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System 7.5 v7.5.3 Technical Details: Part 3 of 3 (8/96)

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TOPIC -------------------------------------------------------------

This article is the System 7.5 Technical Details (part 3 of 3) document.


DISCUSSION --------------------------------------------------------


System 7.5 Technical Details (part 3 of 3)

This file is one of several Read Me files that describe technical
details between system software version 7.5 and system software version
7.5.3. This information is most appropriate for advanced users. For
less technical information, see the About System 7.5 document, the
Installing System 7.5 document, or the What's New in version 7.5.3
document.

What's in this document (part 3 of 3)
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- Changes for PowerPC-based models
- Changes for PowerBook and Duo models
- Changes for other 68K-based models
- Changes for PC cards
- Changes for AppleVision monitors
- Changes related to printing
- Known problems and their workarounds
- Tips


Changes for PowerPC-based models
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• PowerPC-based computers with PCI expansion slots now use the Monitors & Sound
control panel to control monitor and sound settings instead of the Sound &
Displays control panel. You can do a custom installation to install the Sound
control panel if you need it for older applications.

• Includes native SCSI (not on desktop 5200, 5300, 6200, and 6300 series
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computers).

• Fixes a SCSI
Manager problem that would hang any PowerPC-based computer if a Sony or WangDAT
DAT drive was used with Retrospect.

• Fixes a problem on desktop 5200, 5300, 6200, and 6300 series computers running
QuickTime 2.1 that would prevent sound from being heard in Fusion Recorder's
Record window until either a recording was started or the TV volume in the Sound
control panel was unmuted.

• Includes both native and 68K versions of common Modern Memory Manager
routines, inproving performance of emulated applications by speeding up calls to
common routines. (System software versions 7.5 and 7.5.1 included only the
native implementations, while system software version 7.5.2 included both native
and 68K versions.)

• Includes a rewritten fixed-point math library to provide better performance
for QuickDraw, other parts of the system, and all applications that use this
library. Because QuickDraw and other parts of the System use this library
extensively, installing this update will cause noticeable performance gains.

• PowerPC-based computers with PCI expansion slots might have a different
physical Ethernet address after you install this software. The software fixes a
bug that caused an incorrect physical Ethernet address to be used in
environments where TCP/IP addresses are obtained using BootP, DHCP, or RARP. To
see the new Ethernet address after you install this software, open the File menu
in the AppleTalk or TCP/IP control panel and choose Get Info. If you install
this software and are no longer able to use your TCP/IP-based applications,
contact your network system administrator.

• On PowerPC-based computers (including those with PowerPC Upgrade cards)
running system software version 7.5 or 7.5.1, this software version introduces
the Native Resource Manager. This version of the Native Resource Manager is
slightly newer than the version released with system software version 7.5.2. The
System 7.5.2 Update file includes the same improved version of the Native
Resource Manager.

• Reduces times to open applications on PowerPC-based computers with virtual
memory turned on. System 7.5.2 (not 7.5 or 7.5.1) would significantly slow down
while opening certain applications, such as Microsoft Excel version 5.0, if
virtual memory was turned on. With this system software version installed,
launch times should be about the same whether or not virtual memory is turned
on.

• Fixes a bug affecting plug-ins that import from an application. This problem
existed in all PowerPC-based computers running system software versions 7.1.2,
7.5, 7.5.1, and 7.5.2. and was originally fixed by the CFM Updater extension
(distributed with QuickDraw 3D). This version of system software deletes this
extension, which is no longer needed.

• Fixes a bug in starting up from removable media with virtual memory on.
(Although this bug was fixed in 7.5.2, it still exists in 7.1.2, 7.5, and 7.5.1

PowerPC computers.)

• Fixes problems with the DR Emulator. (The DR Emulator works only on PCI-based computers and the PowerBook 2300, 5300, and 500 upgrade.)

• Fixes a problem in certain IDE drives that resulted in cached data not being written to the disk at shutdown.

• Fixes anti-aliasing errors for Kanji Type 1 fonts.

• Fixes a problem that resulted in off-white often being drawn as white. (This effect, while generally subtle, was significant enough for some applications to merit a fix.)

• Fixes a crash problem (a Type 11 error) in Native QuickDraw; this error occurred when using Quark XPress v3.1.1 with system software versions 7.5 and 7.5.1. System 7.5.2 and later versions corrected this problem. If you have Type 11 errors when using Quark XPress 3.3.1 with System 7.5.3 on a PowerPC-based computer, one suggested solution is upgrading to the latest version of Quark Express.

• Fixes a problem in the Dialog Manager that caused some applications to crash after a dialog box was dismissed.

• Supports DayStar Turbo 601 cards in a Macintosh IIci or IIsi.

• If you use Microsoft Office 4.2.1, you need the extension "Office 4.2x Update For Power Mac," version 1.0.1, and the Microsoft Office Manager control panel, version 4.2.1b. You can download these files from the Internet. Download the MC1164.HQX and MOMPATCH.HQX "patch" (update) files from Microsoft. The patches are available on the Internet at

ftp://ftp.microsoft.com/softlib/mslfiles

• Includes changes to native QuickDraw which speed up operations such as scrolling, image filtering, and pattern and text drawing. ("Native QuickDraw" refers to time-critical portions of QuickDraw that have been native since the initial release of PowerPC-based computers.

• Updates video software, thus prevent video scrambling during computer startup.

Changes for PowerBook and PowerBook Duo models

• Contains a new version of password security software. The version that shipped with the PowerBook 5300 and the PowerBook 190 computers could lock out international users since the software to handle international keyboards does not load until after the password is requested during startup. If the password contained a character that was not available on a U.S. keyboard, it could not be entered and the computer could not finish starting up. The new version of the password security software fixes this problem.

• Fixes a problem in the Assistant Toolbox that caused the Assistant Toolbox to

be incompatible with Open Transport.

• Fixes a problem that prevented PowerBooks and PowerBook Duos from going to sleep if SimpleText or certain other applications were running in the background.

• Fixes problems with the DR Emulator. (The DR Emulator works only on PCI-based computers and the PowerBook 2300, 5300, and 500 upgrade.)

• PowerBook Duo docks: Pressing the eject button automatically opens items in the Shutdown Items folder and shuts down the computer. No dialog box appears.

• PowerBook 500 models: Improves trackpad performance.

• PowerBook 150: Extends battery life by reducing power requirements during sleep mode. It also prevents the system from freezing when you repeatedly use the internal modem without restarting the computer.

• PowerBook 150: Eliminates the need for the PowerBook 150 Update system extension. Installing Update 2.0 automatically removes this extension from the Extensions folder (inside the System Folder).

• PowerBook 150: Fixes a problem that prevented the internal IDE disk from appearing on the desktop. The problem occurred if the internal IDE disk was selected as the startup disk, and the Command-Shift-Option-Delete keys were held during startup (to start up from an external hard disk).

Changes for other 68K-based models

• Quadra 900 and 950: Fixes a problem in the Sound control panel. Before this version of system software, the External Line and Internal CD buttons in the Sound control panel were reversed, so that clicking the Internal CD button was interpreted as though the External Line button had been clicked (and vice-versa).

• Quadra 950: Fixes a problem with the Sound control panel. Before this software version, clicking the Add button sometimes caused the computer to crash.

• Centris 660AV, Quadra 660AV, and Quadra 840AV: Includes Apple Video Player v.1.4, which replaces the Video Monitor application (which is no longer supported).

• Quadra 840AV, Quadra 660AV, and Centris 660AV: Includes new video software that prevents video scrambling during computer startup.

• Quadra 840AV, Quadra 660AV, and Centris 660AV: Fixes a problem in the Dialog Manager that caused some applications to crash after a dialog was dismissed.

• Performa 630, Quadra 630, and LC 630 with internal IDE drives: Fixes a problem that prevented the internal IDE disk from appearing on the desktop. The problem occurred if the internal IDE disk was selected as the startup disk, and the Command-Shift-Option-Delete keys were pressed during startup (to start up from an external hard disk).

• Quadra 700: Fixes a potential problem that could slow down the mouse or trackball.

• Quadra 840AV: Includes an updated Display Manager which ensures that a multi-sync monitor is set to the correct resolution when you restart the computer.

Changes for DOS Compatibility Cards

• Macintosh Easy Open version 1.1.1 fixes problems with cut and paste between Mac OS and PC applications on Mac OS computers with a DOS Compatibility Card installed.

• Quadra 610 and Centris 610 computers with the 610 DOS Compatibility Card installed receive PC Setup version 1.0.2 (software that was inadvertently not provided with the upgrade disks for System 7.5).

Changes for AppleVision monitors

• If you use AppleVision software, use version 1.0.2 or later. Earlier versions of AppleVision are not compatible with this software.

• If you have a 1710AV monitor and a PCI-based computer, use AppleVision 1.0.4 and the Monitors & Sound control panel.

• If you have a 1710AV monitor and a non-PCI-based computer, use AppleVision 1.0.2, the Sound control panel, and the Monitors control panel.

Changes related to printing

• Includes version 2.1.1 of the StyleWriter 1200 driver, which fixes a crash bug on System 7.5.2-capable computers.

• Includes the LaserWriter 8F (version 8.2.3F) driver, which supports all the fax options on the LaserWriter 16/600. The LaserWriter 8 (version 8.3.3) driver does not support all these fax options.

• Supports QuickTime compressed images and ColorSync 2.0 through the LaserWriter 8 (version 8.3.3) driver.

• The LaserWriter 8 (version 8.3.3) and LaserWriter 8F (version 8.2.3) drivers contain fixes for two common printing problems found on PCI-based computers: freezing when trying to print to a printer that's busy, and freezing when trying to print large documents or printing to LocalTalk-based printers.

• The LaserWriter 8F, version 8.2.3, printer driver provides the following enhancements (introduced in version 8.2):

 - Improves the function of the Setup button in the Chooser; this button automatically looks for the selected printer, selects the appropriate PostScript Printer Definition (PPD) file, and configures the paper trays. (If you prefer to manually configure the PPD files and paper trays, you can do so by clicking the

Setup button a second time.)

- Resets the destination in the Print dialog box to Printer instead of
  retaining the previous print job's destination. For example, if the
  previous destination was Fax, the destination automatically resets to
  Printer for the next job.
- Enables you to tab backwards through the fields in all print dialog
  boxes by pressing Shift-Tab.

Note: Installing the LaserWriter 8F version 8.2.3 printer driver removes the
LaserWriter 8 Prefs file from your system. Thus, after you install, you need to
set up your printer using the following steps:

1. Open the Chooser.
2. Click the LaserWriter 8 icon.
3. Click the printer you want to use.
4. Click the Setup button.

Known problems and their workarounds

• Apple Video Player displays an incorrect dialog box if it's opened on a
computer that does not have video-in capability. Apple Video Player complains
that the Video Startup extension was not installed properly instead of stating
that video-in is required for this application to run.

• If, when you try to print, you see a message that your printing preferences
are missing or damaged, open the Chooser and select a printer.

• Some versions of the LaserWriter driver (version 7.2 and earlier) and the
QuickDraw GX printer drivers still have the problems that interfere with
PCI-based computers trying to print on a busy printer or trying to print large
documents. If you experience these problems, select the LaserWriter 8.3.2 driver
from the Chooser.

• Two different control panels are named "Energy Saver." The older version
worked by dimming the external screens of certain computers. The newer Energy
Saver, which works differently, works only on PowerPC computers with PCI slots.

The universal System Folder (created by choosing Any Macintosh in the Custom
Install option) that can be created by this system software version contains
only the newer Energy Saver. If your universal System Folder requires both
versions of the Energy Saver, do the following:

1. Rename the newer Energy Saver.
2. Use the Custom Install option to install the older Energy Saver.

• The new minimum RAM disk size is 416K. If a smaller RAM disk exists during the
installation of this software, it will be turned off and its contents lost when
the computer is restarted. Therefore, before installing this software on a
computer with a RAM disk smaller than 416K, move all the contents of the RAM
disk to another disk.

• Digital audio recording and playback can occasionally "skip" if virtual memory

is turned on. To reduce this skipping, turn off virtual memory.

• HyperCard version 2.3.3 or earlier does not record sound properly on computers with PCI slots. Other sound-recording application programs, including SimpleSound and the Sound control panel, can record sounds that you can import and play within HyperCard 2.3.

• When used with SerialDMA, DOS Compatibility software will not be able to use hardware handshaking on the PC serial port.

• There is an incompatibility between AppleShare Workstation software version 3.6.1 and Connectix Speed Copy (part of Speed Doubler version 1.1 or earlier). Use the Extensions Manager to turn off Speed Copy before you install this software, and contact Connectix to get the latest version of Speed Doubler. (You can contact Connectix at http://www.connectix.com, 415-571-5100, or 800-950-5880.)

• If you are using the IR port and Open Transport on a PowerBook 190, and networking doesn't work after you restart the computer, try putting the computer to sleep and waking it up, or choose the printer/modem port and then switch back to the IR port.

• The Ethernet Compatiblity extension version 1.0.3 fixes a problem in the Macintosh system shutdown code for PCI-based PowerPC computers running some network software, including Novell Netware. The side effect of this fix is a two-minute delay in shutting down the computer.

• When using Drive Setup (version 1.0.4 or earlier) on some IDE hard drives, the "Update driver," "Customize volume," and "Test disk" options are dimmed. To use these options, back up all data from the IDE disk onto another disk, and use Drive Setup to reinitialize the IDE disk.

• If you have a Macintosh Centris 660AV, Quadra 660AV, or Quadra 840AV, some system alert sounds may not play correctly with the alert volume turned down. To avoid the problem, keep the alert volume turned all the way up and adjust the Built-In system volume:

1. Open the Sound control panel.
2. Choose Volumes from the pop-up menu.
3. Adjust the volume.

• Speech version 1.4.1 can cause a Macintosh Plus (a model which does not support speech) to hang during startup. If your Macintosh Plus hangs during startup, do the following:

1. Restart the computer while holding down the Space bar.
2. When the Extensions Manager dialog box appears, turn off Speech.

• If your computer has a 68000 processor and the computer won't start up, try pressing the Shift key (to turn off extensions) while you restart. If there is a "Color StyleWriter 2000 CMM" file in your Extensions folder (inside the System Folder), take this file out of the Extensions folder and restart your computer. (To use the Color StyleWriter 2000 series printer, you need a 68020 or higher

processor.)

Tips

• Many LaserWriter LS users are unaware that this printer is supported by the
LaserWriter 300 driver. To make this clear, future system releases will rename
this driver to LaserWriter 300/LS. For now, you can either rename this driver or
wait for a future release to do it for you. If you rename it, you must select
the new name from the Chooser before you can print using this renamed driver.

• Recent-documents tracking (in Apple Menu Options) tracks all files that are
opened -- even those opened by an application as part of its launch sequence
(such as drop-in filters used by desktop publishing packages). This tracking can
significantly slow down the launching of these applications. To reduce this
overhead you can:

- turn off "recent documents" tracking in the Apple Menu Options control
  panel
- turn off Apple Menu Options in the Extensions Manager

• This update resets all settings in the Apple Menu Options control panel to
their default values. If you have made changes to Apple Menu Options, you will
need to select them again after installing this update. If you have set Apple
Menu Options to track more than ten items in any category, you may want to move
some of those aliases out of their folders before you install the update, which
deletes all but the ten most recent items in each category.

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