Mac OS 8 Update

Known problems, Internet Access, and Installation

Document Contents

Introduction

Mac OS 8 is the most significant update to the Macintosh operating system since 1984. The updated system gives users PowerPC-native multitasking, an efficient desktop with new pop-up windows and spring-loaded folders, and a fully integrated suite of Internet services.

This document provides information about Mac OS 8 that supplements the information in the Mac OS installation manual. For a detailed description of Mac OS 8, useful tips for using the system, troubleshooting, late-breaking news, and links for online technical support, visit the Mac OS Info Center at http://ip.apple.com/infocenter. Or browse the Mac OS 8 topic in the Apple Technical Library at http://tilsp1.info.apple.com.

About Mac OS 8

Read this section for information about known problems with the Mac OS 8 update and possible solutions.

Known Problems and Compatibility Issues

Apple Language Kits and Mac OS 8

Apple's Language Kits require an updater for full functionality with this version of the Mac OS. The Language Kit Updater for Mac OS 8 can be downloaded from the software updates area of Apple's Web site, America Online, and other sites where Apple updates are available.

If you cannot obtain the Language Kit Updater right away, do the following as an interim method of improving compatibility: After installing Mac OS 8, open the Installer

again and add the International components of the basic system software. (See "Adding and Removing Software" in Chapter 3 of the installation manual.) Then reinstall your Apple Language Kit software. If the Language Kit installer asks about older files, always choose Newer.

At Ease and Mac OS 8

Some of the Mac OS 8 control panels can't be enabled for At Ease users and won't appear in At Ease Setup. You should use these control panels in the Finder before running At Ease. Also, note that At Ease does not support file sharing. Do not turn on file sharing when using At Ease or your computer may freeze.

Apple Location Manager and Mac OS 8

To use the Apple Location Manager with your PowerBook computer, you must install Apple Location Manager 1.0.1, which is included with Mac OS 8. Due to changes in Mac OS 8, previous versions of Apple Location Manager will not function correctly and should not be used.

Programs Refuse to Open

Some programs refuse to run if the system font is set to anything but Chicago. To change the system font, use the Appearance control panel and change the font from Charcoal (the default) to Chicago then restart your computer and try to open the program again. Contact the manufacturer of the program to see if an updated version is available.

Additionally, some programs might require a small amount of additional memory when used with Mac OS 8. If a program

refuses to open, increase its minimum memory allocation by 200K or 300K. To do this, select the program's icon, then open the File menu and choose Get Info. See the Memory topic in Mac OS Help for more information.
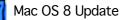
Printing with a LaserWriter Select 300 or 360 printer

If you experience system freezes or other problems when printing on a LaserWriter Select 300 or 360 printer, make sure the printer is connected to the computer. Trying to cancel printing does not solve the problem and may cause a flashing error message or cause your computer's performance to slow down.

Using Mac OS 8 with HP Printers

If your computer freezes or crashes when you use the Page Setup dialog box, contact Hewlett-Packard to obtain updated

drivers for your printer.

Enhanced CDs Stop Playing

Audio tracks on Enhanced Compact Discs may stop playing if you open a program, access a file, or use the Finder. Enhanced CDs contain both audio and data information, such as text, movies, or multimedia software. On occasion, the Finder needs to access information about the data portion of the CD, which causes the audio to stop playing. This problem does not occur with standard audio CDs.

Apple Telecom Software

The Apple Telecom software provided in the CD Extras folder on the Mac OS 8 CD is for PowerPC computers only. Also, the Apple Fax Gateway is no longer supported and will be removed when you install the new version of Apple Telecom.

If you already have an earlier version of Apple Telecom installed on your computer, a regular installation of Mac OS 8 does not remove or alter it. However, if you perform a clean installation of Mac OS 8, you will need to reinstall Apple Telecom software. If you have a PowerPC computer, use the installer on the Mac OS 8 CD. If you have a 68040-based Macintosh, reinstall your previous version.

Important: If you have a 68040 (or earlier) Macintosh, do not install the Apple Telecom software included with Mac OS 8.

Express Modems and GeoPort Adapter

If you have an Express Modem or GeoPort Adapter, and a 68040-based Macintosh, you may experience unexpected disconnections when accessing the Internet, the Internet Registration Server, and online services. External modems

that do not use the Apple Telecom software will not experience this problem.

Internet Setup Assistant and Static IP Addresses

If you perform a clean installation of Mac OS 8, and you are connected to the Internet via a LAN (instead of a modem connection) and you have a static IP address, you should set the AppleTalk control panel to use ethernet before using the Internet Setup Assistant. This is necessary so the assistant can update your configuration settings with the information you enter. After you use the assistant, open the TCP/IP control panel to activate TCP/IP for your computer.

Desktop Printing Extension and Mac OS 8

The Desktop Printing Extension is unnecessary with Mac OS 8. If it is present in the Extensions folder it may cause a

system crash when you start up your computer.

ATI Xclaim GA and 3DMF files

If you have an ATI Xclaim GA card and your computer freezes when the monitor is set to Thousands of Colors and you try to load a QuickDraw 3D (3DMF) file, remove the Graphics Accelerator 1.0.7x extension from the Extensions folder. This extension is installed by the ATI Installer but is no longer needed with Mac OS 8.

ProDOS Disks and File Sharing

Turn off File Sharing before accessing a ProDOS (Apple II) disk or hard drive. Or, if you are using a ProDOS disk, eject it before turning File Sharing on. The Finder will be less responsive when you access ProDOS disks, and may freeze when ProDOS disks and File Sharing are used together.

Macintosh Tutorial

If you have the Macintosh Tutorial, parts of it may not work correctly on computers with 68040 processors and Mac OS 8. Additionally, due to changes in the Finder and other parts of Mac OS 8, the information in the tutorial may not be correct. You can use the Mac OS Info Center to learn about the capabilities of your computer.

IR File Exchange Guide

The Apple Guide for the IR File Exchange control panel does not recognize when the File Sharing control panel is open. You can avoid this problem by setting your owner name in the File Sharing control panel, or by using the Mac OS Setup Assistant.

Using Old Versions of Cyberdog With International Text

Using Cyberdog 1.2.1 or earlier to send or receive non-Roman text in e-mail messages may result in information being lost from the end of the message. Cyberdog 2.0, included with Mac OS 8, solves this problem.

AppleScript and the Finder

Many of the new features of the Mac OS 8 Finder are scriptable, and some of the properties in previous versions of the Finder have changed. Additionally, some scripting capabilities have been removed from the Finder and placed into scriptable control panels. For example, you can now script file sharing by addressing the File Sharing control panel directly. These changes might require some scripts to be updated for use with Mac OS 8.

Recording Scripts and Mac OS 8

When you record an AppleScript using the Script Editor, Mac OS 8 does not properly record name changes. For example, when you turn on recording in the Script editor and then change the name of an icon in the Finder, the script will incorrectly record as:

    set «class» of item "folder name" to "folder name"

The correct recording should be:

    select item "folder name"

    set name of selection to "new folder name"

To work around this problem, edit the script after you record it. Change the wording as shown above, substituting the correct names.

AppleShare IP 5.0 Servers and Mac OS 8

Apple recommends that you use Mac OS 7.6 with AppleShare IP 5.0 servers. If you use Mac OS 8, you may encounter problems with FTP access. When several FTP clients try to access the same file simultaneously, the clients may receive one of several error messages and the server may stop serving files properly, or may crash when you shut it down. To avoid this problem until a fix is available, you can turn off FTP access using the AppleShare IP Web & File Admin application. For the latest information on AppleShare IP 5.0 support for Mac OS 8, see the AppleShare IP web site at <http://appleshareip.apple.com>.

Miscellaneous Notes

Internet Access in Canada

If you don't already have an account with an Internet service provider, you can obtain one using the Internet Setup Assistant, or you can choose one from the list in the International Internet Access file in the Internet Extras folder on the Mac OS 8 CD. Read this information before using the Internet Setup Assistant.

Internet Access in Latin America, Australia, New Zealand, and Asia

If you don't already have an account with an Internet service provider, see the file International Internet Access in the Internet Extras folder on the Mac OS 8 CD. Read this information before using the Internet Setup Assistant.

Installing the Internet Utilities

If you use your computer for sending e-mail, you should install the program DropStuff. DropStuff will install the StuffIt Engine that allows Claris Emailer to compress and send files via e-mail. The DropStuff installer is located in the Aladdin folder of the Internet Utilities folder, in the Internet folder on your hard disk.

General Controls, Empty Trash Warning, and Views Settings

These settings are restored to their default values after installing Mac OS 8. Additionally, in previous versions of Mac OS, view settings such as "snap to grid" and "calculate folder size" applied to all folders. When you install Mac OS 8 your previous setting is used as the default, but you can now select different settings for each folder and the desktop.

If you use a disk with Mac OS 8, and then use it on a computer with a previous version of the Mac OS, you'll notice that some of your views may change. For example, if you set a folder to "view by button," then access that folder with System 7.6, the files will be displayed in large icon view because button view is not available under the older system software. Additionally, if you ejected the disk with open windows on a Mac OS 8 computer, the windows will not automatically reopen on older versions of Mac OS.

Unusual or Inconsistent Appearance

Some applications will exhibit unusual or inconsistent cosmetic anomalies when used with Mac OS 8. These are harmless, but if they bother you turn off the system-wide setting in the Appearance control panel. Contact the manufacturer of the program to see if an updated version of the program is available.

Entering Comments for Floppy Disks

With Mac OS 8 you can no longer enter comments in the Get Info window for floppy disks. The space formerly used for storing comments is now used by Mac OS 8 to store the view settings (button view, etc.) for the disk and its folders.

Stationery Pads and Mac OS 8

If you use a stationery pad with an application that does not directly support stationery, Mac OS 8 will automatically make a new copy of the stationery and open it using the application. In previous versions of Mac OS, you were asked to enter a name for the new copy; now it is opened as an untitled document automatically.

Disk Cache Setting and Better Performance

If opening windows, emptying trash, and other activities in the Finder seem very slow, increase the size of the disk cache. Click the "Use Defaults" button in the Memory control panel to set the cache to the minimum recommended size for your system. With Mac OS 8, you can perform many file-related activities at the same time, and increasing the size of the disk cache will help performance.

Using Desktop Pictures

If you select a desktop picture that is on a CD or external disk, the picture might not be available the next time you start up your computer and will not be displayed. You can prevent this by copying the picture you want to display to your hard disk.

Slow Screen Redrawing

If the desktop is redrawn slowly after closing a window, your computer might be running low on memory. Set Desktop Pictures to display a pattern, instead of a picture, to speed up the redrawing process.

PowerBook 2400 Computers and OT/PPP

After installing Mac OS 8, the printer/modem port may be in use by AppleTalk. If you also install OT/PPP, you must turn off AppleTalk then restart your computer in order to release the port for use by OT/PPP. Turn off AppleTalk using the AppleTalk control panel. Then restart the PowerBook and select the modem/printer port in the OT/PPP control panel.

Using Acrobat PDF Documents

Some of the manuals included with Mac OS 8 are in Adobe Acrobat format. These files have "pdf" at the end of their names. To view or print these documents you must install Adobe Acrobat Reader, located in the CD Extras folder on the Mac OS 8 CD.

QuickTake Image Access

When you are copying pictures from a QuickTake 100 or Quicktake 150 camera to your computer, make sure all the pictures you want have finished copying before you erase the contents of the camera. Previously, you couldn't erase the camera until copying was completed. With Mac OS 8, you can copy and delete files at the same time so it's possible to accidently erase the pictures before they have been copied. You can't recover a picture once it's erased from the camera.

QuickTake 150 Software Installs Old Version of QuickTime PowerPlug

Mac OS 8 includes a new version of the QuickTime PowerPlug 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.

Using a RAM Disk

On some models of Mac OS-based computers, RAM disk contents are saved by writing to the hard disk when the computer shuts down. Then the contents are reloaded at startup. If the RAM disk is large, this may result in a delay

when you shut down or start up your computer.

Apple HD SC Setup Program

After you install Mac OS 8, you cannot use the obsolete Apple HD SC Setup program to initialize your hard drive. Use the Drive Setup program supplied with Mac OS 8 instead.

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.

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 8. 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 8.

Password Security Protects One Partition Only

The PowerBook Password Security control panel asks for a password in order to start up the computer. If you have formatted your internal hard disk so it has more than one partition, only the start up partition will be password protected. Additionally, if more than one partition has a System Folder, the PowerBook may start up from a non-protected partition.

Password Security on PowerBook 2400 and 3400 Computers

The Password Security control panel is incompatible with Mac OS 8 on PowerBook 2400 and PowerBook 3400 computers. The security protection that the control panel provides works correctly on these PowerBook computers, but you cannot use the current version of the control panel to set up password protection. As an alternative, you can boot your PowerBook using a Disk Tools diskette, then open the Password Security control panel on your hard drive and turn password protection on, off, or set your password.

AutoRemounter Control Panel Is for PowerBooks Only

The AutoRemounter control panel automatically remounts network devices after a PowerBook computer awakes from sleep. On desktop computers, network devices are not

unmounted when the computer sleeps, so AutoRemounter is not needed.

Serial Port In Use Error Message on PowerBook Computers With IrDA

If you receive an error message about the modem port being in use when you try to establish a PPP connection using OT/PPP, open the Infrared control panel and change the setting to IRTalk.

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

AppleTalk off, restart the computer.

3D Images Cannot Be Viewed With OpenDoc 3DMF Viewer 1.0.1 With QuickDraw 3D 1.5 or 1.5.1 Installed

If QuickDraw 3D 1.5 or 1.5.1 is installed, a message about insufficient memory appears when attempting to place a 3D image in an OpenDoc document. Increasing the viewer's memory size with the Get Info command in the File menu does not solve the problem. To use the 3DMF Viewer, install an earlier version of QuickDraw 3D.

Internal Speaker on Power Macintosh 5500 and 6500 Computers Remains Muted After Disconnecting External Speakers

If the external speakers are connected when the computer starts up and then are disconnected, the internal speakers

remain muted. To work around this problem, restart the computer after disconnecting the external speakers. The internal speaker should work normally.

Using Monitors & Sound With Add-on Devices

If you have a video or sound device that cannot be accessed using the Monitors & Sound control panel, use the Monitors control panel, or the Sound control panel, instead. Copies of these older control panels are installed in the Apple Extras folder on your hard disk. Unless you need to use these older control panels, use the unified Monitors & Sound control panel instead.

File Sharing and Users & Groups

If you want to be able to use the File Sharing and Users & Groups control panels from a remote computer, you must

remove the FileSharing Commands scripting addition from the Scripting Additions folder and turn on the Program Linking setting for both control panels.

File Sharing Control Panel and AppleShare

If you have AppleShare installed, some of the instructions about file sharing in the onscreen help will be incorrect. For instructions on network identity, file sharing, and activity monitoring, refer to the AppleShare documentation.

ARA 2.1 Personal Server and Users & Groups Control Panel

AppleTalk Remote Access Personal Server 2.1 cannot automatically open the Users & Groups control panel when you choose Users & Groups in the ARA setup menu. Instead, open the control panel by choosing it from the Control

Panels submenu, in the Apple menu.

PowerBook 190, 190cs, and 5300cs Computers

The PowerBook 190cs and 5300cs display may appear blank when you first restart after installing Mac OS 8, 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 down the PowerBook safely, press the Power button one time (which brings up the shutdown dialog box) and then press the Return key.

Reinstalling Printer Drivers

If you perform a clean installation of Mac OS 8, and an icon for your printer is not available in the Chooser, you may need to reinstall the software that came with your printer.

If you have a StyleWriter, StyleWriter II, or StyleWriter 1200, you can use the StyleWriter 1500 driver that comes with Mac OS 8 instead of installing your original printer software. If you have a Color StyleWriter 2200 or Color StyleWriter 2400, you can use the Color StyleWriter 2500 driver instead.

Drive Setup and Energy Saver

Use the Energy Saver control panel to set the hard drive sleep setting to "Never" when you use Drive Setup to perform an extended operation, such as testing the disk or initializing the disk with a low level format or zeroing all the data. This will prevent errors caused by the hard drive spinning down before Drive Setup completes its operation.

Mac OS 8 Hard Disks and Older Macintosh Computers

The hard disk driver software that the Installer places on Apple hard disks is not compatible with computers that have a 68000 microprocessor. If you have an external drive with Apple driver software connected to your computer when you install Mac OS 8, the updated driver software will cause an error if you connect that drive to a Macintosh Plus, Macintosh Classic, Macintosh SE, Macintosh Portable, or PowerBook 100 computer.

Using MacsBug and Mac OS 8

Mac OS 8 requires a new version of MacsBug. (MacsBug is a tool for software developers.) For information, check the Apple developer Web site at <http://devworld.apple.com>.

Advanced users can find additional technical information in the Mac OS 8 Tech Notes document. This document is located

on the World Wide Web at <http://devworld.apple.com/dev/
technotes.shtml>.

About Internet Access

This section contains late-breaking news about Internet Access for the Mac OS. You will find instructions on how to set up Internet Access and solutions for common problems in the manual that came with your software or computer. Additional information about the Internet and Internet Access for Mac OS 8 can be found in the Info Center.

What To Do First

If you have not previously connected to the Internet with this computer, you need to configure the Internet settings. Double-click the Internet Setup Assistant icon located in your Internet folder to begin. If you already have an account with an Internet service provider, you should have that information handy before you begin.

Customers in Canada

The Internet Setup Assistant can help you create automatically a new Internet account online, or set up an existing dial-up or LAN Internet account. Double-click the Internet Setup Assistant icon located in your Internet folder to begin. For more information on how to set up an Internet account in Canada, refer to the Internet Extras folder on your Mac OS CD.

Customers in Asia, Australia, Latin America, and New Zealand

The Internet Setup Assistant can help you set up an existing dial-up or LAN Internet account. If you do not yet have an Internet account, you need to set up an account with an Internet service provider first. For more information on how to set up an Internet account in your country, refer to

the Internet Extras folder on your Mac OS CD. Then double-click the Internet Setup Assistant icon located in your Internet folder to begin.

Additional Software

If your Mac OS software came with a CD, refer to the CD and the Internet Extras folder for late-breaking software to help you access and use the Internet more effectively.

Auto-Dial and Auto-Disconnect Settings

Your computer is set to dial your Internet service provider automatically when an application that requires an Internet connection is used. In addition, it has been set to disconnect automatically after 10 minutes of network inactivity. Use the PPP control panel to change or verify these settings.

TCP/IP Connection Options and Internet Access

Apple Internet Connection Kit Preferences

If you used the Apple Internet Connection Kit (AICK) before you upgraded to Mac OS 8, then your Internet configurations are transferred automatically. Before you use Internet Access in Mac OS 8 it is a good idea to verify your Internet configurations. To do this, launch the Internet Setup Assistant and select Update. Then select Modify and complete the interview process.

During the interview process notice that your login and e-mail passwords are blank. This is for security reasons. You must enter the same passwords you used in AICK. If you have forgotten your passwords, contact your Internet Service Provider.

Ethernet

Internet Access for Mac OS 8 supports the Ethernet option in the TCP/IP control panel for Ethernet built into your computer. If you have added an Ethernet card to your computer, you must open the TCP/IP control panel to verify the settings are correct, and make changes if necessary.

MacIP

Internet Access for Mac OS supports MacIP configurations that use dynamic (or server-based) addressing, such as the MacIP configuration used for Apple Remote Access. It does not support MacIP configurations that use static IP addresses.

"Load Only When Needed"

The "Load only when needed" feature is turned on by default.

We recommend that you do not change this setting. When "Load only when needed" is turned on, TCP/IP is not loaded until you open a network connection. If you turn this feature off, and auto-dial is turned on, then your modem will dial every time you start up your machine. To turn this feature on or off, do the following:

1. Open the TCP/IP control panel.

2. Choose User Mode from the Edit menu.

3. Click Advanced; then click OK.

4. Click Options; then click the checkbox next to "Load only when needed."

5. Click OK.

6. Close the TCP/IP control panel.

TCP/IP, PPP and Modem Configurations From Previous Versions of Mac OS

TCP/IP, PPP, and Modem configurations from prior versions of Mac OS must have the same name for them to work with Internet Access in Mac OS 8. Otherwise changes you make to the TCP/IP, PPP, or Modem control panels will not be reflected in Internet Access for Mac OS 8.

Follow these steps to rename PPP and modem configurations so they match your TCP/IP configurations:

1. Open the TCP/IP control panel.

2. Choose Configurations from the File menu to view your TCP/IP configurations.

3. Make a note of each configuration's name. Your list of TCP/IP configurations should be equal to the number of

Internet configurations you have.

4. Click Done and then close the TCP/IP control panel.

5. Open the Modem control panel.

6. Choose Configurations from the File menu to view your modem configurations.

7. Select a configuration and click Rename. Type the name that matches the corresponding TCP/IP configuration, and then click OK.

8. Repeat step 7 until all your modem configurations have been renamed.

9. Click Done and then close the Modem control panel.

10. Open the PPP control panel.

11. Choose Configurations from the File menu to view your PPP configurations.

12. Select a configuration and click Rename. Type the name that matches the corresponding TCP/IP configuration, and then click OK.

13. Repeat step 11 until all your PPP configurations have been renamed

14. Click Done and close the PPP control panel.

Length of Configuration Names

When you use Internet Access for Mac OS you must limit the length of a configuration name to 32 characters. If you used TCP/IP or other control panels to create a configuration with a longer name, you must rename the configuration in

order to use it with Internet Access for Mac OS.

To rename your configurations, follow the steps for renaming PPP and modem configurations outlined in the previous section "TCP/IP, PPP, and modem configurations from previous versions of Mac OS." Be sure to shorten the name of the TCP/IP configuration when you open the TCP/IP panel.

Modem scripts

Additional modem scripts can be found in the CD Extras folder located on the CD that came with your Mac OS software.

Password length

For security reasons, the Internet Setup Assistant displays 16 bullets in the Password boxes for e-mail and login passwords, regardless of the length of your password.

Proxies and Other Internet Config Settings

Internet Access for Mac OS 8 only manipulates your e-mail and news settings in Internet Config. You need to make sure other Internet Config settings, such as proxies, for each of your Internet configurations are set properly. To adjust other Internet configuration settings, double-click the Internet Config icon located in the Internet Utilities folder in your Internet folder. Then click the appropriate button, such as Firewalls to change proxies.

Web Browser Issues

Using Netscape Navigator 2.0 After You've Used 3.01

Mac OS 8 installs Netscape Navigator 3.01. If you use Netscape Navigator 3.01 and then want to go back to using Netscape Navigator 2.0, follow these steps to restore your preferences and bookmarks:

1. Quit Netscape Navigator if it is open.

2. Open the Backup folder in the Internet folder.

3. Drag the Netscape Preferences icon into your Netscape 2.0 folder.

4. Drag the Netscape Bookmarks.html icon into your Netscape 2.0 folder.

5. Open Netscape Navigator 2.0.

Using Netscape Navigator 3.01 With 2.0 Plug-ins

When Mac OS 8 was installed, a new Netscape Navigator folder was created in the Internet Applications folder located in the Internet folder on your startup disk. You must move your Netscape Navigator 2.0 plug-ins to the Plug-ins folder located in this Netscape Navigator folder.

Web Browser Memory Needs for QuickTime and Shockwave Plug-ins

For optimum performance when viewing QuickTime or Shockwave media over the Internet, you should increase the amount of memory allocated to Netscape Navigator. To do this:

1. Open the Internet folder.

2. Click the Netscape alias.

3. Choose Get Info from the File menu.

4. Click Find Original. The folder containing the Netscape icon opens, and Netscape is selected.

5. Choose Get Info from the File menu.

6. If you are using QuickTime only, increase the minimum size in the Memory Requirements box by 1000.

7. If you are using Shockwave only, increase the minimum size in the Memory Requirements box by 3000.

8. If you are using both QuickTime and Shockwave, increase the minimum size in the Memory Requirements box by 4000.

Obtaining a Web Browser That Uses Highly Secure (128-bit) Encryption

Mac OS 8 installs Netscape Navigator 3.01 with International (40-bit) encryption. This supports a standard level of security suitable for worldwide export and use. In the United States and Canada, some electronic commerce web sites, such as banking and shopping sites, recommend using non-International (128-bit) encryption for a greater level of security. Contact Netscape (http://www.netscape.com) or Microsoft (http://www.microsoft.com) for more information.

Troubleshooting

You can find additional information on the problems listed below in the onscreen help on your computer or in documentation for your Mac OS software and computer.

Netscape Is Unable to Locate the Registration Server

You see this message when you try to register with an Internet service provider: "Netscape is unable to locate the server: reggie.netscape.com The server does not have a DNS entry. Check the server name in the Location (URL) and try again."

Solution: You cannot check the server name in the Location box because Netscape runs in kiosk mode when it connects to the registration server. Instead, you must quit Netscape and try connecting again. If reconnecting does not work, you may need to try registering at a different time.

Reinstalling Internet Access Components

If your Internet Access files become corrupted and you want to do a clean installation, you must remove all Internet Access files before you use the Installer. If you do not, files

with current version numbers will not be replaced whether or not they are corrupted. The Internet Access files that must be removed are the Internet folder, the Internet Access extension, and the following items which are located in the Preferences folder in your System Folder: Netscape *f*, Internet Preferences, Internet Setup Preferences, and Internet Dialer Preferences.

Switching From Internet Access in Mac OS 8 to Apple Internet Connection Kit

If you modify your old Apple Internet Connection Kit (AICK) configuration with the Internet Setup Assistant, the Assistant switches TCP/IP from MacPPP to PPP. If you open AICK dialer, you see a dialog box that asks you to go to the TCP/IP control panel. Open the TCP/IP control panel and choose MacPPP in the Connect Via pop-up menu.

If you decide to use AICK after Internet Access for Mac OS 8 is installed, you can't register with a new Internet service provider online. You must use the Internet Setup Assistant to register with a new ISP.

If you switch back and forth between Internet Access for Mac OS 8 and AICK, and you have multiple ISP settings with AICK, you will find duplicate configurations when you use Internet Access. Although this does not create a problem, you may want to remove the duplicate configurations. You can use the Internet Setup Utility to remove duplicate configurations. The Internet Setup Utility is located in the Internet Utilities folder located in the Internet folder on your hard disk.
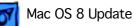
Changing Your Configuration Type From LAN to Modem or From Modem to LAN

You can't use the Modify feature of the Internet Setup Assistant to change an Internet configuration type.To change an Internet configuration from LAN to Modem, or from Modem to LAN you must first use the Internet Setup Assistant to remove the configuration. Then you use the Internet Setup Assistant to add the configuration with the new type.

Before you remove the configuration you should write down any information that you may need, such as your login name and password.

About Mac OS Runtime for Java Version 1.0.2

Introduction

Mac OS Runtime for Java (MRJ) is Apple's implementation of the Java runtime environment based on software from Sun Microsystems, Inc. With MRJ, Mac OS applications can run Java applets and applications.

MRJ 1.0.2 implements version 1.0.2 of Sun's Java. MRJ 1.0.2 includes Apple Applet Runner, a standalone application that runs Java applets, and Apple Applet Viewer, an OpenDoc viewer you use to put Java applets into OpenDoc documents.

MRJ 1.0.2 is a minor upgrade to MRJ 1.0.1 that fixes a bug

where some Java applications were not able to save files.

Important: The Applets menu in Apple Applet Runner includes a set of applets provided by Sun Microsystems, Inc. These applets were not created by Apple Computer, Inc. and may not follow Apple guidelines for user interaction. For example, buttons in an applet may have different behavior from buttons in applications developed specifically for the Mac OS.

System Requirements

MRJ 1.0.2 works on computers with 68030 or 68040 microprocessors or PowerPC microprocessors. You also need System 7.5 or later, a minimum of 8 MB of RAM (16 MB is strongly recommended) and at least 7 MB of free disk space. Computers with 68030 or 68040 microprocessors must have 32-bit addressing turned on. This can be done by

using the Memory control panel.

The Apple Applet Viewer requires OpenDoc 1.0.4 or later. To get OpenDoc, see the OpenDoc Web page at <http://www.opendoc.apple.com/>. MRJ 1.0.2 and the Apple Applet Runner do not require OpenDoc.

Using Java applets over the Internet requires MacTCP 2.0.4 or later, or OpenTransport 1.1 or later with TCP/IP, and an active Internet connection.

MRJ 1.0.2 works with Cyberdog 1.2.1 or later. See the Cyberdog Web page at <http://www.cyberdog.apple.com/> for more information.

What's Installed With MRJ?

The MRJ 1.0.2 installer places the required software components in your System Folder. If necessary, the installer will force you to restart your computer before using MRJ.

WARNING: If you have been using a pre-release version of MRJ, you need to remove files installed with the pre-release version before installing version 1.0.2. Use the list below to check the files you need to remove. However, do not remove the file named "Text Encoding Converter" or the folder named "Text Encodings."

On all computers, MRJ 1.0.2 installs:

• Mac OS Runtime for Java folder in the Apple Extras folder at the root of the startup disk

• MRJ Libraries folder in the Extensions folder of the active System Folder

• Text Encoding Converter in the Extensions folder of the active System Folder

• Text Encodings folder in the active System Folder

If you have a 68030 or 68040 computer, MRJ 1.0.2 also installs:

• CFM-68K Runtime Enabler in the Extensions folder of the active System Folder

If you have OpenDoc installed, MRJ 1.0.2 also installs:

• Apple Applet Viewer Libraries in the Editors folder of the active System Folder

• Apple Applet Viewer Stationery in the Stationery folder at the root of the startup disk

Using the Apple Applet Runner produces a preferences file named "Apple Applet Runner Prefs" in the Preferences folder of the active System Folder.

Description of MRJ Components

MRJ 1.0.2 contains the system components necessary to use Java. It also includes two demonstration tools that use these components to run Java applets.

System Components

The MRJ 1.0.2 installer puts a folder named "MRJ Libraries" in the Extensions folder of the active System Folder. This folder contains two items necessary for Java

support: MRJLib and the MRJClasses folder.

Apple Applet Runner

You use Apple Applet Runner to run Java applets from your local disk. If you have MacTCP or Open Transport installed and an active Internet connection, you can also run Java applets over the Internet.

You can open URLs or local HTML files containing <applet> tags from the Applet Runner's File menu. In addition, you can drop HTML files containing <applet> tags onto the Apple Applet Runner application icon from the Finder. You will only see the applet itself inside Apple Applet Runner; if you use a Web browser to open the HTML file, you may see additional information.

Apple Applet Runner remembers URLs of remote ("http://...") or local ("file:///...") applets. This information is

stored in the Apple Applet Runner Prefs file in the Preferences folder of the active System Folder. A few sample URLs are available by choosing Open URL from the File menu; you may add more URLs if you desire. You must have an active Internet connection to use these remote URLs.

Demonstration applets are available under the "Applets" menu in Applet Runner. You may run these demonstration applets even if you do not have an active Internet connection. These applets are stored locally in the Applets folder.

Apple Applet Viewer (for OpenDoc)

You use Apple Applet Viewer to place Java applets into your OpenDoc documents.

A folder called "Apple Applet Viewer" is installed in your Editors folder and the Apple Applet Viewer Stationery file is installed in your Stationery folder. Refer to your OpenDoc

documentation for instructions on using stationery.

You use Java applets by doing dragging one of the following to the Apple Applet Viewer frame:

1. An HTML file that contains an <applet> tag,

2. A text file that contains a URL for an HTML document containing an <applet> tag, or

3. A Scrapbook clipping that contains either a URL for an HTML document containing an <applet> tag or an <applet> tag.

Note: You must have an active Internet connection to use applets at remote URLs.

Tips for Using MRJ

OpenDoc

If you do not have OpenDoc installed when you install MRJ 1.0.2, the Apple Applet Viewer will not be installed. If you install OpenDoc later, you must reinstall MRJ to use the Applet Viewer.

Memory Usage

MRJ uses system memory to run Java applets and applications. Applications allocate their own application memory, leaving less memory available to the system. If an application that uses MRJ (such as the Applet Runner or Cyberdog) is using an especially large amount of memory, you may have trouble running large Java applets or applications. If you encounter problems, try quitting

applications you aren't using. If you still cannot run the applet or application, try reducing the amount of memory used by the application that is using MRJ. To reduce an application's memory size, first quit the application, then select the application's icon and choose Get Info from the File menu. Type a smaller number in the Preferred Size field. (However, do not set the preferred size smaller than the indicated minimum size).

Known Problems

• You must restart your computer after installing MRJ. If you attempt to run MRJ without restarting, MRJ may behave in unexpected ways.

• Do not remove the Text Encodings folder from the System Folder or the Text Encoder Converter file from the Extensions folder. Removing these items may cause

problems while using MRJ or using other applications requiring these files.

• In pre-release versions of MRJ, the preferences file was named "Applet Runner Prefs." If you had a pre-release version of MRJ installed, make sure you throw the "Applet Runner Prefs" file away. (The old file may conflict with preference files created by applet runner applications from other companies.)

• There is a known problem with the PPCExceptionEnabler extension. This extension is installed by Macintosh Common Lisp (MCL) 3.9. If you have this extension, you must remove it before running MRJ. Future versions of MCL will not require this extension.

• There are known problems with some applets when using MRJ 1.0.2 with Microsoft Internet Explorer, including display problems, sound problems and possible crashes. We

are working with Microsoft to resolve these problems in a future release of Internet Explorer.

• If you are running applications or applets compiled with the JavaSoft 1.0.2 JDK release for Macintosh, you may encounter numerics-related problems. Specifically, floating-point constants (and in some cases computed integer constants) may not be accurate. If possible, use another Java compiler to recompile any applications or applets displaying this problem.

• If all the images and sounds an applet uses don't appear, there may not be enough memory available for all the images and sounds. You may be able to free up memory by quitting all applications (such as the Apple Applet Runner and Apple Applet Viewer) that use MRJ. If necessary, try quitting other applications as well. After quitting the applications, try reopening Apple Applet Runner or Apple Applet Viewer.

See Memory Usage above for additional information.

• Some Java applets (such as Clock) or applications that are processor intensive may cause other applets to open or run slowly, or may cause them not to open at all. To improve performance, try closing applets or applications that you are not using.

• The Apple Applet Viewer does not report some errors. If an applet does not open in Apple Applet Viewer, try opening it with Apple Applet Runner to see if an error message appears.

Further Information and Reporting Problems

See our Web site at <http://applejava.apple.com/> to find out about future releases of Mac OS Runtime for Java or get information on how to report problems with the software.

Other Applets on the Internet

There are thousands of applets available on the Internet. Two good starting points for finding applets are:

• <http://www.javasoft.com/>

• <http://www.gamelan.com/>

Software Development Kit Available

A software development kit (SDK) is available for MRJ 1.0.2. The MRJ SDK includes interfaces to the runtime environment that allow software developers to:

• Run Java applets and applications within a Macintosh application

• Access the Java runtime from a Macintosh application

- Call Java methods from C and C++

- Call native methods from Java

- Build standalone Java applications

The SDK also includes a utility to run Java applications.

See our Web site at <http://applejava.apple.com/> to get the MRJ SDK.

Java Not Fault-Tolerant

The Java technology is not fault-tolerant and is not designed, manufactured or intended for use or resale as on-line control equipment in the operation of nuclear facilities, aircraft navigation or communication systems, or air traffic control machines in which the failure of the Java technology or Mac OS Runtime for Java could lead directly to

death, personal injury, or severe physical or
environmental damage.

About Mac OS Personal Web Sharing

This section introduces the Mac OS Personal Web Sharing software and contains late-breaking information about setting up and using your own Web server.

Mac OS Personal Web Sharing is the easiest way to share your information with everyone on your intranet, no matter what type of computer or browser they're using. All you do is put the items you want to share in the server folder and turn on the server.

Installing Personal Web Sharing

To install Personal Web Sharing, double-click the WebScript icon in the Web Sharing folder. To set up your Web server, see the instructions in "Using Personal Web Sharing" in the Web Pages folder (which is created when

the software is installed) at the root level of your hard disk.

The Web Pages folder also contains a file named "Default.html" which you can use as the home page for your server. You can modify this file or choose a different home page (see "Using Personal Web Sharing" for instructions).

Compatibility

Personal Web Sharing is compatible with Open Transport 1.1.1 (or a more recent version). MacTCP 2.0.6 is supported only with System 7.5.5, but we have noticed some inconsistencies with large volume connections.

Important: A continuous TCP/IP connection and a static IP address are strongly recommended for use of Personal Web Sharing. If your system does not have a persistent connection and a static IP address, any interruption in the

network connection could negatively affect TCP/IP signals. In some circumstances, this could cause the system to appear to hang. To avoid this problem, always use a continuous TCP/IP connection and a static IP address.

Note: This problem could also occur with other server applications.

Known Problems

Virtual Memory Off

Web servers expose a bug in the Ethernet driver for PCI-based computers. To ensure that your server works correctly, either turn off virtual memory (VM) or install Mac OS System 7.6.

OT/PPP

There is a known problem using OT/PPP 1.0 with Personal Web Sharing. This software runs as a background application, which conflicts with the dialog box that PPP tries to display when reconnecting (if the connection has been broken). This can cause your system to crash. To work around this problem, turn off the automatic reconnect option in the PPP control panel.

Follow these steps to turn off the automatic reconnect option:

1. Open the PPP control panel.

2. Click the Options button.

3. Click the Connection tab.

4. Click to remove the X from the box labeled "Connect automatically when starting TCP/IP applications" and

click OK.

5. Close the PPP control panel.

Location of Server Folder

To ensure that the correct content is served, the Web Pages folder (or other server folder) should be located no more than five levels below the root level of the hard disk.

Browsers Look for "index.html" Document

Visitors to your Web server may use a browser that automatically looks for a document named "default.html" or one named "index.html" as the point of entry (home page) to your server, regardless of the home page you select in the Web Sharing control panel. This occurs because some browsers "assume" that the home page will have one of the names noted above, and they only look for the home page

name you specified after looking for either "default.html" or "index.html." You can avoid having visitors inadvertently see the wrong document by renaming any files named "default.html" and "index.html" (whether at root level or inside a nested folder on the server). If you change document names, be sure to revise any links to the renamed documents so they reflect the new name.

Personal NetFinder and an "index.html" Document

In Personal NetFinder view (similar to list view in the Finder), if there is a document named "index.html," it will open in the visitor's browser. Therefore visitors will see that document as if it were a home page, and the list view of files at that level of the server will not be displayed. If you don't want visitors to see the list of files in a certain folder on your server, you can put an "index.html" document in that folder. By contrast, if you want visitors always to see a

list of files at each level of the server's content, don't include any files named "index.html."

File Sharing and AppleShare

If you want to use access privileges for your server, you must use the File Sharing privileges, which you set in the Users & Groups control panel of your system software. Personal Web Sharing is incompatible with the Users & Groups component of the AppleShare Server Software; do not use AppleShare Server Software's privileges for your Web server. If you want to use the AppleShare Server Software and Personal Web Sharing, configure the Web server to give everyone read-only access in the Web Sharing control panel.

MacIP via LocalTalk

Some computers providing a server may experience slower

performance overall during times of heavy activity on the Personal Web Sharing server over LocalTalk.

IP Addressing: Every Personal Web Sharing server will need a unique assigned IP address. Do not use nonstandard IP addressing with your server. Some IP addresses ("0.0.0.0" or "1.1.1.1," for example) are reserved for network hardware such as routers and gateways. If you are not sure how to assign an IP address to your server, contact your network administrator.

Optimizing Personal NetFinder

As with the Finder, Personal NetFinder will take a longer time to display its list of files if the server contains a large number of files. To optimize performance, limit the number of items in any one folder in your server content.

CGIs (Common Gateway Interfaces)

CGIs are applications, created by developers, that add functionality such as counters, image maps, and database access to your server. Personal Web Sharing supports CGIs that are compatible with MacHTTP 2.2 and WebStar 1.3.1. To obtain information about CGIs, contact your Internet Service Provider, a user group, or your network administrator.

Mixed-Platform Environment

Personal Web Sharing allows you to publish documents across multiple platforms. Because character sets may differ from one platform to another, you may notice a difference in how data is displayed on some other types of computers on the network. To get a more accurate representation of HTML documents in a cross-platform

environment, we recommend that you use Personal NetFinder to display the documents on your server.

File formats also vary from one type of computer to another in a cross-platform environment. Each computer on the network should have its browser's helper applications configured correctly for the types of files your server contains before connecting to your server.

Non-English-Language Documents

Mac to Mac

If your server contains non-English-language pages, the client's browser should be set to the appropriate document encoding option. Please review your browser documentation for more information on document encoding.

Mac to Non-Mac

If your server contains non-English-language pages, a non-Mac OS computer will encounter some incompatibilities. For example, character sets may differ from one type of computer to another.

Non-English System Software

Personal NetFinder displays header information in the language of the Finder (part of the system software) used by the server.

Installing Mac OS 8

This section describes how to install Mac OS 8. It includes compatibility information, instructions for the Install Mac OS application program, and basic installation troubleshooting.

For more information, see the Mac OS 8 installation manual.

WARNING: PowerTalk is not compatible with Mac OS 8. After you install Mac OS 8, you won't be able to access your PowerTalk mail or catalogs, nor will you be able to use your keychain or other PowerTalk services. See the Mac OS 8 installation manual for more information.

WARNING: Application programs that use QuickDraw GX may not be able to print due to changes in the version of QuickDraw GX included with Mac OS 8. See the file About QuickDraw GX for more information.

Before You Install

• Turn off any security software that you may have installed on your computer.

• If you have a PowerBook, make sure that it is plugged into AC power and set not to go to sleep.

• If you have AppleShare software earlier than version 3.6.4, you should upgrade to version 3.6.4 before installing Mac OS 8 over a network. See the document in the AppleShare folder in the Utilities folder for instructions.

• Write down your current Internet settings, such as the IP address, subnet mask, name server, and so on. After installation, the Internet Setup Assistant will ask you to enter this information.

• Start up your computer using the Mac OS CD-ROM disc or

the Mac OS 8 Install Me First floppy disk. See your installation manual for instructions.

If you can't start up with the Mac OS 8 disks, be sure to do the following additional steps:

• Turn off any virus-protection software that you may have installed on your computer.

• Disable all non-Apple extensions and control panels. If you have System 7.5 or later, use the Extensions Manager control panel to select the System 7.x base set of extensions and control panels. See the installation manual for more details.

• Restart your computer before installing Mac OS 8.

Compatibility Information

Although compatibility problems are not expected, you can ensure a smooth upgrade by checking with the manufacturers of any non-Apple software you use to make sure it is compatible with Mac OS 8. If you do experience a problem, see the troubleshooting chapter in your installation manual for more information on isolating compatibility problems.

Computers With 68040 Processor Upgrade Cards

Computers upgraded to 68040 with a processor upgrade card are not supported by Mac OS 8.

Performa or Power Macintosh 5000 and 6000 Series Computers

Some Performa or Power Macintosh 5200 series, 5300

series, 6200 series, and 6300 series models cannot use Mac OS 8 until a hardware problem is fixed. The repairs are covered under the Apple repair extension program. To see if your computer has this hardware problem, use the 5xxx/ 6xxx Tester utility in the Utilities folder on the CD before installing Mac OS 8.

Important: The Power Macintosh or Performa 6320, 6360, and 5260 do not have this hardware problem. If you have a Power Macintosh or Performa 6320, 6360, or 5260, you do not need to use the tester program.

Installing Mac OS 8

Accelerated NuBus PowerPC Computers

If you have a Power Macintosh 6100, 7100, 8100, or 9150 with a third-party accelerator that increases the

clock speed of your computer, the Installer might refuse to install Mac OS 8 because it doesn't recognize your system. You can install Mac OS 8 on these computers by using the individual installers located in the Software Installers folder on the Mac OS 8 CD instead.

MacODBC and Mac OS 8

If you use MacODBC, you should either install it before installing Mac OS 8, or perform a custom install of MacODBC and make sure the ASLM extensions are not selected. The MacODBC installer installs older versions of ASLM extensions that are incompatible with Mac OS 8.

Third-Party Finder and Utility Software

Some third-party programs that extend or add features to Mac OS may be incompatible. Examples include programs

that change the way menus work, change how files are stored, or alter the way you work with files in the Finder. Contact the software's manufacturer for information about using such programs with Mac OS 8. This is especially important if you're using a program that automatically alters the way files are stored (such as compressing them) because you might not be able to access those files until you obtain updated software for use with Mac OS 8.

400K Diskettes and Mac OS 8

The 400K MFS diskette format is not supported by Mac OS 8. If you have information or programs on obsolete 400K diskettes that you want to access, copy the files to your hard disk, an 800K diskette, or a 1.44 MB diskette before installing Mac OS 8.

Using the Install Mac OS program

To ensure a successful upgrade, use the Install Mac OS program to install the software. This program unifies the tasks recommended for a successful installation and simplifies the installation process. Refer to the Mac OS 8 installation manual and the onscreen help in the Install Mac OS program for more information.

Troubleshooting Suggestions

Disk Cannot Be Updated with the Apple Utilities

Some Apple-branded disks manufactured by third parties, including the Apple 365 MB external hard disk, are not supported by the Apple disk utilities. If your disk cannot be updated with the Apple utilities, you'll need to use a third-party disk utility to update the driver.

Disk Has Problems and Cannot Be Repaired Message

If you see a message that your disk has problems and cannot be repaired, turn off file sharing if it is on, then try installing again. If that doesn't work, try using another disk-repair utility. If you don't have another utility, or if that utility also doesn't work, you may need to reinitialize the disk. Copy all your files to another disk first, as reinitializing erases the disk. For more information about reinitializing, see the manual that came with your computer.

Cannot Start Up From CD-ROM: Bus Error Type 11

Some customers have reported that they are unable to start up from the Mac OS 8 Install CD.   During the startup process, a dialog appears with the following message:

'Sorry, a system error has occurred. Bus Error Type 11. Restart with shift key held down.'

This issue is currently under investigation. In the meantime, try one of the following workarounds (listed in order of preference):

1. Make sure the computer is running from the startup disk. Activate AppleTalk (in the Chooser for classic networking, or in the AppleTalk control panel for Open Transport networking). With the Mac OS 8 CD in the CD-ROM drive, restart the computer while holding down the 'c' key.

2. With the Mac OS 8 CD in the CD-ROM drive, startup your computer, while pressing the letter 'c' (or cmd-opt-shft-del if appropriate). When the Happy Macintosh icon appears, release all keys and hold down the shift key until the boot screen appears with the 'extensions disabled' message.

3. Using the Mac OS 8 CD, create a startup Disk Tools disk. To make a Disk Tools disk, open the Disk Tools folder on the

Mac OS 8 CD, then open the Make Disk Tools floppies
application. When you startup from the Disk Tools disk, you
will then be able to run the Mac OS 8 Installer from the CD.
(This will only work with Apple CD-ROM drives).

4. Use the Extensions Manager to select a minimum (base)
set of the Mac OS extensions. Boot from the hard disk and
install from the Mac OS 8 CD. If the installer finds any
problems with the hard disk, it will not be able to correct
them.

5. Clear (zap) the Parameter RAM (PRAM). After doing
this, restart holding down the 'c' key to start up from the
Mac OS 8 Install CD.

Other Problems During Installation

If you're installing over a network, or if you have a non-
Apple CD-ROM drive and can't start up with the CD or disk,

turn off all extensions that weren't provided with your system software. Then restart the computer.

If you experience other problems during installation, see the Mac OS 8 installation manual for instructions and additional troubleshooting suggestions.

Upgrading Workgroup Server 9650 & 7350 Software

The following steps should be taken when planning to upgrade your Workgroup Server 7350 or 9650 to MacOS 8. The steps may include updating specific components of the server MacOS as well as bundled Apple and third-party software.

Upgrade Procedures

Workgroup Server 7350 and 9650

1 If you have the Apple RAID hard disk driver installed, update to Apple RAID 1.5.3. - After performing the update to Apple RAID 1.5.3, launch Apple RAID and then install/update the driver on every Apple RAID disk.

Make sure to install the new driver on every disk under the disks column.

2   Boot the server from the Mac OS 8 CD. Install Mac OS 8, following the installation instructions on the CD. If you updated the hard disk drivers as per instruction 1, you will get a dialog informing you that the drivers can not be updated. It is safe to ignore this warning.

3   Update to AppleShare IP 5.0.2. - Be sure to follow the installation instructions documented in the AppleShare IP Updater Read Me.

4   Update to Open Transport 1.2.1. This updater is part of the AppleShare IP Update archive.

5   Update to RunShare 3.0.1.

6   Install WGS SCSI Update 2.0. This updater is part of the WGS MacOs 8 Update archive. Drag copy this file into the System Folder of the server.

7   Restart the server, with the Mac OS 8 CD removed from the drive. If you have a Workgroup Server 9650, continue to the appropriate 9650 model's section below.

Workgroup Server 9650/233

Note: The Workgroup Server 9650/350 ships with several MacOS components which are not included in the base Mac OS system software. In order to update your server to MacOS 8, you must follow these additional steps.

1   Insert the Workgroup Server Software CD in the drive.

2   Install the PCI Card Driver for the SCSI JackHammer card that is on the CD.

Workgroup Server 9650/350

Note: The Workgroup Server 9650/350 ships with several MacOS components which are not included in the base Mac OS

system software. In order to update your server to MacOS 8, you must follow these additional steps

1   Insert the Workgroup Server Software CD in the drive.

2   Install PCI Card Drivers on WGS CD - Locate and Open the 'Server Additions' folder on the CD.

3   Move the following drivers from the 'For System Folder' folder to the active System Folder:
    – PCI SCSI JackHammer=81 1.2.2
    – Apple 10/100 Fast Ethernet

4   Install Xclaim 3D video card software - Open the Xclaim 3D Installer folder that's also in the 'For System Folder' folder. Install the Xclaim software following the instructions in the Read Me file.

Internet Web Sites to Download Software Updates

• WGS MacOs 8 Update.hqx (includes Apple Raid 1.5.3 Update and WGS SCSI Update 2.0)

http://swupdates.info.apple.com/

Note: The path to the update is: Macintosh/Networking-Communications/Other N-C

• AppleShare IP 5.0.2 (including O.T. 1.2.1)

http://appleshareip.apple.com/downloads

• RunShare 3.0.1

http://www.run.co.il/tech_downloads/Apple.html

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