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Use Your iPhone for File Backup, Storage, and Transfer

HOW TO...

- Decide whether or not to use your iPhone as an external drive
- Transfer files to your iPhone using iTunes File Sharing
- Use a third-party program to put other files on your iPhone

As well as providing you with communications, entertainment, and apps to work or play anywhere, your iPhone has plenty of space to carry your most important files so that they're always with you. This chapter shows you how to turn your iPhone into an external drive for backup, portable storage, and file transfer.

As you've probably noticed, iTunes includes a feature called File Sharing that enables you to put files into your iPhone's file system, where the apps you use can access them. In this chapter, we'll look at how File Sharing works and how you use it.

But transferring files via File Sharing ties the files to particular apps, so File Sharing isn't the right tool when you simply want to copy a large number of files to or from your iPhone. For that, you need a third-party program instead, as you'll see in this chapter.



One external-drive feature this chapter *doesn't* show you is how to transfer files from an iPhone's library onto your computer. Chapter 13 covers this subject.

Decide Whether to Use Your iPhone as an External Drive

Here's why you may want to use your iPhone as an external drive:

- It provides a great combination of portability and high capacity. You can get smaller portable-storage devices (for example, USB keys, CompactFlash drives, SmartMedia cards, and Memory Sticks), but they're an extra expense and an extra device to carry with you. Assuming you always carry your iPhone, you can keep your files with you at all times.
- You can take all your documents with you. For example, you could take home that
 large PowerPoint presentation you need to review to prepare for the meeting
 tomorrow. You can even put several gigabytes of video files on your iPhone if you
 need to take them with you (for example, to a studio for editing) or transfer them
 to another computer.
- You can use your iPhone for backup. If you keep your vital documents down to a size you can easily fit on your iPhone (and still have plenty of room left for songs, videos, photos, and all the other files you need on it), you can quickly back up the documents and take the backup with you wherever you go.
- You can use your iPhone for security. By keeping your documents on your iPhone rather than on your computer, and by keeping your iPhone with you, you can prevent other people from accessing your documents.

The disadvantages to using your iPhone as an external drive are straightforward:

- Whatever space you use on your iPhone for storing other files isn't available for music, video, photos, or apps.
- If you lose or break your iPhone, any files stored only on it will be gone forever.

Transfer Files to Your iPhone Using iTunes' File Sharing

iTunes includes a feature called File Sharing that enables you to transfer files to and from your iPhone. This section shows you how to use File Sharing—after making sure you know how it works and what its limitations are.

First, we'll take a quick diversion and discuss how the iPhone's file system handles files. You need to understand this to make sense of File Sharing and why you will probably have to get a third-party program to put files freely on your iPhone.

Understand How the iPhone's File System Handles Files

On your PC or Mac, you can largely put files where you want. For example, on the PC, you can open a Windows Explorer window, navigate to most any folder in the file system, and paste files there. Similarly, on the Mac, you can open a Finder window, navigate to the folder you choose, and paste files there. Or you can use the Save As dialog box in a program or application to store a file in such a folder.

Both Windows and Mac OS X discourage you from storing your documents among the system files, but if you're determined enough, they don't prevent you from doing so. Putting the documents in unsuitable places may bring awkward consequences, such as the wrong people being able to access them, but the operating systems let you bring those consequences upon yourself.

The iPhone's operating system, iOS, is more restrictive. It strictly limits the areas of the file system that you can access—and it does the same for the iPhone's apps. Within its file system, iOS gives each app a separate storage area for documents: its own document silo. iOS largely confines each app to its own silo and prevents it from accessing any other silos. This security measure both protects against malware and prevents one app from stomping another app's data files.

For example, if you have the Pages app on your iPhone, you can use File Sharing to transfer a Pages document from your Mac to your iPhone. Once the Pages document is on your iPhone, you can launch Pages and then open the document. But you can't open the document in another app, because it's stored in Pages' silo.

The exception is apps that can receive incoming files, such as Mail and Safari. These apps can provide those files to other apps. For example, if you receive a Word document attached to an e-mail message on your iPhone, you can choose to open that document in Pages or another app that can handle Word documents. Mail makes the document available to Pages or the app you choose.

Use File Sharing to Transfer Files to and from Your iPhone

To transfer documents to and from your iPhone by using File Sharing, follow these steps:

- **1.** Connect your iPhone to the computer as usual.
- 2. If the computer doesn't automatically launch or activate iTunes, launch or activate iTunes yourself.
- 3. In the Source list, click the entry for your iPhone to display its control screens.
- **4.** Click the Apps tab to display its contents.
- **5.** Scroll down to the File Sharing area (see Figure 14-1).
- **6.** In the Apps list, click the app to which you want to transfer the files. The list of files for that app appears in the Documents pane to the right.
- 7. To add documents to the app, follow these steps:
 - a. Click the Add button to display the iTunes dialog box (on Windows) or the Choose A File: iTunes dialog box (on the Mac).
 - **b.** Navigate to and select the document or documents you want to add.
 - **c.** Click the OK button (on Windows) or the Choose button (on the Mac).
- **8.** To copy documents from the app to the computer, follow these steps:
 - a. Click the Save To button to display the iTunes dialog box (on Windows) or the Choose A File: iTunes dialog box (on the Mac).
 - **b.** Navigate to the folder in which you want to save the document.



FIGURE 14-1 The File Sharing area on the Apps tab in the iTunes control screen for an iPhone lists the apps that can transfer files. Click an app to see its files.

- c. Click the Select Folder button (on Windows) or the Choose button (on the Mac).
- 9. Click the Sync button to run the synchronization.

File transfers generally run pretty quickly, as USB 2.0 can handle up to 480 megabits per second (Mbps)—but if you're transferring many large files, it'll take a while.

Find a Suitable Program for Putting Other Files on Your iPhone

As you saw in the previous section, iTunes' File Sharing feature lets you put one or more files in a particular app's storage silo on your iPhone, or transfer files from your iPhone to your PC or Mac. But it doesn't give you full-on access to the file system.

If you've used an iPod (other than the iPod touch), you probably know that you can select a check box in iTunes to switch the iPod to "disk mode," making it show up in your PC's or Mac's file system as a removable drive. With disk mode on, you can

transfer files to the iPod using Windows Explorer (on Windows) or the Finder (on the Mac), just as you can with any other removable drive.

At this writing, Apple doesn't provide a way to put an iPhone into disk mode so that you can transfer files to it. So instead you need to use a third-party program that lets you use your iPhone as an external drive. This section shows you three such programs: DiskAid, Air Sharing, and PhoneView. You can find others on the Web or in the App Store (which you can access via iTunes on your computer or via the App Store application on your iPhone).

DiskAid (Windows and Mac OS X)

DiskAid from DigiDNA (\$9.90; www.digidna.net/diskaid) is a utility that lets you mount your iPhone as an external disk. Figure 14-2 shows DiskAid at work on a Mac.

DiskAid's toolbar buttons let you easily create folders, copy items to and from the device, and delete items from the device. But you can also simply drag files and folders from a Windows Explorer window or a Finder window to the DiskAid window to add them to the iPhone.



FIGURE 14-2 DiskAid gives you access to your iPhone's file system.

Air Sharing (Windows and Mac OS X)

Air Sharing from Avatron Software (www.avatron.com), which you can buy from the App Store for \$6.99, lets you access your iPhone across a wireless network connection rather than the USB connection that most other programs require. Not having to connect the device to your computer is an advantage, but you get slower file transfers than via USB, and your iPhone doesn't get to recharge while you're using Air Sharing.

If Air Sharing suits you, you may want to upgrade to the Universal version (\$9.99), which includes a wider variety of file operations (such as creating new folders and zipping and unzipping files), the ability to mount remote file servers (such as iCloud and Dropbox), and the ability to print to certain printers.

Set Up Air Sharing on Your iPhone

After downloading Air Sharing and installing it on your iPhone by synchronizing with iTunes, set up Air Sharing so that your computer can connect to it. Follow these steps:

1. On your iPhone, launch Air Sharing by tapping its icon on the Home screen. The My Documents screen appears, as shown on the left in Figure 14-3.

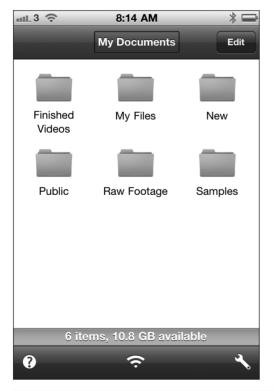




FIGURE 14-3 Tap the wrench icon in the lower-right corner of the My Documents screen (left) to display the Settings screen (right).

- **2.** Tap the wrench icon in the lower-right corner to display the Settings screen (shown on the right in Figure 14-3).
- **3.** Tap the Sharing button to display the Sharing screen (shown on the left in Figure 14-4).
- **4.** Move the Enabled switch to the On position.
- **5.** Tap the Settings button to return to the Settings screen.
- **6.** Tap the Sharing Security button to display the Sharing Security screen (shown on the right in Figure 14-4).



This section shows you how to implement a reasonable level of security on your iPhone for sharing. Air Sharing can provide not only password-free access but also public access to your iPhone, but neither is a good idea.

- 7. Move the Require Password switch to the On position.
- **8.** Type the username and password you will use for the connection.
- 9. Move the Public Access switch to the Off position.

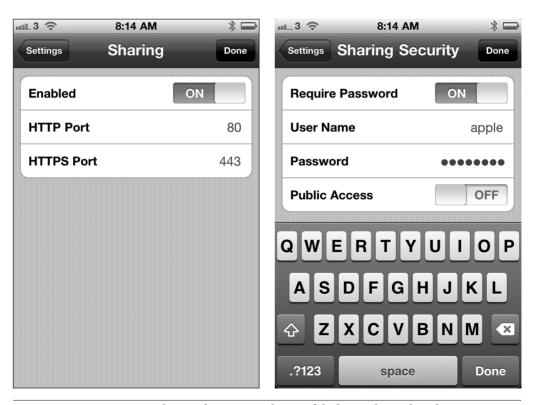


FIGURE 14-4 Turn on sharing by setting the Enabled switch on the Sharing screen (left) to the On position. On the Sharing Security screen (right), move the Require Password switch to the On position, and then enter the username and password for connecting.

- **10.** Tap the Settings button to return to the Settings screen. Look at the readout at the bottom giving the Bonjour addresses and IP addresses of your iPhone, and note the address you need—the non-https IP address for Windows, and the non-https Bonjour address for Mac OS X.
- 11. Tap the Done button to return to the My Documents screen.

Now that you've set up Air Sharing on your iPhone, you can connect to Air Sharing from your PC or Mac, as discussed next.

Connect to Air Sharing on Your iPhone from a PC

To connect to Air Sharing on your iPhone from a PC, follow these steps:

- 1. Choose Start | Computer to open a Computer window.
- **2.** Click the Map Network Drive button on the toolbar to display the Map Network Drive dialog box (see Figure 14-5).
- 3. In the Drive drop-down list, choose the drive letter you want to map to your iPhone.
- **4.** In the Folder text box, type **http:**// and the IP address shown for your iPhone—for example, **http:**//**10.0.36**.

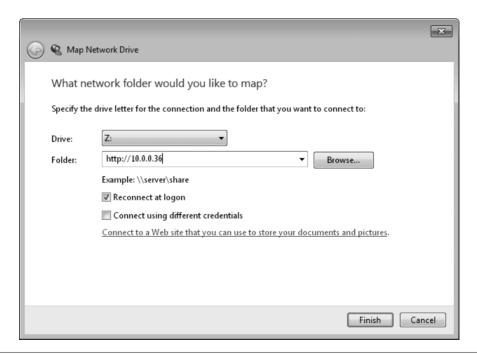


FIGURE 14-5 In the Map Network Drive dialog box, choose the drive letter to use, and then enter your iPhone's address in the Folder field.

- 5. Select the Reconnect At Logon check box if you want Windows to automatically reconnect the drive each time you log on. Unless you plan to run Air Sharing on your iPhone all the time, you're usually better off clearing this check box and establishing the connection manually when you need it.
- **6.** Click the Finish button. Windows attempts to connect to your iPhone.
- 7. If you have set a username and password on Air Sharing, Windows prompts you to enter them, as shown here.



- 8. Type your username and password.
- 9. Select the Remember My Credentials check box if you want Windows to store the username and password for future use. If you're using your own PC, this is usually a good idea.
- 10. Click the OK button. Windows establishes the connection to your iPhone and displays a Windows Explorer window showing its contents (see Figure 14-6).

You can now work with your iPhone's file system using standard Windows Explorer techniques. For example, to create a new folder, right-click in open space in the document area, choose New | Folder from the context menu, type the name to give the folder, and then press ENTER.



You can connect to your iPhone from two or more computers at once. You can even use your iPhone as a kind of server for your network if you want.

When you finish using your iPhone from your PC, disconnect the network drive like this:

- 1. In the Windows Explorer window, click Computer in the address box to display the Computer window. Alternatively, choose Start | Computer to open a Computer window.
- 2. Right-click the drive representing your iPhone, and then click Disconnect on the context menu.

Connect to Air Sharing on Your iPhone from a Mac

To connect to Air Sharing on your iPhone from a Mac, follow these steps:

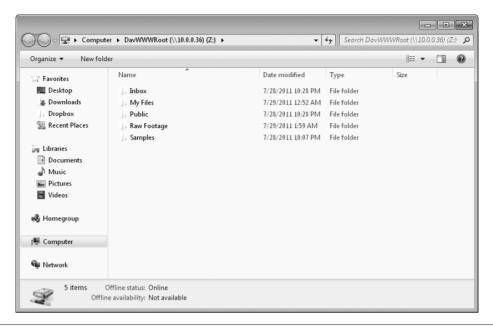


FIGURE 14-6 Windows opens a Windows Explorer window showing your iPhone's file system.

- 1. Click the desktop to activate the Finder.
- 2. Choose Go | Connect To Server or press **%**-κ to display the Connect To Server dialog box (shown here).



3. In the Server Address text box, type **http://** and the Bonjour address shown for your iPhone—for example, **http://iPhone.local**.



Instead of typing the Bonjour address, you can type the IP address shown for your iPhone. But given that your Mac is running Bonjour anyway, the Bonjour address is usually a better choice. This is because your iPhone's Bonjour address remains the same unless you change your iPhone's name, whereas if your iPhone gets its IP

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Connect to Air Sharing from Windows XP

If your PC is running Windows XP, you must have Service Pack 3 installed in order to connect to Air Sharing. If you're not sure which Service Pack your PC is running, click the Start button, right-click the My Computer icon, click Properties on the context menu, and then look at the System readout on the General tab of the System Properties dialog box.

There's also another complication: XP can't connect to the iPhone's shared directory. Instead, you must connect to a subdirectory—preferably the one you want to work in. If you use your iPhone mainly with a Windows XP PC, you'll probably want to set up your iPhone's file system with a subfolder that contains all your other folders.

Provided your PC has Service Pack 3 installed, connect like this:

- 1. Choose Start | My Computer to open a My Computer window.
- 2. Choose Tools | Map Network Drive to display the Map Network Drive dialog box.
- 3. In the Drive drop-down list, choose the drive letter you want to map.
- 4. In the Folder text box, type http://, the iPhone's IP address, a forward slash, and the name of a folder—for example, http://10.0.0.36/Files.
- 5. Click the Finish button.
- 6. If Windows XP displays a dialog box prompting you for your username and password, enter them, and click the OK button.

address from a DHCP server (as is the normal setup), your iPhone will typically get a different IP address each time it connects to the DHCP server.

- **4.** Click the Add (+) button if you want to add your iPhone to your list of servers. This is a good idea if you plan to access your iPhone frequently using this Mac.
- 5. Click the Connect button. The Finder attempts to connect to your iPhone.
- 6. If you have set a username and password on Air Sharing, Mac OS X prompts you to enter them, as shown here.



- 7. Make sure the Registered User option button is selected.
- 8. Type your username and password.
- 9. Select the Remember This Password In My Keychain check box if you want your Mac to store the password for future use. When you're using your own Mac (as opposed to someone else's Mac), this is usually a good idea.
- **10.** Click the Connect button. The Finder establishes the connection to your iPhone and displays your iPhone's contents in a Finder window.

You can now work with your iPhone's file system using the same techniques as for any other drive. For example, CTRL-click or right-click and then click New Folder on the context menu to create a new folder, as shown in Figure 14-7.

When you finish using your iPhone from the Mac, click the Disconnect button in the Finder window to disconnect the drive.

PhoneView (Mac OS X Only)

PhoneView (see Figure 14-8) from Ecamm Network (www.ecamm.com/mac/phoneview) lets you access your iPhone from your Mac. Ecamm provides a mostly functional trial edition, which gives you seven days to find out how well PhoneView suits your needs.

When you finish using PhoneView, quit it (for example, press **%**-Q or choose PhoneView | Quit PhoneView). PhoneView closes its window and releases its grip on your iPhone's file system.

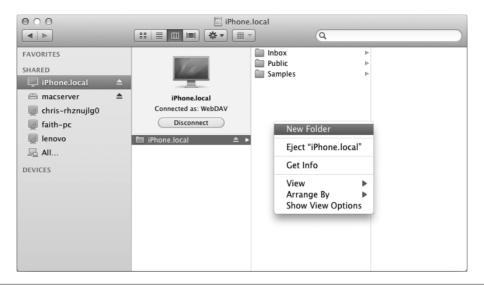


FIGURE 14-7 After connecting to your iPhone using Air Sharing, you can work with its file system using normal Finder techniques.



FIGURE 14-8 PhoneView lets you quickly access the contents of your iPhone to copy, add, or delete files.