NEXTSTEP for RISC Processors

Title: Building a FAT Bootable Disk for Both HPPA and SPARC
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Overview

In NEXTSTEP 3.3risc, you may indeed be able to create a disk that is bootable on both hppa and sparc machines, but it's not a supported feature. One current problem is that the 3.3 installation mechanism (cdis + BuildDisk) does not support fat installation. Another problem is with drivers and the assumption that they live in /usr/Devices.

Note: This is an untested and unsupported procedure. You may run into unforseen problems while attempting this procedure.

Major Steps

Copy both /usr/standalone/arch directories onto your booted disk
You need to ensure that both fully populated /usr/standalone/sparc and /usr/standalone/hppa directories exist on the system when you run disk(8) to install the booter(s). By default, only the directory specific to the architecture you're installing for is copied onto the hard disk when you installing from the CD-ROM.

Run disk(8) to write the booters onto the target drive
Issue a 'disk -i' to make the target disk bootable . If both /usr/standalone directories exist, both architectures will be written to the disk.

Install FAT libraries and programs onto the target drive
After that, you need to make the programs and libraries 2-way fat. Your best bet in this case is to mount the 3.3risc user CD on /NEXTSTEP_3.3risc and do a 'ditto -arch hppa -arch sparc /NEXTSTEP_3.3risc /InstallationMountPoint'.

Booting off the FAT disk

The SCSI target IDs of the factory shipped internal hard drives for hppa and sparc are 6 and 3, respectively. Because sparc target IDs are mapped to logical sdn names in ascending order from 0 to 6, while hppa IDs are mapped in reverse, you probably should to set your external drive's target ID to 4 or 5, then setup /etc/fstab to mount root on /dev/sd1a.