

Installing Mac OS 9

If your Mac came with Mac OS 9 already installed, great; you won't have to go through the educational but time-consuming process of updating your operating system. (You may still want to consider reading about the *clean install*, described at the end of this chapter, because it's a sensational troubleshooting technique.)

If your Mac is running some earlier version of the Mac OS, however, and you've obtained a copy of the Mac OS 9 CD-ROM, almost all of this chapter pertains to you. It covers all three kinds of installation:

- **The standard installation**, in which your existing System Folder is simply updated to Mac OS 9, in the process preserving your preferences files, font collection,  menu configuration, and so on;
- **The custom installation**, in which you install only the Mac OS 9 components you want; and
- **The clean installation**, in which the Mac OS 9 installer gives you a virginal, clean, complete Mac OS 9 System Folder, setting aside and retiring your existing, older System Folder.

Tip: Technically, Mac OS 9 costs \$99; you can buy it at the computer store, from the Apple Web site (www.apple.com), or from any Mac mail-order joint (such as macwarehouse.com, macmall.com, or maczone.com). But Apple will give you a \$20 rebate if you have Mac OS 8.5 or Mac OS 8.6. And if you have an iBook, Power Mac G4, or any other Mac model that was released after Mac OS 9, you can buy Mac OS 9 for \$20. For details on these offers (which involve mailing in a considerable amount of paperwork), call 800-335-9258, or visit www.apple.com/macos/uptodate.

Before You Install

Mac OS 9 requires a Mac with a PowerPC processor, which includes every Mac sold since late 1994. PowerPC-equipped Macs include every Power Macintosh, iMac, and iBook model, along with any Performa, PowerBook, or LC model with a four-digit model number. (You can't install Mac OS 9 on a Mac model that you've enhanced with a PowerPC upgrade card.)

Mac OS 9 also requires a Mac that has 32 MB of RAM *and* virtual memory (see page 117) turned up to at least 40 MB. For faster, smoother operation, however, Apple recommends 64 MB of memory or more. You need 100 to 250 MB of empty disk space when you install Mac OS 9, too, depending on how many of its components you plan to install.

If you're upgrading from Mac OS 8.1 or earlier, consult the Before You Install document on the Mac OS 9 CD. It contains special steps for Macs with ultrawide SCSI cards, DOS compatibility cards, and Macs in the 5000 and 6000 model lines. It also warns you about hard drives that you've formatted using non-Apple hard drive software (such as HDToolkit); you'll probably have to contact the manufacturer about getting an update before you can install Mac OS 9.

The Standard Installation

If you're upgrading to Mac OS 9 from an earlier Mac OS version, Apple assumes that you've already got a lot of customized stuff in your existing System Folder: fonts you've added, extensions and control panels deposited by your application installers, the preference files that store serial numbers for your software,  menu items you've installed, and so on. The idea behind the standard Mac OS 9 installation is to *preserve* all of that customized stuff. Mac OS 9 installer treads carefully around it, updating or adding only the components it cares about—the ones needed to give you a genuine Mac OS 9 System Folder.

Most people, most of the time, perform this kind of upgrade. There *is* another way to install Mac OS 9—the clean install, described later in this appendix—but the standard installation is the one you get if you don't take any special steps.

Most Mac OS 9 upgrades go very smoothly. Still, when things do go wrong, the standard installation is generally at fault. That's because some of your older extensions, control panels, and other System Folder components—the very items the Mac OS installer takes care not to disturb—may be incompatible with Mac OS 9. When you start up the machine after the installation, therefore, your first experience with the new operating system may be freezes or other glitches.

The bottom line: If things go well, the standard installation can save you a lot of time and hassle. It simply upgrades your existing System Folder, maintaining your customizations. If things don't go well, and your Mac is crashy after the upgrade, you can always perform a clean install afterward. Consider jumping directly to a clean install only if:

- You're having glitches and freezes already, while running your older system software. Installing Mac OS 9 over such a system would simply exacerbate the problems.
- You're a utility junkie. You've loaded down your System Folder with add-on extensions and control panels, such as Kaleidoscope and other shareware goodies from the Web. If so, you're probably better off performing a clean install—unless you first revisit the Web sites in question to make sure you've got the latest, Mac OS 9-compatible versions of your System Folder clutter.

Here, then, are the steps for performing a standard installation.

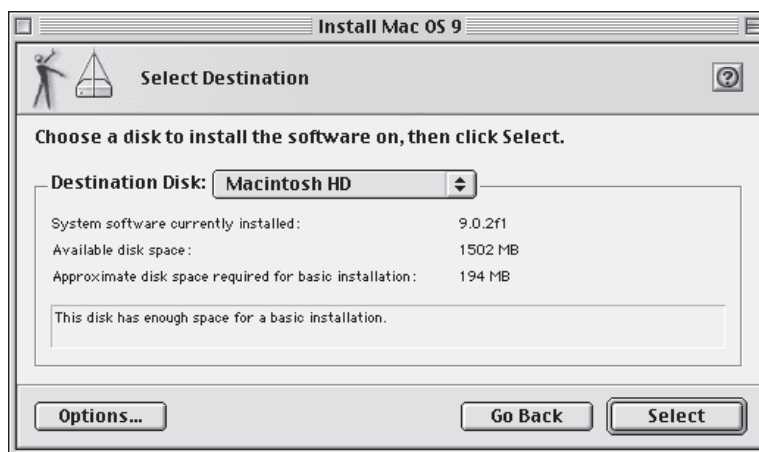
Tip: If you're installing Mac OS 9 onto a laptop, plug it in before you begin, so that it won't go to sleep or run out of battery power in the middle of the process. Check your Energy Saver control panel, too, to make sure that the computer isn't set to sleep after only a few minutes of inactivity.

1. Insert the Mac OS 9 CD-ROM. Choose **Special**→**Restart**; immediately hold down the letter C key until you see the light-colored desktop pattern that's filled with pictures of CDs.

That special background tells you that you've started up the Mac from the CD-ROM. (Technically, you can install Mac OS 9 without starting up from the CD-ROM, but this approach is more likely to go smoothly. It rules out the possibility that one of your own extensions or control panels might interfere with the installation process.)

On the screen now, you should see the Mac OS 9 CD window. It contains Before You Install, a Utilities folder, and the Mac OS Install icon.

Figure B-1:
The Select Destination screen that lets you specify which disk you want to receive Mac OS 9. It's possible to cram Mac OS 9 onto a Zip disk, but only if you use a customized installation, as described in the next section, and request only a few of Mac OS 9's features—and then use the Memory control panel's "Select Disk" pop-up menu to specify a different disk for virtual-memory storage.



2. Double-click Mac OS install.

A welcome screen appears. There's nothing particularly interesting on it except for the circled question mark in the upper-right corner, which you can click for some help screens.

3. Click Continue (or press Return).

Now the Select Destination screen appears, as shown in Figure B-1. This is where you're supposed to specify which disk you want Mac OS 9 installed on. Most people accept the proposed choice, which is the built-in hard drive. It's possible, however, to install Mac OS 9 onto a different drive, such as an external hard drive, a Jaz cartridge (if you have version 6.0.2 or later of its driver software), and so on.

4. From the Destination Disk pop-up menu, specify the disk on which you want Mac OS 9 installed. Then click Select (or press Return).

Now you're shown the Before You Install document; it's the same one that appears in the Mac OS 9 CD window.

5. Click Continue (or press Return). Click Continue on the next screen, too, to bypass the software license agreement. Click Agree on the pop-up warning.

At last you arrive at the Install Software screen. At this point, you could click Options to turn off one of two special features: **Update Apple Hard Disk Drivers** makes sure that your hard drive (if it's an Apple hard drive) has the latest hard drive software installed—an excellent idea. The **Create Installation Report** checkbox produces a folder on your hard drive called Installer Logs; inside are text files that identify every software component the Mac OS 9 installer added, deleted, or replaced.

This screen also contains the Customize button. More on this topic in “The Custom Installation,” later in this appendix.

6. Click Start.

If you're warned that other applications are running, click Continue. (The Mac can't install new system software if any other programs are running.)

Now the installation process begins in earnest. A status box lets you know what's going on—first the installer checks your hard drive and automatically repairs any damage it finds there. (This step makes the transition to Mac OS 9 much smoother than, say, the one to Mac OS 8, whose installer didn't perform this check. The upgrade to Mac OS 8 caused grief for thousands of people who had tiny problems lurking on their hard drives.)

Next, the installer updates the driver software on your hard drive (unless it's not an Apple hard drive, in which case you're responsible for obtaining Mac OS 9-compatible driver software).

Finally, the actual software installation begins. You can click Cancel at any time; you'll be asked whether you want to abort the entire installation, just skip the

installation of the component currently being installed (such as ColorSync or speech recognition), or start the installation over again.

The entire installation process takes about 10 minutes. When the installation is complete, you'll be asked to restart the Mac.

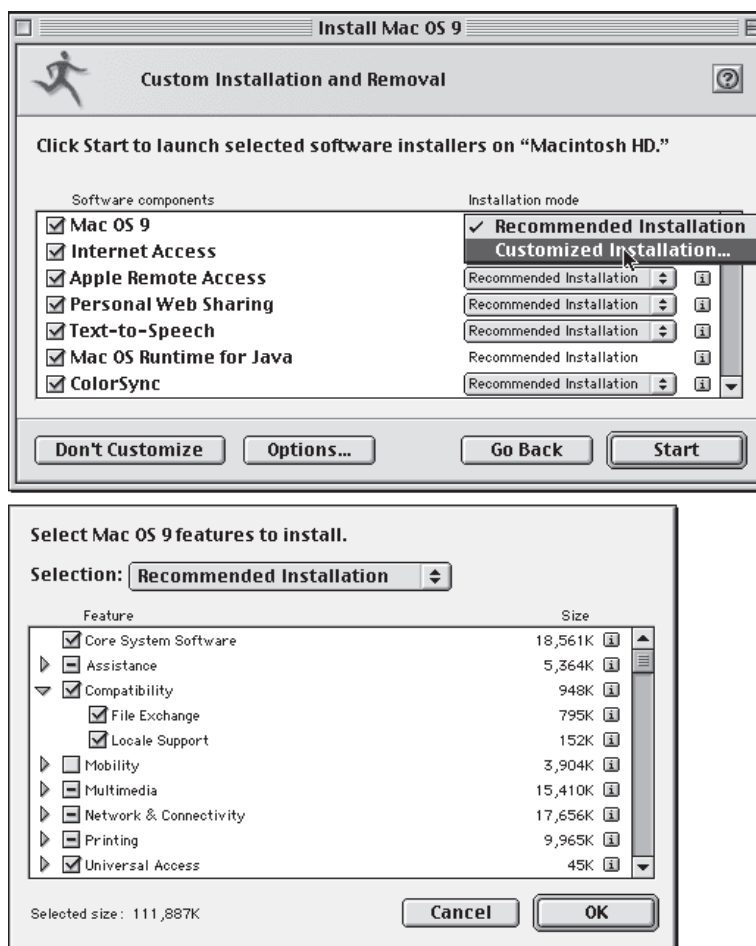
7. Click Restart.

That's it—you've just installed Mac OS 9.

When the Mac starts up again, the Mac OS Setup Assistant runs automatically; it's an inconsequential startup program designed primarily for people whose Macs are connected to office networks. On successive screens, you're asked to specify the current time zone, the current time and date, your name and password (for networking purposes), what kind of printer you plan to connect, and so on.

Figure B-2:

*If you click Customize, you're offered these primary 10 chunks of software (top). If you choose Customized Installation from one of the pop-up menus at the right side of that window, you're shown the individual software pieces that make up the larger module (bottom). A checkmark means you're going to get the entire collection; a - means that you're going to get some of the items within each collection; and an empty checkbox means you're not going to get any of the items in that collection. Click the little *i* button for a terse explanation of its contents.*



Tip: You can skip the Mac OS Setup Assistant; just choose File→Quit at any time, and then confirm that you do indeed want to abandon the process. If you're not on office network, the only meaningful setting the Setup Assistant makes for you is the time and date, which you can do much more quickly yourself (by choosing →Control Panels→Date & Time).

On the final screen, you can click Quit (to begin using your Mac) or Continue (if you'd like to set up an Internet account). If you choose to continue, you're shown the Internet Setup Assistant, which walks you through the process of setting up an Internet account with EarthLink.

Then, at last, you're ready to begin using your Mac and enjoying the features described in this book.

The Custom Installation

In step 5 of the preceding instructions, you come face-to-face with a button called Customize. It brings up the screen shown in Figure B-2, where you can specify which components of the Mac OS you want installed. Unless you're an absolute terrified novice who'd just as soon not have to confront unnecessary options, turning off the components you don't need can save you installation time and a lot of disk space. This option lets you order your software meal *à la carte* instead of as a fixed package.

To the right of each item is a pop-up menu. (You must turn on the checkbox to undim the pop-up menu.) It lets you further break down this customized installation into the individual chunks of software that make up each of the modules listed here, as shown in Figure B-2.

Here are the individual modules you can turn off or on—and the sub-options that appear when you choose Customized Installation from the pop-up menu:

Mac OS 9

This item gives you the basic System Folder, lacking only the nine other major modules items listed on this screen. If you choose Customized Installation from the pop-up menu to its right, you discover that Mac OS 9 is composed of these elements (see Figure B-2, bottom):

- **Core System Software.** Here it is: Mac OS 9 in its tiniest, most stripped-down form—a mere 18-MB chunk that's just barely enough software to let your Mac turn on. This option is useful when you want to create, for example, an “emergency” Zip disk or even RAM disk, so you'll have something to start up your Mac when all else fails (and you've lost your Mac OS 9 CD, which is an ideal startup disk).

This miniature System Folder is rather shocking to use: it starts up your Mac almost instantaneously, seems to double your Mac's speed, and uses very little RAM. Of course, it's lacking just about every useful feature of the standard Mac—in fact, it gives you only a single font (Geneva), which makes your menus look extremely peculiar.

Tip: Don't miss the Selection pop-up menu above the list of checkboxes (you can see it in the bottom dialog box of Figure B-2). It lets you turn all of the checkboxes on or off with a single click.

- **Assistance.** This item means “help files,” including two of the help systems (Apple Guide and Mac OS Help) described in Appendix A, the Mac OS Setup Assistant program described above, and SimpleText.
- **Compatibility.** Grants you File Exchange (a control panel described in Chapter 12) and Locale Support. Locale Support creates a folder in your System Folder called Language & Region Support, containing 13 resource files for various languages. The Mac relies on the information in these files when it offers you various international choices in its control panels, such as Date & Time, Numbers, and so on.
- **Mobility.** These programs for laptops include Apple IR File Exchange (lets PowerBooks connect with each other through the air, via infrared communication), a battery-draining application (designed to eliminate the “memory effect” of very old PowerBook batteries), the Trackpad control panel, and the drivers for various PowerBook and iBook modems and monitors.
- **Multimedia.** In this category are the drivers for various Apple sound and video products, including its CD/DVD drive, game drivers like OpenGL and Game Sprockets, QuickTime, and the useful AppleCD Audio Player (see Chapter 5).
- **Network & Connectivity.** Most of these items are for setting up an office network, as described in Chapter 16: AppleShare, Ethernet drivers, File Sharing, the Network Browser, Open Transport (see Chapter 14), and so on. Buried in this option, however, are several of the big-ticket Mac OS 9 features—the Multiple Users control panel, the password-encryption feature, and so on.
- **Printing.** This batch includes all the software described in Chapter 15—various drivers for discontinued Apple printer models, the Desktop Printing software, and so on.
- **Universal Access.** You can read about these two control panels—CloseView and Easy Access—in Chapter 13.
- **Utility.** This broad category includes some of the most useful Mac OS 9 components: AppleScript (Chapter 10), the application switcher (Chapter 6), the Control Strip (Chapter 4), Disk Copy (Chapter 13), Disk First Aid (Chapter 13), Drive Setup, FontSync (Chapter 12), the Graphing Calculator (Chapter 13), Note Pad (Chapter 13), SimpleSound (Chapter 20), and so on.
- **Video.** Here are the drivers for various Apple monitors, plus the DigitalColor Meter program described in Chapter 13.
- **International.** This software gets your Mac ready for the international language features described in Chapter 13.
- **Apple Menu Items.** Here are the Calculator, Chooser, Key Caps, Sherlock, and other  menu items that aren't part of the bundles of software described so far.

- **Control Panels.** This category includes all of the control panels described in Chapter 12—except the ones included in software chunks described so far.

Tip: Nestled among these control panel options is File Synchronization, which is generally installed only on laptops. If you have a desktop Mac, you can use a custom installation to turn it on here.

- **Fonts.** Using these checkboxes, you can turn on or off each of the 19 TrueType fonts that come with the Mac (see Chapter 19).

GEM IN THE ROUGH

The Universal System Folder

When you install the Mac OS 9 component by itself, the installer gives you a System Folder that can start up your Mac model. Unbeknownst to most Mac fans, however, not every Mac OS 9 System Folder is alike. The installer can create several subtly different versions of Mac OS 9—one for an iMac, another for Power Mac G4 models, another for the old beige Power Mac G3 models, and so on.

In other words, the Mac OS 9 you installed onto a Zip disk connected to your iMac may not actually be able to start up a Power Mac G3 in the next office.

The solution: create a *Universal* System Folder. This extra-large version of Mac OS 9, once installed on a portable disk

large enough to contain it, can power up any Mac OS 9-compatible machine.

To create it, run the Mac OS 9 installer, exactly as described in steps 1 through 5 at the beginning of this appendix. Once again, you'll wind up facing a Customize button. Click it, make sure the Mac OS 9 checkbox has a checkmark, and then—from the Installation Mode pop-up menu—choose Customized Installation. Finally, from the Selection pop-up menu above the checkboxes, choose Universal Installation.

Unless you further customize the installation by turning off some of the checkboxes described below, you'll get a System Folder that occupies 140 MB—but that can start up any PowerPC Mac with enough RAM for Mac OS 9.

Internet Access

A better name for this item would have been “Internet programs,” because this is the component that gives you two Web browsers (Internet Explorer and Netscape Communicator), an email program (Outlook Express), and so on. If you use the pop-up menu to specify Customized Installation, you may save yourself a lot of disk space; the individual components you can turn on or off include:

- **Apple Internet Access.** This checkbox refers to the Internet Access extension, which you need to go online.
- **Internet Utilities.** This item grants you StuffIt Expander, the useful utility program that can decompress software you download from the Internet via email or Web pages, and DropStuff, which lets you *create* compressed files for sending. (Most email programs perform this compression automatically, however.)

Tip: Newer versions of both StuffIt Expander and DropStuff are already available, at no charge, from www.aladdinsys.com.

- **Microsoft.** Turn on this checkbox to acquire Internet Explorer and Outlook Express, Microsoft's Web browser and email program.
- **Netscape Communicator.** An alternative, faster Web browser with fewer browsing features—but a built-in Web-page editor.

Apple Remote Access

This bundle includes the Apple Remote Access Personal Server software, which lets you dial into your Mac from the road (see Chapter 16).

Personal Web Sharing

As described in Chapter 14, Web Sharing lets you make one folder on your hard drive available to the entire Internet. This package includes the necessary control panel, Control Strip module, extension, and instruction manual (in Web-page format; you'll find it in a folder called Web Pages on your hard drive).

Text-To-Speech

If you want your Mac to be able to read your text back to you out loud, in a nasal voice, this is the option you want (see Chapter 21).

Mac OS Runtime for Java

You can read about Java on page 217; it's a fancy programming language required by some Web pages (such as banking and game sites).

ColorSync

As described in Chapter 19, ColorSync is a collection of software components that help ensure color consistency throughout the scanning, viewing, editing, and printing process. This bundle gives you that software, including the Photoshop plug-ins described in Chapter 19 and the profiles for many Apple color products.

English Speech Recognition

Here's the software you need for the Mac to understand your spoken commands, as described in Chapter 21. It's not ordinarily installed; a customized installation is the only way to get it.

Language Kits

You can read about these kits in Chapter 13; they let you word process or surf the Web in any of dozens of different languages—Hebrew, Japanese, Korean, Chinese, and so on—complete with foreign-language fonts and alphabet systems.

Network Assistant Client

Network administrators can buy a program called Apple Network Administrator that lets them install software onto an entire network's worth of Macs—remotely, from one central computer. Administrators can also maintain the software, troubleshoot problems, and even see what's on your screen. But to do that, your Mac must have this special software installed.

Tip: You can also *remove* selected components from an existing copy of Mac OS 9. Suppose, for example, that in reading the preceding pages, you become alarmed at how much junk gets installed during a standard installation. By following the steps for performing a customized installation, and then choosing Customized Removal from one of the pop-up menus (shown at top in Figure B-2), you can turn on the checkboxes of software components you want removed, thus saving a lot of disk space.

Finally, open the more detailed list of components shown at bottom in Figure B-2. Click the ones you want deleted, and then click Remove. When the process is over, you'll be asked to restart your Mac, just as though you had installed something.

POWER USERS' CLINIC

Labeling the Mac OS 9 Components

Regardless of the kind of Mac OS 9 installation you perform, one syndrome will befall you in the coming months: over time, you and your applications will deposit more files into the System Folder. As you install programs, your Extensions and Preferences folders will collect more accompanying modules; as you explore the Internet, you'll stumble across more shareware that sounds like fun. And then one day, your Mac will start acting up. You'll stare hopelessly at your System Folder, filled as it is with over 2,000 icons, and have no idea where to begin your troubleshooting.

If you plan ahead, you can avoid this situation. Immediately after installing Mac OS 9, use the icon-labeling trick described on page 40. The routine goes like this: open your System Folder. Choose Edit→Select All. Then press ⌘-Option-right arrow, which expands every flippy triangle so that you can see every icon in every folder.

Now choose Edit→Select All again, and then choose File→Label→Essential (or any label you prefer). (You may even want to choose Edit→Preferences→Labels and type in a very specific label, such as "Clean install 8/2000.") You've just tinted every icon in every System Folder folder orange (or whatever color that label represents). Finally, press ⌘-left arrow to collapse all the folders again, and close the System Folder.

When the day of troubleshooting arrives, you'll be able to narrow down your list of culprits instantly. You'll open your System Folder and look for items that *aren't* orange. These are the icons that didn't come from Apple, and are therefore the ones most likely to be causing your problems. (Be alert, however: System components that Mac OS 9's Software Updates control panel have automatically downloaded and installed won't be orange, either.)

The Clean Installation

A standard Mac OS 9 installation packs in Mac OS 9 around your fonts, control panels, Apple menu items, startup items, and so on. If all goes well, when your Mac restarts after the installation, you'll be running the new operating system with all of your familiar modifications intact.

But if anything goes wrong, and your Mac behaves oddly—whether at the time of installation or later—you may want to consider a *clean installation*. In this special mode, the Mac OS 9 installer gives you a new System Folder—a fresh, perfect, smoothly operating System Folder that doesn't contain any of the junk you've added to your Mac over the months. Nothing else on your hard drive is disturbed—your programs and documents are just fine—but the System Folder itself is surgically replaced.

When you do a clean installation of Mac OS 9, the installer retires your existing System Folder and renames it *Previous System Folder* to avoid confusion. Figure B-3 shows the effect.

Figure B-3:

Your new, fresh Mac OS 9 System Folder is easily identifiable—it's the one now called System Folder, and it's also the one bearing the traditional Mac OS logo, as shown here at right.



It's impossible to overstate the power and usefulness of the clean install. Unless your Mac has actual hardware problems, whatever glitch you've been experiencing, in any program—crashes, freezes, cosmetic anomalies, or whatever—goes away after a clean install. That's why this technique is so adored by Mac phone staff, trouble-shooters, and consultants the world over.

What makes a clean install inconvenient, however, is that when it's over, you have to hand-install every component that made the old System Folder *your* System Folder—all of those preference files, fonts, Apple menu items, and so on that you and your programs had added over the months. This section gives you guidance both on performing a clean install and on performing this follow-up procedure.

Performing a Clean Installation

To give yourself a fresh, new System Folder, follow these steps:

1. Insert your Mac OS 9 CD-ROM. Double-click the Mac OS Install icon.

The Welcome screen appears.

2. Click Continue; from the pop-up menu, choose a destination disk for the installation.

In general, this is your built-in hard drive.

Now you've arrived at the critical step:

3. Click the Options button in the lower-left corner of the window.

As shown in Figure B-4, you're now offered the chance to specify a clean installation.

4. Turn on the “Perform Clean Installation” checkbox and then click OK. Click Select, and then continue with step 5 on page 426.

When the installation is complete, you’ll see two System Folders—as shown in Figure B-3—one of which is named Previous System Folder. That’s your old one. You should notice that the Mac starts up faster, windows and programs open faster, and the entire machine feels smoother and more responsive.



Figure B-4: Click Options (background) to summon the “Perform Clean Installation” dialog box, which briefly explains what’s about to happen. Turn on the checkbox and then click OK.

Reinstalling Fonts, Preferences, and Other Components

If you have a current version of the commercial program called Conflict Catcher (www.casadyg.com), bringing over your fonts, preference files, control panels, Apple menu items, and other personal items from the Previous System Folder into the new one is easy. The Clean Install Merge command in Conflict Catcher automatically prepares for you a list of each item in the *old* System Folder that isn’t in the new one. You just click the checkboxes of the ones you want copied into the new System Folder, and call it a day.

If you don’t have Conflict Catcher, you can perform the same steps manually, although you’ll spend more time doing it. Here’s how to go about it:

1. Open the Previous System Folder and the new one in tall, skinny windows, side-by-side, as shown in Figure B-5.

For each window, choose View→as List.

2. In each of the two windows, click the flippy triangle next to the Apple Menu Items folder, so that you can see its contents.

The idea is that you want to compare the contents, to find elements in the left-side (Previous System Folder) window that *aren’t* in the new System Folder. When you find such an icon in the Apple Menu Items folder, do this:

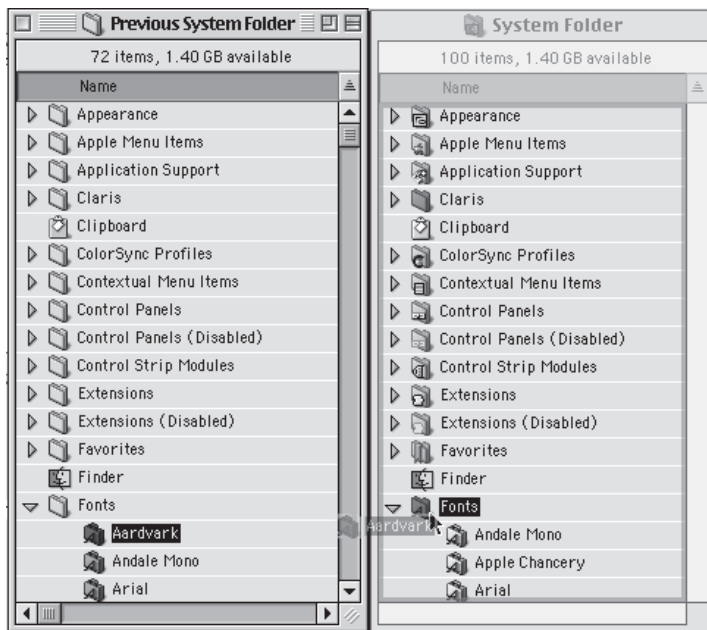
3. While pressing Option, drag each unique icon in the left-side Apple Menu Items window into the corresponding folder in the right-side window (the new System Folder).

Option-dragging creates a copy of the original. You're copying, rather than moving, these items in order to leave your previous System Folder intact, just in case you need to go back to it.

Incidentally: an item in your  menu can't cause instability on your Mac. You're perfectly safe copying these items into the new System Folder.

Figure B-5:

Set up your old and new System Folder windows so that you can compare their contents. Pay special attention to the Apple Menu Items, Control Panels, Extensions, Fonts, Preferences, and Startup Items folders. Each time you recognize something worth bringing over into your new System Folder, Option-drag it from the left window into the corresponding locations of the right window.



4. Repeat the compare-and-copy procedure with the Control Panels, Extensions, Startup Items, and Fonts folders.

Be judicious, however. The last thing you want is to re-introduce problem components into your new System Folder. If possible, install fresh versions of these control panels, extensions, and fonts—updated versions, if you can find them—instead of copying them from the old System Folder.

If you find something in the Previous System Folder window that you can't identify—that is, you're not sure whether you need it or not—consider living without it as you get used to your new System Folder. Part of the joy of the clean install is leaving behind hundreds of arbitrary files installed unnecessarily by your various applications.

5. Repeat the compare-and-copy procedure with your Preferences folder.

Corrupted preference files are a common cause of problems on the Mac. You should grow especially suspicious when you begin having problems in one specific program, as described in Appendix C.

Therefore, consider dragging preference files from your old System Folder into your new one *only* if they contain key information, such as the password or serial number necessary to run a particular program. (Unfortunately, some programs rely on *invisible* serial-number files; you'll have to reinstall such programs from scratch.) You should also copy over the files that contain your Internet connection information (phone numbers, passwords, and so on)—namely, the TCP/IP Preferences, Modem Preferences, and Remote Access folder.

Tip: The Mac won't let you replace the Remote Access folder in your new System Folder; it will claim that the existing Remote Access folder is "in use." The solution: *throw away* the new Remote Access folder before Option-dragging the old one.

6. Close all windows, and then restart the Mac.

With luck, you'll be exactly where you want to be: running a clean, fresh, fast new System Folder that nonetheless contains your most treasured fonts, control panels, and so on.

At this point, it's a good idea to live with *both* System Folders on your hard drive for a couple of weeks. (Contrary to the Apple advice of the 1980s, these days, it's perfectly safe to have multiple System Folders on your hard drive. The Mac "blesses"—activates—only one System Folder at a time, as indicated by the Mac OS logo on the folder.) After some time has elapsed, and you're comfortable that your new System Folder works the way you like, you can throw away the one called Previous System Folder.

Tip: If the installation didn't go well, you can always return to your earlier System Folder, even if it was an earlier version of the Mac OS. To do so, open your new System Folder. Move the Finder out of the window—to the desktop, for example. Doing so cripples the new System Folder; you'll see the Mac OS logo disappear from its folder, and the colorful special folder designs inside it all turn plain.

Now just open and close the Previous System Folder to make the Mac OS logo reappear on *it*. You've just "blessed" the older System Folder; when you restart, it will be in control. (You can leave its "Previous" name, or rename it; the name of the System Folder makes no difference.)

Mac OS 9 Compatibility Problems

A major system-software upgrade always invites a few headaches, and Mac OS 9 is a prominent example. Dozens of programs—especially utility programs—require minor upgrades to be compatible with Mac OS 9. Not every item in this list, by the

way, is *completely* broken in Mac OS 9; some have only minor incompatibilities. Here's a partial list of the programs that have compatibility issues, along with the software companies' Web sites and the *lowest* version number that works completely in Mac OS 9:

Mac OS 9 Compatibility Problems

<i>Product</i>	<i>Web site</i>	<i>Requires version</i>
Acrobat Reader	adobe.com	4.0
Adobe Type Reunion	adobe.com	4.5.2
AppleWorks 5	apple.com	5.0.4
ATM	adobe.com	4.5.2
Avara	Ambrosiasw.com	1.0.1
Barrack	Ambrosiasw.com	1.0.4
Conflict Catcher	casadyg.com	8.0.6
Cythera	Ambrosiasw.com	1.0.4
Excel 98	microsoft.com	(unnumbered updater available)
Final Cut Pro	apple.com	1.2.1
Final Draft	finaldraft.com	5.0.2d
Fourth Dimension	acius.com	6.5.3
InstallerMaker	aladdinsys.com	6.5
Kensington trackballs	kensington.com	5.31
MenuFonts	dubclick.com	(no fix yet)
Norton Anti-Virus	symantec.com	6.0
Norton Utilities	symantec.com	5.0
PaperPort	visioneer.com	(unnumbered updater available)
Premiere	adobe.com	5.1c
RAM Doubler 8	connectix.com	9
Retrospect	dantz.com	4.2
SpaceSaver	aladdinsys.com	(no fix yet)
Speed Doubler	connectix.com	(no fix yet)
StatView	statview.com	(fixed by the Mac OS 9.0.2 update)
StuffIt Deluxe	aladdinsys.com	5.5
StuffIt Expander	aladdinsys.com	5.5
StyleWriter 4000	apple.com	(no fix yet)
Toast	adaptec.com	(no fix yet)
VirtualPC	connectix.com	2.1.2

You can find much more exhaustive Mac OS 9 compatibility lists at any of these Web sites:

- **MacFixit.** Point your browser to www.macfixit.com/reports/macos9-2.shtml#updated for a long list of updates and software patches, with links.
- **Macintouch.** The Mac OS 9 compatibility report is at www.macintouch.com/m90_compatibility.html.
- **VersionTracker.** This outstanding resource tracks current versions of *everything* Mac-related. It has a special Mac OS 9 page at www.versiontracker.com/systems/system9.shtml.

