UPDATE TO APPLETALK INTERNET ROUTER ADMINISTRATOR'S GUIDE

This update provides important changes to the information in the AppleTalk Internet Router Administrator's Guide. In particular, the update includes new installation procedures for the AppleTalk Internet Router.

Whether you use System 6 or System 7, you should follow the instructions given here; these instructions completely replace those found in Chapter 5, "Installing the AppleTalk Internet Router," of the AppleTalk Internet Router Administrator's Guide.

In addition to new installation procedures, this update also contains information about system requirements, using the router with System 7, and running the router concurrently with AppleShare File Server software.

What this update contains

This update contains six major sections:

- "System Requirements" This section specifies the Macintosh computers and the system software you need to operate the AppleTalk Internet Router.
- "Running the AppleTalk Internet Router on a System 7 Macintosh" If you are using the router on a System 7 Macintosh, you need to be aware of certain changes in terminology and function between System 6 and
- System 7. This section explains those changes and also describes the most efficient way to use the router on a Macintosh computer running system software version 7.0 or later.
- "Installing the AppleTalk Internet Router on a Hard Disk" This section describes new procedures for installing the router.
- "Running the AppleTalk Internet Router Without a Hard Disk" This section explains how to run the router without using a hard disk (for System 6 users only).
- "Installing the AppleTalk Internet Router With an AppleShare File Server" This section describes steps you need to take if you are installing the router on a Macintosh that is also running AppleShare File Server software, with specific instructions for both AppleShare version 2.0 and version 3.0 users.
- "For More Information" You may wish to consult the references listed in this section for additional information.

System requirements

This section specifies the hardware and software you need to operate the AppleTalk Internet Router.

Hardware

The AppleTalk Internet Router software can be used on any of the following Macintosh computers:

- Macintosh Plus
- Macintosh SE and SE/30
- Macintosh II family
- Macintosh Classic and Classic II
- Macintosh LC
- Macintosh Quadra 700 and 900

A hard disk is not required in the Macintosh computer running the router software, provided the startup disk is running System 6 (see software requirements in the next section, "Software"). Running the router concurrently with System 7 requires a hard disk. For System 7 router computers, 4 megabytes (MB) of random-access memory (RAM) is recommended.

To connect to a Token Ring or Ethernet network, you also need the appropriate network interface card, such as the Apple Token Ring 4/16 NB Card, the Apple Ethernet NB Card, or the Apple Ethernet LC Card.

Software

The Macintosh computer running the AppleTalk Internet Router software must be equipped with the following system and network software:

- System 6, version 6.0.3 or later, or System 7
- TokenTalk version 2.0 or later, if a Token Ring network is to be connected to the router
- EtherTalk version 2.0 or later, if an Ethernet network is to be connected to the router

Running the AppleTalk Internet Router on a System 7 Macintosh

The AppleTalk Internet Router Administrator's Guide was published prior to the appearance of System 7. Basic router function and operation remain the same in System 7, so if you are running system software version 7.0 or later you should have no trouble understanding the information in the Administrator's Guide. However, you should be aware of certain changes and additional information not documented in the Guide.

- References to the Control Panel in the Administrator's Guide should be read as Control Panels by System 7 users.
- The router desk accessory is installed in the Apple Menu Items folder, which is in the System Folder of System 7 Macintosh computers. If you want

to remove the desk accessory from your Macintosh, you can open the Apple Menu Items folder and drag the Router desk accessory to the Trash. You may also want to remove the Router file from your Macintosh; open your System Folder and drag the Router file to the Trash.

- Your Macintosh should have at least 4 MB of RAM to run System 7 and the AppleTalk Internet Router concurrently.

In addition, if your Macintosh supports virtual memory, you must take the following steps before using the router:

- Turn off virtual memory.
- Turn off 32-bit addressing.

See the manuals that came with your computer or your System 7 documentation for more details about any of the items discussed in this section.

Installing the AppleTalk Internet Router on a hard disk

Follow the instructions provided in this section to install the AppleTalk Internet Router. These instructions replace those in Chapter 5 of the AppleTalk Internet Router Administrator's Guide.

If you plan to run the router software from a floppy disk, see the section "Running the AppleTalk Internet Router Without a Hard Disk." If you are installing the router software on a Macintosh that will concurrently run AppleShare File Server software, follow the instructions in the section "Installing the AppleTalk Internet Router With an AppleShare File Server."

To install the router on a hard disk, make sure you have the Network Software Installer and the AppleTalk Internet Router disks that came in the AppleTalk Internet Router package.

Follow these instructions to install the AppleTalk Internet Router on a System 6 or a System 7 hard disk:

- 1. Start up your Macintosh computer.
- 2. Insert the Network Software Installer disk into a floppy disk drive and double-click the disk icon to open it.

The Network Software Installer window appears:

- 3. Double-click the Installer icon to start the Installer program.
- 4. When you've finished reading the welcome screen, click OK.

The Easy Install dialog box appears (the dialog box might differ from the one shown depending on your configuration):

Click Customize.

If necessary, click Switch Disk to select the appropriate disk on which you want to install the router.

6. Scroll through the list in the dialog box and select AppleTalk Router (v2.0) for System 7. Or, if you are installing the router on a System 6 Macintosh, select AppleTalk Router (v2.0) for System 6.

7. Click Install.

A dialog box may appear that says you must quit all currently active application programs for the installation process to continue. If the dialog box appears, click Continue.

On-screen messages report the progress of the installation and ask you to insert the AppleTalk Internet Router disk, then the Network Software Installer disk again.

When installation is complete, you see this message:

8. Click Restart.

Running the AppleTalk Internet Router without a hard disk

The AppleTalk Internet Router can operate without a hard disk; however, you will not be able to run System 7. You must use a version of System 6 on a floppy disk if you want to run the router without a hard disk. Read the next section, "Starting Up With the Correct Version of System 6," to make sure you are using the appropriate version of system software for your Macintosh computer.

Starting up with the correct version of System 6

Running the AppleTalk Internet Router without a hard disk involves starting up your computer with a copy of the AppleTalk Internet Router disk. However, some Macintosh computers cannot start up with system software version 6.0.3, which is the version on the AppleTalk Internet Router disk. These computers and their minimum software requirements are indicated in the following table.

If your computer is not listed in the table, but can run the router (see the section "Hardware" earlier in this update), you can start up your computer with version 6.0.3.

If you want to run the router without a hard disk and your Macintosh is listed in the following table, you must update the System Folder on the AppleTalk Internet Router disk with system software that meets the minimum system software version requirements for your computer. You can use the version of system software listed or a later version. Computers that require System 7 cannot be used to run the router from a floppy disk.

See the manuals that came with your computer if you need more information on updating system software or using a floppy disk as the startup disk.

Minimum system software requirements

Macintosh model. Earliest version of system software required

Classic 6.0.7

Classic II System 7 only LC 6.0.7

IIsi 6.0.7

IIci 6.0.4

IIfx 6.0.5

Quadra family System 7 only

Installing the router on a floppy disk

You can install the router software on a floppy disk. However, this is not necessary if the router will be the only application program running on the Macintosh. Running from a copy of the original router disk, as described in the next section, is easier and more direct than installing on a floppy disk.

!! IMPORTANT You may need to update the System Folder on the AppleTalk Internet Router disk before you install the router onto a floppy disk. Make sure you've read the previous section, "Starting Up With the Correct Version of System 6," before you install the router onto a floppy disk and attempt to start up your computer. !!

If you do wish to install the router software onto a floppy disk, a Macintosh with two floppy disk drives is recommended. Follow the directions for installing on a hard disk described in the section "Installing the AppleTalk Internet Router on a Hard Disk" earlier in this update, but when you open the Installer, click Switch Disk one or more times until the name of the desired floppy disk drive is displayed. Then continue the procedure as indicated for the hard disk installation.

Running the router from a copy of the AppleTalk Internet Router disk

Follow these instructions to run the AppleTalk Internet Router from a copy of the AppleTalk Internet Router disk.

1. Make a backup copy of the AppleTalk Internet Router floppy disk.

Never use your original disk to run the AppleTalk Internet Router. Make a duplicate disk, referring to the documentation that came with your Macintosh if necessary, and store the original disk in a safe place.

- !! IMPORTANT You may need to update the System Folder on your copy of the AppleTalk Internet Router disk. Make sure you have an appropriate version of system software for your computer before proceeding to step 2; see the earlier section, "Starting Up With the Correct Version of System 6," to find out whether you need to update the version of system software on your copy of the disk. !!
- 2. Start up your Macintosh from the duplicate AppleTalk Internet Router disk.

Insert the disk and turn on the Macintosh.

When the Finder starts up, the Router desk accessory is added to the Apple menu. The router is now ready to be set up; refer to Chapter 6 of the AppleTalk Internet Router Administrator's Guide, "Setting Up the AppleTalk Internet Router."

Installing the AppleTalk Internet Router with an AppleShare file server

This section describes how to install AppleTalk Internet Router software on a Macintosh computer that will concurrently run AppleShare File Server software. The installation procedure itself does not change from the procedure described in "Installing the AppleTalk Internet Router on a Hard Disk" earlier in this update, but it requires additional steps before and after installing the router software.

The steps you need to take differ depending on whether you're using AppleShare version 2.0 or version 3.0. If you're using version 2.0, read the next section, "Installing the AppleTalk Internet Router With AppleShare File Server Version 2.0." Version 3.0 users can skip to the section "Installing the AppleTalk Internet Router With AppleShare Server 3.0."

Installing the AppleTalk Internet Router with AppleShare File Server version 2.0

Follow the instructions in this section to install the router on a Macintosh computer running AppleShare File Server software version 2.0 (version 2.0 works with System 6 only; System 7 file servers must use AppleShare Server 3.0).

- !! IMPORTANT You must install AppleShare software version 2.0 before you install the Internet Router. If the Router was installed first, you'll need to reinstall it after installing AppleShare. The AppleShare installation causes changes in the System Folder that would prevent the Router from running, and these changes are corrected during the Router's installation. !!
- 1. If AppleShare is running, perform an orderly shutdown of the server software.

Refer to the server documentation for shutdown instructions.

2. Start up the server Macintosh with a floppy disk.

For example, you can use the System Tools disk that came with your computer as a startup disk. See the documentation that came with your computer for details about using a floppy disk as a startup disk.

- !! IMPORTANT You can start up some Macintosh computers using the AppleTalk Internet Router disk. However, you should not try to start up your Macintosh with the Internet Router disk unless you are sure it can run system software version 6.0.3; see the earlier section, "Starting Up With the Correct Version of System 6," to determine whether you can start up your computer with version 6.0.3. !!
- 3. Click the hard disk icon to select it.

4. Select Set Startup from the Special menu.

The following dialog box, with the Finder Only button already selected, appears:

- 5. Click OK.
- 6. Select Restart from the Special menu.
- 7. Install the router on the server's startup disk and restart the Macintosh.

Follow the instructions in the section "Installing the AppleTalk Internet Router on a Hard Disk" earlier in this update.

8. Open the Router desk accessory and proceed to set up the router.

Refer to Chapter 6 of the AppleTalk Internet Router Administrator's Guide, "Setting Up the AppleTalk Internet Router," for setup instructions.

- 9. Set the Router's Restart Status to On and save the setup information.
- 10. Open the Server Folder on the hard disk and select AShare File Srv.

The AppleShare File Server application is stored in the Server Folder as AShare File Srv.

11. Select Set Startup from the Special menu.

The Set Startup dialog box appears:

- 12. Click OK.
- 13. Restart the Macintosh.

The AppleShare File Server and the AppleTalk Internet Router are now running concurrently on the Macintosh.

Installing the AppleTalk Internet Router With AppleShare Server $3.0\,$

Follow the steps in this section to install the AppleTalk Internet Router with AppleShare File Server software version 3.0.

1. If AppleShare is running, perform an orderly shutdown of the server software.

Refer to the server documentation for shutdown instructions.

2. Install the router on the server's startup disk and restart the Macintosh

Follow the installation instructions in the section "Installing the AppleTalk Internet Router on a Hard Disk" earlier in this update (you can begin with step 2).

3. Open the Router desk accessory and proceed to set up the router.

Refer to Chapter 6 of the AppleTalk Internet Router Administrator's Guide, "Setting Up the AppleTalk Internet Router," for setup instructions.

- 4. Set the Router's Restart Status to On and save the setup information.
- 5. Restart the Macintosh.
- 6. Restart file service.

See the server documentation for details about restarting file service.

The AppleShare server and the AppleTalk Internet Router are now running concurrently on the Macintosh.

For More Information

The following publications from Apple Computer provide additional information about using AppleTalk networks:

- The Apple Ethernet NB Card User's Guide provides installation and operation guidelines for using the Apple Ethernet NB Card and EtherTalk software.
- The Apple Ethernet LC Card provides installation and operation guidelines for using the Apple Ethernet LC Card and EtherTalk software.
- The Apple Token Ring 4/16 NB Card User's Guide provides installation and operation guidelines for using the Apple Token Ring 4/16 NB Card and TokenTalk software.
- Inside AppleTalk, second edition, is a technical reference that describes the AppleTalk network system protocols in detail. Published by Addison-Wesley and available at your local bookstore.
- Planning and Managing AppleTalk Networks provides in-depth information for network administrators about planning and managing AppleTalk networks -- including AppleTalk terms and concepts, and information about network services, media, topologies, security, monitoring and optimizing network performance, and troubleshooting. Published by Addison-Wesley and available at your local bookstore.