X1027A-Z/X1027A-Z, PCIe Dual 10 Gigabit Ethernet Fiber XFP	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. This defect does not exist in Solaris 10 8/07.

TABLE 9 Solaris Issues and Workarounds *(3 of 5) (Continued)*

CR ID	Description	Workaround
6542632	Memory leak in PCIe module if driver attach fails.	There is no workaround. Check for the availability of a patch for this defect. This bug has been fixed in Solaris 10 8/07.
6545685	If the system has detected Correctible Memory Errors (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 `/etc/system`: `set mc-opl:mc_max_rewrite_loop = 20000`
6546188	The system panics when running hotplug (`cfgadm`) and DR operations (`addboard` and `deleteboard`) on: • X4447A-Z, PCI-e Quad-port Gigabit Ethernet Adapter UTP • X1027A-Z1, PCI-e Dual 10 Gigabit Ethernet Fiber XFP Low profile Adapter	There is no workaround. Check for the availability of a patch for this defect.
6551356	The system panics when running hotplug (cfgadm) 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: • X4447A-Z, PCI-e Quad-port Gigabit Ethernet Adapter UTP • X1027A-Z1, PCI-e Dual 10 Gigabit Ethernet Fiber XFP Low profile Adapter	Perform `cfgadm -c disconnect` to completely remove the card. After waiting at least 10 seconds, the card may be configured back into the domain using the `cfgadm -c configure` command.
6556742	The system panics when DiskSuite can not read the `metadb` during DR. This bug affects the following cards: • SG-XPCIE2FC-QF4, 4Gb PCI-e Dual-Port Fibre Channel HBA • SG-XPCIE1FC-QF4, 4Gb PCI-e Single-Port Fibre Channel HBA • SG-XPCI2FC-QF4, 4Gb PCI-X Dual-Port Fibre Channel HBA • SG-XPCI1FC-QF4, 4Gb PCI-X Single-Port Fibre Channel HBA	Panic can be avoided when a duplicated copy of the `metadb` is accessible via another Host Bus Adaptor. Or you can apply patch 125166-06.
6559504	Messages of the form "nxge: NOTICE: nxge_ipp_eccue_valid_check: rd_ptr = nnn wr_ptr = nnn" will be observed on the console.	These messages can be safely ignored.

TABLE 9 Solaris Issues and Workarounds *(4 of 5) (Continued)*

CR ID	Description	Workaround
6563785	Hot-plug operation with the following cards might fail if a card is disconnected and then immediately reconnected: • SG-XPCIE2SCSIU320Z Sun StorageTek PCI-E Dual-Port Ultra320 SCSI HBA • SGXPCI2SCSILM320-Z Sun StorageTek PCI Dual-Port Ultra320 SCSI HBA	After disconnecting a card, wait for a few seconds before re-connecting.
6564332	Hot-plug operations on Sun Crypto Accelerator (SCA)6000 cards can cause SPARC Enterprise M4000/M5000 servers to panic or hang.	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 will support hot-plug operations after the required bootstrap firmware upgrade has been performed.
6564934	Performing a DR `deleteboard` operation on a board which includes Permanent Memory when using the following network cards will result in broken connections: • X4447A-Z, PCI-e Quad-port Gigabit Ethernet Adapter UTP • X1027A-Z1, PCI-e Dual 10 Gigabit Ethernet Fiber XFP Low profile Adapter	Re-configure the affected network interfaces after the completion of the DR operation. For basic network configuration procedures, refer to the `if` man page for more information.
6568417	After a successful CPU DR `deleteboard` operation, the system panics when the following network interfaces are in use: • X4447A-Z, PCI-e Quad-port Gigabit Ethernet Adapter UTP • X1027A-Z1, PCI-e Dual 10 Gigabit Ethernet Fiber XFP Low profile Adapter	Add the following line to /etc/system and reboot the system: set ip:ip_soft_rings_cnt=0
6571370	Use of the following cards have been observed to cause data corruption in stress test under laboratory conditions: • X4447A-Z, PCI-e Quad-port Gigabit Ethernet Adapter UTP • X1027A-Z1, PCI-e Dual 10 Gigabit Ethernet Fiber XFP Low profile Adapter	Add the following line in `/etc/system` and reboot: `set nxge:nxge_rx_threshold_hi=0`

TABLE 9 Solaris Issues and Workarounds *(5 of 5) (Continued)*

CR ID	Description	Workaround
6589833	The DR `addboard` 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: • X4447A-Z, PCI-e Quad-port Gigabit Ethernet Adapter UTP • X1027A-Z1, PCI-e Dual 10 Gigabit Ethernet Fiber XFP Low profile Adapter	There is no workaround. Check for the availability of a patch for this defect.
6592302	Unsuccessful DR operation leaves memory partially configured.	To recover, add the board back to the domain with the `addboard` command, then retry the `deleteboard` 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 and executes the `deleteboard` command or `moveboard` command, the following notification will appear:

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

Booting From a WAN Boot Server

To support booting the SPARC Enterprise M4000/M5000 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 SPARC Enterprise M4000/M5000 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`

This section provides information on the abbreviated man page for `getflashimage`.

Synopsis

`getflashimage [-v] [[-q] -{y|n}] [-u` *user*`] [-p` *proxy* `[-t` *proxy_type*`]] ` *url*

`getflashimage -l`

`getflashimage [[-q] -{y|n}] [-d]`

`getflashimage -h`

Description

The `getflashimage` (8) command downloads a firmware image file for use by the `flashupdate` (8) command. If any previous image files of the firmware are present on the XSCF unit, they are deleted prior to downloading the new version. You must have `platadm` or `fieldeng` privileges to run this command.

Options and Operand

The following table describes the most commonly used options and operand.

`-d`	Deletes all previous firmware image files still on the XSCF unit, then exits.
`-l`	Lists firmware image files that are still on the XSCF unit, then exits.
`-u` *user*	Specifies the user name when logging in to a remote `ftp` or `http` server that requires authentication. You will be prompted for a password.
url	Specifies the URL of the firmware image to download.

Examples

CODE EXAMPLE 1 Downloading Using a User Name and Password

This example uses the optional `-u` *user* option.

```
XSCF> getflashimage -u jsmith \
http://imageserver/images/FFXCP1041.tar.gz
Existing versions:
        Version                 Size  Date
        FFXCP1040.tar.gz   46827123  Wed Mar 14 19:11:40 2007
Warning: About to delete old versions.
Continue? [y|n]: y
Password: [not echoed]
Removing FFXCP1040.tar.gz.
  0MB received
  1MB received
  2MB received
...
  43MB received
  44MB received
  45MB received
Download successful: 46827KB at 1016.857KB/s
```

CODE EXAMPLE 2 Listing Available Firmware Image Files

```
XSCF> getflashimage -l
Existing versions:
        Version                 Size  Date
        FFXCP1040.tar.gz   46827123  Wed Mar 14 19:11:40 2007
```

CODE EXAMPLE 3 Deleting All Previous Firmware Image Files

```
XSCF> getflashimage -d
Existing versions:
        Version                 Size  Date
        FFXCP1040.tar.gz   46827123  Wed Mar 14 19:11:40 2007
Warning: About to delete old versions.
Continue? [y|n]: y
Removing FFXCP1040.tar.gz.
```

Software Documentation Updates

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

TABLE 10 Software Documentation Updates

Document	Page Number	Change
All SPARC Enterprise M4000/M5000 servers documentation		All DVD references are now referred to as CD-RW/DVD-RW.
Sun SPARC Enterprise M4000/M5000/M8000/M9000 Servers XSCF User's Guide		The list of web browsers supported by the XSCF Web include: • Microsoft Internet Explorer 6.0 or later • Firefox 2.0 or later • Mozilla 1.7 or later • Netscape Navigator 7.1 or later
SPARC Enterprise M4000/M5000/M8000/ M9000 Servers Administration Guide	Page 2	Solaris OS Software section. The following Note has been added Note: The XSCF firmware requires that all domains have the SUNWsckmr and SUNWsckmu.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.
SPARC Enterprise M4000/M5000/M8000/M9000 Servers Dynamic Reconfiguration (DR) User's Guide	Page 2-15	Update 2.3: "Conditions and Settings Using Solaris OS" The following caution will be added: Caution: DR is not initially supported on domains with one of the following Solaris software groups installed: Core System, Reduced Network, or Minimal System. To use DR on such a domain, you first must install the SUNWsckmr and SUNWsckmu.u packages.
SPARC Enterprise M4000/M5000/M8000/M9000 Servers XSCF User's Guide	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.

TABLE 10 Software Documentation Updates *(Continued)*

Document	Page Number	Change
`ioxadm` (8) man page		The Privileges section of the `ioxadm` (8) man page is incomplete. The following description is complete: • With `platop` privileges, you can use the operands: `env`, `list`. • With `platadm` privileges, you can use the operands: `env`, `list`, `locator`, `poweroff`, `poweron`. • With `fieldeng` privileges, you can use the operands: `env`, `list`, `locator`, `poweroff`, `poweron`, `reset`, and `setled`.
`showldap` (8) man page `showlookup` (8) man page `showemailreport` (8) man page		The man pages for `showldap`, `showlookup`, and `showemailreport` do not state that these commands are available with the `fieldeng` privilege.
`getflashimage` (8) man page		In XCP104x, the new command `getflashimage` is available, which can be used to download firmware images in place of the XSCF Web. An abbreviated man page for `getflashimage` is included in "Abbreviated Man Page for `getflashimage`" on page 25.
`setaudit` (8) man page `showaudit` (8) man page		The `setaudit` and `showaudit` man pages are incorrect with respect to audit class information. The following are the audit classes and their values: ACS_SYSTEM 1 ACS_WRITE 2 ACS_READ 4 ACS_LOGIN 8 ACS_AUDIT 16 ACS_DOMAIN 32 ACS_USER 64 ACS_PLATFORM 128 ACS_MODES 256