3

Out of the Camera and Into the Computer

Now that you've snapped all the photos your memory card can hold, you're ready to download them to your computer and show off your new digital photo skills. This chapter takes you through the process of moving your digital photos to your computer, organizing your photos, and choosing where and how you want to store them.

Getting the Photos Out of Your Camera

Your camera's manuals should tell you everything you need to know about moving files to your computer. But they may not tell you everything you ought to know. There are two basic issues involved in moving photos to your system. One is how you make the physical connection. The other is what software you use to move the files. We'll mention three connection choices, but in terms of software, this chapter assumes your camera is compatible with Windows XP.

Note In this chapter, we assume your camera is compatible with Windows XP and that you're not using any special software that came with the computer or camera. However, if your camera is more than two years old, it's possible it won't be able to communicate with Windows XP, in which

case you may have no choice but to use that third-party software to manage your camera.

The Connection Choices: Cable, Docking Station, or Moving a Storage Card

Before you can move your photos to your computer, you have to somehow make a connection between the memory card and computer. One way to do that is to leave the storage card in the camera, and then connect the camera to the computer. You should have gotten a cable for that purpose along with the camera. The cable plugs into the camera on one side and the computer on the other.

The type of cable depends partly on the camera manufacturer and partly on how old the camera model is. If it's an older model, the computer side probably ends in a serial connector, like the one on the left side of Figure 3-1. If it's a newer model, it probably uses a universal serial bus (USB) connector, like the one on the right side of the figure. The camera side of the connection doesn't matter for our purposes, as long as it plugs into and works with your camera. You should be aware, however, that the connection varies depending on the camera.

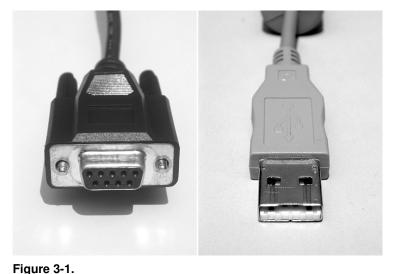
A third connection option we want to mention is to use a docking station on the camera side. Instead of plugging the cable into the camera, you simply put the camera in the docking station. Here's one more option that most camera manuals don't mention: you can remove the memory card from the camera and plug it into a slot so the computer can read it directly. All of these choices are variations on a theme. And which one you use depends entirely on the camera you have.

Even if your computer does not have an included memory slot, you can purchase a printer that does. Connect the printer and insert your memory card into it. You can then work directly from the card.

Serial ports transfer data much more slowly than USB ports.

A driver is software that enables a piece of hardware—such as a camera, printer, or scanner—to communicate with Windows XP.

You can't just connect the camera. You also have to turn it to its playback setting. (This step essentially turns on the camera so that Windows XP can access it.)



Older cameras most often use serial cables, as on the left. Most newer cameras use USB cables, as on the right.

As with any hardware device, you'll need to set up your camera first. If you're lucky, Windows already includes a *driver* for your camera, and it installs automatically when you first connect the camera to your computer's USB port and switch on the power. If Windows can't find a suitable driver in its collection, you'll have to download the correct driver from the camera maker's Web site and supply it when prompted by the Add Hardware Wizard.

After the correct driver is installed, you'll find a new icon in the Scanners And Cameras folder in My Computer, like the one shown here. Each time you connect the camera to the computer, the Scanner And Camera Wizard should start automatically. To start the wizard on your own, double-click the camera icon.

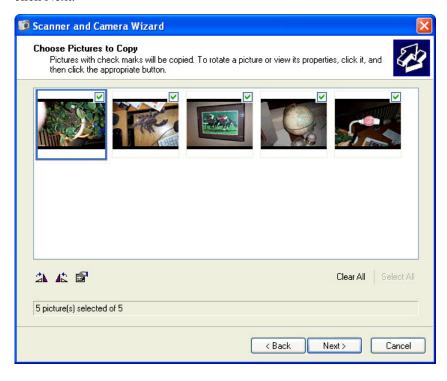


The wizard's job is to help you copy pictures from your camera to your computer. Here's how:

- 1. Click past the Welcome page.
- 2. On the Choose Pictures to Copy page, shown in Figure 3-2, you see thumbnail images of every photo stored on your camera's memory card.

By default, all images are selected. Adjust the selections, if necessary, and click Next.

The wizard should automatically start when a memory card is placed into a memory card slot at the computer, when a camera is physically connected, or when the computer is docked.



Choose a name that represents the group of pictures you're copying.
You might prefer to organize by date, by event, by location, or by subject matter.

Figure 3-2.

Decide which pictures are keepers; clear the check box for any that you don't want to copy to your PC.

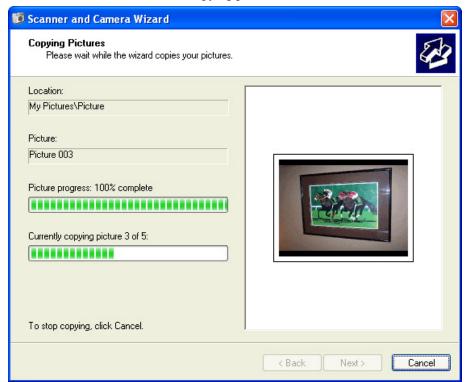
3. On the Picture Name And Destination page, enter the name you want to use for all downloaded pictures (the wizard tacks on a three-digit number—001, 002, and so on—at the end of each name). Choose the location where you want the photos to be copied and click Next.

Tip Should you select the Delete Pictures From My Device After Copying Them option? Only if you're certain that the pictures can be successfully transferred to your computer. If you're still experimenting with your new

camera, don't delete the pictures until you're sure they've made it safely across the cable.

4. As the wizard transfers your photos, it displays the dialog box shown on the next page. At a glance, you can see a large preview of each image, along with a summary of the file name and location where it will be stored. After the wizard finishes copying pictures, click Next.

Depending on the physical connection and your computer's hardware, images can be transferred as quickly as four or five per second to one every other second.

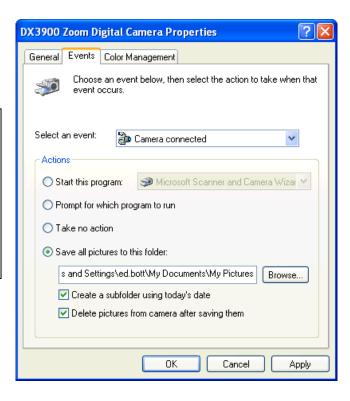


5. On the final page, choose whether you want to publish the pictures to a Web site (such as MSN Groups), order prints from an online photo site, or just close the wizard. Click Next to finish.

Although the wizard is quick and easy, there's a faster, smarter way to get your pictures onto your computer without using the wizard at all. You can configure Windows XP so that when you connect the camera, Windows automatically creates a new subfolder in My Pictures, using the current date as the folder name, copies all your pictures to that folder, and deletes them from the camera

after the transfer is complete. To set up this hands-free configuration, right-click the camera's icon in the Scanners And Cameras folder and choose Properties. Click the Events tab and set the options as shown here.

If you don't see your camera listed in Scanners and Cameras, turn it to its playback setting or turn it on.



Using "My Pictures" to Organize Your Images

When you open the My Pictures folder in a Windows Explorer window, you'll probably notice the Picture Tasks pane, shown below, right away. The list of options varies, depending on the current selection.



In the My Pictures folder, different views offer different perspectives on your digital photo collection. For instance, in Filmstrip view, you can select a single image from the list along the bottom and see it in a large preview pane at the top of the window. In Details view, you can still see preview images of each picture. Look at the bottom of the Task pane: the Details pane previews the selected image and provides details about its size, the date on which the photo was taken, and so on.

Storing Your Photos

Even low-resolution compressed photos take up room, which means that once you get enough photo files on your hard disk, you'll inevitably start wondering how to make enough room for them. And the more photos you take, the sooner you'll need to wonder about that.

Basically, you have two choices for storing photos: you can keep getting bigger hard disks, or you can move the files to removable *disks* or *discs*. (The first spelling indicates a magnetic disk, like a Zip disk. The second indicates an optical disc, like a CD or DVD.) Or you could do both.

The Hard Disk Option

The advantage to keeping all your photos on a hard disk is straightforward. You'll have all your photos available all the time, without having to hunt for a disk or disc when you want to retrieve a photo, not to mention the chore of finding the *right* disk or disc. The disadvantages are pretty straightforward too. You'll be using up room on your hard disk, and if the hard disk dies, you'll lose all your photos.

Using up room on your hard disk is not as much of a problem as it once was. You have to take a lot of pictures before it becomes an issue.

A couple of examples will help make the point. Let's start with an unlikely scenario that will give you gigantic files compared to what you'll have in real-world use. Suppose you have a 3-megapixel camera and choose to use no compression and the highest resolution at all times. Each photo will be a bit more than 9 MB, giving you room for about 11 photos per 100 MB, or 110 photos per gigabyte. That means a 20-GB hard disk, which isn't terribly large by today's standards, can hold 2200 photos.

If you use the highest resolution for the camera, but turn on compression, each photo will vary in size, depending on the amount of detail in the photo. But even with minimal compression, you'll likely need well under 1 MB per photo. To make the math easy, assume each photo is 1 MB. In that case, the same 20-GB hard disk will hold 20,000 photos. By the time you take that many, hard disks with much greater capacity will be available for far less money. Use a lower resolution or more compression, and it will take even longer to fill up the 20 GB.

The real problem with hard disks is that they die. It doesn't happen very often, but it does happen. Hard disks have gotten reliable enough so that too many people have forgotten they can die. Don't be one of them. The truth is that hard disks are just reliable enough to lull you into a false sense of security. The way to keep your photos secure is to use a more reliable storage format.

The Removable Disk (or Disc) Option

An alternative to storing your photos exclusively on a hard disk is to keep them on some sort of removable disc (or disk), either instead of keeping them on the hard disk, or in addition to it, in which case the copies on the removable discs or disks are your backups.

We're talking primarily about (optical) discs here, rather than (magnetic) disks, because optical discs—which today means one of the writable versions of CD or DVD—are the preferred choice.

The reason we prefer optical discs to magnetic disks is, quite simply, they keep your data intact longer. Unlike magnetic disks, they aren't subject to the vagaries of a

CDs make excellent backups, are easy to store, and last for years. stray cosmic ray (we're not kidding) flipping a bit and making a file unreadable, as happens with magnetic disks all the time.

Quick Quiz

- 1. Name four ways to physically transfer data from a camera to a computer.
- 2. What is a driver?
- 3. Which views are available for the My Pictures folder? Which do you think you prefer and why?
- 4. Why is backing up important if you use the hard disk option for storing your digital images?
- 5. What's the difference between disk and disc?

Putting It All Together

Exercise 1: If you have a digital camera that is compatible with Windows XP, physically connect the camera and use the Windows Scanner and Camera Wizard to transfer images from the camera to the My Pictures folder.

Exercise 2: If you have a digital camera that is compatible with Windows XP, show that you know how to configure properties for the camera and how to change the defaults for saving images. Do not make any changes, however

Exercise 3: Create a new folder named Vacation Photos in the My Pictures folder.