

# NEXTSTEP for Intel Processors

**Title:** Creating Floppies From Images Under NEXTSTEP and DOS

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## Table of Contents

- ....Overview
- ....Creating NEXTSTEP Floppies From Images Under NEXTSTEP
- ....Creating NEXTSTEP Floppies Under DOS
- ....3.2 Boot Floppy Image
- ....3.2 Additional Drivers Floppy Image
- ....3.2 Motorola Boot Floppy Image
- ....3.3 Boot Floppy Image
- ....3.3 Driver Floppy Image
- ....3.3 PCCard Installation Floppy Image
- ....3.3 Core Drivers Floppy Image
- ....3.3 Additional Drivers Floppy Image
- ....3.3 Motorola Boot Floppy Image
- ....3.3 Beta Install Drivers Floppy Image
- ....Readme For rawrite.exe Program

# Overview

These floppy images have been created as a convenience for those who may have a damaged install floppy, or who need to get crucial drivers onto a NEXTSTEP floppy but don't have a running NEXTSTEP machine.

If you have a damaged installation floppy, the only way to create a new one, even under NEXTSTEP, is to make a copy of another one. The instructions for creating floppies from images under NEXTSTEP are in the next section.

If you have a machine configuration which requires a certain driver (usually a SCSI adapter driver) which is not provided on the installation driver floppy, and you don't already have a running NEXTSTEP system, you need to create one under another system. (The instructions for creating a driver floppy under NEXTSTEP are in 1824\_Installing\_Drivers\_Overview.rtf ) If you have DOS running on your PC, you can download the proper driver floppy image and create a NEXTSTEP disk under DOS using the rawrite program. Instructions for doing this are in a following section in this document.

**NOTE:**

This procedure can only be used on floppy images. That is, files that exist on NeXTanswers with the ".floppyimage" extension. Only boot drivers have been provided, for all other drivers, please refer to 1824\_Installing\_Drivers\_Overview.rtf for installation instructions.

# Creating NEXTSTEP Floppies From Images Under NEXTSTEP

- 1 Make sure you are logged in as root.
- 2 Download the floppy image and decompress it from the Workspace via the File->Uncompress menu item. Make sure you are logged in as root.
- 3 Verify that the image has been downloaded correctly by comparing the results of `/usr/bin/sum` to the sums given for each floppy image. For example:  

```
# sum 1883_3.2_Boot_Floppy.floppyimage
43583 1440
```
- 4 Insert a blank 1.44 megabyte 3.5" HD floppy disk into the floppy drive.

- 5 In the Workspace, choose the command Check For Disks from the Disk menu. Initialize the disk as a NEXTSTEP filesystem. NEXTSTEP then formats and initializes the disk. When it is done initializing, select Eject from the disk menu, but leave the floppy in the drive.
- 6 If you have placed the image in **/tmp**, type this command to copy the boot floppy image to the new disk.

```
# dd if=/tmp/Floppy_Image of=/dev/rfd0b
```

- 7 After a few minutes, the duplication will be complete. Type this command:

```
# disk -e /dev/rfd0b
```

- 8 Physically eject the disk from the drive. It is ready to use.

## **Creating NEXTSTEP Floppies Under DOS**

- 1 Download the file 1925\_rawrite.exe and copy it to your DOS system. If you are downloading it under DOS, use [ftp://ftp.next.com/pub/NeXTanswers/Files/NEXTSTEP/Floppy\\_Images/1925\\_rawrite.exe](ftp://ftp.next.com/pub/NeXTanswers/Files/NEXTSTEP/Floppy_Images/1925_rawrite.exe) to get the uncompressed version. Remember that DOS will not support the original NeXTanswer filename. Rename the file to rawrite.exe.
- 2 Download the floppy image that you need to your DOS system. Remember that DOS will not support the original NeXTanswer filename.
- 3 Prepare a floppy by first formatting it for DOS.
- 4 Run rawrite. It will ask you for the source file (the floppy image) and the destination drive.
- 5 When rawrite has completed, the floppy is ready to be used under NeXTSTEP

For more information about rawrite, see the Readme for it at the end of this document.

## **3.2 Boot Floppy Image**

**sum result: 43583    1440**

The 3.2 Boot Floppy Image is 1883\_3.2\_Boot\_Floppy.floppyimage.

If you are downloading it under DOS, use

[ftp://ftp.next.com/pub/NeXTanswers/Files/NEXTSTEP/Floppy\\_Images/1883\\_3.2\\_Boot\\_Floppy.floppyimage](ftp://ftp.next.com/pub/NeXTanswers/Files/NEXTSTEP/Floppy_Images/1883_3.2_Boot_Floppy.floppyimage) to get the uncompressed version.

This floppy image is an exact copy of the floppy that shipped with NEXTSTEP 3.2.

## **3.2 Additional Drivers Floppy Image**

**sum result: 44390    1440**

The 3.2 Additional Drivers Floppy Image is 1922\_3.2\_Additional\_Drivers.floppyimage.

If you are downloading it under DOS, use

[ftp://ftp.next.com/pub/NeXTanswers/Files/NEXTSTEP/Floppy\\_Images/1922\\_3.2\\_Additional\\_Drivers.floppyimage](ftp://ftp.next.com/pub/NeXTanswers/Files/NEXTSTEP/Floppy_Images/1922_3.2_Additional_Drivers.floppyimage) to get the uncompressed version.

It contains these drivers:

1520\_Adaptec154xDriver.ReadMe.rtf

1626\_DPT2000SCSIDriver.ReadMe.rtf

1670\_PS2KbdMouseDriver.ReadMe.rtf

1676\_Adaptec6x60SCSIDriver.ReadMe.rtf

1692\_Adaptec2740Driver.ReadMe.rtf

1694\_IDE8265Driver.ReadMe.rtf

## **3.2 Motorola Boot Floppy Image**

**sum result: 63860    1440**

The 3.2 Motorola Boot Floppy Image is 2151\_3.2\_Moto\_Boot\_Floppy.floppyimage.

If you are downloading it under DOS, use

[ftp://ftp.next.com/pub/NeXTanswers/Files/NEXTSTEP/Floppy\\_Images/2151\\_3.2\\_Moto\\_Boot\\_Floppy.floppyimage](ftp://ftp.next.com/pub/NeXTanswers/Files/NEXTSTEP/Floppy_Images/2151_3.2_Moto_Boot_Floppy.floppyimage)

ppyimage to get the uncompressed version. This floppy image is an exact duplicate of the installation floppy that ships with NEXTSTEP 3.2 for Motorola.

### **3.3 Boot Floppy Image**

**sum result: 20459 1440**

The 3.3 Boot Floppy Image is 1886\_3.3\_Boot\_Floppy.floppyimage.  
If you are downloading it under DOS, use  
[ftp://ftp.next.com/pub/NeXTanswers/Files/NEXTSTEP/Floppy\\_Images/1886\\_3.3\\_Boot\\_Floppy.floppyimage](ftp://ftp.next.com/pub/NeXTanswers/Files/NEXTSTEP/Floppy_Images/1886_3.3_Boot_Floppy.floppyimage)  
to get the uncompressed version.

This floppy image is an exact copy of the floppy that shipped with NEXTSTEP 3.3.

### **3.3 Driver Floppy Image**

**sum result: 64912 1440**

The 3.3 Driver Floppy Image is 1887\_3.3\_Driver\_Floppy.floppyimage.  
If you are downloading it under DOS, use  
[ftp://ftp.next.com/pub/NeXTanswers/Files/NEXTSTEP/Floppy\\_Images/1887\\_3.3\\_Driver\\_Floppy.floppyimage](ftp://ftp.next.com/pub/NeXTanswers/Files/NEXTSTEP/Floppy_Images/1887_3.3_Driver_Floppy.floppyimage)  
to get the uncompressed version.

This floppy image is an exact copy of the driver floppy that shipped with NEXTSTEP 3.3.

### **3.3 PCCard Installation Floppy Image**

**sum result: 25759 1440**

The 3.3 PCCard Installation Floppy Image is 1984\_3.3\_PCCard\_Install\_Floppy.floppyimage.  
If you are downloading it under DOS, use  
[ftp://ftp.next.com/pub/NeXTanswers/Files/NEXTSTEP/Floppy\\_Images/1984\\_3.3\\_PCCard\\_Install\\_Floppy.floppyimage](ftp://ftp.next.com/pub/NeXTanswers/Files/NEXTSTEP/Floppy_Images/1984_3.3_PCCard_Install_Floppy.floppyimage)  
to get the uncompressed version.

This floppy image is provided as a convenience for installing NEXTSTEP using PCCard(PCMCIA) SCSI or network adapters. It should be used only in conjunction with the 3.3 Additional Drivers Floppy. For instructions on using these floppy images to perform PCCard installations, see NeXTanswer 1985\_Installing\_from\_PCCard\_Devices.rtf.

## 3.3 Core Drivers Floppy Image

**sum result: 44844 1440**

The 3.3 Core Drivers Floppy Image is 2145\_3.3\_Core\_Drivers.floppyimage. If you are downloading it under DOS, use [ftp://ftp.next.com/pub/NeXTanswers/Files/NEXTSTEP/Floppy\\_Images/2145\\_3.3\\_Core\\_Drivers.floppyimage](ftp://ftp.next.com/pub/NeXTanswers/Files/NEXTSTEP/Floppy_Images/2145_3.3_Core_Drivers.floppyimage) to get the uncompressed version.

It contains these drivers:

- 1784\_EISABus\_Driver\_Overview.rtf
- 1785\_Floppy\_Driver\_Overview.rtf
- 1790\_Intel\_824X0\_PCI\_Chipset\_Driver\_Overview.rtf
- 1799\_PCI\_Bus\_Driver\_Overview.rtf
- 1800\_Intel\_82365\_and\_compatible\_PCMCIA\_chipset\_Driver\_Overview.rtf
- 1801\_PCMCIABus\_Driver\_Overview.rtf
- 1804\_PS2Keyboard\_Driver\_Overview.rtf

This image contains the latest versions of the basic drivers needed during an install of NEXTSTEP. It should be used as the first Driver Floppy during an install.

The floppy driver is also on the NEXTSTEP CDROM, but may be needed in cases where you need to access the floppy while booted single-user off the CDROM. There is a link missing on the CDROM that is necessary for using driverLoader.

## 3.3 Additional Drivers Floppy Image

**sum result: 48983 1440**

The 3.3 Additional Drivers Floppy Image is 1923\_3.3\_Additional\_Drivers.floppyimage.

If you are downloading it under DOS, use  
[ftp://ftp.next.com/pub/NeXTanswers/Files/NEXTSTEP/Floppy\\_Images/1923\\_3.3\\_Additional\\_Drivers.floppyimage](ftp://ftp.next.com/pub/NeXTanswers/Files/NEXTSTEP/Floppy_Images/1923_3.3_Additional_Drivers.floppyimage) to get the uncompressed version.

It contains these drivers:  
1752\_AMD\_PC\_SCSI\_Driver\_Overview.rtf  
1754\_SymbiosLogic53C8xxSCSIDriver\_Driver\_Overview.rtf  
1759\_Adaptec\_274x\_and\_284x\_family\_Driver\_Overview.rtf  
1760\_Adaptec\_2940\_family\_and\_7870\_integrated\_Driver\_Overview.rtf  
1761\_Adaptec\_6x60\_chipset\_add-on\_and\_integrated\_\_Driver\_Overview.rtf  
1771\_BusLogic\_family\_Driver\_Overview.rtf  
1830\_DPT\_SCSI\_family\_Driver\_Overview.rtf  
1839\_EIDE\_Driver\_Overview.rtf

NOTE: This floppy image should be used with the 3.3 Core Drivers Floppy Image.

### **3.3 Motorola Boot Floppy Image**

**sum result: 27215    1440**

The 3.3 Motorola Boot Floppy Image is 2071\_3.3\_Moto\_Boot\_Floppy.floppyimage.  
If you are downloading it under DOS, use  
[ftp://ftp.next.com/pub/NeXTanswers/Files/NEXTSTEP/Floppy\\_Images/2071\\_3.3\\_Moto\\_Boot\\_Floppy.floppyimage](ftp://ftp.next.com/pub/NeXTanswers/Files/NEXTSTEP/Floppy_Images/2071_3.3_Moto_Boot_Floppy.floppyimage) to get the uncompressed version. This floppy image is an exact duplicate of the installation floppy that ships with NEXTSTEP 3.3 for Motorola.

### **3.3 Beta Install Drivers Floppy Image**

**sum result: 36368    1440**

The 3.3 Beta Install Drivers Floppy Image is 2078\_3.3\_Beta\_Drivers.floppyimage.  
If you are downloading it under DOS, use  
[ftp://ftp.next.com/pub/NeXTanswers/Files/NEXTSTEP/Floppy\\_Images/2078\\_3.3\\_Beta\\_Drivers.floppyimage](ftp://ftp.next.com/pub/NeXTanswers/Files/NEXTSTEP/Floppy_Images/2078_3.3_Beta_Drivers.floppyimage) to get the uncompressed version. This floppy contains drivers necessary for installing NEXTSTEP for Intel Processors. The drivers are still in Beta, so they are separated from the main

Additional Drivers Floppy.

It contains the Beta versions of these drivers:

1839\_EIDE\_Driver\_Overview.rtf

2129\_Bus\_Logic\_FlashPoint\_Driver\_Overview.rtf

## **Readme For rawrite.exe Program**

RaWrite 1.3

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Disclaimer of Warranty

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Users of this software must accept this disclaimer of warranty: "This software is supplied AS IS. Mark Becker disclaims all warranties, expressed or implied, including, without limitation, the warranties of merchantability and of fitness for any purpose. Mark Becker assumes no liability for damages, direct or consequential, which may result from the use of this software."

Purpose

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Write a disk image file to a floppy disk.

Equipment/Software Requirements

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- \* PC/XT/AT or 100% compatible with at least 256K of RAM and a floppy disk drive.
- \* MS-DOS version 3.21 or greater.



\* A formatted diskette.

This program uses well-documented generic low-level DOS and BIOS functions. It should run on nearly every PC in existence. PS/2's should be able to run RaWrite but this has not been tested.

CAVEAT  
-----

This program will write ANY disk file to a floppy, overwriting any previous information that may have been present. If you wish to re-use a diskette that has been written to by RaWrite then that diskette will probably need to be reformatted; all MS-DOS specific information will have been erased.

Usage  
-----

C> RAWRITE

And follow the prompts. All arguments are case-insensitive.

If the source and destination drives are the same, RaWrite will ask the user to swap diskettes as required. Rawrite allocates a large buffer in RAM to reduce the number of disk swaps.

RaWrite may be aborted at any time by typing ^C or CTRL-Break.

Errors  
-----

RaWrite attempts to determine if the diskette is a 1.44M, 1.2M, 720K, or 360K

diskette by reading sectors 18, 15, and 9 in that order. If the inserted diskette is not one of the these types, then RaWrite will abort with an error message.

Errors such as write protect, door open, bad disk, bad sector, etc. cause a program abort with a short error message.

## See Also

- 1561\_Duplicating\_the\_Installation\_Disk
- 1824\_Installing\_Drivers\_Overview.rtf
- 1933\_EIDE\_and\_ATAPI\_CDROM\_Support\_in\_NEXTSTEP\_3.3.rtf
- 1985\_Installing\_from\_PCCard\_Devices.rtf