

NEXTSTEP Tech Support Frequently Asked Questions

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Introduction

Welcome to *Tech Support Frequently Asked Questions* (FAQ). This document is updated regularly to reflect NeXT Technical Support's most commonly asked technical questions. You can use this document as a quick reference guide for issues that may or may not be found in NeXT documentation or otherwise be readily available.

When additional sources of information are available about a topic they are indicated in the **See Also:** section. Much of the information in this document is expanded upon in other NeXTanswers documents and in the on-line and printed NEXTSTEP documentation.

When you are required to type a command, the text that you need to type is denoted by the **bold** typeface.

We regularly update this document based on questions most frequently asked of the NeXT's technical support group. We welcome comments and suggestions. You can contact Technical Support via phone by calling (800) 955-NEXT or (415) 780-

2922, faxing (415) 780-2801 or emailing nextanswers-request@next.com.

Contacting NeXT by email

Q: Which email addresses does NeXT provide for customer use?

A: The following addresses can be used to reach specific groups at NeXT:

<code>trynext@next.com</code>	Product Information and Sales (North America)
<code>international@next.com</code>	Product Information and Sales (outside North America)
<code>academic_ext@next.com</code>	Product Information and Sales (Higher Education)
<code>productreg@next.com</code>	Registering products purchased from NeXT
<code>orderstatus@next.com</code>	Information about the status of your order
<code>NeXTanswers@next.com</code>	Information about using NeXTanswers
<code>ask_next@next.com</code>	NeXT Technical Support

NeXT hardware support

Q: Who do I contact about service for NeXT hardware.

A: Bell Atlantic is in charge of repair and maintenance of NeXT hardware. They can be reached at (800) 499-6398.

NEXTSTEP supported systems

Q: Which HP PA-RISC, SPARC and Intel systems are supported by NEXTSTEP Release 3.3, and how should they be configured?

A: See NeXTanswers documents:
1002_3.3_Intel_Hardware_Compatibility_Guide
1843_3.3_SUN_Compatibility_Guide.rtf

1844_3.3_HP_Compatibility_Guide.rtf.

See also: NeXTanswer 1684_PA_RISC_Frequently_Asked_Questions.

World Wide Web for NEXTSTEP

Q: Does NeXT provide a World Wide Web page?

A: Yes! The URL is <http://www.next.com>. The page contains links to NeXTanswers, the Stepwise NEXTSTEP/OpenStep Information Service, and other information about NeXT.

Q: Is there a World Wide Web browser such as NCSA Mosaic available for NEXTSTEP?

A: There are at least three browsers available for NEXTSTEP. Here's some info about each.

Netsurfer provides a commercial web browser of the same name. The latest version is available from <ftp://ftp.netsurfer.com/pub/next/Netsurfer/> . Their web site is <http://www.netsurfer.com/>

Omni Development provides a freeware WWW browser for NEXTSTEP called OmniWeb. The latest version is available from [ftp.omnigroup.com](ftp://ftp.omnigroup.com). For for information, contact Omni Development at info@omnigroup.com.

Sen:te provides a freeware WWW browser called SpiderWoman. The latest version is available from <ftp://sente.epfl.ch/pub/software/SpiderWoman.app.tar.gz> (ftp to sente.epfl.ch and get /pub/software/SpiderWoman.app.tar.gz) Information about Sen:te can be found at <http://sente.epfl.ch/>

Note: You need NEXTSTEP 3.2 or greater with **EOF 1.0** in order to run SpiderWoman.

Installing the Developer CD-ROM

Q: I've installed the User Version of NEXTSTEP. When I try to install the Developer disk, I get a permission denied error.

How do I install the Developer disk?

A: You need to be logged in as the **root** account to install the Developer disk. If you're logged in as **me**, you need set a password and log back in as **root** to continue the installation.

See Also: *Here's How* manual (included with the User Version of NEXTSTEP), page 7 for how to set a password for an account

Cleanly rebooting when something goes wrong

Q: When something goes wrong with my computer (for example, the cursor is frozen on screen or Workspace Manager doesn't start up.), how can I restart my computer without performing a hard reset and potentially damaging the disk's filesystem?

A: Hold down the right Alternate key and press the Num Lock key on the numeric keypad. This should display a panel that

lets you type either **h** to halt the computer or **r** to restart it. This is an easy way to bypass the normal NEXTSTEP shutdown and logout procedures and assure that the disk's filesystem is not damaged.

Safely copying directories and filesystems

Q: What is an easy way to copy files, directories, or filesystems and retain file ownership, permissions, setuid modes and links?

A: The ditto command copies a source directory to a destination directory. Ditto overwrites existing files, symbolic links, and devices in the destination when these are copied from a source. The resulting files, links, and devices will have the same mode, owner, and group as the source items from which they are copied. On the other, ditto does not modify the mode, owner, or group of existing directories in the destination. Ditto can be used to "thin" multi-architecture binaries during a copy. Ditto can also copy files selectively based on the contents of a BOM ("Bill of Materials") file. Ditto preserves hardlinks present in the source directories and preserves setuid and setgid modes. On a properly formatted disk, ditto can be used as a replacement to the NEXTSTEP BuildDisk program for building bootable NEXTSTEP system disks.

See also: The NEXTSTEP ditto(8) UNIX manual page

Editing files in single-user mode

Q: My system won't boot into the Workspace, so I want to boot single-user by typing "-s" at the boot: prompt, then edit some NEXTSTEP configuration files. How can I do this, since I can't use Edit.app from single-user mode?

A: We ship a number of common UNIX editors with NEXTSTEP, including ed, emacs, ex, edit, and vi. Unfortunately, some of these editors do not work well in single-user mode. Some require better terminal support than is available in single-user mode; others try to write to /tmp, which isn't possible while booted from a read-only file system such as a CD-ROM; others are just plain unfriendly to the uninitiated.

Fortunately, NEXTSTEP 3.3 includes pico, a simple, display-oriented text editor which overcomes the above problems. Here are the only commands you really need to know in order to edit a file using pico, some of which are displayed right

at the bottom of the screen:

Ctrl-F: Move Forward a character

Ctrl-B: Move Backward a character

Ctrl-P: Move to the Previous line

Ctrl-N: Move to the Next line

Ctrl-D: Delete the character at the cursor position (or just use Backspace to delete the previous character)

Ctrl-X: Save the file and quit (press "y" and then Return to confirm the save)

Ctrl-G: Display help text listing the above commands and more

Normally, pico will also let you use the arrow keys to move around. However, these keys haven't been mapped yet when you're in single-user mode, so you'll need to use the Control-key combinations above. Similarly, you may be used to a keymapping that uses a different key (such as the Caps Lock key) as the Control key. This mapping hasn't happened yet either in single-user mode, so the Control key is in fact the Control key.

See also: The NEXTSTEP pico(1) UNIX manual page

Mouse does not work after installation

Q: When I reboot my computer and the login window is displayed, everything appears fine except that I can't use the mouse --the cursor seems to be frozen or not responding. I can still type, though. What's wrong?

A: When you install NEXTSTEP, you need to tell the operating system about specific hardware such as the mouse, graphics adapters, and SCSI adapters (i.e., which drivers should be used). The installation software loads in and uses all available mouse drivers. Thus, during installation, whatever mouse you are using should work with one of these drivers. You need to specify which mouse driver NEXTSTEP should load upon starting up. For example, if you have a serial mouse, this means selecting and installing the serial mouse driver. If you forget to do this during the installation, when you restart NEXTSTEP after the installation the mouse won't work.

To configure NEXTSTEP to use a different mouse driver, you need to restart the computer using the default driver setup. At the **boot:** prompt type:

`boot: config=Default`

This starts up NEXTSTEP with all of the mouse drivers loaded. Log in as **root** and start up Configure located in **/NextAdmin**. Select the mouse and configure the mouse according to your hardware setup.

Note: **config=Default** should be used whenever there is a specific hardware-related failure (as may be caused by adding or removing a peripheral). This causes NEXTSTEP to start up with a basic default configuration and allows modification of the hardware configuration with the Configure.

See Also: NeXTanswer 1360_Mouse_Support

Simple NetInfo problems

Q: When I start up NEXTSTEP, I get a message indicating "cannot connect to network, press Control-C to continue." I

believe this is because NetInfo is improperly configured or corrupted. What can I do to start up NEXTSTEP?

A: This problem can have a variety of causes. Two possibilities are that the NetInfo database has been corrupted or the network interface card has been removed.

One solution is to rebuild the NetInfo database to a default configuration. First, start up the computer in single-user mode:

```
boot: mach_kernel -s    (on Intel hardware)
NeXT> bsd -s            (on NeXT hardware)
```

Note: To get to the ROM Monitor (NeXT> prompt) during power up, hold down both Command keys and press the tilde key on the keypad. This will bring up the NeXT ROM Monitor.

The computer starts up to the single-user UNIX command line. Next, at the command line type these commands to copy a new NetInfo database and new **hostconfig** file.

```
# cp -rp /usr/template/client/etc/netinfo /etc
```

```
# cp -p /usr/template/client/etc/hostconfig /etc
```

This sets your computer back to a default NetInfo configuration as it was when you first installed NEXTSTEP. You can then use SimpleNetworkStarter in **/NextAdmin** to reconfigure the computer.

Warning: Creating a new NetInfo database may be a drastic measure under certain circumstances. If you've invested a lot of time configuring a NetInfo database, you probably would want rebuild it from scratch only as a last resort. If you feel this is your situation, ask an experienced NEXTSTEP system administration expert for help before replacing the database. A better choice might be to restore the **/etc/hostconfig** file and the contents of **/etc/netinfo** from backups made when the network was functioning properly. (You *did* make backups, *didn't* you?).

See Also: *NEXTSTEP Network and System Administration*, page 89 and NeXTanswer document 1295_restoring_to_default_netinfo_configuration

Removing the NEXTSTEP boot sector

Q: How can I remove the NEXTSTEP boot sector? I installed NEXTSTEP on my hard drive and removed it, but I still get "Boot Next: v1.xx" when starting up.

A: NEXTSTEP provides two boot sectors: boot0 which boots a DOS partitioned disk that may or may not have NEXTSTEP on it and boot1 which boots a virtual NEXTSTEP disk, whether it is located at the beginning of a disk or is on a partition. If you install a disk with only NEXTSTEP, only the boot1 sector is written at the beginning of the disk. If you then want to go back and install DOS, DOS finds executable code in the boot sector but doesn't replace it, even though that code is incapable of booting DOS. The solution is to either remove the boot sector before installing DOS, or rewrite the boot sector from DOS.

In NEXTSTEP, before installing DOS type:


```
# fdisk /dev/rsd0h -removePartitioning
```

Or, in DOS, after installing DOS type:

```
C: fdisk /mbr
```

Note: This technique is only useful if you're changing a disk from NEXTSTEP-only to one that also includes a DOS partition. The NEXTSTEP installation process always writes the boot sectors required for NEXTSTEP. Also, our boot0 sector is fully compatible with MS-DOS's and boots any operating system on a partition.

See Also: The NEXTSTEP fdisk(8) UNIX manual page and NeXTanswer document 1130_Surviving_DOS

Replacing the NEXTSTEP boot sector

Q: My NEXTSTEP PC doesn't display the prompt 'Press n for NEXTSTEP, d for DOS' when the system starts up, even

though my disk has both DOS and NEXTSTEP partitions. How can I fix the disk so I can boot from either partition?

A: Somehow the boot sector for the disk became corrupted or was removed. You need to replace it. Often this is caused by installing DOS 6.x or Windows95.

As the user **root**, type this command in a Terminal window:

```
disk -B0 /usr/standalone/i386/boot0 /dev/rsd0a
```

If you're using an IDE disk, substitute **/dev/rhd0a** for **/dev/rsd0a**.

Note: You must execute this command as **root**. Incorrectly typing this command can have serious repercussions. Use caution when logged in as **root**.

See also: NeXTanswer 1487_Intel_Boot_Process for details on booting. The NEXTSTEP fdisk(8) UNIX manual page and NeXTanswer 1130_Surviving_DOS

Problems with DOS Version 6.x, Windows95 and NEXTSTEP

Q: I am having problems installing DOS 6.x or Windows95 on a disk that has the NEXTSTEP boot sector already installed.

A: After installing DOS 6 or Windows95, the default partition will be set to the DOS partition. Thus if you take no action after the "n for nextstep, d for dos" prompt, the machine will boot into DOS, not NEXTSTEP. This can be fixed by resetting the active partition to the NEXTSTEP partition, using DOS's or our fdisk. Typing n for NEXTSTEP will still boot to NEXTSTEP.

Q: After upgrading to DOS 6.2 or Windows95, upon bootup, the "n for nextstep, d for dos" prompt does not appear and the system boots up into DOS.

A: DOS 6.2 and Windows95 kindly removes our booter. You can replace the boot sector by following the instructions under "Replacing the NEXTSTEP Boot Sector" above.

CD-ROM drives and CDPlayer

Q: How do I get CDPlayer, located in /NextDeveloper/Demos, to play music CD's on my CD-ROM Drive?

A: See NeXTanswer document 1579_CDPlayer_Troubleshooting

Faxing in NEXTSTEP

Q: What is necessary to do faxing in NEXTSTEP? I've installed a modem and tried to fax, but it's not faxing.

A: NEXTSTEP requires an additional fax driver specifically written for your fax modem. The following product offers support for a variety of common fax modems, such as ZyXEL, SupraFAXmodem, Telebit, and Prometheus:

NXFax

Black & White Software, Inc.
(802) 496-8500 voice
(802) 496-5112 fax
nxfax@bandw.com

See Also: *Third Party Products Guide*

Macintosh networking and NEXTSTEP

- Q: I want to network a machine running NEXTSTEP to a Macintosh or Macintosh network. What software is available to do this?
- A: Several third party products are available for doing NEXTSTEP to Appletalk or Mac to TCP/IP networking, including printer sharing. Two companies that NeXT knows of are:

Partner uShare

IPT (Information Presentation Technologies, Inc.)

(800) 233-9993

(805) 541-3000

(805) 541-3037 (fax)

555 Chorro Street, Suite A

San Luis Obispo, CA 93405

NFS/Share InterPrint Planet X

InterCon Systems Corporation

(703) 709-5500

(703) 709-5555

email: info@intercon.com

WWW: <http://www.intercon.com/>

950 Herndon Parkway, Suite 420

Herndon, VA 22070

See Also: *Third Party Products Guide*

Dot-matrix printer support

Q: What dot-matrix printers are supported by NEXTSTEP?

A: NeXT can provide drivers for the Epson 510 and IBM ProPrinter. These drivers ship with NEXTSTEP 3.1. For 3.2, they are available on a floppy as a separate product; contact your sales rep. for details on pricing and availability. Drivers for these and other printers are also available with the following product:

Dots

Object Technologies
800-452-7608 toll free
303-799-6223

303-799-1435 fax
Email: info@object-tech.com
WWW: <http://www.csn.net/NEXTSTEP/>
14 Inverness Dr. East
Suite G-228
Englewood, CO 80112

Light pen support

Q: Does NEXTSTEP support light pens?

A: NeXT knows of two companies selling NEXTSTEP-compatible light pen products:

Design Technology
(800) 945-7367

(619) 448-2888
(619) 448-3044 (fax)
11489 Woodside Ave.
Santee, CA 92071-4724

FTG Data Systems
(800) 962-3900
(714) 995-3989 (fax)
8181 Katella Ave., Suite J
Stanton, CA 90680

Using an Intel Triton based motherboard and a S3 based video card

Q: When my system boots the screen turns black right when the boot graphics should appear, and it does not appear to finish the boot sequence.

A: Systems using motherboards based on the Intel Triton PCI chipset and video cards based on an S3 chip lock up when boot graphics are enabled. In order to boot the system, you must disable boot graphics.

To boot NEXTSTEP without boot graphics, you need to restart the computer in verbose mode. At the **boot:** prompt type:

boot: -v

Also, it is possible to dissable boot graphics using the Configure application found in **/NextAdmin**. When Configure launches, there is a Summary of Devices panel. Click on the "Expert..." button to edit the Expert Settings. Double click on the word "Yes" after "Boot Graphics" and change it to "No". Hit return, click ok and save your changes. Now when you boot, the system will automatically go into verbose mode.

Does NEXTSTEP run on the Pentium®Pro processor

Q: I'm thinking about buying a new PentiumPro workstation, will NEXTSTEP work?.

A: Although NeXT is currently testing NEXTSTEP on the PentiumPro, Intel already has a whitepaper stating that the processor is fully compatible with the NEXTSTEP operating system. A copy of the whitepaper can be obtained from the Intel www page <http://www.intel.com/procs/perf/doc/pprows.pdf> or <http://www.intel.com/procs/perf/doc/pprows.ps>.

Running the PCNFS Daemon

Q: Where can I get a new version of pcnfsd?

A: You can download the source and makefile for a NEXTSTEP version of rpc.pcnfsd from <ftp://ftp.york.ac.uk/pub/pc-nfs/RPC.pcnfsd/pcnfsd.tar>