## **Chapter 1**

# Opening, Viewing, Managing, and Saving Image Files

#### In This Chapter

- ▶ Opening and browsing image files
- ▶ Zooming in and out
- ▶ Reading image information
- ▶ Saving image files
- ➤ Saving your workspace
- ▶ Working with different image types
- Using vector file types
- Converting or renaming batches of files
- Responding to file type messages and Auto Actions
- ► Getting image files from the Web

ost of the time, images exist as files. Those files may be on a disk, on a digital camera connected to your computer, or on a storage device that looks and acts just like a disk in Windows. This chapter makes you Lord of the Files. It tells you how to open image files, organize those files, and save images as various kinds of files. It also helps you view them in whatever size is convenient for you.

(If you want to open an image that does *not* appear to be stored as a file, see Chapter 5. For example, you may want a picture that appears on your computer screen in a document or a snapshot that needs to be downloaded from your digital camera.)

Images are easy to deal with in small quantities. In large quantities, however, they're challenging to manage. (They're sort of like kids, in that regard.) This chapter tells you about the clever Paint Shop Pro features for keeping an eye on all your graphical progeny, including browsing, previewing, and organizing files in different orders and in different folders.



Image files come in an amazing variety of file types because many software geeks over the years have each decided that they know a much better way of storing an image as a file (a file type). Image files of different types have different multiletter extensions at the end, like .jpg, .png, or .tif. People refer to them by those extensions, saying "jay-peg" or "jay pee gee" for .jpg or "ping file" for .png. These file types sometimes behave differently in Paint Shop Pro, so see the section "Using native and foreign file types," later in this chapter, if someone gives you a file that behaves oddly. Fortunately, although you need to be aware that images come in a variety of file types, most of the time you don't have to give a hoot. Paint Shop Pro can crack open most popular types of image file.

## Three Ways to Open Image Files

Paint Shop Pro gives you three ways to open a file:

- ✓ Browsing ("I'll know it when I see it"): Choose File

  Browse or press

  Ctrl+B. The browser window opens, as shown in the following section, in Figure 1-1. You open folders in the left panel and double-click tiny pictures in the right panel to open them.
- ✓ Opening ("I know its name and where it lives"): Choose File Open; or, click the Open button on the toolbar or press Ctrl+O. The Open dialog box appears, as shown a couple of sections from here, in Figure 1-2.
- ✓ **Double-clicking ("There it is open it"):** If you see a file listed and it displays a Paint Shop Pro icon (a tiny artist's palette), double-click that puppy and Paint Shop Pro should start up and display the image.

That's all you need to know — well, at least most of the time, that's all. The following sections give you some additional tricks and tips for opening files in those three ways.



If you can see the image on your screen, but aren't sure where the image file is, see the section in Chapter 5 about capturing images from your PC screen. Images that appear in a document (a Web page, a Microsoft Word document, or an Adobe Acrobat document, for example) may not be stored as files on your computer. (Or, if they are, they may be very hard to find.) You may need to capture the image off your screen.

For some files, Paint Shop Pro has to translate the image file into a form it can use. Translation may especially be necessary for *vector* image files, such as DXF and WPG. To translate, Paint Shop Pro needs additional information from you: specifically, how many pixels wide and high you want the image to be. See the section "Using Vector File Types (Drawing Files)," later in this chapter, for more information.

## Opening, Managing, and Sorting Files with the Browser

We like the Paint Shop Pro browser best for opening files because it also lets you manage them visually. Do one of the following to open the browser:

✓ Press Ctrl+B.



- ✓ Click the Browse icon, as shown in the margin. (It's on the Standard toolbar, which runs along the top of the Paint Shop Pro window.)
- ✓ If the Open dialog box is open already, click the Browse button.

Figure 1-1 shows you the Browse window. To close the window when you're done, choose File Close or press Ctrl+F4.

The left side of the Browse window looks and works like Windows Explorer. The right side displays, and helps you manage, image files.

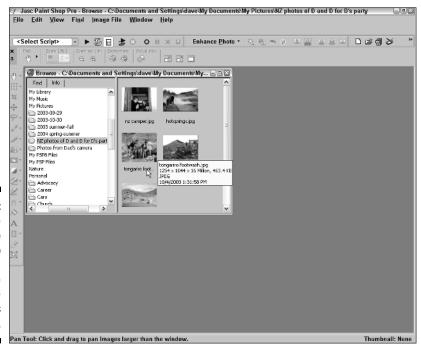


Figure 1-1:
Use the
Browse
window to
review and
manage
your image
files
visually.

The following list shows you the details for using the folders on the left side (if the Find tab shown in Figure 1-1 isn't displayed, click that tab):

- ✓ To see what images a folder holds, click the folder. Thumbnail (small) images appear on the right.
- ✓ If the folder contains more folders (or *subfolders*), a + sign appears to its left. To see those subfolders, click the + sign.
- ✓ To hide those subfolders again, click the sign that now appears where the + sign did.

Here's how to open and manage files by using the thumbnails on the right side:

- **✓ Open:** Double-click the image.
- ✓ **Get image information:** Pause your cursor over any thumbnail, as we did in Figure 1-1. Paint Shop Pro displays basic information near your cursor. For more detail, click the Info tab in the browser's left pane.
- ✓ Rearrange the order that's displayed: Drag thumbnails where you want them. You can also sort files by name, date, or other criteria. Follow the numbered steps that appear after this list.
- ✓ **Move to a different folder:** Drag the thumbnail from the right pane to your destination folder in the left pane.
- ✓ Create a new folder: In the left panel, click the folder in which you want to create a new folder. Choose File Create New Folder, and in the Create New Folder dialog box that appears, type your new folder's name.
- ✓ Delete: Right-click the file's thumbnail and choose Delete from the menu that appears.
- ✓ Rename: Right-click the file's thumbnail, choose Rename from the dropdown menu, and enter a new name in the Rename File dialog box that appears.
- ✓ Select several files for opening, moving, copying, or deleting: Hold down the Ctrl key and click their thumbnail images. To select a series, left-click the first (or last) image; then hold down the Shift key and click the last (or first) image. Follow the instructions in the preceding bullets for opening, moving, copying, or deleting files.

To sort your thumbnails in different ways, follow these steps:

1. Right-click the blank area to the right of the pictures and choose Sort from the context menu that appears.

The Sorting dialog box appears.

- 2. Choose Ascending or Descending sort order in the Primary sort order area of the dialog box.
- 3. Choose what to sort by in the Sort Condition selection box: file attributes, such as date, or image attributes, such as dimensions (size).
- 4. To sort within a sort (such as sorting filenames alphabetically within each file date), choose your secondary sort criterion by using the Secondary sort order area of the dialog box. (It works just like the Primary sort order area.)
- 5. Click OK to sort.



Files from some cameras now contain EXIF data: detailed and technical information for professional photographers about how and when that photograph was taken. The Paint Shop Pro 9 browser now lets you choose to sort on that information in the Sort Conditions selection boxes.

## Opening the right file with File > Open



If you know the folder where your file lives, the fastest route to opening the file is to use the familiar old File Open command. (Every program has one.) As with most programs, you can alternatively press Ctrl+O or click the File Open button on the toolbar (as shown in the margin of this paragraph).

Figure 1-2 shows you the Open dialog box that appears. As in any program, you click a filename listed in the Open dialog box and then click Open to open a file. Paint Shop Pro, however, adds a few special features for working with images.

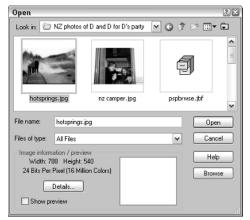


Figure 1-2: The Open dialog box.



### If your file isn't listed

If the file you want isn't listed in the File Open dialog box, make sure that the wrong file type isn't chosen in the Files of Type selection box. File type choices are "sticky." That is, if you chose last time to display only GIF files, this time

the Open dialog box still displays only GIF files. If you're looking for a JPG file now, you don't see it! Choose All Files in the Files of Type selection box to see all files again.

- ✓ **To open more than one file at a time:** Hold down the Ctrl button while clicking filenames, and then click the Open button. Or, to open a bunch of image files listed sequentially in the Open dialog box, click the first file, hold down the Shift button, click the last file, and then click the Open button.
- ✓ To trim down the list of files to show just one type (if you're looking for a GIF file, for example): Click the Files of Type selection box and choose that type from the many file types Paint Shop Pro can read.
- ✓ To see information on the image width, height, and color depth:

  Click your file and then read the Image Information area of the Open dialog box.
- ✓ To see more information about an image you have clicked, such as date or file size: Click the Details button.

## Secrets of opening a file by double-clicking

If you see an image file listed on your computer — in a My Computer or Windows Explorer window, for example — and it displays the Paint Shop Pro palette icon, you can open it in Paint Shop Pro by double-clicking that icon. If you have several images you want to open, double-click each of them separately, and they all get a separate window in Paint Shop Pro. You don't end up with multiple copies of Paint Shop Pro running.

If you have an image file that Paint Shop Pro doesn't open when you doubleclick it, three things could be responsible:

✓ The file doesn't have an extension, like .jpg or .gif. This problem often happens when someone sends you a file from a Macintosh computer. Use the browsing or File⇔Open technique described in the preceding

- sections. Or, if you know what kind of file it is (JPEG, for example), right-click the file and choose Rename from the context menu that appears. Then type the correct file extension (.jpg for JPEG, for example).
- ✓ Paint Shop Pro can't open the file. Paint Shop Pro can open many different types of file, but not all of them.
- ✓ Paint Shop Pro may not be configured to open that file type. See the nearby sidebar, "Making Paint Shop Pro open the right file types when you double-click."



## Making Paint Shop Pro open the right file types when you double-click

Two problems can occur with double-clicking as a way of opening image files:

- Paint Shop Pro may open files that you would prefer to be opened by some other program. For example, if you're running AutoCAD or another AutoDesk program, you may prefer that the AutoDesk program open DXF files because they're one of AutoDesk's own file types.
- Paint Shop Pro may fail to open image files that you want it to open. For example, you may install new software for a new digital camera, and, suddenly, when you doubleclick JPG files, some program other than Paint Shop Pro opens the file.

These problems usually occur when you have more than one graphics program. The latest one installed may grab all the file types for itself. Both problems can be solved the same way. Follow these steps to specify which files are to be opened (or not) by Paint Shop Pro:

## Choose File → Preferences → File Format Associations.

The File Format Associations dialog box appears. This box directs Windows to open certain file types by using Paint Shop Pro.

Click the check boxes to enable or disable the file types you want opened by Paint Shop Pro.

To disable all check boxes, click Remove All. To enable all check boxes, click Select All. (After that, you can enable or disable check boxes manually, if you like.) To have Paint Shop Pro open only the file types that aren't opened by any other program, click Select Unused.

#### 3. Click OK.

At this point, Paint Shop Pro is properly set up to open just the file types you want it to and leave the others alone. The other program you use, however, may still not be properly set up to open the files you want it to open. We can't give you much help with that, but we can tell you one place to get help: Choose Start⇒Help from the Windows taskbar. In the Help window that appears, click the Index tab at the top of the Help window and then, in the text box in the upper-left corner of the window, type associating file. Below that text box, a line appears that reads Associating file extensions (or types) with programs. Double-click that line to get help with associating file extensions with your other program.

## Viewing and Zooming an Image

Working with images involves a great deal of *zooming*, or changing the magnification of your view. Sometimes you need to work close up, to take that nasty gleam out of Uncle Charley's eye, for example (something Aunt Mabel has been trying to do for years). At other times, you really need to see the whole picture, but Uncle Charley's gleaming eye rather scarily fills the whole window.



Zooming doesn't change the size of an image (in pixels or in inches). It only changes how big Paint Shop Pro displays the image onscreen.

## Zooming and moving an image in the window

The basic way to zoom in (enlarge the view) or zoom out (see more of the picture) is to use the *Zoom* tool. The Zoom tool and its sidekick, the Pan tool, live in the same position (which we call a *tool group*) at the top of the Tools toolbar.

Follow these steps to zoom:

1. Click the tiny down-arrow on the top tool group on the Tools toolbar.

Two tools spring out to the right of this button: the Pan tool (the hand) and the Zoom tool (the magnifying glass).



2. Click the Zoom tool, as shown in the margin.

Your cursor changes to a magnifying glass icon.

- 3. Click with the zoom tool on the image in this way:
  - Click (left-click) to zoom in.
  - Right-click to zoom out.



You can choose the Zoom or Pan tool quickly by pressing a single key. Press the Z key for Zoom. Press the A key for Pan.

If the image gets bigger than the window, use the Pan tool to move the image around (pan it) in the window. Click the top button on the Tools toolbar, as you did in Step 1, but this time choose the Pan tool (the hand icon) — or just press the A key. Drag the cursor (it's now displaying a hand icon) on the image to move the image.

To see the image at its actual size (100 percent), choose View⇔Zoom⇔Zoom to 100% or click the button labeled Actual Size on the Tool Options palette. (The Tool Options palette runs horizontally near the top of the Paint Shop Pro window and changes depending on the tool you choose. See the following sidebar about the Tool Options palette.)

## The Tool Options palette — the toolbar-ish thing that changes a lot

Every time you choose a new tool (from the tool buttons that run down the left side of the Paint Shop Pro window), a toolbar changes just above the image window. (If you're not sure which toolbar it is, press the F4 key repeatedly to flash the toolbar on or off.) This toolbar, the Tool Options palette, contains all the various fiddly bits you may want to change on a tool. For

example, with a paintbrush, you set the brush width here. With the Zoom or Pan tool, you can choose shortcuts named Zoom more rather than click repeatedly to zoom a lot. Each tool has too many fiddly bits to cover in detail, so we alert you to any important ones and let you, well, fiddle with the rest.



Paint Shop Pro also lets you magnify a portion of the image rather than have to enlarge the whole thing to see a detail. With either the Pan or Zoom tool selected, choose View Magnifier or press Ctrl+Alt+M. Move your cursor over an area of the image, and a special 5x Zoom window shows you a close-up view of that area. Repeat the command to remove the magnifier.

## Working on several images at a time

You can open several images at a time in Paint Shop Pro. Each one gets its own window. Having several images open is useful for tasks such as cutting and pasting between images. To help manage those windows, use the commands on the Paint Shop Pro Window menu. That menu contains the usual suspects of nearly all Windows programs: Cascade, Tile (Horizontally or Vertically), or Close All to close all image files.



Remember that Paint Shop Pro tools and commands apply to only the image window that's *active* (the one with the colored title bar). Click an image window's title bar to make that window active and bring it to the front. Alternatively, you can choose a window by the name of the file it's displaying, as listed on the Window menu.

## Getting Information about an Image

Simply looking at an image doesn't tell you the whole story. You may be asking yourself, "What exactly am I looking at, here? I mean, how big is this image, really? How many colors? What folder is it from? Is this really Uncle Fred in Cancun?"

To get information, choose Image: Image Information from the menu bar or press Shift+I. The Current Image Information dialog box appears and displays all available information about this image file.

## Saving an Image File

After you're done working on an image in Paint Shop Pro, you need to save it. Saving an image in Paint Shop Pro is just as easy as saving a Microsoft Word document, for example. Choose File Save or click the Save button on the standard toolbar (the floppy disk icon) or press Ctrl+S.

Paint Shop Pro saves (without complaint, in most instances) an image as the same type (format) of file (JPG, for example) that it was when you opened it. It may, however, raise a warning, depending on what changes you have made — see the nearby sidebar, "When Paint Shop Pro notes your limitations."

If you have added text or shapes or overlaid images on your original image, saving the modified image as a Paint Shop Pro file is a good idea; see the following section.

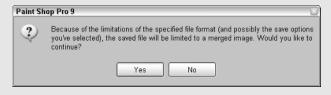
### When Paint Shop Pro notes your limitations

Paint Shop Pro images are sophisticated! They can have layers, selections, and as many as 16 million colors. Many common image types (like JPEG or GIF) cannot handle layers, selections, or that many colors. If you try to save such a sophisticated image as one of these more limited file types, Paint Shop Pro displays the following query box:

For example, if you start with a JPEG image and put text on it, Paint Shop Pro normally puts that

text on a separate layer. If you save the image as a JPEG file, Paint Shop Pro has to combine all layers into one single layer.

Go ahead and click OK on the query box. The file you create is limited, but the image you have open in Paint Shop Pro is unaffected. It still has its advanced features until you close it. We recommend that you take this opportunity to also save the image as a Paint Shop Pro file so that you can access those layers.



## Saving an Image As a Paint Shop Pro File

Saving your image as a Paint Shop Pro (pspimage) type of file is a good idea, even if the image started life as a different type or even if you ultimately want to save the image as a different type.

Paint Shop Pro files are a good choice because, among other things, they save layers and any current selection you may have made during the editing process. Most common file types (except the common Photoshop type) don't save that stuff. Some file types are *lossy* (like most JPG varieties), which means that they may even lose quality.

After you have taken the precaution of making a Paint Shop Pro file, if you also need a different type of file, save a *copy of the image* as that other type of file. If you make subsequent changes to the image, always make the changes to the Paint Shop Pro file and then make copies of that file in the various file types you may need.

Follow these steps to save your image as a Paint Shop Pro file:

1. Choose File

Save As.

The Save As dialog box appears.

- 2. Click the Save as Type box and select the Paint Shop Pro Image option.
- 3. Select a folder and type a name for the file.

Do this exactly as you would to save a file in any other Windows program.

4. Click the Save button.

The image is now safely stored as the best file type possible for a Paint Shop Pro user, with nothing lost.

## Saving a Copy of Your File As Another File Type

After saving an image as a Paint Shop Pro file (refer to the preceding section), if you also need the image in a different file type, save a *copy* in that different file type. Follow these steps to save a copy as another file type:

1. Choose File Save Copy As.

The Save Copy As dialog box appears.

#### 2. Select the file type you want from the Save as Type box.

If an Option button appears and isn't grayed out, it provides access to variations on your chosen format that can sometimes be useful, like reducing the file size (compression) or putting the file in a particular form that somebody needs. This section provides a few examples of options.

#### 3. Click the Save button.



Keep the following pointers in mind to avoid confusion, disappointment, and bad hair days:

- We recommend that you keep your ongoing work in Paint Shop Pro files (.pspimage) to avoid losing features like layers. If you need the image as another file type, use the <u>File</u>⇒Save Copy As command and avoid using File⇒Save As.
- When you save a copy in a different file type, the open file isn't affected. It remains whatever file type it was. For example, if the open file is a Paint Shop Pro file type and you save a copy as JPEG, the open file remains a Paint Shop Pro file type. (You can tell by the pspimage extension on the filename, on the title bar in the image window.)
- ✓ If you have used layers (or floating selections) and save a copy as something other than a Paint Shop Pro file, Paint Shop Pro may have to merge (combine) those layers into a single image. The program displays a dialog box to warn you if it needs to merge layers into a single image. (See the nearby sidebar, "When Paint Shop Pro notes your limitations.") That merge *doesn't* happen to the Paint Shop Pro image you're working on only to the file copy you're creating. Don't worry about the message just click Yes to proceed.

## Saving the Whole Enchilada, Your Workspace

Got a hot and spicy date? Need to wrap up one Paint Shop Pro project and start chewing on another?

You can close Paint Shop Pro at any time and go back later to exactly the way things were: what file you had open, what palettes and tool options you had chosen — the whole enchilada. This process is called *saving the workspace*. It's also a good feature if you're finicky about exactly how the various Paint

Shop Pro controls (palettes and toolbars, for example) are arranged. It's a nice way to save different image projects by name.

Follow these steps to save a workspace:

#### 1. Choose File⇔ Workspace⇔ Save.

The Save Workspace dialog box makes the scene and lists any workspaces you have previously created.

#### 2. Type a name for this workspace in the New Workspace Name text box.

If you want your workspace to include any images you have open, click to enable the Include Open Images check box.

#### 3. Click the Save button.

If any images are open, Paint Shop Pro prompts you to save them now. If you're going out and your PC may crash or your cat may dance on the keyboard, consider clicking Yes.

To restore a previously saved workspace, follow these steps:

#### 1. Choose File⇒Workspace⇒Load.

A Load Workspace query box may appear and warn you that loading a workspace replaces your existing workspace settings. It asks whether you want to save the existing workspace. Click Yes to open the Save Workspace dialog box we just described. Click No if you don't care to save the current workspace.

The Load Workspace dialog box appears and lists workspaces by name.

#### 2. Click the named workspace you want.

#### 3. Click Load.

Paint Shop Pro loads any images that are part of that workspace and restores all settings.

## Using Native and Foreign File Types

Most graphics files are "not from around here"; that is, they're not Paint Shop Pro files. Because you may have to open or create these types of files, knowing something about file types can be helpful. This section describes a few of the most popular file types. Each file type is identified by the *extension* (ending) it uses. For example, Paint Shop Pro files end with the extension .pspimage or .psp.



## "How the FPX can I see the TIF, JPG, DXF, and other extensions?!"

An image file is often referred to by the 3-or-more letter ending (extension) at the end of its file-name. The file polecat.tif, for example, is a TIF (or TIFF) file. On many computers, Windows is set up to hide these extensions, which makes your life harder when you're using Paint Shop Pro. If, when you go to open a file in Paint Shop Pro, the files don't appear to end with a period and extension (such as .psp, .bmp, or .pcx), Windows is hiding valuable information from you.To reveal

the extensions, do this: On the Windows desktop, double-click the My Computer icon. In the window that appears in Windows XP, choose Tools-Folder Options (or in Windows 98, choose View-Folder Options). This command displays the Folder Options dialog box. Click the View tab there, and under Files and Folders, Hidden Files, deselect the check box labeled Hide File Extensions for Known File Types.

Most of the time, you don't have to do anything special to open a particular file type or to save your work as that type of file — and then again, sometimes you do. Paint Shop Pro, in most cases, simply asks you a few questions to resolve any problems when you're opening or saving a foreign file type.

## Paint Shop Pro files (pspimage or PSP)

The native Paint Shop Pro 9 file type, pspimage, is probably the best choice for storing your own images. When you save your work as a Paint Shop Pro file, you can save everything just as it is, including any areas you have selected with the Paint Shop Pro selection tools, plus your various kinds of layers, palettes, tool settings (like current brush width), transparency, and other advanced features. You can pick up almost exactly where you left off. Paint Shop Pro files can have any color depth (maximum number of colors) you choose. Pspimage is the latest and greatest of the Paint Shop Pro native formats; earlier versions used the PSP extension.

Programs other than Paint Shop Pro and Animation Shop don't often read Paint Shop Pro files, however. You may need to save a copy of your image in a different file type for someone who uses other software, like Photoshop. Also, earlier versions of Paint Shop Pro can't read later Paint Shop Pro files (Paint Shop Pro 7 can't read Paint Shop Pro 9 files, for example.) To create files for earlier versions of Paint Shop Pro, see the instructions for saving a copy of your image in the section "Saving a Copy of Your File As Another File Type," earlier in this chapter.

### **Color depth**

Color depth refers to the capacity of a given file type (like GIF) to store a variety of colors. Color depth is described as either the maximum number of colors an image can contain (like 256 colors) or a number of bits. The term 1 bit means

that the image contains only black and white; 4 bits means that the image can contain 16 colors; 8 bits corresponds to 256 colors, and 24 bits means as many as 16 million colors.

### BMP

BMP files are *Windows bitmap* files; that is, they were designed by Microsoft for storing images, and many programs under Windows can read and write them. BMP files can have color depths of 1, 4, 8, or 24 bits. (Set your color depth by choosing Colors: Decrease Color Depth or Colors: Increase Color Depth.)

BMP files that are 24-bit can be quite large. When you save a file as BMP, you can click the Options button in the Save As (or Save Copy As) dialog box to choose higher *compression* (make smaller files). Under Encoding in the Options dialog box that appears, select RLE and then click OK. (RLE stands for *Run-Length Encoding*, a way of making image files smaller.) Now, when you save the file, Paint Shop Pro asks your permission to switch to a 256-color (8-bit) version of the BMP file. The resulting file is much trimmer than the original, although the color quality may diminish slightly.

### TIFF

TIFF (or TIF) stands for Tag Image File Format (which, of course, tells you nothing useful). Many graphics programs on the PC and Macintosh can read and write TIFF files, so it's a good choice of file type when you don't know what kinds of files the other person can read.

TIFF files can be quite large unless you compress them. To compress a TIFF file, click the Options button when you're using the Save As or Save Copy As dialog box. Then choose the LZW Compression option in the Compression area of the Options dialog box that appears. LZW gives you the best compression and compatibility with most other programs. (No image quality is lost by using LZW compression in TIFF files.)



For advanced users, TIFF is a good choice because it can store information in not only RGB (red, green, blue) primary colors, but also in CMYK (cyan, magenta, yellow, and black), which is used for some high-quality printed images. It can also store advanced data for color accuracy, such as gamma.

### GIF

The Web uses CompuServe GIF images all over the place. GIF is the most popular of three common file types used on the Internet. (JPG and PNG are the other two.)

Many programs read GIF files. (Older programs may read only the older GIF standard, GIF87, rather than the newer GIF89a. Paint Shop Pro lets you choose which standard to use when you're saving a GIF file — just click the Options button in the Save As or Save Copy As dialog box.)

Saving your Paint Shop Pro work as GIF usually means that it loses something, but perhaps not enough to matter. GIF images have a maximum color depth of 256 colors, which allows fairly realistic images. That number of colors, however, isn't enough to enable Paint Shop Pro to do all operations, so it may at some point suggest that you let it increase the number of colors. (See the section "File Types and Auto-Action Messages about Colors," later in this chapter.)

GIF enables you to use some special features, such as a *transparent color* (which lets the backgrounds of Web pages show through), and *interlaced display* (in which the entire image gradually forms as it's downloaded from the Web).

A special Paint Shop Pro tool called the *GIF Optimizer* can help you set transparency and otherwise optimize the image for Web use. See Chapter 15 for the details of creating GIF files for the Web using this tool.

Some GIF files contain a whole series of images to be displayed as an animation. You can view these images by using Animation Shop; Paint Shop Pro shows you only the first image of the series.

## **JPEG**

JPEG (or JPG) stands for Joint Photographic Experts Group, which sounds impressive. JPEG images are common on the Web for color photographs and other realistic color images because their files are small (relative to other file types) and download quickly.

The disadvantage of JPEG is that it uses a kind of compression, called lossy compression, to make its files small. *Lossy compression* means that the image quality is reduced a bit, especially around sharp edges, like text. Storing an image as a JPEG is kind of like stuffing a pie into a little plastic bag in your backpack for a hike. If it gets squeezed, the basic taste and nutrition are still there, and it doesn't take up lots of space, but you may not like the result.

You can choose just how much squeezing you want in the JPEG format, but first storing your work in some other format (preferably, PSP) is a good idea.

1. Choose File⇔Save Copy As.

The Save Copy As dialog box appears.

- 2. Select JPEG in the Save As Type box.
- 3. Click the Options button.

In the Save Options dialog box that appears, drag the Compression Factor slider to the left for higher quality and larger files, or to the right for lower-quality and smaller files.

4. Click the Save button.



The geeks at the Joint Photographics Experts Group have also come up with a lossless (unsqueezed) variety of JPEG. To save your files in this maximum-quality-but-largest-file-size format, first select JPEG 2000 in the Save As Type selection box. Then click the Options button, and in the Save Options dialog box that appears, choose Lossless. Be aware that not all software can read or display JPEG 2000 files, though.

If you're reading JPEG files, Paint Shop Pro offers an effect that removes some image distortions, called *artifacts*, that result from compression. (See Chapter 6 for instructions for removing JPEG artifacts.)

As with GIF, Paint Shop Pro offers a special tool, the JPEG Optimizer, for adjusting JPEG images for the Web. See the section in Chapter 15 about creating JPEG files for the details of fine-tuning JPEG images with this tool.

### PNG

PNG (Progressive Network Graphics) was designed to take over for GIF on the Web, although it's catching on slowly. It does have some advantages over GIF and accomplishes the same functions as GIF, so it may yet take over. Because its main use is Web graphics, we discuss it a bit more in Chapter 15.

## Using Vector File Types (Drawing Files)

Graphics images come in two main flavors: *raster* (also called *bitmap*) and *vector*. Here are the differences between them:

- Raster (bitmap) images are made up of dots (pixels). Most computer images are of this kind, and Paint Shop Pro is principally designed for this kind of image. It both reads and writes a wide variety of raster images.
- ✓ Vector images are made up of lines, shapes, filled areas, and text. You can change text, lines, and shapes more easily if they're stored as vectors than if they're stored as bitmaps. Although Paint Shop Pro is principally designed for raster images, it allows you to create vector layers that contain lines, text, and preset shapes. If you use these layers, store your image as a Paint Shop Pro file to retain any vector graphics you create. If you store your images as other file types, PSP may convert your vector graphics to bitmap form, which may make editing more difficult.

Vector files are typically created by popular *drawing* software (as opposed to *painting* software). AutoCAD, for example, a popular drafting application, writes DXF (Drawing eXchange Format) files. Corel Draw writes CDR files, and Corel WordPerfect uses WPG files, Many other vector file types are in use too.



Like Paint Shop Pro files, some other file types can also contain a mix of vector and bitmap graphics. These include Windows Enhanced Metafiles (EMF, a Microsoft Windows standard), Computer Graphics Metafiles (CGM, a standard by the American National Standards Institute), PICT (a Macintosh standard), and embedded PostScript (EPS, by Adobe). Some files (like embedded PostScript) may contain in some cases both a bitmap and a vector version of the same image.

## Opening vector files

Paint Shop Pro can open many kinds of vector (or mixed vector and bitmap) files. You can also copy drawings, using the Windows Clipboard, from most vector programs that run under Windows and paste the images into Paint Shop Pro.

Paint Shop Pro 9 opens many types of vector files and keeps them as vector files. If you open an AutoCAD DXF file, for example, the lines and other objects are translated into Paint Shop Pro vector objects.

Because Paint Shop Pro also lets you work with bitmap graphics, however, whenever you open a vector file, you have to add information about what size, in pixels, you want the image to be. Paint Shop Pro pops up a dialog box

that requires you to enter dimensions in pixels (or dimensions in inches and pixels per inch) for the resulting bitmap image. If a Maintain Original Aspect Ratio check box appears, select it if you want to keep the same proportions as the original image.

For a PostScript file, for example, Paint Shop Pro displays the PostScript Renderer dialog box. To enter the page size, we generally find the Bounding Box option (which refers to the outside of the drawing area) to be the best solution; for resolution, the 72 dpi that is already entered in the Resolution box usually does well. The image size you get (in pixels) is the image dimension (say,  $8.5 \times 11$  inches) times the Resolution (say,  $72 \times 11$  dpi, gives you an image that is  $8.5 \times 72$  pixels wide and  $11 \times 72$  pixels high). For more detail or a bigger picture, choose a higher resolution.

Because Paint Shop Pro is translating between two different kinds of image data, it may make a few mistakes that you have to clean up afterward.

## Saving vector files — not

You can't save pure vector-type image files, such as DXF, in Paint Shop Pro. You can, however, save your work as one of the file types that is allowed to contain a mix of vectors and bitmaps, such as EPS or CGM.

In those instances, however, Paint Shop Pro simply stores all your edits as a bitmap image and stores nothing in the vector part of the EPS, CGM, or other combined bitmap or vector file. Your vector objects become part of a single bitmap image. Because no vector objects are stored, a program that handles only vector graphics may not be able to read the file.

## Converting or Renaming Batches of Files

If you have lots of image files and need copies of them in a different file type, try the Paint Shop Pro batch processing feature. Batch processing also lets you create an ordered series of related names, like hawaii0001 through hawaii9579, for your 9,579 vacation photos.

To copy a bunch of files to a new file format, follow these steps:

- 1. Choose <u>File  $\Rightarrow$  Batch</u>  $\Rightarrow$  <u>Process.</u>
  - The Batch Process dialog box appears.
- 2. Click the <u>Browse</u> button at the top of the Batch Process dialog box. A Select Files dialog box appears.
- 3. In the Select Files dialog box, open the folder containing your files, hold down the Ctrl key, and click all the files you want to convert.

4. Click Select to close the Select Files dialog box.

Your selected files are now listed in the Files to Process box of the Batch Process dialog box. To add files from another folder, repeat Steps 2 and 3.

- 5. In the Save Options area at the bottom of the Batch Process dialog box, in the Type selection box, choose the file type you want as the result of your conversion.
- 6. To put the newly generated files in a different folder, click the Browse button at the bottom of the dialog box and choose a new folder.
- 7. Click the Start button.

In a few seconds or minutes, you have copies in the new file type you need.

To give a bunch of files similar names, differing by only a number (as in hawaii01, hawaii02, and so on), take these steps:

- 1. Choose File⇔Batch⇔Rename.
- 2. In the Batch Rename dialog box that appears, click the Browse button.
- 3. In the Select Files dialog box, open the folder containing your files, hold down the Ctrl key, and click all the files you want to convert.
- 4. Click Select to close the Select Files dialog box.

Your selected files are now listed in the Files to Process box of the Batch Rename dialog box. To add files from another folder, repeat Steps 2 and 3.

5. Click the Modify button.

The Modify Filename Format dialog box appears. The idea is to combine various naming and numbering elements into a sort of formula for Paint Shop Pro to follow. For example, hawaii50 is a *custom text* element of our choosing, followed by a 2-digit *sequence*.

- 6. Click an element in the Rename Options panel to choose the first part of the new name, such as Custom Text.
- 7. Click the Add button to add that element to your formula, which gets assembled in the right panel.

Depending on what kind of element you choose, a 1-line text box appears on the right for you to make a choice or enter some text. We stick with our simple example. If you have chosen Custom Text, type your text (**hawaii**, for example) in the Custom Text box that appears. If you have chosen Sequence, type a starting number in the Starting Sequence box that appears; use as many digits as you need for the batch (type 1 for as many as 9 images and 01 for as many as 99 images). For today's date, choose a date format.

8. Repeat Steps 4 and 5 to add more elements. Make sure that one of your elements is Sequence, or else you're asking the impossible: for each file to have the same name.

The order in which you add elements on the right is the order in which they appear in the filenames.

Click OK. When the Batch Rename dialog box returns, select the files to be converted.

The files are all renamed, and each name includes a different number.

## File Types and Auto-Action Messages about Colors

When you try to use certain Paint Shop Pro features or save your work in a non–PSP format, you may see an Auto Actions message box from Paint Shop Pro. For example, you may open a GIF file and want to use one of the Paint Shop Pro commands on the Adjust or Effects menu. Or, perhaps you want to add a raster layer to that GIF file. Paint Shop Pro displays an error message like the one shown in Figure 1-3.

Figure 1-3: First, Paint Shop Pro may need to improve the image quality.



Don't worry — be happy; just click OK. The issue is that certain file types, like GIF, can handle only a limited number of colors (they have limited *color depth*) and many Paint Shop Pro features work only on images able to handle as many as 16 million colors. Paint Shop Pro is offering to create a 16-million-color image for you so that it can apply the tool you want to use.

If you get one of these messages, and if you later save your work in the original, color-limited file type (GIF, for example), you also get a message requesting permission to reduce the number of colors back to whatever that type of file can handle. Simply click OK in whatever dialog box or boxes result, and you're likely to be happy with the result.

If you're a professional and are picky, you understand what's going on and can take the necessary steps to control the result. You can always change the number of colors manually by choosing Image⇔Increase Color Depth or Image⇔Decrease Color Depth.

To turn off these messages and always have Paint Shop Pro proceed (or not proceed), choose File Preferences General Program Preferences. Click the Auto Actions tab in the dialog box that appears. For each type of conversion, you can choose to never do it or to always do it or to have the program prompt you. Or, click Never All or Always All to never or always do any of the conversions.

## Obtaining Image Files from the Web

The Web is a grab bag of goodies for graphics gurus. Here's how to get your hands on these fabulous fruits.

One of the best ways to get graphics is to find a Web site offering them free and clear. Most of these sites provide instructions for downloading those image files. Other Web pages may copy-protect their images so that you can't use the procedures we list in this section.

To save an image that you're viewing in your Web browser, use either of these methods:

- Right-click the image and, on the pop-up menu that appears, look for Save Picture As or a similar choice. You're prompted for the location on your hard drive where you want the image saved.
- ✓ Right-click the image and, on the pop-up menu that appears, choose Copy. This choice copies the image to the Windows Clipboard; open Paint Shop Pro and press Ctrl+V to paste the image as a new image. (Choose the Edit

  Paste command to see ways to paste the image into another open image.) Save the image by choosing File

  Save.



A fair number of graphics images on the Web have transparent portions, especially their backgrounds. The transparent parts of these types of image have a hidden color (typically white), and that color may become visible in Paint Shop Pro. See Chapter 15 for more information about transparency in Web images.

Most Web images are one of only a few different file types: GIF, JPEG, or PNG. GIF and some PNG images are *palette images*, with a limited number of colors (typically, 256 colors).

Many animations on the Web are GIF files. You should open animated GIF files in Animation Shop, not in Paint Shop Pro (which displays only the first frame of the animation). Some animations are, however, in a private vector format (Flash) that neither Animation Shop nor Paint Shop Pro can read.