



# SPARC Enterprise T2000 Server Product Notes

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# Preface

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These product notes contain late-breaking information about the SPARC Enterprise T2000 server hardware, software, or documentation errata.

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**Note** – The information indicated in this document will be updated as needed. Check the following web site on a regular basis for the availability of a newer edition when using the SPARC Enterprise T2000 server.

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

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## Software Resources

The Oracle Solaris Operating System (Solaris OS) and Sun Java Enterprise System software are preinstalled on your SPARC Enterprise T2000 server.

For the important information about preinstalled software, visit the following web sites:

- Global Site

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

- Japanese Site

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

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**Note** – For the information on how to get the patch releases, contact your sales representative.

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# Downloading Documentation

The documentation set of SPARC Enterprise T2000 server is available on the following web sites:

- Global Site

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

- North American Site

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

- Japanese Site

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

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**Note** – Information in these product notes supersedes the information in the SPARC Enterprise T2000 server documentation set.

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# Documentation Feedback

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

[http://www.fujitsu.com/global/contact/computing/sparce\\_index.html](http://www.fujitsu.com/global/contact/computing/sparce_index.html)



# Important Information About the SPARC Enterprise T2000 Server

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These product notes contain important and late-breaking information about the SPARC Enterprise T2000 server.

The following sections are included:

- [“Supported Versions of Firmware and Software” on page 1](#)
- [“Patch Information” on page 2](#)
- [“Known Issues and Workarounds” on page 2](#)
- [“Documentation Errata” on page 20](#)

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**Note** – Information in these product notes supersedes the information in the SPARC Enterprise T2000 documentation set.

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## Supported Versions of Firmware and Software

These are the minimum supported versions of firmware and software for this release of the SPARC Enterprise T2000 server:

- Solaris 10 11/06 Operating System
- Sun Java Enterprise System software (Java ES 2005Q4)
- System firmware 6.3.5, which includes Advanced Lights Out Manager (ALOM) CMT 1.3.5 software and OpenBoot 4.25.3 firmware.

## Updating System Firmware

For details on how to update your system firmware, see Appendix A of the *SPARC Enterprise T2000 Server Installation Guide*. For more details on the `flashupdate` command, see the *Advanced Lights Out Management (ALOM) CMT v1.x Guide*.

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**Note** – Updating your system firmware also updates your ALOM CMT software and OpenBoot firmware.

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## Patch Information

### Mandatory Patches

At this time, there are no mandatory patches for SPARC Enterprise T2000 servers.

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**Note** – Contact a sales representative or a certified service engineer for the latest patch information.

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### Patches for Option Cards

If you add option cards to your server, refer to the documentation and README files for each card to determine if additional patches are needed.

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## Known Issues and Workarounds

This section describes issues that are known to exist for this release of the SPARC Enterprise T2000 server.

# Mandatory `/etc/system` File Entry

This section describes mandatory `/etc/system` file entries that must be listed in this file to ensure the optimal functionality of the server.

The following entry must be in the `/etc/system` file:

```
set pcie:pcie_aer_ce_mask=0x2001
```

## ▼ To Check and Create the Mandatory `/etc/system` File Entries

Perform this procedure in the following circumstances:

- Check that the entries are present before deploying the server.
- Create the entries after the Solaris OS is installed or updated.

1. **Log in as superuser.**
2. **Check the `/etc/system` file to see if the mandatory lines are in the file.**

```
# more /etc/system
*ident "@(#)system      1.18 05/06/27 SMI" /* SVR4 1.5 */
*
* SYSTEM SPECIFICATION FILE
.
.
.
set pcie:pcie_aer_ce_mask=0x2001
.
```

3. **If the entry is not there, add it:**
  - a. **Use an editor to edit the `/etc/system` file and add entry.**
  - b. **Reboot the server.**

# Hardware Installation and Service Issues

## Notes on the Use of 200V Power Supply

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

For details of the power cord type for your server, contact your authorized service engineer.

## General Functionality Issues

### RAID Function

A hardware RAID function is provided as standard in SPARC Enterprise T2000 servers. However, with regard to data protection, reliability, and serviceability, Fujitsu does not support this function.

Fujitsu recommends use of software RAID functions for internal disks as specified below:

- PRIMECLUSTER GDS
- Solaris Volume Manager (included in Solaris OS)

### False IO-Bridge Errors May Be Reported at Startup (CR 6792174)

This bug can occasionally cause POST to report a false PCIE-to-PCIX bridge chip error the first time a system starts up. If this occurs, the system will reset. When it restarts, POST will behave correctly.

The following shows an example of the report POST records in such cases:

```
2007-05-15 02:48:48.778 0:0>ERROR: TEST = IO-Bridge unit 1 Config MB
bridges
2007-05-15 02:48:48.854 0:0>H/W under test = IOBD/PCIE,
IOBD/IO-BRIDGE, MB/CMP0
2007-05-15 02:48:49.007 0:0>Repair Instructions: Replace items in
order listed by 'H/W under test' above.
2007-05-15 02:48:49.236 0:0>MSG = IO-Bridge Error - 64bit Reg
Register,
    address 000000f6.00400004
    expected 00000000.00000000
    observed 00000000.000001ff
    wrote 00000000.00000000
2007-05-15 02:48:49.412 0:0>END_ERROR
```

**Workaround:** No workaround is needed. The system will behave correctly when it restarts.

## Running SunVTS CPU Tests ... Causes Shutdown Due to Watchdog Timeout (CR 6498483)

Coolthreads servers running SunVTS CPU tests have encountered Solaris watchdog timeouts leading to system shutdown.

**Workaround:** Set the ALOM CMT `sys_autorestart` variable to none while running SunVTS, so that ALOM CMT issues a warning message but does not reset the server.

## Solaris Predictive Self-Healing (PSH) Feature

The Solaris PSH implementation is not fully implemented in this release of the product. If a PSH message with a message ID of FMD-8000-OW occurs, refer to the instructions at: <http://www.sun.com/msg/FMD-8000-OW>.

## Supported Sun Explorer Utility Version

The SPARC Enterprise T2000 server is supported by the Sun Explorer 5.7 (or later) data collection utility, but is not supported by earlier releases of the utility. Installing Sun Cluster or Sun Net Connect software from the preinstalled Java ES package

could automatically install an earlier version of the utility on your system. After installing any of the Java ES software, determine whether an earlier version of the Sun Explorer product has been installed on your system by typing the following:

```
# pkginfo -l SUNWexplo
```

If an earlier version exists, uninstall it and install version 5.7, or later.

## Correctable Memory Errors in POST Could Be Misleading (CR 6479408)

POST error messages regarding unsupported memory configurations can be misleading. In situations where memory rank 0 (zero) is fully populated, the following message can be safely ignored.

```
ERROR: Using unsupported memory configuration
```

## Erroneous Fault Messages Displayed After a Solaris OS JumpStart Installation

If you perform a Solaris JumpStart installation of a SPARC Enterprise T2000 server, the server will display erroneous PSH fault messages at boot time. To correct this situation, you must install the SPARC Enterprise T2000 server mandatory patches and make changes to the `/etc/system` file. In addition, you should also clear the PSH and ALOM CMT fault logs to prevent the erroneous messages from being reported again. The steps to do this are described in [“To Configure the System After a JumpStart Installation” on page 7](#).

Example of Erroneous Fault Messages at boot time:

```
SUNW-MSG-ID: SUN4-8000-0Y, TYPE: Fault, VER: 1, SEVERITY: Critical
EVENT-TIME: Fri Jan 27 22:17:36 GMT 2006
PLATFORM: SUNW,SPARC-Enterprise-T2000, CSN: -, HOSTNAME: xx
SOURCE: eft, REV: 1.13
EVENT-ID: d79b51d1-aca0-c786-aa50-c8f35ea0fba3
DESC: A problem was detected in the PCI-Express subsystem.
Refer to http://sun.com/msg/SUN4-8000-0Y for more information.
AUTO-RESPONSE: One or more device instances may be disabled
IMPACT: Loss of services provided by the device instances
associated with this fault
REC-ACTION: Schedule a repair procedure to replace the affected
device. Use fmdump -v -u EVENT_ID to identify the device or contact
support.
```

Example of displaying the messages with the fmdump command:

```
# fmdump -v -u d79b51d1-aca0-c786-aa50-c8f35ea0fba3
TIME UUID SUNW-MSG-ID
Jan 27 22:01:58.8757 d79b51d1-aca0-c786-aa50-c8f35ea0fba3 SUN4-
8000-0Y 100% fault.io.fire.asic
FRU: hc://product-id=SUNW,SPARC-Enterprise-T2000/component=IOBD
rsrc: hc:///ioboard=0/hostbridge=0/pciexrc=0
Jan 27 22:17:36.5980 d79b51d1-aca0-c786-aa50-c8f35ea0fba3 SUN4-
8000-0Y
100% fault.io.fire.asic
FRU: hc://product-id=SUNW,SPARC-Enterprise-T2000/component=IOBD
rsrc: hc:///ioboard=0/hostbridge=0/pciexrc=0
```

## ▼ To Configure the System After a JumpStart Installation

This procedure describes how to configure the SPARC Enterprise T2000 server after a JumpStart installation so that erroneous fault messages are not reported.

1. Install the mandatory patches on the server.
2. Update the `/etc/system` file.  
See [“Mandatory /etc/system File Entry”](#) on page 3.
3. Use the `fmadm faulty` command to list the UUID of each erroneous fault.

```
# fmadm faulty
```

4. Clear each fault that was listed in the preceding step.

```
# fmadm repair d79b51d1-aca0-c786-aa50-c8f35ea0fba3
```

5. Clear the persistent logs as shown in the following example.

```
# cd /var/fm/fmd
# rm e* f* c*/eft/* r*/*
```

6. Reset the Solaris PSH modules as shown.

```
# fmadm reset cpumem-diagnosis
# fmadm reset cpumem-retire
# fmadm reset eft
# fmadm reset io-retire
```

7. Reset the faults at the ALOM CMT prompt:

- a. Gain access to the ALOM CMT `sc>` prompt.

Refer to the *Advanced Lights Out Management (ALOM) CMT v1.x Guide* for instructions.

- b. Run the `showfaults -v` command to see the UUID of any faults.

```
sc> showfaults -v
ID Time                FRU                Fault
0 Jan 27 22:01 hc://product-id=SUNW,SPARC-Enterprise-T2000/
component=IOBD Host detected fault, MSGID:
SUN4-8000-0Y UUID: d79b51d1-aca0-c786-aa50-c8f35ea0fba3
```

- c. Run the `clearfault` command with the UUID provided in the `showfaults` output:

```
sc> clearfault d79b51d1-aca0-c786-aa50-c8f35ea0fba3
Clearing fault from all indicted FRUs...
Fault cleared.
```

If faults continue to be reported, the server might have a faulty component. Refer to the *SPARC Enterprise T2000 Server Service Manual* for diagnostic procedures.



# Specific Issues and Workarounds

TABLE 1 lists known issues. The table also lists possible workarounds for these issues.

**TABLE 1** Specific Issues and Workarounds

CR ID	Description	Workaround
6997177	When you use the <code>console</code> command of ALOM to log in to OS via the virtual console device, and then use an editor such as <code>vi</code> to cut & paste a large amount of data to a file, that virtual console may hang.	<p><b>Note - Fixed in System Firmware 6.7.12 or later.</b></p> <p>None.</p> <p>If you would like to cut &amp; paste a large amount of data to a file on OS, log in to OS via TELNET or SSH and use the relevant editor.</p> <p>When this event occurred, use the OS shutdown command to normally stop the system and then execute the ALOM reset operation.</p> <p>For the execution example, see <a href="#">“Virtual Console May Hang When You Using vi Editor (CR 6997177)” on page 15.</a></p>
6949047	<p>After the <code>shutdown -i5</code> command was executed, though Solaris OS normally terminates, system power-off process may fail to complete.</p> <p>Event example in failure:</p> <pre># shutdown -i5 -g0 -y</pre> <p>Shutdown started. Thu May 19 10:32:49 JST 2011</p> <pre>Changing to init state 5 - please wait Broadcast Message from root (console) on XXXXXX Thu May 19 10:32:49... THE SYSTEM erie0 IS BEING SHUT DOWN NOW ! ! ! Log off now or risk your files being damaged</pre> <pre># svc.startd: The system is coming down. Please wait. svc.startd: 106 system services are now being stopped. May 19 10:33:38 XXXXXX syslogd: going down on signal 15 svc.startd: The system is down. syncing file systems... done</pre>	<p><b>Note - Fixed in System Firmware 6.7.12 or later.</b></p> <p>This can be avoided according to the following procedures.</p> <ol style="list-style-type: none"> <li>1. From OS, execute the <code>shutdown -i0 (init 0)</code> command</li> <li>2. From ALOM, execute the <code>poweroff</code> command</li> </ol> <p>This event can be recovered by executing the <code>poweroff</code> command from ALOM.</p>

**TABLE 1** Specific Issues and Workarounds (*Continued*)

CR ID	Description	Workaround
6929662	After you execute the <code>prtdiag</code> command, the output may stop at the screen of environmental data.	<b>Note - Fixed in System Firmware 6.7.11 or later.</b> None. After the ALOM reset, you can recover by restarting <code>picld</code> . If not recovered, restart the Solaris OS.
6886045	Start of the FMA (Fault Management Architecture) service may not complete. And due to the derived event, the Solaris OS shutdown may not terminate. For details, see <a href="#">“Start of FMA Service May Not Complete (CR 6886045)”</a> on page 16.	<b>Note - Fixed in System Firmware 6.7.8 or later.</b> None.
6875992	During system operation, an event may repeatedly occur that the server internal fan shows the failed state (log: "SYS_FAN at FT0/FMx has FAILED.") and then gets back to normal (log: "SYS_FAN at FT0/FM1 is OK.") one second later. For details, see <a href="#">“Repeatedly Occurs an Event of Internal Fan Status Error Which Gets Back to Normal One Second Later (CR 6875992)”</a> on page 18.	<b>Note - Fixed in System Firmware 6.7.8 or later.</b> Ignore the output message.
6861787	When you use the download command of System Firmware ( <code>sysfwdownload</code> ) with the <code>-u</code> option, the host does not start automatically after the update completes.	<b>Note -Fixed in System Firmware 6.7.8 or later.</b> None. Execute the <code>poweron</code> command and manually start the host.
6835857	After the system power-on, when Solaris OS started, the "chip reset error!" message may appear and Solaris OS may fail to start.	<b>Note -Fixed in System Firmware 6.7.8 or later.</b> Power off the system, wait for about 180 seconds, and then power on the system.
6834363	While Solaris OS is running, when you use the <code>poweroff</code> command of the system controller to order the system power-off, panic occurs in Solaris OS and the system power stops.	<b>Note -Fixed in System Firmware 6.7.8 or later.</b> Use the <code>shutdown</code> command to stop Solaris OS and then execute the system power-off order of the system controller.

**TABLE 1** Specific Issues and Workarounds (Continued)

CR ID	Description	Workaround
6781815	<p>After the ALOM reset or the power cord removal and insertion, when the server powered on, Solaris OS startup at the <code>ok</code> prompt of OBP (OpenBoot PROM) using the <code>boot</code> command may fail.</p> <p>Error output example:</p> <pre>{0} ok boot ERROR: All device paths in boot-device have failed. (*) {0} ok</pre> <p>It cannot refer to the device paths that configured in the OBP environmental variable <code>boot-device</code> and fails to start Solaris OS.</p>	<p><b>Note - Fixed in System Firmware 6.7.5 or later.</b></p> <p>After the ALOM reset or the power cord removal and insertion, when you power on the server, check the OBP environmental variable. Especially, in case the OBP environmental variable <code>use-nvramrc?</code> has been set to true, it is necessary in advance of starting the Solaris OS to see the <code>ok</code> prompt and check that <code>use-nvramrc?</code> has been set to true and then execute the <code>boot</code> command.</p> <p>Confirmation example:</p> <pre>{0} ok printenv use-nvramrc? use-nvramrc? = true {0} ok</pre>
6757066	<p>After downgrading System Firmware 6.6.x or later to System Firmware 6.3.X or earlier, the <code>showhost</code> command output displays the firmware information prior to the downgrade. It has no impact on the operation, as system is actually working with the downgraded firmware. Ignore the display.</p> <p><code>showhost</code> output example:</p> <pre>sc&gt; showhost SPARC-Enterprise-T2000 System Firmware 6.3.12 2008/04/06 15:49</pre> <p>Host flash versions:</p> <pre>Hypervisor 1.3.4 2007/03/28 06:03 OBP 4.25.12 2008/03/23 13:27 POST 4.25.12 2008/03/23 13:52 Hypervisor 1.6.7.a 2008/09/29 09:29 &lt;-- POST 4.29.0.a 2008/09/15 12:26 &lt;--</pre>	None.
6676561	<p>When Solaris OS is started, BAD TRAP might occur and the Solaris OS might panic.</p> <p>Message example:</p> <pre>panic[cpu12]/thread=300044434c0: BAD TRAP: type=31 rp=2a101c83320 addr=8 mmu_fsr=0 occurred in module "&lt;unknown&gt;" due to a NULL pointer dereference</pre>	<p><b>Note - Fixed in System Firmware 6.6.7 or later.</b></p> <p>None.</p>

**TABLE 1** Specific Issues and Workarounds (*Continued*)

CR ID	Description	Workaround
6542956	False warnings may occur in the <code>showenvironment</code> table because the <code>showenvironment</code> command, to provide timely results, does not perform value averaging. Thus, it could appear that a sensor or environmental reading exceeded a threshold and did not generate a fault. If this occurs, system logs and the <code>showenvironment</code> table will not match.	None. If no warning or error message appears in the system logs, this WARNING status can be safely ignored.
6538717	The <code>showfru</code> command reports Micron DIMMs as Seagate DIMMs. For example: [LE2]FRU_PROM at MB/CMP0/CH0/R0/D0/SEEPROM /SPD/TimeStamp: MON APR 17 12:00:00 2006 /SPD/Description: DDR2 SDRAM, 1024 MB /SPD/Manufacture Location: /SPD/Vendor: Seagate <--should say Micron	None.
6520334	If SSH is not enabled, executing the <code>ssh-keygen -l</code> command to print keys generates the following error message:  <code>sc&gt; ssh-keygen -l -t rsa</code> Fingerprint file cant be opened error 380003 This error message should read as follows: ssh is not enabled.	Enable SSH.
6508432	Many correctable errors (CE) could occur, and although these errors are correctable, the system could panic.	Add the following entry to <code>/etc/system</code> to avoid the problem: <code>set pcie:pcie_aer_ce_mask = 0x2001</code> See <a href="#">“Mandatory /etc/system File Entry” on page 3</a> .
6500293 6502078	After executing <code>boot -r</code> , the <code>prtdiag -v</code> command. might not display host bus adaptors on SPARC Enterprise T1000 or T2000 servers.	Reboot the system without reconfiguration.
6472072	When a panic dump is taken by <code>Break-D</code> of ALOM, the panic message displays as follows: Unrecoverable hardware error.	Hardware error does not occur. This message can be safely ignored.
6408619	The server fails to boot from a Linux tftp boot server on the network.	Use a Solaris OS tftp boot server.
6405137	Intermittently, upon a system host power-on or reset, the system powers down with the following message: HV Abort: JBI Error (22) - PowerDown	Ignore this message. If the server hangs, reset the server from the system console.

**TABLE 1** Specific Issues and Workarounds (*Continued*)

CR ID	Description	Workaround
6381064	The system cannot boot if a Sun type-7 keyboard is plugged into one of the front USB ports.	Do not plug a type-7 keyboard into any of the front USB ports. Instead, use a different kind of keyboard, or use the rear USB ports.
6380987	When a grounding wire is connected to the grounding pin on the rear of the chassis, it is not possible to change rear blower without removing the ground connection.	If you need to replace the rear blower unit, and there is a grounding wire connected, remove the grounding wire to access the blower unit.
6368944	At the <code>ok</code> prompt, you can only enter text up to 114 characters.	Do not attempt to enter more than 114 characters at the <code>ok</code> prompt.
6368136	The ALOM <code>showlogs -p p</code> command displays a lot of data and could slow down the ALOM CLI.	To display the persistent log, use the following command instead: <code>showlogs -e x</code> where <i>x</i> specifies the number of lines (most recent log entries) to be displayed.
6347456	SunVTS memory tests, in rare cases, might log a warning message similar to the following when the ECC Error Monitor ( <code>errmon</code> ) option is enabled: WARNING: software error encountered while processing /ar/fm/fmd/errlog Additional-Information: end-offile reached	Do not enable the <code>errmon</code> option. The <code>errmon</code> option is disabled by default.
6344888	The system might generate erroneous fault messages with the following message IDs: SUN4-8000-ER SUN4-8000-OY SUN4-8000-75 SUN4-8000-D4	Make sure that the following line is in the <code>/etc/system</code> file: <code>set pcie:pcie_aer_ce_mask=0x2001</code> See <a href="#">“Mandatory /etc/system File Entry” on page 3</a> .
6343294	When a Solaris PSH error is detected and reported, the following erroneous message (in addition to the correct message) might be reported: msg = warning: bad proto frame implies corrupt/lost msg(s)	Ignore this message.
6342192	The server does not answer incoming calls on the ALOM CMT serial management port.	Do not connect a modem to the ALOM CMT serial port.
6341045	If a CPU or memory fault occurs while the server is running a trap handler, the system might panic with a bad trap instead of providing a CPU or memory fault message. In such cases, memory scrubbing is not performed.	Reset the server, and check the server for possible faults using the <code>showfaults</code> command.

**TABLE 1** Specific Issues and Workarounds (*Continued*)

CR ID	Description	Workaround
6338962	The system might hang after a panic when the <code>sync</code> command is used.	If the server hangs, reset the server from the system console.
6338365	Sun Net Connect 3.2.2 software does not monitor environmental alarms on the SPARC Enterprise T2000 server.	To receive notification that an environmental error has occurred, use the ALOM CMT <code>mgt_mailalert</code> feature to have ALOM CMT send an email when an event occurs. To check whether or not the environmental status of the server is ok, log on to ALOM CMT and run the <code>showfaults</code> command. To view a history of any events the server encountered, log on to ALOM CMT and run the <code>showlogs</code> command.
6336040	After a failed DIMM was cleared from the <code>asr</code> database, ALOM CMT might not properly reboot and returns the following error message: No valid MEMORY configuration	Wait 10 seconds after executing the <code>clearasrdb</code> command before executing the <code>resetsc</code> command. Refer to the <i>SPARC Enterprise T2000 Server Service Manual</i> for information about clearing DIMM-related faults.
6325271	The console history boot and run logs are the same.	At this time, no workaround is available for this issue.
6318208	Whenever the system resets, including after a POST reset, you might see the following message: Host system has shut down	Ignore this message. The system will be reset and display the OBP <code>ok</code> prompt as expected.
6317382	Typing unrecognized commands or words at the <code>ok</code> prompt causes the system to return the following erroneous error: ERROR: Last Trap and might hang the server.	Ignore this message. If the server hangs, reset the server from the system console.
6315238	Recycling AC power results in the following erroneous message: Preceding SC reset due to watchdog	Ignore this message.
6314590	Executing the ALOM CMT <code>break</code> and <code>go</code> commands might cause the system to hang.	If the console hangs, reset the system.
6312364	When accessing the host through the ALOM CMT <code>console</code> command, you might experience slow console response.	For optimum responsiveness, access the host through the host network interfaces as soon as the host has completed booting the Solaris OS.
6310384	The SunVTS USB keyboard test ( <code>usbtest</code> ) reports that a keyboard is present when there is no keyboard attached to the server.	Do not run the <code>usbtest</code> .

**TABLE 1** Specific Issues and Workarounds (*Continued*)

CR ID	Description	Workaround
n/a	X-option and replacement hard drives might not have an electronic disk label.	If you plan to replace or add a hard drive to your server, the drive might not have an electronic disk label and you must run the <code>format</code> utility to label the drive.
n/a	When the following devices are connected with <code>ttya</code> (Dsub 9pin) on SPARC Enterprise T1000 or T2000 servers, you cannot install the Solaris OS. <ul style="list-style-type: none"><li>• SH4124T (Dsub 9pin)</li><li>• Cisco Catalyst2960 (RJ-45)</li><li>• SPARC Enterprise T2000 (Dsub 9pin)</li></ul>	Install Solaris OS with nothing connected with <code>ttya</code> (Dsub 9pin).
n/a	When the following devices are connected with <code>ttya</code> (Dsub 9pin) on SPARC Enterprise T1000 or T2000 servers, you cannot log into the ALOM console. <ul style="list-style-type: none"><li>• SH4124T (Dsub 9pin)</li><li>• Cisco Catalyst2960 (RJ-45)</li><li>• SPARC Enterprise T2000 Server (Dsub 9pin)</li></ul>	Log into the ALOM console with nothing connected with <code>ttya</code> (Dsub 9pin). Or, connect to ALOM with an RJ-45 cable when you use it.

## Virtual Console May Hang When You Using vi Editor (CR 6997177)

This issue has been fixed in System Firmware 6.7.12 or later.

When you use the console command of ALOM to log in to OS via the virtual console device, and then use an editor such as `vi` to cut & paste a large amount of data to a file, that virtual console may hang.

### **Workaround:**

None. If you would like to cut & paste a large amount of data to a file on OS, log in to OS via TELNET or SSH and use the relevant editor.

When this event occurred, use the OS shutdown command to normally stop the system and then execute the ALOM reset operation.

System shutdown execution example:

1. Log in to Solaris OS via TELNET or SSH, and then execute `shutdown -i5` command to stop the system.

```
# shutdown -i5 -g0 -y
```

2. Execute `showplatform` command from ALOM to confirm that system is stopped.

```
sc> showplatform
SUNW,SPARC-Enterprise-T2000
Chassis Serial Number: 0546NNN0PL

Domain Status
-----
S0      OS Standby
sc>
```

3. Execute `resetsc` command from ALOM to reset ALOM.

```
sc> resetsc

Are you sure you want to reset the SC [y/n]? y
```

## Start of FMA Service May Not Complete (CR 6886045)

This issue has been fixed in System Firmware 6.7.8 or later.

Start of the FMA (Fault Management Architecture) service may not complete. And due to the derived event, the Solaris OS shutdown may not terminate.

### ■ Event 1

Start of the FMA service may not complete. When you executed the `svcs(1M)` command and the FMA service is offline, and if there exist two `fmd` processes as the `ps(1M)` command execution result, this event has been occurred.



Command output example of Event 1:

```
# svcs svc:/system/fmd:default
STATE          STIME          FMRI
offline*      14:44:42      svc:/system/fmd:default

# ps -ef | grep fmd
root  665  606  0 14:44:44 ?          0:00 /usr/lib/fm/fmd/fmd
root  606   7  0 14:44:43 ?          0:00 /usr/lib/fm/fmd/fmd
root 10898  476  0 08:58:47 console  0:00 grep fmd
```

#### ■ Event 2

After the above Event 1 occurred, when you execute the system shutdown and restart using the `shutdown(1M)` command and the `init(1M)` command, the Solaris OS shutdown may be suspended.

Example of Event 2 using the `shutdown -i0` option:

```
# /usr/sbin/shutdown -y -i0 -g0

Shutdown started.      Thu Oct 22 18:21:03 JST 2009

Changing to init state 6 - please wait
Broadcast Message from root (console) on xxxxx Thu Oct 22 18:21:...
THE SYSTEM xxxxx IS BEING SHUT DOWN NOW !!!
Log off now or risk your files being damaged
*snip*
svc.startd: The system is coming down. Please wait.
svc.startd: 105 system services are now being stopped.
Oct 22 18:22:13 xxxxx syslogd: going down on signal 15

<-- Shutdown stops at this point and does not shift to ok prompt.
```

To recover from this event, system restart by forced panic is required. If not recovered, reset ALOM.

**Workaround:** None.

## Repeatedly Occurs an Event of Internal Fan Status Error Which Gets Back to Normal One Second Later (CR 6875992)

This issue has been fixed in System Firmware 6.7.8 or later.

During system operation, an event may repeatedly occur that the server internal fan shows the failed state (log: "SYS\_FAN at FT0/FMx has FAILED.") and then gets back to normal (log: "SYS\_FAN at FT0/FM1 is OK.") one second later.

Output example (Excerpt from the showlogs command result of ALOM):

```
JAN 26 15:36:25: 00040066: "SYS_FAN at FT0/FM1 has FAILED."  
JAN 26 15:36:26: 00040065: "SYS_FAN at FT0/FM1 is OK."  
JAN 31 06:11:56: 00040066: "SYS_FAN at FT0/FM1 has FAILED."  
JAN 31 06:11:57: 00040065: "SYS_FAN at FT0/FM1 is OK."  
FEB 12 01:59:20: 00040066: "SYS_FAN at FT0/FM1 has FAILED."  
FEB 12 01:59:21: 00040065: "SYS_FAN at FT0/FM1 is OK."  
FEB 13 22:12:24: 00040066: "SYS_FAN at FT0/FM1 has FAILED."  
FEB 13 22:12:25: 00040065: "SYS_FAN at FT0/FM1 is OK."  
FEB 13 22:39:20: 00040066: "SYS_FAN at FT0/FM2 has FAILED."  
FEB 13 22:39:21: 00040065: "SYS_FAN at FT0/FM2 is OK."  
FEB 15 23:38:34: 00040066: "SYS_FAN at FT0/FM2 has FAILED."  
FEB 15 23:38:35: 00040065: "SYS_FAN at FT0/FM2 is OK."
```

Or, the "FAILED" status may be repeatedly appear as below.

Output example (Excerpt from the showlogs command result of ALOM):

```
AUG 24 05:05:09: 00040066: "SYS_FAN at FT0/FM0 has FAILED."  
AUG 24 05:08:21: 00040066: "SYS_FAN at FT0/FM1 has FAILED."  
AUG 24 05:09:35: 00040066: "SYS_FAN at FT0/FM2 has FAILED."  
AUG 24 05:47:41: 00040066: "SYS_FAN at FT0/FM0 has FAILED."  
AUG 24 05:50:40: 00040066: "SYS_FAN at FT0/FM0 has FAILED."  
AUG 24 06:11:53: 00040066: "SYS_FAN at FT0/FM1 has FAILED."  
AUG 24 06:55:30: 00040066: "SYS_FAN at FT0/FM2 has FAILED."  
AUG 24 07:30:58: 00040066: "SYS_FAN at FT0/FM0 has FAILED."  
AUG 24 07:36:15: 00040066: "SYS_FAN at FT0/FM0 has FAILED."  
AUG 24 07:45:20: 00040066: "SYS_FAN at FT0/FM1 has FAILED."
```

In each case, the showfaults and the showenvironment command results are normal.

The showfaults command result:

```
sc> showfaults -v  
Last POST run: MON JAN 04 02:10:35 2010  
POST status: Passed all devices  
  
No failures found in System  
  
sc>
```

The showenvironment command result:

```
sc> showenvironment  
:  
-----  
Fans Status:  
-----  
Fans (Speeds Revolution Per Minute):  
Sensor          Status          Speed   Warn   Low  
-----  
FT0/FM0         OK              3556   --    1920  
FT0/FM1         OK              3409   --    1920  
FT0/FM2         OK              3495   --    1920  
FT2             OK              2484   --    1900  
-----  
:
```

**Workaround:** Ignore the output message.

---

# Documentation Errata

## *Advanced Lights out Management (ALOM) CMT v1.3 Guide*

### Error Regarding Date Synchronization

There is an error in the documentation of the `showdate` command in published versions of the ALOM CMT guide. The erroneous text follows:

Displays the ALOM CMT date. The Solaris OS and ALOM CMT time are synchronized, but ALOM CMT time is expressed in Coordinated Universal Time (UTC) rather than local time.

The correct description is as follows:

Displays the ALOM CMT date. ALOM CMT time is expressed in Coordinated Universal Time (UTC) rather than local time. The Solaris OS and ALOM CMT time are not synchronized.

### Complement to the Description Regarding `diag_trigger`

In "To Use the `setsc` Command to Change the `diag_trigger` Variable," the following description is missing.

The Solaris OS restart using the Solaris OS shutdown command or the reset on OpenBoot PROM never runs diagnostics (POST). If you want to run POST, you need to perform system reset (`reset`) or system power off/on (`poweroff`, `poweron`) from ALOM.

# *SPARC Enterprise T2000 Server Installation Guide*

## Typographic Error in "To Boot the Solaris Operating System"

There might be a typographical error in the translated versions of the *SPARC Enterprise T2000 Server Installation Guide*. The error is not present in the English version.

The error is located in Chapter 3, in the section titled, "To Boot the Solaris Operating system", in the example in Step 2.

The incorrect example shows the following:

```
ok boot / pci@7c0/pci@0/pci@2/pci@0,2/LSILogic,sas@4/disk@0,0p
```

There is a space after the first / that should not be there.

The following line shows the correct example:

```
ok boot /pci@7c0/pci@0/pci@2/pci@0,2/LSILogic,sas@4/disk@0,0p
```

