

# Netra ft™ 1800 Software Release Notes

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*Solaris 2.6 Update 01*



THE NETWORK IS THE COMPUTER™

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# Summary

These Release Notes provide the following information:

- “Features of this Release and Other Information” on page 2 provides details of features incorporated from the previous multiple fixes patch, new features in this release, and Y2K compliance.
- “Identified Issues and Workarounds” on page 4 lists those issues identified in this software release and the associated workarounds, where applicable.
- “Documentation Errata” on page 6 describes the changes required to the Software Installation Guide.
- “To Check that the Solaris Installation/Upgrade was Successful” on page 9 tells you how to check that the Solaris software has been successfully implemented.

# Features of this Release and Other Information

This section documents the features provided by this release.

## New Features Incorporated in this Release

This release provides the following, including further refinements to some of the Netra ft 1800 6.7 Multiple Fixes Patch (108145-10) features:

Feature	Nature of improvement
Environmental Monitoring Subsystem Enhancements	This enhancement adds the following features: <ul style="list-style-type: none"><li>• Increased reliability of the monitoring subsystem by the use of persistent storage for monitoring module configurations.</li><li>• Utility to print power module status (<code>pmstat</code>).</li><li>• Latent fault checking for fans.</li></ul>
(Re-)Boot performance improvement	This improves the availability of the system under total system (software) failures. Primarily it comprises optimizations to POST (in the boot PROM), and reorganization and rationalization of the majority of CMS definition files
(CMS) control of Inter-CPUset network driver	This feature brings the ICN driver, which is a required component of Split Mode, under CMS control, thus allowing improved fault management and diagnosis of motherboards
Enhanced System Diagnostics	This feature comprises reworking of the CMS definitions to improve the diagnostics and fault attribution, particularly of cross-subsystem correlated faults and dependency related faults
PNET-32	This feature increases the number of instances of fault-tolerant networks that can be created on the Netra ft 1800 to 32
Realigned Solaris source base	The kernel source tree has been modified to incorporate all the kernel updates to HW3 up to, and including, KU17
Processor Re-integration performance improvements	Also known as Stop Dead Time enhancements, this feature reduces the time that the system is unavailable during the final stages of processor re-integration to less than 250ms for a 1P system
FPGA and PROM Update Management System	Provides a managed delivery vehicle for upgrades to firmware including Boot PROMs, Bridge FPGAs and RCP
Bridge 1	This FPGA delivers improved I/O performance of 50Mbytes per second, in addition to improvements to stop dead time and stealthy PRI time
OSdog	Delivers additional functionality for the OSdog that allows user applications to indicate system availability, and hence trigger a reset.  About OSdog: A watchdog-controlled alarm is stroked by the operating system (OSdog). If this timer expires the side is power cycled. There is a separate timer for each side, so failure of one OSdog will not bring the system down.

# Y2K Compliance – Solaris Y2K Patch Compatibility

This release of Solaris 2.6 incorporates the following Y2K patches, which have been tested on the Netra ft 1800:

Patch	Software	Description
105210-24	SunOS 5.6	libc and watchmalloc
105464-02	OpenWindows 3.6	Multiple xterm fixes
105566-07	CDE 1.2	Calendar manager
105621-19	SunOS 5.6	libbsm and cron
105800-05	SunOS 5.6	/usr/bin/admintool
106029-01	SunOS 5.6	/usr/ccs/bin/sccs and /usr/ccs/bin/make patch
106125-08	SunOS 5.6	/usr/sbin/patchadd and /usr/sbin/patchrm
106193-03	SunOS 5.6	sysid unzip
106828-01	SunOS 5.6	/usr/bin/date
107492-01	SunOS 5.6	runacct cannot update /var/adm/acct/sum/log

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**Note** – More recent releases of the above patches may be available on SunSolve.

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## Tested Patches Available from SunSolve

The following Y2K patches currently available on SunSolve have been tested with this update, but are not included as part of the update<sup>1</sup>:

Patch	Software	Description
105210-25	SunOS 5.6	libc and watchmalloc
106029-04	SunOS 5.6	/usr/ccs/bin/sccs and /usr/ccs/bin/make patch

1. All patches tested at time of document delivery.

## PCI Card Driver Patches Incorporated in this Release

The patch levels incorporated in the PCI card drivers distributed on the Solaris 2.6 Update 01 supplemental CD (part no. 704-7063-10) are:

- 106955-02 Sun SAI/P 2.0 PCI patch.
- 106922-06 Sun HSI/P 2.0 PCI patch.
- 107915-07 Sun ATM/P 4.0 PCI patch.
- 107778-04 Sun QFE 2.2 patch.

Check the SunSolve website for updated patches, where applicable.

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# Identified Issues and Workarounds

## Issue 4299249

	Description
<b>Synopsis</b>	Motherboard parent fails to come online when re-enabled after reboot
<b>Symptom</b>	If the system is booted with a motherboard disabled, and an attempt is made to re-enable the motherboard after boot, it may fail to enable
<b>Workaround/Action</b>	Reboot system with both motherboards enabled

## Issue 4298520

	Description
<b>Synopsis</b>	Upgrade to Solaris 2.6 Update 01 upgrade path broken – CMS state not maintained
<b>Symptom</b>	When upgrading the system to Solaris 2.6 Update 01 the CMS module configuration is not maintained
<b>Workaround/Action</b>	Re-enter module configuration after Solaris 2.6 Update 01 upgrade

## Issue 4298535

	Description
<b>Synopsis</b>	Patch C versions of split startup scripts not removed at upgrade to QU1
<b>Symptom</b>	Some out-of-date files may be installed (or not removed) in <code>/etc/rcS.d</code>
<b>Workaround/Action</b>	After the installation (fresh or upgrade), remove the following files, if present: <code>/etc/rcS.d/S74u4ftspllit</code> <code>/etc/rcS.d/S87u4ftspllitl2</code> <code>/etc/rcS.d/S89u4ftspllit</code>

## Issue 4299374

	Description
<b>Synopsis</b>	Dynamic changing of PRI parameters sometimes fails if new <code>max_cpu_usage &gt;= 90%</code>
<b>Symptom</b>	If the <code>max_cpu_usage</code> is changed to 90 or 100% from a lower value during CPUset integration, the CPUset integration program's resource utilization is not increased accordingly
<b>Workaround/Action</b>	Use <code>prionctl</code> to place the CIP process on the real-time queue: <code># prionctl -s -c RT -i pid xxxxx</code> where xxxxx is the process ID of the CPUSET Integration Program (CIP)

## Issue 429931

	Description
<b>Synopsis</b>	User settings for non-owned FRUs are lost on reboot of a split system
<b>Symptom</b>	On a split system if <code>cmsconfig</code> has been used to disable non-owned FRUs upon reboot, all the unowned FRUs that happen to be powered on will be marked <code>enable-failed</code>
<b>Workaround/Action</b>	None

## Issue 4225922

	Description
<b>Synopsis</b>	Need to recognize motherboard/CPUset failures caused by a motherboard reset
<b>Symptom</b>	If a motherboard is reset via the RCP during normal system operation, the motherboard and possibly other FRUs will be marked as faulty
<b>Workaround/Action</b>	Do not under any circumstance type <code>AAres/BBres</code> to the RCP whilst the system is operational

## Issue 4274912

	Description
<b>Synopsis</b>	I/O fault resulting in multiple UPA BERRs does not call I/O fix up
<b>Symptom</b>	The system panics if the target CPUset is powered off or un-injected during CPUset integration
<b>Workaround/Action</b>	Do not un-inject or power off a CPUset during integration

## Issue 4292279

	Description
<b>Synopsis</b>	Merge after CPUset power-down results in failed bridge
<b>Symptom</b>	During Split/Merge, if one of the CPUsets is powered off rather than shutdown cleanly, it is possible to get a failed bridge when the system is subsequently combined
<b>Workaround/Action</b>	After the return from the <code>splitadm</code> command: <ul style="list-style-type: none"><li>• Wait until the <code>ft_core</code> status is <code>fault_tolerant</code>.</li><li>• If the bridge (and consequently motherboard) has failed:<ul style="list-style-type: none"><li>• disable all the FRUs depending on the failed motherboard.</li><li>• disable the failed motherboard.</li><li>• <code>cmsrepairfru</code> the failed motherboard.</li><li>• enable the repaired motherboard.</li><li>• enable the CPU and all FRUs depending on the repaired motherboard.</li></ul></li></ul>

## Issue 4295927

	Description
<b>Synopsis</b>	SAIP driver from patch 106955-02 does not create the link <code>/dev/sad/saipN</code>
<b>Symptom</b>	SunVTS will not recognize SAIP devices because of this
<b>Workaround/Action</b>	Check the SunSolve website for the latest version of this patch, or contact your Sun Enterprise Services representative for further details of how to obtain the latest SAIP driver

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## Documentation Errata

This section provides details of changes applicable to the Netra ft 1800 Software Installation Guide for Solaris 2.6 Update 01 (part no. 806-3830-10).

### CD Part Number Correction

This correction applies to the following parts of the document:

- “Checking the Netra ft 1800 Installation Media” on page 6.
- Step 6 of “Installing the Netra ft 1800 Software” on page 11.
- Step 15 of “To Upgrade the Netra ft 1800 Software” on page 25.

Solaris 2.6 Software for Netra ft 1800 Update 01 CD part number should read as 704-7062-10, and not part number 704-7064-10.



# Applying Power to the RMM module at installation time

A change in behavior introduced by the Update 01 CPUset firmware (PROM version 28) is that power to the RMM module is not applied by the PROM when the system is initially powered up to the OpenBoot PROM `ok` prompt. To insert the installation CD it will first be necessary to apply power to the RMM module.

## Update to the Clean Installation Procedure

Step 6 of Chapter 3 “Performing a Clean Installation” on page 11 should read as follows:



- 6. For Local installation, place the Solaris 2.6 Software for Netra ft 1800 Update 01 Installation CD-ROM (part no. 704-7064-10) in the relevant CD-ROM drive.**

**If your system is using PROM version 28, you will need to follow steps a. and b. prior to inserting the Installation CD-ROM.**

- a. To apply power to the A-RMM module, type:**

```
ok rmm-aa
ok power-on-module
```

- b. To apply power to the B-RMM module, type:**

```
ok rmm-bb
ok power-on-module
```

- c. If you inserted the installation CD in the CD-ROM drive on side A (at the top of the system), type:**

```
ok boot a-cdrom0
```

- d. If you inserted the installation CD in the CD-ROM drive on side B (at the bottom of the system), type:**

```
ok boot b-cdrom0
```

## Update to the Upgrade Procedure

Step 15 of Chapter 4 “Upgrading from a Previous Software Version” on page 25 should read as follows:



- 15. For Local upgrade installation, place the Solaris 2.6 Software for Netra ft 1800 Update 01 Installation CD-ROM (part no. 704-7064-10) in the relevant CD-ROM drive.**

**If your system is using PROM version 28, you will need to follow steps a. and b. prior to inserting the Installation CD-ROM.**

- a. To apply power to the A-RMM module, type:**

```
ok rmm-aa
ok power-on-module
```

b. To apply power to the B-RMM module, type:

```
ok rmm-bb
ok power-on-module
```

c. If you inserted the installation CD in the CD-ROM drive on side A (at the top of the system), type:

```
ok boot a-cdrom0
```

d. If you inserted the installation CD in the CD-ROM drive on side B (at the bottom of the system), type:

```
ok boot b-cdrom0
```

## To Backout the QFE Driver Patch

Step 4 of Chapter 4 “Upgrading from a Previous Software Version” on page 22 should read as follows:

4. Back out any QFE Driver patches already on your system:

```
# cd /var/sadm/patch
# ./107778-04/backoutpatch 107778-04
```

## To Install the Veritas Patch When Performing an Upgrade

Step 28 of “To Re-enable SEVM Control” on page 31 should read as follows:

28. Install Veritas patch 105463-07 (or later version, if available) if it has not already been installed.

a. Check the current patch version. Type:

```
# showrev -p |grep 105463
Patch: 105463-07 Obsoletes: Requires: Incompatibles: Packages: SUNWvmmman,
SUNWvxva, SUNWvxvm
#
```

If the patch version is earlier than patch 105463-07, continue from step b below. If the patch version is -07 or later, continue from step 29.

b. Place the supplemental CD (part number 704-7063-10) in the drive.

c. Include patch 105463-07 (or later version, if available) from the supplemental CD. Type:

```
# cd /cdrom/s2_6_qu_1_netra_ft1800_suppcd/Patches
# patchadd 105463-07
```

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# To Check that the Solaris Installation/Upgrade was Successful

You can check that the Solaris software installation/upgrade was successful prior to installing the relevant PCI card drivers for your system.

1. **Log in as root.**

2. **Type `uname -v` and press Return to list the current OS version:**

```
# uname -v
107548-10
#
```

3. **If the installation/upgrade was successful, the system will display 107548-10 as the OS version and you can proceed with installation of the relevant PCI card drivers.**

If the installation/upgrade was unsuccessful, you should resolve any system faults and then re-install the software.

