

Instructions for Manually Installing Patch 103346

Appendix A describes a procedure for manually installing the flash PROM firmware.

Patch 103346-10 and later are designed to work with both 32-bit and 64-bit Solaris versions. Patch versions 103346-09 and earlier are designed for 32-bit Solaris versions only.

Note – Use this appendix if the CD-ROM is not available. To download the current patch, visit the SunSolveSM web site at: <http://sunsolve.Sun.COM/>

The patch is downloaded as a compressed tar file.

A.1 Installing the Flash PROM Firmware

To install the latest flash PROM firmware to your system, use the following commands:

1. Log in as `root` on the system that needs its flash PROM firmware upgraded.
2. Type the following, replacing the variable with the current patch version number to be installed in your system:

```
# uncompress 103346-xx.tar.Z
# tar -xvf 103346-xx.tar
# cd 103346-xx
```

You are now in the directory containing all the flash-update files.

3. Type `./flash-update` in this directory.

The script will extract the flash PROM driver from the directory and install the driver on the system. It then extracts the program that actually updates the flash PROMs with the new images.

The current PROM revision in the system is displayed followed by a list of PROM versions that are available in the release of the `flash-update` program that you have executed. This command always points to the latest version in that directory.

Note – When the firmware has been updated, the system cannot use the new firmware until the system has been power-cycled. You can do this immediately or schedule it for a later time when disruption will be minimized.

4. Halt and reboot the system complete the following steps:

c. Turn the power off and wait for approximately 15 seconds.

d. Turn the power back on. The reprogrammed flash PROMs is functional at this point.

A.1.1 Sample Program Output

The program displays its progress at every stage of execution. In CODE EXAMPLE A-1, the flash PROMs are being updated for boards 0, 1, 4, 5, and 6.

CODE EXAMPLE A-1

```
# ./flash-update
Generating flashprom driver...
Generating SUNW,Ultra-Enterprise flash-update program...

Current System Board PROM Revisions:
-----
Board 0: cpu OBP      3.2.2 1996/03/20 10:07 POST 3.0.3 1996/03/16 17:54
Board 4: cpu OBP      3.2.2 1996/03/20 10:07 POST 3.0.3 1996/03/16 17:54
Board 1: dual-sbus
          FCODE       1.7.0 1996/03/20 10:07 iPOST 3.0.3 1996/03/16 17:55
Board 5: upa-sbus
          FCODE       1.7.0 1996/03/20 10:07 iPOST 3.0.3 1996/03/16 17:55
Board 6: dual-sbus
          FCODE       1.7.0 1996/03/20 10:07 iPOST 3.0.3 1996/03/16 17:55

Available 'Update' Revisions:
-----
          cpu OBP      3.2.3 1996/04/04 20:23 POST 3.1.4 1996/04/04 20:23
          dual-sbus FCODE 1.7.0 1996/04/04 20:23 iPOST 3.1.4 1996/04/04 20:23
```

CODE EXAMPLE A-1 (Continued)

```
upa-sbus FCODE 1.7.0 1996/04/04 20:23 iPOST 3.1.4 1996/04/04 20:23

Verifying Checksums: Okay

Do you wish to flash update your firmware y/[n] : y

Are you sure y/[n] : y

Updating Board 0: Type 'cpu'
1 Erasing ... Done.
1 Verifying Erase ... Done.
1 Programming ... Done
1 Verifying Program ... Done.

Updating Board 4: Type 'cpu'
1 Erasing ... Done.
1 Verifying Erase ... Done.
1 Programming ... Done.
1 Verifying Program ... Done.

Updating Board 1: Type 'dual-sbus'
1 Erasing ... Done.
1 Verifying Erase ... Done.
1 Programming ... Done.
1 Verifying Program ... Done.

Updating Board 5: Type 'upa-sbus'
1 Erasing ... Done.
1 Verifying Erase ... Done.
1 Programming ... Done.
1 Verifying Program ... Done.

Updating Board 6: Type 'dual-sbus'
1 Erasing ... Done.
1 Verifying Erase ... Done.
1 Programming ... Done.
1 Verifying Program ... Done.
```

Each step in the process is repeated until it succeeds. The number at the beginning of a line indicates the number of attempts for that update step. If any of the steps fail, then all four steps are repeated and the number is incremented on each try.

When the flash update is successfully completed, the script removes the flash PROM driver from the machine and cleans up any temporary files that were created in the /tmp directory.

If the process is interrupted by a loss of power, the update is incomplete. If this happens, see Chapter 3 “Emergency Recovery Procedure.”

A.2 Reprogramming Previous Versions

Patch 103346 exists in several versions, starting with version -01 (Patch 103346-01). Later versions are sequentially numbered. Each patch contains all files from previous versions.

If system flash PROMs need to be reprogrammed to a previous firmware version, the procedure can be executed with `./flash-update-xx`, where `-xx` is the version number.