NEXTSTEP for Intel Processors

Title: Creating Floppies From Images Under NEXTSTEP and DOS
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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 proveded in 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 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.floppyim
age 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.flo
ppyimage 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

3.3 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.floppyim
age 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 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 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 Additional Drivers Floppy Image

sum result: `32879   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 to get the uncompressed version.

It contains these drivers:
1752_AMD_PC_SCSI_Driver_Overview.rtf
1754_SymbiosLogic53C8xxSCSIDriver_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
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
1830_DPT_SCSI_family_Driver_Overview.rtf
1839_EIDE_Driver_Overview.rtf

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 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 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: `08696   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.floppyim
age 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

Readme For rawrite.exe Program

RaWrite 1.3

Disclaimer of Warranty

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

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 existance.   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