Release Notes
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Release Notes

This document contains notes about the NeXT™ Software Release 2.0. The first section provides late-breaking information or other points of interest about the 2.0 software. The last section briefly describes some key differences between this release and Software Release 1.0.

Updates

Recovering Disk Space

- **Recovery tips**: If you have a 105-megabyte hard disk drive installed in your NeXT computer and find that you need more disk space, try the following to recover some space. (Be sure to use the Empty Recycler command in the File menu to destroy any files you drag into the recycler.)

  1. Review your personal files (including mail messages) and delete as many of them as you can. (Use the Compact command in Mail’s Utilities menu to destroy deleted messages.)

  2. Look over the demo applications in `/NextDeveloper/Demos` and delete any that you’re not interested in. (You cannot, however, delete the `/NextDeveloper/Demos` folder.)

  3. If you need even more disk space, you can gain 3 megabytes of space by deleting the thesaurus used by Digital Webster™; specifically, delete the folder `/NextLibrary/References/Webster-Thesaurus`. If you absolutely need more space, you can gain an additional 15 megabytes by deleting the dictionary, `/NextLibrary/References/Webster-Dictionary`. (Consider backing up these files so you can restore them in case you have more space available in the future.)

November 1990
Workspace Manager and File System

- **Copy and move**: When you drag an icon to another folder, whether it’s copied or moved depends on both the location and ownership of the source and destination folders. If you drag to a folder on the same disk and you’re the owner of both the source and destination folders, Workspace Manager moves the file or folder; otherwise, it copies the file or folder.

- **Open as Folder**: The first time you open a folder in a separate window, it appears in the same type of view as the window you opened it from (rather than always opening in icon view, as stated in the documentation).

- **Folders in /NextDeveloper**: The /NextDeveloper folder contains an Apps folder and an Examples folder only in the extended release of the software.

- **Guided Tour demo**: On the extended release, the /NextDeveloper/Demos folder contains an application named Guided Tour.app that will help new users get a feel for what it’s like to work on a NeXT computer.

- **Ejecting disks**: To eject disks, be sure to choose the Eject command from the Disk menu. Do not press the eject disk button on the device unless you’re prompted to by the system.

Working with MS-DOS Disks

- **Initializing disks**: After initializing an MS-DOS disk to a UNIX disk, you must log out.

- **Copying files to MS-DOS disks**: If you try to copy more information to an MS-DOS disk than it has free space, Workspace Manager brings up a window that asks you to Stop or Proceed. Do not click Proceed because you may lose data on your hard disk. Clicking Stop will abort the operation and prevent data loss.

Printing

- **Manual paper feed**: When you click Print in the Print panel after choosing Manual, a panel containing Stop and Continue buttons appears if no paper has been manually fed after a short while. Click Stop if you want to halt printing and cancel the print request. The panel will go away when you begin feeding the paper or when you click Continue. You have a total of three minutes to begin feeding paper after you click Print; after three minutes, paper will be fed from the paper cassette.
Preferences

- **Large File System**: The Expert Preference called Large File System speeds up the display of folders that contain large numbers of files and folders (possibly at the expense of slowing down scrolling through the folder). Contrary to the documentation, folders continue to be differentiated from files in a browser, with an arrowhead symbol as usual.

WriteNow

- **Quotes in Merge template**: In an instruction in a template document read by the Merge command, nonnumeric values must be enclosed in quotes—for example, «IF city="Middletown"». (The quotation mark must be ′, not " or ′.)

- **Dictionary preferences**: The Dictionary field in the Preferences panel initially shows WNDictionary.wndict. WriteNow® will look for a default dictionary by that name in your home folder; if there’s none there, the dictionary by that name that’s supplied in WriteNow’s file package will be used. To specify a different dictionary in your home folder, you need only enter its file name (or other pathname relative to your home folder) and click Set. You can return to the initial default of WNDictionary.wndict by clearing the field and clicking Set.

- **MS-DOS disks**: Don’t save files onto MS-DOS disks from WriteNow. Instead, edit and save WriteNow files on the hard disk. To do this, use Workspace Manager to copy WriteNow files onto the hard disk before editing them and to copy them back to the MS-DOS disk when you’re done.

Digital Library

- **Folder icons**: Some folders in /NextLibrary are represented by icons that depict what they contain, rather than the standard folder icon.

- **Librarian Services command**: A Librarian Services command has been added to the Info menu in Digital Librarian ™. This command lets you control the services Librarian provides in other applications. You can enable or disable the Search and Target commands in the Librarian submenu of the Services menu, and you can create custom Search commands that specify a particular target. Use Librarian’s Help command to get more information (enter Librarian Services as your query).

- **Multiple target**: You can drag a multiple selection (the icon of a hand holding several cards) into the target area; however, don’t attempt to index such a target.

- **Indexing**: If the folder name for a target has any spaces in it, the target won’t be indexed properly. (It’s OK for a target’s label in the target area to have spaces in it, however.)
Mail

• **Initial mail retrieval:** When Mail starts up, it may take a while for your new messages to show up in your mailbox (depending on the volume of mail).

• **Sort order:** After you undelete messages or compact a mailbox, the messages will appear sorted by number regardless of the previous sort order.

• **Lip Service recording:** When you’re recording with the Lip Service™ panel, clicking Play doesn’t stop the recording as documented (you must click Stop).

• **Lip Service attachments:** Lip Service attachments can’t be cut, copied, and pasted like other attachments. To move an incorrectly placed Lip Service attachment, delete it and then insert it again in the correct location from the Lip Service panel.

• **Spell checking availability:** Contrary to the documentation, the Spelling command isn’t limited to use in a Send window; it can also be used in the message area of a mailbox window (the search for misspelled words starts at the beginning of the message). The same is true for Check Spelling, with the added feature that it can also be used to check spelling in text fields in panels.

• **No Receipt and NeXT Mail:** The No Receipt and NeXT Mail buttons in the Send window indicate the mode in which Mail will send the message; their labels change to indicate a different mode when you click them. To get a notification when the message has been read, click No Receipt to change it to Receipt; to send the message to a non-NeXT computer, click NeXT Mail to change it to Non-NeXT.

• **Mail Services:** If you have an RTF file open in the Edit application and you choose Selection from the Mail submenu of the Services menu, the selection appears with the proper fonts and formatting in a Send window, but the triangle symbol doesn’t appear on the Deliver button. When you mail the message to another NeXT computer, the fonts and formatting are removed.

Faxes

• **FaxReader icon:** If there are no received faxes, the FaxReader icon in the dock should show no paper coming out of the fax machine. However, this works only if you’ve set FaxReader to start up automatically when you enter the workspace, and then only until you unhide it; at other times, the paper is shown in the icon regardless of whether there are received faxes.

• **Tall images:** If a received fax contains an image that’s taller than the paper you print on, you can only print the top portion of the image. Only as much of the image that fits on one page is shown. This is most frequently encountered when there’s a caller ID line at the top of a letter-size fax.
• **Fax modem port:** In the Choose Fax Modem panel that appears when you click the Modem button in the Fax panel, the port a fax modem is attached to should be indicated by the letter A or B in the Port column if the fax modem is connected to your computer. This feature doesn’t work: The Port column is always blank.

• **Margins in custom cover sheet:** Margins in Cover.rtf are relative to the width of the text in the Cover Sheet panel. Make sure that if you change Cover.rtf, you make your margins smaller.

**Mass Storage**

• **New disk drive:** A 200 MB Hard Disk has been added to NeXT’s product line. The specifications for this internal storage device are as follows:
  
  - 3.5-inch half-height form factor
  - 200 MB formatted capacity
  - 15 ms average seek rate
  - 4.0 MB/sec maximum transfer rate (synchronous)
  - Software Release 2.0 preinstalled on disk

**Upgrade2.0**

• **Disk space:** If you’re upgrading a computer with an existing hard disk, Upgrade2.0 will need at least 5 MB and possibly as much as 20 MB of free space on the hard disk. If you keep around the Release 1.0 version of Mathematica® or Allegro CL® Common Lisp, it will need 7 MB or 8 MB more, respectively. In Release 1.0, you can use the Disk Info command in Workspace Manager’s Files menu for disk space information.

  If Upgrade2.0 estimates that there’s not enough room on the hard disk to perform the upgrade, it displays a message to this effect in its window when you start up the application. Before you can perform the upgrade, you must make more room by deleting files from the disk. (If you click the Upgrade button anyway, a similar message appears in a panel; click Cancel to remove the panel.)

  1. Return to Workspace Manager (click in the File Viewer or double-click the NeXT icon in the dock; *don’t quit Upgrade2.0*).

  2. Delete files from /UPGRADE2.0 (which contains the entire contents of the hard disk).

  3. Return to Upgrade2.0, *quit and restart it*, and see whether there’s enough disk space; if not, repeat these steps until there is sufficient space.
It may happen that Upgrade2.0 needs more room than it originally estimates. In this case, it will present an attention panel during the upgrade that says the disk is full. To continue with the upgrade, follow steps 1 and 2 above, dragging the panel off to the side if necessary (if you’ve elected to replace a large number of modified files, you may find that /UPGRADE2.0/UPGRADEDFILES is a good place to begin looking for files to delete). Then return to Upgrade2.0 and click Proceed in the panel. *It’s very important that the upgrade be continued in this manner or your hard disk may be left in an inconsistent state.*

- **Continuing an interrupted upgrade:** If a power failure or other unexpected problem interrupts an upgrade, you’ll need to restart Upgrade2.0 so that the upgrade can be completed. Upgrade2.0 can automatically resume the upgrade at the point where the problem occurred. Answer any questions the same way you answered them the first time.

**FrameMaker**

**Update FrameMaker 2.0b:** FrameMaker® 2.0b uses a font encoding mechanism that’s incompatible with NeXT’s Release 2.0. To fix your copy of FrameMaker so that it will work with 2.0, follow the steps below. (Do this even if you’re only upgrading some of your systems to 2.0.)

1. Using Workspace Manager, find the folder where FrameMaker.app is installed. Normally, it’s either in /LocalApps or your own personal Apps folder, ~/Apps. (This update doesn’t apply to the Release 1.0 demo version of FrameMaker in /NextDeveloper/Demos.)

2. If you installed FrameMaker in your own ~/Apps folder, skip to step 3. If FrameMaker was installed in a shared folder owned by root, you must log in as root to go any further (your system administrator may need to help you with this).

3. Use Workspace Manager to find /NextAdmin/FrameUpdate.pkg and double-click it. This will start up the Installer application.

4. In the Installer application, click the Install button. In the panel that appears, select the folder where FrameMaker is installed (which you found in step 1), and click OK.

5. Installer will ask you to confirm where you would like to install this update. An alert panel will tell you that some of the files in this package are already installed, and that continuing will overwrite these files. Click Continue to complete the installation.

Two things that can go wrong with the installation are:

- You don’t have permission to write the files that need changing. You can solve this problem by logging in as root on the computer containing the disk that FrameMaker resides on.
• You installed the update in the wrong folder. If you specify a folder other than the one in which FrameMaker is installed, you'll end up with a file named FrameMaker.app that's incomplete and doesn't have the FrameMaker icon. This happens because the update is not a complete FrameMaker release; it needs to be installed on top of your existing FrameMaker 2.0b.

Network and System Administration

• **System administration bookshelf:** In /NextLibrary/Bookshelves in the extended release of the software, there's a bookshelf named SysAdmin.bshlf, which has the Network and System Administration manual and the UNIX manual pages as its targets.

• **Using BuildDisk on very large disks:** If you use BuildDisk to install the system software on a NeXT 660 MB hard disk, your system may not be able to boot normally. (The disk comes built, so building the disk again is usually unnecessary.) To fix the problem, edit /etc/fstab before you reboot. Delete the line that begins with "/dev/sd0b". If you try to reboot before deleting this line, the boot process will end with the presentation of a small window with an error message followed by a "#" prompt. You can continue the boot by typing Control-D at that prompt. When booting completes, be sure to edit /etc/fstab so that booting will proceed normally in the future.

The NeXT 660 MB hard disk (and some disks from other vendors) has no entries in the file /etc/disktab. If your disk has no entry in /etc/disktab, BuildDisk will correctly format the disk to have one partition, but will set up the /etc/fstab file as though the disk has two partitions. This will cause booting to end prematurely. (Note that BuildDisk, in this case, will not ask how many partitions you want to create.)

• **Serial ports:** For an update to information about serial ports, look in the NeXT User target in Digital Librarian; this update supersedes the information in the zs manual page in the Network and System Administration manual appendix.

• **NetManager:** When you choose Save To Domain in NetManager, and the host you're saving already exists in the specified domain, NetManager asks you if you want to overwrite the existing entry. However, NetManager doesn't overwrite the entry even if you ask it to. Rather, it adds another entry with the same name. You should manually delete the old one by opening it and choosing Delete from the Host menu. Be sure you've opened the old entry by examining any fields you changed.

• **Network time service:** The discussion of network time service implies that if you try to change the time on a time client, it will eventually resynchronize with the network time. This isn't true if you change the time with the date command. If you do change the time with the date command (which is not recommended), you must resynchronize the time either by clicking the Synchronize button in the Date and Time panel in the Preferences application, or by executing the command

```
/usr/etc/ntpd -F
```
• **InstallTablet:** If you’re using a SummaSketch tablet and switch tablet modes, you must reboot after switching modes.

**Setting Up**

• **Power cord:** A 125V parallel-blade UL-listed power cord is provided by NeXT; for 240V power, a 250V tandem-blade UL-listed power cord should be used.

**Key Differences from Release 1.0**

This section summarizes significant differences from the Release 1.0 software. For details, see the user manuals.

**General**

• **Menus and commands:** Many application menus have been reorganized, and some keyboard alternatives have changed, to comply with the new NeXT user interface guidelines.

• **Folders:** Directories are now referred to as “folders.”

**Workspace Manager**

• **Customizing your dock:** When you start up the computer after updating to Release 2.0, your application dock may not look the same as it did in 1.0; if it doesn’t, just customize it yourself as necessary. If you specified applications to start up automatically in 1.0, you must reset them with the Preferences command in the Info menu.

• **File Viewer window:** The Directory Browser window has been replaced by the File Viewer window, which is divided into three areas: a *shelf* at the top for displaying icons of files and folders that you access frequently; below that, an *icon path* showing the path to the current selection; and an area at the bottom of the window for viewing the contents of folders.

• **Browser and other views:** The folder view area is initially a browser, similar to the one in the 1.0 Directory Browser window; you can change this view with commands in the View menu. Icon view is similar to Icon view in 1.0, except that double-clicking a folder icon opens that folder in the same window, rather than in another folder window. Listing view provides the same information as Name view in 1.0. To display the contents of a folder by date or size, choose the Inspector command from the Tools menu to display a panel in which you can choose a sort option.
• **Icon path:** The icon on the far right in the icon path indicates the selected file or folder, and is thus equivalent to the icon in the icon well in 1.0. Clicking a folder icon in the icon path selects the folder; this is the primary way to move up the file hierarchy. To scroll along the highlighted branch of the file hierarchy, use the scroller at the bottom of the icon path. In browser view, the icon path shows the selection in each column of the browser.

• **Shelf:** You can click an icon on the shelf to select it. To open a file from the shelf, double-click it. Add icons to the shelf by dragging them there from the icon path (or from icon view). You can remove any icon from the shelf, except the home folder icon, by dragging it out into the workspace.

• **Copy and move:** Copying or moving files and folders has been simplified. Select what you want to copy or move, then drag your selection’s icon from the icon path onto the shelf. Next, display the destination folder in the icon path and drag the selection from the shelf into the destination folder’s icon (possibly holding down a modifier key; see below). As in 1.0, the cursor’s shape changes to indicate whether you’re copying or moving. You can force a copy with the Alternate key, and force a move with the Command key.

• **Background processes:** Workspace Manager now performs file operations in the background, allowing you to continue to work while files are being moved or copied. You can track background processes with the Processes command in the Tools menu; this can be very important if you’re performing an operation that may take some time and that must be completed before you perform another operation (for example, if you’re moving a large number of files out of a folder that you then want to rename or delete). If a background process encounters an exceptional condition—for example, a full disk—the Processes panel will appear describing the condition and providing options for completing the operation.

• **Typing pathnames:** To open a file or folder by typing its pathname, choose Finder from the Tools menu.

• **Recycler:** The black hole icon has been replaced by the recycler icon. Deleting with the recycler works the same way as with the black hole. Unlike the black hole icon, the recycler icon cannot be moved out of the dock, and it remains in the dock when you double-click it to display its contents. When there’s something in the recycler, a sphere appears in the center of the icon.

• **Disk commands:** The Disk menu replaces the Optical menu. The Mount and Unmount commands are no longer available; disks are automatically mounted when inserted in a drive, and automatically unmounted when ejected. Optical disks (or floppy disks) appear in your root folder rather than in your home folder.

• **Killing an application:** You can now kill an application by choosing Processes from the Tools menu and clicking the Kill button that appears in the Processes panel when the Applications option is selected.

• **Information about files:** To get information about files or folders that was previously provided by the More Info command, use the Inspector command in the Tools menu.
Digital Librarian

- **Reindexing**: You must rebuild the indexes for any targets that you indexed in Release 1.0. (Digital Librarian in Release 2.0 will consider targets with old indexes to be unindexed.)

Preferences

- **Setting the time**: If your computer is on a network and its internal clock is managed by your system administrator, you’ll no longer be able to set the time. You may only synchronize the time on your machine with the network time, though you can still change the time zone.

- **Keyboard diagram**: In Keyboard Preferences, in the Keyboard panel, the diagram of the keyboard is not accurate for older keyboards. For more information, see the Notes in Appendix E of the *NeXT User’s Reference* manual.

PrintManager

- **Local Printer**: There must always be one and only one printer entry for the local NeXT 400 dpi Laser Printer. PrintManager no longer lets you delete or add entries for the local NeXT printer.

- **Current printer**: The current printer is no longer marked with a check mark in the PrintManager window; it’s the one that’s highlighted in the window when you first start up PrintManager.

WriteNow

- **Checking Document Format**: There’s a slight difference in the way lines are spaced. As a result, when you open old documents you’ll get the “Checking Document Format...” panel. If you subsequently save the document, it will open the next time without the “Checking Document Format...” panel. To avoid this problem, you should open and save all the documents that you use.

Mail

- **New Mail command**: The New Mail command now beeps if there’s no new mail. If there is new mail, the command will seem to execute immediately (rather than wait until all the new mail has been retrieved). It’s actually retrieving the new mail in the background; the mail will show up a little later.
Terminal

- **New application**: A new Terminal application is available in /NeXTApps; this 2.0 version of Terminal combines the functionality of the 1.0 Terminal and Shell applications, and provides full VT100 terminal emulation. For information about this application, see the NeXT Development Tools manual in the NeXT Developer’s Library.