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## System 7: Personal File Sharing (8/96)

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TOPIC -----

File sharing with System 7.0 and later versions turns your Macintosh into a file server, letting others access information on your hard disk. This article provides a general description of file sharing followed by the specific steps you follow to set up file sharing on your Macintosh. A brief list of troubleshooting tips follows the sharing setup steps.

DISCUSSION -----

Defining File Sharing  
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You can define file sharing in System 7 for up to 10 top-level items (drives and parent folders - folders inside folders don't count toward this limit). (This article uses the term "files" when a specific distinction is not important.)

You can define file sharing for a maximum of 100 users and a maximum of 100 groups in Users and Groups. Up to 10 users (specific or guest) can be connected, however 5 can be "actively" accessing files.

Setting up sharing includes these steps:

Turning file sharing on for your Macintosh

- Defining users and groups (if you want to restrict access)
- Defining the files you want to share
- Monitoring and managing file sharing once you have activated it

Setting Up Sharing  
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The first thing you need to do is turn sharing capability on for your Macintosh. To do this, select the Sharing Setup Control Panel. Enter the owner and system names, click on the Start button for File Sharing, and close the Control Panel.

## Defining Users and Groups

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To restrict access to your shared files you must define the users and groups who will have access. If no restriction is necessary, then you simply permit "guest" access.

You define users and groups using the Users & Groups Control Panel. This Control Panel initially includes two items: one for you, as the owner, and one for guest access.

To allow guest access, double click on the <guest> icon, which displays a small dialog box that gives you two options:

- Allow guests to connect
- Allow guest to link to programs on this Macintosh

Click on the options you want and then close the box.

To add additional users and groups, you select New User or New Group from the File menu. Both of these actions creates a new item in the Users & Groups folder.

If you create a New User, define the name as the name you want the user to use when accessing your shared files. To set specific access for the user, you double click on the user's icon, which displays a personalized dialog box.

You specify the type of file sharing access to have, whether they belong to a Group folder (described next), and whether they have program linking capability. You also define an access password, if desired.

If you create a New Group, define the name as the name of the group. You then select and drag the applicable user icon(s) into the group folder. If you double click on the group folder, you see the users who belong to the group.

## Sharing Drives and Folders

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You define the drives and folders you want to share by highlighting the item and selecting the Sharing option from the File menu. A file sharing dialog box displays. This dialog box lets you:

- Share this item and its contents  
For drives, this includes all files and top-level folders on the drive.  
For folders, this includes all files and sub-folders within the folder.
- Select who will have shared access  
You can change the Owner to someone other than yourself. You can also define access for a specific user or group. Or you can let everyone have access (as "guest").
- Define the level of access  
You can restrict access for each user or group to seeing folders, seeing files, and making changes, or any combination of these.
- Share access "down the folder tree"  
For folders, you can provide access to the folder and its immediate

contents, or to all folders within the selected folder (by selecting "Make all currently enclosed folders like this one").

- Restrict modification

You can let users access information in your files and still restrict their ability to move, rename, or delete them (by selecting "Can't be moved, renamed or deleted").

## Monitoring and Managing File Sharing

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The File Sharing Monitor Control Panel lets you see what has been shared and shows you the name of any connected users (actually the names you have allowed users to connect with). In addition, the monitor lets you disconnect any connected users. A thermometer-style meter indicates the activity level of the server.

## Viewing File Sharing Status

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To see whether file sharing is turned on, simply open the File Sharing Monitor Control Panel. Information in the File Sharing Monitor updates as the status of file sharing on your Macintosh changes.

## Disconnecting a File Sharing User

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To disconnect a user from file sharing on your Macintosh, open the File Sharing Monitor Control Panel. Highlight the user or user names you want to disconnect and click on the Disconnect button. At the prompt, enter the number of minutes to wait before the disconnect (enter 0 for immediate disconnect) and click on OK.

A message announcing the pending disconnect displays on the monitor of each Macintosh that is currently sharing files on your system, or you can turn off your system to disconnect them all.

## Steps For Setting Up File Sharing

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### Turn on File Sharing

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- 1) Choose Control Panels from the Apple menu.
- 2) Double-click Sharing Setup in the Control Panels window.  
The Sharing Setup window opens.
- 3) Type your name in the Owner Name box. Your Macintosh uses this name to identify you over the network, like the Chooser name in versions of System 6.
- 4) Type a password you can remember, and that other users will not easily guess. (Upper case and lower case MUST match.)

NOTE: With file sharing active, persons having access to your password can log on to your Macintosh and access the entire contents

of your hard disk.

- 5) Type a name for your Macintosh. The name you give your Macintosh becomes the file server name when file sharing is on.
- 6) Click the Start button on the File Sharing portion of the Sharing Setup window. The Start button changes to Cancel, and the Status window says that file sharing is starting up.
- 7) Close the Sharing Setup window.

#### Configure Guest Access

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- 1) Choose Control Panels from the Apple menu.
  - 2) Double-click the Users & Groups icon. The Users & Groups window opens.

NOTE: The window shows two users -- Guest, and the name you typed in the Sharing Setup Owner Name field.

- 3) Double-click the Guest icon. The Guest window opens.

Be certain that the box titled "Allow guests to connect" IS NOT checked, unless you are certain that you want to allow guest access.

- 4) Close the Guest window.

#### Create a New User

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- 1) If the Users & Groups window is already open, skip to step 4.
  - 2) Choose Control Panels from the Apple menu.
  - 3) Double-click the Users & Groups control panel. The Users & Groups window opens.
  - 4) Choose New User from the File menu. A New User is added to the Users & Groups window.
  - 5) Click the mouse in the text area just below the New User icon. The cursor changes from an arrow to a text cursor, and an outline box appears around the text.
  - 6) Type the appropriate user name.
  - 7) Double-click the New User icon. The New User window opens.
  - 8) Set the User's password by typing the password in the field titled User Password.
  - 9) Set the User's privileges by clicking the mouse in the Allow User to Connect and/or Allow User to Change Password boxes.

10) Close the User's window.

#### Create a New Group

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- 1) Open the Users & Groups control panel window.
- 2) Choose New Group from the File menu. A New Group is added to the Users & Groups window:
- 3) Click the mouse in the text area just below the New Group icon. The cursor changes from a pointer to a text cursor.
- 4) Type in the appropriate group name.
- 5) To add users to the group, select the User's icon and drag it onto the group until the Group's icon is highlighted. Release the User icon. The User is added to the Group.
- 6) To see the members of the group, double-click the Group icon. The Group window shows icons of all users who are members of the group.

#### Configure a Folder for Sharing

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- 1) Create a folder for the files and folders you plan to share. The folder should contain files and folders to be shared with users with identical access privileges.
- 2) Select the items to share and drag them into the new folder. To share a copy rather than the original, hold down the Option key, select the item, and drag it to the folder. This creates a duplicate of the item(s) selected.
- 3) Click the folder you wish to share. The folder is highlighted.
- 4) Choose Sharing from the File menu. The Sharing window opens.
- 5) Click the box titled "Share this item and its contents."
- 6) Click the Everyone boxes to turn OFF access for guests.
- 7) If you wish to make the folder available to a group, click the User/Group pop-up menu.
- 8) Select the appropriate group and release the mouse button. The group you have selected should now be visible in the User/Group menu.
- 9) Close the folder's sharing window.

#### Troubleshooting Tips

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Here are the most common problems and the things you should verify first.

Users cannot see a shared volume or folder

- Make sure that File Sharing is turned on
- Make sure the volume or folder has the "Share this item..." box selected
- Check your network connections and make sure both you and the user have access to the same network

Users can't log on

- Make sure the user has the correct name and password (see Defining Users and Groups earlier in this article)
- Make sure the Caps Lock key is not down since passwords are case-sensitive
- Make sure the user has permission to connect (see Defining Users and Groups)
- Make sure the user has access to the same volume or folder that has been shared

Unexpected disconnects

- Make sure the Macintosh acting as a server has not gone down or been turned off
- Check for network problems

Cannot turn System 7 File Sharing on

- Make sure there is at least 340K of memory available on the hard disk.
- Make sure there are no DOS volumes mounted with PC Exchange. If there are, eject the volume and try again.
- Zap Parameter RAM (PRAM) by restarting the Macintosh and holding down the COMMAND-OPTION-P-R keys. Wait for the second startup chime then release the keys and let the computer startup. This resets the serial ports so you will have to reactivate AppleShare and reset your network interface (Ethernet or Token Ring) on most Macintosh computers.
- Delete the Users & Groups Data File in the Preferences folder. (NOTE: Deleting the Users & Groups Data File will remove all existing users and groups.) Restart the Macintosh and enter the Owner Name, Owner Password, and Macintosh Name in the Sharing Setup control panel then start File Sharing. Restart the computer and a new Users & Groups data file will be created. Recreate the user and group information.
- Delete the File Sharing folder in the Preferences folder, restart the Macintosh, and turn File Sharing on.
- If any media is formatted with a third-party utility, check with the vendor to be sure it is compatible with System 7 File Sharing.
- Delete the invisible AppleShare PDS file at the root of any volume being shared. (NOTE: Deleting the AppleShare PDS file will remove all existing file and folder access privileges.) Restart the Macintosh and start File Sharing. Re-establish folder and file access privileges. The AppleShare PDS file can be deleted by using ResEdit or other third-party utility that can view invisible files. Use the utility to make the file visible

on the desktop. The now visible AppleShare PDS file can now be dragged to the trash.

- Backup the data and reformat the drive. The issue may be caused by bad blocks on the drive.

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