# Netra ft™ 1800
# Interim Update Instructions

*Important – Read Before Installation*



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# Netra ft 1800
# Interim Update Instructions

This document contains important release information for the software for the Netra ft 1800.

**Caution –** Read this document before attempting to install the system.

This document contains the following information:

START

Pre-requisites met

N → Set system to req'd level

PREREQUISITES

Y

QFE patch installed

Y                    N

Backout patch 107778-04

Install patch 108181-01

Install patch 105181-14

Install patch 108145-10

Re-install patch 107778-04

Install patch 108181-01

Install patch 105181-14

Install patch 108145-10

Install Patch D

INSTALL PATCH D

FPGA at -08

Y

N

Install FPGAs

UPGRADE FPGAs

REBOOT

from previous page

```
                         ┌──────────────┐
                         │ Update PROMs │          UPGRADE PROMs
                         └──────────────┘

                    Y      ◇ OSdog      N
              ┌─────────────  required  ─────────────┐
              │              ◇                       │
      ┌───────────────┐                      ┌────────────────┐
      │ Enable OSdog  │                      │ Disable OSdog  │   OSDOG
      └───────────────┘                      └────────────────┘
              └─────────────────┬────────────────────┘

                         ┌──────────────┐
                         │ Power OFF    │          POWER RECYCLE
                         │ Cycle        │
                         └──────────────┘

                    ┌ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ┐
                        ┌──────────────┐
                    │   │ Verify patch D│   │
                        │ installation │
                    │   └──────────────┘   │
                        ┌──────────────┐
                    │   │ Verify FPGA  │   │
                        │ installation │
                    │   └──────────────┘   │
                        ┌──────────────┐
                    │   │ Verify PROM  │   │
                        │ installation │
                    │   └──────────────┘   │    VERIFICATION
                    └ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ┘

                         (    END    )
```
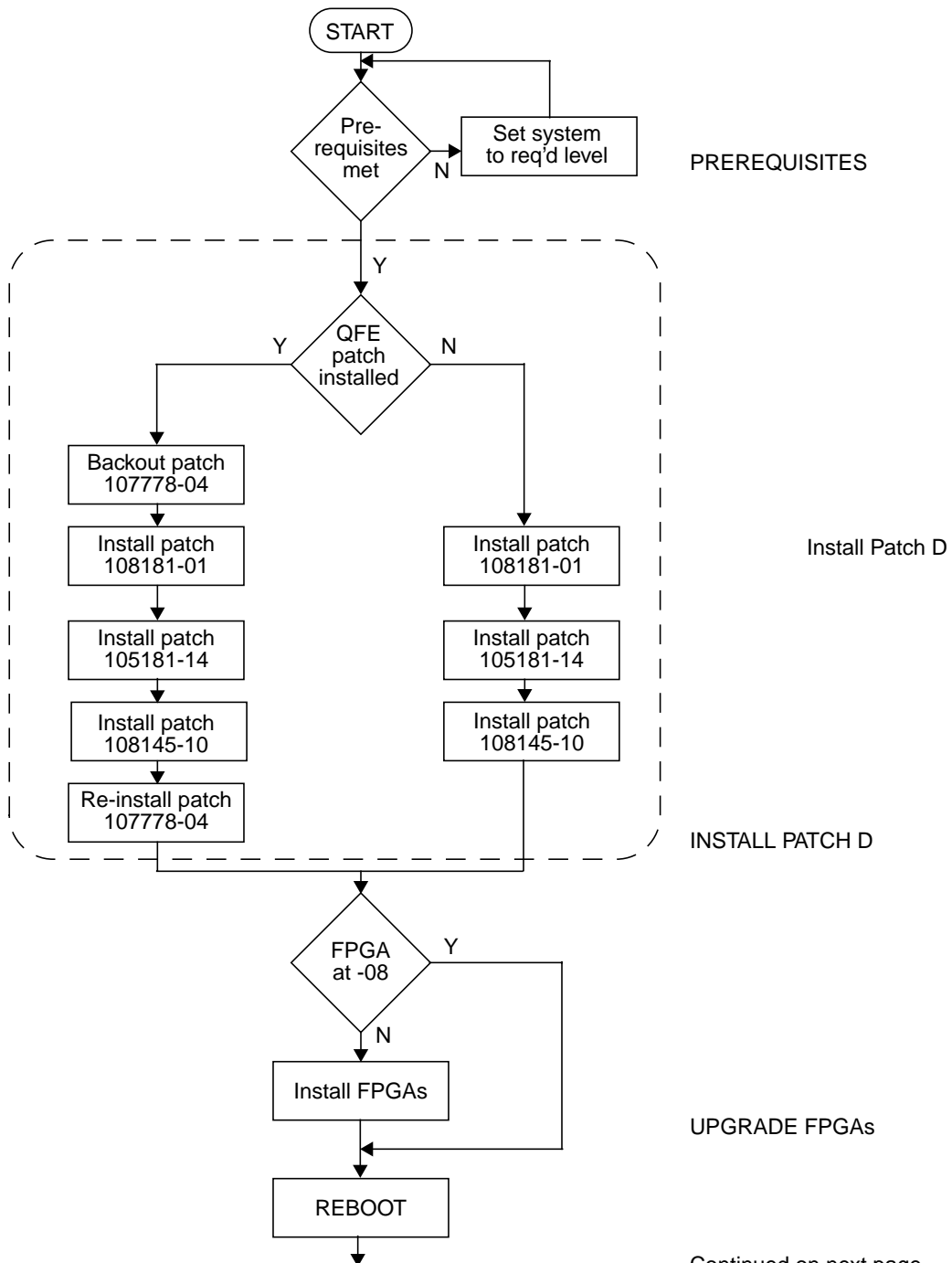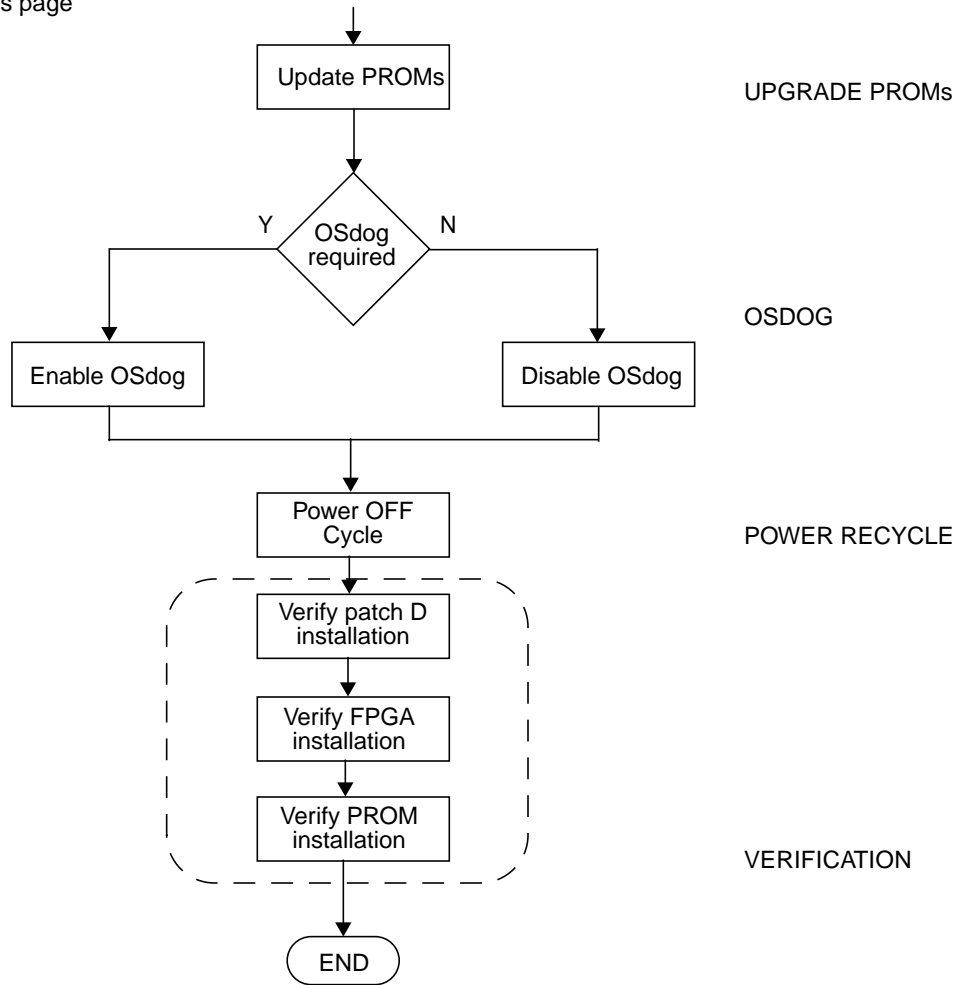
# Prerequisites

**Caution –** Read all the instructions *before* attempting the installation procedure to ensure that you understand them and have everything required to hand.

The Netra ft 1800 upgrade software is supplied as a patch (108145-10, or whichever is the latest version). In addition to this patch, you will require the Kernel Update patch (105181-14) which is delivered as part of patch 108181-01. You can download both of these patches from SunSolve at `http://sunsolve.sun.com`.

In order to upgrade the system successfully you must already have installed:

- The base system from the Netra ft 1800 Installation CD (part no. 704-6491-11).
- The mandatory patches from the Netra ft 1800 Patch CD (part no. 704-6823-12). These patches are:
  - 107369-16 or -17 (Netra ft 1800 software patch)
  - 106929-01 (SunOs 5.6 `/usr/uadmin` patch)

  and are also available from SunSolve.

**Caution –** The mandatory patches listed above must be installed before you proceed with the upgrade.

In addition you may have also installed:

- 108065-03 (Netra ft 1800 Bridge patch)
- 107926-04 (Netra ft 1800 OSdog patch)

If you installed the Sun QFE/P patch 107778 as part of the existing installation, it will be necessary to back out the patch (see Step 3 on page 12) and then re-install it (see Step 8 on page 13) following the instructions in this document.

Instructions for installing the base system and mandatory patches are contained in the *Netra ft 1800 Software Release Notes* (part no. 805-4527-13).

**Caution –** You must follow precisely the installation instructions in this document. The installation procedure for the patches involves special instructions. Installing the patches incorrectly can leave your system unusable, requiring a complete re-installation of all software which can take up to four hours.

All operations must be performed at the OBP `ok` prompt or as `root`.

Netra ft 1800 release software occupies approximately 540 Mbytes of disk space.

# Verifying the Prerequisites Before You Start

If any of the following verifications fails, consult Sun Enterprise Services.

## General

The system should be free from faults (that is, no red LEDs showing) and running in sync (see "To Confirm the System is Running in Sync" on page 11.

## To Verify Mandatory Patches

Patch verified ☐

1. **Type:**

```
# showrev -p | grep 107369
```

The output should include:

```
Patch: 107369-17 Obsoletes: 106616-01 Requires:
Incompatibles:  Packages: SUNWcsu, SUNWftcar, SUNWcmscu,
SUNWcmsr, SUNWcmsu, SUNWcmsdf, SUNWftm, SUNWftmuu,
SUNWftutr, SUNWftutu, SUNWpnet, SUNWspltr, SUNWspltu
Patch: 107369-16 Obsoletes: 106616-01 Requires:
Incompatibles:  Packages: SUNWftcar, SUNWcmscu, SUNWcmsr,
SUNWcmsu, SUNWcmsdf, SUNWftm, SUNWftmuu, SUNWftutr,
SUNWftutu, SUNWpnet, SUNWspltr, SUNWspltu
```

or:

```
Patch: 107369-17 Obsoletes: 106616-01 Requires:
Incompatibles:  Packages: SUNWcsu, SUNWftcar, SUNWcmscu,
SUNWcmsr, SUNWcmsu, SUNWcmsdf, SUNWftm, SUNWftmuu,
SUNWftutr, SUNWftutu, SUNWpnet, SUNWspltr, SUNWspltu
```

or:

```
Patch: 107369-16 Obsoletes: 106616-01 Requires:
Incompatibles:  Packages: SUNWftcar, SUNWcmscu, SUNWcmsr,
SUNWcmsu, SUNWcmsdf, SUNWftm, SUNWftmuu, SUNWftutr,
SUNWftutu, SUNWpnet, SUNWspltr, SUNWspltu
```

Patch
verified ☐

**2. Type:**

```
# showrev -p | grep 106929

Patch: 106929-01 Obsoletes:  Requires:  Incompatibles:
Packages: SUNWcsr
```

# ▼ To Verify FPGA Firmware Levels

FPGA revision
verified ☐

**1. For each motherboard type:**

```
# cd /usr/platform/SUNW,Ultra-4FT/SUNWcms/sbin
# ./cmsfruinfo -l X-MBD -i -s EE_MBD_BRIDGE_FWARE_PARTNO EE_MBD_BRIDGE_FWARE_DASH
```

where *x* is A for motherboard A or B for motherboard B.

Record A-MBD
FPGA revision ☐

For both motherboards the output should be:

```
2587134
07
```

Record B-MBD
FPGA revision ☐

or

```
2587134
08
```

Both sides should be at the same revision level, that is, both -07 or both -08.

# To Verify PROM Firmware Levels

PROM
verified ☐

**1. For each CPUset type:**

```
# cd /usr/platform/SUNW,Ultra-4FT/SUNWcms/sbin
# ./cmsfruinfo -l x-CPU -i -s EE_CPU_PROM_PARTNO EE_CPU_PROM_DASH
```

where *x* is A for A-CPU or B for B-CPU.

Record A-CPU
PROM revision ☐

For both CPUsets the output should be:

```
2587354
07
```

Record B-CPU
PROM revision ☐

or

```
2587354
09
```

Both sides should be at the same revision level, that is, both -07 or
both -09.

Record
version ☐

**2. Check the PROM version by typing:**

```
# prtconf -V
```

Record the version in the box. In the following example:

```
OBP 3.7.23.0 1999/06/24 14:24
```

OBP  3.7.23.0  indicates version 23.

The PROM should be version 21 for CPU PROM revision 07, or
version 23 for CPU PROM revision 09.

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# Patch Installation

This installation procedure, including the two required reboots, will take approximately ninety minutes.

---

**Note –** There are special instructions for backing out this patch. Refer to "Backing Out Strategy" on page 24.

---

**Caution –** *Do not reboot* at any stage of the installation process unless specifically requested to do so *in this document*. In particular, rebooting after step 6 and before step 7 has completed will render the system unusable.

## ▼ To Confirm the System is Running in Sync

Steps 10, 29 and 43 require you to verify that the system is running in sync, or wait for the system to come back into sync. To determine if the CPUsets are running in sync, perform either of the following:

- Examine the amber LEDs, labeled *Diag*, on the front panel of each CPUset. If they are running in sync, the LEDs will flash exactly at the same time.

- Enter the following command:

```
# cd /usr/platform/SUNW,Ultra-4FT/SUNWcms/lib
# ./u4ftvmctl -c
```

If the CPUsets are running in sync, the following message is displayed:

```
CPUsets running combined
```

# ▼ To Install the Patches

Prerequisites
verified ☐

1. **Verify that all prerequisites have been met.**

   Refer to "Verifying the Prerequisites Before You Start" on page 6 through page 9.

Base software
and patches
installed ☐

2. **If step 1 is not satisfied, contact Sun Enterprise Services to assist you in achieving the correct level of installation, then repeat step 1.**

Back out QFE/P
patch ☐

3. **If you installed the Sun QFE/P patch 107778 as part of Step 2 or in a previous installation, you must backout the patch before proceeding.**

   Type:

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

Patches
downloaded ☐

4. **Download patches 108181-01 and 108145-10 (or the latest versions) from the web site at SunSolve (**`http://sunsolve.sun.com`**).**

   Copy them into the subdirectory `/var/tmp`.

Patch files
extracted ☐

5. **Extract the files:**

   ```
   # cd /var/tmp
   # zcat 108181-01.tar.Z | tar -xvf -
   # zcat 108145-10.tar.Z | tar -xvf -
   ```

Kernel Update
patch installed ☐

6. **Read the caution at the top of page 11, then install the Kernel Update patch:**

   ```
   # cd 108181-01
   # ./installpatch .
   # cd /usr/platform/SUNW,Ultra-4FT/lib/105181-14
   # ./installpatch .
   ```

   When prompted, type **yes** to confirm the installation. When installation of the patch is complete *do not reboot.*

Netra ft 1800
patch installed ☐

**7. Install the Netra ft 1800 upgrade patch:**

```
# cd /var/tmp/108145-10
# ./installpatch .
```

When prompted, type **yes** to confirm the installation.

---

**Note –** The patch delivers an updated version of the Configuration Management System (CMS). To do this, the patch installation process terminates the CMS daemon. Do not attempt to use cmsconfig (or other CMS utility) until instructed to do so later in this installation procedure.

---

Reinstall QFE/P
patch ☐

**8. If you backed out the Sun QFE/P patch 107778 as part of Step 3, you can now reinstall the patch.**

■ If the patch still resides in the /var/tmp directory, type:

```
# cd /var/tmp/107778-04
# ./installpatch .
```

■ If the patch no longer resides in the /var/tmp directory, re-install the patch as described in the *Netra ft 1800 Software Release Notes*, part no. 805-4527-13.

# Programmable Hardware Upgrade

> **Note –** The upgrade utilities cannot be run if the system was booted from a read-only device, such as a CD-ROM or a network: the system must be running from a writable device such as a disk before this procedure can be performed. In particular, if the system has just been fully installed from CD-ROM, it should be rebooted from disk before performing this procedure.

> **Note –** If the FPGAs were upgraded using version 08 of the upgrade utility during the base software patch installation in Step 2 it is not necessary to repeat the procedure. If you are not sure of the firmware version, proceed to the next step (Step 9), otherwise you can proceed directly to the PROM upgrade at Step 14.

## ▼ To Upgrade the FPGAs

The following procedure upgrades both motherboard A and motherboard B.

System in sync

9. **Ensure the system is running in sync by following the procedure "To Confirm the System is Running in Sync" on page 11.**

FPGAs upgraded
on one side

**10. Type:**

```
# cd /usr/platform/SUNW,Ultra-4FT/lib
# ./fwupdate.fpga.258-7134-08
```

You will be prompted:

```
WARNING: This firmware update can only be performed on:

1) The side which is executing this update utility.

2) The other side if its cpuset is powered off.

3) Either side if running in-sync.


Please enter the side of the system that you want to update A or B?
```

Type **A** to upgrade motherboard A or **B** to upgrade motherboard B, then type **yes** to confirm.

Keep system up

**11. When asked if you want to halt the system, answer** no**. The power cycle for the FPGA upgrades is performed later at Step 50 on page 20.**

FPGAs upgraded
on other side

**12. Repeat Step 10 and Step 11 for the other motherboard.**

System rebooted

**13. Reboot the machine:**

```
# init 6
```

## ▼ To Upgrade the PROMs

You must disable each CPUset in turn in order to upgrade the remaining CPUset PROM.

System in sync

**14. Wait for the system to come back into sync following Step 13.**

This may take a few minutes. To verify, follow the procedure "To Confirm the System is Running in Sync" on page 11.

cmsconfig
started ☐

**15. Start** cmsconfig**:**

```
# cd /usr/platform/SUNW,Ultra-4FT/SUNWcms/sbin
# ./cmsconfig
```

**16. Enter the item number for A-CPU, then select the** Action **item.**

**17. Press** 0 **to disable A-CPU.**

A-CPU disabled ☐

**18. Wait for a few seconds, then press Return to redisplay the menu.**

Repeat until the display shows that A-CPU is disabled, then press **q** twice to exit from cmsconfig.

Update the
PROM ☐

**19. Invoke the update program:**

```
# cd /usr/platform/SUNW,Ultra-4FT/lib
# ./netra_ft_1800.flash.update-10
```

**20. You will be asked if you wish to upgrade the PROMs.**

Answer **y** and then **yes** to upgrade.

NVRAM variables
noted ☐

**21. A list of NVRAM variables will be displayed for you to note, and reset later if different from the default values.**

Note these for safety, although it should not be necessary to use them.

**22. You will be asked if you wish to continue.**

Answer **yes** to continue.

B-CPU upgrade
completed ☐

**23. The upgrade will proceed, and the success or failure of the upgrade will be reported.**

If the update fails, note any error messages and contact Sun Enterprise Services.

Keep system up ☐

**24. You will be asked** Do you wish to halt the system now**.**

Answer **no**.

cmsconfig
started ☐

**25. Start** cmsconfig**:**

```
# cd /usr/platform/SUNW,Ultra-4FT/SUNWcms/sbin
# ./cmsconfig
```

26. **Enter the item number for A-CPU, then select the** Action **item.**

27. **Press** 1 **to enable A-CPU.**

A-CPU
re-enabled ☐

28. **Wait for a few seconds, then press Return to redisplay the menu.**

    Repeat until the display shows that A-CPU is enabled, then press **q** to return to the cmsconfig menu.

System in sync ☐

29. **Wait for the system to come back into sync.**

    This may take a few minutes. To verify, follow the procedure "To Confirm the System is Running in Sync" on page 11.

30. **Enter the item number for B-CPU, then select the** Action **item.**

31. **Press** 0 **to disable B-CPU.**

B-CPU disabled ☐

32. **Wait for a few seconds, then press Return to redisplay the menu.**

    Repeat until the display shows that B-CPU is disabled, then press **q** twice to return to the prompt.

Update the
PROM ☐

33. **Invoke the update program:**

```
# cd /usr/platform/SUNW,Ultra-4FT/lib
# ./netra_ft_1800.flash.update-10
```

34. **You will be asked if you wish to upgrade the PROMs.**

    Answer **y** and then **yes** to upgrade.

35. **A list of NVRAM variables will be displayed for you to note, and reset later if different from the default values.**

    Note these for safety, although it should not be necessary to use them.

36. **You will be asked if you wish to continue.**

    Answer **yes** to continue.

A-CPU upgrade
completed ☐

37. **The upgrade will proceed, and the success or failure of the upgrade will be reported.**

    If the update fails, note any error messages and contact your Sun Enterprise Services.

Keep system up ☐

38. **You will be asked** Do you wish to halt the system now.

    Answer **no**.

cmsconfig
started

**39. Start** cmsconfig**:**

```
# cd /usr/platform/SUNW,Ultra-4FT/SUNWcms/sbin
# ./cmsconfig
```

**40. Enter the item number for B-CPU, then select the** Action **item.**

**41. Press** 1 **to enable B-CPU.**

B-CPU
re-enabled

**42. Wait for a few seconds, then press Return to redisplay the menu.**

Repeat until the display shows that B-CPU is enabled, then press q twice to return to the main menu.

System in sync

**43. Wait for the system to come back into sync.**

This may take a few minutes. To verify, follow the procedure "To Confirm the System is Running in Sync" on page 11.

**44. Type:**

```
# eeprom auto-boot? true
```

# ▼ To Enable or Disable the OSdog

The OSdog functionality is enabled or disabled at boot time based on values stored in the motherboard EEPROM. These can only be modified by an OBP command.

If you require the OSdog to be enabled, proceed to Step 45.

If you do not require the OSdog, proceed to Step 48

## ▼ To Enable the OSdog

Go to OBP prompt

**45. Type:**

```
# init 0
```

Enable the OSdog

**46. At the** ok **prompt type:**

```
ok setenv auto-boot? false
ok reset-all
ok 4f set-conf-osdog
ok setenv auto-boot? true
```

The OSdog is now permanently enabled.

**47. Proceed to Step 50.**

## ▼ To Disable the OSdog

Go to OBP prompt

**48. Type:**

```
# init 0
```

Enable the OSdog

**49. At the** ok **prompt type:**

```
ok setenv auto-boot? false
ok reset-all
ok 0 set-conf-osdog
ok setenv auto-boot? true
```

The OSdog is now permanently disabled.

# ▼ To Reset the System with the Upgrades

**50. A full power cycle of the system is required in order for the upgrades to take effect.**

- If you are at the unix prompt, type:

```
# init 5
```

- If you are at the OBP prompt, ignore this step and proceed with Step 51.

System
power-cycled ☐

**51. Reset motherboard and side B using either of the following two methods:**

- From the Remote Control Processor (RCP), enter the command:

```
# BBoff
```

Wait 10 seconds, then enter the command:

```
# BBon
```

- Press the black standby power button on the side B (bottom) Control Alarms and Fans (CAF) module to power off.
  Wait ten seconds, then press the green button to power on.

**52. Reset motherboard and side A using either of the following two methods:**

- From the Remote Control Processor (RCP), enter the command:

```
# AAoff
```

Wait 10 seconds, then enter the command:

```
# AAon
```

- Press the black standby power button on the side A (top) Control Alarms and Fans (CAF) module to power off.
  Wait ten seconds, then press the green button to power on.

The system will boot up and come into sync.

# Verifying the Upgrade

You can use the following instructions to verify that the patch installation procedure has been correctly applied.

If any of these verifications fail, you should review the related steps in the procedure or consult Sun Enterprise Services.

## ▼ To Verify the Patch Installation

53. **Type:**

```
# showrev -p | grep 105181-14
```

The output should be:

```
Patch: 105181-14 Obsoletes: 105214-01, 105636-01, 105776-01, 106031-02,
106308-01 Requires:  Incompatibles:  Packages: SUNWkvm, SUNWcsr, SUNWcar,
SUNWhea
Patch: 108145-10 Obsoletes: 108065-03, 107926-03, 107369-16 Requires:
105181-14 Incompatibles:  Packages: SUNWcsu, SUNWftcar, SUNWftcau,
SUNWcmscu, SUNWcmsr, SUNWcmsu, SUNWcmsdf, SUNWcrash, SUNWftm, SUNWftmur,
SUNWftmuu, SUNWftutr, SUNWftutu, SUNWlogr, SUNWlogu, SUNWpnet, SUNWspltr,
SUNWspltu, SUNWttymx
```

Patch installation verified ☐

54. **Type:**

```
# showrev -p | grep 108145
```

The output should be:

```
Patch: 108145-10 Obsoletes: 108065-03, 107926-03, 107369-16 Requires:
105181-14 Incompatibles:  Packages: SUNWcsu,
SUNWftcar, SUNWftcau, SUNWcmscu, SUNWcmsr, SUNWcmsu, SUNWcmsdf, SUNWcrash,
SUNWftm, SUNWftmur, SUNWftmuu, SUNWftutr,
SUNWftutu, SUNWlogr, SUNWlogu, SUNWpnet, SUNWspltr, SUNWspltu, SUNWtty
```

## ▼ To Verify FPGA Firmware Levels

FPGA upgrade
verified ☐

**55. For each motherboard type:**

```
# cd /usr/platform/SUNW,Ultra-4FT/SUNWcms/sbin
# ./cmsfruinfo -l x-MBD -i -s EE_MBD_BRIDGE_FWARE_PARTNO EE_MBD_BRIDGE_FWARE_DASH
```

where *x* is A for motherboard A or B for motherboard B.

For both motherboards the output should be:

```
2587134
08
```

Both sides should be at the same revision level, that is, both -08.

## ▼ To Verify PROM Firmware Levels

**56. For each CPUset type:**

```
# cd /usr/platform/SUNW,Ultra-4FT/SUNWcms/sbin
# ./cmsfruinfo -l x-CPU -i -s EE_CPU_PROM_PARTNO EE_CPU_PROM_DASH
```

where *x* is A for A-CPU or B for B-CPU.

For both CPUsets the output should be:

```
2587354
10
```

Both sides should be at the same revision level, that is, both -10.

**57. Type:**

```
# prtconf -V
```

The output should be:

```
OBP 3.7.24.0 1999/06/24 14:24
```

The 24 indicates that the PROM level is 24.

# Backing Out Strategy

The stages involved are as follows:

1. **Backout the PROM.**

2. **Backout the QFE patch, if installed.**

3. **Backout the OSdog patch, if installed.**

4. **Backout the interim update patch D.**

5. **Backout the kernel update.**

6. **Re-install the OSdog patch, if required.**

7. **Re-install the QFE patch, if required.**

8. **Reboot the system.**

## ▼ To Backout the PROM

cmsconfig
started

1. **Start** cmsconfig:

```
# cd /usr/platform/SUNW,Ultra-4FT/SUNWcms/sbin
# ./cmsconfig
```

2. **Enter the item number for A-CPU, then select the** Action **item.**

3. **Press** 0 **to disable A-CPU.**

A-CPU
disabled

4. **Wait for a few seconds, then press Return to redisplay the menu.**

   Repeat until the display shows that A-CPU is disabled, then press **q** twice to exit from cmsconfig.

OSdog
installed  Y / N

5. **Determine which patch you are reverting to by typing the following at the command line:**

```
# patchadd -p | grep "atch: 107926"
```

   ■ If a line including the patch number 107926 is displayed, circle 'Y' in the box, otherwise circle 'N'.

6. **Invoke the update program.**

   - If you entered '23 in Step 2 on page 9, enter the following at the command line:

   ```
   # cd /usr/platform/SUNW,Ultra-4FT/lib
   # ./netra_ft_1800.flash.update-09
   ```

   - If you entered '21' in Step 2 on page 9, enter the following at the command line:

   ```
   # cd /usr/platform/SUNW,Ultra-4FT/lib
   # ./netra_ft_1800.flash.update-07
   ```

7. **You will be asked if you wish to upgrade.**

   Answer **y** and then **yes** to upgrade.

NVRAM variables noted ☐

8. **A list of NVRAM variables will be displayed for you to note, and reset later if different from the default values.**

   Note these for safety, although it should not be necessary to use them.

9. **You will be asked if you wish to continue.**

   Answer **yes** to continue.

B-CPU upgrade completed ☐

10. **The upgrade will proceed, and the success or failure of the upgrade will be reported.**

    If the update fails, note any error messages and contact Sun Enterprise Services.

Keep system up ☐

11. **You will be asked** Do you wish to halt the system now.

    Answer **no**.

cmsconfig started ☐

12. **Start** cmsconfig:

   ```
   # cd /usr/platform/SUNW,Ultra-4FT/SUNWcms/sbin
   # ./cmsconfig
   ```

13. **Enter the item number for A-CPU, then select the** Action **item.**

14. **Press** 1 **to enable A-CPU.**

A-CPU
re-enabled ☐

**15. Wait for a few seconds, then press Return to redisplay the menu.**

Repeat until the display shows that A-CPU is enabled, then press **q** to return to the `cmsconfig` menu.

System in sync ☐

**16. Wait for the system to come back into sync.**

This may take a few minutes. To verify, follow the procedure "To Confirm the System is Running in Sync" on page 11.

**17. Enter the item number for B-CPU, then select the `Action` item.**

**18. Press** 0 **to disable B-CPU.**

B-CPU disabled ☐

**19. Wait for a few seconds, then press Return to redisplay the menu.**

Repeat until the display shows that B-CPU is disabled, then press **q** twice to return to the prompt.

Update the
PROM ☐

**20. Invoke the update program.**

- If you entered '23' in Step 2 on page 9, enter the following at the command line:

```
# cd /usr/platform/SUNW,Ultra-4FT/lib
# ./netra_ft_1800.flash.update-09
```

- If you entered '21' in Step 2 on page 9, enter the following at the command line:

```
# cd /usr/platform/SUNW,Ultra-4FT/lib
# ./netra_ft_1800.flash.update-07
```

**21. You will be asked if you wish to upgrade.**

Answer **y** and then **yes** to upgrade.

**22. A list of NVRAM variables will be displayed for you to note, and reset later if different from the default values.**

Note these for safety, although it should not be necessary to use them.

**23. You will be asked if you wish to continue.**

Answer **yes** to continue.

A-CPU upgrade
completed ☐

**24. The upgrade will proceed, and the success or failure of the upgrade will be reported.**

If the update fails, note any error messages and contact Sun Enterprise Services.

Keep system up ☐

cmsconfig started ☐

**25. You will be asked** Do you wish to halt the system now. Answer **no**.

**26. Start** cmsconfig:

```
# cd /usr/platform/SUNW,Ultra-4FT/SUNWcms/sbin
# ./cmsconfig
```

**27. Enter the item number for B-CPU, then select the** Action **item.**

**28. Press** 1 **to enable B-CPU.**

B-CPU re-enabled ☐

**29. Wait for a few seconds, then press Return to redisplay the menu.**

Repeat until the display shows that B-CPU is enabled, then press **q** to return to the cmsconfig menu.

System in sync ☐

**30. Wait for the system to come back into sync.**

This may take a few minutes. To verify, follow the procedure "To Confirm the System is Running in Sync" on page 11.

## ▼ To Backout the QFE Patch

The following step applies only if the QFE patch (number 107778) was previously installed. If the patch was not installed, ignore this step and proceed to Step 32.

QFE patch backed out ☐

**31. Backout the QFE patch by entering the following at the command line:**

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

## ▼ To Backout the OSdog Patch

The following step applies only if the OSdog patch (number 107926 was previously installed, in which case you will have circled 'Y' following Step 5 on page 24. If you circled 'N', ignore this step and proceed to Step 33.

OSdog patch
backed out

**32. Backout the OSdog patch by entering the following at the command line:**

```
# cd /var/sadm/patch
# ./107926-04/backoutpatch 107926-04
```

## ▼ To Backout the Interim Update Patch

Netra ft 1800
Interim Update
patch backed out

**33. Backout the Netra ft 1800 Interim Update patch by entering the following at the command line:**

```
# cd /var/sadm/patch
# ./108145-10/backoutpatch 108145-10
```

## ▼ To Back Out the Kernel Update

Kernel Update
patch backed
out twice

**34. Backout the Kernel Update patch by entering the following at the command line:**

```
# cd /var/sadm/patch
# ./105181-14/backoutpatch 105181-14
```

The following warning will be displayed:

```
WARNING: /usr/sbin/patchrm is being used to backout
this patch.
Backoutpatch will be removed from Solaris patches in
the next release of Solaris.

Checking installed packages and patches...
Backing out patch 105181-14...
ERROR: Patch number 105181-14 is not installed
```

The backout script must therefore be executed a second time, after which the patch will install correctly; that is, type:

```
# ./105181-14/backoutpatch 105181-14
```

## ▼ To Re-install the OSdog Patch

Perform this step only if the OSdog patch was backed out in step 31, otherwise proceed to Step 36.

**35. Re-install the OSdog patch.**

■ If patch 107926-04 still resides in the /var/tmp directory, type:

```
# cd /var/tmp/107926-04
# ./installpatch .
```

■ If patch 107926-04 no longer resides in the /var/tmp directory, download it from SunSolve at http://sunsolve.sun.com and install it according to the instructions provided with the patch.

## ▼ To Re-install the QFE Patch

Perform this step only if the QFE patch was backed out in Step 31 on page 27, otherwise proceed to Step 37.

**36. Re-install the QFE patch.**

■ If the patch still resides in the /var/tmp directory, enter:

```
# cd /var/tmp/107778-04
# ./installpatch .
```

■ If the patch no longer resides in the /var/tmp directory, re-install the patch as described in the *Netra ft 1800 Software Release Notes*, part no. 805-4527-13.

**37. Finally, reboot the system:**

```
# init 6
```

This page is intentionally blank.

# Functionality Addendum

This Addendum contains details of documentation changes and functional additions since the last update.

# Documentation Changes

## User's Guide

The following changes should be made to the *Netra ft 1800 User's Guide*:

- Section 9.2.1 "Console Subsystem" on page 9-5: All references to `sm` should be replaced with `ft_serial`.
- Table 9-2 "Console Subsystem Fields" on page 9-5:

| Field | Values |
|---|---|
| *description | Serial multiplexer |
| port0 | NULL\|A-CAF_console |
| port1 | NULL\|A-CAF_modem |
| port2 | NULL\|B-CAF_console |
| port3 | NULL\|B-CAF_modem |
| *redundancy | The redundancy level of the system |
| *mode_of_use | The file system device used to access the subsystem |
| *ports_in_use | List of ports in use |

- Table 9-3 "Console Subsystem States" on page 9-6: Add an extra state as follows:

| State | Means |
|-------|-------|
| not_known | The subsystem cannot determine its level of redundancy (this is an error state). |

- Delete the paragraph following Table 9-3 on page 9-6.

## Reference Manual / Manpages

The following changes should be made:

- ttymuxadm(1M):
  - AVAILABILITY should be SUNWttymx
  - On line 166 change B CAF to B-CAF.
- ttymux(7d):
  - AVAILABILITY should be SUNWttymx.

# Solaris Y2K Patch Compatibility

The following Y2K patches currently available on SunSolve have been tested with this patch, but are not included as part of the patch[1]:

| Patch | Software | Description |
|-------|----------|-------------|
| 105210-22 | SunOS 5.6 | libc and watchmalloc |
| 105800-05 | SunOS 5.6 | /usr/bin/admintool |
| 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 |
| 105621-17 | SunOS 5.6 | libbsm and cron |
| 105464-02 | OpenWindows 3.6 | Multiple xterm fixes |
| 105566-07 | CDE 1.2 | Calendar manager |

1. All patches tested at time of document delivery.

# CMS Control of the ICN Subsystem

CMS control of the ICN subsystem is implemented via four new `cmsdefs`. Two are simple device `cmsdefs` (`u4ftmbox` and `icnio`) that are visible in `cmsconfig` but have no user changeable attributes. However, they can provide information that may be useful in diagnosing problems. The other two (`icn` and `icn_system`) constitute the user interface; they are described in detail below. There are two `u4ftmbox` objects, four `icnio` objects, four `icn` objects and one `icn_system` object.

## icn_system

This is the master CMS object for the `icn` subsystem. Its only visible user operations are `enable` and `disable`. Its task is to provide overall control of the subsystem. `icn_system 0` can only be enabled if the system is split – when the system is combined it remains in the `disabled` state unless an explicit `enable` is requested, in which case it will go to the `enable_failed` state, setting the `info` field to 'System is not split'.

Under normal operation the act of enabling and disabling `icn_system 0` is automatically undertaken by `u4ftsplitd` and thus no user intervention should be required.

Enabling `icn_system 0` automatically brings the `u4ftmbox` objects online and then enables the individual `icn` objects (in that order). Disabling `icn_system 0` disables the `icn` objects and takes the `u4ftmbox` objects offline (again in that order). If the `u4ftmbox` objects fail to come online, `icn_system` goes `enable_failed` and does not proceed to perform any actions on the `icn` objects. They will then normally appear to be in state `not_present`.

`icn_system 0` effectively encompasses the functionality of the existing `icn` control scripts (`icn.init` and `icn.terminate`) and can be used interchangeably with them.

A complete reset of the `icn` system can be accomplished by executing a `disable` followed by an `enable` on `icn_system 0`.

## icn

Each `icn` object controls a single `icn` network connection. It can be enabled and disabled, and also supports attributes that set the hostname of the network interface; control whether the interface is 'up' or 'down', and determine how much memory is reserved for communication.

`icn` objects can only be enabled if `icn_system 0` is also enabled.

The initial value for the hostname attribute is read from the corresponding `icn` configuration file in `/etc`; furthermore if the hostname is changed in the CMS the modified value is written back to the appropriate configuration file. Note that the reverse is not true: that is, if the configuration file in `/etc/` is modified, this will not be noticed by the `icn` CMS object; in fact, the change to the configuration file will be lost when the object is disabled, since at that time the hostname from the CMS object is copied back to the configuration file.

When initially enabled (automatically via an `enable` on `icn_system 0`) the initial state of each `icn` object depends upon the existing system state. If the matching `icn` configuration file (CMS object `icn 0` reads `/etc/config.icn0` and so on for the other instances) contains a hostname, then the `icn` object is automatically enabled and the interface plumbed and brought online. If the configuration file does not contain a hostname then the `icn` instance automatically goes to the disabled state.

Once enabled, a `disable` action unplumbs the network interface; takes the necessary devices offline, and goes to the disabled state. A subsequent `enable` will bring the interface back online.

The hostname attached to an interface cannot be changed while the interface is marked as 'up'.

Memory size cannot be changed if the interface is 'up' or 'down'.

Individual `icn` interfaces can be reset by disabling and then enabling the appropriate `icn` object.