

What's Improved in Release 2.1?

NeXT recently shipped Software Release 2.1, which was designed to provide support for the NeXTstation Color. However, Release 2.1 also includes some added functionality unrelated to NeXTstation Color support. In general, it will be somewhat more reliable than 2.0 because it includes fixes to some low-level system software (in 2.0 these problems occasionally forced logout). The following lists the most important bugs that were fixed in 2.1.

Disk Use

- If you ran the spelling checker against a file on a removable disk, you could not remove the disk unless you killed the spelling checker daemon (spelled). This has been fixed.
- After mounting a CD-ROM, receipt of data using the serial ports at 19,200 baud was unreliable; likewise, fax receipt was unreliable. In both cases, data could be lost. This has been fixed.
- Entries for SCSI disks have been removed from /etc/disktab. The system can determine the drive geometry for most disks. In addition, the disk program is able to build a two-partition configuration for large disks. You need an entry in disktab only if you want to do something nonstandard.

Fax Subsystem

In general, we highly recommend that anyone using the fax capabilities of a NeXT computer upgrade to Release 2.1.

- Incompatibilities with some fax machines have been corrected.
- The Class 2 Fax Modem driver was missing in Release 2.0; it is included in 2.1. (Note that the Class 2 Fax Modem driver is the same code as the Interfax™ Fax Modem driver; a symbolic link was missing in 2.0.)
- If you had characters other than spaces and digits in the Modem's Number field in the Fax Options panel, the fax modem would not answer the phone. This has been corrected.

Digital Librarian

- In Release 2.1, you can update indices from the Digital Librarian™ without having to delete the index first.
- Digital Librarian can now index folders with spaces in their names.

Printing

- Release 2.1 corrects a problem that led to difficulties when printing to a remote printer connected to a non-NeXT computer.

- Under a very few circumstances, printing on a 68040-based NeXT computer was much slower than printing on a 68030-based machine. Printing on a 68040 is now uniformly faster than printing on 68030.
- In 2.0, if a print job was directed to a machine with no printer, it could lead to the target machine's disk filling up. This has been fixed in 2.1.

Serial Ports

We highly recommend that anyone using the serial ports upgrade to Release 2.1. This is especially true if the serial ports are used with a modem (fax or data).

- Two bugs that led to difficulties accessing the serial ports under some circumstances have been fixed. (The symptoms generated by these bugs included the getty program acquiring a controlling terminal prematurely, leading to the port appearing to be busy when it was actually idle.)
- The tip command would crash if you tried to use it with `/dev/ttyfa` or `/dev/ttyfb`. This has been corrected.

Workspace

- Attempting to copy a file that would not fit to a DOS disk could cause removal of many files on your primary disk. This has been fixed.

- The /LocalApps directory was missing from the effective ApplicationPaths of a new user; it is properly included in 2.1.

Miscellaneous

- Using a LoginHook with the loginwindow program no longer destroys your ability to log in.
- Control-\ is now recognized from new-style keyboards.
- The 2.0 boot block, which is necessary for 68040-based computers, is now correctly written when SCSI Disk 0 is upgraded (using the Upgrade2.0 application). Upgrade2.0 can be restarted more consistently after a failure under Release 2.1.
- Using a large number of fonts is much more reliable in 2.1 than in 2.0. However, see *NeXT Technical Alert* 91-2 regarding using many fonts in a user's individual font library.
- Mail has been made more secure, through a combination of having the correct permissions on /usr/spool/mail (the ^asticky^{oo} bit should be on, especially if the directory's permissions permit world write) and setting permissions correctly on the mail spool

files when receiving incoming mail.

- The file system consistency checker, fsck, now handles file names with the eighth bit set (for example, Alternate-o [that's Alternate lowercase o]).
- The floor() subroutine is much faster in Release 2.1 than in Release 2.0.
- The constant HUGE in the mathematics libraries has the correct value in Release 2.1 (its value in 2.0 was incorrect).