



Guide to
Macintosh
System 7.6
Update

Lisa Lee



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Mac OS 7.6 Reality Check

AppleScript, OpenDoc, Open Transport, Cyberdog, and QuickDraw GX are important System tools and features codified in Mac OS 7.6, as discussed on Page 2, paragraph 1. AppleScript and Open Transport are installed as part of the Mac OS installer. OpenDoc, CyberDog, and QuickDraw GX have their own installers, which are accessible individually or by using the Install Mac OS 7.6 application. PowerTalk, however, is no longer supported by Mac OS 7.6. Consequently, Apple has also announced it does not plan to support QuickDraw GX, OpenDoc or Open Transport in future versions of its operating systems, such as Rhapsody.

What's in Mac OS 7.6?

System 7.5.5 was the last System software release from Apple to support all Mac models (see page 3, paragraph 3). Mac OS 7.6 supports all 68030 (except for the SE/30, IIx and IIcx), 68040 and all Power Macintosh models with at least 8MB of RAM and an additional 8MB of virtual memory. 32-bit memory mode is always "on," and with Power Macs, Modern Memory Manager is always "on." Mac OS 7.6.1 is required for Macs released after 7.6, such as the 5500, 6500, 9600/200, and 8600/200 (and Multi-processor) Macs.

Safe Install Utility, mentioned on Page 4, paragraph 1, is replaced by a new installer application in Mac OS 7.6, **Install Mac OS**, version 7.6. **Install Mac OS** is the application that you should run before

installing Mac OS 7.6. Install Mac OS is located on the first install disk on the floppy version of 7.6, or on the root level of the Mac OS 7.6 CD-ROM.

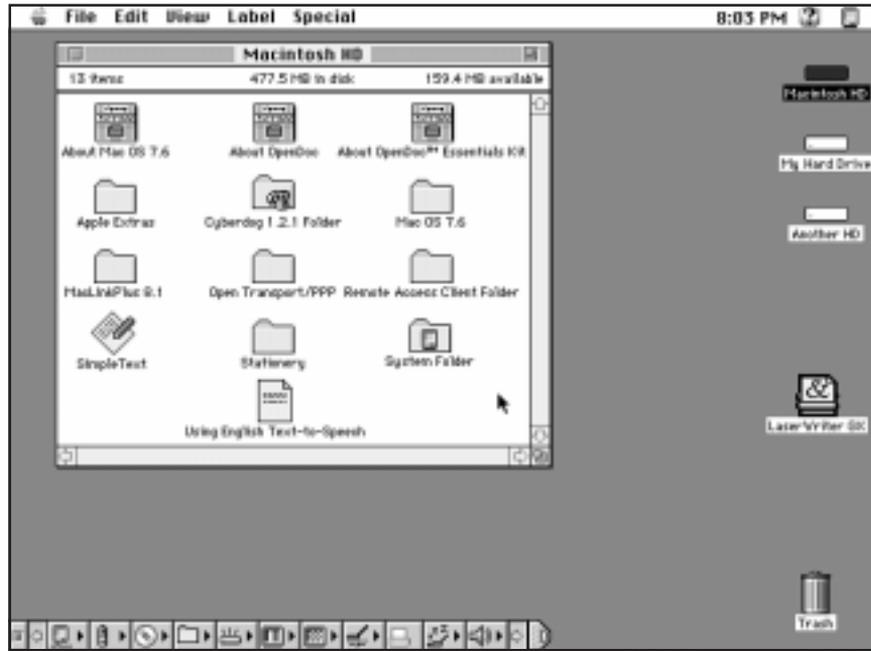


Figure 0.1 Mac OS 7.6 desktop.

Apple Macintosh Guide has a newer version in Mac OS 7.6 (see Page 4, paragraph 3). Apple Guide 2.1.1 includes guide support for OpenDoc parts. Both OpenDoc 1.1.2 and CyberDog 1.2.1 provide guide support in Mac OS 7.6.

Macintosh Easy Open™ (see Page 6, paragraph 5) has had a name change. Macintosh Easy Open has been renamed to Mac OS Easy Open. There also is a new version of Mac OS Easy Open, version 1.1.3. This version must be used with Mac OS 7.6.

PC Exchange (see Page 6, paragraph 6) is version 2.1.1 on Mac OS 7.6. It contains bug fixes for Power Mac models and support for 586 cards for Power Macs.

Mac TCP® (see Page 6, paragraph 7) is no longer installed with Mac OS 7.6. Mac OS 7.6 only installs and supports Open Transport. The Network Selector Switch application and Classic AppleTalk are no longer supported in Mac OS 7.6.

Multitasking Thread Manager (see Page 7, paragraph 1) was formerly a shared library that installed to the extensions folder. Multitasking Thread Manager is built into the system file of Mac OS 7.6 (as well as in the system file of System 7.5).

PowerTalk™ (see Page 7, last paragraph) is only supported on System 7 Pro through System 7.5.5. Mac OS 7.6 will not allow any PowerTalk technologies to work with it.

QuickDraw GX™ 1.1.5 is a new (and last) version of QuickDraw GX. Mac OS 7.6 has a new version of QuickDraw GX, version 1.1.5. QuickDraw GX 1.1.5 must be used with Mac OS 7.6. Earlier versions of QuickDraw GX are not supported by Mac OS 7.6. For reference see Page 8, last paragraph.

The following additional information is referenced from Page 10, following paragraph 6. These are new features that have been added to Mac OS 7.6.

Apple System Profiler

System Profiler is an application that will display more detailed information about your Mac and Power Mac such as the processor, speed of the processor, amount of memory installed, printer selected in Chooser, and version of System software currently running.

Extensions Manager 4.0

Extensions Manager has a new look and additional features in Mac OS 7.6. Its main purpose is to allow you to turn on or off your System Folder's extensions. Extensions Manager 4.0 is explained in more detail in Chapter 3, starting on Page 136.

Screen Capture

Full and partial screen captures are supported in Mac OS 7.6. The following is a list of screen capture options available in Mac OS 7.6 courtesy of Apple Computer.

- Command-Shift-Control-3 copies a picture of the entire desktop to the Clipboard.
- Command-Shift-4 creates a picture file of a rectangular selection of the desktop. After pressing and releasing the key combination, position the cursor at the upper-left corner of the area you want to capture, then drag

to the lower-right corner. If you continue to press the Shift key while dragging the cursor, the capture area will be constrained to a square.

- Command-Shift-4-Caps Lock creates a picture file of a window. After pressing the key combination, click the window you want to capture.

To save the rectangle or window on the Clipboard instead of as a file, press the Control key as you click. To cancel a Command-Shift-4 screen selection, press the Spacebar.

Third-Party Software Bundled on the CD-ROM Version of Mac OS 7.6

The CD-ROM for Mac OS 7.6 contains software updaters, as mentioned on Page 11, paragraph 5. There are two At Ease updaters on the Mac OS 7.6 CD. They are located in the CD Extras folder and contain updates to At Ease 2.0.3 and At Ease 3.0.3. On Page 11 in general, paragraphs referring to PowerTalk software do not apply to Mac OS 7.6.

Crabb's Bottom Line

Crabb's Bottom line summarizes its chapter contents. On Page 13, PowerTalk references in Chapter 6 do not apply to Mac OS 7.6.

Chapter 1

A First Look at Mac OS 7.6

New features for Mac OS 7.6 are not based on System 7 Pro, as referenced from Page 16, paragraph 3. System 7 Pro was a PowerTalk release of Mac OS. Mac OS 7.6 does not support PowerTalk and is based more on System 7.5, version 7.5.3r2.

The Macintosh Desktop: A Guided Tour

System 7.5.5 consisted of three installers (see Page 17, paragraph 3). Mac OS 7.6 consists of 10 software installers for Power Macs, and 7 for 680x0 Macs. CFM 68K is not supported in Mac OS 7.6, preventing OpenDoc 1.1.2 and CyberDog 1.2.1 software from being supported on 680x0 Macs. QuickDraw 3D is a Power Mac-only software package. A newer version of CFM 68K, (available from Apple's Web site) is now available for 680x0 Macs and can be used with Mac OS 7.6. The CFM 68K updates is also apart of Apple's Mac OS 7.6.1 update, which can also be found on Apple's Web site.

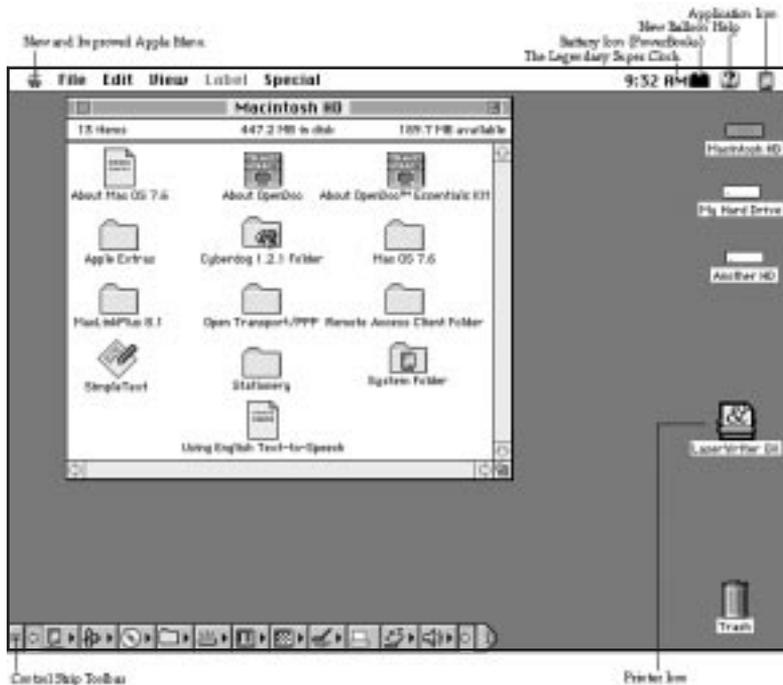


Figure 1.1 The Mac OS 7.6 desktop.

(Figure 1.1 is an updated screenshot of that shown on page 18.)

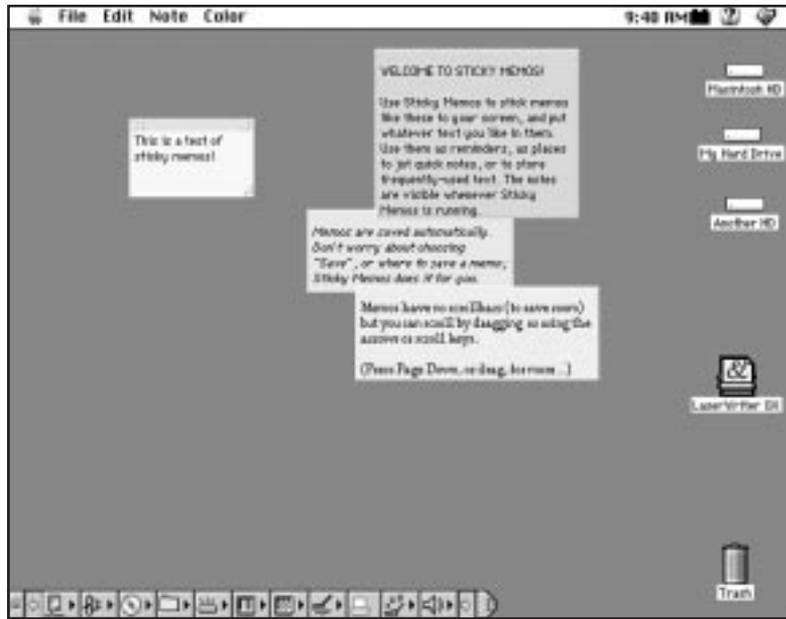


Figure 1.2 *Stickies.*
(Updated screen shot of that shown on Page 27.)



Figure 1.3 *WindowShade.*
(Updated screen shot of that shown on Page 28.)

Collaboration (AOCE and PowerTalk)

Starting with page 41 and on through 47, various features of PowerTalk are explained. These PowerTalk features are no longer supported by Mac OS 7.6.

Macintosh Telephone Manager

Apple Telecom is not included with Mac OS 7.6. You can download the latest version and updates to Apple Telecom, including Telephone Manager (see page 48) from Apple's web site (www.apple.com).

Multi-Processing Software

Mac OS 7.6 includes MP (multi-processing) software support for PCI Power Macs with multiple 604 processors. Follow these steps (courtesy of Apple Computer) to use MP software with Mac OS 7.6.

Turn Off Virtual Memory and Do Not Install RAM Doubler

Turn off virtual memory in the Memory control panel, and do not install Connectix RAM Doubler software. If virtual memory is turned on or RAM Doubler is installed, then your multiprocessor-compatible software applications will not be able to take advantage of the second PowerPC processor.

To turn off virtual memory, open the Memory control panel. In the Virtual Memory section, click the Off button. Then restart your computer. For more detailed information about virtual memory, see the topics on memory in Mac OS Guide, available in the Guide menu.

Turn Off Hard Disk Sleep

Make sure that the hard disk sleep interval is set to "Never" in the Energy Saver control panel. Otherwise, software applications designed to work with your multiprocessor computer may not work properly.

System Requirements and Availability

Mac OS 7.6 requires a 32-bit clean Macintosh with at least 16MB of memory installed (if you have 8MB of memory, you must have an additional 8MB of virtual memory turned "on"). The Mac Plus, SE, Portable, II, LC, SE/30, IIx,

and Ilcx are not supported by Mac OS 7.6, although they were supported in System 7.5.5 as referenced on Page 51, paragraph 1.

I wouldn't install Mac OS 7.6 on anything older or slower than a Macintosh Quadra or 68040 PowerBook. Page 52, paragraph 1 recommends a Mac II for System 7.5.5. Because Mac OS 7.6 no longer supports a Mac II, and also requires a little more memory than previous versions of System 7, I recommend an 68040 Mac, especially if you plan to upgrade to Mac OS 8.

Software and Hardware Compatibility

Mac OS 7.6 uses a slightly larger system heap (approximately 30K) more than System 7.5.3. If an application or third party software package has a problem launching under Mac OS 7.6, try increasing its memory partition via the Get Info window located in the File Menu. See Page 52, paragraph 2 for the original reference to making software and hardware compatible with System 7.5.5.

The Installer

A new installer application is included with Mac OS 7.6, Install Mac OS (see Figure 1.4). It uses the same installer application found in System 7.5, and as discussed on Page 53, paragraph 2, however, it has a much simpler interface consisting of four steps. To begin, double-click on the Install Mac OS icon. When the application launches, you will see a window with four steps. Begin with Step One, then continue through Step Four to begin installing your Mac OS 7.6 software.

Automatic Installation

Install Mac OS selects the system software installer, OpenDoc, Mac Link, and QuickDraw 3D (Power Macs) automatically by default. You can select additional or all installation options and Install Mac OS will cycle through all the selected installers until all selected items are installed. Auto-install only brings up the first licensing agreement from the first software installer list. This is the simplest way to install all your Mac OS 7.6 software packages. A clean install can be selected by selecting the appropriate radio button via the Options button located at the bottom of the main installation window as shown in Figure 1.5.



Figure 1.4 Install Mac OS 7.6 application's main window.

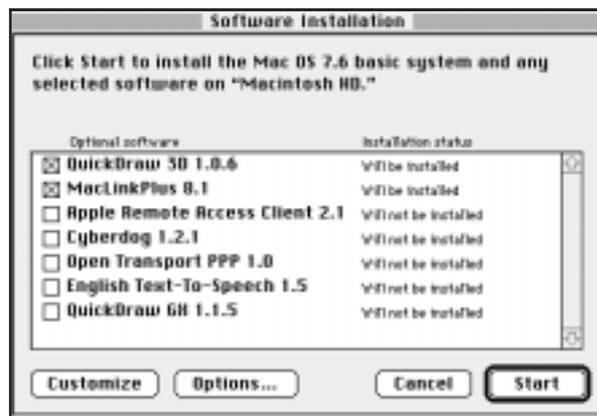


Figure 1.5 Install Mac OS 7.6 application's automatic installation window.

Custom Installation

If you don't want to automatically install your Mac OS 7.6 software, you can select the Customize button and Install Mac OS will bring up each software installers selected in the installation list (see Figure 1.6).

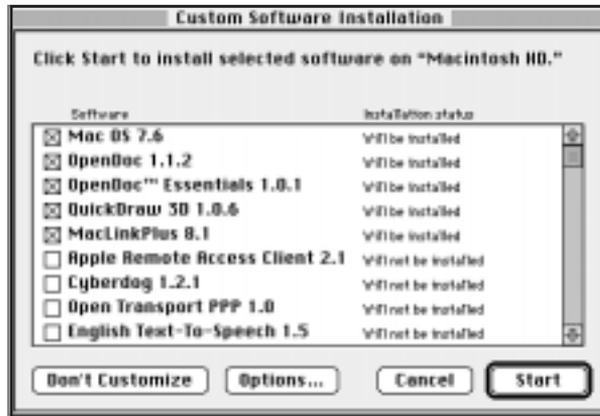


Figure 1.6 Install Mac OS 7.6 application's custom Software Installation dialog box.

Upgrades

Mac OS 7.6 will be followed by an update, Mac OS 7.6.1. Customers with Mac OS 7.6 will be able to upgrade to 7.6.1 for a nominal fee. Customers who purchased a 5500, 6500, 9600/200, 8600/200, or other new Mac that did not include 7.6, will be able to upgrade to 7.6.1 by using the coupon included with their Mac packaging. If you purchased another Mac that is supported by 7.6, but shipped with 7.5.5, you can upgrade (for a limited time) to 7.6 for around \$24. Call Apple at 1-800-SOS-APPL or visit Apple's Web site for more detailed information on upgrades for Mac OS 7.6.

Mac OS 7.6.1 is available from Apple's Web site at www.apple.com, or at Apple's forum area on America Online (keyword 'AppleComputer' or 'MacUpdate'). Below is a brief list of 7.6.1 enhancements and new software items courtesy of Apple Computer.

- Nearly all Type 11 errors eliminated:
Type 11 errors force you to restart the computer without saving your work. Most of these errors are now properly classified as Type 1 or Type 2 errors, which cause the active application to quit, but do not force you to restart the computer. Type 11 errors occur while using "native" applications used by computers with PowerPC processors.
Important: When you get an error that forces a program to quit, you should still save your work in other open programs and restart the computer.

- Type 112 errors eliminated:
Type 112 errors, which occurred when using some multimedia applications, have been eliminated.
- CFM-68K Runtime Enabler included for computers with 68030 and 68040 processors:
Computers with 68030 and 68040 processors can now use programs that require the CFM-68K Runtime Enabler. The CFM-68K Runtime Enabler is a system extension that allows application programs to share code resources. Because of a problem with this extension, it was not included with Mac OS 7.6. This problem has been fixed.
Apple products that use the CFM-68K Runtime Enabler include OpenDoc, the LaserWriter 8.4 driver, Apple Telecom software 3.0 and later, and the Apple Media Tool. Applications from other companies that require the CFM-68K Runtime Enabler include America Online 3.0 and Internet Explorer 3.0. (If you continue to experience problems with non-Apple programs that use the CFM-68K Runtime Enabler, contact the manufacturer.)
- Improved compatibility with serial devices when using Performa 5400 and 6400 and PowerBook 3400 computers:
Equipment connected to the serial port now communicates correctly with these computers. (Previously, some devices using the serial port were not recognized by these computers if the devices were connected when the computer started up.)
- Infrared problems fixed on PowerBook 1400 and 3400 computers:
The computer no longer freezes if the infrared window is blocked when the computer is starting or transferring files.
- Improved reliability when using large QuickTime files, or using QuickTime in low-memory situations:
Application programs that use QuickTime files work more reliably when working with large files and when using QuickTime files in low-memory situations.
- Printing improved for Performa and Power Macintosh 5400 and 6400 series computers using non-Apple printers over LocalTalk networks:
Performa and Power Macintosh 5400 and 6400 computers now print at an acceptable speed on non-Apple printers over a LocalTalk network. (Previously, printing was very slow.)

- Video applications recognize that MPEG is installed:
Video applications, including the Apple Video Player, now correctly recognize when MPEG software or hardware is installed.
- Storage PC Cards no longer require a utility program to appear on the desktop:
PC Cards used for storage now appear on the desktop when inserted. A mounting utility program is no longer required.
- Only two low-battery messages displayed on PowerBooks before computer shuts itself down:
Only two low-battery messages are displayed, instead of three, before the computer shuts itself down. The first message appears approximately two to four minutes before shutdown. The second occurs approximately ten seconds before shutdown.
- PowerBook 1400 computers now wake from sleep faster:
When you wake the computer, there is less of a delay before the screen appears.
- Contrast and brightness controls work as expected on PowerBook 1400 computers:
The screen will get brighter or show more contrast when the plus (+) controls are pressed. Previously, the functionality of the plus (+) and minus (-) controls were reversed on PowerBook 1400 computers.
- On the PowerBook 3400, the CD-ROM drive works correctly if inserted when the computer is on:
The removable CD-ROM drive now appears correctly on the desktop if it is inserted in the expansion bay while the computer is on.
- New version of Apple System Profiler IDE-based CD-ROM drives, such as the built-in CD-ROM drive for the PowerBook 1400, are now listed in the Apple System Profiler window.
- New version of AppleVision software:
A new version of AppleVision software improves reliability on computers that currently use AppleVision monitors.
- New version of Apple Video Player Video-capture and TV tuner PC Cards now work correctly on PowerBook 3400 computers. Additionally, all computers can use the AppleScript scripting language to automate tasks in Apple Video Player.

For additional technical information, see the Mac OS 7.6.1 Update Technote. You can find it at the Apple Developer World site at <http://devworld.apple.com/dev/technotes.shtml>.

Common Myths about Mac OS 7.6

The Party Line and Don's Comments

Myth #2, on Page 57, paragraph 4 says System 7.5.5 runs in 4MB but you really need 8MB. Mac OS 7.6 needs more memory to run than System 7.5.5. 16MB of real RAM or 8MB with an additional 8MB of virtual memory "on" is the minimal configuration recommended for Mac OS 7.6. 24MB or more (with or without virtual memory) is a healthier memory configuration for running Mac OS 7.6.

Myth # 3, on Page 58, paragraph 1, says MacTCP won't work with System 7.5.5. Mac TCP 2.0.6 will work with System 7.5.5. Mac TCP, however, is not supported by Mac OS 7.6. Mac OS 7.6 only supports Open Transport for TCP networking.

Chapter 2

Using Finder 7.5.6

The Finder is a little different in Mac OS 7.6, compared to the one described on Page 62, paragraph 1. Mac OS 7.6 contains a slightly newer version of the Finder. The main change to Finder 7.5.6 involves changing the word Macintosh or Mac to Computer or Mac OS in Mac OS 7.6. For example, go to the Apple Menu and select About This Computer.

This window was titled About This Macintosh in System 7.5.5. These changes were made so that Mac OS could more easily support its clones, since the Macintosh product is exclusive to Apple.

On Power Macs, Finder items become translucent as you move them when you click-drag their icons.

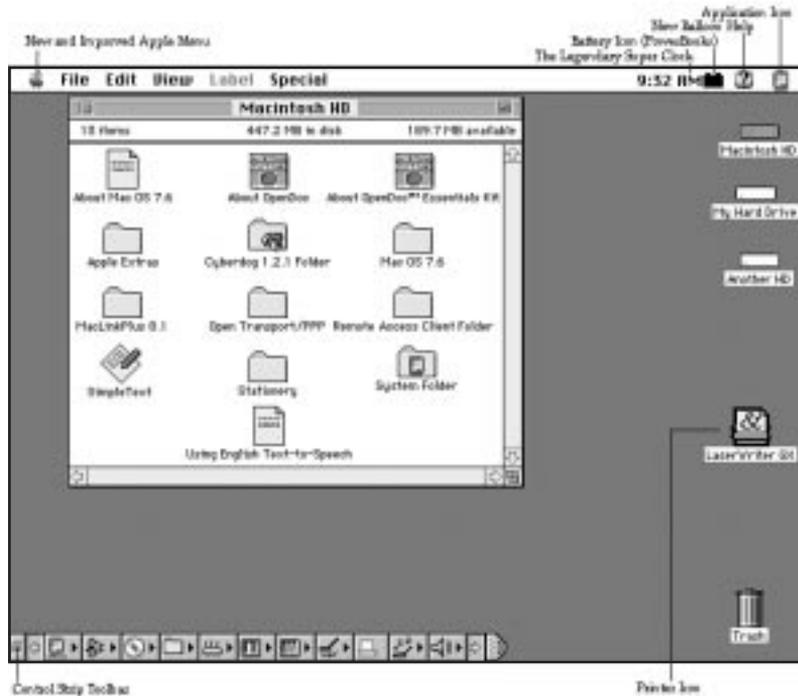


Figure 2.1 The Finder desktop.
(Update of figure on Page 63.)

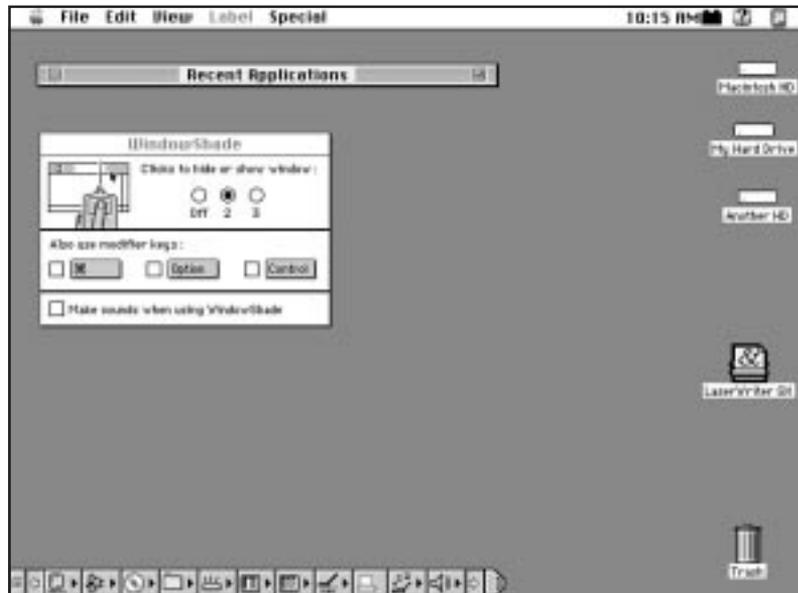


Figure 2.2 WindowShade in action and the WindowShade control.
(Update of figure on Page 109.)

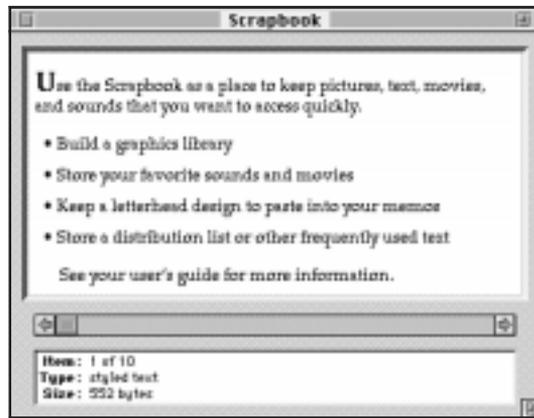


Figure 2.3 The Scrapbook dialog box.

(Update of figure on Page 112.)

Chapter 3

Modifying the Mac OS 7.6 Environment

An explanation of Extensions Manager 3.0 begins on Page 136. Mac OS 7.6 has a new version of Mac OS 7.6, Extensions Manager 4.0, as you can see in Figure 3.1.

Extensions Manager 3.0 has had a face lift for Mac OS 7.6. Extensions Manager 4.0 contains almost all of the features from Extensions Manager 3.0, such as the capability to turn extensions on or off. Extensions Manager 4.0, however, now has a much larger window that shows more information about extensions and control panels in your System Folder. Some of the additional information displayed includes the file's icon, file size, version, package, and balloon help text. You also can view type and creator information by selecting these items in the Extensions Manager Preferences menu command, located in the Edit menu.



Figure 3.1 The Extensions Manager control panel.

(Update of figure on Page 136.)

The main features of Extensions Manager 4.0 are the following:

- Mac OS 7.6 folder structure aware, showing you the folders inside the System Folder where extensions reside.
- General and detailed file information ranging from file size to an explanation about the file's use.
- View extensions and control panels by name, item, or package (see Figure 3.2). A package view displays software that was installed as part of the same set, or software package.
- Automatic saving of sets

You can compare this feature list with the one on Page 137, paragraph 1 to Extensions Manager 3.0 features with version 4.0 (see Figure 3.3).

Other notable features include a restart button in the main window, resizable Name and Package columns, and identification and ability to delete duplicate files in your System Folder. Extensions Manager 4.0 also includes two pre-configured sets for Mac OS all and base files. One thing Extensions Manager 4.0 cannot see are aliases located in your System Folder, in particular aliases that might reside in your Startup Items or Shutdown Items folders.

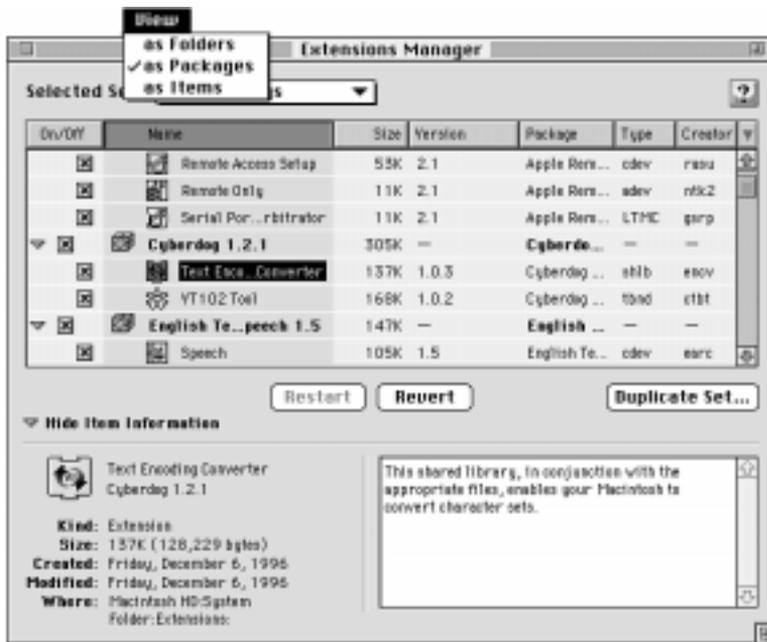


Figure 3.2 Extensions Manager View by Package feature.

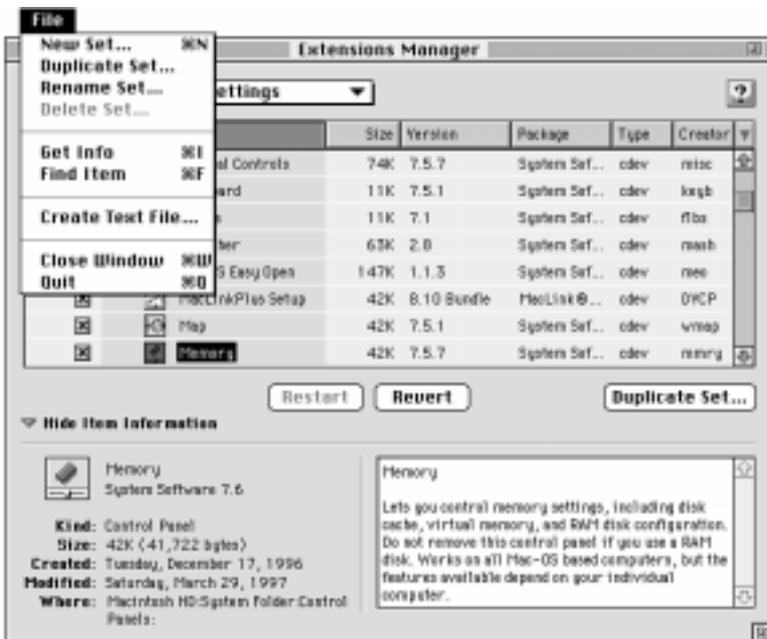


Figure 3.3 Extensions Manager new File menu.

The Mac OS base set turns on all the files originating from the system software install. For example, OpenDoc, QuickDraw 3D, and QuickDraw GX extensions and control panels are not selected in this set. The Mac OS all set includes all possible extensions and control panels from all possible Install Mac OS software installers. The Mac OS 7.6 sets are locked sets, so you won't be able to make changes to them directly. You can, however, duplicate copy any set and edit the resulting duplicate set.

You also can move sets from one Mac OS 7.6 CPU to another. So if you make a set of extensions and want to share them, you can. All sets are located in the Extensions Manager Preferences folder, which is located in the Preferences folder of your System Folder.

Apple CD Speed Switch, mentioned on Page 137, last paragraph, is not part of Mac OS 7.6. This control panel was used for two-speed CD-ROM drives. Apple's latest Macs ship with 8 to 12-speed CDs, approaching 24-speed in the future. Apple's CD-ROM driver has been updated in version 5.3 to support the fastest speed possible on Apple's CD drives.

AppleTalk control panel replaces the Network control panel, mentioned on Page 151, paragraph 3. The Network control panel is supported through System 7.5.5 and its classic AppleTalk network software. Introduced with Open Transport, AppleTalk control panel allows you to select the type of network connection for your Mac, such as Ethernet or LocalTalk, via your printer or modem port.



Figure 3.4 AppleTalk control panel.

(Update of figure on Page 151.)

Macintosh Easy Open is renamed to Mac OS Easy Open in Mac OS 7.6. All functionality discussed on Page 145, last paragraph, about Macintosh Easy Open still exists with Mac OS Easy Open.

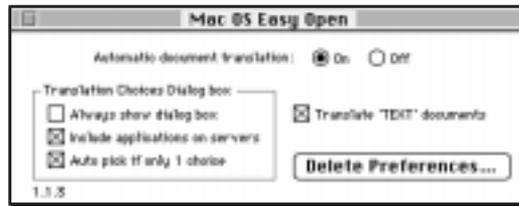


Figure 3.5 Mac OS Easy Open control panel.

(Update of figure on Page 146.)

Mac TCP, referenced on Page 146, paragraph 2, is replaced with Open Transport's TCP/IP control panel in Mac OS 7.6. TCP/IP enables you to have multiple IP configurations and switch between them without requiring you to restart your Mac. Use the Configurations Configure menu item (under the File menu) to select an IP configuration. Then select the IP configuration and Make Active button to change your IP configuration. Be sure to save your changes made to the TCP/IP control panel.

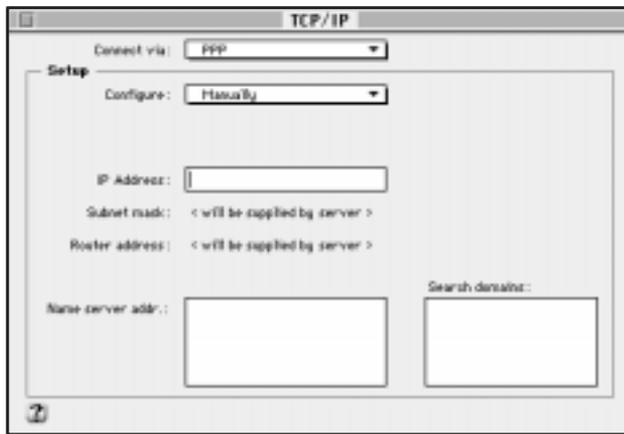


Figure 3.6 TCP/IP control panel.

(Update of figure on Page 146.)

Mac PPP 1.0 is a new software control panel. It is a part of Open Transport's PPP (Point-to-Point Protocol) software package, which is a part of Install Mac OS, but separate from Mac OS software installation.



Figure 3.7 PPP control panel.

Memory control panel mentioned on Page 147, paragraph 2 has a few new features in Mac OS 7.6. Upgraded from version 7.5, Memory control panel 7.5.7 no longer has a Modern Memory manager section because it's always on. Also, the RAM Disk feature has an additional checkbox for saving RAM disk contents when you shutdown your Mac on PowerBooks.

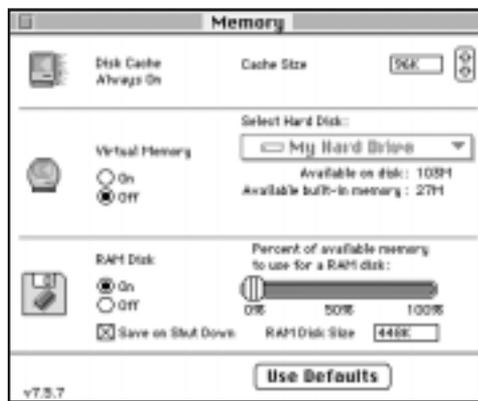


Figure 3.8 The Memory control panel.

(Update of figure on Page 147.)

Monitors control panel on Page 149, paragraph 4 is still supported on all Mac OS 7.6 computers. In addition to Monitors control panel, Monitors and Sound control panel is supported on PCI Power Macs and can work with or replace the separate Monitors or Sound control panels.

Network control panel referenced on Page 151, paragraph 3 is no longer apart of Mac OS 7.6. It is replaced with Open Transport's AppleTalk control panel.

Network control panel has been replaced by the AppleTalk control panel, mentioned on Page 151, paragraph 3. The Network control panel is supported through System 7.5.5 and its classic AppleTalk network software. Introduced with Open Transport, AppleTalk control panel allows you to select the type of network connection for your Mac, such as Ethernet or LocalTalk, via your printer or modem port.



Figure 3.9 AppleTalk control panel.

(Update of figure on Page 151.)

PowerTalk Setup, as described on Page 153, paragraph 2, is not apart of Mac OS 7.6.

Chapter 4

Fonts and Printing

The following section explains LaserWriter 8 and Desktop Printing. It is an addendum to the information on Page 223, following the section on Managing Multiple Serial Printers and Modems

LaserWriter 8

Mac OS 7.6 contains LaserWriter 8, version 8.4.2. It supports all printers that use the LaserWriter 7 printer driver, plus has several new features which make printing easier.

Desktop Printing

Mac OS 7.6 contains version 2.0.2 of Desktop Printing software. Desktop Printing shares similar features as QuickDraw GX's desktop printing feature. These include features such as creating a desktop printer icon, scheduling document printing, and support for dragging files onto desktop printers. Desktop Printing can work with or without QuickDraw GX being installed with Mac OS 7.6. Desktop Printing 2.0.2 also enables you to configure your desktop printers in the control strip, Apple Menu, or the Desktop Printer menu located on the right corner of the menu bar (you need to create a desktop printer in order for the menu to appear). The following is an explanation of Desktop Printing features courtesy of Apple Computer.

New Features in Version 2.0

- Desktop printer icons can be moved off the desktop and into folders.
- A printer menu located on the right-hand side of the menu bar provides a convenient means to switch the user's default printer.
- A control strip module with functionality identical to the printer menu is provided for PowerBook systems and other systems employing the Control Strip software.

Hints and Shortcuts

- The Desktop Printers folder in the Apple Menu provides a convenient shortcut to desktop printers. This is especially helpful if you have moved your desktop printer icons off the desktop.
- Command-L key combination is a shortcut equivalent to the Set Default Printer command in the Printing menu.
- Holding down the Option and Shift keys makes the Hold and Resume buttons function as Stop Print Queue and Start Print Queue.
- To print additional copies of a file, you can select the spool file waiting in the print queue and choose Duplicate from the File menu.

Creating Desktop Printers

To create a desktop printer, follow these steps:

1. Open the Chooser.
2. Select the print driver for the printer you are using.

3. Select the printer you want to use.
4. Close the Chooser.

When you close the Chooser, an icon for the printer appears on the desktop. The name of the icon is the name of the printer. The name of the printer also appears in the Printer menu to the left of the Guide menu and in the Desktop Printers item in the Apple menu.

After the desktop printer icon appears, you can move it to any location on your startup disk.

You can have as many desktop printers as you want. To create other desktop printers, you must open the Chooser, select the printer, and close the Chooser for each printer you want to use.

The last printer you select in the Chooser becomes the default printer. The default printer is used whenever you choose Print from the File menu. The desktop printer icon for the default printer has a bold outline. For other ways to select the default printer, see “Selecting a Default Printer” later in this document.

Note: If you use different versions of the LaserWriter 8 software to print to the same printer, you can create a desktop printer icon for each version of the LaserWriter software. For example, you might use LaserWriter driver version 8.3 for printing and version 8.2.2f for faxing. To create a desktop printer for each driver, select the LaserWriter 8.3 driver and your printer in the Chooser, then close the Chooser. Reopen the Chooser and select the LaserWriter 8.2.2f driver and your printer, then close the Chooser. To choose which version of the driver to use, change the default printer (see “Selecting a Default Printer”). To avoid confusion, rename the desktop printer icons to indicate which version of the printer software the icon uses.

Selecting a Default Printer

The default printer is the printer you use when you choose Print from the File menu.

To change the default printer, you can do the following:

- Print documents from the Finder with a desktop printer icon.
- Select a desktop printer icon and choose Set Default Printer from the Printing menu.

- Choose the printer from the Printer menu that appears to the left of the Guide menu.
- Select the printer name using the Printing module in the Control Strip.
- Select a new printer in the Chooser.

Note: Changing the printer you are using may change how much information appears on a page of your document. If you change printers, check the formatting of your document.

Working with Desktop Printer Icons

Desktop printer icons show the status of the printer. You can rename desktop printer icons, make aliases of them, and throw them away, just like other Finder icons.

If you throw away the icon for the default printer, another desktop printer is automatically selected as the default printer. If you do not have another desktop printer, another icon is automatically created for the desktop printer you are throwing away. To throw away the last desktop printer icon, you must select a printer in the Chooser that does not support desktop printing.



Mac Basics

You can't throw away a desktop printer icon while the printer is printing a document.

Managing Printing

If background printing is turned on for the printer you are using, you can use desktop printing to manage print jobs. You perform tasks with the Printing menu that appears when you select a desktop printer. You perform other tasks by using the desktop printer window that opens when you double-click a desktop printer icon.

To Manage Printing using the Printing Menu

The Printing menu appears to the right of the Special menu when you select a desktop printer icon.

Using the Printing menu you can do the following:

- Choose Start Print Queue to restart printing.
- Choose Stop Print Queue to stop printing all of your documents. The icon of the printer indicates that you have stopped printing.
- Choose Get Printer Info to see information about the printer. (Only available for some printers.)



Mac Basics

You need to choose Start Print Queue to restart printing if you click the Stop Queue button in a printer alert message.

- Choose Change Setup to change the setup of the printer. (Only available for some printers. You can change the setup of other printers using the Chooser.)
- Choose Show Manual Feed Alert to turn on or off the manual alert.
- Choose Set Default Printer to select the printer as the default printer, if it isn't selected already.

To Manage Printing using the Desktop Printer Window

Double-click a desktop printer icon to open its window. The name of the document currently printing and status messages about the current print job appear in the upper box. The status messages can help you troubleshoot a printing problem.

When you are printing more than one document, a list of the print jobs appears in the lower box. If this list is sorted by the Print Time column, it shows the order in which the documents will be printed.

Using the desktop printer window, you can do the following:

- Change the sort order of the print job list. To do this, click the title of the column by which you want to sort. The column title by which the list is sorted is underlined. To sort by the name of the document, for example, click Document Name.
- Cancel printing a document. To do this select the print job in the list and click the Remove button. You also can drag the print job from the window to the Trash icon on the desktop.
- Put a printing document on hold. To do this select the print job in the list and click the Hold Job button. You also can put the document that's currently printing on hold by dragging it to the print job list.
- Resume printing a document. To do this, select the print job and click the Resume Job button.
- Print a document immediately. To do this select the print job and put it on hold. Next, click the Set Print Time icon button and select Urgent in the dialog box that appears. Then click OK. You also can drag the print job to the top of the print job list or to the area reserved for the currently printing job.
- Schedule printing. To do this select a print job and click the Set Print Time button. In the Set Print Time dialog box, click At Time and set the time you want. Then click OK.



Mac Basics

Changing the sort order of the print jobs does not change the order in which they will print. To see that order, click the Print Time heading.



Mac Basics

These methods do not delete the document itself.

- Change the print order. To do this drag the name of a print job up or down in the print job list.
- Print the document using another desktop printer. To do this drag the print job to the icon of the other desktop printer. That printer becomes the default printer. You can only move a print job to another printer of the same type. For example, you can't move a print job from a LaserWriter printer to a StyleWriter printer.
- Stop printing all documents. To do this hold down the Option and Shift keys and click the Hold Job button. You also can choose Stop Print Queue from the Printing menu.
- Start printing documents. To do this hold down the Option and Shift keys and click the Resume Job button. You can also choose Start Print Queue from the Printing menu.

Turning Off Desktop Printing

If you don't want to use desktop printers, you can turn off Desktop PrintMonitor using the Extensions Manager control panel.

IMPORTANT: Before you turn off Desktop PrintMonitor, be sure that all documents have finished printing. If there are documents waiting to print that you do not want to print, you can cancel printing as described in the previous section on this document.

To turn off Desktop PrintMonitor, follow these steps:

1. Open the Extensions Manager control panel.
2. Click the boxes next to these extensions to remove the X:
 - Desktop PrintMonitor
 - Desktop Printer Extension
 - Desktop Printer Spooler
 - Desktop Printer Menu extensions
3. Click the close box to close the control panel.
4. If your computer has a Control Strip, drag the Printer Selector file from the Control Strip Modules folder in the System Folder to the Trash.
5. Restart your computer.

Chapter 5

The Multimedia Is the Message

The following explanation of the QuickTime Settings control panel is an addendum to the QuickTime information from Page 229.

QuickTime Settings Control Panel

QuickTime 2.5 introduces the QuickTime Settings control panel (see Figure 5.1). It enables you to configure AutoPlay and music features in QuickTime 2.5. If you place an audio CD in your CD player, QuickTime Settings control panel will begin playing the first track of the CD after it appears on your desktop. Similarly, if you have CD-ROM AutoPlay on, QuickTime will begin playing the CD-ROM mounted on your Mac's desktop. To turn off these features, simply uncheck the appropriate checkbox.



Figure 5.1 QuickTime Setting control panel, AutoPlay.

Music is the second section of the QuickTime Settings control panel (see Figure 5.2). It works in conjunction with the newer features of QuickTime 2.5 outlined in this chapter.



Figure 5.2 QuickTime Settings control panel, Music.

The Future System for the Future Multimedia Interface

Page 254 contains a bullet list of System features for a minimum infrastructure for future Mac OS releases. Although most of the technologies listed on this page currently are supported in Mac OS 7.6, Apple has announced that PowerTalk, QuickDraw GX, and OpenDoc will not be apart of its future, long term system software architecture.

Chapter 6

Networking versus Collaboration

The Future System for the Future Multimedia Interface

Page 254 contains a bullet list of System features for a minimum infrastructure for future Mac OS releases. Although most of the technologies listed on this page currently are supported in Mac OS 7.6, Apple has announced that PowerTalk, QuickDraw GX, and OpenDoc will not be apart of its future, long term system software architecture.

Collaborative Competition

PowerTalk is a key technology discussed on Page 259, paragraph 3 through Page 261 as part of System 7.5.5's networking and collaboration features. Although PowerTalk provided a valuable collaboration solution, it is not supported in Mac OS 7.6.

PowerShare Mail Server

An incompatibility with Open Transport is referenced on Page 279, paragraph 3. The PowerShare Mail Server is only supported by System 7.5.5. PowerShare Mail Server and PowerTalk are not supported by Mac OS 7.6.

Apple Remote Access

After the PowerShare Mail Server paragraph on Page 279, the following information is an addendum for Apple Remote Access 2.1, included with Mac OS 7.6, courtesy of Apple Computer.

Beginning with version 2.1 of the Apple Remote Access Client and the companion Personal Server product, modem scripts are no longer stored in the Extensions Folder. A new folder called "Modem Scripts" within the Extensions Folder is created by Apple Remote Access to hold modem scripts.

The Apple Remote Access Installer will move any existing scripts you may already have in your Extensions Folder to the new Modem Scripts folder in addition to placing scripts for all the modems listed above into the Modem Scripts folder.

Future remote access products from Apple will also use the Modem Scripts folder. However, there will be a transition period before other products are updated to use the new folder. Some existing products may install modem scripts into the Extensions Folder. If such a product is installed after Apple Remote Access 2.1, you will have to open your Extensions Folder and drag the scripts into the Modem Scripts folder in order for Apple Remote Access to recognize the script.

The Virtual Desktop

The future of workgroup computing is discussed on Page 281, paragraph 2. Although the general concepts and problematic issues regarding workgroups are still valid in this section, the PowerTalk references do not apply to Mac OS 7.6.

OpenDoc 101

Page 305, paragraph 2 commences a hearty comparison of OpenDoc and Microsoft's OLE 2.0 technology. Although OpenDoc is apart of Mac OS 7.6, and will continue to be supported by Apple through at least Mac OS 8, Apple has announced that OpenDoc will not be apart of its future operating systems, such as Rhapsody. In the meantime, you can use OpenDoc with Mac OS 7.6 and 8.0, along with CyberDog to get a better understanding of how object sharing works.

Sharing Alike: The Rebirth of AOCCE

Page 306, paragraph 3 through Page 323 inclusive is an in-depth discussion of PowerTalk features. Systems that support System 7.5.5 can continue to offer these collaborative features. PowerTalk, however, is not supported by Mac OS 7.6. Many of the features described in these pages may gradually be available via Internet or intranet-based solutions for Macs.

Summary

System 7.5.5 consists of 14 floppies, or one CD-ROM, as mentioned on Page 325, paragraph 2. Mac OS 7.6 consists of 20 floppies for the system software and an additional 28 for OpenDoc, CyberDog, QuickDraw GX, QuickDraw 3D, Open Transport PPP, OpenDoc Essentials, and additional system software installers. References to PowerTalk in paragraph 5 of this page no longer apply to Mac OS 7.6.

Chapter 7

Improving Your Memory

Although the Memory control panel is discussed in Chapters 2 and 3, this section reviews it one more time. The Memory control panel can make a big difference in your Mac's overall performance as well as provide optimal conditions for applications and general computing productivity.

The Disk Cache

Memory control panel's Disk Cache is explained on Page 335. The end of paragraph 4 mentions 32-bit addressing as a means to identify a modern Mac. Mac OS 7.6 only supports 32-bit on the Macs it supports. So if your Mac runs Mac OS 7.6, it's a modern Mac.

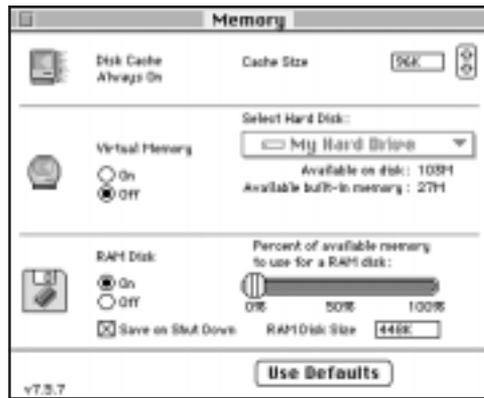


Figure 7.1 The Memory control panel.

(Update of figure on Page 336.)

Virtual Memory

The ins and outs of virtual memory can be found on page 338. At the end of paragraph 1, the general processes of how virtual memory works are explained. In Mac OS 7.6, virtual memory takes up less system memory and has improved performance for launching and running applications. After a clean install of Mac OS 7.6, it is automatically turned on to 1MB more than the amount of physical memory if you have 16 or more megabytes of RAM. If you have less than 16MB, the amount of virtual memory will be twice as much as the RAM installed in your Mac.

32-bit versus 24-bit Addressing

Memory addressing is defined in these two modes on Page 341, paragraph 4. 24-bit mode only allows the Mac to see a maximum of 8MB of RAM. All currently shipping Macs have at least 16MB of memory installed and only support 32-bit addressing mode. In Mac OS 7.6, 24-bit addressing is not supported.

MODE32

MODE32, by Connectix, is mentioned on Page 343, paragraph 4. MODE32 allows 24-bit Macs, such as the Mac II, IIx, IIcx, SE/30, Plus, Portable, and SE to run in 32-bit mode. Because 24-bit mode is not supported by Mac OS 7.6, MODE 32 also is not supported.

Modern Memory Manager

Turning off Modern Memory Manager from the Memory control panel, referenced on Page 346, paragraph 5, was one way of curing minor compatibility problems with Power Macs. On Power Macs, Modern Memory Manager provides native memory management. Unlike System 7.5.5, Modern Memory Manager cannot be turned 'off' with Mac OS 7.6.

RAM Disks

The advantages of using RAM Disks on PowerBooks is explained on Page 348, paragraph 4. Mac OS 7.6 includes a checkbox for PowerBooks in the Memory control panel, which enables you to save your work if you shut down your Mac. The Memory control panel also has been updated to adjust disk cache or RAM Disk settings smarter than in previous Memory control panel versions.

Apple Drives

Updating the driver on your Apple or third-party hard drive is a standard process that you should follow when upgrading your system software. Install Mac OS updates Apple internal hard drives. However, you must use the appropriate third-party software product to update any third-party drivers on non-Apple internal or external hard drives. On Page 354, paragraph 1, step 1, one Disks Tools floppy disk is described.

There are two Disk Tools floppy disks in Mac OS 7.6. Disk One is for 680x0 Macs (primarily), which use Apple's HD SC Setup. Disk Two is for Power Macs and Macs that use the Drive Setup application to update and format their internal SCSI or IDE hard drives. Disk Two contains Drive Setup Lite, which is based on Drive Setup 1.2.2, but reduced in file size so that it can fit on the floppy along with a bootable system folder. Both disks contain Disk First Aid 7.2.3.

IDE

Most Mac models, beginning with the Quadra 630 and PowerBook 150 have IDE internal hard drives, as mentioned on Page 355, paragraph 2. Power Mac 52xx, 62xx, 53xx, 63xx, 54xx, 64xx, and Power Mac PowerBooks all have internal IDE drives whose drivers are supported by Apple's Drive Setup application. Macs that can run Mac OS 7.6 and have IDE drives can be updated and formatted using Apple's Drive Setup 1.2.2.

*Chapter*8

Management Strategies for Mac OS 7.6

There are several processes discussed in this section, on Page 360, paragraph 4, that should still be followed for Mac OS 7.6. In addition to these, there are several Read Me documents included with Mac OS 7.6. Read the Installing Mac OS 7.6 Read Me document before using Install Mac OS 7.6. to install your system software.

The Minimum Mac OS 7.6 Macintosh

System 7.5.5 is only an update to System 7.5.3, as mentioned on Page 360, paragraph 5. Mac OS 7.6 is a complete Mac OS system installation package, not an update. Therefore a clean installation of Mac OS 7.6 is recommended. This may prevent some application settings from being in the System Folder after you complete the install.

The Official Version

Apple's System 7.5.5 requirements are covered on Page 361, paragraph 1. These requirements changed for Mac OS 7.6. Apple says Mac OS 7.6 requires a 68030 or 68040 (excluding the SE/30, IIx and IIcx) or Power Macintosh with a minimum of 8MB of memory installed and 8MB of virtual memory in addition, for a total of 16MB of memory. PowerTalk information does not apply to Mac OS 7.6.

Before You Install

Page 365, paragraph 4 mentions running Disk First Aid and HD SC Setup on each hard disk before installing system software. This advice should still be followed for Mac OS 7.6. The good news is that Disk First Aid is built into the Install Mac OS application. It runs prior to any of the software installers for Mac OS 7.6. Even better news is that Disk First Aid has been updated to version 7.2.3 in Mac OS 7.6 (see paragraph 5).

Apple's Installation Tips for System 7.5.5 are located on Page 367, paragraph 2. These have been updated for Mac OS 7.6 and are recommended reading for everyone prior to upgrading to Mac OS 7.6.

Installation Tips from Apple

(courtesy of Apple Computer)

5xxx/6xxx Tester

This program tests Performa and Power Macintosh 5200, 5300, 6200, and 6300 computers for a possible hardware problem. If you have a Performa or Power Macintosh 5200, 5300, 6200, or 6300 series computer, you should use the tester before installing Mac OS 7.6. See the document inside the Tester folder for instructions on using the tester.

IMPORTANT: The Power Macintosh or Performa 6360 does not have this hardware problem. If you have a Power Macintosh or Performa 6360, you do not need to use the tester program.

AppleShare Software

If you have AppleShare software version 3.6, 3.6.1, or 3.6.2, you should upgrade to version 3.6.3 before installing Mac OS 7.6 over a network. See the document inside the AppleShare folder for instructions.

Disk First Aid

You use the Disk First Aid program to test and repair your hard disk. To test a disk, follow these steps:

1. Open the Disk First Aid program.
2. In the screen that appears, click the icon of the disk you want to check.
3. Click Verify to test the disk for problems.

Drive Setup and HD SC Setup

You use the Drive Setup or HD SC Setup programs to update your disk driver or to reinitialize a disk. You should update the drivers on your hard disks before installing system software.

The following computers should use the Drive Setup program:

All computers with PowerPC microprocessors

Macintosh LC 580

Macintosh LC 630

Macintosh LC 630 DOS Compatible

Macintosh Quadra 630 series computers

Macintosh Performa 580 series computers

Macintosh Performa 630 and 640 series computers

PowerBook 150 series computers

PowerBook 190 series computers

All other computers should use HD SC Setup.

Note for PowerBook 150 owners: You do not need to update the driver for your internal hard disk. That driver is contained in your computer's ROM. If you try using either utility program to update the driver, nothing will happen.

Note for Quadra owners with a PowerPC Upgrade Card: Drive Setup does not work with your upgrade card. You can use HD SC Setup to update your driver or initialize a disk, but you need to turn off the PowerPC upgrade card before using HD SC Setup.

To update the disk driver with Drive Setup, follow these steps:

1. Open the Drive Setup program.
2. Click the disk whose driver you want to update.
3. Choose Update Driver from the Functions menu.

To update the disk driver with HD SC Setup, follow these steps:

1. Open the HD SC Setup program.
2. Click Drive until the "volume name" is the name of the disk whose driver you want to update.
3. Click Update.

WARNING: Before using Drive Setup or HD SC Setup to update your disk driver, make sure you turn off any disk protection software you may be using.

IMPORTANT: If the Update Driver command is dimmed, or if the disk name never appears when you click Drive, the problem disk is either not supported, or it's previously been updated with a non-Apple utility.

- If the disk isn't supported, check the instructions that came with your computer or disk to see if the manufacturer includes or recommends a disk utility, and use that utility to update the driver. To ensure a successful update, obtain the latest version of the utility.
- If you've updated or formatted the disk with a non-Apple utility, you'll need to use that utility again to perform the update. To ensure a successful update, obtain the latest version of the utility.

Know the Terms

Several Macintosh software terms are described starting on Page 371. These are brief explanations of the key components of System 7.5.5. Fortunately, almost all of these terms also apply to Mac OS 7.6 except for the three terms listed below.

Macintosh Easy Open, described on Page 373, is renamed to Mac OS Easy Open.

Mac TCP, described on Page 373, is not supported by Mac OS 7.6.

PowerTalk, described on Page 374, is not supported by Mac OS 7.6

Chapter 9

The Art and Science of Troubleshooting

A brief list of PowerTalk features for System 7.5.5 can be found on Page 404, paragraph 1. Although this information reflected PowerTalk's status at that time, PowerTalk is not supported by Mac OS 7.6.

Installation Troubleshooting

Steps to minimize installation problems with System 7.5.5 are on Page 405.

Step One says you have to have at least 4MB of RAM to upgrade to 7.5.5.

Memory requirements for Mac OS 7.6 are 8MB of RAM minimum with an additional 8MB of virtual memory 'on' for a total of 16 MB. Alternatively, 16MB of RAM is a minimum requirement for running Mac OS 7.6.

If you are running low on memory for the system software install, select the Mac OS installer. This is located in the Software Installers folder. Using the Mac OS installer bypasses the Install Mac OS application, and only installs system software.

MacsBug and the ROM Monitor

MacsBug is a system debugger available from APDA or on most Apple Developer CD-ROMs (see Page 411, paragraph 1). It is a widely used Mac development tool, however, most Mac users will never need to use this software. If you do, Mac OS 7.6 requires MacsBug 6.5.4 or later.

Nobody Knows the Troubles I've Seen

The Mac Masters tip on Page 427 only applies to System 7.5.5. System Update 3.0 updated System 7.5 to System 7.5.1. Mac OS 7.6 has a 7.6.1 update. You should never run an update intended for System 7.5 on Mac OS 7.6. Similarly, the 7.6.1 update only supports Mac OS 7.6 and will not update a System 7.5-based System Folder.

The System 3.0 Update

As with the Mac Masters tip above, the System Update information found on Page 427, paragraph 2 reiterates the importance of only running a system update for its intended Mac OS counterpart. System 3.0 Update is only for System 7.5, it does not work with Mac OS 7.6.

How to Use the Shutdown Items Folder

In addition to the Shutdown Items information provided on Page 430, here's a little more information new to Mac OS 7.6. Extensions Manager 4.0 will not display aliases located in the Shutdown Items folder.

How to Rebuild Your Desktop

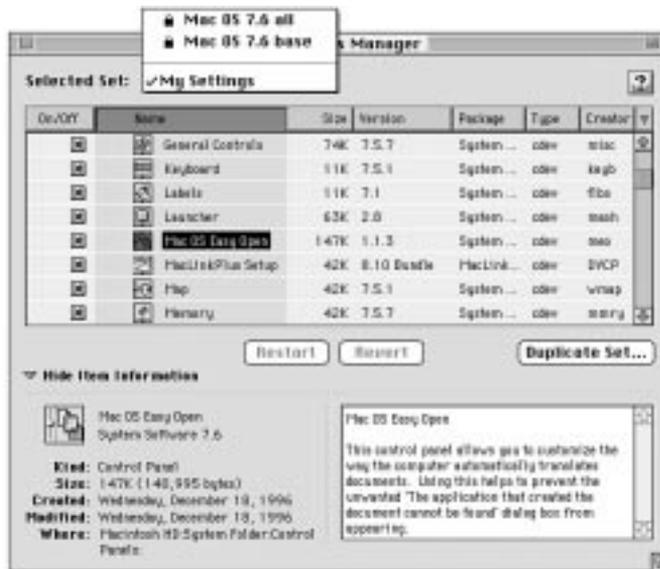


Figure 9.1 Extensions Manager with Sets pop-up menu.

(Update of the figure on Page 431.)

Extensions Manager 3.0 as described on Page 431, Step 1 has a slightly different implementation of saving a set than Extensions Manager 4.0. Instead of using the menu in Extensions Manager 3.0, saving a set is built into Extensions Manager 4.0. Extensions Manager 4.0 saves sets automatically. Also, Macintosh Easy Open, mentioned on Page 431, step 3, is renamed Mac OS Easy Open.

Express Modem Software

Page 432, paragraph 4 advises you to reinstall your Express Modem software after a new system installation. Express Modem software is not included with Mac OS 7.6 installer. Express Modem software is part of the Apple Telecom software package and can be downloaded from Apple's web site or ftp site.

Disk Volumes Larger than 2 Gigabytes

Mac OS 7.6 supports a single volume of 4GB on 68040 and Power Macs. System 7.5.5 only supported this feature on all Power Macs. The information found on Page 434, paragraph 1 no longer applies to Mac OS 7.6.

Printing Large Fonts with LaserWriter

A specific problem with the LaserWriter 7.2 printer driver is on Page 434, last paragraph. Apple has released several revisions to the LaserWriter driver since version 7.2. Mac OS 7.6 contains LaserWriter 8, version 8.4.2 which is a newer version than LaserWriter 8.2.

Help with the Japanese or Chinese Language Kit

Versions 1.1 of the Japanese or Chinese Language Kits may have had problems with System 7.5.5 (see Page 437, paragraph 2). Mac OS 7.6 may also have compatibility problems with these language kits. Look for a language kit update on Apple's web site or ftp site.

Known Problems and Compatibility Issues

Here's a list of known problems with Mac OS 7.6, courtesy of Apple Computer. This information is an addendum to Page 439.

- PowerTalk is not compatible with Mac OS 7.6
PowerTalk mail, catalogs, the keychain, and other PowerTalk services are not available with Mac OS 7.6. See the Mac OS 7.6 installation manual for more information.
- OpenDoc, CyberDog, and LaserWriter 8.4 are not installed on computers with 68030 and 68040 microprocessors.

OpenDoc, CyberDog, and the LaserWriter 8.4 driver use a common piece of software called the CFM 68K Runtime Enabler. Apple has discovered a problem with the CFM 68K Runtime Enabler and is not including it with Mac OS 7.6. You cannot install OpenDoc, CyberDog, and the LaserWriter 8.4 driver on computers with 68030 and 68040 microprocessors.

Additionally, other application programs that use the CFM 68K Runtime Enabler will not work on computers with 68030 or 68040 processors and Mac OS 7.6. Other Apple products that use the CFM 68K Runtime Enabler include Apple Telecom software, version 3.0 and later, and the Apple Media Tool.

A new version of CFM 68K is available with the Mac OS 7.6.1 update. Install this update to run OpenDoc, LaserWriter 8.4, and all other Apple software requiring CFM 68K in order to run on 68K Macs.

- Select a printer driver even if you don't have a printer connected.
If you don't have a printer connected, either locally or over a network, you should still select a printer driver in the Chooser. To select a printer driver, open the Apple () menu and choose Chooser. Click a type of printer (for example, LaserWriter 8) in the box on the left side of the Chooser. If you don't select a driver, you could experience problems.
- Using AppleVision software on computers with 68040 processors and on computers with PowerPC processors that use the NuBus expansion bus after a clean installation of Mac OS 7.6.

Computers with 68040 processors and computers with PowerPC processors that use the NuBus expansion bus use AppleVision software version 1.0.2. If you do a clean installation of Mac OS 7.6, version 1.0.4 of the AppleVision software is installed. (If you do a normal installation, your AppleVision software is not touched, and you retain version 1.0.2.) AppleVision software version 1.0.4 was not meant for computers with 68040 processors or computers that use the NuBus expansion bus. You can still use your computer and monitor with version 1.0.4, but you won't be able to use all of your monitor's features. To regain all the features of your monitor software, reinstall your AppleVision software from its original disks.

- PowerBook 190, 190cs and 5300cs.
The PowerBook 190cs and 5300cs display may appear blank upon the first restart after installing Mac OS 7.6, as well as every time after resetting PRAM. This is because the power manager is being updated on the PowerBook. Restarting the PowerBook once more will result in a normal screen. To shut the PowerBook down safely, press the power button one time (which brings up the shutdown dialog) and then press return.
- Power Macintosh Upgrade Card users cannot use LaserWriter driver 8.4 in 68040 mode.

LaserWriter driver version 8.4, installed on PowerPC computers, will not work on computers with 68040 microprocessors. If you have a Power Macintosh Upgrade Card and switch between PowerPC and 68040 modes, you will not be able to print in 68040 mode unless you install LaserWriter driver version 8.3.4 instead of version 8.4. You can install this LaserWriter version by installing a universal system on your computer. (The universal system is a custom installation option.)

Some features in LaserWriter version 8.4 are not available in version 8.3.4. In LaserWriter 8.3.4, you cannot print a PostScript file by dragging it to a desktop printer icon; you must use the Apple Printer Utility or the LaserWriter Utility. (One of these programs was included on the disks that came with your printer.) Also, in LaserWriter 8.3.4, you set up printers in the Chooser, not in the Printing menu.

- Printing with QuickDraw GX while using CyberDog.
Printing is not available with QuickDraw GX while using CyberDog (both QuickDraw GX and CyberDog are available with Mac OS 7.6). To work around this problem, save email messages and other CyberDog files as text, then print them using another application.
- Color OneScanner driver will not work with Virtual Memory turned on.
If you are using an Apple Color OneScanner with Scanner extension version 4.1 or earlier, you need to turn off VM. Apple will have a new scanner driver available to address this problem as soon as possible.
- Macintosh Tutorial Part 1 will not work on computers with 68030 or 68040 processors.
Part 1 of the Macintosh Tutorial, version 1.2 will not work on computers with 68030 or 68040 processors and Mac OS 7.6. Part 2 of the Macintosh Tutorial will work normally.
- PC Compatibility software and Mac OS 7.6.
Mac OS 7.6 does not include PC Compatibility software. If you perform a clean installation of Mac OS 7.6, you will need to reinstall PC compatibility software.
- Apple Telecom software and Mac OS 7.6.
Mac OS 7.6 does not include Apple Telecom software. If you perform a clean installation of Mac OS 7.6, you will need to reinstall Apple Telecom software.
- Apple CD-ROM and non-Apple CD-ROM incompatibilities.
If your computer or CD-ROM drive is not manufactured by Apple, or you have an Apple CD-ROM drive which has been updated with a non-Apple driver, incompatibilities may result. To permit your CD-ROM drive to function correctly, remove "Apple CD-ROM" from the Extensions Folder, and reinstall the software to support your CD-ROM device.

- Macintosh Easy Open control panel renamed “Mac OS Easy Open” control panel.
Some software, including PC Compatibility software versions 1.5 and earlier, installs the Macintosh Easy Open control panel. If you install software that includes the Macintosh Easy Open control panel, remove it and use the Mac OS Easy Open control panel which is installed with Mac OS 7.6.
- Network Software Installer version 1.5.1 installs older version of AppleTalk.
The Network Software Installer installs an earlier version of AppleTalk than the one included with Mac OS 7.6. If an earlier AppleTalk version is installed, Open Transport networking software will not work. Do not use the Network Software Installer after installing Mac OS 7.6.
- QuickTake 150 software installs old version of QuickTime PowerPlug.
Mac OS 7.6 includes QuickTime PowerPlug version 2.5 for computers with PowerPC microprocessors. The QuickTake 150 installer replaces this with version 2.0. Remove the QuickTime PowerPlug file from your Extensions folder (inside the System Folder) before installing QuickTake 150 software. After the QuickTake software is installed, drag the PowerPlug file back to the Extensions folder.
- Switching between a LocalTalk network and a serial printer.
If you use the same port to alternately connect to a LocalTalk network and a serial printer, the port is not always correctly released after you turn off AppleTalk to use the printer. If you have trouble printing after turning off AppleTalk, restart the computer.
- Using the QuickDraw GX Installer when Adobe Acrobat is installed.
If you use the QuickDraw GX Installer to either install or remove QuickDraw GX and your computer has Adobe Acrobat installed, Acrobat will display a message about missing fonts each time the computer is restarted. Reinstall or turn off Acrobat to stop the warning message. (Turning off QuickDraw GX in the Extensions Manager will not solve the problem.)
- Using Open Transport PPP with other versions of PPP.
If you use other versions of PPP (such as MacPPP), settings for each control panel must be updated separately. If an application (such as the Dialer application included with the Apple Internet Connection Kit) makes changes to one control panel, the other must be updated manually. The Apple Internet Connection Kit Dialer will only work with MacPPP.

- **Quadra owners with a PowerPC Upgrade Card.**

The Drive Setup disk utility does not work with your upgrade card. You can use HD SC Setup to update your driver or initialize a disk, but you need to turn off the PowerPC upgrade card before using HD SC Setup. If you need to start up your computer from a Disk Tools floppy disk, either turn off the upgrade card and use the Disk Tools 1 disk, or make a copy of the Disk Tools 2 disk and replace Drive Setup with HD SC Setup. Then start up your computer with the new Disk Tools 2 you just created.
- **Apple HD SC Setup should not be used to update the driver after using Drive Setup.**

After a hard drive has been initialized with Drive Setup, do not update the driver with HD SC Setup.
- **OpenDoc ODFLibrary and non-Apple installers.**

Some non-Apple applications and OpenDoc part editors require a later version of the OpenDoc ODFLibrary than the one installed with Mac OS 7.6. In some cases, the installers for these products may not replace the older version of ODFLibrary with the newer version they require. If a newly installed OpenDoc product doesn't work, remove the ODFLibrary file from the Editors folder inside the System Folder, then reinstall the product. This should cause the product's installer to install the correct ODFLibrary. If the product still fails to work, contact the manufacturer.
- **Apple Menu Options, General Controls, and Views control panels restored to default values.**

These control panels are restored to their default values after installing Mac OS 7.6. If you have made changes to either of these control panels, you will need to restore your settings. The Empty Trash warning is also turned back on.
- **Macintosh Guide has been renamed "Mac OS Guide."**

This change appears in the Guide (question mark) menu when the Finder and Energy Saver control panel are active, but not when some other control panels are active. All instances of Macintosh Guide will be renamed in a future release.
- **Aliases in Extensions Manager.**

The Extensions Manager control panel does not display aliases. If you have aliases in the Startup Items folder or the Shutdown Items folder, you can't turn off those items using the Extensions Manager.

- Using Assistant Toolbox with desktop computers.
If you use the Assistant Toolbox extension (for portable computers) on a desktop computer, the contents of your RAM disk will be lost when you shut down your computer. Apple is working on a solution to this problem.
- Apple System Profiler program displays incomplete information.
With the exception of internal ATA hard disks, Apple System Profiler does not display information about non-SCSI devices, including PC Cards, ATA devices, and ATAPI devices.
- Using Desktop Shortcut feature of Aladdin Desktop Tools with Mac OS 7.6.
With Shortcut, when you are in an Open or Save dialog box, you should be able click any Finder window and see that window's contents in the Open or Save dialog box's scrolling list. This feature does not work with Mac OS 7.6. Aladdin Systems expects to release an update to address the issue.

Chapter 10

We All Need More Help, So Here's How to Get It

Table 10.1 on Page 445 contains a variety of Sources of System 7.5.5 Help. Keep in mind that most of these sources will also support Mac OS 7.6. References to PowerTalk, however, are not applicable to Mac OS 7.6.

Getting Collaborative

PowerTalk collaboration is compared to OpenDoc and third-party collaboration solutions on Page 454, paragraph 1. References to PowerTalk, in this section on collaborative software are not supported by Mac OS 7.6. However, OpenDoc and other collaboration technologies continue to apply to Mac OS 7.6.

Mac OS 7.6 Major Features

The built-in collaborative services through PowerTalk software, on Page 458 (second bullet) item are only found with System 7.5.5. PowerTalk and Collaborative services are not supported in Mac OS 7.6.

Additional new features for Mac OS 7.6 include:

- Extensions Manager 4.0 provides a better interface for managing extensions
- Install Mac OS includes access to all Mac OS 7.6 software installers in one easy-to-use application

Crabb's Final Exam

On Page 460, Item number 10, question Number 10 of Crabb's Final Exam asks "Does Finder 7.5.5 give you a new interface?" To clarify this question for Mac OS 7.6, System 7.5.5 contains Finder 7.5.5. Mac OS 7.6 contains Finder 7.5.6. The answer on Page 461 applies to both Finder versions.

Appendix A

Apple Guide and Guide Maker

Apple Guide 2.1 provides guide support for OpenDoc parts. For more detailed information on how to create guides for OpenDoc parts, visit Apple's Developer World Web site at www.apple.com. This information is an addendum to Appendix A, which ends on Page 476.

Appendix B

PlainTalk and Text-to-Speech

Most information provided in Appendix B, beginning with Page 478, continues to be true for Mac OS 7.6. Mac OS 7.6 contains Text-to-Speech 1.5, which consists primarily of bug fixes and enhancements to PlainTalk 1.4.1. The newest feature is the Talking Alerts option in the Speech control panel. For information about English Text-to-Speech, see the Read Me

document located on the Mac OS CD-ROM in the 'Additional Mac OS Information' folder. Speech recognition is not supported in Mac OS 7.6. Apple also has announced Speech Recognition and Text-to-Speech will not be supported in its future operating systems, such as Rhapsody.

Turning On or Off Talking Alerts

If you have system software version 7.0 or later, you can use the Speech control panel to turn on or off the Talking Alerts feature. When this feature is on, your Macintosh will speak the contents of alerts to you. (An alert appears, for example, when your printer runs out of paper while printing.) To turn the Talking Alerts feature on, follow these steps.

1. Open the Control Panels window by pulling down the Apple () menu and choosing Control Panels.
2. Open the Speech control panel by double-clicking its icon in the Control Panels window.
3. Open the Options pop-up menu at the top of the Speech control panel and choose Talking Alerts.
4. To have your Macintosh speak a phrase like "Alert!" or "Hey!" when an alert appears, click the "Speak the phrase" check box to put an X in it, and choose the phrase you want to be spoken from the adjacent popup menu.
5. To have your Macintosh speak the content of an alert when one appears, click the "Speak the alert text" check box to put an X in it.
6. To adjust how long your Macintosh delays after an alert appears before speaking the alert text, adjust the slider beneath the "Speak the alert text" check box.
7. To test how Talking Alerts will behave with your chosen settings, click on the speaker icon to the right of the slider.

Whenever Talking Alerts is speaking the text of an alert, you can stop it by clicking the mouse or typing any key.