Sun SPARC® Enterprise M8000/M9000 Servers Product Notes

For XCP Version 1050

Sun Microsystems, Inc.
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Contents

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 Patches

The mandatory Solaris patches for the Sun SPARC Enterprise M8000/M9000 servers should be preinstalled on your system. See "Solaris Patch Information" on page 2 for the list of patches.

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.

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*:

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

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 `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 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 each patch, as follows.**

   Patches can be downloaded through the Sun Connection Update Manager.

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

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

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

```
# 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.**
   - If no restart is necessary, proceed to Step 7.
   - If it is necessary 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.

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 typing 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 typing:**

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

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 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/

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Sun SPARC Enterprise M8000/M9000 Servers Product Notes for XCP Version 1050, part number 820-2852-11

Sun SPARC Enterprise M8000/M9000 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) 1050 or later is preinstalled in your server.
- The first version of the Solaris 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 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 7.

- This XCP release supports the Sun External I/O Expansion Unit.

- This XCP release supports the Capacity-On-Demand (COD) feature.

Note – All Sun SPARC Enterprise M8000/M9000 servers must 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 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 21 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 patches in the following order:**

1. 118833-36

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

2. 125100-08

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

3. 123839-07

4. 120068-03

5. 125424-01
6. 118918-24
7. 120222-21
8. 125127-01

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

9. 125670-02
10. 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 3 , "Solaris Issues and Workarounds" on page 7.

- 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 eight cards in a Sun SPARC Enterprise M8000/M9000 servers
- Do not use the CD-RW/DVD-RW drive unit and the TAPE drive unit at the same time.
- For this XCP release, the XSCF web browser interface, also known as the browser interface (BUI), supports neither the COD nor the External I/O Expansion Unit Manager feature.
- 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.

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 `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.
6557379	Power cables are not redundant on single power feed servers without the dual power feed option.	On servers that have single power feed, all power cables must be connected and powered on at all times.

Software and Firmware Issues

This section describes specific software and firmware issues and workarounds.

XCP Issues and Workarounds

TABLE 2 lists XCP issues and possible workarounds.

TABLE 2 XCP Issues and Workarounds

CR ID	Description	Workaround
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.
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, this results in many I/O errors on the console.	Do not attempt to use write-protected USB devices for collecting `snapshot`.
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.
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” on page 14.
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.

TABLE 2 XCP Issues and Workarounds *(Continued)*

CR ID	Description	Workaround

6590858	When the server is being installed, and the mainline switch is turned on for the first time, these error messages might be displayed:
	
	`XSCFU hang-up is detected`
	`XSCF process down detected`
	`DB synchronization timeout`
		Turn off the system AC power, then turn it on again.

6595501	If an invalid SMTP server is configured, a subsequent attempt to disable email service (using the `setemailreport` CLI) might block for up to 30 minutes.	Wait for the CLI to complete. The rest of the system functions 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.
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.
6600060	The XSCFU cannot act as a reliable NTP source for domains.	All domains should be configured to use an NTP source other than the XSCFU.

Solaris Issues and Workarounds.

TABLE 3 lists Solaris issues and possible workarounds.

TABLE 3 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 `/etc/fm/fmd/fmd.conf` containing the following lines;
		`setprop client.buflim 40m`
		`setprop client.memlim 40m`

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 `psradm` 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 `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.

TABLE 3 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 `/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 DAT72-00.

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: **# sttydefs -r console** **# sttydefs -a console -i "9600 hupcl opost onlcr crtscts" -f "9600"** This procedure is required only once.
6485555	On-board Gigabit Ethernet NVRAM corruption could occur due to a race condition.	If the NVRAM is corrupted, the device is not recognized as a network device. Contact your service representative to replace the FRU.
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 `/etc/system` and reboot the system: `set pcie:pcie_aer_ce_mask = 0x2001` This bug has been fixed in Solaris 10 8/07.
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.

TABLE 3 Solaris Issues and Workarounds *(Continued)*

CR ID	Description	Workaround
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 `/etc/system` to prevent the problem: `set pcie:pcie_aer_ce_mask = 0x31c1` This bug has been fixed in Solaris 10 8/07.
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.
6527781	The `cfgadm` command fails while moving the DVD/DAT drive between two domains.	There is no workaround. To reconfigure DVD/Tape drive, execute `reboot -r` from the domain exhibiting the problem. This bug has been fixed in Solaris 10 8/07.
6527811	The `showhardconf`(8) 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 `addboard` command can hang. Once the 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` appears repeatedly after a boot net installation.	There is no workaround.
6534471	Systems might panic/trap during normal operation.	Make sure you have the correct `/etc/system` parameter and reboot the system: `set heaplp_use_stlb=0` 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. This defect only applies to Solaris 10 11/06.	There is no workaround. Check for the availability of a patch for this defect.

TABLE 3 Solaris Issues and Workarounds *(Continued)*

CR ID	Description	Workaround
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.
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 `/etc/system` and reboot the system: `set mc-opl:mc_max_rewrite_loop = 20000`
6546188	The system panics when running hot-plug (`cfgadm`) and DR operations (`addboard` and `deleteboard`) on the following cards: • 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 hot-plug (`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	DO NOT use `cfgadm -c unconfigure` to disconnect the I/O card. Use `cfgadm -c disconnect` to completely remove the card. After waiting at least 10 seconds, the card might be configured back into the domain using the `cfgadm -c configure` command.
6556742	The system panics when DiskSuite cannot 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.

TABLE 3 Solaris Issues and Workarounds *(Continued)*

CR ID	Description	Workaround
6559504	Messages of the form `nxge: NOTICE: nxge_ipp_eccue_valid_check: rd_ptr = nnn wr_ptr = nnn` will be observed on the console with the following cards: • X4447A-Z, PCI-e Quad-port Gigabit Ethernet Adapter UTP • X1027A-Z1, PCI-e Dual 10 Gigabit Ethernet Fiber XFP Low profile Adapter	These messages can be safely ignored.
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 Sun SPARC Enterprise M8000/M9000 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 supports 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 results 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 `ifconfig` 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 the system: `set nxge:nxge_rx_threshold_hi=0`

TABLE 3 Solaris Issues and Workarounds *(Continued)*

CR ID	Description	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.
6583035	After using the `addfru` or `replacefru` command to hotplug a CMU, further DR operations might fail with a misleading message regarding the board being unavailable for DR.	When performing the `addfru` and `replacefru` commands, it is mandatory to run diagnostic tests. If you forget to run the diagnostic tests during `addfru/addfru` then either run `testsb` to test the CMU or remove the CMU/IOU with the `deletefru` command and then use the `addfru` command with the diagnostic tests.
6584984	`The busstat`(1M) command with `-w` option might cause domains to reboot.	There is no workaround. Do not use `busstat`(1M) command with `-w` option on pcmu_p.
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.
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 an `addboard -d` command and 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, 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

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. Reseting 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. 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 4, "Software Documentation Updates" on page 22.

Upgrading to XCP 1050

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 1050 upgrade image by using the command line** `getflashimage`**.**

```
XSCF> getflashimage http://server.domain.com/XCP1050/images/DCXCP1050.tar.gz
```

   The BUI on XSCFU#0 can also be used to upload the XCP 1050 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 1050, proceed to the next step.

```
XSCF> flashupdate -c update -m xcp -s 1050
```

Specify the XCP version to be updated. In this example, it is 1050.

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): 1050
XCP1 (Current): 1050
XSCF#1 (Standby)
XCP0 (Reserve): 0000
XCP1 (Current): 0000
```

If the Current and Reserve banks on XSCF#0 do not indicate XCP revision 1050, 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, 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 1050
```

Specify the XCP version to be updated. In this example, it is 1050. 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): 1050
XCP1 (Current): 1050
XSCF#0 (Standby)
XCP0 (Reserve): 1050
XCP1 (Current): 1050
```

If the Current and Reserve banks on XSCF#0 do not indicate XCP revision 1050, 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 105*x*, 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 4 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.
Sun SPARC Enterprise M4000/M5000/M8000/M9000 Servers XSCF User's Guide	Page 9-5	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
Sun SPARC Enterprise M4000/M5000/M8000/M9000 Servers XSCF User's Guide	Page 2-2	Setup Summary by the XSCF Shell section. Add the following Note: Note: In addition to the standard *default* login, Sun SPARC Enterprise M4000/M5000/M8000/M9000 servers are delivered with a temporary login called *admin* 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: `showuser -l`

TABLE 4 Software Documentation Updates *(2 of 3)*

Document	Page Number	Change
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.
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 Administration Guide	Page 8	Logging in to the System section. Add the following Note: Note: In addition to the standard *default* login, Sun SPARC Enterprise M4000/M5000/M8000/M9000 servers are delivered with a temporary login called *admin* 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: `showuser -l`

TABLE 4 Software Documentation Updates *(3 of 3)*

Document	Page Number	Change
SPARC Enterprise M4000/M5000/M8000/M9000 Servers Administration Guide	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.

SPARC Enterprise M4000/M5000/M8000/M9000 Servers XSCF Reference Manual	`switchscf`(8) manpage	The `switchscf`(8) command now supports the `-n`/`-q`/`-y` options. As a result of this support, the SYNOPSIS is changed as follows:
		`switchscf [[-q] -{y|n}] -t {Active | Standby} [-f]`
		`switchscf -h`
		Each meaning of new options is as follows:
		`-n`: Automatically answers 'n' (no) to all prompts.
		`-q`: Suppresses all messages to stdout, including prompts.
		`-y`: Automatically answers 'y' (yes) to all prompts.